

June 5, 2025

Mr. Noah Peters
Senior Adviser to the Director
U.S. Office of Personnel Management
1900 E Street, NW
Washington, D.C. 20415

Submitted via Regulations.gov Docket & Email

Re: Improving Performance, Accountability and Responsiveness in the Civil Service (Docket ID No. OPM-2025-0004)

Dear Mr. Peters,

On April 23, 2025, the Office of Personnel Management (“OPM”) proposed a new rule (“the Proposed Rule”) in response to President Trump’s Executive Orders 13957 and 14171.¹ The rulemaking, if completed, would rescind a rule that guarantees a number of workplace protections for certain groups of federal employees.² The purported purpose of the Proposed Rule is to “strengthen employee accountability” and “address[] longstanding performance management challenges” by making it easier for the President and other political appointees to terminate the employment of federal employees.³ In reality, the Proposed Rule will inject partisan politics into many facets of the federal civil service, including grantmaking to support scientific research, where public servants are focused upon how best to serve the American people, rather than how best to serve a current President’s political agenda.

One of the most pernicious and least justified repercussions of the Proposed Rule will be to undermine the strength and integrity of American scientific research. Accordingly, we, the undersigned—a group of scientists, researchers, and professors at Northwestern University—write today in our individual capacities to oppose the Proposed Rule. We have doubts about the effectiveness and wisdom of the entire Proposed Rule, but we focus our comments today upon how the Proposed Rule could harm our work as scientists and researchers if it were applied to grantmaking personnel within the federal government. The Notice of Proposed Rulemaking makes it clear that the Proposed Rule would do just that; OPM intends to use the Proposed Rule to remove employment protections for federal employees who “have substantive participation and discretionary authority in agency grantmaking.”⁴ As illustrated in the brief descriptions of our individual experiences with federal scientific grant programs, provided in Appendix A and in our attached *curriculum vitae*, we interact with just such federal employees regularly and can speak with first-hand perspective about the damage likely to be done to the entire American scientific community if the Proposed Rule is promulgated.

¹ Improving Performance, Accountability, and Responsiveness in the Civil Service, 90 Fed. Reg. 17,182 (Apr. 23, 2025) (*hereinafter* “Notice of Proposed Rulemaking”).

² Upholding Civil Service Protections and Merit Systems Principles, 69 Fed. Reg. 24,982 (Apr. 9, 2024).

³ Notice of Proposed Rulemaking at 17,182.

⁴ *Id.* at 17,188.

If finalized, the Proposed Rule would inject partisan politics into what are currently non-partisan, expertise-driven processes for awarding funding in line with Congressional goals and standards for specific funding agencies. That, in turn, would stymie the advance of scientific research across the country by introducing uncertainty, errors, and bias into the funding process. Science, in order to progress, needs a longer-term vision as compared to the timeframe and perspective of a given presidential administration. Our research and the research of our colleagues relies on the deliberate, collective accumulation of knowledge through careful study, and the pursuit of wide-ranging and overlapping lines of inquiry. If there is a sea change in how our research is funded or in what is funded every four years, as would be facilitated by the Proposed Rule, our work could grind to a halt and would certainly be made less dynamic, effective, and impactful. For decades, the United States has been a leader in many high-tech and specialized fields. In large part, that dominance can be attributed to the support from and partnerships formed between personnel within the federal government and researchers like us.⁵ The Proposed Rule threatens to destroy those partnerships and undermine that support. If finalized, we believe the Proposed Rule would threaten the United States' position as a leader in a number of the fields that we represent.

Our reasons for opposing the Proposed Rule fall into three categories. First, we believe that the Proposed Rule contradicts Congress's judgment, embedded in a number of statutes, that grantmaking should be based on scientific merit, rather than partisan influence. Our extensive experience with federal grantmaking confirms that this is, indeed, how these programs currently operate. Congress has decided that grantmaking programs should operate to advance science, create new knowledge, and solve some of our country's most pressing problems. If applied to grantmaking personnel, the Proposed Rule would undermine that Congressional judgment—expressed in various statutes that create grantmaking power in particular agencies—by forcing employees to respond to the agenda of a current president rather than the research priorities that emerge from rigorous science-based processes. Notably, those grantmaking processes already include structural protections against bias and allow for input from multiple governmental and non-governmental experts.

Second, the Proposed Rule exceeds OPM's authority under the statutory provisions that it cites. OPM relies on two provisions that allow the President and OPM to make exceptions to the general merit-based regime that governs the federal civil service. OPM asserts that those two provisions implicitly authorize the agency to repeal merit-based employment systems established explicitly within the same statute. At least when it comes to grantmaking personnel, this would be a radical change. The federal employees who we work with are apolitical and dedicated to advancing scientific research on behalf of the long-term interests of the American people, but the Proposed Rule would change that, making them beholden to the President's personal policy preferences instead. It would also have significant economic ramifications given that the federal government funds billions of dollars in research grants each year, all of which could be affected by this rule.⁶ Under the major questions doctrine, however, OPM cannot take such

⁵ See Alan Burdick & Emily Anthes, *9 Federally Funded Scientific Breakthroughs That Changed Everything*, N.Y. TIMES (May 16, 2025) <https://www.nytimes.com/2025/05/16/science/federally-funded-science-breakthroughs.html>.

⁶ There is plenty of data that shows how important federal grantmaking is to the economy, but we also know, from our personal experience how important grant funds are. These funds are essential to ensuring that we can operate our labs

a significant action—ending civil service protections for an estimated 50,000 employees⁷—unless it has clear statutory authorization to do so. On our read of the Notice of Proposed Rulemaking and the relevant statute, OPM does not have the sort of clear statement it needs to take such a politically and economically significant action.

Finally, we believe that there is no evidence in the record to support OPM’s suggestion that grantmaking personnel are injecting their own personal political preferences into their work.⁸ In fact, contrary to OPM’s assertions, we have found in our experience that grantmaking personnel operate with a high degree of expertise and professionalism. Grantmakers work collaboratively with each other and with the scientific community to make funding decisions that they believe will lead to breakthroughs and valuable, new knowledge. We have seen consistently that grantmaking personnel are focused on advancing science and research, and we have not experienced federal grant writers or managers inserting their political preferences, or anyone else’s political preferences, into the grantmaking process.

Because the problem this Proposed Rule purports to address is not a problem at all, and the Proposed Rule would dramatically increase the risk of the politicization of scientific research funding in the United States, we urge OPM to withdraw the Proposed Rule—if not entirely, then at a minimum as applied to grantmaking personnel.

I. Congress has already decided that grantmaking activities should not be subject to the executive branch’s partisan influence or political oversight.

As part of the Proposed Rule, OPM plans to amend federal regulations to announce that certain civil servants, including grantmaking personnel, “are required to faithfully implement administration policies to the best of their ability, consistent with their constitutional oath and the vesting of executive authority solely in the President.”⁹ At another point in the Notice of Proposed Rulemaking, OPM asserts that it is promulgating this new rule to ensure that federal employees are “accountable to the President,” because it believes that “[b]ureaucratic autonomy undercuts the federal government’s accountability to the American people.”¹⁰ In effect, the Proposed Rule intends to allow the President or political appointees to

which employ dozens of people, research new technologies with commercial applications, and help train the next generation of scientists.

⁷ Notice of Proposed Rulemaking at 17,220

⁸ We recognize that the Proposed Rule is presented as a repeal of current regulations that provided protections to federal employees in general, rather than specifically removing any protections from particular employees at this time. Notice of Proposed Rulemaking at 17,182. However, as the Notice of Proposed Rulemaking makes clear, OPM views this repeal as part of a larger action wherein the President will subsequently reclassify a number of federal employees—including grantmaking personnel—into a new employment category, “Schedule Policy/Career,” which will allow the President or political appointees to terminate those employees at will. *Id.* Given the apparent coordination between this proposed rulemaking and the subsequent reclassification and the fact that such reclassification cannot happen without the Proposed Rule being promulgated, we address the effect that the reclassification will have in our comments.

⁹ Notice of Proposed Rulemaking at 17,222.

¹⁰ *Id.* at 17209.

more easily dismiss federal employees who fall within the rule's ambit.¹¹ Specifically, it would allow the President to dismiss federal employees based on his own partisan and political preferences.

As applied to grantmaking personnel in the federal government, the Proposed Rule would contradict Congress's prioritization of scientific integrity and research productivity by exposing those civil servants to political directives from the President and his political appointees. In that, the Proposed Rule would violate the separation of powers by undermining the explicit directions Congress has included in using its spending powers to create grantmaking programs and agencies. In many instances, Congress has decided that agency personnel should base funding decisions on non-political, non-partisan scientific criteria, rather than the short-term political desires of the President or his political appointees. Congress has done so by expressly centering the purpose of grantmaking on scientific advancement.

For instance, in establishing the National Institutes of Health, which disburses millions of dollars in federal grant funds each year, Congress explicitly stated scientific purposes for which each Institute was created.¹² For almost every Institute, the purpose is something along the lines of "the conduct and support of research, training, and . . . information dissemination" with respect to the Institute's specific focus.¹³ Similarly, the National Science Foundation's organic statute reveals that Congress, in establishing the agency, was concerned with "initiat[ing] and support[ing] basic scientific research and programs."¹⁴ Even as recently as 2017, Congress passed a law with regards to the National Science Foundation that stated "it is the sense of Congress that . . . peer review and merit review processes have identified and funded scientifically and societally relevant basic research and should be preserved."¹⁵ And, with regards to the National Institute of Standards and Technology, another major source of research funding, Congress established the agency to "enhance the competitiveness of American industry" and to advance "promising research and development projects."¹⁶ All of this goes to show that Congress intended these agencies to

¹¹ The Proposed Rule states that the federal employees to which the rule would apply are "not required to personally or politically support the current President or the policies of the current administration." Notice of Proposed Rulemaking at 17,222. That is a fine statement, but it is also telling that the OPM believes it needs to disclaim that it is not explicitly creating a political loyalty test for government employees. Indeed, the Proposed Rule eliminates many procedural protections that assure federal employees are not subjected to such loyalty tests in practice by being reclassified into Schedule Policy/Career where they could be dismissed on the basis of their personal political views. *Id.* at 17,223–24. Thus, even though the Proposed Rule offers some empty assurance that it will not be used to punish federal employees on the basis of their political views or affiliations, it also eliminates the procedures that ensure the federal government is complying with its own rules.

¹² 42 U.S.C. § 285 *et seq.* That National Institutes of Health is an umbrella agency which oversees a set of different institutes focused on research related to particular diseases or other health issues. So, for example, the National Cancer Institute funds research on cancer, but is still part of the broader National Institutes of Health organization.

¹³ 42 U.S.C. § 285k (establishing the National Institute of General Medical Sciences).

¹⁴ 42 U.S.C. § 1862.

¹⁵ 42 U.S.C. § 1862s. In that same provision, Congress further found that the National Science Foundation should continue to evaluate proposals on the basis of "intellectual merit" in order to assure that grants "are of high quality and advance scientific knowledge" and that "grants address societal needs." *Id.*

¹⁶ 15 U.S.C. § 271.

devote their time and resources to advancing scientific knowledge through merit-based grantmaking—it did not intend them to do or fund whatever the President desires.¹⁷

In our view, and in light of our extensive experience with the federal grantmaking process across a number of agencies, the scientific mission that Congress has dedicated each grantmaking program towards is incompatible with the Proposed Rule that allows for partisan, political direction and oversight of the civil servants who implement those programs. For one thing, the time scale of much scientific research does not align with the cadence of political elections. Much of the research that is funded by federal government grants, particularly observational or longitudinal studies, lasts far longer than four years—the length of a Presidential term. That sort of research aims to look at changes over periods of time. Similarly, research initiatives that strive to launch or transform an area of knowledge or capability must operate and adapt over periods of time spanning multiple administrations. Without the necessary time—and more relevant here, the necessary funding throughout that period of time—long-term research would become infeasible.

The Proposed Rule would undermine these lengthier studies and initiatives because it would create uncertainty about the continued availability of funding. At its core, the Proposed Rule would allow the President and other members of his administration to assert greater control over decisions made by personnel moved into the Schedule Policy/Career category. For grantmaking personnel, that means that the President would have greater control over the grants that they administer. The President—whether this one or the next—could, if he or she finds it politically attractive, order grantmaking personnel to terminate grants that he or she personally dislikes. He or she could do so despite those grants funding long-term studies whose results depend upon the consistent collection of data over time. If grantmaking personnel push back or refuse, they could then be terminated under the Proposed Rule despite making the best decision from the Congressionally-mandated perspective of advancing scientific research. Beyond destroying expensive and long-term work underway now, even just the uncertainty that this Proposed Rule would introduce by specifically enabling executive branch political control over a significant portion of the research done in the United States would have a chilling effect on scientists’ plans to conduct these sorts of studies.

In addition to the timing problems, the insertion of political decision-making into the work that grantmaking personnel do—again, something which the Proposed Rule is designed to facilitate—would likely inhibit the development of new science and technology. It is famously difficult to evaluate the exact

¹⁷ See 41 U.S.C. § 3105 (stating that “[i]t is the policy of Congress that any program, project, or technology identified in legislation be awarded through *merit-based* selection procedures.”) (emphasis added). See also 10 U.S.C. § 4024 (stating the same with regards to Department of Defense grants, in particular); 10 U.S.C. § 4061 (establishing the “Defense Research and Development Rapid Innovation Program” and requiring that “[p]rojects are selected using *merit-based* selection procedures and the selection of projects is not subject to undue influence by Congress or other Federal agencies.”) (emphasis added); 42 U.S.C. § 1862p-3 (establishing a program to award “competitive, *merit-based* grants” for sustainable chemistry basic research) (emphasis added); 42 U.S.C. § 19351 (establishing a grantmaking program, “using a competitive, *merit-based* review process” to fund “advanced nuclear reactors and associated supply chain infrastructure”) (emphasis added).

value and consequences of scientific research *ex ante*.¹⁸ Over the past century, the stories of unanticipated applications or inventions arising out of seemingly niche or unrelated scientific research are manifold.¹⁹ As just one example of many, a number of the most cutting-edge obesity and diabetes drugs are based upon research into the digestive enzyme of the Gila monster—“a slow, venomous lizard that can survive on just a few meals a year.”²⁰ As another example, a curiosity-driven challenge to the accepted wisdom that “nothing can live in hot springs” led to the discovery of a new branch of life that can survive extreme temperatures; the biochemistry evolved in this organism enabled the invention of polymerase-chain reaction (PCR)—a technique used to amplify DNA that “has revolutionized biological research and biotechnology.”²¹ Even the discovery and development of CRISPR, the most advanced precision medicine platform in the world, was originated in a serendipitous discovery within purely curiosity-driven research.²² Given that, it is particularly important to fund a broad portfolio of scientific research even if some of it may, at the time it is being funded, be unpopular. Politicians, lacking the scientific expertise that grantmaking personnel possess, are in particularly poor positions to make decisions about whether a field of research or specific grant is worthwhile. The Proposed Rule would put the President and other political appointees in a position to direct these decisions despite their lack of expertise, tendency to react to underinformed and crudely measured public opinion and their electoral incentives to think on a short-term time frame.

Finally, the Proposed Rule would engender significant amounts of waste in government spending if it led to the cancellation, or even the pause, of any federal grants. The current presidential administration has prioritized attempts to reduce waste in government spending and increase federal government efficiency.²³ Yet, the Proposed Rule, if implemented, would create the potential for millions of dollars or more of government waste by allowing the President to direct personnel to terminate grants for long-term research. For many of these research projects, if the research is terminated before the project is complete, no conclusions can be drawn and all of the money invested into that particular grant and larger related research efforts will be for naught. That means no publications, no sharing of new knowledge, and no new technology associated with that research. Under the current system, grantmaking personnel already scrutinize expenses in grant applications extremely closely and seek input from other experts to identify potential cost savings—there is no evidence of significant waste or fraud in these programs. That would be undermined if the Proposed Rule were implemented.

¹⁸ See *History*, THE GOLDEN GOOSE AWARDS (last visited May 22, 2025) <https://www.goldengooseaward.org/history> (“highlighting examples of seemingly obscure studies that have led to major breakthroughs and resulted in significant societal impact.”)

¹⁹ *Id.*

²⁰ See Alan Burdick & Emily Anthes, *9 Federally Funded Scientific Breakthroughs That Changed Everything*, N.Y. TIMES (May 16, 2025) <https://www.nytimes.com/2025/05/16/science/federally-funded-science-breakthroughs.html>.

²¹ Nick Oswald, *The Invention of PCR*, BITE SIZE BIO (May 30, 2025) <https://bitesizebio.com/13505/the-invention-of-pcr/>; Andrew Porterfield, *The Taq Behind PCR: The Story of a Heat-Tolerant Enzyme*, BITE SIZE BIO (Mar. 7, 2025) <https://bitesizebio.com/1953/the-taq-behind-pcr/>.

²² See generally Yoshizumi Ishino, Mart Krupovic, & Patrick Forterre, *History of CRISPR-Cas from Encounter with a Mysterious Repeated Sequence to Genome Editing Technology*, 200 J. BACTERIOLOGY 1 (2018).

²³ See *Fact Sheet: President Donald J. Trump Reins in Government Waste*, THE WHITE HOUSE (Feb. 26, 2025) <https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-reins-in-government-waste/>.

As illustrated above, in a number of instances, Congress has made a judgment that scientific and research-related grantmaking should be conducted apolitically and on the basis of merit in order to advance scientific progress. In our view, that Congressional judgement underpins the current power and dynamism of American scientific research and leaves no room for partisan or political decision-making. OPM cannot, and should not, attempt to contradict Congress's considered judgments about the importance of scientific progress through an overbroad, misguided rulemaking.²⁴

II. OPM's Proposed Rule exceeds the agency's statutory authority, particularly with regard to grantmaking personnel.

In the Notice of Proposed Rulemaking, OPM cites two statutory provisions, 5 U.S.C. § 4301(2)(g) and 5 U.S.C. § 7511(b)(2),²⁵ as the basis for its authority.²⁶ Both of those provisions are drawn from the Civil Service Reform Act of 1978—a decades-old statute which reaffirmed and expanded the merit principles-based employment system that has governed the federal civil service for over a century. On the basis of that statute and its predecessors, the federal government has developed a nonpartisan civil service dedicated to serving the American people. OPM would use the two exceptions it cites to reclassify an estimated 50,000 federal employees—including the apolitical grantmaking personnel with whom we regularly interact—such that they could be fired at will without some of the basic procedural protections that they currently hold.²⁷

We believe that OPM's reading of the two provisions is incorrect and that OPM does not, in fact, have statutory authority to promulgate the Proposed Rule. In particular, we believe that OPM has violated the major questions doctrine in its reading of the relevant statute.²⁸ Under that doctrine, when an agency passes on a question of “vast economic and political significance,” it must have clear Congressional authorization to exercise the authority that it claims, not just “a merely plausible textual basis.”²⁹

²⁴ Cf. *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 637 (1952) (“When the President takes measures incompatible with the expressed or implied will of Congress, his power is at its lowest ebb.”).

²⁵ The first provision, § 4301(2)(g), excludes “individual[s] occupying a position not in the competitive service excluded from coverage of this subchapter by regulations of the Office of Personnel Management” from the definition of an “employee” for the purposes of the performance appraisal systems developed in the rest of the relevant subchapter. The second provision, § 7511(b)(2), exempts federal employees “whose position has been determined to be of a confidential, policy-determining, policy-making or policy-advocating character” by the President, OPM, or an agency head and who are excepted from the civil service from the for-cause requirement for adverse actions created in the remainder of that subchapter.

²⁶ Notice of Proposed Rulemaking at 17,182.

²⁷ Notice of Proposed Rulemaking at 17,188, 17,220.

²⁸ See generally *W. Virginia v. Env't Prot. Agency*, 597 U.S. 697 (2022). See also *Nat'l Fed'n of Indep. Bus. v. Occupational Safety & Health Admin.*, 595 U.S. 109, 125 (2022) (Gorsuch, J., concurring) (“Sometimes, Congress passes broadly worded statutes seeking to resolve important policy questions in a field while leaving an agency to work out the details of implementation. Later, the agency may seek to exploit some gap, ambiguity, or doubtful expression in Congress's statutes to assume responsibilities far beyond its initial assignment. The major questions doctrine guards against this possibility by recognizing that Congress does not usually hide elephants in mouseholes. In this way, the doctrine is a vital check on expansive and aggressive assertions of executive authority.”) (internal citations and quotations omitted).

²⁹ 597 U.S. at 716, 723.

Questions of “vast economic and political significance” qualify as major questions.³⁰ And there can be little doubt that the Proposed Rule—with its goals of overhauling the civil service and eliminating employment protections—fits the bill. In the Notice of Proposed Rulemaking, OPM essentially admits this, acknowledging that the nature of the civil service was a hotly contested issue during the 2024 presidential campaign and going so far as to insist that President Trump was “elected on a platform” of removing protections from the federal civil service.³¹ There are also significant economic ramifications of the Proposed Rule, at least when it comes to grantmaking personnel. Federal grantmaking funds billions of dollars of American research each year—helping to employ thousands of people, training the next generation of scientists, and developing new technologies with commercial applications. In our opinion as recipients of some of those funds and people who review the work of other scientists funded by federal grants, if the structure of federal grantmaking is changed along the lines that OPM proposes, we believe that it would significantly harm the United States’s scientific competitiveness, and, ultimately, the American economy.

Once an agency proposes to regulate a major question under that definition, the agency must be able to identify a clear Congressional statement authorizing the regulation it proposes to undertake. In a concurring opinion in *West Virginia v. EPA*, the seminal case on the major questions doctrine, Justice Gorsuch provided a list of factors relevant to identifying when Congress has supplied such a clear statement. Three are most relevant here.³² In identifying whether a clear statement is present, courts, or others performing statutory interpretation, should look to (1) “the legislative provisions on which the agency seeks to rely with a view to their place in the overall statutory scheme;” (2) “the age and focus of the statute the agency invokes in relation to the problem the agency seeks to address;” and (3) “the agency’s past interpretations of the relevant statute.”³³ In this case, each factor demonstrates there is no clear Congressional authorization for OPM’s Proposed Rule.

Starting with the first factor—the place of the legislative provisions within the overall statutory scheme—the text that OPM relies on are minor exceptions within the “Definitions” sections of the Civil Service Reform Act of 1978. The central substantive provisions of that statute create a general rule that federal employees should be hired and fired based on merit alone and that employees should receive procedural protections to ensure that those merit principles are not being violated.³⁴ Along those lines, one contemporaneous government report noted that a purpose of the act was to “provide[] greater protection of

³⁰ *Id.*

³¹ Notice of Proposed Rulemaking at 17,187, 17,189.

³² The fourth factor is when there is a “mismatch between an agency’s challenged action and its congressionally assigned mission and expertise.” 597 U.S. at 748 (Gorsuch, J., concurring). OPM is, admittedly, one of the relevant agencies when it comes to overseeing the federal workforce. However, when it comes to grantmaking in particular, OPM does not have any relevant expertise. OPM’s mission is focused on federal personnel, not on the work that those personnel actually perform. This “mismatch” is particularly pronounced in the grantmaking space because Congress has specifically instructed that federal grantmaking be driven by scientific merit and the input of relevant scientific communities—areas unrelated to OPM’s “congressionally assigned mission and expertise.” Thus, to the extent that OPM would use the Proposed Rule to shape the work that grant makers actually do, there is the sort “mismatch” Justice Gorsuch described. *Id.*

³³ 597 U.S. at 746–48 (Gorsuch, J., concurring).

³⁴ See Civil Service Reform Act of 1978, Pub. L. No. 95-454, 92 Stat. 111.

the career civil service from political abuses.”³⁵ The exceptions on which OPM rests its interpretations on are designed to give the President limited flexibility to disregard that general rule for a small subset of employees—those of “a confidential, policy-determining, policy-making or policy-advocating character”—who work most closely with the President.³⁶ OPM’s Proposed Rule, however, flips this scheme on its head—removing protections from an estimated 50,000 workers and contravening the central purpose and text of the statute on the basis of narrow exceptions to definitions.³⁷ Agencies may not rely on minor statutory exceptions to make “fundamental changes” to a statutory scheme, but that is exactly what OPM’s Proposed Rule does.³⁸ The minor exceptions that OPM cites do not constitute clear Congressional authorization to abrogate the general rule that Congress created in the Civil Service Reform Act.

The second factor—the age and focus of the statute—confirms that OPM lacks clear Congressional authorization to institute the Proposed Rule. The statute on which OPM bases its authority, the Civil Service Reform Act, is a decades-old law focused on ensuring that “[f]ederal personnel management [] be implemented consistent with merit system principles.”³⁹ One of those merit systems principles is that “[e]mployees should be protected against arbitrary action, personal favoritism, or coercion for partisan political purposes.”⁴⁰ For obvious reasons, that law has never before been used to make federal employees subject to termination or other consequences based on “partisan political purposes.”⁴¹ Yet, OPM now proposes to use provisions of the Civil Service Reform Act to institute a regime based on principles that are directly opposed to those that Congress actually articulated in the statute. Looking to the focus of the statute reveals not just the absence of a clear Congressional authorization for the Proposed Rule, but, instead, the presence of a clear Congressional prohibition against the specific policy that would be advanced through OPM’s Proposed Rule.

Finally, the third factor—the agency’s prior interpretations—again demonstrates that OPM lacks the authority to promulgate the Proposed Rule because it lacks clear Congressional authorization to do so. In the decades since the Civil Service Reform Act was passed, OPM had never interpreted the exceptions on which the agency is currently relying as allowing it to exempt such a substantial portion of the career federal workforce from merit-system protections. And, as OPM acknowledges, little over a year ago, OPM promulgated a rule interpreting the exceptions at issue here consistently with OPM’s past practice and confirming the natural reading of the statute—a reading which directly contradicts the interpretation on which OPM now relies.⁴² OPM’s own prior practice is yet more evidence that the agency lacks a clear Congressional authorization to advance the Proposed Rule.

³⁵ GENERAL ACCOUNTING OFFICE, FPCD-80-38, CIVIL SERVICE REFORM—WHERE IT STANDS TODAY i (1980).

³⁶ 5 U.S.C. § 4301(2)(g); 5 U.S.C. § 7511(b)(2).

³⁷ Notice of Proposed Rulemaking at 17,220

³⁸ *MCI Telecommunications Corp. v. Am. Tel. & Tel. Co.*, 512 U.S. 218, 228 (1994).

³⁹ 5 U.S.C. § 1101.

⁴⁰ 5 U.S.C. § 2301.

⁴¹ *Id.*

⁴² Upholding Civil Service Protections and Merit Systems Principles, 69 Fed. Reg. 24,987 (Apr. 9, 2024) (concluding that the § 7511(b)(2) exception should apply only “to the voluntary filling of noncareer political appointments that

In summary, OPM has misconstrued its authority under the relevant statutes. Its Proposed Rule would have vast consequences on the work that we do and on many other areas of American society. Without a doubt, it is a major question. Yet, despite the major ramifications of the Proposed Rule, OPM cannot identify a clear Congressional grants of the authority it claims to have here. Without such a clear statement, OPM lacks the authority to promulgate the Proposed Rule.

III. OPM has identified no evidence that grantmaking personnel have inserted personal political or policy preferences into their work.

The justification for the Proposed Rule that OPM put forward in the Notice of Proposed Rulemaking is a fear that career employees are “advanc[ing] their own personal or partisan policy preferences instead of those of the elected President.”⁴³ OPM further asserts that “policy resistance is a serious concern,” reversing without significant explanation OPM’s own position stated on the record little over a year ago.⁴⁴ In our experience, when it comes to grantmaking personnel, OPM’s fears are particularly unfounded and disconnected from the reality of federal grantmaking. If anything, the opposite is true. The grantmaking personnel we have interacted with—when we work in various capacities in the grantmaking process, as recipients of grants, members of advisory boards, or peer reviewers—have taken pains not to introduce any personal biases into their work. Instead, they strictly follow agency procedures, discussed in more detail below, which are designed to preclude personal biases of any kind in order to fund the most promising scientific research.⁴⁵

When we consider our collective decades of deep experience with federal grantmaking, we were struck by the absence of any evidence whatsoever in the rulemaking record that suggests that grantmaking personnel are actually inserting political preferences into their work. Admittedly, the Notice of Proposed Rulemaking does list a number of academic pieces describing how a principal-agent problem could, in theory, arise when career bureaucrats do not align their actions with the priorities of the current administration.⁴⁶ Similarly, it cites a set of news reports, some based on reporting from anonymous sources,⁴⁷ which supposedly demonstrate “widespread career employee policy resistance” among federal

carry no expectation of continued employment beyond the presidential administration during which the appointment occurred.”).

⁴³ Notice of Proposed Rulemaking at 17,191.

⁴⁴ *Id.*

⁴⁵ The Proposed Rule sets up a false dichotomy between advancing policies that align with an employee’s personal preferences or advancing policies that align with the President’s preferences. However, there is a third option—advancing those policies which best advance scientific research. As explained above, *see supra* Section 1, it is this third option which best aligns with what Congress actually intended in organizing the agencies and grantmaking programs where the relevant federal employees work. Congress intended to advance science, not to advance the President’s political priorities.

⁴⁶ Notice of Proposed Rulemaking at 17,191.

⁴⁷ *Cf.* Brett Samuels, *Trump: Anonymous News Sources Are ‘Bull—’*, THE HILL (May 17, 2019) <https://thehill.com/homenews/administration/444322-trump-anonymous-news-sources-are-bullshit/> (“‘Do you ever notice they never write the names of people anymore?’ Trump said. ‘Everything is ‘a source says.’ There is no source. The person doesn’t exist. The person’s not alive. It’s bullshit, OK? It’s bullshit.’”)

employees.⁴⁸ First, these news reports are not, themselves, actual evidence of anything; OPM makes no effort to collect information about the underlying events reported on. More to the point from our perspective, at no point does the Notice of Proposed Rulemaking cite any sources—not the academic hypotheticals nor the vague news reports—which describe how grantmaking personnel specifically have inserted political preferences into their work.

That absence in the rulemaking record is conspicuous because grantmaking personnel currently must abide by strict procedures in administering grants. Those procedures—which we have found to be appropriate and effective—limit any opportunity for grantmaking personnel to insert, intentionally or inadvertently, their own personal preferences and protect that work from the President or political appointees’ ability to influence the evaluation of scientific or technical merit or promise.⁴⁹ For instance, many agencies require multiple levels of review—starting with review from the expert scientific community, followed by several levels of review led by federal employees—before issuing any research grants.⁵⁰ These multiple inputs into each grantmaking decision minimize the opportunities for any particular employee to insert any personal preferences into the grantmaking process. Additionally, appeal processes at many agencies—which allow those who feel they were wrongly denied a grant—provide further assurance that grantmaking personnel will not introduce their personal preferences into their work.⁵¹

Finally, it is crucial to understand the structural role of the broader scientific community in providing input on research directions and specific grants being considered by grantmaking personnel. Including external scientific input in the very structures of federal grantmaking further prevents federal employees from inserting personal preferences into their work whether intentionally or subconsciously. Many agencies utilize external peer review to ensure that they are allocating their grant funds as effectively and efficiently as possible and to prevent wasteful or inefficient expenditures in grant budgets. In fact, some of these processes are required by the statutes establishing agencies’ grantmaking authority.⁵² Peer

⁴⁸ Notice of Proposed Rulemaking at 17,192.

⁴⁹ Currently, all federal agencies are required to make grantmaking decisions on the basis of merit unless they are explicitly excepted from doing so by statute. See 2 C.F.R. § 200.205 (“Unless prohibited by Federal statute, the Federal agency must design and execute a merit review process of applications for discretionary Federal awards. The objective of a merit review process is to select recipients most likely to be successful in delivering results based on the program objectives . . .”).

⁵⁰ See, e.g., NAT’L SCI. FOUND. NSF 24-1, PROPOSAL AND AWARD POLICIES AND PROCEDURES GUIDE III-1 to III-8 (May 20, 2024) available at https://nsf-gov-resources.nsf.gov/files/nsf24_1.pdf (describing multiple levels of internal review before grants are awarded). See also 10 C.F.R. § 605.10 (describing multiple levels of review for grants issued by the Department of Energy); 42 C.F.R. § 52a.5 (“NIH grants may be awarded generally only after approval recommendations from both appropriate scientific peer review groups and national advisory councils or boards.”).

⁵¹ See *id.* at III-5 to III-6 (“Process to Appeal NSF’s Decision to Decline a Proposal for Financial or Administrative Reasons”). See also 42 C.F.R. § 50.401 *et seq.* (“Public Health Service Grant Appeals Procedure”); 32 C.F.R. § 22.815 (establishing appeal procedures for Department of Defense grants) 2 C.F.R. § 910.128 (establishing appeal procedures for Department of Energy grants). In addition to these grant-specific appeals procedures, most federal grantmaking agencies have an Office of the Inspector General which is established “to prevent and detect fraud and abuse” in programs and operations which they oversee. 5 U.S.C. § 402.

⁵² See, e.g., 42 U.S.C. § 289a (requiring that applications undergo two levels of peer review for a grant award to be made by the National Institutes of Health); 42 U.S.C. § 1862c (describing “merit review panels” who must review National Science Foundation grants before they may be disbursed).

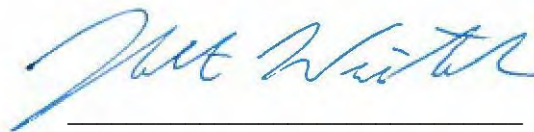
review allows personnel to draw on external expertise in order to ensure that the research that their agency is funding is the best science at project-appropriate levels of expense. That external expertise further ensures the work that grantmaking personnel conduct is focused on advancing scientific knowledge—and not on advancing personal or political policies.

* * *

Over the last century, the scientific community in our country has thrived. Scientists and other researchers have pushed the boundaries of knowledge leading to new technologies, improved health, and a cleaner environment. In short, our country—and the world, at large—has benefited from the strength of America’s scientific community. That story cannot be told without crediting the existing federal funding system that has supported so much of the most cutting-edge research in recent years. The Proposed Rule, by inserting politics into what has been a non-partisan, expertise-driven grantmaking process, has the potential to undo all of this. If finalized, the Proposed Rule will introduce uncertainty, create waste, and stymie promising research projects. We are deeply concerned that promulgation of the Proposed Rule would endanger America’s position at the top of many scientific fields, especially as other countries invest in expertise-driven science and talented scientists are drawn away from the United States toward those places. Ironically, the Proposed Rule will cause the very problems it purports to address, problems that we have not seen in our collective decades of experience with federal grantmaking personnel.

We end our comment by once again urging OPM to reconsider the Proposed Rule, at least as applied to grantmaking personnel, and to ensure that our country’s legacy of scientific achievement can continue unabated for another century.

Respectfully submitted
on behalf of the individuals listed below,



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Appendix A

Kenzie Alynn Cameron is a Professor at Northwestern University's Feinberg School of Medicine in the Department of Medicine. She is also affiliated with Northwestern Memorial Hospital. Her current research focuses on designing innovative health communication interventions to promote preventive health behaviors. She has received federal grants from the Centers for Disease Control and Prevention, National Institute on Aging, the National Cancer Institute, and the Agency for Healthcare Research and Quality acting as a principal investigator. Additionally, she has received funding for over three dozen other federal grants acting as either a co-investigator or a mentor. Finally, she has participated in peer review on a number of committees associated with the National Institutes of Health.

Lauren Clark is an Assistant Core Scientist at Northwestern University's Center for Synthetic Biology. Her current role involves providing services at cost to Northwestern labs interested in using synthetic biology techniques to increase their experimental throughput and efficiency through automation. A majority of her core's revenue is currently from federal grants.

Erica Marie Hartmann is an Associate Professor at Northwestern University's McCormick School of Engineering in the Department of Civil and Environmental Engineering. She is also an affiliate faculty member at the Center for Synthetic Biology and holds a courtesy appointment to the Feinberg School of Medicine. Her current research focuses on the effects of anthropogenic chemicals on microbes in different sorts of environments. She currently receives four federal grants from the National Institute of Allergies and Infectious Diseases, the Centers for Disease Control and Prevention, and the National Science Foundation. She is currently a principal investigator on one of those grants and has previously served as a principal investigator on two completed federal grants. Additionally, many of the students and fellows whom she has supervised have received federal funding to support their positions. She has served as a reviewer for National Institutes of Health (NIAID), NSF (Division of Environmental Engineering; Division of Environmental Biology; Division of Technology, Innovation and Partnerships), and NASA.

Namratha R. Kandula is a Professor of Medicine at Northwestern University's Feinberg School of Medicine in the Department of Medicine. She also holds an appointment as a staff physician at Northwestern Memorial Hospital and a courtesy appointment to the Weinberg College of Arts and Sciences. Her current research focuses on understanding health disparities in light of immigration trends, cultural practices, and other social contexts. She currently receives federal grant funding as a principal investigator from the National Cancer Institute, the National Heart, Lung, and Blood Institute, and the National Institute of Minority Health and Disparities. She has previously received federal funds for at least a dozen other grants, acting in a variety of roles. Finally, she has served as an ad hoc reviewer for the National Institutes of Health since 2016.

Ashty Stephen Karim is an Assistant Professor of Chemical and Biological Engineering at Northwestern University's McCormick School of Engineering. He is also a core faculty member of Northwestern's Center for Synthetic Biology. He has worked with cell-free synthetic biology for >10 years at the intersection of biology and chemistry developing technologies to efficiently harness biological systems. His current research focuses on developing biological molecules, systems, and processes to enable global sustainability, with a particular interest in increasing our ability to recover resources, recycle materials, and capture waste carbon. He currently receives federal grant funding for his research from the National Sciences Foundation, Department of Energy, Defense Advanced Research Projects Agency, Army Research Office, and the Defense Threat Reduction Agency. For the grant that he receives from the Defense Advanced Research Projects Agency, he is the principal investigator of the grant which has been funded at over \$30 million.

Julius Beau Lucks is a Professor of Chemical and Biological Engineering at Northwestern University's McCormick School of Engineering. He is also the co-director of the Center for Synthetic Biology, a faculty associate at the Institute for Policy Research, and a member of the Chemistry of Life Processes Institute, the Center for Water Research, and the Center for Engineering, Sustainability, and Resilience. His current research focuses on developing a greater understanding of biological systems at the molecular level and translating these discoveries into practical applications to tackle difficult challenges. He is a leader in RNA research and synthetic biology, focusing on developing technologies that tackle global challenges, most recently in the area of global water insecurity. He is currently a principal investigator or co-principal investigator on five federal grants from the National Science Foundation and the Department of Defense. He has previously received millions of dollars in federal funding from other federal agencies including the Defense Advanced Research Projects Agency and the National Institutes of Health. He is a fellow of both the American Institute for Medical and Biological Engineering (AIMBE), and the American Association for the Advancement of Science (AAAS). Additionally, he has served as an ad hoc reviewer for the National Science Foundation and the National Institutes of Health, and as a consensus studies member for the National Academies of Science, Engineering and Medicine (NASEM). Finally, he was a member of the National Science Foundation BIO Directorate Advisory Committee from 2024 until it was disestablished this year.

Joshua N. Leonard is a Professor of Chemical and Biological Engineering at Northwestern University's McCormick School of Engineering. He is a pioneer of the field of mammalian synthetic biology, which is dedicated to creating new biomedical technologies that improve human health, and his research focuses on making those advanced therapies both effective and available to all patients. He is also the Director of an National Institutes of Health-funded Biotechnology Training Program and co-founder of Northwestern's Center for Synthetic Biology. He has received millions of dollars in federal funding from the National Science Foundation, Department of Defense's Defense Advanced Research Projects Agency, the National

Institutes of Health, and the Advanced Research Projects Agency for Health to support his research over the years. He is a fellow of the American Institute for Medical and Biological Engineering (AIMBE). He has testified as an expert witness before the United States House of Representatives at a hearing dedicated to “21st Century Biology”. He has served as an advisor to the National Institute of Biomedical Imaging and Engineering in strategic planning. He has served as a member of the National Institute for Health standing study section on cellular and molecular technologies, and he has served as an ad hoc reviewer for multiple National Science Foundation and National Institutes of Health peer review panels.

Niall Mangan is an Assistant Professor of Engineering Sciences and Applied Mathematics at Northwestern University’s McCormick School of Engineering. She is also a member of the Center for Synthetic Biology and the Center for Water Research, and affiliate faculty at the Center for Engineering Sustainability and Resilience and the Paula M. Triens Institute for Sustainability and Energy. Her current research focuses on modelling complex biochemical systems, aiming to produce high-value products like biofuels, plastic alternatives, and pharmaceuticals. She has received federal grant funding from the Department of Energy, the National Institutes of Health, the National Science Foundation, and the U.S. Army. She has previously worked as a panel reviewer at the Department of Energy.

Danielle Tullman-Ercek is a Professor of Chemical and Biological Engineering at Northwestern University’s McCormick School of Engineering. She is also the co-director of the Center for Synthetic Biology and the Director of the Masters in Biotechnology Program. Her current research examines highly organized self-assembling proteins and looks at how those proteins can be used to build biomolecular devices that will be useful that will be useful in both environmental and medical applications. She currently receives federal grant funding for her research from the U.S Army, the National Science Foundation, and the Department of Energy. She is currently the principal investigator for three federally funded grants. She is a fellow of the American Institute for Medical and Biomedical Engineering (AIMBE).

Robert A. Weinstock is the Director of the Environmental Advocacy Center and a Clinical Associate Professor of Law at the Northwestern Pritzker School of Law. He is currently a faculty team member on a project funded by a multi-million-dollar National Science Foundation grant.

Sera L. Young is a Professor in the Department of Anthropology at Northwestern University’s Weinberg College of Arts and Sciences. She is also affiliated with the Institute for Policy Research, the Center for Water Research, the Center for Synthetic Biology, and the Buffet Institute for Global Studies. Her current research focuses on how vulnerable populations adapt to challenges to their health and well-being. She currently receives federal funding for her research from the Environmental Protection Agency, the National

Institute of Mental Health, the National Institute of Child Health and Disease, and the National Science Foundation.

Compilation of Signatories'
Curriculum Vitae

Kenzie Alynn Cameron, PhD, MPH, FACH

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 Northwestern University
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EDUCATION

1988 – 1992 Northwestern University, Evanston, IL, BSSP awarded 06/1992 in Communication Studies

1994 – 1996 Michigan State University, East Lansing, MI, Master of Arts awarded 12/1996 in Communication

1996 – 1998 Michigan State University, East Lansing, MI, PhD awarded 08/1998 in Communication

2005 - 2008 Northwestern University, Chicago IL, Master of Public Health awarded 06/2008

ADDITIONAL TRAINING

2019 The Coach Approach to Mentoring, Training from the Northwestern University Center for Leadership (4 hours)

2020 Northwestern University Clinical and Translations Sciences Institute (NUCATS) Dissemination & Implementation Science Reading Course (10 hours)

2021 National Research Mentoring Network (NRMN) and University of Minnesota Clinical and Translational Science Institute (CTSI) “Enhancing Motivation Using the CARES Mentoring Model” mentor training (1.25 hours)

2022 Northwestern Faculty Mentor Training, The Graduate School, Northwestern University (10 hours)

2022 National Institutes of Health/Office of Intramural Training & Education, Raising a Resilient Scientist (11.25 hours)

CERTIFICATIONS

2021 Certificate of completion from the developers of “Breaking the Bias Habit®: Bias Reduction in Internal Medicine (BRIM),” a web-based course to train BRIM workshop presenters, developed with funding from NIH grant R35 GM122557.

ACADEMIC APPOINTMENTS

1998 – 2003 Assistant Professor (tenure-eligible), The University of Georgia, Department of Speech Communication

2003 - 2011 Research Assistant Professor, Northwestern University Feinberg School of Medicine, Department of Medicine, Division of General Internal Medicine

2004 – 2014 Lecturer, Northwestern University Feinberg School of Medicine, Department of Preventive Medicine (Secondary appointment) (converted to Research Associate Professor in 2014)

2010 – present Full Member, Robert H. Lurie Comprehensive Cancer Center of Northwestern University

2011 – 2016 Research Associate Professor, Northwestern University Feinberg School of Medicine, Department of Medicine, Division of General Internal Medicine and Geriatrics (effective 09/01/2011)

2014 – 2016 Research Associate Professor, Northwestern University Feinberg School of Medicine, Department of Medical Social Sciences (Secondary appointment)

ACADEMIC APPOINTMENTS (continued)

2014 – 2016	Research Associate Professor, Northwestern University Feinberg School of Medicine, Department of Preventive Medicine (Secondary appointment)
2016 – 2022	Research Professor, Northwestern University Feinberg School of Medicine, Department of Medicine, Division of General Internal Medicine and Geriatrics (effective 09/01/2016)
2016 – 2022	Research Professor, Northwestern University Feinberg School of Medicine, Department of Medical Social Sciences (Secondary appointment)
2016 – 2022	Research Professor, Northwestern University Feinberg School of Medicine, Department of Preventive Medicine (Secondary appointment)
2019 – 2022	Research Professor, Northwestern University Feinberg School of Medicine, Department of Medical Education (Secondary appointment)
2022 - present	Professor, Northwestern University Feinberg School of Medicine, Department of Medicine, Division of General Internal Medicine, <i>Team Science Track</i> (effective 02/01/2022). Retain secondary appointments as Professor in the Departments of Medical Education, Medical Social Sciences, and Preventive Medicine

HOSPITAL/CLINIC APPOINTMENTS

Northwestern Memorial Hospital/Northwestern Medicine, Chicago, IL (non-clinical affiliation via Northwestern Medicine)

OTHER POSITIONS / EMPLOYMENT

2011 – 2015	Lead , Survey and Qualitative Research, Research Methods and Analytic Core of the Center for Advancing Equity in Clinical Preventive Services
2016 – 2020	Co-Director , Feinberg School of Medicine Mentoring Consultation Service of the Mentor Development Academy, Northwestern University Clinical and Translational Sciences Institute (NUCATS), Center for Education and Career Development Core
2018 – present	Director , General Internal Medicine Faculty Development and Mentoring – Research (General Internal Medicine and Geriatrics 2018 – 2022; became separate Divisions in 2022)
2019 – present	Lead , Outcomes & Quality Management, Northwestern University Feinberg School of Medicine Department of Medicine Peer Coaching Program
2021 – present	Coach , Northwestern University Feinberg School of Medicine Department of Medicine Peer Coaching Program
2020 – 2024	Director , Northwestern University Clinical and Translational Sciences Institute (NUCATS) Mentoring Programs, Center for Education and Career Development Core
2020 – 2024	Director , Feinberg School of Medicine Mentoring Consultation Service of the Mentor Development Academy, Northwestern University Clinical and Translational Sciences Institute (NUCATS), Center for Education and Career Development Core
2023 – present	Grant Writing Coach , Northwestern University Feinberg School of Medicine Faculty Affairs Office
2024 – present	Senior Director of NUCATS Mentoring and Leadership Development , Northwestern University Clinical and Translational Sciences Institute (NUCATS) Mentoring Programs, Center for Education and Career Development Core

HONORS AND AWARDS**A. Elected Society Memberships**

1998-present	Phi Kappa Phi Honor Society, Inducted into membership at Michigan State University
1999-present	Phi Beta Delta, The Honor Society for International Scholars, Inducted into membership at The University of Georgia
2008 - present	Delta Omega, The Public Health Honor Society (Beta Eta Chapter), Inducted into membership at Northwestern University
2016 - present	Fellow , American Academy on Communication and Healthcare (elected)/ organization renamed Academy on Communication in Healthcare in 2017

HONORS AND AWARDS (continued)**B. International/National/Regional**

- 1995 Top Paper, Health Communication Division, Speech Communication Association (Co-Author)
- 1996 Top Paper, Health Communication Division, International Communication (Co-Author)
- 1996 Top Three Paper, Health Communication Division, Speech Communication Association (Co-Author)
- 1996 Distinguished Article Award, Applied Communication Division, Speech Communication Association (Co-Author)
- 1997 Top Three Paper, Applied Communication Division, Speech Communication Association (Co-Author)
- 2005 Selected as a Fellow in the NIH sponsored Summer Institute on Randomized Controlled Trials Involving Behavioral Interventions, Sponsored by the Office of Behavioral and Social Science Research, National Institutes of Health
- 2008 American Public Health Association (APHA), Public Health Education and Health Promotion Section, Eighteenth Annual Public Health Materials Contest; Electronic materials category winner for: Multimedia Influenza Prevention Program (DVD) (First Author)
- 2008 Top Abstract (Plenary presentation), Midwest Society for General Internal Medicine, Chicago, IL (First/Senior Author)
- 2013 Best Paper, American Academy of Hospice and Palliative Care (Co-Author; First author: RK Sharma, MD, MHS - mentee)
- 2013 Selected participant of the Association of American Medical Colleges (AAMC) Executive Development Seminar for Interim and Aspiring Leaders
- 2013 Finalist for "Top Poster" award, International Conference on Communication in Healthcare, *Understanding African-American Patients Refusal of Pneumococcal Vaccination*, Montreal, Canada. (Senior Author)
- 2014 Abstract selected as part of the *Gallery of Excellence* at the Society of Academic Emergency Medicine, Dallas, TX, May 2014. (Co-Author) Also mentee was selected as a finalist for Young Investigator of the Year (Conference Award – Danielle McCarthy, MD, MS – mentee)
- 2014 Disability Research Group Best Poster Abstract, AcademyHealth conference, San Diego, CA, June 2014. *Patients' Attitudes Towards Healthcare Organizations Collecting Information about Disability Status*. (Senior author; First author: Megan A. Morris, PhD, MPH – mentee)
- 2015 Best Cancer Research Poster Presentation Award, Society of General Internal Medicine Annual Meeting, **Cameron KA**, Ramirez-Zohfeld V, Dolan NC, Ferreira MR, Radosta J, Galanter WL, Eder M, Wolf MS, Liu D, Rademaker A. Do knowledge gains translate into behavior change? Pairing physician-directed and point-of-care patient education strategies to increase colorectal cancer knowledge and screening completion. Toronto, Ontario, Canada.
- 2015 Top 10 Abstract/Oral Presentation, International Conference on Communication in Healthcare, **Cameron KA**, Ramirez-Zohfeld V, Dolan NC, Ferreira MR, Radosta J, Galanter WL, Eder M, Wolf MS, Liu D, Rademaker A. *Do Knowledge Gains Translate into Behavior Change? Pairing Physician-Directed and Point-of-Care Patient Education Strategies to Increase Colorectal Cancer Knowledge and Screening Completion*, New Orleans, Louisiana (Senior and presenting author). [recused from final judging as K.A. Cameron was Co-Chair of Scientific Committee]
- 2017 **Best Paper Award**, 5th Annual Conference on Sustainable Development, Columbia University, NY. Schliep MA, Feinglass JF, **Cameron KA**, Sorensen JS. An assessment of radio-based education about female genital cutting and health and human rights issues in Douentza, Mali.
- 2018 **Heart Failure Society of America (HFSA) Nursing Investigator Award**. A Simulation-based Mastery Learning Approach to Ventricular Assist Device Self-Management: The SimVAD Study (Harap RS, **Cameron KA**, Nonog G, Schultze LE, Cohen ER, Grady KL, Wilcox JE, Shanklin KB, Barsuk JH), Nashville, TN, September 2018

HONORS AND AWARDS

B. International/National/Regional (continued)

- 2019 **Editor-in-Chief Pick of the Month, featured on front cover of journal.** McCarthy DM, Curtis LM, Courtney DM, **Cameron KA**, Lank PM, Kim HS, Opsasnick LA, Lyden AE, Gravenor SJ, Russell AM, Eifler MR, Hur SI, Rowland ME, Walton SM, Montague E, Kim K-YA, Wolf MS. (2019). A multi-faceted intervention to improve patient knowledge and safe use of opioids: Results of the EMC² trial for opioids. *Academic Emergency Medicine*, 26: 1311-1325.
- 2020 **Michigan State University College of Communication Arts & Sciences Alumni Board Outstanding Alumni Award.** Nominated and Selected among all Michigan State Communication Arts & Sciences alumni for the College of Communication Arts & Sciences most prestigious honor
- 2020 **Academy of Communication in Healthcare Putnam Scholar Program:** Mentor to Dr. Johanne Eliacin, Awardee 2020 – 2022. Dr. Eliacin is a Research Scientist at the William M. Tierney Center for Health Services Research, Regenstrief Institute; Core Investigator, VA HSR&D Center for Health Information and Communication at the Richard L. Roudebush VA Medical Center; a Research Scientist at the Indiana Alzheimer's Disease Research Center; and a Research Scientist at Indiana University Center for Health Services and Outcome Research.

C. University

- 1994 – 1998 **University Distinguished Fellowship, Four-year Fellowship,** The Graduate School, Michigan State University
- 1995 Outstanding Graduate Student Award, Awarded by the Undergraduate Communication Association, Michigan State University
- 1998 **Excellence in Teaching Citation,** Michigan State University
- 1999 – 2000 Faculty Mentoring Fellowship, Institute for Behavioral Research, The University of Georgia
- 2000 – 2002 Lilly Teaching Fellowship, Office for Instructional Development, The University of Georgia
- 2000 – 2002 Member, University Roundtable, The University of Georgia
- 2002 Major Professor of Erin Payne, A.B., who was awarded the Outstanding Student in the Social Sciences by The University of Georgia Honors Program
- 2002 Outstanding Faculty Academic Advisor Award, Franklin College of Arts and Sciences, The University of Georgia
- 2002 – 2003 Invited Faculty Mentor, The Honors Program, The University of Georgia
- 2002 – 2003 **Research Fellow,** Institute for Behavioral Research, The University of Georgia
- 2003 J. Hatten Howard, III Teaching Award, The Honors Program, The University of Georgia
- 2007 Northwestern University Department of Medicine Teaching Award, in honor of being ranked in the top 10% of medical school teachers at Northwestern for the 2006 – 2007 academic year.
- 2010 – 2011 **Searle Fellows Program of Northwestern University's Searle Center for Teaching Excellence**
- 2011 – present **Feinberg Academy of Medical Educators,** Northwestern University Feinberg School of Medicine
- 2012 Finalist, Northwestern University Women Faculty Organization Founder's Award for Clinical Research (Senior author)
- 2012 Finalist, Northwestern University Women Faculty Organization Founder's Award for Clinical Research (Senior author)
- 2012 Winner, Northwestern University Women Faculty Organization Founder's Award for Public Health/Medical Social Sciences (Co-Author; first author: Karen Kaiser, PhD - mentee)
- 2012 Finalist, Northwestern University Women Faculty Organization Founder's Award for Public Health/Medical Social Sciences, Lewis Landsberg Research Day (Co-Author; first author: Lori Gawron, MD, MPH – mentee)
- 2013 Winner, Northwestern University Women Faculty Organization Founder's Award for Public Health/Medical Social Sciences (Co-author; Senior author: Joyce Tang, MD, MPH – mentee)

HONORS AND AWARDS

C. University (continued)

- 2013 Finalist, Northwestern University Women Faculty Organization Founder's Award for Public Health/Medical Social Sciences, Lewis Landsberg Research Day (Co-author; First author: Krysf Foster – MPH student; senior author: Joyce Tang, MD, MPH – mentee)
- 2013 Finalist, Milton Hamolsky competition, Society of General Internal Medicine (Co-author; First author: Joyce Tang, MD, MPH – mentee)
- 2014 Nominated for Northwestern University Feinberg School of Medicine Mentor of the Year Award
- 2015 Finalist, Northwestern University Feinberg School of Medicine Mentor of the Year Award
- 2016 **The Graduate School Faculty Service Award**, Northwestern University, Evanston, IL
- 2016 **Mentor of the Year**, Northwestern University Feinberg School of Medicine
- 2018 Finalist, Northwestern University Lewis Landsberg Research Day Education Research Abstract (co-author; first author: Rebecca Harap)
- 2019 Third place abstract, Medical Education Category, Northwestern University, Lewis Landsberg Research Day Education Research Abstract (co-author; presenting author: Blair P. Golden)
- 2022 **Provost Award for Exemplary Faculty Service**, Northwestern University
- 2023 Awarded "High Impact Paper" in Clinical Research for the Department of Medicine, Northwestern University Feinberg School of Medicine for Henschen BL, Theodorou ME, Chapman M, Barra M, Toms A, **Cameron KA**, Shou S, Yeh C, Lee J, O'Leary KJ. (2022). An Intensive Intervention to Reduce Readmissions for Frequently Hospitalized Patients: the CHAMP Randomized Controlled Trial. *J Gen Intern Med*, 37: 1877-1884. PMID:34472021. doi: 10.1007/s11606-021-07048-1.

INTERNAL INSTITUTIONAL SERVICE

A. University

The University of Georgia

- 2000 – 2003 Interviewer, Interview preparation/mock interviews for Rhodes, Marshall, Truman, and Gates Scholarship Applicants, The Honors Program
- 2000 – 2003 Member, The University of Georgia Cancer Coalition (The Cancer Intervention Initiative Proposal)
- 2001 Honors Faculty/Student Panel, for parents of potential honors students. The University of Georgia
- 2001 Selection Committee, Mid-Term Foundation Fellows, The Honors Program
- 2003 Invited Member, Honors Assessment Committee. Serving at request of Jere W. Morehead, Associate Provost and Director of the Honors Program

Northwestern University

- 2004 – 2013 Institutional Review Board Panel C, Office for the Protection of Human Subjects
- 2004 – present Faculty Marshal, The Graduate School Hooding Ceremony, Northwestern Univ, Evanston, IL
- 2006 – 2007 Steering Committee, Research Alliance to Combat HIV/AIDS (REACH) (\$3 million grant awarded to the Program of African Studies, Northwestern University)
- 2018 Mentoring Consultant. Provided faculty oversight in conjunction with Dr. Mercedes Carnethon on the development of mentoring program for clinical research professionals at Ann & Robert Lurie Children's hospital of Chicago
- 2018 - present Invited member, Provost's Advisory Council on Women Faculty
- 2018 – 2020 Chair, Mentoring Work Group, Provost's Advisory Council on Women Faculty. Invited to chair by P. Lindsay Chase-Lansdale, Vice Provost for Academics and Associate Provost for Faculty. Work Group proposed a Provost's Small Group Mentoring Program.
- 2019 – present Provost Faculty Mentoring Program: collaborate with Joan Johnson, Director for Faculty, Office of the Provost, and Adam Goodman, Director, Center for Leadership to develop, facilitate, and evaluate the Provost Small Group Faculty Mentoring Program (initiated January 2020)

INTERNAL INSTITUTIONAL SERVICE**A. University (continued)**

2024 – present Collaborate with The Provost's Office, The Graduate School, and the Center for Leadership to develop the Advancing Mentoring Excellence at Northwestern mentor training program.

B. SchoolNorthwestern University – Feinberg School of Medicine

2006 – 2012 Member, Institute for Healthcare Studies, Northwestern University Feinberg School of Medicine (reorganized and renamed Center for Healthcare Studies in 2012)

2008 – 2024 Steering Committee, Women's Faculty Organization, Northwestern University Feinberg School of Medicine

2011 – 2012 Co-Chair

2012 – 2013 **Chair**

2013 – 2014 Past-Chair

2013 – 2016 Committee Chairperson of the Distinguished Women in Medicine and Science sub-committee

2008 – 2009 Northwestern Competency Compass, Effective Communication and Interpersonal Skills Committee, Feinberg School of Medicine

2008 – 2014 Core Faculty, Research and Education for Academic Achievement (REACH), Practice Based Research Network affiliated with the Northwestern University Clinical and Translational Sciences Institute (NUCATS)

2008 – 2012 Northwestern University Community Engagement Council

2009 – 2013 Faculty Development Workgroup, Northwestern University Community Engagement Council

2011 – 2014 Research Dissemination Committee, Northwestern University Clinical and Translational Sciences Institute, Community Engaged Research Center (CERC)

2011 – 2014 Feinberg Academy of Medical Educators (FAME) Faculty Development Workshops Task Force

2011 – 2014 Screencasting Subcommittee

2011 – 2012 Joint Curriculum Renewal/FAME Faculty Development Committee

Northwestern University – Feinberg School of Medicine

2012 - 2016 **Co-Founder** (with Rick McGee & Sandra LaBlance) Qualitative Research Interest Group, Northwestern University Feinberg School of Medicine

2012 – present Institute for Public Health and Medicine, Northwestern University Feinberg School of Medicine

Member, Center for Applied Health Research on Aging (2019 – present)

Member, Center for Behavior and Health (2012 – present)

Member, Center for Community Health (2013 – present)

Member, Center for Dissemination & Implementation Science (2022 – present)

Member, Center for Education in Health Sciences (2012 – present)

Member, Center for Health Equity Transformation (2018 – present)

Member, Center for Health Services and Outcomes Research (**formerly Institute for Healthcare Studies; member since 2006)

Member, Center for Primary Care Innovation (2014 – present)

2012 - 2014 **Mentor**, Building Interdisciplinary Research Careers in Women's Health (BIRCWH) (Rashmi K. Sharma, Mentee)

2012 Selection committee for Searle Faculty Fellows from the Feinberg School of Medicine for 2012 – 2013

2012 Self Study Committee (Faculty) for Liaison Committee on Medication Education Reaccreditation, Northwestern University Feinberg School of Medicine

2013 Invited Judge for Lewis Landsberg Research Day, Northwestern University Feinberg School of Medicine

INSTITUTIONAL SERVICE**B. School (continued)**

- 2014 Member, Health Services Outcome Research Mentor Development Workshop Planning Committee, Center for Healthcare Studies, Institute for Public Health and Medicine
- 2014 – present Feinberg School of Medicine Mentor Development Academy (invited membership), Northwestern University, Chicago, IL
- 2016 – 2018 Member, Steering Committee, Feinberg Academy of Medical Educators (FAME)
- 2018 - 2019 Searle Fellows Program/Searle Review Task Force, Feinberg Academy of Medical Educators
- 2019 Member, Search Committee, Ann and Robert Lurie Children's Hospital, Department Chair for Medical Imaging
- 2019 – 2020 **Mentor**, Searle Fellows Program (served as faculty mentor to Dr. Theresa Walunas)
- 2019 – 2021 **Provost Faculty Mentor**, Northwestern's Provost Faculty Mentoring Program
- 2020 – 2021 Self Study Committee (Faculty) for Liaison Committee on Medication Education Reaccreditation, Northwestern University Feinberg School of Medicine
- 2021 Participant, Liaison Committee on Medical Education (LCME) accreditation Site Visit
- 2021 – 2022 Member, Implementation Scientist Faculty Search Committee
- 2021 – 2022 Equity Officer, Implementation Scientist Faculty Search Committee
- 2021 Member, NUCATS Community Advisory Board Planning
- 2021 – present Invited Member, NUCATS KL2/K12 Executive Leadership Committee
- 2022 – present Facilitator, Augusta Webster Group Mentoring Sessions (2022, 2024)
- 2022 – present Member, Feinberg Academy of Medical Educators (FAME) Medical Education Day Programming Committee
- 2024 – present Member, Faculty Panel to review Northwestern University Feinberg School of Medicine Centers.

B. Department/DivisionMichigan State University – Department of Communication

- 1994 – 1995 Member, Doctoral Affairs Committee (selection of incoming PhD students), Department of Communication
- 1994 – 1996 Committee Member and Registration Chair (1996), Bowling for Scholars: A Strike against Cancer (Philanthropic Organization through the Department of Communication)
- 1995 – 1996 Vice President, Association of Graduate Students in Communication
- 1996 – 1997 President, Association of Graduate Students in Communication
- 1997 Member, Communication Department Chair Search Committee

The University of Georgia – Department of Speech Communication

- 1998 Judge, Department of Speech Communication Speech Contest
- 1998 – 2003 Member, Personnel/Search Committee, Department of Speech Communication
- 1998 – 2003 Member, Interpersonal Communication Committee, Department of Speech Communication
- 1998 – 2003 Member, Graduate Research Funding Committee, Department of Speech Communication
- 1998 – 2003 Member, Assessment Committee, Department of Speech Communication
- 1999 – 2001 Elected member, Graduate Admissions Committee, Department of Speech Communication
- 2001 – 2002 External Member, Search Committee for Faculty position, Department of Health Promotion and Behavior
- 2002 – 2003 Member, Development of MPH Program at The University of Georgia; Developed Course Application for new course "Medical Interviewing and Information Dissemination," to be a requirement for a specialization in Health Communication
- 2002 Member, Search Committee for Senior Secretary Position, Department of Speech Communication

INSTITUTIONAL SERVICE**C. Department/Division (continued)***Northwestern University – Department of Medicine/Division of General Internal Medicine and Geriatrics*

- 2014 – present Member, Faculty Search Committee, Division of General Internal Medicine and Geriatrics/Department of Medicine
- 2014 – present Member, Medical Education Research Group, Department of Medicine, Feinberg School of Medicine
- 2015 – present Member, Faculty Search Committee, Division of Hospital Medicine, Feinberg School of Medicine
- 2018 – present **Director**, General Internal Medicine Faculty Development and Mentoring – Research (General Internal Medicine and Geriatrics 2018 – 2022; became separate Divisions in 2022)
- 2019 – 2021 Local Bias Reduction in Medicine (BRIM) Implementer, Department of Medicine, Feinberg School of Medicine
- 2024 – present Department of Medicine Appointments, Promotion, and Tenure Committee, Feinberg School of Medicine

Northwestern University – Program in Public Health (formerly in Department of Preventive Medicine, now under Center for Healthcare Studies Education Programs)

- 2008 – 2009 Master of Public Health Task Force
- 2013 – 2017 **Chair**, Evaluation Committee, Program in Public Health, Northwestern University
- 2013 – 2017 Member, Executive Committee, Program in Public Health, Northwestern University

D. Hospital

- 2009 Grant Reviewer, Proposals submitted for funding from the Women's Board of Northwestern Memorial Hospital for Nursing Research
- 2012 - 2017 Academy for Quality and Safety Innovation; Co-instructor for *Patient Centeredness* Section (1 lecture annually); *2015 Winner of the Leape Ahead Award from the American Association for Physician Leadership*

COMMUNITY / PUBLIC SERVICE

- 2011 Member of Dana Farber Marathon Challenge Team (Charity Runner) for Boston Marathon, raised over \$8,000
- 2017 – present Advocate Circle Member, Legal Council for Health Justice, Chicago, IL
- 2017 – present Supporter and Volunteer, Chicago Cat Rescue, Chicago, IL
- 2019 Raffle/Silent Auction Volunteer for “11th annual Sexy Black” (Benefit to raise awareness for black cats and dogs)
- 2018 – 2020 Member and Chair, Data Safety Monitoring Board, for PI: Valerie Press, University of Chicago
- 2019 – 2022 Member, 100 Women Who Care, Chicago Chapter
- 2020 – 2021 Volunteer, Cradles to Crayons
- 2021 Host Committee, Legal Council for Health Justice, *Building Lives, Rebuilding Systems* Virtual Gala
- 2021 Member of Legal Beagles AIDS Run Walk Chicago team

PROFESSIONAL SOCIETY MEMBERSHIP

1994 – 2016	National Communication Association
1995 – 2002	International Network on Personal Relationships
1996 – 2002	International Communication Association
1996 – 2002	International Society for Social and Personal Relationships
1998 – 2000	Central States Communication Association
1998 – 2004	The Society for Personality and Social Psychology
1998 – present	Phi Kappa Phi Honor Society, Lifelong Member
1999 – 2003	Phi Beta Delta International Honor Society
1999 – 2003	Southern States Communication Association
2002 – 2003	International Association for Relationship Research
2002 – 2010	American Public Health Association
2004 – 2014	European Association for Communication in Healthcare
2006 - present	Society for General Internal Medicine
2007 - present	American Academy on Communication in Healthcare

EXTERNAL PROFESSIONAL LEADERSHIP AND SERVICE

1996 – 1997	Elected Student Representative , Health Communication Division, National Communication Association
1998	Member, Book Auction Committee International Network on Personal Relationships, Annual Conference
1998 – 1999	Elected Member, Awards Committee , Interpersonal Communication Division, National Communication Association
1998 – 1999	Elected Member Abstract Review Committee , Interpersonal and Small Group Interaction Division, National Communication Association
1998 – 1999	Member, Abstract Review Committee, International Society for Social and Personal Relationships
2004 – 2005	Co-Chair, Productive Approaches to Grantsmanship and Publication Pre-Conference at the 2005 annual International Conference on Communication in Healthcare, Chicago, IL
2005 - present	Member, Abstract Review Committee, International Conference on Communication in Healthcare (ICCH) (2005, 2007, 2009, 2011, annually 2014 - present)
2007	Member, Centers for Disease Control and Prevention (CDC) Agenda Advisory Committee, Health Protection Research Initiative (HPRI) Grantee Meeting
2007	Elected Member, Abstract Review Committee , Health Communication Division, National Communication Association
2007 - present	Member, Scientific Committee, International Conference on Communication in Healthcare, Chicago, IL (2005); Charleston, SC (2007); Miami, FL (2009); Amsterdam, The Netherlands (2014); New Orleans, LA (2015); Heidelberg, Germany (2016); Baltimore, MD (2017); Porto, Portugal (2018), San Diego, CA (2019), Vienna, Austria (2020), Virtual (2021), Glasgow, Scotland (2022); Rio Grande, Puerto Rico (2023).
2008 – 2011	Member, Abstract Review Committee, Health Communication Working Group, Public Health Education and Health Promotion, American Public Health Association
2008 – present	Member, Abstract Review Committee, Midwest Society for General Internal Medicine Annual Meetings
2009 – 2012	Judge and Abstract Reviewer, Women's Faculty Organization Women's Health Top Abstract presented at 5 th Annual Lewis Landsberg Research Day, Northwestern University Feinberg School of Medicine
2010 – 2011	Member, Abstract Review Committee, Qualitative Abstracts Review Committee, Society for General Internal Medicine
2010 – 2020	Member, Abstract Review Committee, Health Literacy Research Conference (HARC)

EXTERNAL PROFESSIONAL LEADERSHIP AND SERVICE (continued)

- 2010 – 2020 Member, Abstract Review Committee, Society for General Internal Medicine Annual Meetings
- 2011 **Co-Chair, Scientific Committee**, International Conference on Communication in Healthcare, Chicago, IL
- 2012 Member, Scientific Committee, American Academy on Communication in Healthcare Teaching and Research Forum, Providence, RI
- 2012 - present Member, Abstract Review Committee, American Academy on Communication in Healthcare Research & Teaching Forum (2012, 2014, 2016, 2018, 2020)
- 2014 - 2018 **Member, Expert Jury for selection of Best Poster Award**, International Conference on Communication in Healthcare, Amsterdam, The Netherlands (2014), New Orleans, LA (2015), Heidelberg, Germany (2016), Porto, Portugal (2018)
- 2015 Member, Planning Committee, International Conference on Communication in Healthcare, New Orleans, LA (2015)
- 2015 **Co-Chair, Scientific Committee**, International Conference on Communication in Healthcare, New Orleans, LA (2015)
- 2018 – present **Invited Inaugural Board Member**. Social Science Clinical Research Alliance (SSCRA). The SSCRA is designed to encourage research collaborations between social scientists and clinical researchers, mentor those from each community on such collaborations, and provide opportunities for connections. The SSCRA is supported by the Academy of Communication in Healthcare, George Mason University's Department of Global and Community Health and School of Nursing (via the DC Health Communication Conference), and the University of Kentucky's Markey Cancer Center (via the Kentucky Conference on Health Communication).
- 2018 – 2019 **Planning Committee Invited Representative (Health Communication)** to the International Conference on Communication in Healthcare Planning Committee for the 2019 (San Diego, CA).
- 2021 **Lead Facilitator**, Professional Development Workshops, International Conference on Communication in Healthcare, held virtually. Co-created and co-facilitated two professional development workshops for the annual conference, October 17 – 20, 2021.
- 2022 – 2023 **Mentoring/Professional Development Co-Chair & Mentoring/Professional Development Subcommittee Co-Chair**. 2023 International Conference on Communication in Healthcare (ICCH).
- 2022 – 2023 **Conference Planning Committee**. 2023 International Conference on Communication in Healthcare (ICCH), Rio Grande, Puerto Rico.
- 2022 – 2024 **Invited Stakeholder Member**, Australia's National Ageing Research Institute (NARI), *Accounting for Diversity: Culturally and Linguistically Diverse (CALD) data variables in health and medical research*, Project funded by the National Health and Medical Research Council of Australia. [Resulting Publication: Brijnath B, Muoio R, Feldman P, Gheri D, Chan A-W, Welch V, Treweek S, Green H, Orkin AM, Owusu-Addo E. (2024). "We are not invited": Australian focus group results on how to improve ethnic diversity in trials. *J Clin Epidemiology*, 170, <https://doi.org/10.1016/j.jclinepi.2024.111366>]
- 2024 – present **Organizing Committee Member**, *Fostering a Healthy Mentorship Ecosystem in the Translational Sciences: A Participatory Conference for CTSA Training Program Administrators & Evaluators, and Mentorship Experts*. (Submitted as R13, M. McDaniels, C. Sorkness, D. Pfund, University of Wisconsin).

EDITORSHIPS / EDITORIAL BOARD SERVICE

- 2000 – 2003 *Women Studies in Communication*
- 2006 Editorial Advisory Board, for Wogalter, M.S. (Ed) *Handbook of Warnings*. Lawrence Erlbaum Associates, Mahwah, NJ. 2007
- 2007 – present Associate Editor, *Health Communication*
- 2007 – 2013 Ad hoc member/reviewer, *Communication Yearbook (33, 34, 36, 37)*
- 2009 **Invited Guest Editor**, Theories in Health Communication Research Special Issue, *Patient Education and Counseling*
- 2011-2012 **Invited Guest Editor**, Patients, providers, and relationships in healthcare: Investigations from the ICCH 2011 conference in Chicago, Special Issue, *Patient Education and Counseling*
- 2014-2015 **Invited Guest Editor**, Selected Investigations from the ICCH 2014 Conference in Amsterdam, The Netherlands (Special Issue) *Patient Education and Counseling*
- 2015-2016 **Invited Guest Editor**, Special Issue Highlighting Investigations from the ICCH 2015 Conference in New Orleans, LA, USA, *Patient Education and Counseling*

MANUSCRIPT REVIEW RESPONSIBILITIES**A. Ongoing**

- Journal of the American Medical Association*, 2006 - present
- Canadian Medical Association Journal*, 2022 - present
- Journal of Hospital Medicine*, 2009 – present
- Journal of General Internal Medicine*, 2006 – present
- The Joint Commission Journal on Quality and Patient Safety*, 2017 - present
- Patient Education & Counseling*, 2006 – present
- Health Communication*, 2005 – present
- Journal of Healthcare for the Poor and Underserved*, 2009 – present
- Journal of Clinical and Translational Science*, 2020 – present
- Teaching and Learning in Medicine*, 2018 – present

B. Past

- AIDS Care: Psychological and Sociomedical Aspects of AIDS*, 1998
- American Journal of Preventive Medicine*, 2006 - 2009
- Archives of Internal Medicine*, 2011
- Cancer*, 2016
- Communication Monographs*, 2002 – 2003
- Communication Research*, 2006 – 2007, 2011 - 2013
- Communication Studies*, 1998 - 2001
- Invited Reviewer, Special issue on compliance-gaining/resisting research, 1998
- Invited Reviewer, Special issue on Practical theory, public participation, and community, 2000
- Critical Studies in Media Communication*, 2001
- Health Education and Behavior*, 2010
- Health Education Research*, 2004 – 2011
- Journal of Applied Communication Research*, 2002
- Journal of Communication*, 2012
- Journal of Communication in Healthcare*, 2008
- Journal of Health Communication*, 2000 – 2011
- Journal of Hospital Medicine*, 2009
- Journal of Immigrant and Minority Health*, 2010 - 2012
- Journal of Sex Research*, 1994 - 2004
- Journal of Social and Personal Relationships*, 1999 - 2000
- Invited Reviewer, Special issue on conflict, 1999; Special issue on HIV/AIDS, 2000
- Medical Care Research and Review*, 2012

MANUSCRIPT REVIEW RESPONSIBILITIES**B. Past (continued)***Social Science & Medicine*, 2006 – 2020*Western Journal of Communication*, 2004*Women's Studies in Communication*, 1998 – 2003**GRANT REVIEW RESPONSIBILITIES****A. International**

2002 Social Sciences and Humanities Research Council of Canada

2011 The Netherlands Organisation of Health, Research and Development (ZonMw)

B. National/Regional

- 2004 National Institutes of Mental Health, Panel related to HIV/AIDS in intravenous drug users in the criminal (prison) population [ZRG1 HOP-M (50) (R)] (Center for Scientific Review, *Temporary Panel Member*) (June 2004)
- 2005 National Institutes of Health, Specially convened review group for an Influenza grant (Center for Scientific Review Member submission)
- 2006 National Institutes of Health, Health and the Community Teleconference Review Panel (Center for Scientific Review) (July 2006, August 2006)
- 2006 National Institutes of Health, Community-Level Health Promotion Study Section (Center for Scientific Review, *Temporary Panel Member*) (June 2006)
- 2007 National Institutes of Health, Community Influences on Health Behavior (CIHB), ZRGI HOP-M(02) member conflict applications (Center for Scientific Review, *Temporary Panel Member*) (March 2007)
- 2009 National Institutes of Health, Community-Level Health Promotion Study Section (Center for Scientific Review, *Temporary Panel Member*) (February 2009)
- 2009 National Institutes of Health Challenge Grants RC-1 Stage 1 Review (June 2009)
- 2010 National Institutes of Health, Community-Level Health Promotion Study Section (Center for Scientific Review, *Temporary Panel Member*) (February 2010)
- 2010 National Institutes of Health, Dissemination and Implementation Research in Health (DIRH) (Center for Scientific Review, *Temporary Panel Member*) (June 2010)
- 2011 National Institutes of Health, Community-Level Health Promotion Study Section (Center for Scientific Review, *Temporary Panel Member*) (June 2011)
- 2011 National Institutes of Health, Understanding and Promoting Health Literacy Study Section [ZRG1 RPHB-P (50) R] (Center for Scientific Review, *Temporary Panel Member*) (June 2011)
- 2012 National Institutes of Health, Small Grants for Behavioral Research in Cancer Control [ZCA1 SRLB-B (M1)] (Center for Scientific Review, *Temporary Panel Member*) (March 2012)
- 2012 – 2016 **National Institutes of Health, Community-Level Health Promotion (CHLP) Study Section Member (Center for Scientific Review) (July 2012 – June 2016)**
- 2014 National Institutes of Health, Special Emphasis Panel/Scientific Review Group 2015/01 Health Services Organization and Delivery, Invited Reviewer (2014)
- 2017 Vanderbilt Center for Effective Health Communication (CEHC) Health Communication Research Grant Program. Proposal Reviewer January 2017.
- 2018 National Institutes of Health Fellowship Review (March 2018), Special Emphasis Panel/Scientific Review Group 2018/05 ZRG1 F16-L (20) Fellowships: Risks, Prevention and Health Behavior
- 2020 National Institutes of Health Fellowship Review (October 2020), Special Emphasis Panel/Scientific Review Group ZRG1 F16-L (20) Fellowships: Risks, Prevention and Health Behavior

GRANT REVIEW RESPONSIBILITIES**C. Institutional (Northwestern University/Feinberg School of Medicine)**

- 2010 - 2022 Northwestern University Clinical and Translational Sciences Institute (NUCATS) Community-Engaged Research Center, Alliance for Research in Chicagoland Communities Seed Grants (2010, 2020, 2022)
- 2011 – 2012 Robert H. Lurie Comprehensive Cancer Center of Northwestern University, reviewer for American Cancer Society-Institutional Research Grants
- 2012 – present Multidisciplinary Clinical and Translational Scientists (MCTS) Scholar Grant Competition (KL2), Reviewer (2012, 2017, 2018, 2021, 2022, 2023) // Renamed K12 (2024)
- 2017 – present Northwestern University Clinical and Translational Sciences Institute (NUCATS), Pilot Program Competition, Reviewer (2017, 2018, 2021)
- 2022 – present Northwestern University Older American Independence Center (Pepper Center), Pepper Scholars Program, Reviewer (2022 - continuing)

GRANT PROPOSALS PENDING

Agency: National Heart Lung and Blood Institute (NHLBI)/National Institutes of Health

ID: R01HL183194

Title: Using Simulation and Implementation Science to Improve Self-care Skills for Patients with Ventricular Assist Device and their Caregivers: The SimVAD Trial

Principal Investigator(s): Jeffrey H. Barsuk/ JaneE. Wilcox (Co-PI)

Role on project: Co-I

Percent effort: 15%/15%/20%/20%/20%

Total costs for project period: \$4,075,139

Project period: 12/1/2025 - 11/30/2030

Agency: National Institutes of Health/National Institute on Aging

ID: P30AG059988-01A1 (Wolf/Linder/Lindquist)

Title: Claude D. Pepper Older American Independence Center (OAIC) at Northwestern University

Principal Investigator(s): Michael S. Wolf/Jeffrey A. Linder (Co-PI)

Role on project: Research Education Component Co-Director; Data Analytics Core Collaborator

Percent effort: 10%/7.5%/7.5%/7.5%/10%

Direct costs per year: \$949,734

Total costs for project period: \$7,086,535

Project period: 08/01/2025 – 06/30/2030

Agency: National Heart Lung and Blood Institute/National Institutes of Health

Title: REACH BP: REmote physical ACTivity intervention for High Blood Pressure Postpartum

Name of PD/PI: Cameron, N.A.

Role on Project: Advisory Committee

Percent effort: donated

Project period: 07/01/2025 – 06/30/2030

GRANT AWARDS AND CLINICAL TRIALS**A. Current**

Agency: American Heart Association (Career Development Award)

Title: Development of an Integrated Heart Failure-Palliative Care Intervention to Improve the Quality of End-of Life Care for Patients with Heart Failure

Name of PD/PI: Chuzi, S.

Role on Project: Co-Mentor

Percent effort: donated

Project period: 04/01/2025 – 03/31/2028

Total Award Amount: \$231,000

Kenzie Alynn Cameron, PhD, MPH, FACH

GRANT AWARDS AND CLINICAL TRIALS**A. Current (continued)**

Agency: American Heart Association (Career Development Award)

Title: REACH BP: REMote physical ACTivity intervention for High Blood Pressure Postpartum

Name of PD/PI: Cameron, N.A.

Role on Project: Co-Mentor

Percent effort: donated

Project period: 04/01/2025 – 03/31/2028

Total Award Amount: \$231,000

Agency: NCATS

Title: NUCATS CTSA UM1 at Northwestern University

Project Number: UM1TR005121

Name of PD/PI: D'Aquila, R.T. (Contact); Yancy, C.W.; Becker, S.J.

Role on project: Co-Investigator

Percent effort: 20%

Project period: 07/01/2024 – 06/30/2031

Total Award Amount (including Indirect Costs): \$55,800,218.00

Agency: National Institute on Aging/ National Institutes of Health

Title: Consequences of Incarceration on Health, Age-Related Conditions, and Risk Factors for AD RD

Project Number: 1R01AG089544-01

Name of PD/PI: Teplin, Linda

Role on project: Co-Investigator

Percent effort: 10% Y1 – Y4; 5% Y5

Project period: 09/01/2024 – 08/31/2029

Total Award Amount (including Indirect Costs): \$19,865,120

Agency: American Heart Association (Career Development Award)

Title: The Built Neighborhood Environment & Walking Outcomes in Peripheral Artery Disease

Name of PD/PI: Thangada, N.D.

Role on Project: Co-Mentor

Percent effort: donated

Project period: 09/01/2024 – 08/31/2027

Total Award Amount: \$231,000

Agency: Agency for Healthcare Research and Quality

ID: R01HS029777

Title: Improving Diagnostic Safety through STEatosis Identification, Risk stratification, and Referral in the ED (STIRRED)

Principal Investigators: Amy V. Kontrick, Danielle M. McCarthy

Role on project: Co-Investigator

Percent effort: 10% Year 1-2/5% Years 3-4

Project period: 09/30/2023 – 07/31/2027

Agency: National Heart Lung and Blood Institute (NHLBI)

ID: 1K23HL157758-01A1

Title: Implementing Prevention of Venous Thromboembolism for Ambulatory Patients with Cancer (PREVenT-APC)

Principal Investigator(s): Karlyn Martin

Role on project: Co-Mentor

Percent effort: donated

Direct costs per year: \$155,193

Total costs project period: \$830,796

Project period: 07/15/2022 – 06/30/2027

Kenzie Alynn Cameron, PhD, MPH, FACH

GRANT AWARDS AND CLINICAL TRIALS**A. Current (continued)**

Agency: National Institutes of Health/National Institute on Aging

ID: P30AG059988-01A1 (Wolf/Linder)

Title: Claude D. Pepper Older American Independence Center (OAIC) at Northwestern University

Principal Investigator(s): Michael S. Wolf/Jeffrey A. Linder (Co-PI)

Role on project: Quantitative and Qualitative Data Analytics Research Core Co-Director; Research Education Component Co-Investigator

Percent effort: 15%

Direct costs per year: \$949,734

Total costs for project period: \$7,086,535

Project period: 08/01/2020 – 06/30/2025

Agency: NIDDK

ID#: R18DK123375

Title: Behavioral Nudges for Diabetes Prevention (BEGIN) Trial in Primary Care

Principal Investigator: Matthew O'Brien, MD, MPH

Role on project: Co-Investigator

Percent effort: 10%/10%/7.5%/3.5%/1%

Direct costs per year: \$494,089

Total costs for project period: \$3,744,907

Project period: 07/01/2020 – 05/31/2025

Agency: National Heart Lung and Blood Institute

ID#: 1K01HL149987-01

Title: Developing a targeted intervention for sleep disturbance in spousal bereavement

Principal Investigator: Diana Chirinos Medina, PhD

Role on project: Content Mentor

Percent effort: donated

Direct costs per year: \$143,860

Total costs for project period: \$776,544

Project period: 07/01/2020-06/30/2025

GRANT AWARDS AND CLINICAL TRIALS**B. Past**

Agency: Department of Veterans Affairs, The Edward Hines, Jr. Hospital

ID#: Intergovernmental Personnel Agreement

Title: Development and Feasibility of a Brief Vaccination Intervention in SCI&D

Principal Investigator: Frances Weaver

Role on project: Intergovernmental Personnel Agreement; Collaborator

Percent effort: 5%

Total costs for project period: \$5698

Project period: 08/01/2004 – 09/30/2004

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: National Institute of Mental Health

ID#: R01-MH63696-01

Title: *Teens, Sex, and the Web: A Prospective Study*

Principal Investigator: Ralph J. DiClemente (Emory University)

Role on project: Northwestern Site PI (approximately \$130,000 to Northwestern for 4th year)

Percent effort: 20%

Total costs for project period: \$3,177,464

Project period: 07/01/2001 – 06/30/2004

Agency: Health Research and Educational Trust

Title: *Study for an Accurate, Efficient and Acceptable Method of Obtaining Information on Race, Ethnicity and Language,*

Principal Investigator: David W. Baker

Role on project: Co-investigator

Percent effort: 10% (over 5 months)

Total costs for project period: \$46,000

Project period: 11/01/2003 – 10/31/2004

Agency: American Cancer Society, Illinois Division

ID#: 115403

Title: *A Hispanic Patient Education Program on Colorectal Cancer Screening*

Principal Investigator: Gregory Makoul

Role on project: Co-investigator

Percent effort: 15%

Direct costs per year: approximately \$104,764 (\$209,528.00 over 2 years)

Total costs for project period: \$249, 998

Project period: 01/01/2004 – 12/31/2005

Agency: Centers for Disease Control and Prevention

ID#: 8 K01 CD000285

Title: *Addressing Racial Disparities in Influenza Prevention*

Principal Investigator: **Kenzie A. Cameron**

Percent effort: 75%

Direct costs per year: approximately \$225,000 (\$675,000 over 3 years)

Total costs for project period: \$725,136

Project period: 09/30/04 – 09/29/2007

Agency: National Cancer Institute

ID#: R21 CA107242-01A

Title: *Tools to Increase Colorectal Cancer Screening Rates*

Principal Investigator: Gregory Makoul

Role on project: Co-investigator

Percent effort: donated (assisted in writing proposal, but had K award)

Direct costs per year: \$107,500.00

Total costs for project period: \$315,524.00

Project period: 1/11/2005-12/31/2007

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: National Institute on Aging

ID#: 1K23 AG028439-01A1

Title: *Health Literacy and Discharge Safety of Hospitalized Seniors*

Principal Investigator: Lee Lindquist

Role on project: Co-Mentor (2009 – 2010)

Percent effort: 3%

Direct costs per year: approximately \$138,740 (\$693,700 over 5 years)

Total costs for project period: \$746,954

Project period: 04/01/2007 – 03/31/2012

Agency: The Davee Foundation

Title: Davee Innovations: Optimizing Communication in the Emergency Department

Principal Investigator: James Adams

Role on project: Co-investigator

Percent effort: 10%

Total costs for project period: \$1,000,000

Project period: 07/01/2007 – 06/31/2009

Agency: National Heart, Lung and Blood Institute

ID#: R01HL088589

Title: *Increasing Activity in Peripheral Arterial Disease*

Principal Investigator: Mary McDermott

Role on project: Co-investigator

Percent effort: 1%

Direct costs per year: \$499,966

Total costs for project period: \$2,869,927

Project period: 04/01/2008 – 05/30/2012

Agency: Foundation for Informed Medical Decision Making

ID#: 0111-1

Title: *Design and use of multimedia and print health materials for low literacy populations*

Principal Investigator: Michael S. Wolf

Role on project: Co-investigator

Percent effort: 25%

Direct costs per year: \$132,878

Total costs for project period: \$155,467

Project period: 06/01/2008-05/31/2009

Agency: American Cancer Society

ID#: RSGT-08-149-01-CPPB // S0646-SC1-20

Title: *Tools For Improving Colorectal Cancer Screening Rates: Multimedia vs. Print*

Principal Investigator: Gregory Makoul/ David W. Baker upon departure of G. Makoul

Role on project: Co-investigator

Percent effort: 5%

Direct costs per year: \$151,490.00

Total costs for project period: \$214,779

Project period: 07/01/2008– 06/30/2011

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: Department of Veterans Affairs, Edward Hines, Jr. Hospital/ Funded via Health Services Research and Development Quality Enhancement Research Initiative (QUERI).

ID#: *IPA: Assessment of MRSA prevention practice in VA Spinal Cord Injury Centers*

Title: *Development and testing of MRSA educational materials for SCI veterans*

Principal Investigator: Charlesnika Evans

Role on project: Co-Investigator (via an Interpersonnel Agreement)

Percent effort: 10%

Total costs for project period: \$63,166

Project periods: 08/01/2009-08/31/2010; 10/01/2010-09/30/2010; 10/01/2011-09/30/2012; 10/01/2012-07/31/2013

Agency: Alliance for Research in Chicagoland Communities Seed Grants Northwestern University Clinical and Translational Institute (NUCATS)

Title: *Colorectal Cancer Screening in Japanese American Elders in Chicagoland*

Principal Investigator: Frances Chikahisa and Denys Lau (Co-PIs)

Role on project: Co-investigator

Percent effort: 3%

Total costs for project period: \$30,000

Project period: 08/01/2009– 03/31/2011

Agency: National Institute on Aging

ID#: AG031470-01

Title: *The Effect of Fact versus Myth Messages on Receipt of Influenza Vaccination*

Principal Investigator: **Kenzie A. Cameron**

Percent effort: 20%

Direct costs per year: \$164,000.00

Total costs for project period: \$251,000

Project period: 08/01/2009– 07/31/2011

Agency: ARRA: Recovery Act Limited Competition: NIH Challenge Grant in Health and Science Research (RC1)/

ID#: RC1HG005468-01

Title: *Impact of Data Access Policies on Biobank Participation*

Principal Investigator: Wendy Wolf & Maureen Smith (Co-PIs)

Role on project: Co-investigator

Percent effort: 10%

Direct costs per year: approximately \$269,649 (\$539,096 over 2 years)

Total costs for project period: \$822,123

Project period: 09/30/2009– 08/30/2011

Agency: National Institute on Aging

ID#: U01AG022376

Title: *Physical Exercise to Prevent Disability/Lifestyle Interventions and Independence for Elders (LIFE) Study*

Principal Investigator: Mary McDermott (Site PI for Pahor, U01 PI)

Role on project: Co-investigator

Percent effort: 1%

Total costs for project period: \$5,479,548

Project period: 09/01/2009– 08/31/2014

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: National Cancer Institute

ID#: 1R01CA140177-01

Title: *Low-literacy physician-patient intervention promoting colorectal cancer screening*

Principal Investigator: **Kenzie A. Cameron**

Percent effort: 25%

Direct costs per year: approximately \$316,552 (\$1,266,209 over 4 years)

Total costs for project period: \$1,688,571

Project period: 09/04/2009-07/31/2014

Agency: American Cancer Society, Illinois Division

ID#: unknown

Title: Cancer Disparities Targeted Grants Program: Communicating Breast Cancer Disparity to Minority Populations

Principal Investigator: Karen Kaiser

Role on project: Co-investigator/Primary Mentor

Percent effort: 8 – 10%

Total costs for project period: \$125,000

Project period: 08/01/2010-07/31/2012

Agency: Society of Family Planning

Title: *A Qualitative Exploration of the Extended Decision Making Process in Pregnancy Termination for Fetal Indications*

Principal Investigator: Melissa Simon/Lori Gawron (fellow)

Role on project: Co-investigator/Co-Mentor

Percent effort: (in kind/Donated)

Total costs for project period: \$45,701

Project period: 06/01/2011– 06/30/2012

Agency: National Heart, Lung, and Blood Institute

ID#: R01 HL107510

Title: *PROgenitor cell release Plus Exercise to improve function performance in PAD (PROPEL)*

Principal Investigator: Mary McDermott

Role on project: Co-investigator

Percent effort: 1%

Total costs for project period: \$833,979

Project period: 08/05/2011-04/30/2016

Agency: Agency for Health Research and Quality

ID#: 1 P01 HS021141-1

Title: *NU Center to Advance Equity in Clinical Preventive Services; Project 3 title: Understanding and Addressing High Rates of Refusal of Pneumococcal Vaccination among African Americans*

Principal Investigator: David W. Baker (10/01/2011 – 02/13/2015)/ **Kenzie A. Cameron (02/14/2015 – 12/31/2015)**

Role on project: Principal Investigator of Project 3; Co-Investigator of Project 1; Principal Investigator of P01 upon departure of D.W. Baker

Percent effort: 2-25% (Project 3/Parent P01): 5% (Project 1)

Direct costs per year: \$1,618,050

Total costs for project period: \$4,254,392 (\$646,548 to Project 3)

Project period: 10/01/2011 – 12/31/2015

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: National Institute on Aging

ID#: U01 AG022376

Title: *Lifestyle Interventions and Independence for Elders (LIFE) Study*

Principal Investigator: Mary McDermott

Role on project: Co-investigator

Percent effort: 1%

Direct costs per year: approximately \$342,352 (\$1,027,056 over 3 years)

Total costs for project period: \$1,548,594

Project period: 01/01/2012-11/30/2015

Agency: National Cancer Institute

ID#: R01CA163830-01

Title: Adapting patient navigation to promote cancer screening in Chicago's Chinatown

Principal Investigator: Melissa Simon

Role on project: Co-investigator

Percent effort: 2 – 2.5%

Project period: 03/15/2012 - 02/28/2017

Agency: Emergency Medicine Foundation-Purdue Pharma Pain and Prescription Management

ID#: Pain and Prescription Management Grant

Title: *Prescribing Opioid Pain Relievers in the Emergency Department: Understanding and Optimizing the Encounter*

Principal Investigator: Danielle McCarthy

Role on project: Mentor

Percent effort: Donated effort (Mentor)

Direct costs per year: \$50,000

Total costs for project period: \$50,000

Project period: 07/01/2012– 06/30/2013

Agency: National Institutes of Health Office of Research on Women's Health

ID#: HD055884

Title: *Building Interdisciplinary Research Careers in Women's Health (BIRCWH)/ Gender Differences in Inpatient End-of-Life Communication for Patients with Advanced Cancer*

Principal Investigator: Andrea Dunaif

Role on project: Primary Mentor of Rashmi Sharma (K12 scholar)

Percent effort: donated

Total costs for project period: \$250,000

Project period: 01/01/2013 – 12/31/2014

Agency: Robert H. Lurie Comprehensive Cancer Center of Northwestern University (non NIH sponsored)

Title: Lurie Cancer Center Bridge Funds

Principal Investigator: Karen Kaiser

Role on project: Co-investigator

Percent effort: 2.5%

Project period: 03/01/2013– 02/28/2014

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: PCORI: Patient Centered Outcomes Research Institute

ID#: *IH-12-11-4259*

Title: *Advance Planning for Home Services for Seniors*

Principal Investigator: Lee A. Lindquist

Role on project: Co-investigator

Percent effort: 15%

Direct costs per year: approximately \$478, 569 (\$1,435,708 over 3 years)

Total costs for project period: \$1,835,801

Project period: 07/01/2013– 06/30/2016

Agency: Agency for Healthcare Research and Quality (AHRQ)

ID#: *1R18HS022767-01*

Title: *Best Practices for Integrating Clinical Decision Support into Clinical Workflow*

Principal Investigator: Muriel Jean-Jacques

Role on project: Co-investigator

Percent effort: 10%

Direct costs per year: \$359,186

Total costs for project period: \$476,189

Project period: 09/30/2013– 09/29/2014

Agency: Contract with Medical Error and Reduction Certification, Inc. (MERCi)

ID#: Agreement 11/01/2013

Title: *Dissemination of a Simulation-Based Mastery Learning Curriculum for Central Venous Insertion at Veteran Affairs Hospitals*

Principal Investigator: Jeffrey H. Barsuk

Role on project: Co-investigator

Percent effort: 20%

Total costs for project period: \$343,749

Project period: 11/01/2013–10/31/2015

Agency: National Cancer Institute

ID#: R21CA175950

Title: *Contralateral Prophylactic Mastectomy: The Patient Decision-Making Process*

Principal Investigator: Karen Kaiser

Role on project: Co-investigator

Percent effort: 10%

Direct costs per year: approximately \$119,625 (\$239,250 over project period)

Total costs for project period: \$369,641

Project period: 07/01/2014 – 06/30/2016

Agency: Agency for Healthcare Research and Quality

ID#: R18HS023459

Title: *EHR Based Medication Complete Communication Strategy to Promote Safe Opioid Use*

Principal Investigator: Danielle M. McCarthy

Role on project: Co-investigator

Percent effort: 5%/5%/3%

Direct costs per year: approximately \$344,368

Total costs for project period: \$1,466,531

Project period: 09/01/2014 – 08/31/2017 (under NCE through 08/31/2018)

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: Department of Veterans Affairs/The Edward Hines Jr. Hospital
 ID#: na (Intergovernmental Personnel Agreement)
 Title: *QUERI RRP: Antibiotic prescribing practice in the spinal cord injury system of care*
 Principal Investigator: Charlesnika Evans
 Role on project: Co-investigator
 Percent effort: 4%
 Direct costs per year: approximately \$13,231
 Total costs for project period: \$13,231
 Project period: 10/01/2014-09/30/2016

Agency: American Cancer Society (Mentored Career Development Award)
 ID#: 125991-MSRG-14-058-01-PCSM
 Title: Racial/Ethnic Differences in Inpatient End-of-Life Communication
 Principal Investigator: Rashmi Sharma
 Role on project: Co-Mentor
 Percent effort: 2% (until 2016)
 Direct costs per year: approximately \$135,000
 Total costs for project period: \$722,000
 Project period: 01/01/2015 – 12/31/2019

Agency: National Cancer Institute
 ID#: 1U54CA203000-01
 Title: *Reducing Tobacco Use Disparities among Adults in Safety Net Community Health Centers*
 Principal Investigator: Melissa A. Simon/Brian Hitsman
 Role on project: Co-investigator
 Percent effort: 10%/10%/2.5%
 Direct costs per year: approximately \$294,565 (\$883,696 over 3 years)
 Total costs for project period: \$1,365,311
 Project period: 09/24/2015 – 08/31/2018

Agency: National Cancer Institute
 ID#: 1U54CA203000-01
 Title: Reducing Colorectal Cancer Disparities on the South Side of Chicago through Cross-Institutional Collaboration (Planning Grant awarded under U54 award)
 Principal Investigator: Melissa Simon, Center PI
 Role on project: Site PI for Planning Grant
 Percent effort: 3.25%
 Direct costs per year: approximately \$10,000
 Total costs for project period: \$15,450
 Project period: 05/01/2016– 04/30/2017

Agency: Digestive Health Foundation
 Title: Utilization of Video-Based Education through the Patient Portal to Improve Adherence to Colorectal cancer Screening
 Principal Investigator: Rajesh Keswani/ **Kenzie A. Cameron, Co-PI**
 Percent effort: 1%
 Total costs for project period: \$14,968
 Project period: 09/01/2016– 08/31/2017

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: Digestive Health Foundation

Title: The Impact of a Video Educational Tool on Perceived Cancer Risk and Patient Satisfaction in patients with Barrett's Esophagus-Associated Neoplasia Referred for Endoscopic Eradication Therapy: A Randomized Controlled Trial

Principal Investigator: Srinadh Komanduri

Role on project: Co-Investigator

Percent effort: 1%

Total costs for project period: \$10,000

Project period: 09/01/2016– 08/31/2017

Agency: National Heart, Lung, and Blood Institute

ID#: R01HL122846

Title: *Low Intensity Exercise intervention for peripheral artery disease: The LITE Trial*

Principal Investigator: Mary McDermott

Role on project: Co-investigator

Percent effort: 2%

Direct costs per year: approximately \$501,199 (\$2,004,797 over 4 years)

Total costs for project period: \$2,828,428

Project period: 04/01/15-01/31/19

Agency: National Institute of Diabetes and Digestive and Kidney Diseases

ID#: R34DK113541

Title: *Diabetes Risk Education and Communication Trial (DiRECT) for Primary Care Patients with Prediabetes*

Principal Investigator: Matthew O'Brien

Role on project: Co-investigator

Percent effort: 10%/5%

Direct costs per year: approximately \$155,294 (\$310,588 over 2 years)

Total costs for project period: \$467,131

Project period: 04/01/2017 - 03/31/2019

Agency: National Institute of Nursing Research

ID#: 1R21NR016745

Title: *Use of Simulation to Improve Ventricular Assist Device Self-Management*

Principal Investigator: Jeffrey H. Barsuk

Role on project: Co-investigator

Percent effort: 15%/10%/2%

Direct costs per year: approximately \$138,099 (\$276,298 over 2 years)

Total costs for project period: \$432,813

Project period: 12/09/2016 – 11/30/2018 (under NCE until 11/30/2019)

Agency: National Institute of Diabetes and Digestive and Kidney Diseases

ID#: R34DK114773-01A1

Title: Coordinating Pragmatic Primary Care Population management for Obesity (C3PO)

Principal Investigator: Ronald T. Ackermann

Role on project: Co-investigator

Percent effort: 5%/10%

Direct costs per year: \$152,177

Total costs for project period: \$467,287

Project period: 08/01/2018 – 06/30/2020

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: Women's Board of Northwestern Memorial Hospital

Title: Developing a Patient-Centered Palliative Care Program for Patients with a Destination Therapy Ventricular Assist Device

Principal Investigator: Jane E. Wilcox/ Sarah E. Chuzi

Role on project: Co-investigator

Percent effort: 2%

Total costs for project period: \$24,992

Project period: 09/01/2018 – 08/31/2019

Agency: Agency for Healthcare Research and Quality

ID#: 1K12HS023011-01

Title: *Northwestern University Patient-Centered Intervention and Engagement Training*

Principal Investigator: Dave Cella

Role on project: Primary mentor for 2 scholars (Christine Pellegrini 2015 – 2017; Stephanie Shintani Smith 2016 – 2019), secondary mentor for one scholar (Betina Yanez 2016 – 2018)

Percent effort: 3.25%

Total costs for project period: \$3,846.570

Project period: 04/01/2014 – 03/31/2019

Agency: Alvin H. Baum Clinical Simulation Research Grants Initiative

ID#: Not applicable

Title: The Use of Simulation to assess and teach gastroenterologists polyp removal skills during colonoscopy

Principal Investigator: Srinadh Komanduri, MD, MS

Role on project: Co-Investigator

Percent effort: 1%

Direct costs per year: \$50,000

Total costs for project period: \$50,000

Project period: 08/01/2019 – 07/31/2020

Agency: Northwestern University Clinical and Translational Science Institute

Title: Development of a Communication-Priming Intervention for Ventricular Assist Device Patients, Caregivers, and Clinicians to Improve Advance Care Planning

Principal Investigator: Jane E. Wilcox/Sarah E. Chuzi

Role on project: Co-investigator

Percent effort: donated

Total costs for project period: \$14,700

Project period: 02/07/2020 – 02/06/2021

Agency: Health Resources and Services Administration (HRSA)/U.S. Department of Health and Human Services (HHS)

ID#: UH1HP29963

Title: Program in Primary Care, Health and Society (PHS)

Principal Investigator: Stephen D. Persell/Deborah Clements (Co-PIs)

Role on project: Co-investigator

Percent effort: 10% (Effort ended 06/30/2020)

Direct costs per year: \$708,294

Total costs for project period: \$3,691,512

Project period: 07/01/2016 - 06/30/2021

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: Agency for Healthcare Research and Quality

ID#: #1R18HS025651

Title: *Promoting safe care transitions: Simulation-based mastery learning to improve communication in times of diagnostic uncertainty*

Principal Investigator: Kristin Rising (Thomas Jefferson University)/ Danielle M. McCarthy (Northwestern University)

Role on project: Co-investigator

Percent effort: 15%/5%/2% (effort ended 9/29/2020)

Direct costs per year: \$88,732

Total costs for project period: \$1,198,203 (NU portion: \$442,035)

Project period: 09/30/17 - 09/29/20 (under NCE until 9/29/21)

Agency: National Cancer Institute

ID: 3P30CA060553-24S1

Title: Program expansion to integrate comprehensive tobacco cessation treatment and cancer care across Northwestern Medicine oncology clinics

Principal Investigator(s): Leonidas Platanias/Brian Hitsman

Role on project: Co-Investigator

Percent effort: 3%

Direct costs per year: \$126,582

Total costs for project period: \$200,000

Project period: 09/01/2020 – 08/31/2021 (NCE through 12/31/2021)

Agency: National Institute of Diabetes and Digestive and Kidney Diseases

ID#: 1R18DK110741

Title: *Health and Economic Impacts of Coverage Requirements and Health System-Community Coordination for Diabetes Prevention*

Principal Investigator: Ronald T. Ackermann

Role on project: Co-investigator

Percent effort: 10%

Direct costs per year: approximately \$145,200 (\$726,000 over 5 years)

Total costs for project period: \$1,111,660.00

Project period: 04/21/2017 – 03/31/2022

Agency: National Institute on Minority Health and Health Disparities (NIMHD)

ID: R01MD012236/ Post-Doctoral Minority Supplement Research Supplements to Promote Diversity in Health-Related Research

Title: Effectiveness and Implementation of a Mindfulness Intervention for Depressive Symptoms among Low-income, Racial/ethnic minority adults in a Federally Qualified Health Center

Principal Investigator(s): Jennifer Martinez (post-doctoral candidate)/Inger Burnett-Zeigler (PI)

Role on project: Secondary Mentor/Methods Mentor

Percent effort: donated

Project period: 09/01/2020 – 08/31/2022

Agency: American Cancer Society Institutional Research Grant (Robert H. Lurie Comprehensive Cancer Center)

Title: Patient Navigation to Improve Outcomes among Low-Income Women in the Post-Partum Period

Principal Investigator(s): Lynn Yee

Role on project: Co-Investigator

Percent effort: 5% (beginning 01/01/2022)

Project period: 09/01/2021 – 8/30/2022 (under NCE through 12/31/2022)

GRANT AWARDS AND CLINICAL TRIALS**B. Past (continued)**

Agency: American Cancer Society Institutional Research Grant (Robert H. Lurie Comprehensive Cancer Center)

Title: Venous thromboembolism prevention in ambulatory patients with cancer

Principal Investigator(s): Karlyn Martin

Role on project: Mentor

Percent effort: donated

Direct costs per year: \$30,000

Project period: 01/01/2021 – 12/31/2021 (under NCE through 12/31/2022)

Agency: NIDDK

ID#: R21 DK1124816

Title Use of simulation-based mastery learning to improve polypectomy outcomes

Principal Investigator: Jeffrey Barsuk/Srinadh Komanduri

Role on project: Co-Investigator

Percent effort: 10%/5%

Direct costs per year: \$150,000

Total costs for project period: \$427,830

Project period: 04/01/2020-03/31/2022 (under NCE through 3/31/2023)

Agency: Agency for Healthcare Research and Quality/Patient-Centered Outcome Research Institute (PCORI)

ID#: K12HS026385

Title: *A Chicago Center of Excellence in Learning Health Systems Research Training (ACCELERAT)*

Principal Investigators: Abel Kho/David Cella

Role on project: Co-mentor for Nisha Mohindra (2021 – 2023)

Percent effort: donated

Project period: 01/01/2021– 12/31/2023

Agency: National Institutes of Health/NCATS

ID#: UL1TR001422

Title: Northwestern University Clinical and Translational Science Institute (NUCATS)

Principal Investigator: Donald Lloyd-Jones, MD, ScM/ Richard D'Aquila

Role on project: Co-investigator

Percent effort: 10%/20% as of 07/01/2020

Direct costs per year: \$3,566,093

Project period: 07/15/2019 – 06/30/2024

Agency: American Heart Association/PCORI DECIDE Center

ID#: 18SFRN34110489

Title: Studying Effectiveness in Patient Centered Care

Principal Investigator: Angela Fagerlin (University of Utah)

Role on project: Site PI

Percent effort: 12.5% Year 2 – 4/10% Year 5/ 5% Year 6/ 2.5% Year 7

Direct costs per year: \$1,226,256 (total across all sites)

Total costs for project period: \$5,000,000 (total across all sites)

Project period: 07/01/2018 – 06/30/2022 (Cameron effort began 11/01/2019) (under NCE through 02/28/2025)

INVITED LECTURES/TALKS

A. International/National

1. Invited Faculty Member Participant, National Communication Association Health Communication Division Pre-Conference, *Obtaining Grant Funding*, 2004.
2. Invited Senior Scholar, National Communication Association Health Communication Division Pre-Conference for Doctoral Students and Early Career Scholars [November 2010]
3. *Advancing Equity in Clinical Preventive Services: The Role of Health Communication*. **Invited Plenary Speaker** for the pre-conference on disparities for the biannual Kentucky Conference on Health Communication, University of Kentucky, Lexington, KY, April 19, 2012.
4. *Addressing Racial and Ethnic Disparities in Colorectal Cancer Screening: The Promises and Pitfalls of Theoretically Based Targeted Messages*. **Invited Grand Rounds speaker**, Department of Psychiatry and Behavioral Sciences, Memorial Sloan Kettering Cancer Center, New York, NY, October 26, 2012.
5. *Grant Funding in the Age of Shrinking \$\$\$*. **Invited Plenary Panel Speaker**, Health Communication Preconference, National Communication Association annual conference (100th anniversary), Chicago, IL, November 19, 2014.
6. *Addressing Racial and Ethnic Disparities in Colorectal Cancer Screening: Results from a Challenging Randomized Controlled Trial in Community-Based Clinics*. **Invited Speaker**, Hutchinson Institute for Cancer Outcomes Research (HICOR), Public Health Sciences, Fred Hutchinson Cancer Center, Seattle, WA, October 2, 2015.
7. *Planning Your Future: Communicating Values, Goals and Preferences as a Patient, Caregiver or Family Member*. **Invited Keynote Program Speaker**, Northwestern University Council of 100 biannual meeting, Evanston, IL, April 16, 2015.
8. *From Patient Perspectives to Preventive Care: Harnessing Technology to Improve Adult Pneumococcal Vaccination*. **Invited Speaker**, The Office of Behavioral and Social Sciences Research (OBSSR) Director's Webinar Series. Webinar, March 27, 2018. (<https://obssr.od.nih.gov/event/directors-webinar-series-presents-kenzie-a-cameron-ph-d-m-p-h-fach/>)
9. *Emerging from the Chrysalis: The Making of a Mentor*. **Invited Keynote** presentation at the Inagural Mentoring Day of the Hamad Medical Corporation Medical Education Department, Doha, Qatar, October 4, 2023.
10. *From Frameworks to Action: Finding Agility in Mentoring Relationships*. **Invited Keynote** at the first Annual Health Outcomes & Biomedical Informatics Education Day, College of Medicine, University of Florida, Gainesville, FL, March 27, 2024.
11. *Rethinking Mentoring to Cultivate a Mentoring Network: Moving from "Mentor" to "Mentors."* **Invited presentation** at the "Empowering futures: The transformative power of mentorship in science" symposium at the American Society for Biochemistry and Molecular Biology Annual Meeting, Chicago, IL, April 15, 2025.

B. Regional

1. Invited Guest, "The 'S' Show," Topic: Flirting and Nonverbal Communication, WUOG Radio, The University of Georgia, 2000.
2. *Life as a Working Academic*. Presented to Girl Scouts of America, Jefferson, GA. February 18, 2001.
3. *Applying Theory to Practice: HIV/AIDS along the Trans-Africa Highway in Kenya*. Invited Speaker for the 2001 Georgia Junior Science and Humanities Symposium, held at The University of Georgia, February 27, 2001.
4. *Health Literacy*. On-Line Guest Lecture for CAS 892 (Public Health & Safety: Communicating with Diverse Populations) Distance Learning Course, Michigan State University, March 2007. (Course developed by Lisa Massi-Lindsey, PhD)

INVITED LECTURES/TALKS

B. Regional (continued)

5. *Designing a Theoretically Based Multimedia Message to Increase African American Seniors' Knowledge, Positive Attitudes, and Intention to be Vaccinated against Influenza.* Presented (via *elluminate* distance learning software) to graduate students in Health Communication, Department of Community and Behavioral Health, University of Iowa, June 4, 2008.
6. *Addressing Racial Disparities in Influenza Vaccination in African American Seniors.* **Keynote speaker**, Chicago Area Immunization Council Fall General Meeting, October 20, 2008, Chicago, IL.
7. *Communication Theories during COVID-19: An MSU Communication Grad's View and Application.* College of Communication Arts & Sciences Alumni Award Winner Guest Lecture to Social Influence and Conflict Course, Michigan State University, East Lansing, MI. (virtual). April 2020.
8. *Strategies for success: Essential skills and abilities for new communication professionals.* Invited presentation to Communication Leadership and Strategy Students, Department of Communication, College of Communication Arts & Sciences, Michigan State University, East Lansing, MI (virtual). November 16, 2021.

C. Local

1. *Conducting Qualitative Research.* Presented to the Bartels Participatory Action Research Fellows, Cornell University, October 30, 2002.
2. *On-line Focus Group Research: Opportunities and Challenges.* Presented to undergraduate students in their Public Opinion and Social Processes (Com 420) course in the Department of Communication, Cornell University, October 31, 2002.
3. *Health Literacy: A Critical Component of Care.* Presented at **Grand Rounds**, Erie Family Health Centers, Chicago, IL, January 5, 2005.
4. *Randomized Clinical Trials in the Behavioral/Social Sciences: Lessons Learned from NIH Summer Institute.* Presented to the faculty of the Division of General Internal Medicine, Work-in-Progress Conference, Northwestern University Feinberg School of Medicine, Chicago, IL, October 14, 2005.
5. *Developing Targeted Messages for Populations Affected by Health Disparities.* Invited presentation to the Northwestern University Feinberg School of Medicine community as part of the medical student sponsored Health Disparities Week, Chicago, IL, February 27, 2006.
6. *Addressing Racial and Ethnic Disparities through Targeted Messages: The Case of Influenza Vaccination.* Presented to the Chicago Center of Excellence in Health Promotion Economics, University of Chicago, Chicago, IL, March 28, 2006.
7. *Developing Targeted Messages to Address Racial and Ethnic Disparities in Influenza Vaccination.* Presented to the Institute for Healthcare Studies (seminar series), Northwestern University Feinberg School of Medicine, Chicago, IL, November 9, 2006.
8. *Communicating Influenza Risk through Targeted Messaging.* Presented to the faculty of the Division of General Internal Medicine, Work-in-Progress Conference, Northwestern University Feinberg School of Medicine, Chicago, IL, November 17, 2006.
9. *Addressing Racial Disparities in Screening and Vaccination through the Development and Use of Targeted Messages.* Presented as part of the Genetic Lecture Series, sponsored by the Graduate Program in Genetic Counseling at Northwestern University and the Center for Genetic Medicine. December 1, 2008.
10. *Using Targeted Messages to Address Racial Disparities in Influenza Vaccination in African American Seniors.* Research in Progress (RIP) Conference, Section of General Internal Medicine, University of Chicago. February 27, 2009.
11. *Adventures with Clickers and Screencasts, or How I Learned to Embrace Technology in the Classroom.* Searle Fellows Program, Northwestern University, Evanston, IL, January 17, 2013.

INVITED LECTURES/TALKS

C. Local (continued)

12. *Using Technology to Assess Student Understanding*. Invited roundtable leader, Northwestern University Learning, Teaching and Assessment Forum (Co-sponsored by the Office of the Provost and Searle Center), Evanston, IL, October 8, 2013.
13. *Complementary, not Adversarial: The Use of Qualitative and Quantitative Methods in Health Services Research*. Invited speaker, Center for Behavioral Health, Institute for Public Health and Medicine, Northwestern University, Chicago, IL, October 16, 2013.
14. *Health Literacy and Communication*. Invited speaker, NUPATIENT K12 Scholars Bootcamp, Northwestern University, Chicago, IL, September 16, 2014.
15. *Addressing Racial and Ethnic Disparities in Colorectal Cancer Screening: Results from a Challenging Randomized Controlled Trial in Community-Based Clinics*. (Co-presented with Vanessa Ramirez-Zohfeld). Presented to the faculty of the Division of General Internal Medicine and Geriatrics, Work-in-Progress Conference, Northwestern University Feinberg School of Medicine, Chicago, IL, November 20, 2014.
16. *Planning for Crises: Communicating with others*. Invited Speaker, Center for Life and Learning at the Gratz Center (in collaboration with Lincoln Park Village). Chicago, IL, March 10, 2015.
17. *Thinking Qualitatively about Educational Research in Healthcare*. Co-led session (with Dr. Water Eppich) presented at the 6th Annual Northwestern University Feinberg School of Medicine Medical Education Day. Chicago, IL, September 30, 2016.
18. *Addressing Racial & Ethnic Disparities in Colorectal Cancer Screening: Results from a Challenging Randomized Controlled Trial in Community-Based Clinics*. Presented to Northwestern University NCI T32 fellowship program, Chicago, IL February 21, 2017.
19. *Addressing Racial & Ethnic Disparities in Colorectal Cancer Screening: Results from a Challenging Randomized Controlled Trial in Community-Based Clinics*. Presented to ChicagoCHEC summer fellows program, Northwestern University, Chicago, IL July 17, 2017.
20. *Activating the Patient Within: Reflecting on Patient Realities to Understand Patient Behavior*. Invited Speaker, Today's Innovations in Medical Education (TIME) Lecture, Northwestern University Feinberg School of Medicine, Chicago, IL, August 15, 2017.
21. *Secrets Every Mentee/Mentor Should Know, or All I Ever Needed to Know I Learned from Mentoring*. FSM Division of Hospital Medicine Mentoring Program Kickoff, Northwestern University Feinberg School of Medicine, October 30, 2018.
24. *Academic Mentoring in the not-so-new Millenium*. Center for Healthcare Studies, Institution for Public Health and Medicine. June 7, 2019.
25. *RCTs in the "Real World" and the Challenges Researchers Face*. Presented to Northwestern University NCI T32 fellowship program, Chicago, IL November 12, 2019.
26. *Preferring Cats to Dogs: Qualitative Methods in Health Services Research*. Human Computer Interaction/Center for Behavioral Intervention Technologies NIMH T32 Fellows Seminar Program. Northwestern University Feinberg School of Medicine. December 10, 2019.
27. *Perspectives on Writing Qualitative Manuscripts for Varied Audiences*. Human Computer Interaction/Center for Behavioral Intervention Technologies NIMH T32 Fellows Seminar Program. Northwestern University Feinberg School of Medicine. February 4, 2020.
28. *Covid-19 and Racial Injustice: Self-Awareness and Allyship*. Co-Presenter/Facilitator with Dr. Inger Burnett-Zeigler. Division of General Internal Medicine and Geriatrics Mentoring Workshop Series, Northwestern University Feinberg School of Medicine, September 16, 2020. (virtual)
29. *Mentoring in Crisis*. FSM Department of Medicine Peer Coaching Program. January 29, 2021. (virtual)
30. *A Conversation with a Panel of Northwestern University Faculty and Student Health on Questions and Concerns with COVID Vaccines*. Panelist. Program hosted by the Northwestern University Graduate Leadership and Advocacy Council (GLAC), Northwestern University, Evanston, IL, May 25, 2021. (virtual)

INVITED LECTURES/TALKS

C. Local (continued)

31. *Mentoring Best Practices: Aligning Expectations*. Northwestern University Feinberg School of Medicine Department of Infectious Diseases Faculty Mentoring Program, June 7, 2021. (virtual)
32. *Qualitative Research Methods, Applications, and Analysis*. Northwestern's Claude T. Pepper Older Americans Independence Center Pepper Scholars Professional Development Program. Northwestern University Feinberg School of Medicine, June 9, 2021. (virtual)
33. *Mentoring Matters: Articulating Needs, Aligning Expectations, and Exploring Best Practices*. Presented to the Lurie Outreach Hospital Based Medicine Mentoring Program (Kickoff event, **Keynote speaker**), Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, October 27, 2021.
34. *Perspectives on Writing Qualitative Manuscripts for Varied Audiences*. Human Computer Interaction/Center for Behavioral Intervention Technologies NIMH T32 Fellows Seminar Program. Northwestern University Feinberg School of Medicine. February 15, 2021. (virtual)
35. *Longitudinal qualitative research in medical education: Dispatches from the (ECMH) field*. Co-presented with Dr. Bruce L. Henschen. Today's Innovations in Medical Education (TIME) Lecture, Northwestern University Feinberg School of Medicine, Chicago, IL, April 19, 2022.
36. *Identifying Research Questions in Medical Education*. Presented to the FAME Medical Education Scholarship Series, Northwestern University Feinberg School of Medicine, Chicago, IL. August 17, 2022 (virtual).
37. *Mentoring the Mentors: NUCATS Programming, Assessment, and Outcomes*. Presented to the Translational Applications in Public Health and Institute for Public Health and Medicine lecture series, Northwestern University Feinberg School of Medicine, Chicago, IL. October 6, 2022.
38. *Agile Mentoring: Strategies for Getting the Most Out of Your Mentoring Relationships*. **Invited presentation** at the Enhancing Quality in the Translation Research Workforce (EQuaTR) Conference, Northwestern University, Chicago, IL, June 1, 2023.
39. *Learning to live with a Ventricular Assist Device (VAD): Patient, caregiver, and clinician concerns following implantation and hospital discharge*. Presented to the Northwestern Advanced Heart Failure Research Series. Northwestern University Feinberg School of Medicine, Chicago, IL. June 20, 2023. (virtual)
40. *No Longer Telemachus' Mentor: Diversifying Mentoring*. **Invited presentation** for the Department of Pharmacology Annual Retreat, Chicago, IL, September 7, 2023.
41. *Qualitative Research: Overview and Discussion*. Presented to SURgeons Promoting Academic Surgeons & Scientists (SURPASS) monthly meeting, Department of Surgery, Feinberg School of Medicine, Chicago, IL. December 6, 2023.
42. *Agile Mentoring: Strategies for Success*. **Invited Speaker** for the Feinberg Academy of Medical Educators (FAME) Today's Innovations in Medical Education (TIME) Lecture Series, Northwestern University Feinberg School of Medicine, Chicago, IL, December 19, 2023.
43. *Creating Opportunities for Success*. **Invited panelist** for the 6th annual Women in Medicine Conference, Northwestern Medicine, March 8, 2024.
44. *Mentoring Momentum*. Presented at the end-of-year luncheon for the Northwestern University Provost's Small Group Faculty Mentoring Program. Evanston, IL, May 24, 2024.
45. *Optimizing the Mentor-Mentee Partnership*. Faculty Development Seminar presented to the Northwestern University Feinberg School of Medicine Department of Medicine. Chicago, IL, November 11, 2024 (virtual).

INVITED MENTORING WORKSHOPS

A. International/National

1. *Mentor Mapping and Mentor Networks*. University of Florida Health Cancer Center Fellowship Lecture Series. Gainesville, FL (via Zoom); February 21, 2022.
2. *Mentor Mapping & Peer Mentoring*. HMC Medical Education Chief Residents' Retreat, at the Hamad Medical Corporation Medical Education Department, Doha, Qatar, October 2, 2023.
3. *Establishing and Mapping your Mentoring Network*. Presentation to Trainees (residents and fellows), Hamad Medical Corporation Medical Education Department, Doha, Qatar, October 3, 2023.
4. *Supporting Mentees to Excel and Progress: Special Situations in Mentoring*. Presentation (with Dr. Brijen Shah) to the Hamad Medical Corporation Medical Education Department, Doha, Qatar, October 4, 2023.
5. *Rethinking Mentoring to Cultivate a Mentoring Network*. Presented to graduate students, post-doctoral trainees, and junior faculty at the first Annual Health Outcomes & Biomedical Informatics Education Day, College of Medicine, University of Florida, Gainesville, FL, March 27, 2024.
6. *Mentoring Best Practices for Senior Mentors*. Presented to Health Outcomes & Biomedical Informatics faculty, College of Medicine, University of Florida, Gainesville, FL, March 28, 2024.

B. Regional/Local

1. *Mentoring Revealed: Being a Mentee and Being a Mentor*. FSM Division of General Internal Medicine and Geriatrics Mentoring Workshop Series, Northwestern University Feinberg School of Medicine, October 26, 2018. *Content adapted for use by the US Speedskating Program Mentor/Mentee Guidelines*.
2. *Mentoring: Roadblocks and the Roads we Travel*. FSM Division of Hospital Medicine Mentor Workshop Development Series. December 18, 2018
3. *Who Me? A Mentor?* Department of Radiology Mentoring Workshop Series, Northwestern University Feinberg School of Medicine, December 11, 2019.
4. *Mentor Networks and Mentor Mapping*. Division of General Internal Medicine and Geriatrics Mentoring Workshop Series, Northwestern University Feinberg School of Medicine. November 20, 2019.
5. *The Art of Effective Recommendation/Nomination/Promotion Letter Writing*. Co-presented with Dr. Diane B. Wayne. Division of General Internal Medicine and Geriatrics Mentoring Workshop Series, Northwestern University Feinberg School of Medicine, May 19, 2021. (virtual)
6. *Mentoring Best Practices: Establishing and Aligning Expectations*. Northwestern University Clinical and Translational Sciences Institute (NUCATS) Science Immersion Program.
 - a. July 15, 2021
 - b. June 30, 2022
7. *Mentoring Best Practices: Articulating Mentoring Needs and Aligning Expectations*. Ann and Robert H. Lurie Children's Hospital of Chicago and Northwestern University Feinberg School of Medicine Pediatric Hematology/Oncology Fellowship Intro Lectures/Mentoring Workshop. August 3, 2021.
8. *Mentoring for What? Articulating Mentoring Needs and Aligning Expectations*. Northwestern University Clinical and Translational Sciences Institute (NUCATS) TL1 Fellowship program.
 - a. August 9, 2021
 - b. February 13, 2023
9. *Using Developmental Networks/Mentor Mapping to Improve your Professional and Personal Life*. Co-presented with Dr. Jeanne M. Horowitz and Dr. Farzaneh Sorond. Department of Radiology Mentoring Workshop Series, Northwestern University Feinberg School of Medicine, August 11, 2021. (virtual)
10. *ROME Wasn't Built in a Day: Research Outcomes in Medical Education*. Co-presented with Dr. Mark Adler. Invited Workshop presented at the 11th Annual Medical Education Day, Northwestern University, Feinberg School of Medicine, Chicago, IL. October 8, 2021.
11. *Developmental Networks for Career Development*. Co-Presented with Dr. Farzaneh A. Sorond, Associate Dean for Faculty Development as part of the Department of Pathology Faculty Development Series, Northwestern University Feinberg School of Medicine. Chicago, IL, October 27, 2021. (virtual)

INVITED MENTORING WORKSHOPS

B. Regional/Local (continued)

12. *Mentoring across Differences: Culturally Aware Mentorship*. Co-presented with Dr. Richard McGee Jr., to the Department of Medical Social Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL,
 - a. December 6, 2021 (virtual)
 - b. December 8, 2021 (virtual)
13. *ROME Wasn't Built in a Day: Research Outcomes in Medical Education*. Co-presented with Dr. Mark Adler at the After-TIME Workshops Series, Northwestern University Feinberg School of Medicine, Chicago, IL. July 19, 2022.
14. *Developmental Networks: The Who, the What, the Why, and the How*. Presented to the Center for Health Services and Outcomes Research, Northwestern University Feinberg School of Medicine, Chicago, IL, October 7, 2022.
15. *Mentoring Across Differences: Culturally Aware Mentoring*. Co-Presented (With Rick McGee) to the Physical Therapy and Human Movement Sciences College Mentor Program, Northwestern University Feinberg School of Medicine, Chicago, IL. October 8, 2022. (virtual)
16. *Using Developmental Networks/Mentor Mapping to Improve Your Professional and Personal Life*. Co-Presented (with Jeanne M. Horowitz) to the Department of Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL. October 14, 2022.
17. *Establishing and Aligning Expectations in Mentoring Relationships*. Presented to the Center of Innovation for Complex Chronic Healthcare (CINCCCH), U. S. Department of Veterans Affairs, Hines, IL. April 18, 2023. (virtual)
18. *Aligning Expectations with your Mentor: The What, the Why, and the How*. Presented to the Northwestern University Clinical and Translational Sciences Institute Science Immersion Program. Northwestern University Feinberg School of Medicine, Chicago, IL. June 15, 2023.
19. *Who is there and who is missing? Helping your mentee expand their network through mentor mapping*. Presented to the U.S. Department of Veterans Affairs Center of Innovation for Complex Chronic Healthcare (CINCCCH). June 20, 2023. (virtual)
20. *Mentorship for Advanced Practice Providers (MAPP) Inaugural Training: Establishing and Aligning Expectations, SMART goals, and Using Coaching Skills in Mentoring Relationships*. Presented to the inaugural cohort of Advanced Practice Providers Mentors, Northwestern Medicine, Chicago, IL. July 10, 2023.
21. *Cultural Awareness to Enhance Mentoring Across Differences*. Presented to the Institute for Sexual and Gender Minority Health and Wellbeing (ISGMH) Summer Intensive Program in Intersectional BIPOC SGM-focused HIV Science Fellows, Northwestern University Feinberg School of Medicine, Chicago, IL,
 - a. August 1, 2022; Evanston, IL
 - b. August 2, 2023; Evanston, IL (virtual)
 - c. July 31, 2024 (virtual)
22. *Establishing and Cultivating Developmental Networks for Career Advancement and Success*. Presented to the Department of Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL, August 18, 2023.
23. *Mentoring Best Practices*. Presented to faculty in the School of Communication, Northwestern University, Evanston, IL, October 9 and October 12, 2023.
24. *Maintaining Effective Communication/Difficult Conversations*. Presented to the U.S. Department of Veterans Affairs Center of Innovation for Complex Chronic Healthcare (CINCCCH). October 31, 2023 (virtual).
25. *Establishing and Aligning Expectations in Mentoring Relationships*. Presented to the Feinberg Education Excellence Series (FEES) of the Feinberg Academy of Medical Educators, Northwestern University Feinberg School of Medicine, Chicago, IL, January 18, 2024.

INVITED MENTORING WORKSHOPS**B. Regional/Local (continued)**

26. *Developing and Evaluating Your Mentees' Goals for Career Progression*. Presented to the U.S. Department of Veterans Affairs Center of Innovation for Complex Chronic Healthcare (CINCCCH). January 30, 2024. (virtual)
27. *Communicating Effectively During Challenging Conversations*. Presented to the staff of the U.S. Department of Veterans Affairs Center of Innovation for Complex Chronic Healthcare (CINCCCH). May 9, 2024.
28. *Mentoring UP*. Presented to faculty in the School of Communication, Northwestern University, Evanston, IL, May 9, 2024.
29. *Aligning Expectations with your Mentor: The What, the Why, and the How*. Presented to the Northwestern University Clinical and Translational Sciences Institute Science Immersion Program. Northwestern University Feinberg School of Medicine, Chicago, IL. June 27, 2024.
30. *Navigating Mentorship: Strategies for Success*. Presented to faculty of the Feinberg School of Medicine Graduate Program in Genetic Counseling. October 25, 2024.

MENTORING WORKSHOPS (via Northwestern University Clinical and Translational Sciences Institute – NUCATS)

1. *Mentor Development Workshop*, Lead Facilitator (co-led with Dr. Mercedes Carnethon). This 3.5 hour workshop was presented annually from 2014 – 2019 as part of the Center for Education and Career Development Mentoring Programs, Northwestern University Clinical and Translational Sciences Institute (NUCATS), Northwestern University Feinberg School of Medicine, Chicago, IL. Served as a small group facilitator 2014 – 2016; Lead Facilitator 2017 – 2019.
2. *Articulating your Mentoring Needs*. NUCATS Series on Developing and Enhancing Mentoring Relationships (co-led with Dr. Mercedes Carnethon). Northwestern University Feinberg School of Medicine. Creator and co-facilitator. October 29, 2020. DOI: [10.18131/g3-bnqx-ns59](https://doi.org/10.18131/g3-bnqx-ns59)
3. *Establishing and Aligning Expectations in Mentoring*. NUCATS Series on Developing and Enhancing Mentoring Relationships. Northwestern University Feinberg School of Medicine. Creator and co-facilitator. [10.18131/g3-b2mn-bp79](https://doi.org/10.18131/g3-b2mn-bp79)
 - a. December 10, 2020 (co-led with Dr. Susanna McColley)
 - b. October 14, 2021 (co-led with Dr. Mercedes Carnethon)
 - c. October 12, 2022 (co-led with Dr. Robert I. Liem)
 - d. October 10, 2023
 - e. October 10, 2024
4. *Mentor Mapping and Developmental Networks*. NUCATS Series on Developing and Enhancing Mentoring Relationships (co-led with Drs. Farzaneh Sorond and Jeanne Horowitz). Northwestern University Feinberg School of Medicine. Co-creator and co-facilitator. April 8, 2021. DOI: [10.18131/g3-j84m-rc33](https://doi.org/10.18131/g3-j84m-rc33)
5. *Navigating Conflict in the Mentor-Mentee Relationship*. NUCATS Series on Developing and Enhancing Mentoring Relationships (co-led with Dr. Michael E. Roloff). Northwestern University Feinberg School of Medicine. Creator and co-facilitator. June 14, 2023.
6. *Cultural Awareness to enhance Mentoring Across Differences*. NUCATS Series on Developing and Enhancing Mentoring Relationships (co-led with Dr. Rick McGee). Northwestern University Feinberg School of Medicine. Northwestern University Feinberg School of Medicine. Co-facilitator. April 9, 2024.
7. *Mentoring across Generations*. NUCATS Series on Developing and Enhancing Mentoring Relationships (co-led with Dr. Khalilah Gates). Northwestern University Feinberg School of Medicine. Co-creator and Co-facilitator. January 9, 2025.
8. *Mentoring under Uncertainty*. (co-led with Jen Kauper Brown, Dr. Ravi Kalhan, Dr. Rick McGee, and Dr. Laura Rassmussen-Torvik). NUCATS Series on Developing and Enhancing Mentoring Relationships. Northwestern University Feinberg School of Medicine. Northwestern University Feinberg School of Medicine. Co-creator and co-facilitator. June 5, 2025.

PUBLICATIONS AND SCHOLARLY WORK

(* = co-first authorship; † = senior author; students/trainees/mentees underlined; ± = corresponding author; § = content/methodological mentor)

A. Journal Articles

a. Peer-reviewed Original Investigations

1. Witte K, **Cameron KA**, McKeon JK, Berkowitz JM. (1996). Predicting risk behaviors: Development and validation of a diagnostic scale. *Journal of Health Communication*, 1, 317-341. PMID:10947367
2. Wilson SR, **Cameron KA**, Whipple EE. (1997). Regulative communication strategies within mother-child interactions: Implications for the study of reflection-enhancing parental communication. *Research on Language and Social Interaction*, 30, 73-92.
3. Witte K, Berkowitz JM, Lillie JM, **Cameron KA**, Lapinski MK, Liu W. (1998). Radon awareness and reduction campaigns for African-Americans: A theoretically based evaluation. *Health Education and Behavior*, 25, 284-303. PMID: 9615240
4. Witte, K, **Cameron KA**, Lapinski MK, Nzyuko S. (1998). A theoretically-based evaluation of HIV/AIDS prevention campaigns along the Trans-Africa highway in Kenya. *Journal of Health Communication*, 3, 345-363. PMID:10977262
5. Witte K, Berkowitz JM, **Cameron KA**, McKeon JK. (1998). Preventing the spread of genital warts: Using fear appeals to promote self-protective behaviors. *Health Education and Behavior*, 25, 571-585. PMID:9768378
6. **Cameron KA**,± Witte K, Lapinski MK, Nzyuko S. Preventing HIV transmission along the Trans-Africa highway in Kenya: Using persuasive message theory in formative education. (1999). *International Quarterly of Community Health Education*, 18, 331-356.
7. Koob JJ, **Cameron KA**, Oswalt S. (2000). The Effects of Peer Sexuality Education on Perceived Risk, Condom Use, and Sexual Decision Making. *Peer Facilitator Quarterly*, 17, 76-83.
8. Boster FJ, **Cameron KA**, Campo SL, Liu W, Lillie JKM, Baker EM, Ah Yun K. (2000). The persuasive effects of statistical evidence in the presence of exemplars. *Communication Studies*, 51, 296-306.
9. Lannutti PJ, **Cameron KA**,† (2002). Beyond the breakup: heterosexual and homosexual post-dissolutional relationships. *Communication Quarterly*, 50, 153-170.
10. Bevan JL, **Cameron KA**,† Dillow MR. (2003). One more try: Compliance-gaining strategies associated with romantic reconciliation attempts. *Southern Communication Journal*, 68, 121-135.
11. **Cameron KA**,†± Campo S, Brossard D. (2003). Advocating for controversial issues: The effect of activism on compliance-gaining strategy selection. *Communication Studies*, 54, 265-281.
12. Campo S, **Cameron KA**,* Brossard D, Frazer MS. (2004). Social norms and expectancy violation theories: Assessing the effectiveness of health communication campaigns. *Communication Monographs*, 71, 127-149.
13. **Cameron KA**,± Salazar LF, Bernhardt JM, Burgess-Whitman N, Wingood GM, DiClemente RJ. (2005). Adolescents' experience with sex on the web: Results from online focus groups. *Journal of Adolescence*, 28, 535-540. PMID: 16022887
14. Baker DW, **Cameron KA**, Feinglass J, Georgas P, Foster S, Pierce D, Thompson J, Hasnain-Wynia R. (2005). Patients' attitudes toward health care providers collecting information about their race and ethnicity. *Journal of General Internal Medicine*, 20, 895-900. PMID: 16191134 (**Selected by JGIM Editors as a "Notable article" among those published in July 2005 – June 2006**).
15. Oswalt SB, **Cameron KA**,† Koob JJ. (2005). Sexual regret in college students. *Archives of Sexual Behavior*, 34, 663-669. PMID: 16362250
16. Baker DW, **Cameron KA**, Feinglass J, Thompson J, Georgas P, Foster S, Pierce D, Hasnain-Wynia R. (2006). A system for rapidly and accurately collecting patients' race and ethnicity. *American Journal of Public Health*, 96, 532-537. PMID: 16449590
17. Campo S, **Cameron KA*** (2006). Differential effects of exposure to social norms campaigns: A cause for concern. *Health Communication*, 19, 209-219. PMID: 16719724
18. **Cameron KA**,* ± Campo S. (2006). Stepping back from social norms campaigns: Comparing normative influences to other predictors of health behaviors. *Health Communication*, 20, 277-288. PMID: 17137419

PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

a. Peer-reviewed Original Investigations

19. **Cameron KA**, Francis L, Wolf MS, Baker DW, Makoul G. (2007). Investigating Hispanic/Latino perceptions about colorectal cancer screening: a community-based approach to effective message design. *Patient Education and Counseling*, 68, 145-152. PMID: 17517486
20. **LaVela SL, Cameron KA**, Priebe M, Weaver FM. (2008). Development and testing of a vaccination message targeted to persons with spinal cord injuries and disorders. *The Journal of Spinal Cord Medicine*, 31, 44-52. PMID: 18533411
21. **Cameron KA**.± (2009). A practitioner's guide to persuasion: An overview of 15 selected persuasion theories, models and frameworks. *Patient Education and Counseling (Special Issue on Theories in Health Communication Research)*, 74, 309-317. **(Top 25 most downloaded articles January 2009 – June 2011)** PMID: 19136229
22. **Cameron KA**,± Rintamaki LS, Kamanda-Kosse M, Noskin GA, Baker DB, Makoul G. (2009). Using theoretical constructs to identify key issues for targeted message design: African American seniors' perceptions about influenza and influenza vaccination. *Health Communication*, 24, 316-326. PMID: 19499425
23. Tanabe P, Gisondi MA, Barnard C, Lucenti MJ, **Cameron KA**.† (2009). Can education and staff based participatory research change nursing practice in an era of ED overcrowding? A focus group study. *Journal of Emergency Nursing*, 35, 290-298. PMID: 19591722
24. Makoul G, **Cameron KA**, Baker DW, Francis L, Scholtens D, Wolf MS. (2009). A multimedia patient education program on colorectal cancer screening increases knowledge and willingness to consider screening among Hispanic/Latino patients. *Patient Education and Counseling*, 76, 220-226. PMID: 19250791
25. Clayman ML, Webb J, Zick A, **Cameron KA**, Rintamaki L, Makoul G. (2009) Video review: an alternative to coding transcripts of focus groups. *Communication Methods and Measures*, 3, 216-222.
26. **Brannen ML, Cameron KA**,§ Adler M, Goodman D, Holl JL. (2009). Admission handoff communications: Clinician's shared understanding of patient severity of illness and problems. *Journal of Patient Safety*, 5, 237-242. PMID: 22130217
27. Persell SD, Zei C, **Cameron KA**,§ Zielinski M, Lloyd-Jones DL. (2010). Potential use of 10-year and lifetime coronary risk information for preventive cardiology prescribing decisions: a primary care physician survey. *Archives of Internal Medicine*, 170, 470 – 477. PMID: 20212185
28. **Cameron KA**,± Engel KG, **McCarthy DM**, Buckley BA, Kollar LMM, Donlan SD, Pang PS, Makoul G, Tanabe P, Gisondi MA, Adams JG. (2010). Examining emergency department communication through a staff-based participatory research method: Identifying barriers and solutions to meaningful change. *Annals of Emergency Medicine*, 56, 614-622. PMID: 20382446
29. Clayman ML, Pandit AU, Bergeron AR, **Cameron KA**, Ross E, Wolf MS. (2010). Ask, understand, remember: A brief measure of patient communication self-efficacy within clinical encounters. *Journal of Health Communication*, 15:72-29. PMID: 20845194
30. **Cameron KA**,± Song J, Manheim LM, Dunlop DD. (2010). Gender disparities in health and healthcare use among older adults. *Journal of Women's Health*, 19: 1643-50. PMID: 20695815
31. **Cameron KA**,± Ross E, Clayman ML, Bergeron AR, Federman AD, Cooper Bailey S, Davis TC, Wolf MS. (2010). Measuring patients' self-efficacy in understanding and using prescription medication. *Patient Education and Counseling*, 80, 372-376 (invited submission for Special Issue of International Conference on Communication in Healthcare 2009). PMID: 20650594
32. Wilson EAH, Wolf MS, Curtis LM, Clayman ML, **Cameron KA**, Vom Eigen K, Makoul G. (2010). Literacy, cognitive ability, and the retention of health-related information about colorectal cancer screening. *Journal of Health Communication*, 15:116-125. PMID: 20845198

PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

a. Peer-reviewed Original Investigations

33. Wilson EAH, Park DC, Curtis L, **Cameron KA**, Clayman M, Makoul G, vom Eigen K, Wolf MS. (2010). Media and memory: The efficacy of video and print materials for promoting patient education about asthma. *Patient Education and Counseling*, 80, 393-398. (invited submission for Special Issue of International Conference on Communication in Healthcare 2009). PMID: 20688454
34. **Cameron KA**,± Persell SD, Brown T, Thompson JA, Baker DW (2011). Patient outreach to promote colorectal cancer screening among patients with an expired order for colonoscopy: a randomized controlled trial. *Archives of Internal Medicine*, 171, 642-646. PMID: 21149742
35. Gordon EJ, Daud A, Caicedo JC, **Cameron KA**, Jay C, Fryer J, Beauvais N, Baker T. Informed Consent and Decision-Making about Adult-to-Adult Living Donor Liver Transplantation: A Systematic Review of Empirical Research. *Transplantation* (2011) 92:1285-1296. PMID: 22143436
36. McCarthy DM, Leone KA, Salzman DH, Vozenilek JA, **Cameron KA**.[†] (2012). Language use in the informed consent discussion for emergency procedures: Can patients understand? *Teaching and Learning in Medicine*, 24, 315-320. PMID: 23035998
37. Bylund CL, Peterson ECB, **Cameron KA**.[†] (2012). A practitioner's guide to interpersonal communication theory: An overview and exploration of selected theories. *Patient Education and Counseling*, 87: 261-267. PMID: 22112396 (**Top 25 most downloaded articles from *Patient Education and Counseling* 2012**).
38. Edwards BJ, Bunta AD, Anderson J, Bobb A, Hahr A, O'Leary K, Agulnek A, Andruszyn L, **Cameron KA**, May M, Kazmers NH, Dillon N, Baker DW, Williams MV. (2012). Development of an electronic medical record based intervention to improve medical care of osteoporosis. *Osteoporosis International*, 23, 2489-2498. PMID: 22273834
39. Tang JW, Kushner RF, **Cameron KA**,§ Hicks B, Cooper A, Baker DW. (2012). Electronic tools to assist with identification and counseling for overweight patients: a randomized controlled trial. *Journal of General Internal Medicine*, 27: 933-939. PMID: 22402982
40. Lindquist LA, **Cameron KA**,§ Messerges-Bernstein J, Friesema E, Zickuhr L, Wolf MS, Baker DW. (2012). Hiring and screening processes of agencies supplying paid caregivers to older adults. *Journal of the American Geriatrics Society*, 60: 1253-1259. PMID: 22724430
41. McCarthy DM, **Cameron KA**, Courtney DM, Vozenilek JA. Self-reported use of communication techniques in the emergency department. (2012) *The Journal of Emergency Medicine*, 43: e355-e361. PMID: 22579019
42. Eppes C, Wu A, **Cameron KA**,§ You W, Garcia P, Grobman W. (2012). Does obstetrician knowledge regarding influenza increase H1N1 vaccine acceptance among their pregnant patients? *Vaccine*, 30, 5782-5784. PMID: 22743135
43. McCarthy DM, Ellison EP, Venkatesh AJ, Engel KG, **Cameron KA**§, Makoul G, Adams JG. (2013). Emergency Department Team Communication with the Patient: The Patients' Perspective. *The Journal of Emergency Medicine*, 45: 262-270. PMID: 22989697
44. Hill JN, Evans CT, **Cameron KA**§, Rogers T, Risa K, Kellie S, Richardson M, Anderson V, Goldstein B, Guihan M. (2013). Patient and Provider Perspectives on Methicillin-resistant *Staphylococcus aureus* (MRSA): A Qualitative Assessment of Knowledge, Beliefs, and Behavior. *The Journal of Spinal Cord Medicine*, 36, 82-90. PMID: 23809521
45. **Cameron KA**.± (2013). Advancing Equity in Clinical Preventive Services: The Role of Health Communication. *Journal of Communication*, 63, 31-50. Invited and peer reviewed: Special issue on Communication Strategies to Reduce Health Disparities.
46. McCarthy DM, Buckley BA, Engel KG, Forth V, Adams JG, **Cameron KA**.[†] (2013). Understanding patient – provider conversations: What are we talking about? *Academic Emergency Medicine*, 20:441-448. PMID: 23672357

PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

a. Peer-reviewed Original Investigations

47. Gawron LM, **Cameron KA**,§ Phisuthikul A, Simon MA. (2013). An Exploration of Women's Reasons for Termination Timing in the Setting of Fetal Abnormalities. *Contraception*, 88, 109-115. PMID: 23352798
48. Lau DT, Machizawa S, Demonte W, **Cameron KA**, Muramatsu N, Henker RD, Chikahisa F, Tanimura M. (2013). Colorectal Cancer Knowledge, Attitudes, Screening, and Intergenerational Communication among Japanese American Families: An Exploratory, Community-Based Participatory Study. *Journal of Cross-Cultural Gerontology*, 28 (1), 89-101. PMID: 23263883
49. Kaiser K, **Cameron KA**, Curry G, Stolley M. (2013). Black Women's Awareness of Breast Cancer Disparity and Perceptions of the Causes of Disparity. *Journal of Community Health*, 38, 766-722. PMID: 23539135
50. Baker DW, Brown T, Buchanan DR, Weil J, **Cameron KA**, Ranalli L, Ferreira MR, Stephens Q, Balsley K, Goldman SN, Wolf MS. (2013). Design of a randomized controlled trial to assess the comparative effectiveness of a multifaceted intervention to improve adherence to colorectal cancer screening among patients cared for in a community health center. *BMC Health Services Research*, 13(1), 153-161. PMID: 23627550
51. Eppes C, Wu A, You W, **Cameron KA**,§ Garcia P, Grobman W. (2013). Barriers to influenza vaccination among pregnant women. *Vaccine*, 31(27), 2874-2878. PMID: 23623863
52. **Cameron KA**,± Roloff ME, Friesema EM, Brown T, Jovanovic BD, Hauber S, Baker DW. (2013). Patient knowledge and recall of health information following exposure to "facts and myths" message format variations. *Patient Education and Counseling*, 92:381-387. (invited submission for Special Issue of International Conference on Communication in Healthcare 2012). PMID:23891420
53. Evans CT, Hill JN, Guihan M, Chin A, Risa K, Goldstein B, Richardson M, Anderson V, Kellie S, **Cameron KA**.† (2014). Implementing a patient education intervention about Methicillin-Resistant Staphylococcus Aureus prevention and effect on knowledge and behavior in Veterans with spinal cord injuries and disorders: A Pilot Randomized Controlled Trial. *The Journal of Spinal Cord Medicine*, 37(2): 152-161. PMID: 24090538
53. Sharma RK, Jain N, Peswani N, Szmuiłowicz E, Wayne DB, **Cameron KA**.† (2014). Unpacking resident-led code status discussions: Results from a mixed methods study. *Journal of General Internal Medicine*, 29:750-757. PMID:24526542
54. Baker DW, Brown T, Buchanan DR, Weil J, Balsley K, Ranalli L, Lee JY, **Cameron KA**, Ferreira MR, Stephens Q, Goldman SN, Rademaker AW, Wolf MS. (2014). Comparative effectiveness of a multifaceted intervention to improve adherence to annual colorectal cancer screening in community health centers: A randomized controlled trial. *JAMA Internal Medicine*, 174: 1235-1241. PMID: 24934845
55. Hill JN, Hogan TP, **Cameron KA**§, Guihan M, Goldstein B, Evans ME, Evans CT. (2014). Perceptions of MRSA and hand hygiene provider training and patient education: results of a mixed method study of healthcare providers in Department of Veterans Affairs Spinal Cord Injury and Disorder units. *American Journal of Infection Control*, 42:834-840. PMID: 24950922
56. McCarthy DM, **Cameron KA**, King JP, Mullen RJ, Bailey SC, Jacobson KL, Di Francesco L, Davis TC, Parker RM, Wolf MS. (2014). Patient recall of healthcare provider counseling for opioid-acetaminophen prescriptions. *Pain Medicine*, 15: 1750-1756. PMID: 25039586
57. McCarthy DM, Engel KG, Buckley BA, Huang A, Acosta F, Stancati J, Schmidt M, Adams JG, **Cameron KA**.† (2014). "Talk-time" in the Emergency Department: The duration of patient-provider interactions during an ED visit. *Journal of Emergency Medicine*, 47: 513-519. PMID: 25214177
58. Strohl AE, Mendoza G, Ghant MS, **Cameron KA**,§ Simon MA, Schink JC, Marsh EE. (2015). Barriers to Prevention: Knowledge of HPV, Cervical Cancer, and HPV Vaccinations among African American Women. *American Journal of Obstetrics and Gynecology*, 212:65.e1-5. PMID: 24983684
59. Ramanathan S, Hill JN, **Cameron KA**§, Safdar N, Guihan M, Evans CT. (2015). The relationship between knowledge and attitudes of Methicillin Resistant Staphylococcus aureus and hand hygiene behavior in Veterans with Spinal Cord Injury and Disorder. *American Journal of Infection Control*, 43: 537-539. PMID:25952051

PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

a. Peer-reviewed Original Investigations

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A. Journal Articles

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A. Journal Articles

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PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

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A. Journal Articles

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PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

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PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

a. Peer-reviewed Original Investigations

141. Vargas MC, Pineda GJ, Talamantes V, Toledo MJL, Owen A, Carcamo P, Gibbert W, Ackermann RT, Kandula NR, **Cameron KA**, Siddique J, Williams GC, O'Brien MJ. (2023). Design and Rationale of Behavioral Nudges for Diabetes Prevention (BEGIN): A Pragmatic, Cluster Randomized Trial of Text Messaging and a Decision Aid Intervention for Primary Care Patients with Prediabetes. *Contemporary Clinical Trials*, 2023 Jul;130:107216. doi: 10.1016/j.cct.2023.107216. Epub 2023 May 9. PMID: 37169219; PMCID: PMC10330561.
142. Eliacin J, Matthias MS. **Cameron KA**,§ and Burgess DJ. (Invited Manuscript, 2023). Veterans' views of PARTNER-MH, a peer-led patient navigation intervention, to improve patient engagement in care and patient-clinician communication: A qualitative study. *Patient Education and Counseling*. 2023 Sep;114:107847. doi: 10.1016/j.pec.2023.107847. Epub 2023 Jun 13. PMID: 37331280.
143. Martin KA, **Cameron KA**,§ Lyleroehr MJ, Linder JA, O'Brien M, Hirschhorn LR. (2023). Venous thromboembolism prevention in cancer care: Implementation strategies to address underuse. *Research and Practice in Thrombosis and Haemostasis*, Aug 20;7(7):102173. PMID: 37822563. DOI: 10.1016/j.rpth.2023.102173
144. Barsuk JH, Cohen ER, Patel RV, **Cameron KA**, Keswani RN, Aadam AA, Wayne DB, Komanduri S. (2024). Effect of polypectomy simulation-based mastery learning on skill retention among practicing endoscopists. *Academic Medicine*, 99(3): 317-324, PMID: 37934830.
145. Mohindra NA, Coughlin A, Kircher S, O'Daniel A, Barnard C, **Cameron KA**,§ Hirschhorn LR, Cella D. (2024). Implementing a Patient-Reported Outcome Dashboard in Oncology Telemedicine Encounters: Clinician and Patient Adoption and Acceptability. *JCO Oncology Practice*, Jan 11:OP2300493. doi: 10.1200/OP.23.00493. Epub ahead of print. PMID: 38207229.
146. **Cameron KA**, ± Rodrigues TJ, Keswani RN. (2024). Developing a mentoring network to navigate fellowship and beyond: Moving from "mentor" to "mentors." *Gastroenterology*, 166(5): 723-727.e.1. doi.org/10.1053/j.gastro.2024.02.021. Epub 2024 Feb 17. PMID: 38373640.
147. Martin KA, **Cameron KA**,§ Linder JA, Hirschhorn LR. (2024). Preventing venous thromboembolism for ambulatory patients with cancer: Developing the form and content of implementation strategies. *Thrombosis Update*, June 2024. doi: 10.1016/j.tru.2024.100168. Epub ahead of print 2024 Mar 27. PMID: 38994000.
148. Eliacin J, Polselini A, **Cameron KA**,§ Saykin AJ, Wang S. Black Americans' perceptions of Alzheimer's disease, a healthy brain, and strategies for brain health promotion. (2024). *PEC Innovation*, Apr 19;4:100282. doi: 10.1016/j.pecinn.2024.100282. PMID: 38706495.
149. Nayak T, Christensen JT, Bardsley T, Barnes GD, **Cameron KA**, Passman R, Kansal P, Witt DM, Cavanaugh JL, Fagerlin A, Ozanne EM. (2025). Evaluation of patient and encounter decision aid interventions for atrial fibrillation: Baseline characteristics of the RED-AF study: A Randomized Controlled Trial. *Contemporary Clinical Trials*, 148. doi.org/10.1016/j.cct.2024.107773.
150. Ozanne EM, Barnes GD, Brito JP, **Cameron KA**, Cavanaugh KL, Greene T, Jackson EA, Montori VM, Steinberg BA, Witt DM, Noseworthy P, Passman RS, Kansal P, Crossley G, Roden DM, Christensen JT, Ariotti A, Jones AE, Bardsely T, Wu C, Fagerlin A, and the STEP-UP Writing Group. (2025). Effectiveness of shared decision making strategies for stroke prevention among patients with atrial fibrillation: cluster randomized controlled trial. *BMJ*, 388. e079976 doi:10.1136/bmj-2024-079976.
151. **Cameron KA**,± Carnethon MR, Barrowman M, Welty LJ. (2025). Development and assessment of a Mentor Training Workshop Series and Certificate Program. *Journal of Clinical and Translational Science*, 9(1):e98. doi:10.1017/cts.2025.71

PUBLICATIONS AND SCHOLARLY WORK

A. Journal Articles

b. Invited Reviews and Commentaries

1. **Cameron KA.** (1998). Invited Review of the book *The fragile community: Living together with AIDS. Personal Relationship Issues*, 5, 13-15. [invited]
2. Clayman ML, **Cameron KA**, Wolf MS, Visser AP. (2012). Patients, providers, and relationships in healthcare: Investigations from the ICCH 2011 conference in Chicago. *Patient Education and Counseling*, 88: 357-358. [PMID: 22776762]
3. **Cameron KA.** (2013). Commentary: Risk communication in context: Theories, models, research and future endeavors. In Salmon, C.T. (Ed). *Communication yearbook 36*. New York, NY: Taylor & Francis (pp. 363-369). Invited commentary.
4. **Cameron KA**, deHaes JCJM, Hulsman R. (2015). Health communication in science, teaching and clinical practice: Selected papers from the Amsterdam EACH 2015 Conference. *Patient Education and Counseling*, 98:1169-1171. [PMID: 26319361]
5. Smets EM, Deveugele M, Kripalani S, **Cameron KA.** (2016). New insights on information provision, decision making and patient autonomy. *Patient Education and Counseling*, 99: 1439-1440. [PMID: 27578368]

c. Case Reports, Letters, Editorials

1. Witte K, McKeon J, **Cameron K**, Berkowitz J. (1995). *The risk behavior diagnosis scale: A health educator's tool* (manual). For: Olin Health Center, Michigan State University.
2. Berkowitz JM, **Cameron KA**, McKeon JK, Witte K. (1996) *The African-American radon awareness project*. For: American Cancer Society/MSU Cancer Center.
3. Witte K, Nzyuko S, **Cameron KA.** (1996) *HIV/AIDS along the Trans-Africa Highway in Kenya: Examining risk perceptions, recommended responses, and campaign materials*. For: All-University Research Initiative Grant Program, Michigan State University.
4. **Cameron KA.** (2000). The role of communication in identity construction. *Proceedings of the VIII International Symposium on Philosophy and Theory of Culture: Reflections on Self-Consciousness Development* (pp. 61-77). St. Petersburg, Russia: UNESCO, "EIDOS."
5. **Cameron KA**, de Haes H, Visser A. (2009). Editorial: Theories in health communication research. *Patient Education and Counseling (Special Issue on Theories in Health Communication Research)*, 74, 279-281. [invited] [PMID: 19135827]
6. Henschen BL, Theororou M, **Cameron KA**, O'Leary KJ. (2023). An Intensive Intervention to Reduce Readmissions for Frequently Hospitalized Patients: the CHAMP Randomized Control Trial. *Journal of General Internal Medicine*, 38, 1309. Published online <https://doi.org/10.1007/s11606-023-08054-1>

B. Books

None

C. Book Chapters

1. **Cameron KA**, Witte K, Nzyuko S. (1999). Perceptions of condoms and barriers to condom use along the Trans-Africa highway in Kenya. In WN Elwood (Ed.) *Power in the blood: AIDS, politics, and communication* (pp. 149-163). Mahwah, NJ: Erlbaum. [invited and peer reviewed]
2. Bernhardt J, **Cameron KA.** (2003). Accessing, understanding, and applying health communication messages: The challenge of health literacy. In T Thompson, A Dorsey, K Miller, RL Parrott (Eds.) *Handbook of health communication*. (pp. 583-605). Mahwah, NJ: Lawrence Erlbaum Associates [invited and peer reviewed]
3. DeJoy DM, **Cameron KA.**, Della LJ. (2006). Post exposure evaluation of warning effectiveness: A review of field studies and population-based research (Chap. 4). In MS Wogalter (Ed.) *Handbook of warnings* (pp. 35-48). Mahwah, NJ: Lawrence Erlbaum Associates. [invited and peer reviewed]

PUBLICATIONS AND SCHOLARLY WORK

C. Book Chapters (continued)

4. **Cameron K A**, DeJoy DM. (2006). The persuasive functions of warnings: Theory and models. (Chap. 22). In MS Wogalter (ed.) *Handbook of warnings* (pp. 301-312). Mahwah, NJ: Lawrence Erlbaum Associates. [invited and peer reviewed]
5. **Cameron KA**, Baker DW, Wolf MS. (2011). Integrating health literacy in health communication. In T Thompson, RL Parrott, Nussbaum J. (Eds.) *Handbook of health communication*. (2nd ed). Mahwah, NJ: Lawrence Erlbaum Associates (pp. 306-319) [invited and peer reviewed]
6. **Cameron KA**. (2014). Health Literacy, Measurement of. In: TL Thompson (Ed.): *Encyclopedia of Health Communication, Vol. 2* (pp. 618-620). Thousand Oaks, CA: Sage. [invited]
7. **Cameron KA**. (2014). Health Literacy and Numeracy. In: TL Thompson (Ed.): *Encyclopedia of Health Communication, Vol. 2* (pp. 624-626). Thousand Oaks, CA: Sage. [invited]
8. **Kaiser K, Cameron KA, Curry G, Stolley M**. (2019). Black Women's Awareness of Breast Cancer Disparity and Perceptions of the Causes of Disparity. In De Maio F, Shah RC, Mazzeo J, Ansell DA. (Eds.) *Community Health Equity: A Chicago Reader*. Chicago: The University of Chicago Press. Reprinted from 2013 original publication in *Journal of Community Health*, 38, 766-722.
9. Cohen ER, **Cameron KA**, Barsuk JH, Wayne DB. (2020). Implementing and managing a mastery learning program. In: McGaghie W, Barsuk JH, Wayne DB (Eds.). *Mastery Learning in Health Professions Education* (pp. 123-137). New York: Springer Publishing Co.
10. **Eliacin J, Cameron KA**. (2023). Patient Navigation. *The International Encyclopedia of Health Communication* (Eds. Ho EY, Bylund CL, van Weert JCM, Basnyat I, Bol N, Dean M.) Wiley. [invited]
11. Banerjee S, **Cameron KA**. (2023). Cancer Prevention. *The International Encyclopedia of Health Communication* (Eds. Ho EY, Bylund CL, van Weert JCM, Basnyat I, Bol N, Dean M.) Wiley. [invited]

D. Peer-Reviewed Educational Materials

None

E. Practice Guidelines, Policy, Consensus Statements, and Reports

None

F. Congressional Hearings and Legislative Testimony

None

G. Patents and Intellectual Property

None

H. Data Sets

None

I. Software/Code

None

PUBLICATIONS AND SCHOLARLY WORK

J. Published Conference Proceedings [2020 – present/past 5 years only]

1. Chuzi S, Cameron KA, Ogunseitan A, Schulze L, Grady KL, Wilcox JE. Dying with A Destination Therapy Left Ventricular Assist Device: Perspectives, Perceptions, and Experiences of Bereaved Caregivers and Clinicians. In: *Journal of Cardiac Failure*; 2020 p. S124–S124.
2. Henschen BL, Theodorou M, Chapman M, Cameron KA, O’Leary K. An Intensive High Utilizer Intervention Does Not Reduce Hospital Readmissions: The CHAMP Randomized Controlled Trial. In: *Journal of General Internal Medicine*; 2020 p. S15–S15.
3. Barsuk JH, Cohen ER, Wilcox JE, Harap RS, Shanklin KB, Cameron KA, Grady KL, Wayne DB. Short Term Retention of Ventricular Assist Device Self-Care Skills after Simulation-Based Mastery Learning. In: *Journal of Heart and Lung Transplantation*; 2020 p. S40–S41.
4. Chapman MM, Theodoru ME, Henschen BL, O’Leary KJ, Foster D, O’Hara L, **Cameron KA**. Frequently hospitalized patients’ perception of support received as they cope with chronic illness. *Patient Education and Counseling*. Elsevier; 2023 p. 14.
5. Eliacin J, Burgess D, Rollins A, Patterson S, Slaven J, O’Connor C, Bair M, **Cameron KA**, Matthias M. Evaluating the Feasibility and Effects of PARTNER-MH on Minority Patients’ Communication. *Patient Education and Counseling*. Elsevier; 2023 p. 136.
6. Fagerlin A, Barnes GD, Brito JP, **Cameron KA**, Cavanaugh KL, Greene T, Jackson EA, Montori VM, Steinberg BA, Witt DM, Noseworthy P, Passman RS, Kansal P, Crossley G, Roden DM, Christensen JT, Jones A, Ariotti A, Bardsley T, Wu C, Ozanne E, and STEP-UP Writing Group. Comparative effectiveness of patient decision aids vs. encounter decision aids for shared decision making about stroke prevention in patients with atrial fibrillation - a multi-center cluster randomized trial. *BMJ Evidence-Based Medicine*, 2024;29:A32-A33.

K. Oral Abstracts [2020 – present/past 5 years only] (*denotes presenting author, students/trainees underlined)

a. International Oral Abstract Presentations

1. Barsuk JH,* Cohen ER, Wilcox JE, Harap RS, Shanklin KB, **Cameron KA**, Grady KL, Wayne DB. *Short Term Retention of Ventricular Assist Device Self-care Skills after Simulation-based Mastery Learning*. (April 2020). Oral presentation at the International Society for Heart and Lung Transplantation Annual Meeting, Montreal, Canada.
2. McCarthy DM, **Cameron KA**, Jutel A, Ofstad E, Han P, Rising K. *Diagnostic uncertainty in the emergency setting - communication challenges and management strategies*. (September 2020) Accepted as a symposium for the International Conference on Communication in Healthcare (ICCH); in person conference cancelled due to COVID-19.
3. Rising KL,* **Cameron KA**, Salzman DH, Papanagnou D, Doty AMB, Piserchia K, Leiby BE, Shimada A, McGaghie WC, Powell RE, Klein MR, Zhang XC, McCarthy DM. (October 2021). *Simulation Based Mastery Learning for Emergency Department Residents Discharging Patients with Diagnostic Uncertainty: Results from a Randomized Control Trial*. Oral presentation at the Virtual International Conference on Communication in Healthcare (ICCH).
4. McCarty M*, Hargraves IG, Shaw K, Fagerlin A, **Cameron KA**, Cavanaugh KL, Noseworthy P, Kansal P, Crossley GH, Jackson EA, Passman RS, Barnes GD, Schmidt MM, Guzman A, Ariotti A, Pershing ML, Chen EP, Herrick J, Ozanne EM. (October 2021). *Development of two decision aids for atrial fibrillation to facilitate communication between patients and clinicians about stroke prevention medications*. Oral presentation at the 2021 Virtual International Conference on Communication in Healthcare (ICCH).
5. Eliacin J*, Burgess D, Rollins A, Patterson S, Slaven J, O’Connor C, Bair M, **Cameron KA**, Matthias M. (September 2022). *Evaluating the Feasibility and Effects of PARTNER-MH on Minority Patients’ Communication*. Oral presentation at the 2022 International Conference on Communication in Healthcare (ICCH), Glasgow, Scotland.

K. Oral Abstracts [2020 – present/past 5 years only] (*denotes presenting author, students/trainees underlined)**a. International Oral Abstract Presentations [continued]**

6. Chapman MM, Theodorou ME, Henschen BL, O'Leary KJ, Foster S, O'Hara L, **Cameron KA***. (September 2022). *Frequently hospitalized patients' perceptions of support received as they cope with chronic illness*. Oral presentation at the 2022 International Conference on Communication in Healthcare (ICCH), Glasgow, Scotland.
7. Harap RS, Cohen ER, Barsuk JH, Shanklin KB, Wilcox JE, Grady KL, Wayne DB, **Cameron KA***. (October 2023). *Learning to live with a Ventricular Assist Device (VAD): Patient, caregiver, and clinician concerns following implantation and hospital discharge*. Oral presentation at the 2023 International Conference on Communication in Healthcare (ICCH), Rio Mar, Puerto Rico.
8. Eliacin J*, Wang S, Saykin AJ, **Cameron KA**. (October 2023). *Black Americans' perceptions of Alzheimer's disease, a healthy brain, and strategies for brain health promotion*. Oral presentation at the 2023 International Conference on Communication in Healthcare (ICCH), Rio Mar, Puerto Rico.
9. Fagerlin A*, Barnes GD, Brito JP, **Cameron KA**, Cavanaugh KL, Crossley G, Greene T, Jackson EA, Jones A, Kansal P, Montori VM, Noseworthy PA, Passman RS, Roden DM, Steinberg BA, Witt DM, Ozanne EM. (July 2024). *Comparative Effectiveness of Patient Decision Aids Vs. Encounter Decision Aids for Shared Decision Making about Stroke Prevention in Patients with Atrial Fibrillation – A Multi-Center Cluster Randomized Trial*. Oral Presentation at the International Shared Decision-Making Conference, Lausanne, Switzerland.
10. Kolomaya AE, Jackson EA,* Kansal P, Passman R, **Cameron KA**, Witt DM, Barnes GD, Cavanaugh KL, Montori VM, Ozanne E, Fagerlin A, Steinberg B. (September 2024). *RED-AF: Oral anticoagulant initiation and adherence after shared decision making interventions for stroke prevention in atrial fibrillation*. Oral presentation at the European Society of Cardiology Annual Meeting, London, England.

K. Oral Abstracts [2018 – present/past 5 years only] (*denotes presenting author, students/trainees underlined)**b. National/Regional/Local Oral Abstract Presentations**

1. Nelson L,* Baldrige AS, Hibler E, Bello Nm Epps KC, **Cameron KA**, Gooding H, Catov J, Rich-Edwards J, Yee L, Toledo P, Banayan J, Khan S. Knowledge of Cardiovascular Disease Risk in Young Women of Reproductive Age: A Cross-Sectional Survey-Based Study. Oral Presentation at the American Heart Association Scientific Sessions, November 2021.

L. Poster Abstracts [2020 – present/past 5 years only] (*denotes presenting author, students/trainees underlined)**a. International Poster Presentations**

1. Martin KA, **Cameron KA***, Linder JA, Hirschhorn LR. (September 2024). *Developing implementation strategies to prevent venous thromboembolism in ambulatory patients with cancer*. Poster presented at the International Conference on Communication in Healthcare Annual Meeting. Zaragoza, Spain.
2. McCarthy DM, Rising K*, **Cameron KA**. (September 2024). *Sustained impact: Long-term application of diagnostic Uncertainty Communication training*. Poster presented at the International Conference on Communication in Healthcare Annual Meeting. Zaragoza, Spain.

b. National/Regional/Local Poster Presentations

1. Henschen BL,* Theodorou M, Chapman M, **Cameron KA**, O'Leary K. (May 2020). *An intensive high utilizer intervention does not reduce hospital readmissions: The CHAMP randomized controlled trial*. Poster presentation at the annual Society for General Internal Medicine Virtual Meeting (in person meeting cancelled due to COVID-19).
2. Horowitz JM,* Choe MJ, Griffin L, Deshmukh S, Kelahan LC, **Cameron KA**, Agarwal G, Yaghmai V, Carr J. (December 2020). *Team Approach to Improving Radiologist Wellness: Process and Examples*. Poster presentation at the annual Radiological Society of North America (Virtual) Conference.

L. Poster Abstracts [2020 – present/past 5 years only] (*denotes presenting author, students/trainees underlined)**a. National/Regional/Local Poster Presentations (continued)**

3. McCarty M,* Hargraves IG, Cavanaugh KL, Guzman A, Chen EP, Jackson EA, McCarthy SR, Pershing ML, Noseworthy P, Fagerlin A, Ozanne EM & **STEP-UP AFIB Writing Group Consortium**. (October 2021). *Development of complementary patient and encounter decision aids for stroke prevention in patients diagnosed with atrial fibrillation*. Poster presentation at the 2021 Virtual Society of Medical Decision Making. [as member of STEP-UP AFIB Writing Group]
4. Rising KL*, Doty AMB, **Cameron KA**, Gentsch AT, Leiby B, McGaghie WC, Papanagnou D, Piserchia K, Salzman DH, McCarthy DM. (May 2022). *Deliberate Practice Meets Tele-simulation: A Novel Approach for Mastery Learning*. Poster presentation at the SAEM22 (Society for Academic Emergency Medicine) Annual Meeting. New Orleans, LA.
5. Martin KA*, Lyleroehr, MJ, Hirschhorn LR, Linder JA, O'Brien M, **Cameron KA**. (September 2022). Identifying barriers to inform implementation strategies for venous thromboembolism prevention in oncology practice using the Implementation Research Logic Model. Poster presentation at the annual *Lewis Landsberg Research Day*, Northwestern University Feinberg School of Medicine, Chicago, IL.
6. **Cameron KA**, Ogunseitan AB,* Nimmagadda J, Ghossein C, Astik GJ. (May 2023). *Peer coaching in academic medicine: Benefits and professional development for peer coaches*. Poster presentation at the Society for General Internal Medicine Annual Meeting, Aurora, CO.
7. **Cameron KA***, Ogunseitan AB,* Nimmagadda J, Ghossein C, Astik GJ. (September 2023). *Peer coaching in academic medicine: Benefits and professional development for peer coaches*. Poster presentation at the annual Feinberg School of Medicine Medical Education Day, Chicago, IL.
8. Fagerlin A*, Barnes G, Brito JP, **Cameron KA**, Cavanaugh KL, Greene T, Jackson EA, Montori VM, Steinberg BA, Witt DM, Noseworthy P, Passman RS, Kansal P, Crossley G, Roden DM, Christensen JT, Jones A, Ariotti A, Bardsley T, Wu C, Ozanne E, STEP-UP Writing Group. (November 2024). Patient Decision Aids and Encounter Decision Aids Improve Shared Decision Making and Patient Knowledge About Stroke Prevention in Patients with Atrial Fibrillation. Virtual poster presentation at the 2024 American Heart Association Scientific Sessions, Chicago, IL.
9. Nayak T, Kansal P, **Cameron KA**, Ozanne EM, Barnes GD, Jeewa S, Pershing M, Fagerlin A, Cavanaugh KL, Jackson EA*, Montori V, Wu C, Passman R, STEP-UP Writing Group. (March 2025). Relationship Between CHA2DS2-VASc, Health Literacy, and Atrial Fibrillation Knowledge. Poster presentation at the 2025 American Heart Association EPI|Lifestyle Scientific Sessions, New Orleans, LA.
10. Kolomaya AE*, Christensen J, Throolin M, Witt DM, Barnes GD, **Cameron KA**, Passman R, Noseworthy P, Cavanaugh KL, Fagerlin A, Steinberg BA, Ozanne EM. (March 2025) Patient Values and Anticoagulant Decisions in Atrial Fibrillation: a Secondary Analysis of the RED-AF Shared Decision-Making Trial. Poster presentation at the 2025 American Heart Association EPI|Lifestyle Scientific Sessions, New Orleans, LA.

M. Panel Presentations**a. Peer Reviewed Workshops, Panel or Symposium Presentations at Conferences**

1. Lindquist LA,* Ramirez-Zohfeld V,* **Cameron KA.*** *Expand Your Career into Patient-Centered Outcomes Research*. (May 2016). Workshop Presentation at the Society of General Internal Medicine Annual Conference, Hollywood, FL.
2. **Cameron KA,*** Finnie D,* Morris MA.* (June 2016). *Building Sustainable Institutional Qualitative Research Capacity: Experiences of Three Diverse Academic-Medical Centers*. Panel Presentation at AcademyHealth annual conference, Boston, MA.
3. Bouchard LC, Penedo FJ, Shivaprakash N, Cella D, **Cameron KA**, Cristofanilli M, Yanez B.* (April 2018). *Advanced cancer patients' and providers' attitudes toward cancer genome sequencing to guide treatment: a qualitative study*. Symposium presentation at the 39th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, New Orleans, LA.

M. Panel Presentations

- a. Peer Reviewed Workshops, Panel or Symposium Presentations at Conferences (continued)
 4. Sikon A, Schulte E, Ghossein C, Nimmagadda K, Ogunseitun A, **Cameron KA**, Astik G. (July 2022). *Reimagining and Redefining Support: Moving Beyond Mentoring with Peer Faculty Coaching Programs*. Workshop presentation at the annual Association of American Medical Colleges Group on Faculty Affairs Professional Development Conference. Presented virtually.
 5. **Cameron KA**, Horowitz JM, Mangold K, McGaghie WC, Rho M, Tappan RS. (September 2022). *Everything I needed to know about writing I did NOT learn in kindergarten: Strategies for improving the process of academic writing*. Panel presentation at the annual Northwestern University Feinberg School of Medicine Medical Education Day, Chicago, IL.
- b. Invited Panel Presentations
 1. Invited Panel Participant, National Communication Association Annual Meeting, *Seeking and Receiving Career Development Awards*, November, 2005.
 2. *Employment outside traditional Health Communication Settings: Hospital, Industry, Other Departments in Academia*. Invited Panel speaker, Health Communication Preconference, National Communication Association annual conference (100th anniversary), Chicago, IL, November 19, 2014.
 3. Invited Panelist, Webinar: *Doctoral-Level Career Paths in Health Communication*. American Public Health Association/Public Health Education and Health Promotion Health Communication Working Group. September 27, 2016.
 4. *Systematic Approaches to Mentoring*. **Invited Panelist**, Association for Clinical and Translational Science Annual Meeting (Translational Science 2017), Washington, DC, April 20, 2017.
 5. *Keys to Successful Research Collaboration*. **Invited panelist**. Jointly sponsored presentation of the Academy of Communication in Healthcare (ACH) and the International Association for Communication in Healthcare (EACH). Roundtable presented at the International Conference on Communication in Healthcare, Porto, Portugal, September 3, 2018.
 6. *Using your Communication Skills to Prepare You for Leadership*, **Invited Panelist/Speaker**, Michigan State University Department of Communication, Undergraduate Communication Association, East Lansing, MI, November 2, 2018.
 7. *Leadership in Academia*; **Invited Panelist/Speaker**, Michigan State University Department of Communication, Association of Graduate Students of Communication, East Lansing, MI, November 2, 2018.
 8. *Thriving in an Academic Career: Mentorship Matters*. **Chair/Invited panelist**. Jointly sponsored presentation of the Academy of Communication in Healthcare (ACH) and the International Association for Communication in Healthcare (EACH). Presented at the International Conference on Communication in Healthcare, San Diego, CA, USA, October 29, 2019.
 9. *A Conversation with a Panel of Northwestern University Faculty and Student Health on Questions and Concerns with COVID Vaccines*. Hosted online via Zoom by the Graduate Leadership and Advocacy Council (GLAC), Northwestern University, Chicago, IL, May 25, 2021.
 10. *Mentor Mapping and Mentor Networks*. Co-Presented with Dr. Gemmae Fix, Research Health Scientist US Department of Veteran Affairs. Invited Workshop presented at the annual International Conference on Communication in Healthcare, held virtually, October 18, 2021.
 11. *Academic Writing: A Panel Discussion*. Co-Facilitated with Dr. Gemmae Fix, Research Health Scientist US Department of Veteran Affairs. Invited Professional Development Workshop presented at the annual International Conference on Communication in Healthcare, held virtually, October 19, 2021.
 12. *Mentoring Circle – How to Get the Most Out of Your Annual Faculty Review*. Co-presented with Drs. Lisa D. Wilsbacher, Valentina Stosor, and Jeffrey A. Linder. Department of Medicine, Northwestern University Feinberg School of Medicine, held virtually, December 5, 2022.

M. Panel Presentations (continued)

b. Invited Panel Presentations (continued)

13. *Forging Impactful Partnerships among Health Communication Researchers, Health Professionals, and Community Stakeholders*. **Invited Panelist**. Jointly sponsored presentation of the International Communication Association (ICA) and the European Association for Communication in Healthcare (EACH). Panel presentation at the International Communication Association conference, Toronto, ON, Canada, May 29, 2023.
14. *Diversity, Equity, and Inclusion in Patient Engagement and Healthcare Communication*. **Invited Panelist**. Panel presentation at the International Communication Association conference, Toronto, ON, Canada, May 29, 2023.
15. *Preparing for Promotion with an Eye to the Everyday*. Co-Facilitator (with Dr. Russell Rothman) for Workshop Sponsored by the Research Committee of the Academy of Communication in Healthcare at the International Conference of Communication in Healthcare, Rio Mar, Puerto Rico, to be presented October 23, 2023.
16. *Mentoring through the Generations Panel*. **Invited moderator** for Panel highlighting Invited Keynote Speaker Dr. Jean Twenge, presented at the annual Northwestern University Feinberg School of Medicine Medical Education Day. Chicago, IL, October 15, 2024.

N. Media

1. **Cameron KA**, Kamanda-Kosse M, Stephens Q, Baker DW, Noskin GA, Makoul G. *Multimedia Influenza Prevention Program*. Chicago: Northwestern University; 2007. Available at: <http://gim-geriatrics.medicine.northwestern.edu/resources/get-flu-shot>
2. Makoul, G., Baker, D.W., **Cameron, K.A.**, Francis, L., Martinez, R., Sager, J., Stephens, Q., Wolf, M.S. *Get screened for colorectal cancer*. Chicago: Northwestern University; 2009. Available at: <http://gim-geriatrics.medicine.northwestern.edu/resources/get-screened-colorectal-cancer>
3. **Cameron, K.A.**, Brown, T., Goldman, S., Stephens, Q., Persell, S.D., Baker, D.W. *Pneumonia and the pneumonia shot*. Chicago: Northwestern University; 2013. Available at: <https://www.youtube.com/watch?v=GEO-RWbyxUw&feature=youtu.be>
4. Northwestern Medicine Digestive Health Center/Digestive Health Foundation funded video. Writers: Keswani, R., **Cameron, K.A.**, Manka, M., Chun, J., Dolan, N.C. *Why you should request a screening colonoscopy*. Chicago: Northwestern Medicine; 2017. Currently available: http://nmcoloncanceraware.northwesternmedicine.org/?utm_source=nm-org%2Fnmcoloncanceraware&utm_medium=vanity&utm_campaign=nmcoloncanceraware
5. Northwestern Medicine Digestive Health center/Digestive Health Foundation funded video. Writers: Writers: Keswani, R., **Cameron, K.A.**, Manka, M., Chun, J., Dolan, N.C. *How to be ready for your colonoscopy*. Chicago; Northwestern Medicine; 2017. Currently unavailable to public (being used for a randomized trial).
6. Barsuk, J.H., **Cameron, K.A.**, Grady, K., Harap, R.S., Wilcox, J.E., Arseneau, J. *Driveline Dressing Change for Ventricular Assist Devices*. Chicago: Northwestern Medicine; 2017. Currently unavailable to public (in use in a randomized trial).
7. Barsuk, J.H., **Cameron, K.A.**, Grady, K., Harap, R.S., Wilcox, J.E., Arseneau, J. *HeartWare® Controller Change*. Chicago: Northwestern Medicine; 2017. Currently unavailable to public (in use in a randomized trial).
8. Barsuk, J.H., **Cameron, K.A.**, Grady, K., Harap, R.S., Wilcox, J.E., Arseneau, J. *Recognizing Normal & Abnormal Driveline Exit Sites*. Chicago: Northwestern Medicine; 2017. Currently unavailable to public (in use in a randomized trial).
9. Barsuk, J.H., **Cameron, K.A.**, Grady, K., Harap, R.S., Wilcox, J.E., Arseneau, J. *HeartMateII® Controller Change*. Chicago: Northwestern Medicine; 2017. Currently unavailable to public (in use in a randomized trial).
10. Barsuk, J.H., **Cameron, K.A.**, Harap, R.S., Wilcox, J.E., Shanklin, K. B., Cohen, E.R., Grady, K. *Safely Showering with a HeartMate® Ventricular Assist Device or VAD*. Chicago: Northwestern Medicine; 2018. Currently unavailable to public (in use in a randomized trial).

N. Media (continued)

11. Barsuk, J.H., **Cameron, K.A.**, Harap, R.S., Wilcox, J.E., Shanklin, K. B., Cohen, E.R., Grady, K. *Safely Showering with a HeartWare® Ventricular Assist Device or VAD*. Chicago: Northwestern Medicine; 2018. Currently unavailable to public (in use in a randomized trial).
12. Barsuk, J.H., **Cameron, K.A.**, Harap, R.S., Wilcox, J.E., Shanklin, K. B., Cohen, E.R., Grady, K., Arseneau, J. *Use of Simulation to Improve Ventricular Assist Device (VAD) Self-Management*. 2018. Created for Presentation at the International Society for Heart & Lung Transplantation, Nice, France.

O. Other scholarly Work/Consortium publications/Acknowledgements

1. Verma Shefali S., Cooke Bailey J.N., Lucas, A., Bradford, Y., Linneman, J.G., Hauser, M.A., et al. (2016). Epistatic Gene-Based Interaction Analyses for Glaucoma in eMERGE and NEIGHBOR Consortium. *PLoS Genetics*, 12. [PMCID: PMC5021356]
2. Ackermann RT, **Cameron KA**, Liss DT, Dolan N, Aikman C, Carson A, Harris SA, Doyle K, Cooper AJ, Hitsman B. (2023). Primary care delivery of behavioral weight loss services for adults with cardiovascular risk factors: development of pragmatic practice components and results of a randomized feasibility trial, 25 July 2023, *PREPRINT (Version 1) available at Research Square* [<https://doi.org/10.21203/rs.3.rs-3074046/v1>]

- Continued next page -

MEDIA COVERAGE AND APPEARANCES

[Many African-American Seniors Have Misconceptions About Flu Vaccine](#). *News Center*. Northwestern Medicine/Feinberg School of Medicine. March 21, 2006.

[Despite Risk, Older African Americans More Likely Than Others to Avoid Flu Vaccine](#). University at Buffalo News Center. October 15, 2009.

[Targeted messages may encourage some patients to get colorectal cancer screenings](#). *Medical Daily*. December 14, 2010.

[Various incentives still failing to encourage colorectal tests](#). *The Boston Globe*. December 20, 2010.

[Prompts for colorectal cancer screening effective, but only temporary](#). *OncologyNurseAdvisor*. December 23, 2010.

[Kenzie A. Cameron, PhD, MPH Research Assistant Professor in Medicine and Preventive Medicine](#). Northwestern University Feinberg School of Medicine *FSM Researcher*. March 2011.

[Gastroenterology and Hepatology News: Targeted Messages May Encourage Colorectal Cancer Screening](#). *Gastroenterology*, 2011;140:743-745.

[Effective Communication Takes Practice](#). *Jump Simulation Blog*. October 9, 2012.

[2016 Mentors of the year](#). Northwestern Medicine Feinberg. *You Tube*. Published on April 8, 2016.

[Two-minute video boosts pneumonia vaccinations: Many older adults don't get pneumococcal vaccination](#). Northwestern Now. May 13, 2016.

Also published in: [Science Daily](#), May 14, 2016.

[Medical Express](#). May 14, 2016.

[Video on pneumococcal vaccination increases immunization rates](#). *Healio: Infectious Disease News*. May 24, 2016.

[Kenzie A. Cameron, Service Award Winner and Hooding Ceremony Faculty Marshal](#). *The Graduate School Northwestern University News and Events*. June 8, 2016.

[Pneumococcal Vaccination Q&A with Kenzie A Cameron, PhD, MPH](#). *Managed Health Care Connect*, November 15, 2016

Also published in: [HMP Global Learning Network](#)

[This video will make your father want his pneumonia vaccine](#). *Vaccines Today*. November 12, 2017.

[LOL Something Matters](#). *Slate (Cover Story)*. Daniel Engber. January 3, 2018.

[Is there a "backfire effect"?](#) Jason Collins Blog: Behavioural economics. Behavioural and data science. Economics. Evolutionary biology. January 17, 2018.

[From patient perspectives to preventive care: Harnessing technology to improve adult pneumococcal vaccination](#). *You Tube*. National Institutes of Health Office of Behavioral and Social Sciences Research. Event date: March 27, 2018; Published on May 16, 2018.

[Health Literacy Annual Conference Mission in a Minute: Dr. Kenzie Cameron](#). Posted June 5, 2018.

[With Coronavirus Vaccines on The Way, Researchers Say It's Time to Build Trust](#). Chicago Tonight, WTTW, Aired November 26, 2020.

[Vaccine hesitancy is fueled by polarization and mistrust in science, experts say](#). Northwestern Now News Release for Journalists. December 15, 2020.

MEDIA COVERAGE AND APPEARANCES (continued)

[Experts explain why Black Americans are less likely to trust COVID-19 vaccines](#). WGN News, Chicago, IL, December 16, 2020.

O'Donnell C., Reeves M. [Tampa Bay health workers first to get coronavirus vaccine, but many say they'll pass](#). *Tampa Bay Times*, December 17, 2020.

Kenen J. [When Elvis helped to conquer polio](#). *Politico Magazine*, December 18, 2020.

Hansen M. [Outreach efforts in Springfield taking shape to counter vaccine hesitancy among black community](#). *NPR Illinois (online)*, January 4, 2021.

Voyles R. [Northwestern's Kenzie Cameron Talks COVID-19 Vaccine Messaging](#), *Health News Illinois*, January 15, 2021.

Siemons J. [As vaccine hesitancy threatens to increase COVID-19 disparities, local experts try to build trust](#). *The Daily Northwestern*, January 27, 2021.

Smith M, Thapa A. [The Weekly: Week Three Recap \(podcast\)](#). *The Daily Northwestern*, February 1, 2021.

Tahir D. [Facebook political ad ban blocks pro-vaccine messages](#). *Politico Magazine*, February 21, 2021.

Procino, J. [Opinion: Vaccine selfies are important, but they're not without risks](#). *Willamette Collegian*, April 23, 2021.

[COVID-19 Vaccine Conversations](#). Northwestern Medicine COVID-19 Resource Center Webpage. Published September 2, 2021.

Ch 9-Implementation and Maintenance. [Simulation in Healthcare Education \(podcast\)](#). Published online December 2, 2021.

Fellman, M. [Four faculty members recognized for exemplary service](#). *Northwestern Now*, February 2, 2022.

Swarthout I. [Northwestern faculty recognized with Provost Award for Exemplary Faculty Service](#). *The Daily Northwestern*, February 11, 2022.

Mussell, J. [A testament to mentorship: Kenzie Cameron and Frank Boster](#). *Michigan State University College of Communication Arts and Sciences*, March 20, 2023.

Anderson, R. [Cameron Named Senior Director of NUCATS Mentoring and Leadership Development](#). *Northwestern University Clinical & Translational Sciences Institute*, December 18, 2024.

TEACHING AND PROFESSIONAL DEVELOPMENT (past and present)Michigan State University

1995 – 1996 Teaching Assistant, Department of Communication
Undergraduate:

Communication Campaign Design and Analysis (1995)

Methods of Communication Inquiry (1996)

Graduate:

Communication Research Design I (Statistics, 1996)

1996 – 1997 Primary Instructor and Course Developer, Department of Communication

Undergraduate: Interpersonal Communication Theory and Research (1996) Communication in Close Relationships (1997)

Critical Perspectives in Communication (1997)

TEACHING AND PROFESSIONAL DEVELOPMENT (past and present - continued)The University of Georgia

1998 – 2003 Course Developer and Sole Instructor, Department of Speech Communication
Undergraduate:

Nonverbal Communication (1998)
Persuasion (1998 – 2002)
Perspectives in Interpersonal Communication (Honors, 2000 – 2002)
Health Communication (2000 – 2003)
Persuasion in Everyday Life (2001)
Health Communication: A Pre-Clinical Primer (Honors, 2002)

1998 – 2003 Course Developer and Sole Instructor, Department of Speech Communication
Graduate:

Directed Graduate Study: Interpersonal Communication Theory (1999) Health Communication (2000 – 2003)
Graduate Seminar in Social Influence (1999 – 2002)

Northwestern University Courses

2004 – 2017 Course Developer/Director and Sole Instructor, Master of Public Health Degree Program, Northwestern University Program in Public Health: Behavior, Society and Health (Note: Fall 2014 – Fall 2016 team taught course with Dr. Christine Pellegrini; beginning Fall 2017 team taught course with Dr. Angela Pfammatter); course meets once per year

2005 Course Director and Co-Instructor, Master of Public Health Degree Program, Northwestern University Program in Public Health, Master of Public Health
Graduate: Topics in Public Health: Health Communication

2020 - 2021 Course Director, Master of Science in Health Services and Outcomes Research Program, Topics in Health Services Research – Grant Writing.

Northwestern University Feinberg School of Medicine Courses

2004 – 2008 Faculty Preceptor, Patient, Physician & Society: M1. Communication Skills
Preceptor for Genetic Counseling students (2004) and M1 students (2005 – 2008)

2006 Small Group leader, Cultural Dynamics in Medicine: M1: Northwestern University Feinberg School of Medicine

Northwestern University Lectures

2005 – 2014 Invited Lecturer for *Communication Skills overview* (2 sessions) for students in Introduction to Genetic Counseling course of the Graduate Program in Genetic Counseling, Northwestern University
[*Introduction to Communication/Interpersonal Communication Concepts and Theoretical Models in Healthcare: Health Belief Model and the Extended Parallel Process Model*] [2 lectures annually]

2006 - 2009 Invited Lecturer, *Some Information about Theories and Models* (2 sessions). Presented to post-doctoral fellows of the Institute for Health Services Research and Policy Studies, Northwestern University, Chicago, IL, February 17, 2005; February 27, 2006; February 28, 2008; September 17, 2009

2009 Northwestern University Feinberg School of Medicine, OB/GYN Resident Organized Lecture: *Bad News Scenarios*, Faculty Participant

2010 Northwestern University Feinberg School of Medicine, OB/GYN Resident Organized Lecture: *From Communication to Narrative to Context to Empathy: A Journey to Provoke Thought in Search of Explanation*, Summer Series Faculty Lecturer

2010 – 2012 Invited Lecturer, *Introduction to Theories and Models I and II*; Topics I in Health Services and Outcomes research course, Master of Science in Health Services and Outcomes Research, Northwestern University [2 lectures annually]

TEACHING AND PROFESSIONAL DEVELOPMENT (past and present - continued)Northwestern University Lectures (continued)

- 2012 Center for Advancing Equity in Clinical Preventive Services Summer Fellows Program Lecturer: *Community and Patient Engagement*
- 2012 - 2019 Academy for Quality and Safety Innovation; Co-instructor for *Patient Centeredness* Section (1 lecture annually); *2015 Winner of the Leape Ahead Award from the American Association for Physician Leadership*
- 2014 - 2018 Invited Lecturer for students in Introduction to Genetic Counseling course of the Graduate Program in Genetic Counseling, Northwestern University [*Theoretical Models in Healthcare: Health Belief Model and the Extended Parallel Process Model*] [1 lecture annually]
- 2016 Invited Lecturer for Emergency Medicine Resident College – Research Track, *Overview of Qualitative Research Methods*, February 3, 2016
- 2016 – 2017 Invited Lecturer, Health Services and Outcomes Research Graduate Program, **HSR 462: Topics in Health Services Research: Grant Writing**, Specific Aims Workshop (*co-led with Dr. Neil Jordan*). March 2016; April 25, 2017

TRAINEES**Faculty**

Lee Lindquist, MD MPH, Assistant Professor of Geriatrics, Northwestern University, Division of Geriatrics/Division of General Internal Medicine, Department of Medicine, Northwestern University Feinberg School of Medicine (NUFSM). Member of Mentoring team, 2007 – 2012
Health Literacy and Discharge Safety of Hospitalized Seniors (K23AG28439) (awarded)

Dr. Lindquist is now Professor of Medicine and Division Chief, Division of Geriatrics, Department of Medicine, NUFSM.

Stephen Persell, MD, MPH, Assistant Professor of Medicine, Northwestern University, Division of General Internal Medicine, Department of Medicine. Member of Mentoring team, 2008 – 2010
Tailored Communication to Reduce Cardiovascular Risk (Agency for Health Research and Policy Career Development Award) (awarded)

Dr. Persell is now Professor of Medicine (tenured), Division of General Internal Medicine and Geriatrics, Department of Medicine, NUFSM, where he also serves as the Director of the Center for Primary Care Innovation.

Charlesnika T. Evans, PhD, MPH, 2008 Paralyzed Veterans of America Fritz Krauth Fellow, Spinal Cord Injury Quality Enhancement Research Initiative (SCI QUERI) & Center for Management of Complex Chronic Care (CMC3), Edward Hines Jr. VA Hospital, Faculty Mentor, 2008 – 2016.

Development and testing of MRSA educational materials for SCI veterans (SCI QUERI/VA award) (awarded 2009 - 2013); QUERI RRP: Antibiotic prescribing practice in the spinal cord injury system of care (awarded 2014 – 2016)

Dr. Evans is now a Research Health Scientist with the Center of Innovation for Complex Chronic Healthcare, and Co-Director of the QUERI program Combating Antimicrobial Resistance through Rapid Implementation of Available Guidelines and Evidence (CARRIAGE) at the Hines, IL U.S Department of Veterans Affairs, and Professor of Preventive Medicine, NUFSM.

Muriel Jean-Jacques, MD, Assistant Professor of Medicine, Northwestern University, Division of General Internal Medicine, Department of Medicine, NUFSM. Co-Mentor, 2010 – 2011

Career Development Award preparation (not awarded)

Dr. Jean-Jacques served as Associate Vice Chair for Diversity, Equity, and Inclusion, Department of Medicine and Associate Professor of Medicine, NUFSM, Northwestern University until 2024 and is now Associate Professor and Chief of Academic Internal Medicine at the University of Illinois Chicago (as of 2025).

TRAINEES

Faculty (continued)

Joyce Tang, MD, MPH, Assistant Professor of Medicine, Northwestern University, Division of General Internal Medicine, Department of Medicine, NUFSM. **Co-Primary Mentor**, 2010 – 2015
Activating behavior change in overweight patients: the ACTION study (K23 Career Development award submitted June 2012, not awarded)

Peer coaching to reduce risk factors for type 2 diabetes among women with gestational Diabetes [Building Interdisciplinary Research Careers in Women's Health (Northwestern University) submission, November 2012 (not awarded)] [American Diabetes Association Junior Faculty Award (not awarded)]

Dr. Tang is now Assistant Professor of Hospital Medicine, University of Chicago Department of Medicine (2015).

Rashmi Sharma, MD, MHS, Assistant Professor, Northwestern University, Division of Hospital Medicine, Department of Medicine, NUFSM.

Racial/ethnic differences in inpatient end-of-life communication for advanced cancer patients (National Palliative Care Research Council submission, NCI K23 submission; not resubmitted as awarded BIRCWH career development award), Co-Primary Mentor, 2010 – 2012.

*Sex differences in inpatient end-of-life communication for advanced cancer patients [Building Interdisciplinary Research Careers in Women's Health (BIRCWH Northwestern University) submission, November 2012 – **awarded January 2013**], Primary Mentor*, 2012 - 2014

*Racial/Ethnic Differences in inpatient end-of-life communication (American Cancer Society Mentored Research Scholar Grant – **awarded March 2014**; grant period 01/01/2015 – 12/31/2019), Co-Mentor*, 2013 – 2019

Dr. Sharma is now Associate Professor in the Division of General Internal Medicine, Department of Medicine at the University of Washington and the Director of Equity, Diversity and Inclusion, at the UW Medicine Cambia Palliative Care Center of Excellence.

Laura Rasmussen-Torvik, PhD, Assistant Professor, Northwestern University, Department of Preventive Medicine, NUFSM. **Co-Mentor**, 2010 - 2012

*The application of recently discovered obesity genetic variants to surgical obesity treatment Northwestern University Clinical and Translational Science Institute (NUCATS) Multidisciplinary Clinical and Translational Scientist (MCTS) Scholars Program KL2 (**awarded**)*

Dr. Rasmussen-Torvik is now Chief of Epidemiology and Professor, Department of Preventive Medicine, NUFSM.

Karen Kaiser, PhD, Research Assistant Professor, Northwestern University, Department of Medical Social Sciences, NUFSM. **Primary Mentor**, 2011 – 2019

*American Cancer Society, Communicating Breast Cancer Disparity to Minority Populations (**awarded**) Contralateral Prophylactic Mastectomy: The Patient Decision-Making Process (R21 07/01/2014 – 06/30/2016). (**awarded**)*

Dr. Kaiser is now Research Associate Professor, Department of Medical Social Sciences, NUFSM.

Maheen Quadri, MD, Instructor, Northwestern University, Pediatrics-Academic General Pediatrics and Primary Care, NUFSM. **Primary Mentor**, 2012 – 2013

The Influence of Message Frame and Content on Mothers' Decisions to Vaccinate Daughters against HPV [Building Interdisciplinary Research Careers in Women's Health (Northwestern University) submission, November 2012 (not awarded)]

Dr. Quadri-Sheriff is now Assistant Professor in the Department of Pediatrics, NUFSM.

TRAINEES

Faculty (continued)

Danielle M. McCarthy, MD, MS, Assistant Professor, Northwestern University, Department of Emergency Medicine, NUFSM. **Primary Mentor**, 2012 - 2017

2012-2013 EMF/Purdue Pain Management Grant: "Prescribing Opioid Pain Relievers in the Emergency Department: Understanding and Optimizing the Encounter" (awarded)

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program, Development of a Patient-Centered mHealth Intervention to Promote Safe Opioid Use (Selected as an awardee, declined as AHRQ R18 was selected for funding)

2014 – 2017 EHR Based Medication Complete Communication Strategy to Promote Safe Opioid Use (Agency for Healthcare Research and Quality R18 awarded)

Dr. McCarthy is now Associate Professor and Vice Chair for Research in the Department of Emergency Medicine, NUFSM, Northwestern University.

Stephanie Shintani Smith, MD, Assistant Professor, Northwestern University, Department of Otolaryngology-Head and Neck Surgery, NUFSM. **Primary Mentor**, 2014 – 2019.

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program, Development of a Patient Decision Aid for Antibiotic Treatment of Sinus Infections (submitted June 2014 – named alternate)

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program (Submitted June 2015 - named alternate)

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program: "A patient-centered e-health tool to reduce inappropriate antibiotic use for sinusitis" (awarded 2016 – 2019)

National Institutes of Health (NIH) Clinical Loan Repayment Program (LRP) – approved for funding by National Institute of Allergy and Infectious Diseases (NIAID) (awarded 2017 – 2019)

Christine A. Pellegrini, PhD, Research Assistant Professor, Northwestern University, Department of Preventive Medicine, NUFSM. **Primary Mentor**, 2015 - 2017

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program: "Development of a Patient-Centered Behavioral Weight Loss Intervention for Patients Undergoing Total Knee Replacement. (awarded 2015 - 2017)

Dr. Pellegrini is now a tenure-track Assistant Professor in the Arnold School of Public Health at the University of South Carolina.

Betina R. Yanez, PhD, Assistant Professor, Northwestern University, Department of Medical Social Sciences, **Co-Mentor**, 2016 – 2018

Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 program: "Developing Patient-Centered Tools to Guide Precision Oncology" (awarded 2016 - 2018)

Dr. Yanez is now Associate Professor, Department of Medical Social Sciences, NUFSM.

Bruce L. Henschen, MD, MPH, Assistant Professor, Northwestern University, Department of Medicine, Division of General Internal Medicine and Geriatrics. **Co-Mentor**, 2014 – present.

Dr. Henschen is now Associate Professor, and Program Director of the Internal Medicine Residency Program, Department of Medicine, NUFSM.

TRAINEES

Faculty (continued)

Alicia K. Morgans, MD, MPH, Associate Professor of Medicine (Hematology and Oncology). **Co-Mentor**, 2018 – 2021.

Department of Defense, Patient-Centered Treatment Decision-Making in Advanced Prostate Cancer. (awarded)

Dr. Morgans is now Genitourinary Medical Oncologist and the Medical Director of Survivorship Program at the Dana-Farber Cancer Institute, Boston, MA.

Sara Shaunfield, PhD, Research Assistant Professor, Northwestern University, Department of Medical Social Sciences, **Mentor**, 2019 – present.

Dr. Shaunfield is now Research Associate Professor, Northwestern University, Department of Medical Social Sciences, Chicago, IL, 2023 - present

Karlyn A. Martin, MD, Assistant Professor of Medicine (Hematology and Oncology), Northwestern University, Department of Medicine. **Co-Mentor**, 2019 – present.

K23: Primary prevention of venous thromboembolism in ambulatory patients with cancer (June 2020; resubmitted June 2021; awarded)

Hemostasis & Thrombosis Research Society (HTRS) 2021 HTRS Mentored Research Award (MRA) Program “A multicenter evaluation of primary prevention of venous thromboembolism in ambulatory patients with cancer” (Submitted August 2020 – invited to submit full proposal, not awarded).

American Cancer Society Institutional Research Grant, Lurie Cancer Center of Northwestern University (Submitted October 2020). (Awarded)

Dr. Martin is now an Associate Professor of Medicine (Hematology and Oncology) at the University of Vermont (2023 – ongoing).

Maya Defoe, MD, Assistant Professor of Medicine (Hospital Medicine), Northwestern University, Department of Medicine. **Research mentor**, 2019 – present.

Nisha Mohindra, MD, Assistant Professor of Medicine (Hematology and Oncology), Northwestern University, Department of Medicine, **Co-Mentor**, 2020 – present.

K12 ACCELERAT: Northwestern Medicine Telemedicine Patient Reported Outcomes (NM-TelePRO) (awarded)

Diana Chirinos Medina, PhD, Assistant Professor of Preventive Medicine (Epidemiology), Northwestern University, Department of Preventive Medicine, **Co-Mentor**, 2019 – present. *Developing a targeted intervention for sleep disturbance in spousal bereavement (awarded)*

Johanne Eliacin, PhD, Research Scientist/Core Investigator, Roudebush VA Medical Center; Research Scientist, Regenstrief Institute; and Assistant Research Professor of Psychiatry, Indiana University School of Medicine. **Primary Mentor for Putnam Scholar Program**, 2020 – present.

Examining drivers of engaging in Alzheimer’s Disease Biomarker Research among African Americans (awarded)

Jami Josefson, MD, MS. Associate Professor, Department of Pediatrics (Endocrinology), Northwestern University Feinberg School of Medicine. **Member of Mentoring Team**. 2023.

NIDDK K26: Investigator Award to Support Mentoring of Early Career Researchers from Diverse Backgrounds. (not awarded)

Jodi L. Johnson, PhD, Research Assistant Professor of Pathology (Research) and Dermatology, Northwestern University Feinberg School of Medicine. **Member of Mentoring Team**, 2023 – present.

TRAINEES

Faculty (continued)

Natalie A. Cameron, MD, Instructor of Medicine (General Internal Medicine), Northwestern University, Department of Medicine, **Co-Mentor**, 2023 – present.

K23 REACH BP: The Remotely EvAluating Cardiovascular Health in Birthing People Cohort Study. (submitted October 2023, not awarded; resubmitted November 2024)

AHA Career Development Award: *REACH BP: REmote physical ACTivity intervention for High Blood Pressure Postpartum* (submitted December 2023, not awarded; **awarded April 2025**)

Neela D. Thangada, MD, Instructor of Medicine (Cardiology), Northwestern University, Department of Medicine, **Co-Mentor**, September 2023 – present.

AHA Career Development Award: *The Built Neighborhood Environment & Walking Outcomes in Peripheral Artery Disease. (awarded)*

Sarah E. Chuzi, MD, Assistant Professor of Medicine (Cardiology), Northwestern University, Department of Medicine, **Co-Mentor**, September 2024 – present.

AHA Career Development Award: *Development of an Integrated Heart Failure-Palliative Care Intervention to Improve the Quality of End-of-Life Care for Patients with Heart Failure (awarded March 2025)*

Emily R. Kahn, MD, Instructor of Medicine (Hospital Medicine), Northwestern University Department of Medicine, **Co-Mentor**, July 2024 – present.

Academic Hospital Medicine Scholar Program, Division of Hospital Medicine, Northwestern University Feinberg School of Medicine: Use of the J-Tip Needle-Free Injection System with Buffered 1% Lidocaine to Reduce Paracentesis-Related Discomfort. (awarded).

Bilal Al-Khalil, MD, Instructor of Medicine (Hospital Medicine), Northwestern University Department of Medicine, **Co-Mentor**, July 2024 – present.

Academic Hospital Medicine Scholar Program, Division of Hospital Medicine, Northwestern University Feinberg School of Medicine: Using POCUS to determine volume status. (awarded).

Bijal V. Jain, MD, Assistant Professor of Medicine (Hospital Medicine), Northwestern University Department of Medicine, **Co-Mentor**, May 2024 – present.

Integration of POCUS into Hospitalist Practice (I-POCUS-HP)

TRAINEES

Post-Doctoral Fellows

Sohrob Saeb, PhD, Postdoctoral Research Fellow, Center for Behavioral Intervention Technologies, Department of Preventive Medicine, Northwestern University, Research/Content mentor, 2015 *Northwestern University Patient-Centered Intervention and Engagement Training (NU-PATIENT) K12 Scholars program (Letter of Intent Submission): Patient-Centered Context Sensing for Improving Behavioral Intervention Outcomes in Depressed Patients [not awarded]*

Danielle McCarthy, MD (Department of Emergency Medicine), **Primary Mentor**, 2010 - 2012 *Fellow, Institute for Healthcare Studies, National Research T32 Service Award (NRSA) (awarded)*

Dr. McCarthy is now Associate Professor and Vice Chair for Research, Department of Emergency Medicine, NUFMS.

Lori Gawron, MD, MPH, FACOG (Department of Obstetrics and Gynecology), **Co-Mentor**, 2010 - 2012 *Northwestern University Obstetrics and Gynecology Fellow, Family Planning and Contraception Society of Family Planning Funded Proposal: A Qualitative Exploration of the Extended Decision Making Process in Pregnancy Termination for Fetal Indication (awarded)*

Dr. Gawron is now Associate Professor (Clinical) in Obstetrics and Gynecology, University of Utah.

TRAINEES

Post-Doctoral Fellows (continued)

Christopher Richards, MD, MS (Department of Emergency Medicine), Independent Study Winter 2014 Fellow, Center for Healthcare Studies, Northwestern University Feinberg School of Medicine

Dr. Richards is now an Adjunct Assistant Professor in Emergency Medicine at the Northwestern University Feinberg School of Medicine

Megan A. Morris, PhD (Robert D. and Patricia E. Kern Center for the Science of Healthcare Delivery), **Mentor/Collaborator**, 2013 - continuing

Post Doctoral Fellow 2013 - 2014, Mayo Clinic, funded through National Institute on Disability and Rehabilitation Research; Switzer fellowship: Documenting Disability Status to Inform Patient-Centered Care and Reduce Healthcare Disparities: Perspectives of Patients and Healthcare Organizations (awarded)

Dr. Morris is now Associate Professor in the Division of General Internal Medicine in the Department of Medicine at the University of Colorado Anschutz Medical Campus, where she served as Director of the Qualitative Research Core, Adult and Child Consortium for Health Outcomes Research and Delivery Science (ACCORDS) at the Children's Hospital Colorado and the University of Colorado Anschutz Medical Campus (2016 – 2022). She is the founder and director of the Disability Equity Collaborative, “a community aimed at advancing equitable care for patients with disabilities through practice, policy, and research.”

Margaret Fitzpatrick, MD, MS (Assistant Professor of Medicine, Division of Infectious Diseases, Loyola University Medical Center), **Advisor**, 2017 – 2019

Post-doctoral HSR&D Fellow, Hines Veterans Administration; submitting an AHRQ K08 titled Optimizing quality of care for urinary tract infections in patients with neurogenic bladder through improved knowledge of provider practice and patient-reported outcomes (submitted February 2017, resubmission Fall 2018)

Dr. Fitzpatrick is now Associate Professor of Medicine, Division of Infectious Diseases, Loyola University Medical Center.

Sarah Chuzi, MD (Advanced Heart Failure and Transplant **Fellow**, Northwestern University Department of Medicine), **Co-Mentor**, 2021 – 2022.

Northwestern University Clinical and Translational Science Institute Pilot Grant Award: *Development of a Communication-Priming Intervention for Ventricular Assist Device Patients, Caregivers, and Clinicians to Improve Advance Care Planning (awarded)*

Dr. Chuzi is now Assistant Professor of Medicine (Cardiology), Department of Medicine, Northwestern University Feinberg School of Medicine.

Jennifer H. Martinez, PhD (post-doctoral Fellow, Northwestern University Department of Psychiatry and Behavioral Science), **Secondary/Methods Mentor**, 2019 – 2022

Effectiveness and Implementation of a Mindfulness Intervention for Depressive Symptoms among Low-income, Racial/ethnic minority adults in a Federally Qualified Health Center (Dr. Inger Burnett-Zeigler, PI) (Post-doctoral minority supplement) (awarded)

TRAINEES**Residents**

Blair P. Golden, MD (Resident Physician, Northwestern Memorial Hospital). **Research Mentor**, 2017 – 2020.

Dr. Golden is now Assistant Professor, Hospitalists-Medicine Faculty, Department of Medicine, University of Wisconsin School of Medicine and Public Health.

In 2018, **Dr. Golden** was awarded the Hopkins GIM Barker-Kern Award, a competitive award given to one Housestaff per year to recognize achievement in medical education.

Sarah Chuzi, MD (Chief Medical Resident, Northwestern University Department of Medicine), **Co-Mentor**, March 2018 – 2020.

*Eleanor Wood-Prince Grants Initiative: Developing a Patient-Centered Palliative Care Program for Patients with a Destination Therapy Ventricular Assist Device (**awarded**)*

Dr. Chuzi is now Assistant Professor of Medicine (Cardiology), Department of Medicine, Northwestern University Feinberg School of Medicine.

Scholars

Mary (Minnie) Gaffney, RN, CCRN (Northwestern Memorial Hospital), **Mentor** 2008 – 2009

Chapman Scholar (Nursing Scholarship)

Defining “assisting nursing with plan of care” & Evaluating the Role of the Rapid Response Team Nurses

TRAINEES**Graduate Students**Medical Students/MPH Students**Northwestern University**

Yuna Rapoport, Master of Public Health Culminating Experience Committee	2010 – 2011
Krys Foster, Master of Public Health Culminating Experience Committee	2012 – 2013
Crystal Than Doan, Area of Scholarly Concentration (AOSC Primary Mentor)	2012 – 2016
Megan Schliep, MA, Master of Public Health Research Practicum	2013 - 2016
Ashley Cenicerros, Master of Public Health Culminating Experience Committee	2014 – 2015
Helen Leung, Area of Scholarly Concentration (Co-Mentor/Content Mentor)	2014 – 2018
Jackson Herzog, Area of Scholarly Concentration (Co-Mentor/Content Mentor)	2015 – 2018
Katie Milgrom, Master of Public Health Culminating Experience Mentor	2015 – 2016
Kateri Nelis, Master of Public Health Culminating Experience Committee	2015 – 2016
Karolina Kucybala, Master of Public Health Culminating Experience Committee	2016 – 2017
Samantha Schroth, M2 Student creating “wheelchair for a day” simulation; assistance with study design and measurement	2019

Doctoral Students:**The University of Georgia**

Doctoral Advisor (withdrew and identified replacement upon leaving the University of Georgia)

Kelli Fellows, PhD, Speech Communication 2002 – 2003

Doctoral Committee Member

Don Turk, Ph.D. Speech Communication	1998 – 2002
Laura Winn, Ph.D. Speech Communication	1998 – 2002
Kelly Dorgan, Ph.D. Speech Communication	1998 – 2001
Gayle Garner, Ph.D. Speech Communication	1998 – 2001
Pamela Lannutti, Ph.D. Speech Communication	1998 – 2001
Keisha Edwards, Ph.D. Speech Communication	2000 – 2003

TRAINEES**Graduate Students**Doctoral Students:***The University of Georgia (continued)***

Kami Silk, Ph.D. Speech Communication	2000 – 2002
Kathi Wilson, Ph.D. Speech Communication	2000 – 2002
John Anderton, Ph.D. Health Promotion and Behavior	2001 – 2003
Jennifer Bevan, Ph.D. Speech Communication	2001 – 2003
Sara Oswalt, Ph.D. Health Promotion and Behavior	2002 – 2003
Norman Wong, Ph.D. Speech Communication	2001 – 2003

Research Practicum Adviser

Kami Silk (1999); Sonja Brown-Givens (2000); Jennifer Bevan (2000)

The University of Illinois at Chicago***Preliminary Committee Member (Outside member - Northwestern University)***

Sherri LaVela, Ph.D. Community Health Sciences, School of Public Health	2007
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Rhodes University, Grahamstown, South Africa***External Examiner***

Sonal Patel, Ph.D., Faculty of Pharmacy	2015
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Northwestern University, Chicago, IL

2019 - 2021

F31 Application: *The Association of Posttraumatic Stress and Prenatal Care Engagement Among a Diverse Group of Pregnant and Parenting Women* (not awarded)

Elizabeth Waldron (Department of Psychiatry and Behavioral Sciences).

Masters Students:***The University of Georgia******Major Professor***

Leslie Coulter, M.A. Speech Communication	1999 – 2000
Lauren Collins, M.A. Speech Communication	2000 – 2001

Thesis Committee Member

Megan Dillow, M.A. Speech Communication	1999 – 2000
Sandra Williams, M.A. Speech Communication	2000 – 2001
Keisha Edwards, M.A. Speech Communication	1999 – 2000

Research Practicum Adviser

Leslie Coulter (1999); Megan Dillow (1999); Rachel Bass (2000); Lauren Collins (2000); Sandra Williams (2000); Rachel Bass (2001); Illana Fisher (2001)

Northwestern University***Thesis Committee Member***

Keri Christensen, M.A. Healthcare Quality and Patient Safety	2007 – 2008
Jill Nichols, M.A. Genetic Counseling	2010 – 2011
Sidney Zell, M.A., Genetic Counseling	2011 – 2013

TRAINEES***Undergraduate Students:******The University of Georgia****Major Professor for Honors Thesis: Interpersonal Needs of Children in Varied and Consistent Roles*

Kathryn Jones 2000 - 2001

Honors Committee Member

Rebecca Cheney, A.B. Speech Communication 1998 – 1999

Ashleigh Sanders, A.B. Speech Communication 2001 – 2002

Independent Directed Study: Interpersonal Needs of Children in Varied and Consistent Roles

Kathryn Jones 2000

Internship Adviser (Department of Speech Communication)

Whitney Young 2000

Jamie Grant 2000

Kelly Starr 2000

Emily Thompson 2000

Dorielle Ludwig 2001

Rachel McCoy 2001

Molly Davis 2002 – 2003

*Independent Directed Studies (Department of Speech Communication)*Allison Paul (*Authoritarianism and Dogmatism and Scientific Persuasive Writing*) 2000Erin Payne (*Post-Dissolutional Relationships; Cognition and Affect in Persuasive Messages*) 2001Tommy Wood (*Cognition and Affect in Persuasive Messages*) 2001Walter Sears (*Affect and Cognition in Persuasion*) 2002Molly Davis (*Communication and Complementary and Alternative Medicine*) 2002*Advising - Department of Speech Communication*

Major Advisor to 20 + Speech Communication Students annually 1998 – 2003

Faculty Mentor and Participant

Center for Undergraduate Research Opportunities, Annual Symposium, 2001

Michigan State University

Department of Communication (Michigan State University) 1997 – 1998

*Supervisor, Undergraduate Research Assistants***TRAINEES*****Other Mentorship******Northwestern University NIH Grant Writers Groups (Coach and Leader)***

2023 – present Unique group process (originated by Dr. Richard McGee, Jr.) in which I lead small groups of 3 – 6 junior faculty in a 2-3 month long weekly process. (have led 13 groups since Spring 2023; 62 participants; 49 unique faculty participants)

Kentucky Conference on Health Communication

2024 served as faculty mentor for two PhD students as part of the conference mentoring program

TRAINEES***Other Mentorship (continued)******Mentor, International Conference on Communication in Healthcare Pairing with Colleagues Program***

2011	Paired with three junior faculty from South Africa and the United States, Chicago, IL
2012	Paired with two junior faculty from the Netherlands, St. Andrews, Scotland
2013	Paired with a junior faculty member from the United States, Montreal, Quebec, Canada
2014	Paired with two junior faculty members from Norway and the Netherlands, Amsterdam, The Netherlands
2015	Paired with two junior colleagues from the United States, New Orleans, Louisiana.
2016	Paired with two junior colleagues from Mexico and the United States, Heidelberg, Germany
2017	Paired with two junior colleagues from the United States, Baltimore, Maryland
2019	Paired with two junior colleagues from the United States, San Diego, California
2022	Paired with two junior colleagues from Australia and Austria, Glasgow, Scotland
2023	Paired with one junior colleague from the United States, San Juan, Puerto Rico

Invited National/International Mentoring

2015	Invited Mentor, American Public Health Association Health Communication Working Group, Speed Networking event during the Annual APHA Meeting, November 1, 2015, Chicago, IL.
2017	Invited Mentor, Translational Science 2017, Post-Doctoral Speed Mentoring session, April 20, 2017.
2018	Invited Inaugural mentor, Kentucky Conference on Health Communication, Lexington, Kentucky (April 12 – 14, 2018), Mentoring for Graduate Students and Early Career Scholars
2018	Academy of Communication in Healthcare/European Academy for Communication in Healthcare Roundtable on Collaboration (Invited Facilitator); International Conference on Communication in Healthcare, Porto, Portugal (September 3, 2018)
2019	Society of General Internal Medicine (SGIM) Annual Meeting One-on-One Mentoring Program, Mentor for 2019 Annual Meeting.
2022 - present	Invited Writing Coach, The University of Utah Grant Writing Coaching Groups Study, funded by the NIH Common Fund (U01 GM132366, administered by NIGMS).

Lauren Clark

1801 Maple Ave Evanston, IL 60201 (847)467-5019

lauren.clark@northwestern.edu

RESEARCH EXPERIENCE

- **Assistant Core Scientist, Northwestern University (Center for Synthetic Biology) Sept 2023--current**
 - Built a core facility to support synthetic biology in the Chicago area including writing equipment justifications, equipment SOPs, and training materials
 - Interfaced with facilities management and installation teams to prepare the lab to meet equipment needs
 - Managed all core online interface and financials including financial projections and entering services into web portal
 - Marketed core offerings through teaching and outreach activities, conducted tours to illustrate the lab's diverse capabilities
- **Research Technologist 1-2-3, Northwestern University (Jewett Lab) Jan 2014 – September 2023**
 - Prototyped a novel cell-free protein synthesis platform from tobacco chloroplasts and advised and shared positive controls with a German iGEM team to contribute to a second publication on this cell-free platform
 - Built an in vitro integrase assay with PCR, qPCR, or NGS readouts to validate bioinformatically sourced protein-substrate pairs.
 - Provided troubleshooting and support for strains sent from Jewett lab via MTA agreement. Built MTA documents and shipped all materials following dangerous goods regulations
 - Trained new lab members on operation and repair of equipment as needed. Served as a repository for how to operate less frequently used equipment.
 - Facilitated reagent preparation, lab cleanup, and inventory practices. Participated in design and implementation of reagent testing standards.
 - Hired and trained undergraduate work study students in lab maintenance tasks. Hired and trained research technicians on best practices for reagent preparation
 - Maintain lab space including coordinating repairs via NU facilities where needed.
 - Ordered equipment and lab supplies including implementing Quartzy for record keeping and trained admin on lab ordering practices.
- **Staff Research Associate, UCSD Biological Sciences (Pillus Lab) Aug 2011 – Nov 2013**
 - Conducted FACS and genotoxin exposure experiments to characterize phenotypes relating to the loss of the *Esa1* histone acetyltransferase function and its genetic interaction with the *Hos2* histone deacetylase
 - Used ChIP and RT-PCR to research the mechanism of suppression of a DNA damage sensitive hypomorphic allele of the HAT *Esa1* by deletion of the HDAC *Hos2* in *Saccharomyces cerevisiae*
 - Assisted in collaborations with other labs including building strains for a position effect screen
 - Researched and made advanced laboratory supplies such as taq polymerase, glucanase, and salmon sperm DNA
 - Conducted all ordering and strain or reagent requests. Maintained accurate records of these and maintained lab data backup.

- **Associate Scientist, *Molecular Throughput, Inc.*** **Dec 2010 – Mar 2011**
 - Helped design protein expression piloting and scale-up experiments in *E. coli*, including scouting growth conditions
 - Optimized and performed untagged protein purification using ion exchange chromatography, hydrophobic interaction chromatography, and gel filtration
- **Laboratory Technician, *UCSD Biological Sciences*** **Summer 2010 – Dec 2010**
 - Collaborated with post-doctorate researcher to expand research project on truncated YFP fusion proteins in *Arabidopsis* into tobacco cell culture
 - Mastered sterile technique necessary for plant cell culture maintenance
 - Used the previously developed PNL2-YFP truncated overexpression construct to show that the PNL2 intercellular kinase domain is necessary for normal PNL2-YFP localization
 - Expressed PNL2-YFP in a CFP-tubulin line via *Agrobacterium*-mediated transformation to show that PNL2-YFP localizes to the cell plate
- **Graduate Researcher, *UCSD Biological Sciences*** **Fall 2008 – Summer 2010**
 - Correlated the localization pattern of *Arabidopsis* PNL2-YFP with previously established BRK1-YFP, providing new areas of investigation of the role of PNL2 regarding its status as the *Arabidopsis* homolog of maize PAN1.
 - Conducted a bioinformatics study to compare the *Arabidopsis* PNL proteins.
 - Developed a truncated version of PNL2 lacking the nonfunctional PNL2 kinase domain to be overexpressed and evaluated as a potential dominant negative construct against all the PNL family of proteins
- **Undergraduate Researcher, *UCSD (Smith Lab)*** **Spring 2006 – Fall 2008**
 - Analyzed the localization of YFP fusion proteins in *Arabidopsis* via confocal microscopy
 - Performed phenotypic screen on a mutagenized crop of maize to identify a stronger allele of PAN2
 - Conducted a series of bioassays to determine the growth phenotype of *brk*, *arp*, and *scar* mutants with partially impaired actin-nucleating ability for a publication on the role of SCAR in actin nucleation.
 - Performed PCR genotyping analysis to isolate double mutants for phenotypic analysis

TEACHING EXPERIENCE

- **Teaching Assistant Winter** **Four academic quarters, Winter 2008-Fall 2009**
 - Lead discussion sections in Structural Biochemistry (1 term) and Genetics (3 terms)
 - Edited examinations for content, length and grammar
 - Worked with other teaching assistants to produce TA-run review sessions
 - Head Teaching Assistant (1 term; genetics)
 - Supervised other teaching assistants in addition to basic teaching assistant duties
 - Wrote and uploaded internet assignments
 - Maintained grades of 750 students
 - Collaborated with professor's faculty assistant to manage course administration

EDUCATION

- **University of California, San Diego (UCSD)**

- **M.S.**, Biological Sciences, June 15, 2010 **GPA: 4.0**
Thesis topic “PNL1 and PNL2: *Arabidopsis* homologs of maize PAN1”
Advisor: Professor Laurie G. Smith
- **B.S.**, Biochemistry and Cell Biology and **B.A.**, French Literature, 2008 **GPA: 3.43**

PUBLICATIONS

- Böhm CV, Inckemann R, Burgis M, Baumann J, Brinkmann CK, Lipinska KE, Gilles S, Freudigmann J, Seiler VN, **Clark LG**, Jewett MC, Voll LM, Niederholtmeyer H (2024) “Chloroplast Cell-Free Systems from Different Plant Species as a Rapid Prototyping Platform” *ACS Synthetic Biology* 13(8): 2412-2424
- **Clark LG**, Voigt, CA, Jewett, MC (2024) “Establishing a High-Yield Chloroplast Cell-Free System for Prototyping Genetic Parts” *ACS Synthetic Biology* 13(8): 2402-2411
- Gan R, Cabezas MD, Pan M, Zhang H, Hu G, **Clark LG**, Jewett MC, Nicol R (2022) “High-Throughput Regulatory Part Prototyping and Analysis by Cell-Free Protein Synthesis and Droplet Microfluidics” *ACS Synthetic Biology* 11(6): 2108-2120
- Schoborg JA, **Clark LG**, Choudhury A, Hodgman CE, Jewett MC (2016) “Yeast knockout library allows for efficient testing of genomic mutations for cell-free protein synthesis” *Synthetic and Systems Biotechnology* 1(1): 2-6
- Sullivan CJ, Pendleton ED, Sasmor HH, Hicks WL, Farnum JB, Muto M, Amendt EM, Schoborg JA, Martin RW, **Clark LG**, Anderson MJ, Choudhury A, Fior R, Lo YH, Griffey RH, Chappell SA, Jewett MC, Mauro VP, Dresios J (2016) “A cell-free expression and purification process for rapid production of protein biologics” *Biotechnology Journal* 11: 238-248
- Torres-Machorro AL, **Clark LG**, Chang CS, Pillus L. (2015) “The Set3 Complex Antagonizes the MYST Acetyltransferase Esa1 in the DNA Damage Response” *Molecular Cell Biology* 2015 Nov; 35(21): 3714–3725.
- Dyachock J, Shao MR, Vaughn K, Bowling A, Facette M, Djakovic S, **Clark L**, Smith L. (2008) “Plasma membrane-associated SCAR complex subunits promote cortical F-actin accumulation and normal growth characteristics in *Arabidopsis* roots.” *Mol Plant*. 2008 Nov ;1(6):990-1006.

ADDITIONAL SKILLS

- Tool Leadership Fundamentals course through Center for Creative Leadership/Northwestern
- Experience preparing provisional patent applications
- Experience in Adobe Illustrator and Photoshop and in Microsoft Office gained through preparation of publications, presentations, and graduate thesis
- Fluent in French

ERICA M. HARTMANN

Civil and Environmental Engineering
Northwestern University
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A. EDUCATION

- 08/2012 Ph.D., Biological Design, Arizona State University, Tempe, AZ
- 05/2008 B.S., Cellular & Molecular Biology (graduated with Departmental Honors), Johns Hopkins University, Baltimore, MD

B. PROFESSIONAL EXPERIENCE

- 03/24 – present Associate Professor, by courtesy, Department of Medicine, Division of Pulmonary Medicine, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, USA
- 09/23 – present Affiliate Faculty, Center for Synthetic Biology, Northwestern University, Evanston, Illinois, USA
- 09/22 – present Associate Professor, Department of Civil & Environmental Engineering, McCormick School of Engineering, Northwestern University, Evanston, Illinois, USA
- 09/16 – 08/22 Assistant Professor, Department of Civil & Environmental Engineering, McCormick School of Engineering, Northwestern University, Evanston, Illinois, USA
- 08/14 – 06/16 Post-doctoral Fellow, Biology and the Built Environment Center, Institute of Ecology and Evolution, University of Oregon, Eugene, Oregon, USA
- 09/12 – 07/14 Post-doctoral Fellow, Biochemistry of Perturbed Systems Laboratory, Atomic Energy Commission (CEA–Marcoule), Bagnols-sur-Cèze, Gard, France
- 08/08 – 08/12 Biological Design Doctoral Research Associate, Laboratory of Dr. Rolf Halden, Swette Center for Environmental Biotechnology, The Biodesign Institute at Arizona State University, Tempe, Arizona, USA
- 06/11 – 08/11 Exchange Student, Laboratory of Dr. Toshiyuki Sakaki, Department of Biotechnology, Toyama Prefectural University, Imizu, Toyama, Japan
- 05/07 – 05/08 Technology Fellow, Center for Educational Resources, Johns Hopkins University, Baltimore, Maryland, USA
- 03/06 – 03/08 Intern, Laboratory of Dr. Rolf Halden, The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

C. HONORS & AWARDS

- Karl Rosengren Faculty Mentoring Award – Mentor of Best 2022 Summer Undergraduate Research Grant Project (2022)
- Office of Undergraduate Research Faculty Honor Roll (2022)
- Karl Rosengren Faculty Mentoring Award – Mentor of Best 2020-2021 Academic Year Undergraduate Research Grant Project (2021)
- CIFAR Azrieli Global Scholars Program finalist (2021)
- Gordon and Betty Moore Foundation Travel Grant for the NAS Microbiome Meeting (2016)

- Searle Leadership Fund Award (2016)
- Harnisch Foundation grant to attend the Op Ed Project (2015)
- Donald E. Wimber Fund Award (2015)
- Federation of European Microbiological Societies Congress Grant for Young Scientists (2013)
- US Student Fulbright Award (2012)
- Arizona State University Security & Defense Systems Initiatives Fellowship (2011)
- National Science Foundation East Asia and Pacific Summer Institutes/Japan Society for the Promotion of Science Summer Program Fellowship (2011)
- Student Travel Stipend for the American Society for Mass Spectrometry Sanibel Conference (2011)
- Science Foundation Arizona Research Fellowship (2008, 2009, 2010)
- Second Decade Society Internship Grant, the Johns Hopkins University (2007)
- Center for Educational Resources Technology Fellowship (2007)

D. PUBLICATIONS

(Total citations: 3028, h-index: 28, Google Scholar i10-index: 49. Underlined authors = graduate or postdoctoral trainee; double underline = undergraduate trainee.)

61. Jabeen, K., J. Farooqi, L. M. Simons, J. F. Hultquist, R. Lorenzo-Redondo, C. T. Evans, **E. M. Hartmann**, M. Hanif, Z. Hasan, S. F. Mahmood, J. Ashraf, H. Ghayas, S. Zaka, N. Saeed, S. A. Raza Shah Bukhari, M. Arshad, L. K. Kociolek, S. J. Patel, R. Hasan, and E. A. Ozer. 2025. *Scheffersomyces spartinae* fungemia among pediatric patients in Pakistan 2020 – 2024. *Emerging Infectious Diseases*, accepted.
60. Huttelmaier, S., W. Shuai, J. Sumner, and **E. M. Hartmann**. 2024. Phage communities in household-related biofilms correlate with bacterial hosts. *Frontiers in Microbiomes*, 3:1396560.
59. Markov, N. S., Z. Ren, K. J. Senkow, R. A. Grant, C. A. Gao, E. S. Malsin, L. Sichizya, H. Kihshen, K. A. Helmin, M. Jocisic, J. M. Arnold, X. G. Pérez-Leonor, H. Abdala-Valencia, S. Swaminathan, J. Nwaezeapu, M. Kang, L. Rasmussen, E. A. Ozer, R. Lorenzo-Redondo, J. F. Hultquist, L. M. Simons, E. Rios-Guzman, A. V. Misharin, R. G. Wunderink, the SCRIPT Study Investigators. 2024. Distinctive evolution of alveolar T cell responses is associated with clinical outcomes in unvaccinated patients with SARS-CoV-2 pneumonia. *Nature Immunology*, 25:1607-1622.
58. Gilbert, J. A. and **E. M. Hartmann**. 2024. The Indoor Microbiome and Human Health. *Nature Reviews Microbiology*, <https://doi.org/10.1038/s41579-024-01077-3>.
57. Itzhari, D., W. Shuai, **E. M. Hartmann**, and Z. Ronen. 2024. Heterogeneous antibiotic resistance gene removal impedes evaluation of constructed wetlands for effective greywater treatment. *Antibiotics*, 13:315.
56. Ipoutcha, T. R. Racharaks, S. Huttelmaier, C. Wilson, E. A. Ozer, and **E. M. Hartmann**. 2024. A synthetic biology approach to assemble and reboot clinically-relevant *Pseudomonas aeruginosa* tailed phages. *Microbiology Spectrum*, e02897-02823.

55. Zhang, J.-F., C.-Y. Lai, X.-X. Cao, **E. M. Hartmann**, and H.-P. Zhao. 2024. High ammonia loading rate and biofilm reattachment initiated partial nitrification and anammox in a membrane aerated biofilm reactor. *Journal of Water Process Engineering*, 58:104829.
54. Shuai, W., D. Itzhari, Z. Ronen, and **E. M. Hartmann**. 2023. Mitigation of antimicrobial resistance genes in greywater treated at household level. *Science of the Total Environment*, 890:164136.
53. Arnold, B., A. Blum, J. Branyan, T. Bruton, C. Carignan, G. Cortopassi, S. Datta, J. DeWitt, A.-C. Doherty, R. U. Halden, H. Harari, L. Harriman, **E. M. Hartmann**, T. Hrubec, P. Hunt, S. Iyer, C. Kwiatowski, J. LaPier, L. Li, D. Li, J. Muniz-Ortiz, H. Ray, A. Salamova, R. Seguin, A. Soehl, R. Sutton, H. Tenney, L. Xu, and G. Zheng. 2023. Review of Quaternary Ammonium Compounds: A Chemical Class of Emerging Concern. *Environmental Science & Technology*, 57(20):7645–7665.
52. Feng, S., S. Owens, A. Shrestha, R. Poretsky, **E. M. Hartmann**, and G. F. Wells. 2023. Intensity of sample processing methods impacts wastewater SARS-CoV-2 whole genome amplicon sequencing outcomes. *Science of the Total Environment*, 876:162572.
51. Wang, Y., K. N. Thompson, Y. Yan, M. I. Short, Y. Zhang, E. A. Franzosa, J. Shen, **E. M. Hartmann**, and C. Huttenhower. 2023. RNA-based amplicon sequencing is ineffective in measuring metabolic activity in environmental microbial communities. *Microbiome*, 11:131.
50. Moghadam, A. A., W. Shuai, and **E. M. Hartmann**. 2023. Anthropogenic micropollutants and their implications for agriculture. *Current Opinion in Biotechnology*, 80:102902.
49. Guo, X., C.-Y. Lai, **E. M. Hartmann**, and H.-P. Zhao. 2023. Heterotrophic denitrification: an overlooked factor that contributes to nitrogen removal in n-DAMO mixed culture. *Environmental Research*, 216(4):114802.
48. Shen, J., A. G. McFarland, R. A. Blaustein, L. J. Rose, K. A. Perry-Dow, A. A. Moghadam, M. K. Hayden, V. B. Young, and **E. M. Hartmann**. 2022. An improved workflow for accurate and robust healthcare environmental surveillance using metagenomics. *Microbiome*, 10:206.
47. Hu, J., W. Shuai, J. T. Sumner, A. A. Moghadam, and **E. M. Hartmann**. 2022. Clinically Relevant Pathogens on Surfaces Display Differences in Survival and Transcriptomic Response in Relation to Probiotic and Traditional Cleaning Strategies. *npj Biofilms and Microbiomes*, 8:72.
46. Rohani, R., M. H. Scheetz, H. K. Donnelly, A. Donayre, M. Kang, E. Diaz, K. Dedicatoria, A. R. Hauser, E. A. Ozer, S. Nozick, C. Qi, A. E. Pawlowski, M. N. Neely, A. V. Misharin, R. G. Wunderink, N. J. Rhodes, H. Abdala-Valencia, M. J. Alexander, J. M. Arnold, J. I. Bailey, E. T. Bartom, A. Bharat, T. Bolig, N. Borkowski, G. R. Budinger, N. S. Chandel, R. K. Clepp, J. Coleman, M. J. Cuttica, T. R. Cybulski, J. E. Dematte, J. S. Deters, J. A. Fiala,

- G. T. Gadhvi, C. A. Gao, K. L. Gates, S. W. M. Gatesy, R. Giri, P. D. Go, C. J. Gottardi, R. A. Grant, S. J. Green, El. Gusman, E. R. Guzman, S. Han, **E. M. Hartmann**, C. M. Horvath, M. Hukamdad, S. Um. Hyder, M. Jain, A. M. Joudi, R. B. Kadar, R. Kalhan, D. W. Kamp, M. Kandpal, D. A. Kidd, H. Kihshen, Z. M. Klug, E. A. Korth, J. M. Kruser, R. Lawrence, E. M. Leibenguth, A. R. Levenson, L. D. Gradone, G. Y. Liu, J. W. Lomasney, T. A. Lombardo, Z. Lu, A. Ludwig, A. Mahmoud, E. S. Maslin, N. S. Markov, A. C. McQuattie-Pimentel, D. Meza, F. L. Morales, L. Morales-Nebreda, R. I. Morimoto, R. J. Mylvaganam, P. Nannapaneni, L. A. Nunes Amaral, R. Patel, L. L. Pesce, C. O. Pickens, Y. Politanska, T. A. Poor, M. H. Prickett, M. Querrey, L. V. Rasmussen, Z. Ren, K. M. Ridge, M. L. Rosenbaum, S. R. Rosenberg, T. Rowe, S. R. Russell, M. A. Sala, D. Schneider, C. J. Schroel, K. Secunda, P. C. Seed, K. J. Sendow, T. Shamaly, E. D. Shanes, J. Shen, A. Shilatifard, L. Sichizya, B. D. Singer, S. Smith, P. H. S. Sporn, J. Starren, T. Stoeger, J. Sumner, S. Swaminathan, J. I. Sznajder, H. Tejedor Navarro, L. N. Textor, S. Thakkar, R. Tomic, B. Tran, K. Vitale, A. A. Wagh, J. M. Walter, F. Wehbe, D. R. Winter, A. R. Wolfe, L. F. Wolfe, A. V. Yeldandi. 2022. Individual target pharmacokinetic/pharmacodynamic attainment rates among meropenem-treated patients admitted to the ICU with hospital-acquired pneumonia. *Journal of Antimicrobial Chemotherapy*, dkac245.
45. Huang, H., O. W. Barber, Z. Yu, H. Park, X. Hu, X. Chen, C.-H. Chen, **E. M. Hartmann**, and J. Huang. 2022. Rub-resistant Antibacterial Surface Conversion Layer on Stainless Steel. *Advanced Materials Interfaces*, DOI:10.1002/admi.202200251.
44. Yu, C., J. Armengaud, R. A. Blaustein, K. Chen, Z. Ye, F. Xu, J.-C. Gaillard, Y. Fu, **E. M. Hartmann**, and C. Shen. 2022. Antibiotic tolerance and degradation capacity of the organic pollutant-degrading bacterium *Rhodococcus biphenylivorans* TG9^T. *Journal of Hazardous Materials*, 424:127712.
43. Hu, J., N. Hellgeth, C. Cabay, J. Clark, F. J. Oliaro, W. Van Bonn, and **E. M. Hartmann**. 2022. Towards understanding microbial degradation of veterinary drugs in large saltwater aquariums. *Science of the Total Environment*, 807:150532.
42. Ren, C.-Y., E.-L. Wu, **E. M. Hartmann**, H.-P. Zhao. Biological mitigation of antibiotic resistance gene dissemination by antioxidant-producing microorganisms in activated sludge systems. 2021. *Environmental Science & Technology*, 55(23):15831–15842.
41. McFarland, A. G., N. W. Kennedy, C. E. Mills, D. Tullman-Ercek, C. Huttenhower, and **E. M. Hartmann**. 2021. Density-based binning of gene clusters to infer function or evolutionary history using GeneGrouper. *Bioinformatics*, btab752.
40. Yu, C., H. Wang, R. A. Blaustein, L. Guo, Q. Ye, Y. Fu, J. Fan, X. Su, **E. M. Hartmann**, and C. Shen. 2021. Pangenomic and functional investigations for dormancy and biodegradation features of an organic pollutant-degrading bacterium *Rhodococcus biphenylivorans* TG9^T. *Science of the Total Environment*, 151141.
48. Webster, T. M., A. G. McFarland, M. J. Gebert, A. M. Oliverio, **E. M. Hartmann**, and N. Fierer. 2021. The structure and functional attributes of bacterial communities in premise

- plumbing across the continental United States. *Environmental Science & Technology*, 55(20):14105–14114.
38. Barber, O. W., I. Manas Miramontes, M. Jain, E. A. Ozer, and **E. M. Hartmann**. 2021. Bacteriophages to Direct Bacterial Evolution Towards Antibiotic Susceptibility. *mSystems*, 6:e00218-21.
37. Crofts, T. S., A. G. McFarland, and **E. M. Hartmann**. 2021. Mosaic Ends Tagmentation (METa) assembly for highly efficient construction of functional metagenomic libraries. *mSystems*, 6:e00524-21.
36. Blaustein, R. A., P. C. Seed, and **E. M. Hartmann**. 2021. Biotransformation of doxorubicin promotes resilience in simplified intestinal microbial communities. *mSphere*, 6:e00068-21.
35. Barber, O. W., and **E. M. Hartmann**. 2021. Benzalkonium Chloride: a Systematic Review of its Environmental Entry through Wastewater Treatment, Potential Impact, and Mitigation Strategies. *Critical Reviews in Environmental Science and Technology*, DOI: 10.1080/10643389.2021.1889284.
34. Shen, J., A. G. McFarland, M. K. Hayden, V. I. Young, and **E. M. Hartmann**. 2021. Toward Accurate and Robust Environmental Surveillance Using Metagenomics. *Frontiers in Genetics*, 12:600111.
33. McFarland, A. G., H. Bertucci, E. Littman, J. Shen, C. Huttenhower, and **E. M. Hartmann**. 2021. A conserved mechanism for high triclosan tolerance in *Pseudomonas* demonstrates evidence of vertical and horizontal transfer. *Applied & Environmental Microbiology*, 87(7): e02924-20.
32. Blaustein, R. A., L.-M. Michelitsch, A. J. Glawe, H. Lee, S. Huttelmaier, N. Hellgeth, S. Ben Maamar, and **E. M. Hartmann**. 2021. Toothbrush Microbiomes Feature a Meeting Ground for Human Oral and Environmental Microbiota. *Microbiome*, 9:32.
31. Wang, Y., Y. Yan, K. N. Thompson, S. Bae, E. K. Accorsi, Y. Zhang, J. Shen, H. Vlamakis, **E. M. Hartmann**, and C. Huttenhower. 2021. Whole microbial community viability is not quantitatively reflected by propidium monoazide sequencing approaches. *Microbiome*, 9:17.
30. Hu, J. and **E. M. Hartmann**. 2021. Anthropogenic chemicals and their impact on microbes living in buildings. *Microbial Biotechnology*, 14(3), 798–802.
29. Johnson, C. R., M. N. Tran, L.-M. Michelitsch, S. Abraham, J. Hu, K. A. Gray, and **E. M. Hartmann**. 2020. Nano-Enabled, Antimicrobial Toothbrushes – How Physical and Chemical Properties Relate to Antibacterial Capabilities. *Journal of Hazardous Materials*, 396:122445.

28. Ben Maamar, S., A. J. Glawe, T. K. Brown, N. Hellgeth, J. Hu, J. Wang, C. Huttenhower, and E. M. Hartmann. 2020. Mobilizable antibiotic resistance genes are present in dust microbial communities. *PLOS Pathogens*, 16(1):e1008211.
27. Ben Maamar, S., J. Hu, and E. M. Hartmann. 2020. Implications of indoor microbial ecology and evolution on the risk of antibiotic resistance. *Journal of Exposure Science & Environmental Epidemiology*, 30:1-15.
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bacteria potentially linked to chlorhexidine persistence in the environment. *medRxiv*, <https://medrxiv.org/cgi/content/short/2024.10.07.24315058v1>.

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E. BOOK CHAPTERS AND OTHER PUBLICATIONS

7. **Hartmann, E. M.** 2022. Engineering and Design Factors for Healthful Built Environments. *The Bridge*, 52(3):20-25.
6. Barber, O. W., A. Khan, E. M. Hartmann, D. Isheim, S. Vaynman, Q. J. Wang, and Y.-W. Chung. 2020. Antimicrobial Copper-containing Stainless Steels Show Promise. *Advanced Materials and Processes*, 178(6), 25-28.

5. **Hartmann, E. M.**, J.-C. Gaillard, and J. Armengaud. “Shotgun proteomics for hydrocarbon microbiology,” in *Hydrocarbon and Lipid Microbiology Protocols*. (K. Timmis, Editor), Springer, 2014. ISBN 978-3-662-50435-2.
4. **Hartmann, E. M.** and J. Armengaud. “Proteogenomics for the enhanced discovery of bacterial biomarkers,” in *Detection of Chemical, Biological, Radiological and Nuclear Agents for the Prevention of Terrorism*. (J. H. Banoub, Editor), Elsevier, 2014. ISBN 978-94-017-9238-7.
3. **Hartmann, E. M.**, F. Allain, J.-C. Gaillard, O. Pible, and J. Armengaud. “Taking the shortcut for high-throughput shotgun proteomic analysis of bacteria,” in *Host-Bacteria Interactions. Methods in Molecular Biology*. (D. O’Callaghan and A. C. Vergunst, Editors), Springer Protocols, 2014. ISBN: 978-1-4939-1260-5.
2. Doudrick, K., D. Jones, T. Kalinowski, **E. M. Hartmann**, and R. U. Halden. “Assessment of the Contribution of Triclosan to Dioxin Emissions from Sludge Incineration in the U.S. Using a Mathematical Model,” in *Contaminants of Emerging Concern: Ecotoxicological and Human Health Considerations. American Chemical Society (ACS) Book Series*. (R. Halden, Editor), Oxford University Press, 2010. ISBN: 0-8412-2496-X.
1. **Hartmann, E. M.** and R. U. Halden. “Challenges of Detecting Bioterrorism Agents in Complex Matrices,” in *NATO-Science for Peace and Security-Chemistry and Biology Series: Detection of Biological Agents for the Prevention of Bioterrorism*. (J. H. Banoub, Editor), Springer, 2010. ISBN: 978-90-481-9815-3.

F. INVENTION DISCLOSURES AND PATENTS

2. Isheim, D., S. Vaynman, A. M. Khan, **E. M. Hartmann**, Q. Wang, Y-W Chung, Antimicrobial Steel and Related Methods, Formal Patent Application 17/231,754 filed April 15, 2021.
1. Blaustein, R. A., P. C. Seed, **E. M. Hartmann**, Bacterial Enzymatic Conversion of Anthracycline Chemotherapeutics to Reduce Toxicity and Promote Diversity Among the Intestinal Microbiota, International Patent Application PCT/US2020/021033 filed March 4, 2020.

G. FUNDING (approximately \$3.9 million)

Investigating the impact of ESBL E. coli colonization on infant microbiome

1R21AI178334-01 (PI: Arshad)

01/07/2023-06/30/2025

National Institute of Allergies and Infectious Disease

\$442,829 (\$90,528)

Characterizing the enduring impacts on the gut microbiome of early-life colonization with ESBL-producing Enterobacteriaceae and understanding the factors, including nutritional status, that facilitate or impede colonization.

Role: Subaward PI

Surveillance of antimicrobial-resistant Gram negative bacteria and fungi in a Pakistan health care system

6NU3HCK000007-01 (PI: Ozer) 09/01/2021-09/30/2026
Centers for Disease Control and Prevention \$3,700,000 (\$63,575)
The goal of this work is to 1) Establish a program to measure and monitor transmission of antimicrobial resistant Enterobacteriaceae, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* at Aga Khan hospitals and associated healthcare facilities; 2) improve networks for diagnosing and tracking antifungal-resistant *Candida auris* infections across Aga Khan institutions; and 3) evaluate the implementation outcomes of building capacity and conducting surveillance for antimicrobial resistant bacteria and fungi using RE-AIM.
Role: Co-I

CAREER: Redefining 'antimicrobial' in the context of microbe-chemical interactions indoors
2043156 04/01/2021-03/31/2026
NSF CBET \$516,000
The goal of this project is to understand bioavailability of antimicrobial chemicals in textiles and characterize the response of indoor microbial communities to these chemicals. This includes an REU supplement.
Role: PI

Successful Clinical Response In Pneumonia Therapy (SCRIPT) Systems Biology Center
2U19AI135964-06 (PI: Wunderink) 01/17/2018-12/31/2027
National Institute of Allergies and Infectious Disease \$23,983,586 (\$1,197,082)
Support for analysis of the alveolar fluid microbiome and its role in pneumonia disease.
Role: Co-I

COMPLETED FUNDING

LiV: Enabling Measurement in Place
01/01/2023-12/31/2024
The Walder Foundation \$90,000
We propose a Laboratory in a Vial (LiV) concept the meet the measure-in-place grand challenge by exploring the feasibility of the LiV for four sensing modalities, and assessing critical developmental and deployment factors for medically-relevant bio-measurements.
Role: PI

Solving antibiotic resistance by outwitting evolution
09/01/2022-02/29/2024
McCormick Research Catalyst Program \$94,825
Antimicrobial resistance threatens to render our pharmaceutical inventory ineffective. This grant funds the development of phage-delivered CRISPR-based alternative or adjunctive therapies to combat infectious disease, specifically for *Pseudomonas aeruginosa*.

Aircraft Cabin Air Filter Experiment
01/01/2022-06/30/2024
The Walder Foundation \$198,686
The goal of this project is to determine whether respiratory pathogens, including SARS-CoV-2, can be recovered from aircraft cabin air filters in a way that is informative to public health surveillance efforts.

Role: PI

Antimicrobial Resistance Global Working Group

09/01/2021-08/31/2024

Buffett Institute for Global Affairs

\$300,000

This group aims to collect and curate data relating to antimicrobial resistance in multiple healthcare systems internationally, starting with the United States and Pakistan. It also aims to identify and assess the efficacy of interventions for curbing antimicrobial resistance.

Role: Co-Lead

Assessment of how individual- vs. city-level epidemiology data collection impacts health equity

01/01/2023-12/31/2023

The Walder Foundation

\$90,000

Both individual- and population-level surveillance of disease figure into public policy and health decision making, but it is unclear whether these strategies impact health outcomes equitably. We will perform a retrospective analysis to understand how both strategies impacted health outcomes for advantaged and disadvantaged populations in Chicago during the covid-19 pandemic. This information will help guide future studies and implementations of surveillance strategies to improve public health.

Role: PI

Sloan Foundation Support for Symposium at the Joint ISES-ISAQ Meeting

G-2019-12356

06/01/2019-11/30/2023

Alfred P. Sloan Foundation

\$41,150

Organization and support for a symposium entitled “Integration of Biology and Chemistry for Indoor Environmental Quality” at the ISES-ISIAQ meeting.

Role: PI

Retrofitting stainless steel with a self-sanitizing surface layer

N00014-20-1-2685

10/01/2020-09/30/2022

Office of Naval Research

\$200,000

The goal of this project is to develop and evaluate the antimicrobial activity of stainless steel surfaces amended with a copper coating.

Role: PI

A Chicagoland Prototype Coronavirus Assessment Network Node (PCANN)

18224 RM//101635-00001 (PI: Packman)

09/01/2021-09/30/2022

The Walder Foundation

\$1,250,000 (\$400,000)

The goal of this project is to build capacity for wastewater-based surveillance of SARS-CoV-2 in Chicago, with a specific focus on variant sequencing.

Role: Co-I

Competition experiments between Bacillus and HAI pathogens

INV-004298

01/01/2020-12/31/2021

Bill & Melinda Gates Foundation

\$97,464

This research focuses on understanding the impact of environmental parameters on probiotic cleaning products.

Role: PI

Evaluation of International Space Station Bacteria for Disinfectant Resistance

SMS0000637 02/25/2020-09/30/2021

KBR Wyle Services, LLC \$15,215

The goal of this research is to develop methods to assess benzalkonium chloride tolerance in cultivable bacterial isolates collected on the International Space Station.

Role: PI

Development and Comparison of Novel Methods for Quantitative SARS-CoV-2 Surveillance in Wastewater

08/24/2020-08/23/2021

Northwestern University Center for Water Research \$45,451

The aim of this project is to develop and assess rapid, specific molecular methods to detect the SARS-CoV-2 virus in complex matrices, e.g., wastewater.

Role: PI (with Wells, Jewett, and Lucks)

Disinfectant and Antibiotic Resistance to Surface Residual Chemistries

SP0061024 08/01/2020-07/31/2021

Diversey, Inc. \$20,561

This research evaluates how residues of cleaning products on surfaces impact surface-associated bacteria.

Role: PI

Examining the role of micropollutants in promoting multidrug resistance in greywater

05/08/2020-05/01/2021

Northwestern University Center for Water Research/ \$50,000 (\$25,000)

Zuckerberg Institute for Water Research at Ben Gurion University

The goal of this project is to evaluate the impact of micropollutants, including preservatives and antimicrobials, on the microbiomes of greywater intended for reuse.

Role: PI (BGU PI: Ronen)

Civil and Environmental Engineering Summer Internship Program

03/19/2019-03/18/2020

The Alumnae of Northwestern University \$4,000

This program provided structured support for student research in the Department of Civil and Environmental Engineering over the summer of 2019.

Role: PI

Development of reproducible, quantitative methods based on shotgun metagenome sequencing for assessment of risk of microbial transmission

75D30118C02915 09/30/2018-09/29/2019

Centers for Disease Control and Prevention \$283,965

This research addresses the question: does the presence or absence of an organism in the healthcare environment as detected using shotgun metagenome sequences indicate the presence or absence of, and thus possible human exposure to, viable pathogens?

Role: PI

Civil and Environmental Engineering Summer Internship Program

09/01/2017 – 08/31/2018

The Murphy Society

\$35,000

This program provided stipends, research funds, and structured support for student research in the Department of Civil and Environmental Engineering over the summer of 2018.

Role: PI

Biology and the Built Environment (BioBE) Center

G-2017-9807 (PI: Van Den Wymelenberg)

01/01/2017-08/31/2019

Alfred P. Sloan Foundation

\$999,998 (\$35,000)

The Center is training next generation scientists to use hypothesis-driven, evidence-based approaches to understand the built environment microbiome.

Role: Co-PI

Examining mobile genetic elements in the indoor microbiome for resistance to antibiotics and other stressors

01/19/2017-09/15/2017

Northwestern Institute on Complex Systems Data Science Initiative

\$45,000

This study examined whether mobile antibiotic resistance genes were present in dust microbiomes. Additionally, relative abundances of mobile antibiotic resistance genes were compared to other environments, i.e., cattle stool and drinking water.

Role: PI (with Wang)

Evaluating the Impacts of Synthetic and Natural Surface Finishes on the Microbiome

G-2016-7291

01/01/2017-12/31/2017

Alfred P. Sloan Foundation

\$40,481

This study revealed whether exposure to synthetic or naturally antimicrobial surface finishes causes an increase in antibiotic resistance in indoor microbes.

Role: PI

Growing Microbes from Dust

999URAP139596

10/28/2016-09/01/2017

Northwestern University Office of Undergraduate Research

\$2,000

This award provided support to compensate two undergraduate student researchers to work on enrichment of cultivable bacteria from indoor dust.

Role: PI

H. TRAINEES

DOCTORAL STUDENTS

06/24 – present	Katherine Bond, Interdisciplinary Biological Sciences
06/24 – present	Yilin Feng, Interdisciplinary Biological Sciences
03/23 – present	Shelby Tillema, Environmental Engineering & Science (NSF Graduate Research Fellow)
06/21 – present	Jack Sumner, Interdisciplinary Biological Sciences

03/21 – present	Anahid Amani Moghadam, Environmental Engineering & Science
03/20 – 06/25	Stefanie Huttelmaier, Environmental Engineering & Science (NSF Graduate Research Fellow; co-advised with Prof. George Wells)
06/19 – 12/23	Olivia W. Barber, Environmental Engineering & Science
09/17 – 03/23	Jiaxian Shen, Environmental Engineering & Science
03/17 – 12/21	Alexander G. McFarland, Interdisciplinary Biological Sciences
01/17 – 08/21	Jinglin Hu, Environmental Engineering & Science

POSTDOCTORAL FELLOWS

09/23 – present	Chiagozie Pickens, MD (KL2 fellow; Assistant Professor of Medicine, Pulmonary and Critical Care)
06/23 – 06/25	Oliyad Jeilu Oumer, PhD
04/23 – 10/23	Jiaxian Shen, PhD (now postdoc at the Harvard T. H. Chan School of Public Health)
07/22 – 06/23	Thomas Ipoutcha, PhD
04/21 – 12/22	Weitao Shuai, PhD (co-advised with Prof. George Wells; now research associate)
01/21 – 01/22	Shuchen Feng, PhD (co-advised with Prof. George Wells; now research associate at Loyola University, Chicago)
07/20 – 06/23	En-Ling Wu, MD (T32 fellow; now assistant professor at University of Chicago)
06/20 – 05/22	Ratanachat Racharaks, PhD (TL1 fellow, co-advised with Profs. Egon Ozer and Manu Jain; now senior scientist at Walter Reed Army Institute of Research)
11/18 – 09/19	Clayton R. Johnson, PhD (now laboratory scientist at Fauske & Associates, LLC)
10/17 – 08/20	Ryan A. Blaustein, PhD (TL1 fellow, co-advised with Prof. Patrick Seed; now assistant professor at University of Maryland, College Park)
04/17 – 03/19	Sarah Ben Maamar, PhD (now faculty for Bioinformatics and Data Integrity at Weill Cornell Medicine)

MASTERS STUDENTS

01/25 – present	Jiahe Yu, Environmental Engineering & Science
01/25 – 06/25	Aishvarya Agrawal, Masters of Biotechnology Program
06/23 – 03/24	William Henry Schirmer, Environmental Engineering & Science
09/20 – 08/22	Donia Moustafa, Environmental Engineering & Science (now at EPA)
09/19 – 06/20	Iria Manas Miramontes, Masters of Biotechnology Program
04/18 – 09/18	Lisa-Marie Michelitsch, Graz University of Technology (Austrian Marshall Plan Scholarship; now Head of Sales at Kilobaser)
01/16 – 06/17	Jianing Li, Environmental Engineering & Science (now Molecular Biologist at ACGT, Inc.)

UNDERGRADUATE STUDENTS (Northwestern University, unless specified)

09/24 – present	Laith Al-Safarini
06/24 – 08/24	Rachel Chubb, Wellesley College (NSF SynBREU)

1/24 – present	Sufyaan Syed
1/24 – present	Lindsey Smith T
1/24 – present	Olivia McAllister-Nevins
06/23 – 08/23	Gabriel Urbina, Northeastern Illinois University (Interdisciplinary Summer Undergraduate Research (I-SURE) Program)
03/23 – present	Simon Kissel (Weinberg College of Arts and Sciences Summer Undergraduate Research Grant)
03/23 – 08/23	Ian Falk (Office of Undergraduate Research Summer Undergraduate Research Grant)
09/22 – 12/23	Mustafa Ismail
06/22 – 08/22	Lilia Smith (NSF SynBREU)
06/22 – 08/22	Grayson Donnelly
06/22 – 06/25	Andrew Watson
06/22 – 08/22	Valeria Castro
04/22 – 08/22	Kayla Terrelonge (NU Bioscientist Program)
03/22 – 08/22	Emran Majidy (McCormick Summer Research Fellowship)
06/21 – 06/24	John Chen (McCormick Summer Research Fellowship, Office of Undergraduate Research Summer Undergraduate Research Grant; Vanderbilt School of Medicine)
06/21 – 06/24	Meghana Karan (Weinberg College of Arts and Sciences Summer Undergraduate Research Grant)
06/21 – 04/22	Silpol Dhiantravan
03/21 – 03/24	William Henry Schirmer (McCormick Summer Research Fellowship, Office of Undergraduate Research Summer Undergraduate Research Grant - Advanced)
03/21 – 06/24	Shayan Malik (Weinberg College of Arts and Sciences Summer Undergraduate Research Grant, Office of Undergraduate Research Academic Year Grant; Midwestern University medical school)
01/21 – 06/23	Christopher Woodard (McCormick Summer Research Fellowship)
09/20 – 12/22	Vikas Ahluwalia
03/20 – 03/22	Phuong Lam (Office of Undergraduate Research Summer Undergraduate Research Grant)
06/19 – 02/20	Isabella Smith (Posner Research Program)
06/19 – 08/19	Zoe Gardner, Smith College
03/19 – 08/22	Yuhan Sherlyn Weng (Office of Undergraduate Research Summer Undergraduate Research Grant; University of California San Diego PhD program in bioinformatics)
01/19 – 06/22	Tyler Shimada (Office of Undergraduate Research Summer Undergraduate Research Grant; University of Illinois Urbana-Champaign Medical School)
01/19 – 06/19	Jessica Bailey
01/19 – 06/19	Brandon Radonski
11/18 – 06/21	Nhu Mia Tran (McCormick Summer Research Fellowship; Yale University PhD program in chemical and environmental engineering)
09/18 – 06/21	Hanna Bertucci (Office of Undergraduate Research Summer Undergraduate Research Grant, Office of Undergraduate Research

	Academic Year Grant, Cystic Fibrosis Foundation Student Traineeship Award; Northwestern University Feinberg School of Medicine)
03/18 – 06/20	Erica Littman (Office of Undergraduate Research Summer Undergraduate Research Grant, Office of Undergraduate Research Academic Year Grant; Junior Specialist, Leal Lab, University of California-Davis)
03/18 – 06/19	Hansung David Lee (Weinberg College of Arts and Sciences Summer Undergraduate Research Grant; University of Virginia Medical School)
02/18 – 12/19	Nancy Hellgeth, Northeastern Illinois University
06/17 – 08/17	Rubab Hyder, University of Illinois at Urbana-Champaign
06/17 – 08/17	Sophie Gray-Gaillard, Swarthmore College
06/17 – 08/17	James Lindsay
04/17 – 01/19	Taylor Brown (Northwestern University PhD program in biomedical engineering)
01/17 – 01/19	David Park (Office of Undergraduate Research Summer Undergraduate Research Grant, Office of Undergraduate Research Academic Year Grant; St Louis University Medical School)
01/17 – 12/18	Huseyin Demir (NU Bioscientist Program, Weinberg College of Arts and Sciences Summer Undergraduate Research Grant)
01/17 – 06/17	Michelle Guo
01/17 – 06/17	Daniela Ruiz
01/17 – 06/17	Amy Eckland (Office of Undergraduate Research Academic Year Grant)

VISITING SCHOLARS

06/18 – 09/18	Chungui Yu, Zhejiang University
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I. PRESENTATIONS

1. INVITED SEMINAR LECTURES

20. “Antimicrobial chemicals, antimicrobial resistance, and the indoor microbiome,” Microbes and Social Equity speaker series, University of Maine Institute of Medicine, virtual, June 28, 2024.
19. “Antimicrobials and their impacts on microbes in both indoor and outdoor environments,” Biology/Bioinformatics seminar series, Loyola University, Chicago, IL, USA, April 12, 2024.
18. “Antimicrobials and their impacts on microbes in both indoor and outdoor environments,” Biological Design Graduate Program seminar series, Arizona State University, Tempe, AZ, USA, March 3, 2023.
17. “Antimicrobials and their impacts on microbes in both indoor and outdoor environments,” Instituto de Investigación e Ingeniería Ambiental, Universidad de San Martín, San Martín, Provincia de Buenos Aires, Argentina, February 14, 2023.

16. “Using the Microbiology and Chemistry of the Built Environment to Promote Indoor Environmental Quality,” Wolman Seminar in the Department of Environmental Health and Engineering, Johns Hopkins University, Baltimore, MD, USA, November 8, 2022.
15. “Antimicrobial resistance in the built environment,” Northwestern University Feinberg School of Medicine, Department of Microbiology/Immunology, Chicago, IL, USA, October 26, 2021.
14. “Using the Microbiology and Chemistry of the Built Environment to Promote Indoor Environmental Quality,” Northwestern University Weinberg College of Arts & Sciences, Department of Earth and Planetary Sciences, Evanston, IL, USA, October 15, 2021.
13. “Chemistry and the Indoor Microbiome: Highlighting the Impacts of Antimicrobial Chemicals,” Vanderbilt University, Nashville, TN, USA, December 7, 2020.
12. “Assessing the impacts of antimicrobial chemicals on microbes indoors,” the University of Regina, Regina, SK, Canada, September 11, 2020.
11. “Impact of physical and chemical landscapes on microbes indoors,” Argonne National Lab, Argonne, IL, USA, March 11, 2019.
10. “How synthetic antimicrobials are altering the microbial world,” Olivet Nazarene University, Bourbonnais, IL, USA, March 5, 2019.
9. “How synthetic antimicrobials are altering the microbial world,” Purdue University, West Lafayette, IN, USA, February 26, 2019.
8. “How synthetic antimicrobials are altering the microbial world,” University of Illinois-Chicago, Chicago, IL, USA, February 21, 2019.
7. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” Northwestern University Feinberg School of Medicine, Chicago, IL, USA, January 22, 2019.
6. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” University of Illinois-Urbana Champaign, IL, USA, September 12, 2018.
5. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” Loyola University, Chicago, IL, USA, March 29, 2018.
4. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” Marquette University, Milwaukee, WI, USA, March 21, 2018.
3. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” Institute of Environmental Biotechnology of the Graz University of Technology, Graz, Austria, July 17, 2017.

2. “Antimicrobial chemicals and antibiotic resistance in the indoor dust microbiome,” Zhejiang University, Hangzhou, China, July 3, 2016.
1. “Antimicrobial Chemicals and Antibiotic Resistance in the Indoor Dust Microbiome,” University of Texas, Austin, TX, USA, January 25, 2016.

2. CONFERENCE TALKS (* = invited)

- *45. TBD, Association of Environmental Engineering and Science Professors (AEESP) Research and Education Conference, Durham, NC, May 20-22, 2025.
- *44. “Expanding Interpretation of Metagenomics,” Metagenomics in Spaceflight: Establishing an implementation roadmap, Moffett Field, CA, USA and online, November 19-22, 2024.
- *43. Keynote speaker, the Caribe Microbial Meeting, Cartagena, Colombia, October 24-25, 2024.
- *42. “Microbial ecology of the built environment,” ISME19, Cape Town, South Africa, August 18-23, 2024.
- *41. Keynote speaker, “Ecology and Evolution of Antimicrobial Resistance: the Environmental Perspective,” ASM Council on Microbial Sciences – Antimicrobial Agents and Resistance 2024 Community Retreat, virtual, March 25-29, 2024.
- *40. Panelist, Briefing on Antimicrobial Resistance Policy Paper hosted by the American Society for Microbiology, online, July 21, 2023.
- 39. “Antimicrobial Textiles: Science Fiction vs. Facts from the Lab,” NeoCon, Chicago, IL, USA and virtual, June 12-14, 2023.
- *38. “Antimicrobials and their impacts on microbes in both indoor and outdoor environments,” Drylands, Deserts, and Desertification, Sede Boqer, Israel, November 27 - December 1, 2022.
- *37. Discussion leader, “Antibiotic Resistance,” Microbiology of the Built Environment Gordon Research Conference, Waterville Valley, NH, USA, June 19-24, 2022.
- *36. Panelist, “Advancement Beyond the Lab: How Advocacy Promotes the Field and is Part of Every Career,” ASM Microbe, Washington, DC, USA, June 8-13, 2022.
- *35. “Antimicrobial Resistance and the Indoor Environment,” 1st Annual Pathogen Genomics Symposium: Genes, Genomes, and Infection, Chicago, IL, USA, May 4, 2022.
- *34. “Benzalkonium Chloride and Microbes,” Healthy Buildings, online, January 18-20, 2022.

- *33. “Environmental factors that influence antimicrobial resistance in the indoor microbiome,” 1st Hub for Biotechnology in the Built Environment Annual Summit, online, July 6-9, 2021.
- *32. “Chemistry and the Indoor Microbiome: Highlighting the Impacts of Antimicrobial Chemicals,” 2nd Annual Metabolomics Association of North America Conference, online, September 14 - 16, 2020.
- *31. “Antimicrobials and Microbes Indoors: How to best promote indoor environmental quality,” webinar hosted by the US EPA, August 11, 2020.
- *30. “The impact of antimicrobial chemicals on microbial viability and antibiotic resistance,” Microbiology of the Built Environment Meeting at the Banbury Center, Cold Spring Harbor Laboratory, Lloyd Harbor, New York, USA, November 3-6, 2019.
- *29. “Antimicrobial materials and their impacts on undomesticated microbial communities,” Department of Defense Microbiome Symposium, Dayton, OH, USA, October 22-24, 2019.
- *28. “Healthcare-associated infections and the hospital environment,” International Conference on Prevention & Infection Control, Geneva, Switzerland, September 10-13, 2019.
- *27. “Microbiome research – new visions for infection control,” International Conference on Prevention & Infection Control, Geneva, Switzerland, September 10-13, 2019.
- *26. “Microbiome and hospital environments,” 2nd Geneva Infection Prevention and Control Think Tank, Geneva, Switzerland, September 9-10, 2019.
- *25. “Antibacterial Toothbrushes – What Effects do Nano-Enabled Products Have on Microbial Communities?” Joint Meeting of the International Society of Exposure Science and the International Society of Indoor Air Quality, Kaunas, Lithuania, August 18-22, 2019.
- *24. “Using pangenomics to monitor built environments,” The Microbiology of Human Spaceflight conference hosted by Nature Research and NASA, Houston, TX, USA, June 26-28, 2019.
- *23. “The Built Environment: Why Understanding Microbiology Matters,” Annual Joint Meeting of the International Society for Exposure Science & the International Society for Environmental Epidemiology, Ottawa, Canada, August 26-30, 2018.
- *22. “Antibiotic Resistance, Pathogens, and the Built Environment,” Microbiology of the Built Environment Gordon Research Conference, Biddeford, ME, USA July 15-20, 2018.
- *21. “Antimicrobial Chemicals and Antibiotic Resistance,” Nanochemistry of the Indoor Environment workshop, New York, NY, USA, July 11-13, 2018.
- *20. “Indoor Antimicrobials and Antibiotic Resistance,” Institute for Health in the Built Environment Industry Consortium, Portland, OR, USA, May 18-19, 2018.

- *19. “Antibiotic resistance in humans and the natural and built environments,” IDWeek, San Diego, CA, USA, October 4-8, 2017.
- *18. “How antimicrobials affect the indoor microbiome,” Consumer Specialty Products Association New Horizon conference, Phoenix, AZ, USA, September 18-20, 2017.
- *17. “Antibiotic resistance and antimicrobial chemicals in the built environment,” Ecological Society of America 2017, Portland, OR, USA, August 6-11, 2017.
- *16. “Antimicrobial chemicals and antibiotic resistance in the built environment,” Healthy Buildings 2017, Lublin, Poland, July 2-4, 2017.
- 15. “The importance of labels in curbing antibiotic resistance,” International Society for Industrial Ecology-International Symposium on Sustainable Systems and Technology, Chicago, IL, USA, June 25-29, 2017.
- *14. “Antimicrobials & antibiotic resistance genes,” Health + Energy Consortium launch, Portland, OR, USA, May 4-5, 2017.
- *13. “The effect of antimicrobial chemicals on the built environment microbiome,” Department of Defense Microbiome Symposium, Colorado Springs, CO, USA, April 5-7, 2017.
- *12. “Connecting context and function: Antibiotic resistance in the indoor microbiome,” New Mexico BioInformatics, Science and Technology Symposium, Santa Fe, NM, USA, March 16-17, 2017.
- *11. “How to prevent manmade chemicals from adversely affecting the microbial world,” Consortium for Research and Education on Emerging Contaminants Meeting, Denver, CO, USA, September 29, 2016.
- *10. “Antimicrobial chemicals are prevalent and problematic in dust as well as in wastewater treatment,” the 252nd American Chemical Society National Meeting, Philadelphia, PA, USA, August 21-25, 2016.
- 9. “MBTA (Boston) City Sampling Day 2016,” 2nd Annual MetaSUB Summit, Shanghai, China, July 1-3, 2016.
- *8. “Biology and the Built Environment,” BuildWell 2016, San Francisco, CA, USA, February 10-12, 2016.
- 7. “Potential indoor exposure to antimicrobials and antibiotic resistant organisms,” Alfred P. Sloan Workshop on *“Towards a better understanding of the emerging paradox with exposures to indoor microbes: good and bad,”* Kuopio, Finland, September 8-10, 2015.

6. “Prevalence of Antimicrobials in Dust and their Impact on the Indoor Microbiome,” Alfred P. Sloan 4th Conference on the Microbiology of the Built Environment, Boulder, CO, USA, July 15-18, 2015.
5. “Prevalence of Antimicrobials in Dust and their Impact on the Indoor Microbiome,” American Society for Microbiology General Meeting, New Orleans, LA, USA, May 30-June 2, 2015.
4. “Live/dead determination in dust with flow cytometry and PMA,” Workshop on Live/Dead Determination, University of California, Davis, CA, USA May 13-14, 2015.
- *3. “Proteogenomics: Using proteomics to recognize and correct genome errors,” 8th Central and Eastern European Proteomics Conference meets 2nd International Metabolomics Austria, Vienna, Austria, June 30- July 4, 2014.
- *2. “Proteogenomics for the enhanced discovery of bacterial biomarkers,” the North Atlantic Treaty Organization Advance Study Institute on Detection of Chemical, Biological, Radiological and Nuclear Agents for the Prevention of Terrorism, Castelnuovo Berardenga, Italy, May 26- June 1, 2013.
1. “Challenges of Detecting Bioterrorism Agents in Complex Matrices,” the North Atlantic Treaty Organization Advanced Research Workshop on Detection of Biological Agents for the Prevention of Bioterrorism in Homeland Security by Advanced Mass Spectrometric Methods, Spezzano, Italy, June 25-July 2, 2009.

3. CONFERENCE TALKS PRESENTED BY TRAINEES (underline indicates presenter)

11. Sumner, J. T., S. Huttelmaier, A. A. Moghadam, C. Pickens, R. Wunderink, and E. M. Hartmann. “Transitions in lung microbiota landscape associate with distinct patterns of pneumonia progression,” ISME19, Cape Town, South Africa, August 18-23, 2024.
10. Barber, O. W. and E. M. Hartmann. “Does Periodic Disinfectant Exposure on Surfaces Induce Antimicrobial Resistance?” ASM Microbe, Washington, DC, USA, June 8-13, 2022.
9. Barber, O. W. Microbial Advancement Beyond the Lab: How Advocacy Promotes the Field and is Part of Every Career (panel member), ASM Microbe, Washington, DC, USA, June 8-13, 2022.
8. Shen, J., Y. Weng, V. S. Ahluwalia, P. K. Lam, F. Ling, and E. M. Hartmann. “Meta-analysis of the indoor microbiome: where are we now and where should we go?” Healthy Buildings 2021-America, Honolulu, HI, USA, November 9-11, 2021.
7. Barber, O. W. and E. M. Hartmann. “Disinfectant Surface Residual Chemistries and their Relationship with Antimicrobial Resistance,” Healthy Buildings 2021-America, Honolulu, HI, USA, November 9-11, 2021.

6. Barber, O. W. Shark Tank Advocacy Antibiotic Resistance Pitch, World Microbe Forum held by ASM and FEMS, virtual, June 20-24, 2021.
5. Shen, J., A. J. Glawe, Y. Weng Y, A. G. McFarland, V. B. Young, M. K. Hayden, and E. M. Hartmann. “Chlorhexidine Resistance of Environmental Isolates from a Medical Intensive Care Unit,” World Microbe Forum held by ASM and FEMS, virtual, June 20-24, 2021.
4. Blaustein, R. “Looking to tiny life to manage problems caused by the strong stuff from doctors,” “Up Goer Five” science communication event at the American Society for Microbiology Annual Meeting, San Francisco, CA, USA, June 2019.
3. Blaustein, R., P. C. Seed, and E. M. Hartmann. “Bacterial biotransformation of chemotherapeutics may promote intestinal microbiota health. Association for Clinical and Translational Science,” Translational Science 2019 hosted by the National Institutes of Health, Bethesda, MD, USA, March 2019.
2. Ben Maamar, S., A. J. Glawe, T. K. Brown, J.-P. Wang, and E. M. Hartmann. “Insight into antibiotic-resistance gene dissemination in the dust microbiome,” ISME17, Leipzig, Germany, August 12-17, 2018.
1. Hu, J. “Impacts of indoor surface finishes on bacterial viability,” Indoor Air 2018, Philadelphia, PA, USA, July 2018.

J. POSTERS

Underlined authors = graduate or postdoctoral trainee; double underline = undergraduate trainee.

69. Huttelmaier, S., J. T. Sumner, W. Shuai, and E. M. Hartmann. Bacteriophage in household biofilms. Presented at ISME19, Cape Town, South Africa, August 18-23, 2024.
68. Tillema, S. J., M. J. Akel, L. B. Mithal, E. Espinosa. F. Kincaid, A. Aron, T. N. Branche, S. A. Fisher, and **E. M. Hartmann**. Paired Household Dust & Clinical Samples Indicate Relationship Between Benzalkonium Chloride Disinfectant Use and Biological & Environmental Persistence. Presented at Indoor Air, Honolulu, HI, USA, July 7-11, 2024. (Outstanding Student Poster Award, 1st place)
67. Wilson, C. J., W. H. Schirmer, T. Ipoutcha, R. Racharaks, E. A. Ozer, and **E. M. Hartmann**. Efficacy of CRISPRi and CRISPR Cytosine Base Editor for Reducing Biofilm Formation in *Pseudomonas aeruginosa* PA14. Presented at Synthetic Biology: Engineering, Evolution & Design (SEED), Atlanta, GA, USA, June 24-27, 2024.
66. Shuai, W., D. Moustafa, A. A. Moghadam, N. M. Tran, C. Johnson, and **E. M. Hartmann**. Indoor Microorganisms Present Different Responses to Metal-Amended Antimicrobial Textiles. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
65. Barber, O. W., I. Falk, A. A. Moghadam, S. Malik, C. M. Ott, and **E. M. Hartmann**. *Staphylococcus* spp. from the International Space Station Contain Quaternary Ammonium

- Compound Resistance Genes. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
64. Wilson, C. J., W. H. Schirmer, T. Ipoutcha, R. Racharaks, E. A. Ozer, and **E. M. Hartmann**. Efficacy of CRISPRi and CRISPR Cytosine Base Editor for Reducing Biofilm Formation in *Pseudomonas aeruginosa* PA14. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
 63. Sumner, J. T., A. A. Moghadam, S. Huttelmaier, R. G. Wunderink, and **E. M. Hartmann**. Transitions in Lung Microbiota Landscape Associate with Distinct Patterns of Pneumonia Progression. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
 62. Moghadam, A. A., B. Cheung, J. T. Sumner, A. Hauser, and **E. M. Hartmann**. Metagenomic Analysis Shows Culture-Positive Bacterial Pathogens are Present at Low Abundance in Human Lung Microbiome in Clinically Ill Patients and Murine Model of Gastrointestinal Colonization. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
 61. Shuai, W., E. Franck, **E. M. Hartmann**, and T. Crofts. Identifying Antimicrobial Resistance Genes from Environmental Microbiomes with Multiplexed Functional Metagenomics. Presented at ASM Microbe, Atlanta, GA, USA, June 13-17, 2024.
 60. Mithal, L. B., A. Sajwani, A. Aaron, A. N. Kremer, **E. M. Hartmann**, J. Sumner, A. Watson, E. Miller, and M. Arshad. Maternal Colonization, Perinatal Exposure, and Neonatal Acquisition of Resistant Enterobacteriales. Presented at IDWeek, Boston, MA, USA, October 11-15, 2023.
 59. Huttelmaier, S., J. S. Sumner, W. Shuai, M. Gebert, N. Fierer, and **E. M. Hartmann**. Bacteriophage in Household Biofilms. Presented at the Evergreen International Phage Meeting, Olympia, WA, USA, August 6-11, 2023.
 58. Barber, O. W., A. A. Moghadam, S. Malik, C. M. Ott, and **E. M. Hartmann**. Benzalkonium Chloride Resistance in *Staphylococcus* spp. from International Space Station. Presented at the Federation of European Microbiological Societies Congress, Hamburg, Germany, July 12, 2023.
 57. Ipoutcha, T., R. Racharaks, S. Huttelmaier, C. Wilson, E. A. Ozer, and **E. M. Hartmann**. Construction of synthetic *Pseudomonas aeruginosa* tailed phages using yeast platform. Presented at CRISPR Conference 2023, Würzburg, Germany, June 27-July 1, 2023.
 56. Barber, O. W., A. A. Moghadam, S. Malik, C. M. Ott, and **E. M. Hartmann**. Putting it into Perspective: Comparing Antimicrobial Resistance of *Staphylococcus* spp. from the International Space Station to Standard Strains. Presented at the American Society for Microbiology Microbe Conference, Houston, TX, USA, June 17, 2023.

55. Sumner, J. S., C. Pickens, D. Dorman, H. Donnelly, H. Abdala-Valencia, R. Wunderink, A. Misharin, and **E. M. Hartmann**. Identifying microbial determinants that drive outcomes in severe pneumonia. Presented at Cell Symposia: Infection Biology in the Age of the Microbiome, Paris, France, June 7-9, 2023. (*Nature* Poster Prize)
54. Chen, J., O. W. Barber, and **E. M. Hartmann**. Heavy Metal-containing Antimicrobial Materials are Robust to Changes in Humidity. Presented at the Biomedical Engineering Society 2022 Annual Meeting, San Antonio, TX, USA, October 12-15, 2022.
53. Huttelmaier, S., R. Racharaks, M. Farmer, G. F. Wells, and **E. M. Hartmann**. Understanding host-phage interactions of nitrite oxidizing bacteria in a nitrification reactor. Presented at the 2022 AEESP Conference, St. Louis, MO, USA, June 28-30, 2022. (Best student poster)
52. Barber, O. W., A. A. Moghadam, C. M. Ott, and **E. M. Hartmann**. Characterizing Antimicrobial Resistance in *Staphylococcus* spp. Isolated from the International Space Station. Presented at the 2022 AEESP Conference, St. Louis, MO, USA, June 28-30, 2022.
51. Shen, J., Y. Weng, V. S. Ahluwalia, F. Ling, and **E. M. Hartmann**. Meta-analysis of the Indoor Surface Microbiome. Presented at the 2022 AEESP Conference, St. Louis, MO, USA, June 28-30, 2022.
50. Sumner, J. T., H. Donnelly, and **E. M. Hartmann**. Improving sequencing success in bronchoalveolar lavage samples for microbiome study. Presented at ASM Microbe, Washington, DC, USA, June 8-13, 2022.
49. Shen, J., Y. Weng, V. S. Ahluwalia, F. Ling, and **E. M. Hartmann**. Are we ready for a meta-analysis of the indoor surface microbiome? Presented at ASM Microbe, Washington, DC, USA, June 8-13, 2022.
48. Shuai, W., D. Itzhari, Z. Ronen, and **E. M. Hartmann**. Mitigation of antimicrobial resistance during onsite greywater treatment and reuse. Presented at ASM Microbe, Washington, DC, USA, June 8-13, 2022.
47. Shuai, W., D. Itzhari, Z. Ronen, and **E. M. Hartmann**. Metagenomic Profiling of Antimicrobial Resistance in Onsite Greywater Treatment and Reuse. Presented at the Purdue Applied Microbiome Sciences Symposium 2022, West Lafayette, IN, USA, May 9-11, 2022.
46. Shen, J. and **E. M. Hartmann**. Using machine learning approaches to predict required sequencing effort from accessible sample features in shotgun metagenomics. Presented at the Purdue Applied Microbiome Sciences Symposium 2022, West Lafayette, IN, USA, May 9-11, 2022.
45. Racharaks, R., H. Bertucci, W. H. Schirmer, and **E. M. Hartmann**. Engineering a Bio-inspired, CRISPR-based System to Treat Infection in Young Children with Cystic Fibrosis.

Presented at the Association for Clinical and Translational Science 2022, Chicago, IL, USA, April 19-22, 2022.

44. Shimada, T. R., J. Shen, O. W. Barber, and **E. M. Hartmann**. Chlorhexidine Interacts with Disinfectants and Microbes on Indoor Surfaces. Presented at Healthy Buildings 2021-America, online, January 18-20, 2022.
43. Crofts, T. S., A. G. McFarland, and E. M. Hartmann. METa Assembly: A Highly Efficient Functional Metagenomic Library Preparation Method That Enables The Capture Of Antimicrobial Resistance Genes From DNA Limited Samples. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
42. Bertucci, H. K., R. Racharaks, and **E. M. Hartmann**. Preliminary Assessment Of Phage Specificity On A *Pseudomonas Aeruginosa* Biofilm Using Optical Coherence Tomography (OCT) In An Optimized Microfluidic Flow Cell System. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
41. McFarland, A. G., N. Fierer, and **E. M. Hartmann**. Characterizing the Presence, Diversity, and Taxonomic Origin of Mobile Antibiotic Resistance Genes in Showerhead Metagenomes. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
40. Huttelmaier, S. A., J. Sumner, R. Racharaks, M. Farmer, A. G. McFarland, N. Fierer, G. Wells, and **E. M. Hartmann**. Diversity of Bacteriophage in Household Biofilms. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
39. McFarland, A. G., C. Huttenhower, and **E. M. Hartmann**. GeneToRegions: Identification and Binning of Variable Genomic Regions Containing a Seed Gene. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
38. Wang, Y., Y. Yan, K. Thompson, J. Shen, **E. M. Hartmann**, C. Huttenhower. Characterizing Microbial Community Viability with RNA-based High-throughput Sequencing. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
37. Shen, J., A. J. Glawe, Y. Weng, A. G. McFarland, V. B. Young, M. K. Hayden, and **E. M. Hartmann**. Chlorhexidine Resistance Of Environmental Isolates From A Medical Intensive Care Unit. Presented at the World Microbe Forum 2021, online, June 20-24, 2021.
36. Barber, O. W. and **E. M. Hartmann**. Surface residuals of quaternary ammonium compounds can be detected hours after disinfection. Presented at IndoorChem2021, online, May 25, 2021.
35. Blaustein, R. A., P. C. Seed, and **E. M. Hartmann**. Biotransformation of doxorubicin promotes resilience in simplified intestinal microbial communities. Presented at the 2nd Cold Spring Harbor Microbiome meeting, online, October 20 - 23, 2020.

34. Shen, J., A. G. McFarland, R. A. Blaustein, L. J. Rose, A. Perry, M. K. Hayden, V. B. Young, and **E. M. Hartmann**. Improving Methods for Understanding Surface Microbiomes in the Medical Intensive Care Unit: A Focus on Sample Treatments Prior to DNA Sequencing. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
33. Shen, J., T. R. Shimada, and **E. M. Hartmann**. Chlorhexidine on Hospital Surfaces: a Focus on Interactions with Disinfectants and Microbes. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
32. Blaustein, R. A., P. C. Seed, and **E. M. Hartmann**. Biotransformation of Chemotherapeutic to Promote Intestinal Microbiota Health. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
31. Huttelmaier, S. A., R. A. Blaustein, L.-M. Michelitsch, A. J. Glawe, H. Lee, N. Hellgeth, S. Ben Maamar, A. G. McFarland, and **E. M. Hartmann**. Toothbrush Microbiomes Feature A Meeting Ground for Human Oral and Environmental Microbiota. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
30. McFarland, A. G., H. K. Bertucci, E. Littman, J. Shen, C. Huttenhower, and **E. M. Hartmann**. Fab Isozyme Determines High or Low Triclosan Tolerance in Diverse Members of Pseudomonas. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
29. McFarland, A. G., H. K. Bertucci, E. Littman, J. Shen, C. Huttenhower, and **E. M. Hartmann**. Discovery of Mobile Triclosan Tolerance Genes in Pseudomonas Using High-throughput Conserved Gene Synteny Analysis. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
28. Wang, Y., Y. Yan, K. N. Thompson, S. Bae, J. Shen, H. Vlamakis, **E. M. Hartmann**, and C. Huttenhower. Characterizing microbial community viability using propidium monoazide. Presented at the American Society for Microbiology Microbe Online meeting, 2020.
27. Shen, J., A. G. McFarland, R. A. Blaustein, M. K. Hayden, V. B. Young, and **E. M. Hartmann**. Blind Spots in Methods Based on Cultivation and Metagenomic Sequencing for Surface Microbiomes in Medical Intensive Care Unit. Presented at the Decennial 2020: 6th International Conference on Healthcare Associated Infections with the Centers for Disease Control and Prevention and the Society for Healthcare Epidemiology in America, Atlanta, GA, USA, March 26 – 30, 2020 [cancelled due to COVID-19].
26. Blaustein, R., A. G. McFarland, S. Ben Mamar, A. Lopez, S. Castro-Wallace, and **E. M. Hartmann**. Conserved mobile genetic elements in bacteria in the International Space Station carry potential adaptations. Presented at the American Society for Microbiology Annual Meeting, San Francisco, CA, USA, June 20 – 24, 2019.

25. Blaustein, R., P. C. Seed, and **E. M. Hartmann**. Bacterial biotransformation of chemotherapeutics promotes diversity in model intestinal microbial community. Presented at the 2019 Microbiome Symposium, Chicago, IL, USA, April 16, 2019.
24. McFarland, A. G., H. Demir, D. Park, E. Littman, A. J. Glawe, and **E. M. Hartmann**. Employing pangenomics to uncover associations between triclosan tolerance factors and antibiotic resistance in *Pseudomonas*. Presented at the 2019 Microbiome Symposium, Chicago, IL, USA, April 16, 2019.
23. Shen, J., A. G. McFarland, M. K. Hayden, V. I. Young, and **E. M. Hartmann**. Chlorhexidine Resistance in Cultivable Bacteria Isolated from a Medical Intensive Care Unit Environment. Presented at the 2019 Microbiome Symposium, Chicago, IL, USA, April 16, 2019.
22. Blaustein, R., P. C. Seed, and **E. M. Hartmann**. Bacterial biotransformation of chemotherapeutics promotes diversity in model intestinal microbial community. Presented at the Northwestern Feinberg School of Medicine 15th Annual Lewis Landsberg Research Day, Chicago, IL, USA, April 4, 2019.
21. Blaustein, R., P. C. Seed, and **E. M. Hartmann**. Bacterial biotransformation of chemotherapeutics may promote intestinal microbiota health. Presented at the Association for Clinical and Translational Science 2019, Bethesda, MD, USA, March 6 – 9, 2019.
20. Ben Maamar, S., A. J. Glawe, T. K. Brown, J. Wang, and **E. M. Hartmann**. The built environment resistome: potential for indoor dust microbial community for dissemination of antibiotic resistance genes. Presented at the Microbiology of the Built Environment Gordon Research Conference, Biddeford, ME, USA July 15 – 20, 2018.
19. Blaustein, R. A., S. Ben Maamar, A. G. McFarland, A. Fahimipour, and **E. M. Hartmann**. Human-derived content of dust microbiota in athletic facilities reflects building design and operation. Presented at Computational Research Day 2018, Evanston, IL, USA April 10, 2018.
18. Ben Maamar, S., A. J. Glawe, T. K. Brown, J. Wang, and **E. M. Hartmann**. The built environment resistome: potential for indoor dust microbial community for dissemination of antibiotic resistance genes. Presented at Computational Research Day 2018, Evanston, IL, USA April 10, 2018.
17. **Hartmann, E.M.** How to prevent manmade chemicals from adversely affecting the microbial world. Presented at the National Academies of Science third meeting of the Committee on Microbiomes of the Built Environment: From Research to Application, Irvine, CA, USA October 17 – 18, 2016.
16. Betancourt Román, C. M., **E. M. Hartmann**, and J. L. Green. Towards assessing the viability of the indoor microbiome using flow cytometry. Presented at Healthy Buildings America, Boulder, CO, USA July 19 – 22, 2015.

15. Betancourt Román, C. M., **E. M. Hartmann**, and J. L. Green. Towards assessing the viability of the indoor microbiome using flow cytometry. Presented at the Alfred P. Sloan 4th Conference on the Microbiology of the Built Environment, Boulder, CO, USA July 15 – 18, 2015.
14. Siemens, A., **E. M. Hartmann**, C. M. Betancourt Román, M. Fretz, J. Kline, D. Northcutt, G. Z. Brown, B. J. Bohannon, and J. L. Green. The Effect of Different Light Wavelengths on the Dust Microbiome. Presented at the 5th Annual Undergraduate Symposium, Eugene, OR, US, May 14, 2015.
13. Betancourt Román, C. M., **E. M. Hartmann**, B. J. Bohannon, and J. L. Green. Microbiome viability in indoor dust. Presented at the 11th Annual University of Michigan Early Career Scientists Symposium, Ann Arbor, MI, USA, March 28, 2015.
12. **Hartmann, E. M.** and J. Armengaud. Identification of novel bioremediation enzymes using proteogenomics. Presented at the Society of Environmental Toxicology and Chemistry Europe 24th Annual Meeting, May 11 – 15, 2014.
11. **Hartmann, E. M.** and J. Armengaud. Dioxin and dibenzofuran transformation by *Sphingomonas wittichii* RW1: new insights from the proteogenomics lens. Presented at the 5th Congress of European Microbiologists, Leipzig, Germany, July 21 – 25, 2013.
10. **Hartmann, E. M.**, M. L. Fisher, and R. U. Halden. Site-Directed Mutagenesis of the Dioxin Dioxygenase to Improve Activity Towards 2,3,7,8-Tetrachloro-Dibenzo-p-Dioxin. Presented at the Japan Society for the Promotion of Science Summer Program Poster Session, Hayama, Japan, June 17, 2011.
9. **Hartmann, E. M.** and R. U. Halden. Use of AQUA and MALDI-TOF/TOF MS to Quantify a Dioxin-Degrading Enzyme. Presented at the Science Foundation Arizona Grand Challenges Summit, Flagstaff, AZ, May 22 – 24, 2011.
8. Doudrick, K. D., Venkatesan, A. K., Jones, D. B., Kalinowski, T., **Hartmann, E. M.**, Halden, R. U. Assessment of the Contribution of Triclosan to Dioxin Emissions from Sludge Incineration in the U.S. Using a Mathematical Model. Presented at the Water Environment Federation: Industrial Wastewater Seminar 2011. Bally's Hotel Atlantic City, NJ, May 9 – 10, 2011.
7. **Hartmann, E. M.** and R. U. Halden. Use of AQUA and MALDI-TOF/TOF MS to Quantify a Dioxin-Degrading Enzyme. Presented at the American Society for Mass Spectrometry 23rd Sanibel Conference, St. Pete Beach, FL, January 21 – 24, 2011.
6. **Hartmann, E. M.** and R. U. Halden. Concept for a Brain Tissue Screening Procedure to Ensure Prion Exclusion. Presented at the 12th Annual Arizona Alzheimer's Consortium Conference, Glendale, AZ, May 21, 2010.

5. **Hartmann, E. M.** and R. U. Halden. Discovery and Detection of Biomarkers of Petroleum-Degrading Bacteria. Presented at the Science Foundation Arizona Grand Challenges Conference, Phoenix, AZ, April 12 – 13, 2010.
4. **Hartmann, E. M.**, K. McClellan, and R. U. Halden. Toward Proteomics-Informed Optimization of *In Situ* Bioremediation. Presented at the National Institute of Environmental Health Sciences Superfund Basic Research and Training Program, Pacific Grove, CA, December 7 – 9, 2008.
3. Maldarelli, G. A., **E. M. Hartmann**, P. J. Cummings, R. Horner, K. M. Obom, R. Shingles, R. Pearlman. Virtual Lab Demonstrations Improve Students' Mastery of Basic Biology Laboratory Techniques, American Society for Microbiology General Meeting, Boston, MA, June 1 – 5, 2008.
2. **Hartmann, E. M.**, D. R. Colquhoun, and R. U. Halden. Identification of Pollutant-Degrading Bacteria Using Peptide Mass Fingerprinting and Mass Spectrometry. Presented at The American Chemical Society Mid-Atlantic Regional Meeting, Collegeville, PA, May 16 – 18, 2007.
1. Colquhoun, D. R., T.R. Miller, **E. M. Hartmann**, and R. U. Halden. Preliminary Characterization Of Pollutant Degrading Microbes Using Matrix Assisted Laser Desorption Ionization Time-Of-Flight Mass Spectrometry. Presented at The Annual Meeting Of The American Society For Microbiology, Orlando, FL, May 20 – 25, 2006.

K. TEACHING

1. COURSES TAUGHT

Course Number	Course Title	Quarter	Enrollment
CIV ENV 495	Molecular Microbiology	Spring 2017	7
CIV ENV 295	Biological and Ecological Principles	Fall 2017	10
CIV ENV 495	Molecular Microbiology	Spring 2018	5
CIV ENV 202	Biological and Ecological Principles	Fall 2018	24
CIV ENV 370	Emerging Contaminants	Spring 2019	23
CIV ENV 202	Biological and Ecological Principles	Fall 2019	39
CIV ENV 447	Molecular Microbiology	Winter 2020	13
CIV ENV 370	Emerging Contaminants	Spring 2020*	15
CIV ENV 202	Biological and Ecological Principles	Fall 2020*	83
CIV ENV 447	Molecular Microbiology	Winter 2021*	21
CIV ENV 370	Emerging Contaminants	Spring 2021*	21
CIV ENV 202	Biological and Ecological Principles	Fall 2021	55
CIV ENV 447	Molecular Microbiology	Winter 2022	8
CIV ENV 370	Emerging Contaminants	Spring 2022	30
CIV ENV 202	Biological and Ecological Principles	Fall 2022	41
CIV ENV 370	Emerging Contaminants	Spring 2023	21
CIV ENV 202	Biological and Ecological Principles	Fall 2023	42
CIV ENV 370	Emerging Contaminants	Winter 2024	16
CIV ENV 395	Indoor Air Quality	Spring 2024	18
CIV ENV 202	Biological and Ecological Principles	Fall 2024	43

*course taught remotely

2. PROFESSIONAL DEVELOPMENT

- Faculty Mentoring Training program, Northwestern University Office of the Provost (2024-2025)
- Culturally Aware Mentor (CAM) Workshop, National Research Mentoring Network (2022)
- Perspectives in DEI Engineering Education Biomedical Engineering DEI committee, the Chemical and Biological Engineering Anti-Racism Diversity, Equity, and Inclusion (ARDEI) committee, and the Materials Science Alliance for an Inclusive Community (MatSAIC), Northwestern University (2022)
- Let's Talk Diversity: Addressing the Needs of Underrepresented Graduate Students through Inclusive Excellence Mentoring Practices, The Graduate School, Northwestern University (2021)
- Trainee Mental Health and Wellness Workshop, NIH Office of Intramural Training and Education (2020)
- Practicum in Foundations of Online Teaching, Northwestern University Searle Center for Advancing Teaching and Learning (2020)
- Workshop: Responding to Students in Distress, Northwestern University Office of the Provost (2019)
- Searle Teaching Fellowship, Northwestern University Searle Center for Advancing Teaching and Learning (2017-2018)

3. GUEST LECTURES

- "Environmental Health," Deconstructing SynBio (CHEM ENG 378), Northwestern University, Evanston, IL, USA, January 11, 2024.
- "How anthropogenic chemicals are altering the microbial world," LabRoots webinar on Microbiology, <http://labroots.com/virtual-event/id/1>, September 2 – 3, 2015.
- "Proteomics," Genomic Data Manipulation (BIO 508), Harvard School of Public Health, Boston, MA, USA, April 13, 2015.
- "Proteomics," Introduction to Systems Biology (BI410/510), University of Oregon, Eugene, OR, USA, November 4, 2014.
- "Genetic Engineering," Sustainable Environmental Biotechnologies (CEE 494/598), Arizona State University, Tempe, AZ, USA, November 29, 2011.
- "Biological Applications of Mass Spectrometry and Related Data Analysis," High Speed Computing (MAE 598/APM 525), Arizona State University, Tempe, AZ, USA, October 12, 2010.
- "Proteomics and Mass Spectrometry: Techniques for Studying Bioremediation," Environmental Engineering Analytical Laboratory (CEE 598), Arizona State University, Tempe, AZ, USA, October 29, 2008.

L. SERVICE & PEER REVIEW

1. PROFESSIONAL SOCIETY MEMBERSHIP & SERVICE

- National Academy of Engineering
 - Organizing committee, The Grainger Foundation Frontiers of Engineering 2024 symposium
- Microbiology of the Built Environment Gordon Research Conference
 - Vice-chair, 2025 meeting

- American Society for Microbiology
 - Contributing Member
 - Public and Scientific Affairs Committee, 2022 – present
 - Search committee member for Applied and Environmental Microbiology Scientific Chair, 2025
 - Microbiome Stakeholders advocacy group, 2019
 - Microbiome Communication Taskforce, 2015–2016
- International Society for Indoor Air Quality and Climate
 - Individual Member
 - Organizing committee, Healthy Buildings 2021-America
- American Chemical Society
 - Regular Member

2. PEER REVIEW & EDITORIAL SERVICE

- Associate Editor, *Microbiome* (2022 – present)
- Associate Editor, *Environmental Microbiome* (2022 – present)
- Associate Editor, *Frontiers in Microbiology*, *Microbiotechnology* (2022 – present)
- Guest editor, *Frontiers in Microbiomes*, Research Topic on “Interactions Between Natural and Built Environment Microbiomes in a One Health Context”
- Guest editor, *Microorganisms*, Special Issue on “Microbiota and inorganic pollutants in the environment”
- Publication review: *Nature Methods*, *Nature Microbiology*, *Nature Communications*, *Science Advances*, *PNAS*, *Trends in Immunology*, *Genome Research*, *Communications Biology*, *Environmental Health Perspectives*, *Trends in Microbiology*, *Cell Reports*, *Environment International*, *Gut Microbes*, *eLife*, *Critical Reviews in Environmental Science and Technology*, *npj Biofilms and Microbiomes*, *Environmental Research*, *mSystems*, *The FASEB Journal*, *Environmental Science & Technology*, *Proceedings of the Royal Society B*, *ES&T Letters*, *Journal of Proteome Research*, *Scientific Reports*, *mBio*, *mSphere*, *Environmental Microbiology*, *Genome Medicine*, *Indoor Air*, *Building and Environment*, *Frontiers in Microbiology*, *BMC Genomics*, *Proteomics*, *Analytical and Bioanalytical Chemistry*, *Applied & Environmental Microbiology*, *PLOS ONE*, *Environmental Science and Pollution Research*, *Pediatric Research*, *Marine Pollution Bulletin*, *BMC Bioinformatics*, *International Journal of Molecular Sciences*, *PeerJ*, *American Journal of Infection Control*, *Environmental Monitoring & Assessment*, *Communications Earth & Environment*
- Proposal review: National Institutes of Health (NIAID), NSF (Division of Environmental Engineering; Division of Environmental Biology; Division of Technology, Innovation and Partnerships), Alfred P. Sloan Foundation, NASA, Medical Research Council UK, Research Grants Council of Hong Kong, Austrian Science Fund, Vienna Science and Technology Fund, Hudson River Foundation for Science and Environmental Research, German-Israeli Foundation for Scientific Research and Development, MIT Press, Oak Ridge Associated Universities Ralph E. Powe Junior Faculty Award, Institut Pasteur, US-Israel Agricultural Research & Development Fund, Natural Sciences and Engineering Research Council of Canada, Schmidt Futures

3. DEPARTMENTAL SERVICE

- Graduate Student Recruitment Committee, 2023–present
- Freshman outreach
 - “Preparing for the Next Pandemic,” Introduction to Civil and Environmental Engineering (CIV ENV 101), Northwestern University, Evanston, IL, USA, October 4, 2023.
 - “Preparing for the Next Pandemic,” Introduction to Civil and Environmental Engineering (CIV ENV 101), Northwestern University, Evanston, IL, USA, October 12, 2022.
 - “Preparing for the Next Pandemic,” Introduction to Civil and Environmental Engineering (CIV ENV 195), Northwestern University, Evanston, IL, USA, October 21, 2020.
 - “Climate Change Indoors and Out,” Introduction to Civil and Environmental Engineering (CIV ENV 195), Northwestern University, Evanston, IL, USA, October 30, 2019.
 - “Preventing Pandemics in Megacities,” Introduction to Civil and Environmental Engineering (CIV ENV 195), Northwestern University, Evanston, IL, USA, October 17, 2018.
 - “SpaceX Settler: the Food-Water-Energy Nexus on Earth and Mars,” Introduction to Civil and Environmental Engineering (CIV ENV 195), Northwestern University, Evanston, IL, USA, October 18, 2017. Presented with Prof. George Wells.
 - “SpaceX Settler: the Food-Water-Energy Nexus on Earth and Mars,” Introduction to Civil and Environmental Engineering (CIV ENV 195), Northwestern University, Evanston, IL, USA, October 26, 2016. Presented with Prof. George Wells.
- Undergraduate advising
 - Class of 2023, 14 students
 - Class of 2020, 12 students
- Murphy Scholar mentor
 - Margaret Grace Eder (2020)

4. INSTITUTIONAL SERVICE

- Equitable TRanslational science to Accelerate Impact of New innovations (E-TRAIN) T32 Internal Advisory Committee member, 2024–present
- The Center for Synthetic Biology DeFeo Family Undergraduate Research Fellowship in Synthetic Biology inaugural “cohort parent,” 2024-2026
- Ryan Acceleration Fund Faculty Review Panel, 2023
- Institutional Biosafety Committee, 2022–present
- Undergraduate Research Assistant Program Committee, 2022–present

5. OTHER

- Scientific Advisory Committee Member: *The Com: The community of microbes art and science pop-up exhibit* by Amanda Phingbodhipakkiya and Anne Madden
- Contributor to the International Microbiology Literacy Initiative: the Microbes in Your Home
<https://imili.org/pdf/The%20microbes%20in%20our%20Home.pdf>

M. PRESS & MEDIA

- Authored popular media pieces
 - [“We have a cleaning problem,”](#) published in *The Chicago Sun-Times*
 - [“Disinfectant misuse poisons our bodies and the environment,”](#) published in *The Hill*
 - [“Many products contain antimicrobial chemicals banned by the FDA,”](#) published in *The Conversation*
 - [“Scientists at work: studying indoor microbial ecology means sampling in public restrooms,”](#) published in *The Conversation*
- Select media coverage
 - [“Bacteriophages Lurk In Your Bathroom, But Don’t Worry,”](#) aired on Science Friday
 - [“Viruses found on toothbrushes are ‘unlike anything we’ve ever seen before,’”](#) published in *Gizmodo*
 - [“The next lifesaving antibiotic might be a virus on your toothbrush,”](#) published in *Popular Science*
 - [“Tons of viruses life in your toothbrush and showerhead,”](#) published in *Time Magazine*
 - [“Your showerhead and toothbrush are teeming with viruses,”](#) published on CNN
 - [“Good news: space bacteria \(probably\) aren’t evolving to destroy us,”](#) published in *Popular Science*
 - [“Your dust bunnies are alive but fighting them with antibacterials is a bad idea,”](#) aired on the CBS’s *Quirks & Quarks*
 - [“Your gym mats may be breeding antibiotic-resistant germs,”](#) published by PBS NewsHour
 - [“Chemicals in indoor dust tied to antibiotic resistance,”](#) published by Reuters
- Select cited interviews
 - [“A Virus Found in Wastewater Beat Back a Woman’s ‘Zombie’ Bacteria,”](#) published in *WIRED*
 - [“How to Reopen Offices Safely,”](#) published in *The New York Times*
 - [“Subway Swabbers Find a Microbe Jungle and Thousands of New Species,”](#) published in *The New York Times*
 - [“Antimicrobial paint can kill bacteria on your walls. But you probably don’t need it to,”](#) published in *The Washington Post*
 - [“Your Home’s Microbiome, Revealed,”](#) published in *Popular Science*
 - [“Triclosan could be really harmful to your gut, and it’s probably in your toothpaste,”](#) published in *The LA Times*

May 2025

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Business Phone: 312-503-6470
Cell 773-620-1255
Email: n-kandula@northwestern.edu

EDUCATION

1993	Bryn Mawr College, Bryn Mawr, PA	B.A. Religion
1998	Tufts University, Boston, MA	M.D. Medicine
1998	Tufts University, Boston, MA	M.P.H. Master of Public Health

TRAINING

1998-2001 Internal Medicine Internship and Residency, Primary Care Program,
New York University/Bellevue Hospital, New York, NY
2001-2004 Robert Wood Johnson Foundation Clinical Scholar,
University of Chicago, Chicago, IL

LICENSURE/CERTIFICATION

2001	New York Medical License
2001	Diplomate, American Board of Internal Medicine
2003	Illinois Medical License
2011	Maintenance of certification, American Board of Internal Medicine

ACADEMIC APPOINTMENTS

2020-present	Tenured Professor of Medicine, Department of Medicine, Feinberg School of Medicine, Northwestern University.
2018-2021	Co-Director, Center for Community Health, Institute for Public Health and Medicine, Feinberg School of Medicine, Northwestern University.
2016-present	Secondary appointments in Department of Preventive Medicine and Weinberg College of Arts and Sciences, Asian American Studies
2015-2020	Tenured Associate Professor, Department of Medicine, Feinberg School of Medicine, Northwestern University.
2004-2014	Assistant Professor, Department of Medicine, Feinberg School of Medicine, Northwestern University

HOSPITAL APPOINTMENTS

2004-present	Medical Staff Physician, Department of Medicine, Northwestern Memorial Hospital
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OTHER EMPLOYMENT

- 1997-1998 Research Associate, Save the Children Foundation, UK.
 Dhaka, Bangladesh
- 2003-2004 Consultant, Illinois Department of Public Health
- 2013-2015 Consultant, Rutgers-Robert Wood Johnson Medical School Rutgers-
 The State University of New Jersey
- 2015-2016 Co-Director for Patient and Physician Engagement in the American
 Medical Association's Improving Health Outcomes Initiative

HONORS AND AWARDS

A. Elected Society Memberships

- 2004 Asian American Community Leadership Program, Asian Americans for
 Advancing Justice, Chicago
- 2009 Distinguished Fellow for the NIH OBSSR Summer Institute
- 2012 "Public Voices Fellow", Public Voices Thought Leadership Fellowship Program
- 2015 Emerging Leader for the World Heart Federation Emerging Leaders Program
- 2018 Academic Leadership Program, Big Ten Academic Alliance

B. International/National/Regional Awards

- 2005 American Heart Association Poster Competition Winner: Population Sciences
- 2005 Finalist, Milton W. Hamolsky Junior Faculty Award, Society of General Internal
 Medicine
- 2009 Winner of the American Public Health Association's Public Health Education
 Health Promotion Materials Contest
- 2013 Alliance for Research in Chicagoland Communities Community-Engaged
 Research Partnership Award
- 2023 Public Health Partners in Excellence Award, the Village of Skokie, IL.

C. University Honors and Awards

- 1993 *Magna cum laude*, Bryn Mawr College
- 1993 Departmental high honors in religion, Haverford College
- 1993 Gest Religion Prize for Senior Thesis, Bryn Mawr and Haverford Colleges
- 2023 Mentor of the Year, Department of Medicine, Northwestern University, Feinberg
 School of Medicine

INSTITUTIONAL SERVICE

A. University

- 2016-2019 Northwestern University Provost's Advisory Council on Women Faculty
- 2021-present Faculty Appeals Panel, Northwestern University
- 2023-present NURTURE Institutional Transformation Committee, Northwestern
 University

B. School

- 2021 Dean's Advisory Group on Strengthening Community Engagement
2016-2024 Northwestern University, Feinberg School of Medicine Diversity and Inclusion Council
2018-2021 Co-director, Center for Community Health, Institute for Public Health and Medicine, Northwestern University, Feinberg School of Medicine

COMMUNITY / PUBLIC SERVICE

- 2019-present Community health talks for South Asian American Policy Research Institute
2018-19 Skokie Public Library Community Health Talks Series
2019 CJE Academy Health Talks
2021 Skokie School District 69 Executive Advisory Board Facilitator

PARTICIPATION IN PROFESSIONAL SOCIETIES AND EXTRAMURAL ORGANIZATIONS**A. Professional Society Memberships**

- Society of General Internal Medicine
American Public Health Association
American Heart Association

B. Leadership and Service

- 2004-2013 Board Member, Asian Health Coalition of Illinois
2005-2011 National Advisory Committee for the Robert Wood Johnson Foundation's Local Funding Partners Program
2010 Chair of Scientific Research Abstracts Committee for Society of General Internal Medicine's Midwest Meeting
2013 Steering Committee, South Asian Health Conference at Memorial Sloan Kettering Cancer Center, New York, New York. September 20, 2013.
2016-17 Abstract Reviewer, American Diabetes Association.
2016-present Ad hoc reviewer, National Institutes of Health Grant Review committees
2019-present Member, American Heart Association's Lifestyle Obesity Committee of the Council on Lifestyle and Cardiometabolic Health
2018-present Chair, Patient Centered Outcomes Research Institute, Merit Review Panel
2022-present Associate Editor, *Diabetes Care*
2023-present National Council of Asian Pacific Islander Physicians, Board Member
2023-2025 Vice Chair, Epidemiology Implementation Science Committee, American Heart Association
2025- present Chair, Epidemiology Implementation Science Committee,

American Heart Association

GRANT AWARDS

Current Grants:

1 R01 CA242520

National Cancer Institute

A Multilevel Physical Activity Intervention for South Asian Women and Girls

Role: PI

K24 HL155897

National Heart, Lung, and Blood Institute

Mentoring in community engaged implementation research to reduce cardiovascular disparities

Role: PI

R01 MD016071

National Institute of Minority Health and Disparities

06/01/2021 - 03/31/2026

Understanding health disparities in Pakistani, Bangladeshi and Asian Indian immigrants: the role of socio-cultural context, acculturation and resilience resources

Role: mPI (Kandula/Kanaya/Islam)

R01HL093009

National Heart, Lung, and Blood Institute (subcontract from UCSF)

Mediators of Atherosclerosis in South Asians Living in America

Role: Consortium PI

K24 HL155897 Admin Supplement

National Heart, Lung, and Blood Institute

Administrative Supplement on the Moderating Role of Acculturation in a Culturally Adapted Physical Activity Intervention for South Asian Women and Girls

Role: PI

3R01CA242520-05S1

Administrative Supplement for A Multilevel Physical Activity Intervention for South Asian Women and Girls

Role: PI

1R01HL144708

National Heart, Lung, and Blood Institute

Transforming Hypertension Control in Nigeria

Role: Co-I

R18DK123375

National Institute of Diabetes and Digestive and Kidney Diseases

Behavioral Nudges for Diabetes Prevention (BEGIN) Trial in Primary Care

Role: Co-I

UG3 HL154297
National Heart, Lung, and Blood Institute
Community Intervention to Reduce CardiovascuLar Disease in Chicago (CIRCL-Chicago)
Role: Co-I

OTA-000000506
National Heart, Lung, and Blood Institute
Collaborative Cohort of Cohorts for COVID Research (C4R)
Role: Co-I

2P30DK092949-11
National Institute of Diabetes and Digestive and Kidney Diseases
Chicago Center for Diabetes Translation Research
Role: Co-I and co-lead of Engagement Core

Past Grants:

American Cancer Society Research Scholar Grant
CPHPS-107922
A Multilevel Analysis of Cancer-Related Risk Factors in Asian Americans
Role: Co-Investigator

The California Endowment
CE20043098
Improving Data Collection of Patient's Race, Ethnicity, and Language in California
PI: Baker
Role: Co-Investigator

National Heart, Lung, and Blood Institute
5 K23HL84177
Culture-Specific, Multimedia Cardiovascular Disease Education for Asian Indians
Role: PI

National Heart, Lung, and Blood Institute (subcontract from UCSF)
R01HL093009
Mediators of Atherosclerosis in South Asians Living in America
Role: Consortium PI

National Heart, Lung, and Blood Institute
R01HL120725
Social and Cultural Influences on Cardiovascular Risks in South Asians
Role: PI

Northwestern University, Center for Healthcare Equity
South Asian Activity Monitoring Pilot Using Smartphones
Role: PI

Northwestern University Seed Grant
Agreement 8/24/10

Finding Solutions to Physical Inactivity in Chicago's South Asian Community
Role: PI

National Heart, Lung, and Blood Institute
R21HL113743
Translating a Heart Disease Lifestyle Intervention into the Community
Role: PI

Chicago Center for Diabetes Translation Research: Pilot and Feasibility studies grant
P30DK092949
Patients' and Providers' Perspectives on Metformin for Diabetes Prevention
Role: PI

PCORI
Community Engagement for Early Recognition and Immediate Action in Stroke
PI: Prabhakaran
Role: Co-I

National Institute of Diabetes and Digestive and Kidney Diseases
R56DK099680
Community-Clinic Partnership to Promote Physical Activity in South Asian Women
Role: PI

R01HL127491
Measurement error correction and sensitivity analysis in longitudinal dietary intervention studies using an external validation study
PI: Siddique
Role: Co-I

National Institute of Diabetes and Digestive and Kidney Diseases
1R34DK113541
Diabetes Risk Education and Communication Trial (DiRECT) for Primary Care Patients with Prediabetes
PI: O'Brien
Role: Co-I

National Heart, Lung, and Blood Institute
1R01HL132978
Community Translation of the South Asian Healthy Lifestyle Intervention
Role: PI

1R61HL139852/ R33 HL139852
National Heart, Lung, and Blood Institute
A Double-blind Randomized Controlled Trial to Assess the Efficacy and Safety of a Quadruple Ultra-low-dose Treatment for Hypertension (QUARTET USA)
Role: Co-I

R18 DK110741

National Institute of Diabetes and Digestive and Kidney Diseases
Health and Economic Impacts of Coverage Requirements and Health System-Community
Coordination for Diabetes Prevention
Role: Co-I

NICHHD P2CHD101899
Center for Smart Use of Technology to Assess Real-world Outcomes (C-STAR)
Role: Co-I, Lead of Community and Implementation Core

INVITED LECTURES

International

February 2013 “Community-engaged diabetes prevention interventions,” at the workshop on Innovative Diabetes Prevention and Management Strategies. Workshop sponsored by the National Institutes of Diabetes and Digestive and Kidney Diseases and Indian Council for Medical Research. Delhi, India.

February 2013 “Risk factors for cardiovascular disease in U.S. South Asians: Baseline results from the MASALA study cohort,” at the Center for Cardiometabolic Risk Reduction in South Asians. Delhi, India.

January 2014 “Culture and Cardiovascular Disease,” University of Chicago Delhi Center. Delhi, India.

June 2019 “Community Translation of Evidence-Based Interventions for Health Equity,” University of Abuja, Nigeria.

November 2021 “Community Stakeholder Engagement in Translational Cardiovascular Research: Introduction to Concepts and Methods,” Cardiovascular Research Training in Nigeria (CeRTIN), NIH Fogarty Center D43. University of Abuja, Nigeria.

National

October 2010 “Interfacing Health Literacy with Selected Initiatives in Culturally Competent Health Care, Cardiovascular Health Disparities, and Provider/Consumer Health Education.” Addressing Health Disparities and Health Literacy Challenges in the South Asian Community. Princeton. NJ.

November 2013 “Identity, culture, and cardiovascular disease prevention in the South Asian Diaspora.” Rutgers Robert Wood Johnson Medical School (RWJMS), New Jersey.

June 2019 “Diabetes and Cardiovascular Disease in South Asians in the United States,” American Diabetes Association 79th Scientific Sessions Symposium, *Diabetes in India and the South Asian Diaspora—The Tsunami Is Here*.

February 2021 “A Multilevel Physical Activity Intervention for South Mothers and Girls,” National Institute of Minority Health and Disparities, *Immigrant Health Grantee Symposium*.

March 2021 “Social Neighborhoods, social networks, and social support,” National Heart,

Lung, and Blood Institute (NHLBI) workshop, *Identifying Research Opportunities for Asian American, Native Hawaiian, and Pacific Islander Health*.

October 2022 “Patient-Centered and Participatory Research Methods in the South Asian Healthy Lifestyle Intervention (SAHELI) Trial,” National Heart, Lung, and Blood Institute (NHLBI) workshop, *Advancing Interventions for Adult Obesity to Promote Health Equity: State of the Science and Research Opportunities*.

March 2023 “Community-Engaged Approaches for Equitable Representation in Research,” National Institute on Minority Health and Health Disparities (NIMHD), *Workshop on Inclusive Participation in Clinical Research*.

September 2023. “Advancing Health Equity Through Culture-Centered Dietary Interventions to Address Chronic Diseases in South Asians.” National Heart, Lung, and Blood Institute workshop on Advancing Health Equity Through Culture-Centered Dietary Interventions to Address Chronic Diseases.

October 2023 “Multisector Community Engagement to Improve Cardiovascular Health Among South Asian Immigrants,” for Enhancing Implementation of Guidelines and Evidence-based Care in Clinical and Community Settings (ENGAGE) Workshop”, National Heart, Lung, and Blood Institute.

November 2023 The Relationship Between Body Weight, Adiposity, and Cardiovascular Risk Among South Asian Americans. National Heart, Lung, and Blood Institute, Obesity, Nutrition, and Physical Activity Seminar.

October 2024 “Implementation Science Unveiled: What is it and how you can use it to improve Cardiovascular Health.” American Heart Association Webinar, moderator.

June 2025 “Social Determinants of Health Interventions,” Panel on ADA Diabetes Care Symposium—How Do We Fix a Broken Health Care System?

Local

March 2018. “Know your Heart Disease Risk Score.” Skokie Public Library.

May 2018 “Diabetes in South Asians.” 13th Annual Chicago Diabetes Day, University of Chicago.

July 2018 “Revisiting the New ACC/AHA Blood Pressure Guidelines,” Lunch and Learn CME, Northwestern Medicine.

September 2018 “Cardiovascular Disease Risk in South Asians: What Clinicians Should Know.” Grand Rounds, NorthShore Health Systems.

November 2018. “Shaking the Salt Habit.” Skokie Public Library.

December 2018 “South Asian American Community Health Forum.” South Asian American Policy Research Institute.

December 2018 “Public Charge Rule and Immigrant Health.” Medicine for Migration National Week of Advocacy, Northwestern University, Feinberg School of Medicine.

May 2019 “Mediators of Atherosclerosis in South Asians Living in America Study.” Grand Rounds, Swedish Covenant Hospital.

May 2019 “Holistic Cardiovascular Health.” CJE Senior Academy.

November 2019 “Community-engaged Research on South Asian Health.” South Asian Trailblazers in Medicine, Loyola University Medical School Conference.

November 2019. “South Asians Active Together (SAATH): A Multilevel Physical Activity Intervention for South Asian Women and Girls.” Illinois Alliance to Prevent Obesity (IAPO) annual meeting.

April 2021. “The South Asian Healthy Lifestyle Initiative: Transformative Community Engagement.” Interdisciplinary Domain Dialogue. Office of the Provost and the Office of Administration and Planning, Northwestern University.

January 2023. “Investigating the Multilevel Determinants of Cardiovascular Health in South Asian Americans.” Bowman Society Lecture, the University of Chicago.

April 2023. “A Conversation: The Intersection of Immigration Status, Health, and Healthcare Access.” National Library of Medicine Traveling Exhibition: Outside/Inside Migration, Immigration, and Health Care in the United States. Northwestern University.

March 2024. “Leading with the Power of Community.” Women in Medicine Conference, Northwestern University Feinberg School of Medicine.

PUBLICATIONS

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C. Books and Book Chapters

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EDUCATION

Ph.D. in Chemical Engineering Northwestern University	2018
B.S. in Chemical Engineering , Concentration in Biotechnology, with Honors The University of Texas at Austin	2013
B.S. in Biology , Concentration in Cell & Molecular Biology, with High Honors The University of Texas at Austin	2013

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Director of Research Center for Synthetic Biology, Northwestern University	Jul 2022 – Aug 2024 Evanston, IL
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PUBLICATIONS

h-index = 23 (4,134 citations as of May 2025) Google Scholar: <https://bit.ly/2a4b2jV>

† represents equal contributions; * represents corresponding author if not last author

Peer-Reviewed Journal Articles

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22. Warfel, K. F., Williams, A., Wong, D. A., Sobol, S. E., Desai, P., Li, J., Chang, Y.-F., DeLisa, M. P., **Karim, A. S.** & Jewett, M. C. A low-cost, thermostable, cell-free protein synthesis platform for on-demand production of conjugate vaccines. *ACS synthetic biology* **12**, 95–107 (2022).
21. Bogart, J. W., Cabezas, M. D., Vögeli, B., Wong, D. A., **Karim, A. S.** & Jewett, M. C. Cell-free exploration of the natural product chemical space. *ChemBioChem* **22**, 84–91 (2021).
20. Meyer, C., Nakamura, Y., Rasor, B. J., **Karim, A. S.**, Jewett, M. C. & Tan, C. Analysis of the innovation trend in cell-free synthetic biology. *Life* **11**, 551 (2021).
19. Rasor, B. J., Vögeli, B., Landwehr, G. M., Bogart, J. W., **Karim, A. S.** & Jewett, M. C. Toward sustainable, cell-free biomanufacturing. *Current Opinion in Biotechnology* **69**, 136–144 (2021).
18. Grubbe, W. S., Rasor, B. J., Krüger, A., Jewett*, M. C. & **Karim***, **A. S.** Cell-free styrene biosynthesis at high titers. *Metabolic Engineering* **61**, 89–95 (2020).

Peer-Reviewed Journal Articles (during training)

17. Dudley, Q. M., **Karim, A. S.**, Nash, C. J. & Jewett, M. C. In vitro prototyping of limonene biosynthesis using cell-free protein synthesis. *Metabolic Engineering* **61**, 251–260 (2020).
16. **Karim, A. S.**, Dudley, Q. M., Juminaga, A., Yuan, Y., Crowe, S. A., Heggstad, J. T., Abdalla, T., Grubbe, W., Rasor, B., Coar, D., *et al.* In vitro prototyping and rapid optimization of biosynthetic enzymes for cell design. *Nature Chemical Biology* **16**, 912–919 (2020).
15. **Karim, A. S.**, Liew, F., Garg, S., Vögeli, B., Rasor, B. J., Gonnot, A., Pavan, M., Juminaga, A., Simpson, S. D., Köpke, M., *et al.* Modular cell-free expression plasmids to accelerate biological design in cells. *Synthetic Biology* **5**, ysaa019 (2020).
14. **Karim, A. S.**, Rasor, B. J. & Jewett, M. C. Enhancing control of cell-free metabolism through pH modulation. *Synthetic Biology* **5**, ysz027 (2020).
13. Silverman, A. D., **Karim, A. S.** & Jewett, M. C. Cell-free gene expression: an expanded repertoire of applications. *Nature Reviews Genetics* **21**, 151–170 (2020).
12. Zhuang, L., Huang, S., Liu, W.-Q., **Karim, A. S.**, Jewett, M. C. & Li, J. Total in vitro biosynthesis of the nonribosomal macrolactone peptide valinomycin. *Metabolic Engineering* **60**, 37–44 (2020).
11. Caschera[†], F., **Karim[†], A. S.**, Gazzola, G., d'Aquino, A. E., Packard, N. H. & Jewett, M. C. High-throughput optimization cycle of a cell-free ribosome assembly and protein synthesis system. *ACS synthetic biology* **7**, 2841–2853 (2018).
10. Casini, A., Chang, F.-Y., Eluere, R., King, A. M., Young, E. M., Dudley, Q. M., **Karim, A.**, Pratt, K., Bristol, C., Forget, A., *et al.* A pressure test to make 10 molecules in 90 days: external evaluation of methods to engineer biology. *Journal of the American Chemical Society* **140**, 4302–4316 (2018).
9. **Karim, A. S.**, Heggstad, J. T., Crowe, S. A. & Jewett, M. C. Controlling cell-free metabolism through physiochemical perturbations. *Metabolic engineering* **45**, 86–94 (2018).
8. **Karim, A. S.** & Jewett, M. C. Cell-free synthetic biology for pathway prototyping. *Methods in enzymology* **608**, 31–57 (2018).
7. **Karim, A. S.**, Dudley, Q. M. & Jewett, M. C. Cell-free synthetic systems for metabolic engineering and biosynthetic pathway prototyping. *Industrial Biotechnology: Microorganisms* **1**, 125–148 (2017).
6. **Karim, A. S.** & Jewett, M. C. A cell-free framework for rapid biosynthetic pathway prototyping and enzyme discovery. *Metabolic engineering* **36**, 116–126 (2016).
5. Dudley, Q. M., **Karim, A. S.** & Jewett, M. C. Cell-free metabolic engineering: biomanufacturing beyond the cell. *Biotechnology journal* **10**, 69–82 (2015).
4. Curran, K. A., Crook, N. C., **Karim, A. S.**, Gupta, A., Wagman, A. M. & Alper, H. S. Design of synthetic yeast promoters via tuning of nucleosome architecture. *Nature communications* **5**, 4002 (2014).
3. Curran, K. A., **Karim, A. S.**, Gupta, A. & Alper, H. S. Use of expression-enhancing terminators in *Saccharomyces cerevisiae* to increase mRNA half-life and improve gene expression control for metabolic engineering applications. *Metabolic engineering* **19**, 88–97 (2013).
2. Curran, K. A., Leavitt, J. M., **Karim, A. S.** & Alper, H. S. Metabolic engineering of muconic acid production in *Saccharomyces cerevisiae*. *Metabolic engineering* **15**, 55–66 (2013).

1. Karim, A. S., Curran, K. A. & Alper, H. S. Characterization of plasmid burden and copy number in *Saccharomyces cerevisiae* for optimization of metabolic engineering applications. *FEMS yeast research* **13**, 107–116 (2013).

Patents & Patent Applications

3. Jewett, M. C., Karim, A. S., Li, J. & Dudley, Q. *Cell-free protein synthesis driven metabolic engineering* US Patent 11,913,052. Feb. 2024.
2. Jewett, M. C., Karim, A. S., Koepke, M., Juminaga, D. & Liew, F. *Modular, cell-free protein expression vectors to accelerate biological design in cells* 2022.
1. Jewett, M. C. & Karim, A. S. *Cell-free protein synthesis driven metabolic engineering for the production of 1-butanol* US Patent 10,577,632. Mar. 2020.

Books

1. Karim, A. S. & Jewett, M. C. Cell-Free Gene Expression. *Methods in Molecular Biology* **Springer Protocols, Humana New York, NY**, 435 (2022).

HONORS & AWARDS

- | | |
|-----------|---|
| 2020 | Distinguished Young Scholar Seminar (DYSS) Series, University of Washington |
| 2019 | BIOT Peterson Award, Best Student Oral Presentation, ACS National Meeting, Orlando, FL |
| 2018 | I&EC Graduate Award, Best Oral Presentation, ACS National Meeting, Boston, MA |
| 2018 | ME-12 Junior Researcher Grant, Metabolic Engineering Conference, Munich, Germany |
| 2018 | ACS Travel Award, ACS National Meeting, New Orleans, LA |
| 2017 | Distinguished Graduate Researcher Award, Chem. & Bio. Engineering, Northwestern University |
| 2017 | U.S. Delegate to the 67th Lindau Nobel Laureate Meeting dedicated to Chemistry, Lindau, Germany |
| 2017 | Honorable Mention Poster, Engineering Biology Research Consortium (EBRC) Spring Retreat |
| 2016 | Selected for Teaching Apprentice Program, Chem. & Bio. Engineering, Northwestern University |
| 2016 | 2nd Prize Poster, Synthetic Biology: Engineering, Evolution, & Design (SEED) Conference, Chicago, IL |
| 2015 | EURAXESS LINKS North America Science Slam Finalist, Video: (bit.ly/2a1JXRd) |
| 2015 | Mentor of the Year, Mentorship Opportunities for Research Engagement (MORE), Northwestern University |
| 2014 | Ready, Set, Go (RSG) Research Communication Fellowship Program, Northwestern University |
| 2013-2018 | National Science Foundation Graduate Research Fellowship |
| 2013 | Phi Beta Kappa |
| 2013 | George H. Mitchell Student Award for Academic Excellence, selected for independent research, UT-Austin (6 graduates selected) |
| 2013 | Student Leadership Award, Cockrell School of Engineering, UT-Austin (8 graduates selected) |
| 2012 | Georgina Ann Goodnight Endowed Scholarship in Chemical Engineering, The University of Texas at Austin |
| 2011 | Joe D. Ligon Endowed Scholarship in Engineering, The University of Texas at Austin |
| 2008-2013 | Terry Foundation Scholarship, The University of Texas at Austin (Full-ride) |

TALKS & PRESENTATIONS

Talks

22. Karim, A. S. *Science and Metabolic Mixology: Accelerating Industrial Biotechnology* The Baxter Center Symposium 2025 (**Keynote Address**), Chicago, IL. May 2025.

Talks (as Research Faculty)

21. Karim, A. S. *Deconstructing synthetic biology: a conceptual approach for training synthetic biologists* Biochemical and Molecular Engineering (BME) XXIII, Dublin, Ireland. Nov. 2024.
20. Karim, A. S. *Cell-free biocatalyst design for sustainability* Society for Industrial Microbiology and Biotechnology (SIMB) Annual Meeting, Boston, MA (**Invited Talk**). Aug. 2024.
19. Karim, A. S. *Deconstructing synthetic biology: a conceptual approach for training synthetic biologists* Engineering Biology Research Consortium (EBRC) Annual Meeting. June 2024.
18. Karim, A. S. *Cell-free protein engineering unlocking the 'biocatalytic potential' of enzymes* Symposium on Biomaterials, Fuels, and Chemicals (SBFC) Washington D.C. (**Invited Talk**). Apr. 2024.
17. Karim, A. S. *A cell-free, machine learning-guided protein evolution platform enables parallelized protein engineering* 2nd Cell Free Systems Conference, Austin, TX (**Invited Talk**). Nov. 2023.
16. Karim, A. S. *Cell-free synthetic biology enables industrial biotechnology* European Society of Applied Biocatalysis, Webinar on Synthetic Biology and Metabolic Engineering Tools and Methodologies (**Invited Talk**). Sept. 2022.
15. Karim, A. S. *Cell-free engineering approaches to enable carbon-negative manufacturing* Biochemical and Molecular Engineering (BME) XXII, Cancun, Mexico. June 2022.
14. Karim, A. S. *Reconceptualizing the way complex biological systems are engineered for compelling applications in medicine, materials, and energy* Institute of Structural and Molecular Biology Biennial Retreat, University College London (**Invited Talk**). July 2021.
13. Karim, A. S. *Accelerating industrial biotechnology with cell-free technologies* Distinguished Young Scholar Seminar Series, University of Washington. June 2020.
12. Karim, A. S. *Cell-free prototyping tools for rapid biosynthetic pathway engineering* ACS National Meeting, Orlando, FL. Apr. 2019.
11. Karim, A. S. *Cell-free prototyping tools for rapid biosynthetic pathway engineering* International Conference on Biomolecular Engineering, Newport Beach, CA. Jan. 2019.
10. Karim, A. S. *Cell-free prototyping tools for rapid biosynthetic pathway engineering* AIChE 2018 Annual Meeting, Pittsburgh, PA. Oct. 2018.

Talks (during training)

9. Karim, A. S. *Integrating cell-free systems into industrial metabolic engineering design-build-test cycles* ACS Industrial & Engineering Chemistry Division Graduate Student Symposium, Boston, MA (**Invited Talk**). Aug. 2018.
8. Karim, A. S. *Enhancing metabolic engineering in Clostridium using cell-free systems* SIMB 40th Symposium on Biotechnology for Fuels and Chemicals, Clearwater Beach, FL (**Invited Talk**). Apr. 2018.
7. Karim, A. S., Dudley, Q., Juminaga, A., Crowe, S., Heggstad, J., Grubbe, W., Yuan, Y., Jensen, R., Simpson, S., Köpke, M. & Jewett, M. *Building a bridge between cell-free experimentation and cellular metabolic engineering* ACS National Meeting, New Orleans, LA. Mar. 2018.
6. Karim, A. S., Heggstad, J., Crowe, S. & Jewett, M. *A novel cell-free framework for enzymatic pathway prototyping and discovery* LanzaTech Site Visit, Skokie, IL. Nov. 2017.
5. Karim, A. S., Heggstad, J., Crowe, S. & Jewett, M. *A cell-free framework for rapid biosynthetic pathway prototyping and enzyme discovery* AIChE 2016 Annual Meeting, San Francisco, CA. Nov. 2016.
4. Karim, A. S., Heggstad, J., Crowe, S. & Jewett, M. *Developing a cell-free framework for rapid biosynthetic pathway prototyping* EBRC Fall 2016 Retreat, Pasadena, CA. Nov. 2016.
3. Karim, A. S. & Jewett, M. *A cell-free framework for rapid biosynthetic pathway prototyping and enzyme discovery* AIChE 2016 Midwest Regional Conference, Chicago, IL. Apr. 2016.
2. Karim, A. S., Yao, X. & Wittrup, K. D. *Characterization of cytokine secretion in tumor cells through microengraving* MIT Biological Engineering NSF-REU Seminar, Cambridge, MA. Aug. 2012.
1. Karim, A. S., Hsu, Y. & Linninger, A. *Computer-aided design to engineer siRNA therapies to the central nervous system through intrathecal delivery* University of Illinois Chicago Biological Engineering NSF- REU Program Seminar, Chicago, IL. Aug. 2011.

TEACHING EXPERIENCE

Co-Instructor

- 2021-2023 **ChBE 378**: Deconstructing Synthetic Biology Across Scales, Northwestern University
 2017 **ChBE 341**: Dynamics & Control of Chemical & Biological Processes (Evaluations: 5.6/6.0), Northwestern University
 2016-2017 **PHIL 373**: The Brady Scholars Program: Philosophy and the City (Evaluations: 5.6/6.0), Northwestern University

Workshop Instructor

- 2022-Pres CSB Research Design and Communication (RDC) Workshop Series, Data Visualization, Northwestern University
 2022 CSB RDC Workshop Series, Managing the Writing Process, Northwestern University
 2021-Pres CSB RDC Workshop Series, Introduction to Research, Northwestern University

Teaching Assistant

- 2015 **ChBE 376**: Synthetic Biology (Evaluations: 5.7/6.0), Northwestern University
 2015 **ChBE 375**: Biochemical Engineering (Evaluations: 5.1/6.0), Northwestern University
 2014 **MBiotech 476-1**: Kinetics, Energetics and Bioreactor Design (Evaluations: 5.0/6.0), Northwestern University
 2011, 2012 Mass & Energy Balances (**ChBE 210** equivalent) (Evaluations: 5.5/6.0), UT-Austin

MENTORSHIP

Research Mentees

- 2025-Pres Anica Diaz (Undergrad)
 2025-Pres Daniel Payan (PhD)
 2025-Pres Shenyue Huang (PhD)
 2025-Pres Owen Eskey (Undergrad)
 2022-Pres Meagan Olsen (PhD), co-advised
 2022-Pres Zachary Shaver (MD/PhD), co-mentored
 2022-Pres Rebeca Lion (Undergrad)
 2021-Pres Caleb Lay (PhD), co-mentored

Research Mentees (prior to tenure-track start)

Co-mentored students and postdocs with Michael Jewett

- 2022-2023 Isaiah Richardson (Master's), currently PhD Student at Dartmouth University
 2020-2024 Holly Ekas (PhD)
 2020-2024 Derek Wong (PhD), currently scientist at Vaxcyte
 2020-2024 Grant Landwehr (PhD)
 2019-2021 Bastian Vogeli (Postdoc), currently Scientist at Invizyne
 2018-2023 Blake Rasor (PhD), currently Postdoc at MPI-Marburg
 2018-2023 Katie Warfel (PhD), currently Scientist at Nabla Bio, Inc.
 2018-2022 Grant Rybnicky (PhD), currently Scientific Director at Lytos Technologies
 2018-2022 Antje Kruger (Postdoc), currently Principal Scientist at Resilience
 2017-2018 William Grubbe (Master's), PhD at The University of Chicago, currently Postdoc at UW
 2016-2018 Samantha Crowe (Undergrad), Chemistry for Life Processes Summer Scholar Awardee, currently PhD at UC Berkeley, currently PostDoc at Stanford University
 2015-2017 Jacob Heggstad (Undergrad), NSF GRFP Honorable Mention, Undergrad Research Grant Awardee, PhD at Duke University, currently Life Science Specialist at L.E.K. Consulting

Thesis Committees

2025-Pres Maram Naji (Advisor: Julius Lucks)
 2023-Pres Tyler Lucci (Advisor: Julius Lucks)
 2022-Pres Dylan Brown (Advisor: Julius Lucks)

LEADERSHIP & SERVICE

Journal Referee: Biotechnology Advances, Journal of Biochemical Engineering, Nature Communications, ACS Catalysis, Microbial Cell Factories, Advanced Biosystems, ChemBioChem, ACS Synthetic Biology, OUP Synthetic Biology, Metabolic Engineering, Biotechnology Journal, Frontiers in Bioengineering and Biotechnology

2023 Participant in Speculative Technologies Workshop “Enzyme Cascades,” Chicago, IL
 2019-Pres Developed “Research Design and Communication Workshop Series,” Northwestern University
 2019 Participant, NSF Workshop “Synthetic Biology, Biomaterials, and Soft Matter,” Washington D.C.
 2019 Participant, ARPA-E Carbon-Optimized Bioconversion Workshop, Chicago, IL

COMMUNITY OUTREACH

2025 Speaker, New Trier High School Biotechnology Visit, Northwestern University
 2023 Mentor, International Genetically Engineered Machines (iGEM) Team, Cornell University
 2019 Mentor, Chicago Public Schools Student Lab Visits, Northwestern University
 2015, 2017 Science Fair Judge, The 8th & 10th Annual High School Project Showcases, Northwestern University
 2017 Judge, Chicago Area Undergraduate Research Symposium (CAURS)
 2015 Science Fair Judge, Goudy and McCutcheon Elementary School Science Fairs, Chicago, IL
 2015 Participant, MORE REACH Outreach Videos, Northwestern University (VIDEO — bit.ly/29VXCnl)
 2015 Lecturer, Graduate Student Speaker Series (GS3), Glenbrook South High School, IL (Eval: 4.7/5.0)
 2014-2016 Mentor, Research Experience for Teachers, Office of STEM Edu Partnerships, Northwestern University

PROFESSIONAL MEMBERSHIPS

American Institute of Chemical Engineers (AIChE)
 American Chemical Society (ACS)
 ACS Division of Biochemical Technology (BIOT)
 Society for Biological Engineers (SBE) - An AIChE Technological Community
 International Metabolic Engineering Society (IMES) - An AIChE Technological Community
 Society for Industry Microbiology and Biotechnology (SIMB)
 Engineering Biology Research Consortium (EBRC)
 Tau Beta Pi - National Engineering Honor Society
 Omega Chi Epsilon - National Chemical Engineering Honor Society

PROFESSIONAL DEVELOPMENT

2025 Equity in Graduate Education Workshop Series, Northwestern University
 2024 Faculty Mentoring Training, Office of the Provost, Northwestern University
 2018 Research Mentorship Training, CIRTL MOOC

RESEARCH INTERESTS

Chemical engineering, synthetic biology, bioprocess engineering, cell-free systems, protein engineering, metabolic engineering, data-driven design, machine learning, high-throughput experimentation, biorecovery of critical resources, decarbonization, plastics recycling

CURRICULUM VITAE

Julius B. Lucks

Professor of Chemical and Biological Engineering
Co-Director, Center for Synthetic Biology
Northwestern University, 2145 Sheridan Rd. Evanston, IL 60208
web: luckslab.org, twitter: @Luckslab

EDUCATION

B.S., Chemistry (Highest Honors) (2001) University of North Carolina, Chapel Hill, NC
M.Phil., Chemistry (2002) University of Cambridge, Cambridge, UK
M.S., Chemical Physics (2004) Harvard University, Cambridge, MA
Ph.D., Chemical Physics (2007) Harvard University, Cambridge, MA
Miller Fellow Postdoctoral Associate (2011) University of California, Berkeley, CA

PROFESSIONAL EXPERIENCE

Professor (2021-)

Associate Professor (2016-2021)

and Associate Chair (2018-2023), Chemical and Biological Engineering, Northwestern University

Affiliations at Northwestern:

Faculty Associate, Institute for Policy Research, 2025-Present
Associate Chair, Chemical and Biological Engineering, 2018-2023
Member, Center for Synthetic Biology, 2016-Present
Member and Preceptor, Chemistry of Life Processes Institute, 2016-Present
Member, Center for Water Research, 2018-Present
Member, Center for Engineering, Sustainability and Resilience, 2019-Present
Member, Center for Air and Water, International Institute of Nanotechnology, 2020-Present
Preceptor, Interdisciplinary Biological Sciences Graduate Program, 2016-Present
Preceptor, Steering Committee, Molecular Biophysics Training Program, 2017-Present
Preceptor, Biotechnology Training Program, 2017-Present
Affiliate, International Institute of Nanotechnology, 2016-Present

Assistant Professor, Chemical and Biomolecular Engineering, Cornell University, 2011-2016

Affiliations at Cornell:

Graduate Field Member, Biochemistry, Molecular and Cell Biology, 2013-2016
Graduate Field Member, Biomedical Engineering, 2014-2016
Graduate Field Member, Computational Biology, 2014-2016
Graduate Field Member, Microbiology, 2014-2016

Co-director, Northwestern Center for Synthetic Biology, 2023-Present

Director, NSF Synthetic Biology Across Scales NRT Graduate Training Program, 2019-Present

Co-founder, Stemloop Inc., 2019-Present

Instructor and Co-Creator, Cold Spring Harbor Course on Synthetic Biology, 2013-2015

James C. and Rebecca Q. Morgan Sesquicentennial Faculty Fellow, Cornell University, 2012-2016

Miller Fellow Postdoctoral Associate, Bioengineering, Univ. of California, Berkeley, 2008-2011

Postdoctoral Associate, Information Science, Cornell University, Ithaca, NY, 2007

Visiting Scholar, Theoretical Physics, Institute Marie Curie, Paris, Fr, 2005

Visiting Bi Fellow, Churchill College, Cambridge UK 2023-2024

Visiting Researcher, Applied Math and Theoretical Physics, Cambridge University, 2023-2024

Visiting Researcher, Laboratory of Molecular Biology, MRC, Cambridge UK 2023-2024

HONORS AND AWARDS

2025 Fellow, American Association for the Advancement of Science

2025 Visscher Lectureship in Genetics (w/ Professor Sera Young), Hope College

2023 Guggenheim Fellow, Biology
2022 Phi Lambda Upsilon Award Lecture, University of Nebraska
2022 American Institute for Medical and Biological Engineering (AIMBE) College of Fellows
 For “discovering RNA folding principles related to understanding and treating disease, and engineering synthetic biology diagnostics for global health.”
2020 Blavatnik National Awards for Young Scientists, Finalist Life Sciences
2017 Camille Dreyfus Teacher-Scholar Award
2016 ACS Synthetic Biology Young Investigator Award
2016 Northwestern Searle Leadership Award
2015 NSF CAREER Award
2015 Cornell College of Engineering Mr. and Mrs. Richard F. Tucker `50 Teaching Award
2013 NIH Director’s New Innovator Award
2013 Office of Naval Research (ONR) Young Investigator
2013 Alfred P. Sloan Research Fellowship
2012 Defense Advanced Research Projects Agency (DARPA) Young Faculty Award
2012 James C. and Rebecca Q. Morgan Sesquicentennial Faculty Fellow
2008-2011 Miller Research Fellow, University of California, Berkeley
2002-2007 John and Fannie Hertz Foundation Graduate Fellow
2002 Robert Karplus Prize Fellowship in Chemical Physics, Harvard University
2001 Winston Churchill Scholarship, Churchill College, Cambridge University
2001 National Science Foundation Graduate Fellowship (Declined, Duplicate Funding)
2001 Department of Defense Graduate Fellowship (Declined, Duplicate Funding)
2000-2001 Barry M. Goldwater Scholarship, Univ. North Carolina, Chapel Hill
2001 Francis P. Venable Medal, Univ. North Carolina, Chapel Hill
2001 Academic Excellence in Physical Chemistry, Univ. North Carolina, Chapel Hill
2000 Phi Beta Kappa, Univ. North Carolina, Chapel Hill
2000 NSF REU Fellowship, Univ. Colorado, Boulder
1999 American Chemical Society Undergraduate Research Award

BOARDS AND ADVISORY COMMITTEES

Scientific Advisory Board, Institute for RNA-based Infection Research, Helmholtz Centre for Infection Research, Würzburg, Germany, 2025 - Present
Advisory Committee, NSF Directorate for Biological Science (BIO), 2024-2025 (Disestablished by Executive Order)
Advisory Board, Engineering Biology Interdisciplinary Research Center, Cambridge University, 2024-Present
Member, National Academies Committee Towards Sequencing and Mapping RNA Modifications, 2022-2024
Advisory Board, MSCA European Doctoral Network SYNSENS, 2022-Present
Editorial Board, GEN Biotechnology, 2021-Present
Guest Editor, PNAS, 2022
Editorial Board, Nucleic Acids Research, 2015-2021
Editorial Board, ACS Synthetic Biology, 2011-Present
Editorial Affiliate, bioRxiv, 2014-Present

PUBLICATIONS (As of 5/22/25, Google Scholar H-index: 46; i10-index 71; Total Citations: 6940)

* = corresponding author; # = student from Lucks group; % = undergraduate student; blue = highlight

1. D. M. Brown[#], D. A. Phillips, D. C. Garcia, A. Arce[#], T. Lucci[#], J. P. Davies Jr., J. Mangini, K. A. Rhea, C. B. Bernhards, J. R. Biondo, S. M. Blum, S. D. Cole, J. A. Lee, M. S. Lee, N. D. McDonald, B. Wang, D. L. Perdue, W. Thavarajah[#], A. S. Karim, M. W. Lux, M. C. Jewett, A. E. Miklos*, **J. B. Lucks*** (2025). "Semiautomated production of cell-free biosensors." *ACS Synthetic Biology*, doi:10.1021/acssynbio.4c00703.
2. D. K. Agarwal, T. J. Lucci[#], K. J. Jung[#], G. S. Shekhawat, A. S. Green, **J. B. Lucks***, V. P. Dravid* (2025). "Ultra-sensitive water contaminant detection with transcription factor interfaced microcantilevers." *ACS Nano*, doi: 10.1021/acsnano.4c17598.
3. D. Z. Bushhouse[#], J. Fu[#], **J. B. Lucks*** (2025). "RNA folding kinetics control riboswitch sensitivity in vivo." *Nature Communications*, doi: 10.1038/s41467-024-55601-3
4. Y. Li[#], T. J. Lucci[#], M. Villarruel Dujovne, K. J. Jung[#], D. A. Capdevila, **J. B. Lucks*** (2025). "A cell-free biosensor signal amplification circuit with polymerase strand recycling." *Nature Chemical Biology*, doi:10.1038/s41589-024-01816-w.
5. T. Lucci[#], A. Neufarth, J.-F. Gaillard, **J. B. Lucks*** (2024). "A sensor for detecting aqueous Cu²⁺ that functions in a just-add-water format." *ACS Omega*, doi: 10.1021/acsomega.4c08751.
6. J. K. Jung[#], K. S. Dreyer, K. E. Dray, J. J. Muldoon, J. George, S. Shirman, M. D. Cabezas, A. E. D'Aquino, M. S. Verosloff[#], K. Seki, G. A. Rybnicky, K. K. Alam, N. Bagheri, M. C. Jewett, J. N. Leonard*, N. M. Mangan*, **J. B. Lucks*** (2024). "Developing, characterizing and modeling CRISPR-based point-of-use pathogen diagnostics." *ACS Synthetic Biology*, doi: 10.1021/acssynbio.4c00469.
7. K. Haynes*, L. Andrews, C. Beisel, J. Chappell, C. Cuba Samaniego, J. Dueber, M. Dunlop, E. Franco, **J. B. Lucks**, V. Noireaux, D. Savage, P. Silver, M. Smanski, E. Young (2024). "Ten Years of the Synthetic Biology Summer Course at Cold Spring Harbor Laboratory". *ACS Synthetic Biology*, doi: 10.1021/acssynbio.4c00276.
8. H. M. Ekas, B. Wang, A. D. Silverman[#], **J. B. Lucks**, A. S. Karim, M. C. Jewett* (2024). "An automated, cell-free workflow for transcription factor engineering." *ACS Synthetic Biology*, doi: 10.1021/acssynbio.4c00471. [Editors Choice](#).
9. H. M. Ekas, B. Wang, A. D. Silverman[#], **J. B. Lucks**, A. S. Karim, M. C. Jewett* (2024). "Engineering a PbrR-based biosensor for cell-free detection of lead at the legal limit." *ACS Synthetic Biology*, doi: 10.1021/acssynbio.4c00456.
10. J. D. Miller, C. Staddon, A. Salzberg, **J. B. Lucks**, W. B. De Bruin, S. L. Young* (2024). "Self-reported anticipated harm from drinking water across 141 countries". *Nature Communications*, doi:10.1038/s41467-024-51528-x.
11. A. S. Karim*, D. M. Brown[#], C. M. Archuleta[#], S. Grannan, L. Aristilde, Y. Goyal, J. N. Leonard, N. Mangan, A. Prindle, G. J. Rocklin, K. J. Tyo, L. Zoloth, M. C. Jewett, S. Calkins, N. Kamat, D. Tullman-Ercek, **J. B. Lucks*** (2024). "Deconstructing synthetic biology across scales: a conceptual approach for training synthetic biologists." *Nature Communications*, doi:10.1038/s41467-024-49626-x.
12. R. Weinstock, A. Knaus, J. Messing, V. Bly, **J. B. Lucks**, S. L. Young (2024). "When it comes to lead in water, new biosensing technology can reveal what the eyes can't see and what the rules don't yet stop." *AQUA Water Infrastructure, Ecosystems and Society*, doi: 10.2166/aqua.2024.019.
13. L. M. Hertz[#], E. N. White, K. Kuznedelov, L. Cheng[#], A. M. Yu[#], R. Kakkaramadam, K. Severinov, A. Chen*, **J. B. Lucks*** (2024). "The effect of pseudoknot base pairing on cotranscriptional structural switching of the fluoride riboswitch." *Nucleic Acids Research*, doi:10.1093/nar/gkae231.
14. Y. Li[#], A. Arce[#], T. Lucci[#], R. A. Rasmussen[#], **J. B. Lucks*** (2023). "Dynamic RNA synthetic biology: new principles, practices and potential." *RNA Biology*, 20, 817-829, doi: 10.1080/15476286.2023.2269508.
15. D. M. Stranford, L. M. Simons, K. E. Berman[#], L. Cheng[#], **J. B. Lucks**, J. F. Hultquist, J. N. Leonard* (2023). "Genetically encoding multiple functionalities into extracellular vesicles for the targeted delivery of biologics to T cells". *Nature Biomedical Engineering* doi: 10.1038/s41551-023-01142-x.

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2. "Analytes' detection using regulated in vitro transcription." J. B. Lucks, K. K. Alam, J. K. Jung (2025). United States Patent US12203144B2.

PATENT APPLICATIONS

1. "Systems and methods for ultra-sensitive detection of analytes with allosteric transcription factor interfaced microcantilevers." G. S. Shekhawat, V. P. Dravid, J. B. Lucks (2024). Provisional patent application.
2. "Cell-free biosensors with DNA strand displacement circuits." J. K. Jung, K. K. Alam, J. B. Lucks (2021). United States Patent Application 63/254,824.
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7. "Small RNAs (sRNAs) that activate transcription." J. B. Lucks, J. Chappell, M. K. Takahashi (2014). United States Patent Application 61/981,241.
8. "Transcription elongation control elements and methods of use thereof." A. P. Arkin, J. B. Lucks, L. Qi, W. P. Whitaker (2010). United States Patent Application 61/250,342.

Curriculum Vitae
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EDUCATION

- **University of California Berkeley** Berkeley, CA
Doctor of Philosophy in Chemical Engineering (2006)
- **Haas School of Business, University of California Berkeley** Berkeley, CA
Management of Technology Certificate (2005)
- **Stanford University** Stanford, CA
Bachelor of Science in Chemical Engineering (2000)

PROFESSIONAL EXPERIENCE

Northwestern University

Professor, Chemical and Biological engineering (September 2023-Present)

Associate Professor, Chemical and Biological engineering (2015-2023)

Assistant Professor, Chemical and Biological engineering (2008-2015)

Positions at Northwestern

- Director, Murphy Institute (2019- 2023)
- Director, Biotechnology Training Program (2019- Present)
 - Co-Director (2016-2019)
- Founding member, Center for Synthetic Biology (2016)
- Co-Director, Biotechnology Training Program (2014-2016)
- Member, Chemistry of Life Processes Institute (2011)
- Full Member, Robert H. Lurie Comprehensive Cancer Center (2008)

Syenex, Inc.

Co-founder and acting Chief Scientific Officer (2022-Present)

National Cancer Institute, NIH

Postdoctoral Fellow (2006-2008) Advisors: Dr. David M. Segal in the Experimental Immunology Branch (National Cancer Institute) and Dr. David R. Davies in the Laboratory of Molecular Biology (National Institute of Diabetes and Digestive and Kidney Diseases).

University of California Berkeley

Doctoral Student (2000-2006) Advisor: Professor David V. Schaffer in the Department of Chemical Engineering and Helen Wills Neuroscience Institute.

AWARDS, HONORS, AND PROFESSIONAL RECOGNITION

- American Institute for Medical and Biological Engineering (AIMBE), College of Fellows (2025)
For the development of innovative technologies and conceptual frameworks enabling design-driven engineering in mammalian synthetic biology
- Engineering Biology Research Consortium (EBRC) Steering Committee (2022-Present)
- Engineering Biology Research Consortium (EBRC) Board (2022-Present)
- NIH standing study section member, Cellular and Molecular Technologies (2020-Present)
- Illinois Science and Technology Council Researchers to Know (2019)
- Karl Rosengren Faculty Mentoring Award (Dec 2018)
- Charles Deering McCormick Professor of Teaching Excellence (2018)
- Scientific Executive Committee of GP-Write Project (2017)

- Clarence Ver Steeg Graduate Faculty Award (2013); for excellence in graduate student training and advising
- 3M Non-Tenured Faculty Award (2012, 2013, 2014)
- Damon Runyon-Rachleff Innovation Award Finalist, Damon Runyon Cancer Research Foundation (2011)
- Expert witness, hearing on “21st Century Biology,” United States House of Representatives, Committee on Science and Technology, Subcommittee on Research and Science Education (2010)
- Searle Junior Faculty Fellow, Northwestern University (2010)
- NIH Cancer Research Training Award Postdoctoral Fellowship (2006-2008)
- BaCaTeC (Bavaria California Technology Center) Grant for Collaborative Research, “High Pressure Inactivation Kinetics of Adeno-Associated Virus” (2004)
- AIChE Annual Meeting - Food, Pharmaceutical and Bioengineering Division Student Poster Award (First Prize) (2003)
- Departmental Award for Outstanding Graduate Student Instructor (2003)
- Atofina Chemicals Graduate Fellowship (2001)

EDITORIAL BOARDS

- GEN Biotechnology (2022-Present)
- Biochemical Engineering Journal (2019-Present)
- Frontiers in Bioengineering and Biotechnology - Synthetic Biology (2013-2021)

RESEARCH PRODUCTS

Publications

Complete publication profiles are maintained at these sites:

Google Scholar: <https://scholar.google.com/citations?user=gyJ2GeAAAAAJ&hl=en>

Pubmed: <http://www.ncbi.nlm.nih.gov/sites/myncbi/joshua.leonard.1/bibliography/40317810/public/?sort=date&direction=ascending>

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- 64 Jung J.K., Dreyer K.S. #, Dray K.E. #, Muldoon J.J. #, George J., Shirman S., Cabezas M.D., d'Aquino A.E., Verosloff M.S., Seki K., Rybnicky G.A., Alam K.K., Bagheri N., Jewett M.C., **Leonard J.N.**, Mangan N.M., & Lucks J.B. (2025) Developing, Characterizing, and Modeling CRISPR-Based Point-of-Use Pathogen Diagnostics. *ACS Synthetic Biology* 14(1):129-147. doi:10.1021/acssynbio.4c00469
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- 3 **Leonard, J. N.**, & Schaffer, D. V. (2006). Antiviral RNAi therapy: emerging approaches for hitting a moving target. *Gene Ther*, 13(6), 532-540. doi:10.1038/sj.gt.3302645. PMC7091878
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Preprints (not yet published as manuscripts) *corresponding author, #Leonard lab member, %undergraduate

- 1 Edelstein H.I.#, Cosio A. #, Ezekiel M.L. #, Corcoran W.K. #, Morris A.H. #, & **Leonard J.N.*** (2024) Conversion of natural cytokine receptors into orthogonal synthetic biosensors. *bioRxiv*:2024.2003.2023.586421. doi:10.1101/2024.03.23.586421

Peer-reviewed Book Chapters *corresponding author, #Leonard lab member, %undergraduate

- 1 Hung, M. E.#, Lenzini, S. B.#, Stranford, D. M.#, & **Leonard, J. N.*** (2018). Enrichment of extracellular vesicle subpopulations via affinity chromatography. In *Extracellular RNA* (pp. 109-124): Humana Press, New York, NY.

Non-Peer-Reviewed Books & Chapters *corresponding author, #Leonard lab member, %undergraduate

- 4 Dudek, R. M.#, Chuang, Y.#, & **Leonard, J. N.*** (2014). Engineered cell-based therapies: a vanguard of design-driven medicine. In *Adv Exp Med Biol* (Vol. 844, pp. 369-391).
- 3 Corey, S. J., Kimmel, M., & **Leonard, J. N.** (2014). *A systems biology approach to blood*: Springer.
- 2 Corey, S. J., Kimmel, M., & **Leonard, J. N.** (2014). Systems hematology: an introduction. In *Adv Exp Med Biol* (2014/12/07 ed., Vol. 844, pp. 3-10).
- 1 **Leonard, J. N.**, Bell, J. K., & Segal, D. M. (2009). Predicting Toll-like receptor structures and characterizing ligand binding. In *Toll-Like Receptors* (pp. 55-67): Humana Press, Totowa, NJ.

Patents

Unpublished patent applications filed (not listed below): 6 (as of Jan 23, 2025)

Pending Applications (Published US application listed for any patent families)

- 5 Leonard, J. N., Muldoon, J.J., Donahue, P.S. (2023). Engineered Mammalian Genetic Circuits and Methods of Using the Same. US Patent App. 20230348892
- 4 Leonard, J. N., & Stranford, D. M. (2021). Extracellular vesicles comprising targeting affinity domain-based membrane proteins. US Patent App. 17/046,147.
- 3 Leonard, J. N., Dudek, R. M., & Schwarz, K. A. (2020). Integration of mesa receptors and promoters to implement customized cellular function. US Patent App. 16/496,141.
- 2 Leonard, J. N., & Schwarz, K. A. (2019). Modular extracellular sensor architecture for regulating genes. US Patent App. 16/343,987.
- 1 Leonard, J. N., Stranford, D. M., & Passineau, M. J. (2018). Deliverable extracellular vesicles incorporating cell membrane transport proteins. US Patent App. 15/975,222.

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- 8 Leonard, J. N., & Donahue, P. S. (2024). A platform of composable mammalian elements of transcription (COMET). US Patent 12,091,668 B2
- 7 Leonard, J. N., & Hung, M. E. (2024). Targeted extracellular vesicles comprising membrane proteins with engineered glycosylation sites. US Patent 11998635-B2
- 6 Leonard, J. N., & Hung, M. E. (2020). Targeted and modular exosome loading system. US Patent 11998635-B2.
- 5 Leonard, J. N., Schwarz, K. A., & Dolberg, T. B. (2020). Engineered red blood cell-based biosensors. US Patent 10753930-B2
- 4 Leonard, J. N., Younger, A. K., & Tyo, K. E. (2020). Generation of novel metabolite-responsive transcription regulator biosensors. US Patent 10,604,552.
- 3 Leonard, J. N., Dudek, R. M., & Daringer, N. M. (2017). Modular sensor architecture for cell based biosensors. US Patent 9,732,392.
- 2 Schaffer, D. V., & Leonard, J. N. (2010). Methods for purifying adeno-associated virus particles. US Patent 7,851,196.
- 1 Schaffer, D. V., & Leonard, J. N. (2009). Methods for purifying adeno-associated virus. US Patent 7,625,570.

Trainees Mentored

- Postdoctoral fellows mentored: 5 (1 current)
- PhD students mentored: 31 (12 current)
- Masters students mentored: 19 (0 current)
- Undergraduate students mentored: 64 (5 current)

Niall Mangan

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Research Areas Data characterization and data-driven model inference for mechanistic understanding
Structural uncertainty and model selection in dynamical systems
Modeling, characterization, and engineering of biological and physical systems
Device physics, catalysis, metabolism, renewable energy, and regulatory systems
Analytic methods for model reduction and systems analysis

Professional Appointments Assistant Professor of Eng. Sci. & Appl. Math, [Northwestern](#) 01/2018 - present
Center for Synthetic Biology, [Member](#)
National Institute for Theory and Mathematics in Biology, [Theme Leader](#)
Paula M. Trienens Institute for Sustainability and Energy, [Faculty Affiliate](#)
Center for Engineering Sustainability and Resilience, [Faculty Affiliate](#)
Center for Water Research, [Member](#)
NSF-Simons Center for Quantitative Biology, [Member](#) 06/2018-05/2024
Preceptor for the [IBIS Graduate Program](#), *Northwestern* 06/2018-06/2022

Acting Assistant Professor, *University of Washington* 01/2016- 12/2017
with Nathan Kutz in Dept. Applied Mathematics

Research Associate Consultant, *Institute for Disease Modeling* 06/2016 - 09/2017
with Joshua Proctor

Visiting Lecturer, *Brown University* 10/2015 - 12/2015
with Shreyas Mandre in School of Engineering

Postdoctoral Associate, *Massachusetts Institute of Technology* 09/2013-09/2015
with Tonio Buonassisi's Photovoltaics Lab

Professional Preparation PhD, Nov. 2013 Systems Biology *Harvard University*
Advisor: Michael Brenner *Harvard School of Engineering and Applied Science*
Thesis: Organization and diffusion in biological and material fabrication problems

BS, May 2008 Dual Physics and Math, Minor Chemistry *Clarkson University*
Research Advisor: Daniel ben-Avraham *Clarkson University, Physics*
Honors Thesis: Random walks and analysis of diffusion

Pre-prints [C. E. FitzGerald[†]](#), [A. J. Engedal](#), **N. M. Mangan**. Discovering universal temperature regulation dynamics in animals. arXiv:2504.00359 [physics.bio-ph] (2025).

[M. Jayadharan](#), [C. Catlett](#), A.N. Montanari, **N. M. Mangan[†]**. SODAs: Sparse Optimization for the Discovery of Differential and Algebraic Equations arXiv:2503.05993 [math.DS] (2024).

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J. D. George[†], S. Y. Jung, **N. M. Mangan**. *Walking into the complex plane to ‘order’ better time integrators*. arXiv:2110.04402 [math.NA] 2022.

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- Palmero, B. J., Gamero, E., **Mangan, N. M.**, & Tullman-Ercek, D. *Encapsulation of Select Violacein Pathway Enzymes in the 1, 2-Propanediol Utilization Bacterial Microcompartment to Divert Pathway Flux*. Metabolic Engineering (2025). doi: 10.1016/j.ymben.2025.03.017
- Jung, J.K., Dreyer, K.S., Dray, K.E., Muldoon, J.J., George, J., Shirman, S., Cabezas, M.D., D'Aquino, A.E., Verosloff, M.S., Seki, K., Rybnicky, G.A., Alam, K. K., Bagheri, N., Jewett, M. C., Leonard, J. N.,[†] **Mangan, N. M.**[†], and Lucks, J. B.[†] *Developing, characterizing and modeling CRISPR-based point-of-use pathogen diagnostics*. ACS Synthetic Biology (2024).
- VanBelzen, J., Sakelaris, B., Brickner, D.G., Marcou, N., Riecke, H., **Mangan, N.** and Brickner, J.H., *Chromatin endogenous cleavage provides a global view of RNA polymerase II transcription kinetics*. eLife 13:RP100764. (2024).
- K.P. Leisman, M. Warns, A. Tiwari, C. Owen, C. Catlett, R. Poretsky, A. Shrestha, A.I. Packman, **N. M. Mangan**[†]. *A Modeling Pipeline to Relate Municipal Wastewater Surveillance and Regional Public Health Data*. Water Research, 252, 121178 (2024).
- Karim, A.S., Brown, D.M., Archuleta, C.M., Grannan, S., Aristilde, L., Goyal, Y., Leonard, J.N., **Mangan, N.M.**, Prindle, A., Rocklin, G.J. and Tyo, K.J., *Deconstructing synthetic biology across scales: a conceptual approach for training synthetic biologists*. Nature communications, 15(1), p.5425 (2024).
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- J. Nyaanga, C. Goss, G. Zhang, H. N. Ahmed, E. J. Andersen, I.R. Miller, J. K. Rozenich, I. L. Swarthout, J. A. Vaughn, **N. M. Mangan**, S. Shirman, E. C. Andersen. *Changes in body shape implicate cuticle stretch in C. elegans growth control* (2022) Cells & Development. 170, 203780. doi: 10.1016/j.cdev.2022.203780
- J. Nyaanga, S. Shirman, **N. M. Mangan**, E. C. Andersen. (2022). Characterization of larval growth in C. elegans cuticle mutants. Micropublication Biology, Vol. 2022. doi:10.17912/micropub.biology.000662
- B. N. Ruggiero, K. M. S. Gutierrez, J. D. George, **N. M. Mangan**, J. M. Notestein, L. C. Seitz. *Probing the relationship between bulk and local environments to understand impacts on electrocatalytic oxygen reduction reaction*.(2022) Journal of Catalysis, 414, 33-43. doi:10.1016/j.jcat.2022.08.025
- N.W. Kennedy, C.E. Mills, C.H. Abrahamson, A. Archer, M.C. Jewett, **N.M. Man-**

gan, D. Tullman-Ercek. *Linking the Salmonella enterica 1, 2-propanediol utilization bacterial microcompartment shell to the enzymatic core via the shell protein PduB* (2022) Journal of bacteriology. 204, 9, e00576-21. doi: 10.1128/jb.00576-21

C.E. Mills, C. Waltmann, A. Archer, N.W. Kennedy, C.H. Abrahamson, A.D. Jackson, E.W. Roth, S. Shirman, M.C. Jewett, **N. M. Mangan**, D. Tullman-Ercek. *Vertex protein PduN tunes encapsulated pathway performance by dictating bacterial metabolosome morphology.* (2022) Nature Communications. 13, 1, 1-12. doi: 10.1038/s41467-022-31279-3

K. Dray, J. J. Muldoon, **N. M. Mangan**, N. Bagheri, J. N. Leonard. *GAMES: A dynamic model development workflow for rigorous characterization of synthetic genetic systems* (2022) ACS Synth. Biol. 11, 2, 1009-1029. doi:10.1021/acssynbio.1c00528

N M Mangan, T Askham, S L Brunton, J N Kutz, J L Proctor, *Model Selection for hybrid dynamical systems via sparse regression*, (2019) Proc. R. Soc. London A Math. Phys. Eng. Sci. Vol 475, No 2223. doi: 10.1098/rspa.2018.0534

C Sun, M Dong, **N M Mangan**, Herbert G. Winful, Steven T. Cundiff, and J. Nathan Kutz. *Frequency Comb Generation at 800 nm in Waveguide Array Quantum Well Diode Lasers*, IEEE Journal of Quantum Electronics 56, no. 1 (2019): 1-9. doi: 10.1109/JQE.2019.2960133.

C. Sun, **N Mangan**, M Dong, H. G. Winful, S. T. Cundiff, J. N. Kutz. *Stable numerical schemes for nonlinear dispersive equations with counter-propagation and gain dynamics*, (2019) JOSA B. Vol. 26, No. 19, pp. 3263-3274.

C M Jakobson, D Tullman-Ercek, **N M Mangan**. *Spatially Organizing biochemistry: choosing a strategy to translate synthetic biology to the factory.* Scientific Reports (2018) 8:8196 doi:10.1038/s41598-018-26399-0

T G Boatman, **N M Mangan**, T Lawson, and R J Geider. *Inorganic carbon and pH dependency of photosynthetic rates in Trichodesmium.* Journal of Experimental Botany (2018): ery141.

M Dong, **N M Mangan**, J N Kutz, S T Cundiff, H G Winful. *Traveling Wave Model for Frequency Comb Generation in Single Section Quantum Well Diode Lasers.* (2017) IEEE Journal of Quantum Electronics 53(6), 1-11. doi: 10.1109/JQE.2017.2756641

N M Mangan, J N Kutz, S L Brunton, J L Proctor, *Model selection for dynamical systems via sparse regression and information criteria.* (2017),” Proc. R. Soc. London A Math. Phys. Eng. Sci., vol. 473, no. 2204. doi: 10.1098/rspa.2017.0009

C M Jakobson, M F Slininger, D Tullman-Ercek, **N M Mangan**[†]. *A systems-level model reveals that 1,2-propanediol utilization microcompartments enhance pathway flux through intermediate sequestration.* PLoS Comp. Bio. 13(5), e1005525 (2017). doi: 10.1371/journal.pcbi.1005525

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A Polizzotti, A Faghaninia, J R Poindexter, L Nienhaus, V Steinmann, R LZ Hoye, A Felten, A Deyine, **N M Mangan**, J P Correa-Baena, S S Shin. *Improving*

the carrier lifetime of tin sulfide via prediction and mitigation of harmful point defects. The Journal of Physical Chemistry Letters 8, no. 15 (2017): 3661-3667. doi: 10.1021/acs.jpcllett.7b01406

N M Mangan S L Brunton, J L Proctor, and J N Kutz. *Inferring biological networks by sparse identification of nonlinear dynamics.* IEEE Transactions on Molecular, Biological and Multi-Scale Communications, 2(1), 52-63 (2016). doi: 10.1109/TMBMC.2016.2633265 [Video Abstract](#)

N M Mangan*, A Flamholz*, R D Hood, R Milo, and D F Savage *pH determines the energetic efficiency of the cyanobacterial CO₂ concentrating mechanism* PNAS, 201525145 (2016). doi:10.1073/pnas.1525145113

N M Mangan, R E Brandt, V Steinmann, R Jaramillo, C Yang, R Chakraborty, J R Poindexter, R G Gordon, and T Buonassisi *A framework to predict optimal buffer-layer pairing with solar cell absorbers: A case study for zinc oxysulfide/ tin sulfide.* J. App. Phys. 118(11), 115102 (2015). doi:10.1063/1.4930581

R Chakraborty, V Steinman, **N M Mangan**, R E Brandt, J R Poindexter, R Jaramillo, J P Mailoa, K Hartman, A Polizzoti, C Yang, R G Gordon, and T Buonassisi, *Non-monotonic effect of growth temperature on carrier collection in SnS solar cells.* App. Phys. Lett., 106(20), 203901 (2015). doi:10.1063/1.4921326

D B Needleman, J P Mailoa, R E Brandt, **N M Mangan**, and T Buonassisi *Sensitivity Analysis of Optical Metrics for Spectral Splitting of Photovoltaic Systems: A Case Study* IEEE Journal of Photovoltaics 5(5), 1380-1388 (2015) doi: 10.1109/JPHOTOV.2015.2457292

M-J Sher, **N M Mangan**, M J Smith, YT Lin, S Marbach, T M Schneider, S Gradecek, M P Brenner and E Mazur *Femtosecond-laser hyperdoping silicion in a SF₆ atmosphere: Dopant incorporation mechanism.* J. App. Phys., 117(12), 125301 (2015). doi:10.1063/1.4914520

Y-T Lin, **N Mangan**, S Marbach, T M Schneider, G. Deng, S. Zhou, M P Brenner and E Mazur *Hyperdoped silicon with a flat doping profile: theoretical design and experimental realization.* App. Phys. Lett., 106(6), 062105 (2015). doi:10.1063/1.4907988

N M Mangan[†] and M P Brenner *Systems analysis of the CO₂ concentrating mechanism in cyanobacteria..* eLife, 2014(3). doi:10.7554/eLife.02043

N Mangan, C Reichhardt, C J Olson Reichhardt *Reversible to Irreversible Flow Transition in Periodically Driven Vortices.* Phys. Rev. Lett. 2008; 100 (18):187002

Y Y Kievsky, B Carey, S Naik, **N Mangan**, D Ben-Avraham, I Sokolov. *Dynamics of molecular diffusion of rhodamine 6G in silica nanochannels.* J. Chem. Phys. 2008; 128 (15):151102

M Reason, Y Jin, H A McKay, **N Mangan**, D Mao, R S Goldman, X Bai, and C Kurdak. *Influence of N on the electronic properties of GaAsN alloy films and heterostructures.* J. Appl. Phys., 102 (10), 103710 (2007)

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M Dong, **N Mangan**, J N Kutz, S T Cundiff, H G Winful. *Model for frequency comb generation in single-section quantum well diode lasers.* CLEO:QELS_Fundamental Science, Optical Society of America, JTu5A 102, May

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N Mangan and S Mandre. *Optimal distribution of riverine turbines in a linear array with systematic flow manipulation*. XXIV ICTAM, 21-26th August 2016, Montreal, Canada.

S Mandre, **N M Mangan**, T Derektor, and S Winckler. *A comparison of hydrokinetic turbines forming a vertical fence along the length of a river or tidal channel with a conventional rectangular turbine array*. METS, 25-27th April 2016, Washington, D.C.

R E Brandt, **N M Mangan**, J V Li, R C Kurchin, T Milakovich, S Levenco, E A Fitzgerald, T Unold, T Buonassisi, *Temperature-and intensity-dependent photovoltaic measurements to identify dominant recombination pathways*. IEEE 43rd Photovoltaic Specialist Conference (PVSC) (pp. 1997-2001). IEEE. (2016) 10.1109/PVSC.2016.7749978

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[†] corresponding author. Mentored students and postdocs.

Invited talks

Mathematical Investigation of Bulk and Local Effects in Electrocatalysis 9th International Conference on Catalysis and Chemical Engineering, San Francisco, Feb 24-26, 2025

Lessons from systems models of metabolism in microcompartments External Invited Speaker for the all-hands meeting of the Energy Frontier Research Center for Catalysis in Biomimetic Confinement, Michigan State University hosted at Argonne National Lab, January 9, 2025.

Sparse-optimization to discover dynamical systems models from data

- Mathematics of Data, Dynamics, and Life Sciences (MDDLs) Conference, NSF-Simons Center for Multiscale Cell Fate UC, Irvine March 20-21, 2025
- Emergent Behavior in Complex Systems of Interacting Agents, IMSI, Chicago, IL March 17-21, 2025
- H.B. Keller Colloquium in Computing and Mathematical Sciences, California Institute of Technology, January 6, 2025
- AI + Science Schmidt Fellows Speaker Series, University of Chicago October 29, 2024
- Applied Mathematics Colloquia Illinois Insitute of Technology, October 28, 2024

Mathematical methods for Chemical and Biological Engineering. Chemical and Biological Engineering Department Seminar, Northwestern University, October 17, 2024

Data-Driven Model Discovery Meets Mechanistic Modeling for Biological Systems

- Workshop on Modeling & Inference of Stochastic Processes in Cells, Flatiron Institute, November 19, 2024
- Applied and Computational Mathematics Seminar, Georgia Tech, October 7, 2024
- 2024 National Institute for Theory and Mathematics in Biology Annual Meeting, Simons Foundation NYC, April 4 - 5, 2024
- Systems Biology Theory Lunch, Harvard Medical School, March 15, 2024

Identifying Models from Data

- Math Colloquium, November 17, 2023, Department of Mathematics New Jersey Institute of Technology, Newark, NJ
- Mathematical Biology Seminar, October 13, 2023, Department of Mathematics Duke, Durham, NC
- Two mathematical biology guest lectures, October 11 and 12, 2023

Building Biological Models for Metabolic and Regulatory Networks: Traditional and Data-driven Approaches

- Keynote at Finding Your Inner Modeler VI, August 4, 2023, Birmingham, AL
- Quantitative Biology Symposium, Northwestern Medical School, June 8, 2023, Chicago, IL

Model selection chaotic systems from data with hidden variables using sparse data assimilation

- Seminar for Computational Biology Group at Altos Labs, July 11, 2023, Redwood City, CA
- Physical Mathematics Seminar. Department of Mathematics. April 4, 2023. Massachusetts Institute of Technology, Cambridge, MA.

Data-driven model construction for dynamic biological systems.

- MathBio Seminar. Dept. of Mathematics. April 18, 2023. University of Pennsylvania. Philadelphia, PA
- Dept. of Chemical Biological Engineering. September 7, 2022. Illinois Institute of Technology, Chicago, IL.
- IV International Course on Theoretical and Applied Aspects of Systems Biology - 2022. July 20-22, 2022. Rio de Janeiro, Brazil (remote).
- Physics of Living Cells Seminar. April 15, 2022. U. Illinois Urbana-Champaign, Urbana-Champaign, IL.
- Computational Biology Seminar Series, December 7, 2021. UC Berkeley, Berkeley, CA.
- NYU Applied Math Seminar Series, November 5, 2021. Courant Institute, New York, NY.
- Interdisciplinary Center for Quantitative Modeling in Biology Seminar, June 1, 2021. UC Riverside, CA (remote).
- Mathematical Biology Seminar, April 21, 2021. U. of Utah (remote).
- IBM Distinguished Speaker Forum. July 2, 2019. IBM Research Almaden, San Jose, CA.
- Wednesdays@NICO seminar at Northwestern Institute on Complex Systems. February 21, 2018. Northwestern University, Evanston, IL

Relating SARS-CoV-2 RNA measured in Chicago-area Wastewater Treatment Plants and Cook County COVID-19 Public Health Data Wastewater Based Epidemiology Seminar Series, October 20, 2022. Discovery Partners Institute, Chicago, IL

Using simple baseline models to interpret developmental processes in C. elegans. Mathematical Biology Seminar Series, October 13, 2021. Southeast Center for Mathematics and Biology, Georgia Tech, Atlanta Georgia (remote).

Sparse model inference for chaotic systems with hidden variables. [Network Science for Fluid Mechanics Seminar Series](#). April 16, 2021, joint U. Nevada, Reno, ORNL, UCLA (remote).

Data-driven methods for model identification and parameter estimation of dynamical systems Mathematics in Science and Society Colloquium, Feb. 20, 2020. U. Illinois Urbana-Champaign, Urbana-Champaign, IL.

Reaction-diffusion modeling to design synthetic biological systems. ACMS Applied Math Seminar. Nov. 7, 2019. Notre Dame, South Bend, IN.

Design rules for spatial organization in cellular metabolism Biochemistry and Molecular Biology Colloquium Series. Oct. 25, 2018. Michigan State University, East Lansing, MI.

Identification of Hybrid Dynamical Systems via Clustering and Sparse Regression Computations in Science Seminars. May 23, 2018. University of Chicago, Chicago, IL.

Principled, data-driven identification of dynamical systems for biological networks

- ESAM Northwestern. Jan. 9, 2017.
- Worcester Polytechnic Institute. Jan. 17, 2017.
- UC Merced Dept. Applied Mathematics. Feb. 8, 2017.

Systems analysis of reactions in bacterial microcompartments. CCM9: The IXth International Symposium on Inorganic Carbon Utilization by Aquatic Photosynthetic Organisms. August 2016. Clare College, Cambridge, UK.

Inferring biological networks by sparse identification of nonlinear dynamics Institute for Disease Modeling. June 2016. Bellevue, WA.

Organization of metabolic reactions for improved efficiency: carbon fixation and bio-engineering applications. Energy Biosciences at University of California, Berkeley. July 2015. Berkeley, CA.

RuBisCO, carbonic anhydrase, cellular organization and the carbon concentrating mechanism, Massachusetts Institute of Technology CO₂ seminar series, May 2013. Cambridge, MA.

Contributed Talks Niall Mangan, Andrew Engedal, Jessica Lin, Manu Jayadharan, Cody FitzGerald. Sparse Model Selection for Oscillatory Data-sets with Hidden States SIAM Mathematics of Data Science, Atlanta GA, October 23, 2024.

Manu Jayadharan, Finn Hagerty, Arthur Montanari, Christina Catlett, Niall Mangan Numerical Strategies for Model Selection of Differential Algebraic Equations SIAM Mathematics of Data Science, Atlanta GA, October 24, 2024.

Manu Jayadharan, N. M. Mangan *Sparse-Optimization for Discovering Differential Algebraic Systems from Data* SIAM Annual Meeting, Spokane, WA, July 10, 2024

N. M. Mangan and C. FitzGerald *Model-Identification Techniques to Inform Dynamics of Regulatory Systems* SIAM Applications of Dynamical Systems, May 14-18, 2023

N. M. Mangan, *Model selection of chaotic systems from data with hidden variables using sparse data assimilation* Dynamics Days US 2023 (remote), January 9, 2023.

Sasha Shirman, Charlotte Abrahamson, Taylor Nichols, Andre Archer, Danielle Tullman-Ercek, and Niall M. Mangan *Optimizing Parameter Estimation through Experimental Design and Analysis of Model Trajectories in State Space* SIAM Life Sciences, July 13 2022

Niall M. Mangan, Anh Nguyen, Sasha Shirman, and Helena Ribera. *Data-Driven Methods for Model Identification in Biological Systems from Indirect Measurements* SIAM Life Sciences, July 13 2022

N M Mangan *Modeling guided design rules for spatial organization of metabolism*. Central Synthetic Biology Conference, U Wisconsin, Madison. October 6-7, 2022.

N M Mangan, S Shirman, A Archer. *Building and constraining kinetic models for spatially organized metabolic pathways*. SIAM Mathematics of Data Science, San Diego, CA. Sept 29, 2022.

N M Mangan, S Shirman, H Ribera, J A Nguyen *Inferring dynamics of biological systems from incomplete measurements*

- SIAM Annual Meeting, Pittsburg, PA July 2022.
- AMS Special Section on Mathematics of Complex Biology, AMS Spring Central Virtual Sectional Meeting, Remote (Purdue), March 2022

H Ribera , S Shirman, J A Nguyen, and N M Mangan *Sparse Model Selection for Dynamical Systems with Hidden Variables* Minisymposium organizer and coauthor at SIAM Dynamical Systems, Remote May 2021.

N M Mangan, T Askham, S L Brunton, J N Kutz, J L Proctor. *Sparse Model Selection for Structurally Challenging, Dynamic, Biological Systems* Mini-symposium speaker at SIAM Dynamical Systems, Snowbird, UT. May 2019.

N M Mangan, T Askham, S L Brunton, J N Kutz, J L Proctor. *Identification of Hybrid Dynamical Systems via Clustering and Sparse Regression* Mini-symposium organizer and speaker at SIAM Annual. Portland, OR. July 2018.

N M Mangan, J N Kutz, S L Brunton, J L Proctor. *Model selection for dynamical systems via sparse regression and information criteria*. AMS Sectional Meeting, Washington State University. Pullman, WA. April 22-23, 2017.

N M Mangan *Model inference in epidemiology and biological networks using sparse identification of nonlinear dynamics* Mini-symposium speaker at SIAM Conference on Computational Science and Engineering. Atlanta, GA. Feb 27- March 3, 2017.

N Mangan and S Mandre. *Optimal distribution of riverine turbines in a linear array with systematic flow manipulation*. Poster at XXIV ICTAM, Montreal, Canada 21-26th August 2016

N M Mangan, S L Brunton, J L Proctor, and J N Kutz. *Inferring biological networks by sparse identification of nonlinear dynamics* Mini-symposium speaker at SIAM Annual Meeting. Boston, MA July 15, 2016.

N M Mangan and Michael Brenner. *Organization of metabolic reactions for improved efficiency: carbon fixation and bioengineering applications* Mini-symposium organizer and speaker at SIAM Applications of dynamical systems conference. Snowbird, UT. May 2015.

N M Mangan, R E Brandt, V Steinmann, R Jaramillo, J R Poindexter, K Hartman, C Yang, R G Gordon, and T Buonassisi *Systematic Determination of the Efficiency Limiting Factors to Accelerate the Development of Photovoltaic Materials* Poster, presented at Fall Materials Research Society Meeting Dec. 2nd 2014, Boston, MA

N M Mangan, R E Brandt, V Steinmann, R Jaramillo, J V Li, J R Poindexter, K Hartman, L Sun, R G Gordon, and T Buonassisi, *A path to 10% efficiency for tin sulfide devices*. Poster presented at IEEE 40th Photovoltaic Specialist Conference (PVSC). Denver, CO June 2014.

N M Mangan, M P Brenner *Organizing biochemical reactions: Lessons from cyanobacteria*. Poster, presented at

- Boston Bacterial Meeting. Cambridge, Massachusetts June 2012.
- APS March Meeting. Boston, MA February 2012.
- Dynamics Days. Baltimore, MD January 2012.

N M Mangan, T M Schneider, and M P Brenner, in collaboration with M-J Sher, Y-T Lin, A Aspuru-Guzik, C Friend, and E Mazur. *Modeling femto-second laser doping: A path to high efficiency solar cells*. Poster, presented at Scialog sponsored by Research Corporation. Biosphere 2, Tuscon, AZ October 2011.

Teaching

Experimental Design using Models

Tutorial/seminar for Synthetic Biology RTG Fall 2021, Fall 2022, Fall 2023

Data Driven Methods for Dynamical Systems

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Websites: [Winter 2020](#), [Winter 2022](#) [Spring 2024](#)

- New course for graduate students and upper level undergraduates connected with cutting-edge research
- Discussion and project-based
- Read primary literature
- Scientific writing is key learning objective

Parameter Estimation for Dynamical Systems

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Websites: [Winter 2024](#), [half credit](#)

- New course for graduate students and upper-level undergraduates
- Focus on identifiability issues, sensitivity analysis, and nonlinear optimization in dynamical systems

Modeling of Metabolic systems

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Websites: [Winter 2023](#) [Winter 2024](#), [half credit](#)

- New course for graduate students and upper-level undergraduates
- Used application to enforce mathematical concepts in model development, linear algebra, ordinary differential equations, dynamical systems, optimization, and thermodynamics

Engineering Analysis 4 (ODEs and Applications)

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Websites: [Winter 2019](#), [Winter 2021](#)

Textbook: *Differential Equations and Boundary Value Problems* by Edwards & Penney

- Winter 2021- Remote teaching using prerecorded lectures and extended office hours.

Honors Engineering Analysis 4 (ODEs and Applications)

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Website: [Spring 2018](#), [Spring 2022](#) [Spring 2023](#) [Spring 2025](#)

Textbook: *Differential Equations and Boundary Value Problems* by Edwards & Penney

- Updated course structure to use a flipped-classroom approach in Spring 2022
- pre-recorded lectures and re-worked assignments to be in-class projects
- directed in-class project work alongside graduate student TAs
- implemented automated grading of programming components to enable separate evaluation of individual students' code, rather than group assessment through reports only

Modeling and Computation in Science and Engineering (Numerical methods)

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Website: [Winter 2021](#), [Winter 2023](#)

Applied Linear Algebra

Department of Engineering Sciences and Applied Mathematics, Northwestern

Course Website: [Winter 2018](#), [Fall 2019](#), [Winter 2022](#) [Spring 2025](#)

Textbook: *Numerical Linear Algebra with Applications* by W.Ford

- New course at NU bridging theory, numerical methods, and application
- lecture style, problem-based
- implemented automated grading of programming assignments

Applied Linear Algebra and Numerical Analysis,

Department of Applied Mathematics, University of Washington

Course Websites: [Spring 2016](#), [Fall 2016](#)

YouTube Example Lecture: [Finite Differences for Higher-Order Derivatives](#)

Mathematical Modeling (Teaching Assistant) Fall 2011

with William Bossert, Harvard School of Engineering and Applied Science

Applied Mathematics (Teaching Assistant) Fall 2010

with Michael Brenner, Harvard School of Engineering and Applied Science

Awards and Funding

- Sloan Research Fellow in Mathematics 2025

- Kuruganti Junior Faculty Fellowship 2025-2026, recognizing outstanding junior faculty in McCormick with a focus on computational research related to artificial intelligence or machine learning.
- DOE Early Career Award 2023-2028
- Theme Leader for the NSF-Simons funded National Institute for Theory and Mathematical Biology, 2023-present
- Member of the Trienens Institute Six Pillars of Decarbonization, Transform pillar.
- Senior Personnel on NIH R01 Design-driven engineering of robust mammalian sense-and-respond functions: from parts to programs, 2023-2027
- Chicago Innovation Award 2022: Discovery Partners Institute collaboration for Wastewater-based monitoring of SARs-CoV-2 across the state of Illinois
- Co-PI on Bill & Melinda Gates Foundation funded Plant DX-Phase II. 2022-2024
- Co-PI on Illinois Public Health Department-funded wastewater monitoring project. 2022-2025
- Co-PI on Chicago Public Health Department-funded Wastewater Surveillance Demonstration Project. 2022-2025
- Senior Personel on Walder Foundation Grant Chicagoland Prototype Coronavirus Assessment Network Node (PCANN)
- Co-PI on U.S. Army Funded Cell-Free Biomanufacturing Institute 2021-2024
- Co-Investigator on NSF-Simons Northwestern University Quantitative Biology Center 2018-2024
- Co-PI on DOE-funded Project: Employing bacterial microcompartments to create privileged redox pools for biofuel production 2018-2022
- Co-Investigator on NSF RTG Interdisciplinary Training in Quantitative Biological Modeling. 2018- 2024
- Lynch Foundation Fellowship 2009
- NSF Graduate Fellowship August 2008

Mentoring

- Within my group at NU I have advised 8 PhD students, 7 postdoctoral researchers, 18 undergraduate researchers, one post-masters research scientist, and one master's student.
- Some of the undergraduates I mentored were funded through NSF REU programs in Synthetic Biology (SynBREU) and Quantitative Biology (QBREU).
- I have served on thesis committees for 8 ESAM students, 6 Chemical and Biological Engineering students, 3 IBIS students, 1 Civil Environmental engineering student, and 1 Physics Student

Graduate Students

Andre Archer, *ESAM Graduate Student*, Spring 2018 - Winter 2024
 Jithin George, *ESAM Graduate Student*, Spring 2019 - Winter 2024
 Joy Nyaanga, *IBiS Graduate Student (joint with Erik Andersen)*, 2019 - Summer 2022
 Julie Anh Van Nguyen, *ESAM Graduate Student*, Fall 2020- Fall 2022
 Maria Warns, *ESAM Graduate Student*, Spring 2021-present
 Kathleen Dreyer, *CBE Graduate Student (joint with Joshua Leonard)*, Fall 2022 - Fall 2024
 Christina Catlett, *ESAM Graduate Student*, Spring 2023- present
 Yifan Zhang, *ESAM Graduate Student*, Spring 2024- present
 Yuxiang Feng, *Northwestern ESAM Masters Student, Thesis*, Spring 2025-Winter 2025

Postdocs	Sasha Shirman, <i>Postdoctoral researcher</i>, Fall 2018 - Spring 2022 Keren Li, <i>Postdoctoral researcher (joint with Jiping Wang)</i>, 2018 - 2019 Helena Ribera Ponsa, <i>Postdoctoral researcher</i>, Fall 2019- Summer 2022 Katelyn Joy Leisman, <i>Visiting Assistant Professor</i>, 2020-Summer 2022 and <i>Research Assistant Professor</i>, Fall 2022- present. Cody FitzGerald, <i>NSF-Simons & JSFM Postdoctoral Fellow</i> , 2021 - present Manu Jayadharan, <i>Postdoctoral researcher</i>, Fall 2023- present Alasdair Hastewell, <i>NITMB Postdoctoral Fellow</i>, August 2024- present
Masters students	George Bian, <i>Northwestern Masters Student in Computer Science</i> Fall 2022 - present, Mentored by Katelyn Leisman Yash Deodhar, <i>Research Scientist, ESAM Masters 2023</i>, Winter 2024- Summer 2025, co-mentored by Manu Jayadharan Yuxiang Feng, <i>Northwestern ESAM Masters</i>, Spring 2025-Winter 2025, Mentored by Manu Jayadharan
Undergraduate students	Christina Goss, <i>Northwestern Undergraduate</i>, Summer 2019- Spring 2021 Zachary Crispino <i>Cornell Undergraduate</i>, Summer 2019 Samuel Jung, <i>Northwestern Undergraduate</i>, Winter 2021 - Fall 2022 Matthew Cummings U. Dayton Undergraduate QBREU Summer 2021, co-mentored by Katelyn Leisman Matthew Sak U. Kentucky Undergraduate QBREU Summer 2021, co-mentored by Katelyn Leisman Isabel Zhong, <i>Northwestern Undergraduate</i>, Summer 2021 - Winter 2023 Andrew Yang, <i>Brown Undergraduate</i>, Fall 2022- 2023 Kevin Li, <i>Northwestern Undergraduate</i>. Fall 2022, Mentored by Katelyn Leisman Kaye Zhou, <i>Northwestern Undergraduate</i>, Fall 2022- Winter 2023, Mentored by Katelyn Leisman Kim Nguyen, <i>Northwestern Undergraduate</i> Fall 2022- present, Mentored by Katelyn Leisman Carol Liu, <i>Northwestern Undergraduate</i> Fall 2022- present, Mentored by Katelyn Leisman Adam Gokcan, <i>Northwestern Undergraduate</i> Fall 2022- Spring 2023, Mentored by Katelyn Leisman Jessica Lin <i>Berkeley Undergraduate</i> QBREU program, Summer 2023 -Spring 2024 Andrew Engedal <i>University of Wisconsin, Madison Undergraduate</i>, QBREU program, Summer 2023 and 2024, co-mentored by Cody FitzGerald Jocelyn Zonnefeld Dordt University Undergraduate, SynBREU REU program, Summer 2023 Ava Penn <i>Caltech Undergraduate</i>, SURF REU program, Summer 2023 Delany Dvorsky <i>University of Miami Undergraduate</i>, QBREU program, Summer 2024, mentored by Manu Jayadharan Roan Luikart, <i>Oregon State University Undergraduate</i>, QBREU program, Summer 2024, mentored by Cody FitzGerald Finn Hagerty, <i>Northwestern Mechanical Engineering Undergraduate</i>, Winter 2024-Summer 2024, Mentored by Manu Jayadharan Victor Agaba, <i>Northwestern Undergraduate</i>, Fall 2024- present, Mentored by Cody FitzGerald Weijia Wang, <i>Northwestern Computer Science and Mathematics Undergraduate</i>, Fall 2024-Present, Mentored by Alasdair Hastewell

Monica Xu, Williams and Mary Undergraduate, Winter 2025-present, Mentored by Yifan Zhang

Service

- Organizing Committee for [Spreading in Nature, Technology and Society Diffusion Fundamentals XI](#), Northwestern University, June 30-July 2
- Organizing Committee [SIAM Conference on Applications of Dynamical Systems](#), May 11-16, 2025 (DS25) Denver, CO, *co-organizer for Mentoring Session, Chaired Plenary talk*
- SIAM Activity Group on Dynamical Systems Canvassing committee for Prize Nominations, Fall 2024
- Council Member and [Policy Working Group Member Engineering Biology Research Consortium](#) (EBRC)
- Chaired Session at [EBRC annual meeting 2024](#), Atlanta Georgia
- Member of the selection committees for NITMB Mathematical Research Fellows 2023, 2024, & 2025 , NITMB Internal Research projects 2023, 2024 & 2025, and External Research Grants 2024 & 2025
- Co-Member of the ESAM departmental seminar Committee, 2024, 2025
- Panel Review Committee, Bioenergy Research Center for the Office of Biological & Environmental Research (BER) within the Department of Energy Office of Science, December 2023
- Selection committee for the SIAM 2023 [J.D. Crawford Prize](#)
- External committee member Postdoctoral Fellow hiring for Mathematics department at Northwestern, Fall 2021 - Winter 2022
- Grant Review panel for DOE ASCR proposals, June 2021
- Organizer for [Central Synthetic Biology Workshop 2021](#), September 9-10th
- Co-Organizer for [Dynamics Days 2019](#)
- Co-Organizer for Northwestern Research Networking Luncheons on *Addressing Climate Change*. Fall 2019-Summer 2021
- Northwestern Curriculum Committee, Winter 2019, Fall 2019 - Winter 2020, Spring 2020- present
- Northwestern Undergraduate Research Grants Review Committee, Spring 2021-Summer 2022
- Review panel for NICO dynamical systems fellowships 2020
- Review Pilot Projects for Northwestern NSF-Simons Center for Quantitative Biology, 2018, 2021
- Review Great Math Challenges in Biology Proposals for Northwestern NSF-Simons Center for Quantitative Biology, 2020
- Clarkson Honors Program Alumni Affinity Group, May 2017-present
- Simons Foundation Panel on Cellular Physiology, NYC Jan 2018
- Comprehensive Environmental Assessment and Synthetic Biology Applications at *Woodrow Wilson International Center for Scholars, Science, Technology & Innovation Program*, July 28th, 2011
- Member Harvard Graduate Consortium on Energy and the Environment, Sept 2009 to April 2011

**Additional
Outreach and DEI
Contributions**

- Wastewater-based SARs-CoV-2 Data analysis for Illinois and Chicago departments of public health through weekly reporting of trends and statistical analysis Fall 2020-present
- Tutorials and open source code-release of algorithms to the broader scientific community
- Group participation in outreach programs for elementary school children, including math days and after-school science club through Science in Society.
- Faculty advisor for [Women in ESAM](#), a group for women and underrepresented groups in mathematics, Jan 2018- present
- Faculty member of Women in Mathematics, a joint program with Statistics, Applied Mathematics, and Pure Math
- Plenary speaker and Panelist on "Working in Mathematical Sciences" at the Graduate Research Opportunities for Women (GROW) conference Oct 15-17, 2021. GROW is a conference aimed at women and non-binary undergraduate students who may be interested in pursuing a graduate degree in mathematical sciences.
- Speak on 2-3 panels/year focusing on work-life balance, career development, and interdisciplinary communication.
- Recruited 30 strong trainees through equitable methods, resulting in a diverse group of 50% women and over 25% other underrepresented groups in applied math.

**Professional
Societies**

Society for Industrial and Applied Mathematics, 2011 - present
American Physical Society, 2011 - present
Engineering Biological Research Consortium, 2022- present

Journal Referee

PNAS; PNAS Nexus; SIAM J. Appl Math.; SIAM J. on Appl. Dynamical Systems (SIADS); SIAM J. on Scientific Computing (SISC); Chaos; Plos One; Plos Comp. Bio.; Nature Communications; Nature Machine Intelligence; Scientific Reports; Proceedings of the Royal Society-A; Physical Review Fluids; J. Comp. Phys.; JCOMP-D; J. Physical Chemistry; Plant Physiology; Mechatronics-D; Biological Cybernetics; Chem. Eng. Sci.; Math. Bio. and Eng.; J. of Guidance, Control, and Dynamics; Nonlinear Dynamics; ASME: J. of Computational and Nonlinear Dynamics; IEEE Transactions on Network Science and Engineering; Environmental Modeling

Other Writing

Mangan, Niall. *Green Energy from Bacteria*. Science in the News "Flash." August 15, 2011, [Online Access](#), Retrieved October 1, 2016.

Kevin Vora and Niall Mangan. Jeffery Sachs: *Calling Academics, Research Communities and Companies to Make Up for Political Shortcomings*. The Energy Collective. April 14, 2011. [Online Access](#) Retrieved October 1, 2016.

CURRICULUM VITAE

Danielle Tullman-Ercek

Website: dtelab.northwestern.edu

EDUCATION

2006 PhD Chemical Engineering, University of Texas at Austin, Supervisor: George Georgiou

2000 BS Chemical Engineering, Biotechnology Specialization, Illinois Institute of Technology

CURRENT POSITION

2021-present Professor, Chemical and Biological Engineering, Northwestern University
Co-Director, Center for Synthetic Biology
Director, MS Biotechnology Program

PREVIOUS POSITIONS

2016-2021 Associate Professor, Chemical and Biological Engineering, Northwestern University
2009-2016 Assistant Professor, Chemical Engineering, University of California Berkeley
2011-2016 Staff Scientist, Lawrence Berkeley National Laboratory
2008-2009 Postdoctoral Researcher, Lawrence Berkeley National Laboratory
2007-2008 Postdoctoral Researcher, University of California, San Francisco

HONORS, AWARDS, AND FELLOWSHIPS

2023 American Institute of Medical and Biological Engineering, Inducted to College of Fellows for “Developing new methods to engineer supramolecular protein assemblies and for fostering a diverse, inclusive synthetic biology community”
2022 Equalize Pitch Competition, MedTech Division, First Place
2020 Biochemical Engineering Journal Young Investigator Award
2018 Outstanding Young Alumna Award, ChBE Illinois Institute of Technology
2015 Searle Leadership Award
2015-16 Merck Chair in Biochemical Engineering
2015-16 Exxon Knowledge Build Award
2012 NSF CAREER Award
2012 Hellman Family Faculty Award
2010 Paper of the Year, Journal of the Taiwan Institute of Chemical Engineers
2009-14 Charles Wilke Endowed Chair in Chemical Engineering
2002-05 National Science Foundation Graduate Research Fellow
2002 Howard Hughes Medical Institute Predoctoral Fellowship Alternate
2001-02 National Institute of Health Predoctoral Training Grant
1997-00 Illinois Institute of Technology Camras/NEXT Scholarship
1996 Rensselaer Polytechnic Institute Medalist

RESEARCH SUPERVISION

2008-present 13 Current PhD students
20 PhD Students Graduated (7 Northwestern, 13 UC Berkeley): current 1 professor, 2 consultants, 1 government lab, 12 industry, 2 startup executives, 2 postdocs
2009-present 1 Research Assistant Professor, 2 Current Postdocs
6 Postdocs Supervised (3 Northwestern, 3 UC Berkeley): current positions - 2 professors, 1 academic staff scientist, 1 national lab, 1 consultant, 1 government policy
2013-present 18 MS Students Graduated (17 Northwestern, 1 UC Berkeley): 3 PhD, 2 regulatory/policy, 1 science communication, 12 industry
2009-present 75 BS Students Mentored (24 Northwestern, 44 UC Berkeley): 22 graduate school (1 professor)

TEACHING ACTIVITIES

- 2009-2016 Undergraduate courses in thermodynamics, biochemical engineering upstream and downstream processes, protein engineering.
- 2016-2023 Undergraduate courses in thermodynamics, biochemical engineering upstream processes, protein engineering. Graduate courses in biochemical engineering upstream processes, molecular folding and function. Summer short courses in synthetic biology in England, Italy, US (guest lecturer).

ORGANIZATION OF SCIENTIFIC MEETINGS (SELECTED)

- 2021-2022 American Chemical Society, 263rd National Meeting Division Programming Chair, Biochemical Technology Division (BIOT)
- 2020 Central US Synthetic Biology Workshop, Co-Chair of Organizing Committee
- 2014-2021 American Chemical Society, 3xNational Meeting BIOT Area Coordinator
- 2019 Organizing Committee, International Conference on Biomolecular Engineering
- 2017 American Society of Microbiology, Annual Meeting Plenary Session Organizer
- 2013 American Chemical Society, Theme Committee
- 2012 American Society of Microbiology, Annual Meeting Plenary Session Organizer

EXTERNAL LEADERSHIP ACTIVITIES (SELECTED)

- 2025 Chair-Elect for ACS BIOT (to hold position in 2026)
- 2022-present Opera Bioscience, Chief Scientific Advisor and Co-Founder
- 2021-2022 Opera Bioscience, Chief Technology Officer and Co-Founder
- 2020-present Trends in Biotechnology, Advisory Board Member
- 2017-present ASM mSystems, Editor
- 2011-2023 ACS Synthetic Biology, Editorial Board Member
- 2017-2021 Current Opinion in Biotechnology, Editor, special issues
- 2017-2023 Engineering Biology Research Consortium, Council Member; Education Chair and Steering Committee Member (2017-2021)

INSTITUTIONAL ACTIVITIES (SELECTED)

- 2023-present Member, International Institute for Nanotechnology Steering Committee
- 2019-present Member, Chemistry of Life Processes Institute Faculty Executive Committee
- 2018-present Director, Synthetic Biology Research Experience for Undergraduates
- 2018-2021 Member, Institutional Biosafety Committee
- 2017-2023 Member, Faculty Search Committees (6)
- 2017-2019 Member, Graduate Admissions Committee

PUBLICATIONS (SELECTED), *indicates corresponding author

Burdette L.A., Leach S.A., Kennedy N.W., Ikwuagwu B.C., Summers J.S., Tullman-Ercek D. (2024) "Characterization and Engineering of the Type 3 Secretion System Needle Monomer from Salmonella Through the Construction and Screening of a Comprehensive Mutagenesis Library" mSphere (in press).

Karim A.S., Brown D.M., Archuleta C.M., Grannan S., Aristilde L., Goyal Y., Leonard J.N., Mangan N.M., Prindle A., Rocklin G.J., Tyo K.J., Zoloth L., Jewett M.C., Calkins S., Kamat N.P., Tullman-Ercek D., Lucks J.B. "Deconstructing synthetic biology across scales: a conceptual approach for training synthetic biologists" (2024) Nat Commun. Jun 26;15(1):5425. doi: 10.1038/s41467-024-49626-x

Liang, J.M., Burdette L., Wong H.T., Tullman-Ercek D.* (2023) "Construction of a constitutively active type III secretion system for heterologous protein secretion" Appl. Microbiol. Biotechnol. 107(5-6):1785-1800. doi: 10.1007/s00253-023-12411-9

Griffith J.E., Chen Y., Liu Q., Wang Q., Richards J.J., Tullman-Ercek D., Shull K., and Wang M.* (2023) “Quantitative high-throughput measurement of bulk mechanical properties using commonly available equipment.” *Materials Horizons* 10: 97-106.

Mills C.E., Waltmann C. Archer A.G., Kennedy N.W., Abrahamson C.H., Jackson A.D., Roth E.W., Shirman S., Jewett M.C., Mangan N.M., Olvera de la Cruz M., Tullman-Ercek D.* (2022) “Vertex protein PduN tunes encapsulated pathway performance by dictating bacterial metabolosome morphology.” *Nature Comm* 13: 3746.

Li Y., Kennedy N.W., Li S., Mills C.E., Tullman-Ercek D.*, Olvera de la Cruz M.* (2021) “Computational and experimental approaches to controlling bacterial microcompartment assembly.” *ACS Central Science* 7(4):658-670.

Chen Y., Wang Q., Mills C.E., Kann J.G., Shull KR, Tullman-Ercek D., Wang M.* (2021) “High-Throughput Screening Test for Adhesion in Soft Materials Using Centrifugation.” *ACS Central Science* 7(7):1135-1143. doi: 10.1021/acscentsci.1c00414.

Brauer D.D., Hartman E.C., Bader D.L.V., Merz Z.N., Tullman-Ercek D.*, Francis M.B.* (2019) “Systematic engineering of a protein nanocage for high-yield, site-specific modification.” *J. Amer. Chem. Soc.* 141(9): 3875-84.

Hartman E.C., Jakobson C.M., Favor A.H., Benedicto E.A., Francis M.B.*, Tullman-Ercek D.* (2018) “Quantitative characterization of all single amino acid variants of a viral capsid-based drug delivery vehicle.” *Nature Comm.* 9(1): 1385.

Glasgow J.E., Asensio M.A., Jakobson C.M., Francis M.B., Tullman-Ercek D.* (2015) “The influence of electrostatics on small molecule flux through a protein nanoreactor.” *ACS Synth. Biol.* 4(9):1011-9.

PATENTS

“Recombinant Strains and Media Formulation For Enhancing Secretion Titer Using a Type III Secretion System.” D. Tullman-Ercek, L.A. Burdette, H.T. Wong (2019). United States Patent Application US2020/013963. (PCT application filed.)

“Inducible Feedback Promoter Systems and Uses Thereof.” K. E. Tyo, B. Biggs, D. Tullman-Ercek, J. Lucks, C. Glasscock (2018). United States Patent Application 62/730,720. (PCT application filed.)

GRANTS (SELECTED)

W911NF-22-2-0246 (US Army) Michael Jewett (PI) 09/01/22-08/31/26
The Army Synthetic Biology Center for Predictive Materials Design (PreMaDe)
With this grant, we will develop materials inspired by and using biological molecules.

DBI-2150269 (NSF) Danielle Tullman-Ercek (PI) 03/01/22-02/28/26
REU Site: Synthetic Biology at Northwestern: From Molecules to Society (SynBREU2.0)
With this grant, we further develop our nation-leading undergraduate summer research program in the area of synthetic biology.

DE-SC0022180 (DOE) Tullman-Ercek (PI) 09/01/21-08/31/25
Engineering bacterial microcompartments in *Clostridium autoethanogenum* to overcome bottlenecks in sustainable production of synthetic rubber
We are exploring the native regulation, assembly and function of microcompartments in the industrially relevant non-model host *Clostridium autoethanogenum* (*C. auto*). Further, we sequester key biosynthesis

enzymes from two distinct metabolic pathways to make compounds involved in rubber production to showcase the power of the strategy.

Role: PI

CBET-2043973 (NSF)

09/01/2021 to 08/31/2025

Collaborative Research: Engineering MS2 Capsid Assembly Using Systematic Fitness Landscapes

The objective of this proposal is to study the virus-like particle based on MS2 bacteriophage as a model system for two main objectives: 1) to establish the principles of protein self-assembly and 2) to enhance chemical reactivity of residues in the particle without disrupting assembly.

Role: PI

DGE-2021900 (NSF) Lucks (PI)

09/01/20-08/31/26

NRT-URoL: Synthesizing Biology Across Scales - A Convergent Synthetic Biology Training Program

With this grant, we aim to create a nation-leading graduate training program in synthetic biology, using a framework of deconstructing a biological engineering problem across various scales (from molecular to community level) and embedding the vision for solutions to the problem within ethical and societal contexts.

Role: Co-PI

SERA L. YOUNG

Professor of Anthropology & Morton O. Schapiro Faculty Fellow, Institute for Policy Research,
Northwestern University

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sera.young@northwestern.edu :: www.serayoung.org :: www.WISEscales.org :: [@profserayoung](https://twitter.com/profserayoung)

MAJOR PROFESSIONAL INTERESTS

I am an applied nutritional anthropologist who explores how vulnerable populations, especially women and children, adapt to challenges to their health and well-being. *Keywords:* Nutritional anthropology; medical anthropology; global health; international nutrition; maternal and child nutrition; water insecurity; pica; food insecurity; HIV; infant and young child feeding.

EDUCATION

Cornell University :: Ithaca, NY — 2003-2008

PhD in Nutritional Anthropology. Division of Nutritional Sciences. Chair: Gretel Pelto.

University of Amsterdam :: Amsterdam, the Netherlands — 2001-2002

MA in Medical Anthropology. Highest Honors. Advisor: Sjaak van der Geest.

Taasisi Institute of Kiswahili and Foreign Languages :: Zanzibar, Tanzania — 2000

Introduction, Intermediate, and Advanced Swahili Courses.

University of Michigan :: Ann Arbor, MI — 1995-1999

BA in Anthropology. High Honors. Secondary Level Teaching Certificate.

Katholieke Universiteit of Leuven :: Leuven, Belgium — 1996-1997

Junior Year Abroad Program through the University of Pennsylvania.

United World College of the Atlantic :: Wales, UK — 1993-1995

International Baccalaureate.

AWARDS, HONORS, & RECOGNITIONS

Nevin Scrimshaw Mid-Career Award in Global Nutrition :: American Society for Nutrition — 2024. For a mid-career professional who has done innovative work to advance the field of global nutrition.

Lifetime Fellow, Clare Hall :: University of Cambridge — 2024-

Leverhulme Visiting Professor :: Leverhulme Foundation — 2023-2024. “Water insecurity: bringing a human voice to a global crisis” at London School of Hygiene and Tropical Medicine.

Norman Kretchmer Memorial Award in Nutrition and Development :: American Society for Nutrition — 2022.

In recognition of a substantial body of independent research in the field of nutrition and development with potential relevance to improving child health.

Andrew Carnegie Fellow :: Carnegie Corporation — 2019-2022

Society for Applied Anthropology :: Fellow — 2018-present

Margaret Mead Award :: American Anthropological Association and the Society for Applied Anthropology — 2013. In recognition of exemplary skills in broadening the impact of anthropology.

Allan Rosenfield Scholar & New Investigator in Global Health :: Global Health Council — 2009. For outstanding research on reproductive and family health.

National Institutes of Health :: (NIAID) T32 Reproductive Infectious Diseases Fellow, University of California, San Francisco 2010-2011

Distinguished Poster :: International Congress of Nutrition — 2009. For the poster “Flash-heating breastmilk is feasible in Dar es Salaam Tanzania”.

Wenner Gren Foundation :: Hunt Postdoctoral Fellowship — 2009

Dissertation Award :: Society for Medical Anthropology — 2009. In recognition of the outstanding dissertation in the field of medical anthropology.

Sugar Award :: One Laptop Per Child — 2007. For the development of the best educational children’s software.

National Institutes of Health (NICHD) Training Grant Trainee :: Cornell University— 2005-2007.

Fulbright Scholarship :: Tanzania (Declined, duplicate funding) 2004-2005.

National Science Foundation Graduate Fellowship :: Honorable Mention — 2004

Rudolf Virchow Award :: Honorable Mention : American Anthropological Association — 2003. Presented by the Society for Medical Anthropology for advancing critical perspectives in medical anthropology.

Christine Wilson Award :: American Anthropological Association — 2002. Presented by the Council on Nutritional Anthropology.

Division of Nutritional Sciences Small Grant :: Cornell University — 2004, 2005, 2007

Mario Einaudi International Research Travel Grant :: Cornell University — 2004, 2005

Sigma Xi Research Grant :: Cornell University — 2004

Rotary Cultural Ambassador Scholarship :: Zanzibar, Tanzania, Taasisi Institute of Swahili — 2000

Student-Intern Teacher of the Year Honorable Mention :: State of Michigan — 1999. For the demonstration of outstanding potential as an educator.

EMPLOYMENT & APPOINTMENTS

Northwestern University, Evanston, IL :: Anthropology & Global Health, Full Professor— September 2024-present; Associate Professor— September 2019— August 2024; Assistant Professor — August 2016-August 2019. *Affiliations:* Institute for Policy Research Faculty Fellow; Global Health Studies; Center for Synthetic Biology; Buffett Institute for Global Studies; Northwestern Center for Water Research; Buehler Center for Health Policy and Economics; Northwestern International Institute for Nanotechnology; Program in African Studies; Third Coast Center for AIDS.

University of Cambridge, England :: Visiting Fellow, Clare Hall. 2023-2024.

London School of Hygiene and Tropical Medicine, England :: Leverhulme Visiting Professor, Department of Nutrition. 2023-2024.

Center for Strategic & International Studies :: Senior Associate (Non-resident), Global Food and Water Security Program. 2023-2025.

The Field Museum of Natural History, Chicago, IL :: Adjunct Curator — October 2016-present.

Cornell University, Ithaca, NY :: Department of Population Medicine and Diagnostics, Assistant Professor of Global Health and Nutrition— August 2015-July 2016; Adjunct Assistant Professor of Global Health and Nutrition— August 2016-December 2019.

Cornell University, Ithaca, NY :: Division of Nutritional Sciences, Research Scientist — July 2011-July 2015.

University of California, San Francisco :: Department of Obstetrics, Gynecology, and Reproductive Sciences, Reproductive Infectious Diseases Fellow — 2010-2011.

University of California, Davis, CA :: Department of Pediatrics, Assistant Researcher — 2008-2011.

University of California, Berkeley, CA :: School of Public Health, Assistant Researcher — 2008.

CURRENT RESEARCH SUPPORT

Environmental Protection Agency:: “Piloting Accessible At-Home Tests for Detecting Lead in Drinking Water in Chicagoland” — PI, 2024-2026 (\$500,000)

Reckett Global Health Institute:: “Development of a Hygiene Experiences Scale: Scale development, implementation, refinement and dissemination” — PI, 2024-2025 (\$218,839)

National Institute of Mental Health:: 1R56MH134671 “Identifying the mechanisms of water insecurity on HIV treatment outcomes” — co-PI, 2024-2025 (\$722,368)

National Institute of Child Health and Disease:: R03HD113976: “Quantifying the compounding vulnerabilities of water and food insecurity on child and adolescent health in the US”— co-PI, 2024-2026 (\$175,303)

Hilton Foundation:: “A novel tool for comparably measuring experiences with water, sanitation, and hygiene health care facilities” — PI 2024-2026 (\$100,000)

National Science Foundation:: “The design, development, and societal impact of rapid, in-home, water quality biosensors” — Co-PI, 2023-2028 (\$2,931,500)

National Institute of Mental Health :: R03MH133200: “Understanding the Synergistic Roles of Water and Food Insecurity in the health of Mexican Adults”— PI, 2023-2025 (\$160,000)

Buffett Global Working Group :: “Making Water Insecurity Visible” — PI, 2023-2025 (\$300,000)

COMPLETED RESEARCH SUPPORT

Leverhulme Trust :: Visiting Professor, London School Hygiene and Tropical Medicine — PI, 2023-2024 (\$110,000)

National Science Foundation (NSF) Convergence RAISE :: “Systems Approaches for Vulnerability Evaluation and Urban Resilience” — Co-PI, 2018-2023 (\$1,050,500)

Northwestern University :: Provost COVID-19 Research Recovery Grant. PI, 2023 (\$25,000)

Swiss Water and Sanitation Consortium :: “Developing a Tool to Measure Experiences of WASH Services in Institutions” — PI, 2022-2023 (\$50,000)

Northwestern University :: Provost Grants for Research in Humanities, Social Sciences and the Arts. 2022-2023 (\$5000)

Institute for Policy Research :: Seed Grant, Using experiential food and water insecurity data for improved science and policy in Latin America and the Caribbean, IPR Seed Grant (off-cycle), 2023 (\$10,000)

National Science Foundation (NSF) :: RCN: Building a Community of Practice for Household Water Insecurity (HWISE) Research — Wendy Jepson (PI), Sera Young (co-PI), Amber Wutich (co-PI), & Justin Stoler (co-PI). 2018-2023 (\$355,000)

Institute for Policy Research :: Seed Grant:: “Understanding the accuracy and usability of at-home fluoride testing in Nakuru County, Kenya” 2022 (\$5,000)

Carnegie Foundation :: “A New Way to Think About Water: Household Water Insecurity” — Sera Young (PI) 2019-2022 (\$200,000)

Crown Family Center for Jewish and Israel Studies (Northwestern University) :: “A field-ready tool to assess the health consequences of water insecurity in the West Bank” — Sera Young (PI) & Yaakov Garb (co-PI). 2019-2021 (\$12,000)

United State Agency for International Development Cooperative Agreement (AID-OAA-L-14-00006 via Kansas Sustainable Intensification Innovation Lab) :: How does household water insecurity relate to household water quality, food security, and COVID-infections?: Health, agriculture, and policy implications using nationally representative data — Lori Post (PI), Sera Young (co-PI). 2020-2021 (\$294,597)

The Nature Conservancy :: Monitoring human well-being after natural infrastructure installation: A NatureNet Fellowship — Sera Young (PI), Vidya Venkataramanan (Fellow). 2019-2021 (\$22,100)

United State Agency for International Development Cooperative Agreement (AID-OAA-L-14-00006 via Rutgers University Policy Research Consortium) :: “A novel indicator of household water insecurity and household food insecurity in East Africa: health, agriculture, and policy implications” — Lori Post (PI), Sera Young (co-PI) (\$200,000)

Crown Family Center for Jewish and Israel Studies (Northwestern University) :: “Simple tools to measure water insecurity in Israel: A collaboration across the social, physical, and biological sciences” — Sera Young (PI), Julius Lucks (co-PI), & Noam Weisbrod (co-PI). 2018-2020 (\$29,000)

Resnick Family Social Impact Fund (Northwestern University Institute for Sustainability & Energy) :: To support the Household Water Insecurity Experiences study and an urban flooding project in Chicago — Sera Young (PI). 2017-2020 (\$25,000)

Innovative Metrics in Nutrition and Agriculture (IMMANA) :: “A novel tool for the assessment of household-level water insecurity: scale refinement, validation, and manual development” — Sera Young (PI), Phelgona Otieno (co-I) & Amber Wutich (co-I). 2016-2018 (\$359,625)

Finite Earth:: Incorporating social science data and metrics into life cycle assessment :: — Jennifer Dunn (PI), Sera Young (co-PI). 2019-2021 (\$45,000)

McKnight Foundation :: “Singida Nutrition and Agroecology Project (SNAP)” — Rachel Bezner Kerr (PI), Sera Young (co-PI), & Elias Mtinda (co-PI). 2015-2019 (\$674,800); <http://bit.ly/farm4change>

National Institute of Mental Health (NIMH) :: R21 “Health Consequences of Water Insecurity for HIV+ Women & Their Infants” — Sera Young (PI) & Maricianah Onono (co-I). 2016-2018 (\$337,214)

Water Collaboration Seed Funds :: To pursue measurement of household water insecurity in Israel and Taiwan — Sera Young (PI) & Noam Weisbrod (co-PI). 2017-2018 (\$25,000)

Crown Family Middle East Research Travel Award :: Water Insecurity among Syrian refugees in Lebanon — Sera Young (PI). 2017-2018 (\$15,000)

National Institutes of Health (NIMH) :: K01 Health Consequences of Food & Nutrition Insecurity for HIV+ Women & Their Infants — Sera Young (PI). 2012-2018 (\$853,970)

Northwestern Institute for Policy Research (IPR) :: Support for workshop entitled “Household Water Insecurity: Measurement, Consequences, and Policy Implications” — Sera Young (PI). 2016-2017 (\$20,000)

Center for Water Research Conference Award :: To support the Household Water Insecurity Scale Development Workshop — Sera Young (PI). 2017 (\$5,000)

Buffett Conference Award :: To support the Household Water Insecurity Scale Development Workshop — Sera Young (PI). 2017 (\$4,000)

Northwestern Third Coast Center for AIDS Research (CFAR) :: “Coalition building between Northwestern University, Pamoja Community-Based Organization, and Kenya Medical Research Institute /Research Care and Training Program-Family AIDS Care and Educational Services”— Sera Young (PI), Patrick Mbullo (co-I), & Pauline Wekesa (co-I). 2016-2017 (\$5,000)

Atkinson Center for Sustainable Future Venture Fund :: A novel assay for simultaneous multiplex detection of diarrhea-causing viruses, bacteria, and protozoa in drinking water and deployment in Kenyan and Honduran households — Ruth Richardson (PI) & Sera Young (co-PI). 2015-2017 (\$132,558)

CARE/Atkinson Center for Sustainable Future Impact through Innovation Fund :: A pilot study of the effects of performance-based incentives on the provision of PMTCT services in Inhassoro District, Inhambane Province, Mozambique — Sera Young (PI) & Delphine Pinault (co-I). 2012-2014 (\$200,000)

Atkinson Center for Sustainable Future Venture Fund :: Healthy Soil + Fertile Land + Food Security — Rachel Bezner Kerr (PI), Sera Young (co-I), David Wolfe (co-I), & Laurie Drinkwater (co-I). 2014-2016 (\$143,344)

Seed Grants for Collaborations Between Cornell University-Ithaca and Weill Cornell Medical College

Faculty :: Food insecurity as a novel diagnostic screening tool for poor nutritional and psychosocial outcomes among HIV-infected and -uninfected lactating Ugandan women and their infants — **Sera Young** (PI) & Nicole Sirotnin (co-PI). 2013-2014 (\$50,000)

Cornell Population Center :: “Development of appropriate methodologies for estimating dietary intake among nutritionally vulnerable women and infants in rural and peri-urban Kenya” — Sera Young (PI). 2013-2014 (\$2,500)

Pears Seed Grant Program, Faculty of Medicine, Hebrew University :: Food Insecurity and Nutritional status of patients Infected with Tuberculosis and Human Immunodeficiency Virus in Gulu, Northern Uganda — Rachel Bezner Kerr (PI) & Sera Young (co-I). 2013-2014 (\$5,500)

National Institutes of Health (NICHD) :: P01 Novel Strategies to Prevent Malaria and Improve HIV Outcomes in Africa — 2011-2013 (sub-contract PI, \$63,700)

Campbell Foundation :: Clinical study of Flash heating breastmilk to decrease morbidity, improve growth, and reduce HIV transmission in HIV-exposed infants — Caroline Chantry (PI) & Sera Young (co-PI). 2010-2011 (\$50,000)

National Institutes of Health (NICHD) :: R34 Planning grant to fund the preparation of a large multi-disciplinary study of Flash-heating of breastmilk by HIV+ women to prevent mother-to-child transmission of HIV — Caroline Chantry (PI) & Sera Young (Co-I). 2010-2011 (\$63,700)

Thrasher Research Fund :: Early Career Award — **Sera Young** (PI). 2009-2010 (\$26,000)

American Psychological Association :: HIV Cybermentor Travel and Research Award — 2009-2011

Population Center Research Award :: UC Berkeley — **Sera Young** (co-PI). 2009

Robert Wood Johnson Foundation :: Health Disparities Small Grant — Sera Young (co-PI). 2008 (\$10,000)

University of California Institute for Mexico and the United States (UC MEXUS) :: Pilot grant — Lia Fernald (PI) & Sera Young (co-PI). 2008 (\$1,500)

University of California, Berkeley :: Professional Development Grant — 2008

PUBLICATIONS

PEER-REVIEWED ARTICLES (**Graduate/medical student advisee, *Undergraduate advisee, ^Post-doctoral advisee, #Special recognition)

178. Butler M**, **Young SL**, Keenan-Devlin L. 2025. “Applying Authoritative Knowledge to Better Understand Preparation for Breastfeeding.” *Frontiers in Global Women’s Health* 6 (March): 1540376. <https://doi.org/10.3389/fgwh.2025.1540376>

177. O’Brien C**, Venkataramanan V^, Ruen CT, McCotter E*, Mittu *, Singh R*, Hernandez Gonzalez L, Packman A, Miller W, and **Young SL**. 2025. “‘They Say the Water Is Perfectly Safe But...’: A Mixed-methods Participatory Study of Factors Influencing Trust in Tap Water Safety in a Great Lakes City.” *Community Science* 4 (1): e2024CSJ000090. <https://doi.org/10.1029/2024CSJ000090>

176. Salles-Costa R, de Souza Cherol C, de Araújo Palmeira P, Segall-Corrêa A, **Young SL**, et al. 2025. “Food Insecurity and Water Insecurity Measurement in Brazil: Sustainable Development Goals Monitoring through Experiential Scales.” *Cadernos de Saúde Pública* 41 (February): e00153524. <https://doi.org/10.1590/0102-311XEN153524>

175. Weatherall, L, Alinta T, Tonkin T, Santos JA, Patay D, McCausland R, Wendy Spencer, ... **Young SL**, Rosewarne E, Webster J. 2025. “Measuring Food and Water Security in an Aboriginal Community in Regional Australia”. *The Australian Journal of Rural Health* 33 (1): e13214. <https://doi.org/10.1111/ajr.13214>

174. Marphatia, A., S. Simiyu, Flint O’Kane M, Alexander KT, Argolo Nascimento de Castro AC, Azcona G, Boni-Morkla PE, ... **Young SL**, Ross I, Cumming O. 2025. “Gender Equality and Quality of Life Must Be Central to the Design and Delivery of Sanitation.” *BMJ Global Health* 10 (1). <https://doi.org/10.1136/bmjgh-2024-018238>
173. Shamah-Levy, T., I. Méndez-Gómez-Humarán I, Mundo-Rosas V, Muñoz-Espinosa A, Melgar-Quinonez H, and **Young SL**. 2025. “Household Water Security Is a Mediator of Household Food Security in a Nationally Representative Sample of Mexico.” *Public Health Nutrition* 28 (1): e30. <https://doi.org/10.1017/S1368980024002684>
172. Bose I[^], Bethancourt HJ[^], Shamah-Levy T, Mundo-Rosas V, Muñoz-Espinosa A, Ginsberg T*, Kadiyala S, Frongillo EA, Gaitán-Rossi P, and **Young SL**. 2025. “Mental Health, Water, and Food: Relationships between Water and Food Insecurity and Probable Depression amongst Adults in Mexico”. *Journal of Affective Disorders*, October. <https://doi.org/10.1016/j.jad.2024.10.116>
171. Frongillo EA, Bethancourt HJ[^], Miller JM**, **Young SL**, and the Household Water Insecurity Experiences Scales (HWISE)-Research Coordination Network (RCN). 2024. “Identifying Ordinal Categories for the Water Insecurity Experiences Scales.” *Journal of Water, Sanitation, and Hygiene for Development: A Journal of the International Water Association*. <https://doi.org/10.2166/washdev.2024.042>
170. Kisliuk N, LaPointe S, **Young SL**, Prencipe L, Luchemba P, Lukongo ML, and Palermo T. 2024. “Water Insecurity Is Associated with Intimate Partner Violence among Female Adolescents and Youth but Not Males in Rural Tanzania: A Cross-Sectional Study.” *Global Public Health* 19 (1): 2409369. <https://doi.org/10.1080/17441692.2024.2409369>
169. Rosinger A, and **Young SL**. 2024. “Trends and Disparities in Concurrent Tap Water Avoidance and Household Food Insecurity among US Children.” *Nature Water* 2 (7): 638–48. <https://doi.org/10.1038/s44221-024-00261-2>
168. Collins SM**, Mock NB, Chaparro PM, Rose D, Watkins B, Wutich A, and **Young SL**. 2024. “Toward a More Systematic Understanding of Water Insecurity Coping Strategies: Insights from 11 Global Sites.” *BMJ Global Health* 9 (5): e013754. <https://doi.org/10.1136/bmjgh-2023-013754>
167. Mundo-Rosas V, Shamah-Levy T, Muñoz-Espinosa A, Hernández-Palafox Corin, Vizuet-Vega NI, Torres-Valencia MA, Figueroa-Oropeza JL, Rodríguez-Atristain A, Bautista-Arredondo S, Téllez-Rojo MM, **Young SL**, Melgar-Quinonez H, et al. 2024. Inseguridad Alimentaria y Del Agua. *Salud Publica de Mexico* 66 (4, jul-ago): 581–88. <https://doi.org/10.21149/15853>
166. Miller JD**, Staddon S, Salzberg A, Lucks JB, Bruine de Bruin W, and **Young SL**. 2024. Self-Reported Anticipated Harm from Drinking Water across 141 Countries. *Nature Communications* 15 (1): 7320. <https://doi.org/10.1038/s41467-024-51528-x>
165. Weinstock R, **Young SL**, Knaus A, Messing J**, Bly V, and Lucks JB. 2024. “When It Comes to Lead in Water, New Biosensing Technology Can Reveal What the Eyes Cannot See and What the Rules Do Not yet Stop.” *AQUA —Water Infrastructure, Ecosystems and Society* 73 (6): 1205–10. <https://doi.org/10.2166/aqua.2024.019>
164. Rangel Bousquet Carrilho T, Dongqing W, Hutcheon J, Wang M, Fawzi G, Kac G, and the GWG Pooling Project Consortium. (Consortium co-author) 2024. “The Impact of Excluding Adverse Neonatal Outcomes on the Creation of Gestational Weight Gain Charts among Women from Low- and Middle-Income Countries with Normal and Overweight BMI.” *The American Journal of Clinical Nutrition* 119 (6): 1465–74. <https://doi.org/10.1016/j.ajcnut.2024.03.016>
163. Owuor PM**, Miller JD**, Kanugula S*, Yeam J*, Collins S**, Obure V, Arunga T, **Young SL** 2024. “The Influence of an Agricultural Intervention on Social Capital and Water Insecurity Coping Strategies: Qualitative Evidence from Female Smallholder Farmers Living with HIV in Western Kenya.” *Heliyon* 10 (11): e32058. <https://doi.org/10.1016/j.heliyon.2024.e32058>
162. Miller, J**, **Young SL**, Bryan E, Ringler C. 2024. Water Insecurity Is Associated with Greater Food Insecurity and Lower Dietary Diversity: Panel Data from Sub-Saharan Africa during the COVID-19 Pandemic. *Food Security*, 16, 149-160. <https://doi.org/10.1007/s12571-023-01412-1>.

161. Kwon D, Knorr D, Wiley S, **Young S**, Fox M. 2023. "Association of Pica with Cortisol and Inflammation among Latina Pregnant Women." American Journal of Human Biology. December, e24025. <https://doi.org.turing.library.northwestern.edu/10.1002/ajhb.24025> #Cover article
160. Owuor PM**, Awuor DR, Ngave, EM, **Young SL**. (2023) "The people here knew how I used to live, but now I have to start again:" Lived experiences and expectations of the displaced and non-displaced women affected by the Thwake Multipurpose Dam construction in Makueni County, Kenya. Social Science & Medicine. <https://doi.org/10.1016/j.socscimed.2023.116342>
159. Rosen F,* Settler L,* Irvine F,* Koselka E,** Miller J,** **Young SL**. (2023) Associations between food insecurity and child and parental physical, nutritional, psychosocial, and economic well-being globally during the first 1000 days: A scoping review. Maternal and Child Nutrition. <https://doi.org/10.1111/mcn.13574>
158. Santoso, M. V.^, Petrie, H. C.*, Kerr, R. B., Lane, C., Kassim, N., Martin, H., Mtinda, E., Lupafya, E., & **Young, S.** (2023). A Mixed Methods Exploration of the Role of Participation in a Nutrition-Sensitive Agroecology Intervention in Rural Tanzania. Current Developments in Nutrition, 7(6), 100098. <https://doi.org/10.1016/j.cdnut.2023.100098>
157. Melgar-Quinonez, H., Gaitán-Rossi, P., Pérez-Escamilla, R., Shamah-Levy, T., Teruel-Belismelis, G., **Young, S. L.**, the Water Insecurity Experiences-Latin America, the Caribbean (WISE-LAC) Network (2023). A declaration on the value of experiential measures of food and water insecurity to improve science and policies in Latin America and the Caribbean. International Journal for Equity in Health, 22(1), 184. <https://doi.org/10.1186/s12939-023-01956-w>
Selected as Editor's Choice, see accompanying blog: <https://sustainabilitycommunity.springernature.com/posts/the-importance-of-measuring-experiences-of-water-insecurity>
156. Perumal, N., Wang, Darling, A. M., Liu, E., Wang, M., Ahmed, T., Christian, P., Dewey, K. G., Kac, G., Kennedy, S. H., Subramoney, V., Briggs, B., & Fawzi, W. W. Gestational Weight Gain Pooling Project Consortium (2023). (Consortium co-author) Suboptimal gestational weight gain and neonatal outcomes in low and middle income countries: Individual participant data meta-analysis. BMJ, 382, e072249. <https://doi.org/10.1136/bmj-2022-072249>
155. Darling, A. M., Wang, D., Perumal, N., Liu, E., Wang, M., Ahmed, T., Christian, P., Dewey, K. G., Kac, G., Kennedy, S. H., Subramoney, V., Briggs, B., Fawzi, Gestational Weight Gain Pooling Project Consortium (2023). (Consortium co-author) Risk factors for inadequate and excessive gestational weight gain in 25 low- and middle-income countries: An individual-level participant meta-analysis. PLOS Medicine, 20(7), e1004236. <https://doi.org/10.1371/journal.pmed.1004236>
154. Connors K, Jaacks L, Awasthi A, Becker K, Bezner Kerr R, Fivian E, Gelli A, Harris-Fry H, Heckert J, Kadiyala S, Martinez E, Santoso M^, **Young SL**, Bliznashka L. (2023) Women's Empowerment, Production Choices, and Crop Diversity: a secondary analysis of cross-sectional data from four low- and middle-income countries. (2023). Lancet Planetary Health. [https://doi.org/10.1016/S2542-5196\(23\)00125-0](https://doi.org/10.1016/S2542-5196(23)00125-0)
Selected by Nature Food as a Research Highlight. <https://www.nature.com/articles/s43016-023-00831-9>
153. Shah, S. H., Harris, L. M., Menghwani, V., Stoler, J., Brewis, A., Miller, J. D., Workman, C. L., Adams, E. A., Pearson, A. L., Hagaman, A., Wutich, A., & **Young, S. L.** (2023). Variations in household water affordability and water insecurity: An intersectional perspective from 18 low- and middle-income countries. Environment and Planning F, 2(3), 369–398. <https://doi.org/10.1177/26349825231156900>
152. Thavarajah W, Mbullo PM**, Awuor DR, Kiprotich K, Aggarwal R*, Lucks JB, **Young SL**. (2023) "The accuracy and usability of point-of-use fluoride biosensors in rural Kenya. npj Clean Water. 6:5; <https://doi.org/10.1038/s41545-023-00221-5>
151. **Young SL**, Bethancourt HJ^, Frongillo EA, Viviani S, Cafiero C. (2023) Concurrence of water and food insecurities, 25 low- and middle-income countries. Bulletin WHO. <http://dx.doi.org/10.2471/BLT.22.288771>
150. **Young SL**, Bethancourt HJ^, Ritter ZR, Frongillo EA. (2022) Estimating national, demographic, and socioeconomic disparities in water insecurity experiences in low- and middle-income countries in 2020-2021: a

cross-sectional, observational study, using nationally representative data. *Lancet Planetary Health*. [https://doi.org/10.1016/S2542-5196\(22\)00241-8](https://doi.org/10.1016/S2542-5196(22)00241-8)

149. Rickman R, **Young SL**, Lane C, Collins SM**, Miller JD**, Nichols A, Foster S, Widen E. (2023) Body composition trajectories during the first 23 months of life differ by HIV exposure among infants in western Kenya: a prospective study. *J Nutrition*. <https://doi.org/10.1016/j.tjnut.2022.11.010>

148. Ford L, Bethancourt HJ, Swanson Z, Nzunza R, Wutich A, Brewis A, **Young SL**, Almeida D, Douglass M, Ndiema E, Braun D, Pontzer H, Rosinger A. Water insecurity, water borrowing and psychosocial stress among Daasanach pastoralists in northern Kenya. *Water International*. <https://doi.org/10.1080/02508060.2022.2138050>

147. Bethancourt HJ^, Frongillo EA, **Young SL**. (2022) Validity of an abbreviated Individual Water Insecurity Experiences (IWISSE-4) Scale for measuring the prevalence of water insecurity in low- and middle-income countries. *J Wat San Hyg Devp*. <https://doi.org/10.2166/washdev.2022.094>

146. Mao F, Miller JD**, **Young SL**, Krause S, Hannah DM, HWISE-RCN. (2022) Inequality of household water security follows a Development Kuznets Curve. *Nature Commun*. 2022 Aug 8;13(1):4525. <https://doi.org/10.1038/s41467-022-31867-3>

145. Rosinger AY, Bethancourt HJ^, **Young SL**. (2022) Tap Water Avoidance Is Associated with Lower Food Security in the United States: Evidence from NHANES 2005-2018. *Journal of the Academy of Nutrition and Dietetics*. 2022. <https://doi.org/10.1016/j.jand.2022.07.011>

144. Bethancourt HJ^, Swanson ZS, Nzunza R, **Young SL**, Lomeiku L, Douglass MJ, et al. (2022) The co-occurrence of water insecurity and food insecurity among Daasanach pastoralists in northern Kenya. *Public Health Nutrition*. 2022 Aug 9;1–11. <https://doi.org/10.1017/S1368980022001689>

143. Miller JD**, Collins SM**, Boateng GO,^ Widen EM,^ Natamba B, Achoko W, Acidri D, **Young SL**, Martin SL. (2022) Pathways linking social support, self-efficacy, and exclusive breastfeeding among women in northern Uganda. *Global Public Health*. 2022 Aug 12;1–13. <https://doi.org/10.1080/17441692.2022.2110918>

142. Wutich, A, Rosinger AY, Brewis A, Beresford M, **Young SL**, Household Water Insecurity Experiences-Research Coordination Network. (2022) Water sharing is a distressing form of reciprocity: Shame, upset, anger, and conflict over water in 20 cross-cultural sites. *American Anthropologist*. <https://anthrosource.onlinelibrary.wiley.com/doi/epdf/10.1111/aman.13682>

141. Oehmke JF, **Young SL**, Heinemann AW, Rukuni M, Lyambabaje A, Post LA. (2022) A novel measure of developing countries' agricultural and food policy readiness. *World Development*. Oct;158:105920. <https://doi.org/10.1016/j.worlddev.2022.105920>

140. **Young SL**, Bethancourt HJ^, Ritter Z, Frongillo EA. (2021) The Individual Water Insecurity Experiences (IWISSE) Scale: Reliability, equivalence, and validity of an individual-level measure of water security. *BMJ Global Health* 2021;6:e006460. <http://dx.doi.org/10.1136/bmjgh-2021-006460>

139. Rosinger AY, Bethancourt HJ^, **Young SL**, Schultz AF. (2021) The embodiment of water insecurity: Injuries and chronic stress in lowland Bolivia. *Social Science & Medicine*. Dec 291: 114490 <https://doi.org/10.1016/j.socscimed.2021.114490>

138. Bamana G., Miller JM**, **Young SL**, Dunn, J. (2021) Addressing the social life cycle inventory analysis data gap: Insights from a case study of cobalt mining in the Democratic Republic of the Congo. *Dec One Earth*. <https://doi.org/10.1016/j.oneear.2021.11.007>

137. Stoler, J. et al., (consortium co-author). (2021) The Household Water Insecurity Experiences (HWISE) Scale: Comparison Scores from 27 Sites in 22 Countries. *Journal of Water, Sanitation and Hygiene for Development*. 11(6): 1102–1110. <https://doi.org/10.2166/washdev.2021.108>

136. Nagata JM, Miller JD**, Cohen CR, Frongillo EA, Weke E, Burger R, Wekesa P, Sheira LA, Mocello AR, Otieno P, Butler LM, Bukusi EA, Weiser SD, **Young SL**. (2021) Water insecurity is associated with lack of viral suppression and greater odds of AIDS-defining illnesses among adults with HIV in western Kenya. *AIDS and Behavior*. <https://doi.org/10.1007/s10461-021-03410-w>

135. **Young SL.** (2021) Viewpoint: The measurement of water access and use is key for more effective food and nutrition policy. *Food Policy*. Oct 1;104:102138 <https://doi.org/10.1016/j.foodpol.2021.102138>
134. Miller JD, Workman CL, Panchang SV, Sneegas G, Adams EA, **Young SL**, Thompson, A. (2021) Water Security and Nutrition: Current Knowledge and Research Opportunities. *Adv Nutr*. 12(6): 2525–2539 <http://academic.oup.com/advances/advance-article/doi/10.1093/advances/nmab075/6322255>
133. Santoso MV**, Bezner Kerr RN, Kassim N, Martin H, Mtinda E, Njau P, **Young, SL.** (2021) A Nutrition-Sensitive Agroecology Intervention in Rural Tanzania Increases Children’s Dietary Diversity and Household Food Security But Does Not Change Child Anthropometry: Results from a Cluster-Randomized Trial. *The Journal of Nutrition* July;151(7): 2010–2021. <https://doi.org/10.1093/jn/nxab052>
Selected as Editor’s Choice by the journal Science
132. Cetrone HM*, Santoso MV**, Kerr RB, Petito L, Blacker L*, Nonga T, Martin, HD, Kassim, N, Mtinda, E. **Young SL.** (2021) Food security mediates the decrease in women’s depressive symptoms in a participatory nutrition-sensitive agroecology intervention in rural Tanzania. *Public Health Nutrition*. Oct: 4682 - 4692. <https://doi.org/10.1017/S1368980021001014>
Selected as paper of the month, https://www.cambridge.org/core/blog/2021/07/09/how-a-nutrition-sensitive-agroecological-intervention-improved-womens-mental-health/
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OPEDs & BLOGS

220. Miller J, Gaitán-Rossi P, **Young SL**. (2024) From Tap to Table: Why Water Security Matters for Food Security. SDG2 Advocacy Hub. <https://sdg2advocacyhub.org/latest/from-tap-to-table-why-water-security-matters-for-food-security/>
221. Gaitán-Rossi P, **Young, S.L.**, Melgar-Quinonez, H. (2023) Unlocking Sustainable Solutions: Transforming Water Security in Latin America and Beyond. *Inter-American Development Bank*. <https://blogs.iadb.org/agua/en/unlocking-sustainable-solutions-transforming-water-security-in-latin-america-and-beyond/>
222. **Young, SL**. (2022) Invisible no more—Bringing a Human Voice to Water Insecurity. *Newsweek*. <https://www.newsweek.com/invisible-no-more-bringing-human-voice-water-insecurity-opinion-1757132>
223. **Young, S.L.** & Lucks, J.B. (2021). What's Really in Your Water? Rapid at-home tests for contaminants are on the way. *Scientific American*. <https://www.scientificamerican.com/article/whats-really-in-your-water/>
224. Miller, J.* & **Young, S.L.** (2020). 'Wash your hands and stay home' is impossible for millions. *The Hill*. <https://thehill.com/opinion/civil-rights/494854-wash-your-hands-and-stay-home-is-impossible-for-millions/>

225. Rzepa, A., **Young, S.L.**, Makariagakis, A. (2020) Monitoring the World's Water Access and Use. *Gallup*. <https://news.gallup.com/opinion/gallup/320825/monitoring-world-water-access.aspx>
226. **Young, S.L.** (2019). The risks of water insecurity. *Scientific American*. <https://blogs.scientificamerican.com/observations/the-risks-of-water-insecurity/>
227. **Young, S.L.** (2019). How often do you worry about water? *U.S. News & World Report*. <https://www.usnews.com/news/best-countries/articles/2019-03-20/commentary-a-better-way-to-measure-household-water-insecurity>
228. **Young, S.L.** (2018). US water security falls short. *The Hill*. <https://thehill.com/opinion/energy-environment/417229-us-water-security-falls-short>

DISSERTATION & THESES

229. **Young, S.L.** (2008). A biocultural study of the relationship between pica and anemia. PhD Dissertation in Nutritional Sciences. Cornell University.
230. **Young, S. L.** (2002). "Listen, Without Blood There is No Life": An ethnography of anemia during pregnancy in Pemba, Zanzibar. MA Thesis in Medical Anthropology. University of Amsterdam.
231. **Young S. L.** (1999). Religious Conversion by Dogon Women: A strategy for reproductive success? BA Honors Thesis. University of Michigan.

PROFESSIONAL TALKS

INVITED LECTURES

2025 Invited lectures at: Hope College (the Visscher Lecture, with Julius Lucks)

2024 Invited lectures at: International Water Management Institute; University of Cambridge, Department of Biological Anthropology; UNESCO & World Food Program, Nairobi; University of Edinburgh; Pennsylvania State University; Northwestern Alumni Association, Chicago & Beijing; Action Against Hunger; Walder Foundation; African Union; Water Research Australia; Zurich Environmental Humanitarian Emergencies; Korea International Water Week UNESCO Special Session on Water and Gender; Environmental Protection Agency; Office of Research Town Hall.

2023 Invited lectures at the Cornell University Division of Nutritional Sciences; University of New South Wales, Australia; The George Institute, Sydney, Australia; Water Research, Australia; UN Water; Foreign Policy Climate Summit; Northwestern University Regents, Northwestern University Parents Weekend; United States Department of Agriculture; the Pacific Institute; University of Buffalo; World Association for Public Opinion Research.

2022 Invited briefings on the Water Insecurity Experiences (WISE) Scales to: The Gap, Water.org, UNICEF's Multiple Indicator Cluster Survey, Heineken, Xylem, Scottish Whisky Association, Asian Development Bank, Inter-American Development Bank, BRAC, Indigo, Stone Family Foundation, UN Economic Commission for Africa, US Agency for International Development, GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), Indonesian Ministry, World Resources Institute, World Bank, One Drop Organization, Helvetas, Heaven Hill, Pernod Ricard, United States Department of Agriculture, Japan International Cooperation Agency, Stone Family Foundation, Chicago Metropolitan Water Reclamation District.

2022 Invited lectures to the Northwestern Alumni Association; University of California Davis, Department of Nutrition; Xylem Innovation Challenge; CDC's NOPREN working group.

2021 "Conversations with the Dean" <https://news.weinberg.northwestern.edu/2021/03/25/conversation-with-dean-featuring-sera-young/>

2021 German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. Expert Roundtable "Turning the tide on data— How to collect, analyze and act on data through a multi-sector perspective?"

2020-2021 Invited briefings on the Household Water Insecurity Experiences Scale and the Individual Water Insecurity Experiences Scale to the UN's Food and Agriculture Organization, USAID, Oxfam, REACH, the International Food Policy Research Institute, Capitol Hill, World Bank, International Water Management Institute, Reckett Group, Danaher, Unilever, UNICEF, International Food Policy Research Institute, Global Water Partnership, UNESCO, FCDO, WaterAid, GAIN, 2030 Water Resources Group, Xylem, Millennium Water Alliance, WaterAid, Water.org, Water Keepers.

2019 Invited presentations to USAID, USDA, UK AID, Oxfam-GB, Millennium Challenge Corporation, International Food Policy Research Institute, Rotary International, and World Bank. "The Household Water Insecurity Experiences (HWISE) Scale: A cross-culturally valid tool for the measurement of water insecurity."

University of Chicago Science Policy Group, Panel on Water Security in Chicago with MWRD Commissioner Debra Shore, 2019

Shirley Ryan "Learning for Life" Lecture, 2018.

Royal Geographic Society, London, UK, 2018. "The Household Water Insecurity (HWISE) Scale: a 'look under the bonnet'". Related: <https://www.rgs.org/geography/advocacy-and-impact/impact/hwise/>

University of Cape Coast, Ghana, 2018. "The links between household water insecurity and food insecurity in sub-Saharan Africa (and the story behind how this work was funded)"

United States Agency for International Development, 2017. "The Household Water Insecurity Experiences (HWISE) Scale: A cross-culturally valid tool for the measurement of water insecurity."

United Nations Commission on the Status of Women, 2017. "Food security in the first 1,000 days".

Buffett Institute, NICO, and Institute for Policy Research, 2019. "The Household Water Insecurity Experiences (HWISE) Scale: A cross-culturally valid tool for the measurement of water insecurity."

Northwestern University, 2019. "The power of breastfeeding."

Workshop on Globalization, Northwestern University, 2018. "Health Effects of Globalization."

Third Annual Symposium on Water in Israel and the Middle East, Northwestern University, 2018. "The Economic, Health, and Psychosocial Consequences of Household Water Insecurity."

Microgrids Symposium, Northwestern University, 2018. "Realizing the human benefits of improved energy access." <https://bit.ly/2rI2VC4>

Northwestern University Dumas Domain Dinner, 2017. "Water Insecurity: Understanding its Consequences and Identifying Solutions."

Third Coast Center for AIDS Research. "'If I Can't Eat, How Can I Feed?': Food Insecurity, HIV, and Maternal and Child Health."

Program in African Studies & Institute for Policy Research, Northwestern University. October 2017. "Why is Food Insecurity So Harmful in the First 1,000 Days of Life? Findings from East Africa."

Emory University, 2015. "If I can't eat, how can I feed?": Food and water insecurity, HIV, and maternal and child health."

University of California, San Francisco, 2012, Reproductive Infectious Diseases Seminar. "Current knowledge and future research areas on infant feeding in the context of HIV: Basic, clinical, behavioral, and programmatic perspectives." <http://bit.ly/LVfJcw> and <http://db.tt/Uww3XHRH>

Cornell University, 2011. "Chats in the Stacks: Craving Earth." <http://www.youtube.com/watch?v=-KX2bwGAxuM>

Touro University, Mare Island, California. 2010, 2011.

University of California, Davis Medical Center. Grand Rounds: Pediatrics. 2008.

University of California, San Francisco. "Local health meets global health group. 2008.

University of Illinois, at Chicago. Department of Anthropology. 2007.

WEBINARS

London School of Hygiene and Tropical Medicine, 2024. Leverhulme Lecture: “Making the invisible, visible: Quantifying human experiences with water to improve public health” <https://lshtm.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=ff63aa28-5197-4927-85d1-b0d000a515a0>

Center for Strategic and International Studies, 2024. “Living the Global Water Crisis” <https://www.youtube.com/watch?v=vOWiuGuMCus>

Nature Water, 2023. “Nature Water Talks: Water and Food: In Celebration of World Food Day” <https://cassyni.com/events/FHEVheEyoZ6YQPCpzusid?aqlcz>

University of New South Wales, The London School of Hygiene & Tropical Medicine, and Resilience Center Kenya, 2023 “Pathways between climate change, water security and mental health” <https://www.youtube.com/watch?v=Qi6noWgQ3Ng>

Foreign Policy Climate Summit, 2023 <https://foreignpolicy.com/events/fp-climate-summit-2023/>

UN Water, 2023. “Water and Nutrition. Harmonizing Actions between the Water and Nutrition Decade” <https://www.iatp.org/watch-water-nutrition-harmonizing-actions>

UN Water, 2023. “Global to local water security assessment: how do we measure up and how close are our targets mid-way to SDG6?” <https://media.un.org/en/asset/k1o/k1orou91lo>

American Society for Nutrition, 2020. “Household Water Insecurity and its Importance for Ensuring Food, Nutrition and Well-being.” <https://ondemand.nutrition.org/s/2020an/annual/ASN20-27>

Engineering for Change, 2019. “A tool to measure household water insecurity globally.” <https://www.engineeringforchange.org/webinar/measuring-worlds-water-insecurity/>

IMMANA, 2019. “A cross-culturally equivalent measure of household water security: experiences in scale development and implementation from 30 sites worldwide.” <https://www.youtube.com/watch?v=juTDN7YGbCs&t=12s>

International WaTERS Webinar, 2018. “‘You are alert all the time just in case you hear rumors that there is water somewhere’: Lived experiences of water insecurity during pregnancy and lactation in western Kenya.” <https://bit.ly/2wHr9S5>

CONFERENCE PRESENTATIONS

(**Graduate/medical student advisee, *Undergraduate advisee, ^Post-doctoral advisee)

Young SL. World Food Day celebration. UN Food and Agriculture Organization, October 2023.

Young, SL. “Asian Development Bank: Gender Inclusion Roundtable” Stockholm Water Week, August 2023.

Young, SL. “Innovative experiential WASH indicators for advancing SDGs across sectors” Stockholm Water Week, August 2023.

Young, SL. “Feminist Water Agenda: Rethinking Discourses on Women and Water” Stockholm Water Week, August 2023.

Bethancourt H[^], Frongillo E, **Young SL.** Global Health Insights from Experiential Measures of Water Insecurity. Gallup World Poll Global Insights, October 2022.

Bethancourt H[^], Frongillo E, **Young SL.** “Household water insecurity is positively associated with household food insecurity in low- and middle-income countries.” UNC Water Institute, October 2022. Oral session.

Tallman P, Workman C, Brogan J, Steiner C, Miller J, Bethancourt H, **Young S.** “Measuring human experiences with water to reveal disparities, inform policy, and prioritize action: The Water Insecurity Experiences Scales” UNC Water Institute, October 2022. Side event.

Thavarajah W, Mbullo PM**, Awuor DR, Kiprotich K, Aggarwal R*, Lucks JB, **Young SL**. “The accuracy and usability of point-of-use fluoride biosensors: a field study in Nakuru County, Kenya. UNC Water Institute, October 2022. Oral session.

“Valuing human experiences with water to reveal disparities, prioritize action” and “Water Security Data: going beyond collection to making impact”. Stockholm World Water Week, Sweden, August 2022. Oral session.

With Asian Development Bank “Mainstreaming Water and Sanitation Resilience Where It Matters Most: Supporting Water and Sanitation Entities on the Ground in Asia and the Pacific; Pinpointing WASH resilience needs by measuring human experiences with water”. Bangkok, Thailand, August 2022. Oral session.

“The Water Insecurity Experiences Scales” World Water Forum, Senegal, July 2022.

Bethancourt H[^], Frongillo E, **Young SL**. “Water Insecurity is Positively Associated with Food Insecurity in Low- and Middle-Income Countries”. American Society for Nutrition, June 2022.

Bethancourt H[^], Frongillo E, **Young SL**. “Water Insecurity is Positively Associated with Food Insecurity in Low- and Middle-Income Countries”. International Fund for Rural Development. Rome, May 2022. Oral Session.

Young SL, Bethancourt H[^], Melgar-Quinonez H, Frongillo, E. Experiences of water insecurity in half the world’s population. UNC Water Institute, October 2021. Oral session.

Young SL, Bethancourt H[^], Melgar-Quinonez H, Frongillo, E. Benchmarking water security experiences globally: implications for health and food. Stockholm World Water Week, August 2021. Invited session.

Bethancourt H[^], Frongillo E, **Young S**. Water Insecurity Is Prevalent and Associated With Constrained Food Choices in Low- and Middle-Income Countries. American Society for Nutrition, June 2021.

Miller JM, **Young SL**, Bryan E, Ringler C. Household water insecurity is common and associated with higher odds of hunger and lower dietary diversity across households in rural sub-Saharan Africa and Nepal. American Society for Nutrition, June 2021.

Rickman R, Lane C, Collins S, Miller J, Nichols A, Foster S, **Young, S.L.**, et al. Disentangling the Role of HIV Exposure on Linear Growth Among Mother-Infant Dyads in Western Kenya: A Comparison of Three Growth Models. American Society for Nutrition, June 2021.

Hannah, D., Krause, S., **Young, S.L.**, et al. Handwashing and water security in the context of a pandemic. Session ITS1.1/NP0.2 European Geosciences Union 2021.

Bakker, K., Edwardes, A., Mondardini, R., **Young, S.L.**, et alia. How big data, citizen science data, and survey data can be effective in monitoring progress and decision-making around SDG 6 (ensuring availability and sustainable management of water and sanitation for all). United Nations World Data Forum. Bern, Switzerland. October 2020. (Oral session)

Young, S. L. et alia. Metropolitan & Household Water Insecurity: Novel Tools for Achieving SDG 6. Stockholm World Water Week. Stockholm, Sweden. September 2020. (Oral session) <https://www.ipr.northwestern.edu/our-work/research-tools-apps/water-insecurity/index.html>

Miller, J.M.* & **Young, S.L.** The Household Water Insecurity Experiences (HWISE) Scale: Implications for Nutrition & Agriculture. Water Scarcity in Agriculture at the Food and Agriculture Organization. Rome, Italy. September 2020. (Oral presentation)

Young, S.L., Rosinger, A., Jamaluddine, Z., & Ringler, C. Household Water Insecurity and its Importance for Ensuring Food, Nutrition and Well-Being. American Society for Nutrition. June 2020. (Plenary session)

Young, S.L. & Staddon, C. The Household Water Insecurity Experiences Scale: a simple questionnaire for generating high-resolution data on water security. Cairo Water Week. Cairo, Egypt. October 2019. (Oral presentation)

Young, S.L., Whinner, J., Miller, J.,* Staddon, C., & HWISE Research Coordination Network. Development of a cross-culturally validated scale to measure household water insecurity experiences and implementation in urban, cholera-prone areas of Lusaka, Zambia. Water and Health Conference. Chapel Hill, NC. October 2019. (Oral presentation)

Young, S.L. Development and testing of a household water insecurity measure that is equivalent across countries. Agriculture, Nutrition & Health Academy Annual Meeting. Hyderabad, India. June 2019. (Oral presentation)

Balka, S.,* Santoso, M.V.,** Bezner Kerr, R., & **Young, S.L.** A Participatory Investigation of Dietary Diversity Amplifies Knowledge Coproduction and Participant Involvement in an Agroecological Intervention in Rural Tanzania. American Society for Nutrition. Baltimore, MD. June 2019. (Oral presentation)

Santoso, M.V.,** Bezner Kerr, R., Kassim, N., Martin, H., Mtinda, E., Mtei, K., & **Young, S.L.** Production Diversity, Men's Help with Household Tasks, & Lower Women's Depression Mediate Impact of an Agriculture Intervention on Child's Dietary Diversity in Tanzania. American Society for Nutrition. Baltimore, MD. June 2019. (Oral presentation)

Wang, M.,* Miller, J.,* Collins, S.,** Santoso, M.V.,** Wekesa, P., Onono, M., Gandhi, M., & **Young, S.L.** Increased Social Support Mitigates the Negative Impact of Food Insecurity on Antiretroviral Adherence Among Postpartum Women in Western Kenya. American Society for Nutrition. Baltimore, MD. June 2019. (Poster presentation)

Cramer, J., Jallow, M., Miller, J.D.,* & **Young, S.L.** Geophagy in The Gambia: An exploration of the motivators for eating earth among men and women. Human Biology Association. Cleveland, OH. March 2019. (Poster presentation)

Benzaken, C.,* Miller, J.D.,* Smith, A., & **Young, S.L.** Higher maternal depression is associated with lower vaccination adherence among infants in western Kenya. Human Biology Association. Cleveland, OH. March 2019. (Poster presentation)

Young, S.L. & HWISE RCN. Development & Uses of a Transdisciplinary Scale To Measure Household Water Insecurity. AAAS. Washington, DC. February 2019. (Oral presentation)

Murnane, P., Miller, J.,* Collins, S.,** Neilands, T., Cohen, C., Laudenslager, M., Weiser, S., Onono, M., & **Young, S.L.** Food insecurity is associated with postpartum stress in Kenyan women of mixed HIV status. AIDS Conference. Amsterdam, Netherlands. July 2018. (Poster presentation.)

Harris, J.,* Santoso, M.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** A Women's Hours of Household and Non-farming Work, But Not Agriculture Work, is Positively Associated with Child's Dietary Diversity Scores in Rural Tanzania. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. **Finalist for the American Society for Nutrition's Emerging Leaders in Global Nutrition Poster Competition (Poster presentation)

Lin, A.,* Santoso, M.,** Collins, S.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** He said, she said: intra-household disparities in water insecurity experiences between men and women in Tanzania. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. (Poster presentation)

Smith, S.,* Santoso, M.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** Timely participatory dissemination improves study implementation and data interpretation: lessons from an agriculture and nutrition participatory study in Tanzania. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. (Poster presentation)

Olmos, S.,* Santoso, M.,** Garigipati, P.,* Benzaken, C.,* Beck, A.,* Umuhire, E.,* & **Young, S.L.** Systematic literature review of the relationship between women's empowerment and child nutrition indicates women's empowerment is important but poorly defined and measured. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. (Poster presentation)

Hassan, B.,* Santoso, M.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** Male attendance at antenatal care clinic visits is not associated with involvement in childcare of child dietary diversity in Singida, Tanzania. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. (Poster presentation)

Clark, K.,* Santoso, M.,** Miller, J.,* Collins, S.,* Onono, M., & **Young S.L.** Food insecurity is positively associated with infant morbidity symptoms at three months of age in Nyanza, Kenya. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. (Poster presentation)

Santoso, M.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** Food insecurity exacerbates depression among women more than among men in rural Tanzania. American Society of Nutrition Annual Meeting. Boston, MA. June 2018. **Finalist for the American Society for Nutrition's Emerging Leaders in Global Nutrition Poster Competition at ASN (Oral presentation)

Santoso, M.,** Bezner Kerr, R., Kassim, M., Mollay, C., Martin, H., Mtei, K., Kalonga, J., Mtinda, E., & **Young, S.L.** A Participatory Agroecological Intervention Amongst Rural Tanzanian Farmers Increases Crop Diversity, Food Security, and Maternal Dietary Diversity: A Midline Evaluation. Agriculture for Nutrition and Health Academy Week. Accra, Ghana. June 2018. (Oral presentation)

Young, S.L. & HWISE Research Coordination Network. Development and testing of a household water insecurity measure that is equivalent across countries. Agriculture for Nutrition and Health Academy Week. Accra, Ghana. June 2018. (Oral presentation)

Young, S.L. & Miller, J.* Medicine beneath your feet: A biocultural examination of the risks and benefits of geophagy. Clay Minerals Society. Urbana-Champaign, IL. June 2018. (Oral presentation)

Young, S.L. & Miller, J.* The Household Water Insecurity Experiences (HWISE) Scale: A Cross-Culturally Valid Tool for the Measurement of Household-Level Water Insecurity. Agricultural & Applied Economics Association Annual Meeting. Washington, D.C. June 2018. (Oral presentation)

Young, S.L. "You are alert all the time just in case you hear rumors that there is water somewhere": Lived experiences of water insecurity during pregnancy and lactation in western Kenya. American Anthropological Association. Washington, D.C. November 2017. (Oral presentation.)

Blacker, L.*, Santoso, M.V.** , Harnett, L. *, Kassim, N., Mollay, C., Martin, H., Mtinda, E., Mtei, K., Kalonga, J., Bezner Kerr, R., **Young, S.L.** Household food insecurity and gender inequity are associated with high prevalence of maternal depression amongst female farmers in rural Tanzania. Experimental Biology. Chicago, IL. April 2017. **Received Second Place in the American Society for Nutrition's Emerging Leaders in Nutrition Poster Competition (Poster presentation.)

Collins, S.M.** , Miller, J.D.*, Mbullo, P., Boateng, G.O.^, Wekesa, P., Onono, M., **Young, S.L.** "You take the cash meant for beans and you buy water": The multi-faceted consequences of water insecurity for pregnant and postpartum women of mixed HIV status. Experimental Biology. Chicago, IL. April 2017. (Poster presentation.)

Boateng, G.O.^, Onono, M., Collins, S.M.** , Baughan, E. *, Wekesa, P., Familiar, I., Widen, E.M., **Young, S.L.** Early childhood learning activities buffer adverse effects of HIV exposure on infant cognitive development: a longitudinal study. Experimental Biology. Chicago, IL. April 2017. (Poster presentation.) **Received First Place in the American Society for Nutrition's Emerging Leaders in Nutrition Poster Competition

Boateng, G.O.^, Collins, S.M.** , Mbullo, P., Wekesa, P., Krumdieck, N.R., Johnson, M., Onono, M., Neilands, T.B., **Young, S.L.** A novel tool for the assessment of household water insecurity: scale development and validation in western Kenya. Experimental Biology. Chicago, IL. April 2017. (Poster presentation.)

Collins, S.M.** , Widen, E.M.^, Santoso, M.V.** , Martin, S.L., Hoke, M.K., Tuthill, E.L.^, Wekesa, P., Boateng, G.O.^, Onono, M., **Young, S.L.** Biological and psychosocial determinants of sustained exclusive breastfeeding among women of mixed HIV status in Western Kenya. Human Biology Association. New Orleans, LA. April, 2017. (Poster presentation.)

Miller, J. *, Boateng, G.^, Collins, S.** , Wekesa, P., Onono, M. **Young, S.L.** Perinatal geophagy is associated with HIV and anemia among women in western Kenya. Human Biology Association. New Orleans, LA. April 2017. (Poster presentation.) **Won Hilde Spielvogel Award for Outstanding Presentation by an Undergraduate Student

Boateng, G.O.^, Onono, M., Baughan, E. *, Collins, S.M. **, **Young, S.L.** Food insecurity and HIV exposure are deleterious to infant cognitive development. Human Biology Association. New Orleans, LA. April 2017. (Oral presentation.)

Pebsworth, PA.**, **Young, SL.**, Huffman, MA. Can geophagy alter the feeding ecology of non-human primates?: A systematic literature review. The International Primatological Society and the American Society of Primatologists. Chicago, IL. August 2016. (Oral presentation.)

Familiar, I., Collins, S. **, Sikorskii, A., Ruisenor, H., Achidri, D., Achola, H., Onen, D., Boivin, M., **Young, SL.** Predictors of neurocognitive outcomes among a cohort of 12-month old infants from Uganda of mixed HIV exposure. The International AIDS Conference. Durban, South Africa. July 2016. (Poster presentation.)

Widen, E. **, Collins, S.**, Wekesa, P., Krumdieck, N. **, Onono, M., **Young, SL.** Newly Diagnosed HIV is Associated with Lower Rates of Gestational Weight Gain and Loss of Mid-Upper Arm Circumference among Pregnant Kenyan Women. Experimental Biology. San Diego, CA. April 2016. (Oral presentation.)

Tsai, I. *, Krumdieck, N. **, Collins, S. **, Widen, EM. **, Wekesa, P., Onono, M., **Young, SL.** Food Insecurity is Associated with Depression and Stress Among a Cohort of Pregnant Kenyan Women of Mixed HIV Status. Experimental Biology. San Diego, CA. April 2016. (Poster presentation.) **Received Second Place in the American Society for Nutrition's Emerging Leaders in Nutrition Poster Competition

Miller, JD. *, Collins, S. **, Krumdieck, NR. **, Wekesa, P., Onono, M., **Young, SL.** Pica is Associated with Lower Hemoglobin Concentration in a Cohort of Pregnant Kenyan Women of Mixed HIV Status. Experimental Biology. San Diego, CA. April 2016. (Poster presentation.)

Hong, JJ. *, Martey, E. *, Dumas, SE. **, **Young, SL.**, Travis, AJ. Physical, Economic, and Social Limitations to Egg Consumption in Luangwa Valley, Zambia. Experimental Biology. San Diego, CA. April 2016. (Poster presentation.)

Maranga, A. *, Dumas, SE. **, Mbullo, PE., Wekesa, P., Collins, S. **, Onono, M., **Young, SL.** Perceived Benefits of Livestock Ownership among Female Smallholder Farmers of Mixed HIV Status in Nyanza Province, Kenya. Experimental Biology. San Diego, CA. April 2016. (Oral and poster presentations.) **Received First Place in the American Society for Nutrition's Emerging Leaders in Nutrition Poster Competition

Martin, S., Collins, S. **, Natamba, BK. **, Achidri, D., Widen, EM. **, **Young, SL.** Perceived breastmilk insufficiency and HIV are key predictors of exclusive breastfeeding at 1 and 3 months among mothers in northern Uganda. Experimental Biology. San Diego, CA. April 2016. (Oral and poster presentations.)

Krumdieck, N. **, Collins, S. **, Wekesa, P., Onono, M., **Young, SL.** Just how much household water insecurity do pregnant Kenyan women of mixed HIV status experience?: The need for a validated scale. Water and Health Conference: Where Science Meets Policy, UNC Chapel Hill. October 2015. (Poster presentation.)

Williams, A., ** Chantry, C., **Young, S.L.**, Null, C., Stewart, C. Breastmilk Vitamin B12 Concentration are inadequate, but are not associated with reported recent animal source food or vitamin B12 intake among lactating women in rural Kenya. Academy of Breastfeeding Medicine, Los Angeles CA. October 2015. (Oral presentation.)

Young, SL. Koss, C., Natureeba, P., Plenty, A., Charlebois, E., Nyafwono, D., Clark, T., Cohan, D., Kamya, M., Havlir, D. Food insecurity is associated with lack of sustained viral suppression among HIV-Infected pregnant and breastfeeding Ugandan women." AIDS Impact. Amsterdam, the Netherlands. July 2015. (Oral presentation.)

Collins S, ** Natamba BK, ** Arbach A, ** Widen EM, ** Desai P, * Khan H, * Griffiths JK, **Young SL.** Alcohol Use Among Pregnant Ugandan Women of Mixed HIV Status is Associated with Social Environment and Food Insecurity. Experimental Biology. Boston, MA. March 2015. (Poster presentation.)

Dumas SE, ** Oyier B, Otticha S, Arbach A, ** Zheng A, * Desai P, * Khan H, * Onono M, **Young SL.** Perceived Causes and Consequences of Food Insecurity During Pregnancy and Lactation among Kenyan Women of Mixed HIV Status. Experimental Biology. Boston, MA. March 2015. (Poster presentation.)

Natamba BK, ** Mehta S, Mou S, * Ghosh S, Stoltzfus RJ, Griffiths JK, **Young SL.** Social Support Modifies Bidirectional Linkages Between Food Insecurity and Prenatal Depressive Symptoms while Domestic Violence Alters the Unidirectional Impact of Food Insecurity on Prenatal Depressive Symptoms. Experimental Biology. Boston, MA. March 2015. (Oral presentation.)

Roy A,** Fuentes-Afflick E, Fernald L, **Young SL**. Pica is prevalent and strongly associated with iron deficiency, but not anemia, among Mexican-born pregnant women living in the United States. Experimental Biology. Boston, MA. March 2015. (Poster presentation.)

Santoso MV,** Larkin H,* Chung YB, Ota V, Bezner Kerr RN, **Young SL**. Sub-Optimal Infant and Young Child Feeding (IYCF) Practices in Singida, Tanzania are Associated with Food Insecurity. Experimental Biology. Boston, MA. March 2015. (Poster presentation.)

Schuster RC,** de Sousa O, Reme A, Pinault D, **Young SL**. Evaluative ethnography is useful for understanding the impact pathways of performance- based incentives on health worker motivation. Experimental Biology. Boston, MA. March 2015. (Poster presentation.)

Widen EM,** Natamba BK,** Collins S,** Khan H,* Sirotin N, Ghosh S, Griffiths JK, **Young SL**. Maternal Food Insecurity is Associated with Loss of Fat, but not Lean Mass during Lactation among Ugandans of Mixed-HIV Status. Experimental Biology, Boston, MA. March 2015. (Oral presentation.)

Williams, A,** Chantry, C., **Young, S.L.**, Null, C., Stewart, C. Breastmilk Vitamin B12 Concentration is Low among Women in Western Kenya and is Not Associated with Animal Source Food Intake or Food Insecurity. Experimental Biology, Boston, MA. March 2015. (Poster presentation.)

Young, S.L., Dumas, S.,** Oyier, B., Otticha, S., Arbach, A.*, Zheng, A.*, Desai, P.*, Onono, M. Food insecurity during pregnancy and lactation: Kenyan women's experiences of vulnerability and strategies for resilience. Society for Applied Anthropology, Pittsburgh, PA, March 2015. (Oral presentation.)

Schuster RC,** de Sousa O., Vopelak C.,** McMahon D,* Pinault D., **Young SL**. The women have trust in me, and I try to live up to this trust: Health worker motivation and workplace characteristics among facility- and community-based health workers in rural Mozambique. American Public Health Association Annual Meeting, New Orleans, LA, November 2014. (Oral presentation.)

Schuster R.C.,** de Sousa O., Vopelak C.,** McMahon D.,* Pinault D, **Young SL**. Motivation and workplace characteristics among facility- and community-based health workers in rural Mozambique to inform a performance-based incentive intervention. Global Symposium on Health Systems Research, Cape Town, South Africa, September 2014. (Poster presentation.)

McDermid, J., Spraggon, V., Oyier, B., Otticha, S., Onono, M., **Young, S.L.** Appetite sensation scores and dietary intake of pregnant and lactating women in western Kenya. Experimental Biology, San Diego, CA, April 2014. (Poster presentation.)

Natamba, B.,** Oyok, T., Achan, J., Mou, S.,* Ghosh, S., Sirotin, N., Stoltzfus, R.J., Griffiths, J., **Young, S.L.** Maternal food insecurity, anemia, and social support are independently associated with prenatal depression among HIV-positive and -negative women attending antenatal services in northern Uganda. Experimental Biology, San Diego, CA, April 2014. (Poster presentation.)

Finkelstein, J., Plenty, A., Mehta, S., Natureeba, P., Clark, T., Kamya, M., Charlebois, E., Cohan, D., Havlir, D., **Young, S.L.** Anemia, vitamin B12, and folate statuses during pregnancy, and their association with obstetric outcomes among HIV-infected Ugandan women receiving ART. Experimental Biology, San Diego, CA, April 2014. (Poster presentation.)

Dickin, K., Seim, G.,* **Young, S.L.**, Wawire, S., Martin, L. Challenges and Facilitators for Implementing Prenatal Calcium Supplementation to Prevent Preeclampsia: Formative Research with Health Care Providers and Women in Kenya. Experimental Biology, San Diego, CA, April 2014. (Oral presentation.)

Tuthill, E.,** **Young, S.L.** Appropriate Methodologies for Mapping the Biocultural Determinants of Infant Feeding Practices in the Context of HIV in Limited-Resource Settings. American Anthropological Association, Chicago, IL, Nov 2013. (Oral presentation.)

Tuthill, E.,** McGrath, J., **Young, S.L.** Commonalities and differences in infant feeding attitudes and practices in the context of HIV in Sub-Saharan Africa: a Metasynthesis. AIDS Impact, Barcelona, Spain, October 2013. (Oral presentation.)

Jones, A.D., Ngure, F.M., Pelto, G., **Young, S.L.** What are we assessing when we measure food security?: A compendium and review of current metrics. First International Conference on Global Food Security. Noordwijkerhout, the Netherlands, September 2013. (Oral presentation.)

Powell, B., Bezner-Kerr, R., **Young, S.**, Johns, T. The importance of biodiversity for dietary diversity and nutrition: perspectives of small-scale farmers in rural Tanzania. Agriculture, Food, and Human Values Society. East Lansing, MI, June 2013. (Oral presentation.)

Lumish, R., * **Young, S.L.**, Lee, S., Cooper, E., Pressman, E., O'Brien, K.O. Pica behavior is prevalent and associated with low iron status in pregnant adolescents. Experimental Biology, Boston, MA, April 2013. (Poster presentation.)

Nagata, J.M., Fiorella, K.J., **Young, S.L.**, Weiser, S.D., Bukusi, E.A., Cohen, C.R. Social determinants of BMI and food insecurity among adults living with HIV / AIDS in Nyanza Province, Kenya. University of California Global Health Day, University of California, Riverside, February 2013. (Poster presentation.)

Williams, A., ** Chantry, C., Geubbels, E., Ramaiya, A., * Shemdoe, A., **Young, S.** Food insecurity is negatively associated with exclusive breastfeeding in Tanzania: a cross-sectional study among HIV-positive women. International AIDS Conference, Washington, D.C. July 2012. (Poster presentation.)

Young, S.L., Natamba, B.K., ** Luwedde, F.A., Plenty, A.H.J., Mwesigwa, J., Natureeba, P., Osterbauer, B., Achan, J., Clark, T.D., Ades, V. Nzarubara, B.K., Ruel, T.D. Kamya, M., Charlebois, E.D., Havlir, D.V., Cohan, D. Severe household food insecurity is highly prevalent and associated with suboptimal breastfeeding practices among HIV-infected women in rural Uganda. International AIDS Conference, Washington, D.C. July 2012. (Oral presentation.)

Seim, G., Ahn, C., Bodis, M., Tako, E., Miller, D., Glahn, R., **Young, S.** The concentration of iron in Zanzibari geophagic earth is high but its in vitro bioavailability is low and it inhibits the bioavailability of dietary iron in an in vitro digestion/Caco-2 Cell model. 16th International Symposium on Iron Nutrition and Interactions in Plants, Amherst, MA June, 2012. (Poster presentation.)

Natamba, B., ** Robine, M., * Luwedde, F., Mwesigwa, J., Natureeba, P., Osterbauer, B., Ades, V., Clark, T. Charlebois, E., Plenty, A., Havlir, D., Cohan, D., Achan, J., **Young, S.** Breastfeeding practices and beliefs among HIV+ pregnant and lactating women on antiretroviral therapy in rural Uganda indicate obstacles to following national guidelines. Experimental Biology, San Diego, CA April 2012. (Poster presentation.)

Seim, G., * Ahn, C., * Bodis, M., Tako, E., Miller, D., Glahn, R., **Young, S.** The concentration of iron in Zanzibari geophagic earth is high but its in vitro bioavailability is low and it inhibits the bioavailability of dietary iron in an in vitro digestion/Caco-2 Cell model. Experimental Biology, San Diego, CA April 2012. (Poster presentation.)

Phillips, E.L., Pelletier, D., Gervais, S., Stoltzfus, R., **Young, S.**, Michaud, L. Using Program Impact Pathways to Improve Anemia Reduction Programs. Experimental Biology, San Diego, CA April 2012. (Oral presentation.)

Phillips, E.L., Pelletier, D., Gervais, S., Stoltzfus, R., **Young, S.**, Michaud, L. The Use of Mixed Methods Evaluation for Effective Program Scale up. Experimental Biology, San Diego, CA April 2012. (Poster presentation.)

Cohan, D.L., **Young, S.L.**, Murray, K., Mwesigwa, J., Achan, J., Ades, V., Charlebois, ED, Ruel, T, Kamya, MR, Havlir, DV. Maternal Nutritional Status Predicts Adverse Birth Outcomes among HIV-infected Rural Ugandan Women Receiving Combination Antiretroviral Therapy. Abstract presented at CROI March, 2012. (Evaluated on Faculty of 1000: <http://f1000.com/14267262#eval15779446>) (Poster presentation.)

Achan J., Ikezeki G., Kakuru A., Murray K., **Young S.**, Havlir D., Kamya M., Charlebois E., Ruel T. HIV-infected Ugandan children suffer high rates of malnutrition and minimal recovery following the initiation of antiretroviral therapy. International AIDS Society, Rome, Italy. July, 2011. (Oral presentation.)

Chantry C.J., **Young S.**, Ngonyani M., Israel-Ballard K., Peerson, J., Nyambo, M., Rennie, W., Dewey, K.G. Feasibility of Flash-heating breastmilk to reduce maternal to child transmission of HIV. American Public Health Association. Denver, CO. November, 2010. (Poster presentation.)

Young, S.L., Chantry, C., Ngonyani, M., Israel-Ballard, K., Ash, D., Nyambo, M. Flash-heating breastmilk is feasible in Dar es Salaam Tanzania. International Congress of Nutrition. Bangkok, Thailand. October, 2009. (Poster presentation.) ** Selected as Distinguished Poster.

Nyambo, M., Ash, D., Ngonyani, M., **Young, S.L.**, Israel-Ballard, K., Chantry, C. Feasibility of Reducing MTCT-HIV by Flash-heating breast milk. Medical Women's International Association. Dar es Salaam, Tanzania. August, 2009. (Poster presentation.)

Young, S., Israel-Ballard, K., Leshabari, S., Maternowska, C., Turuka, E., Mallya, D., Maisho, C., Ash, D., Nyambo, M., Chantry, C. Flash-heating Breastmilk To Reduce MTCT-HIV: Successes And Challenges. Global Health Council. Washington DC, May 2009. ** Selected as part of the New Investigator in Global Health Program (Poster presentation.)

Chantry C.J., **Young S.**, Ngonyani M., Israel-Ballard K., Ash D., Nyambo M., 2009. Feasibility of Flash-heating breastmilk to reduce maternal to child transmission of HIV. Pediatric Academic Societies. Baltimore, MD May 2009. (Poster presentation.)

Young, S., Steinmetz, A.,* Abrams, E.T. Are food aversions protective adaptations to pregnancy? American Anthropological Association. Philadelphia, PA. December 2009. (Co-chair of panel "Cravings and Aversions" with Crystal Patil). (Oral presentation.)

Young, S.L., Chantry, C., Ngonyani, M., Israel-Ballard, K., Ash, D., Nyambo, M. Flash-heating breastmilk is feasible in Dar es Salaam Tanzania. Experimental Biology. New Orleans, Louisiana, April 2009. (Poster presentation.)

Young, S.L., Ali S. M., Wilson, M.J., Hillier, S., Rasmussen, K.M., Stoltzfus, R.J. Pica is associated with pregnancy, anemia and gastrointestinal distress among Zanzibari women. Bloemfontein, South Africa, October 2008. (Oral presentation.)

Wilson, M. J., Hillier, S., **Young, S.L.** Clay Mineralogy of Geophagic Materials from Tanzania and Other Countries. 4th Mid-European Clay Conference, Zakopane, Poland, September 2008. (Oral presentation.)

Young, S.L., Hernandez Cordero, S., Branco Garcia, I., Bonvecchio Arenas, A., & Neufeld, L. M. Acceptability of three nutritional supplements among pregnancy and lactating women in Mexico. Experimental Biology, San Diego, CA, April 2008. (Poster presentation.)

Young, S. L., Goodman, D., Farag, T. H., Ali, S. M., Khatib, M. R., Khalfan, S. S. Tielsch, J.M., Stoltzfus, R.J. Geophagia is not associated with Trichuris or hookworm transmission in Zanzibar, Tanzania. Experimental Biology, Washington DC, April 2007. (Poster presentation.)

Young, S.L., J.B. Lucks, G.H. Pelto. Managing 1,472 articles on pica. Strategies for hypothesis testing with a comprehensive literature review. Society for Anthropological Sciences. Savannah, Georgia. February 2006. (Oral presentation.)

Young, S.L. *Safura* [anemia], the disease of earth-eating? An investigation of the relationship of iron status to pica in Zanzibar. International Commission on the Anthropology of Food. Oxford, England. June 2005. (Oral presentation.)

Young, S. L. Mapping the Cultural and Physiological Components of Anemia on Pemba Island, Zanzibar. American Anthropological Association, Nutritional Anthropology section. Chicago, IL, November 2003. (Oral presentation.)

Young, S. L. Religious Conversion by Dogon Women: A Tactic of the Weak? Conference of the Netherlands African Studies Association. Leiden, the Netherlands, September 2003. (Oral presentation.)

Young, S. L. Straight Edge: Youth rebellion or voice of social conscience? American Midwest Sociological Society. Chicago, IL, April 2000. (Invited oral presentation.)

Young, S. L. Dogon Women's Religious Conversion: A Strategy for improved reproductive success? American Anthropological Association, Anthropology of Religion. Philadelphia, PA, April 1999. (Oral presentation.)

LEAVE OF ABSENCE

Sabbatical. Visiting Fellow at Clare Hall, University of Cambridge, England & Leverhulme Visiting Professor at the London School of Hygiene and Tropical Medicine, England— 2023-2024.

PEER-REVIEW AND RELATED ACTIVITIES

Maternal and Child Nutrition :: Editorial Board 2017-present

Advances in Global Health :: Associate Editor 2021-present

WHO/UNICEF JMP :: Virtual Expert Group on Enhanced Monitoring of Gender in relation to SDG WASH targets 2021

Society for Applied Anthropology :: Nominations Committee 2016-2020, Chair 2019-2020; Malinowski Award Selection Committee 2015-2020, Chair 2018-2019

NIH review panel :: PAR-DK-19-019: AIDS and AIDS-Related Research— 2020

Sir Henry Wellcome (UK):: Post-doctoral Fellowships Panel— 2020

Innovative Metrics in Agriculture and Nutrition (IMMANA) (UK):: Grant Review Panel — 2020, 2021

French National Institute for Agricultural Research :: Post Agreen Skills Fund— 2020

Society for the Anthropology of Food and Nutrition :: Vice-President — 2012-2014; National Meeting Program Chair — 2010-2012

Ad hoc reviewer :: Advances in Nutrition; African Health Sciences; African Journal of Biotechnology; African Journal of AIDS; AIDS and Behavior; American Journal of Clinical Nutrition; American Journal of Human Biology; American Journal of Obstetrics and Gynecology; American Journal of Tropical Medicine and Hygiene; Appetite; Berghahn Books; BMC Breastfeeding Medicine; BMC Medicine; BMC Pregnancy and Childbirth; BMC Public Health; BMC Research Notes; BMJ Open; Clay Minerals; Climate and Development; Current Anthropology; Current Developments in Nutrition; Environmental Monitoring and Assessment; Global Public Health; Ecology of Food and Nutrition; Environmental Geochemistry and Health; Epidemiology and Infection; Evolution, Medicine, and Public Health; The Freiburg Institute for Advanced Studies (FRIAS), University of Freiburg, Germany; International Breastfeeding Journal; International Journal of Obesity; Journal of Acquired Immune Deficiency Syndrome; Journal of AIDS and Clinical Research; Journal of AIDS and HIV Research; Journal of Health, Population, and Nutrition; Journal of Nutrition; Journal of Tropical Ecology; Journal of Water & Health; Maternal and Child Health Journal; Lancet Global Health; Maternal and Child Nutrition; Medical Anthropology; Medical Anthropology Quarterly; Medische Antropologie; National Research Foundation (South Africa); Nature Food; PLoS One; Population Health Metrics; Public Health Nutrition; Review of Development Economics; Rural and Remote Health; Science Translational Medicine; Scientific Research and Essays; Sigma Delta Epsilon/ Graduate Women in Science Fellowship; Social Sciences and Humanities Research Council of Canada; Social Science and Medicine; Swiss National Science Foundation; Texas Biomedical Research Institute; Toxicology Reports; Transactions of the Royal Society of Tropical Medicine and Hygiene; UCSF's Center of Excellence in Women's Health; Water Policy; Water Research; World Bank Advisory Service and Analytics Applications; Yearbook of Physical Anthropology

MAJOR CONSULTANCIES

Charity: water — 2024

Preparation of the Water Insecurity Experiences Manual

Food and Agriculture Organization— 2023-2024

Analysis on the relationships between food and water insecurity in Latin America & the Caribbean.

Asian Development Bank— 2023

Analysis on disparities in water insecurity by gender.

International Water Management Institute— 2023

Consulted on the inclusion of water insecurity experiences measures in agricultural water assessments.

International Women's Development Agency— 2022

Analysis of data on water insecurity in Tonga and the Solomon Islands.

Bangladesh Rural Advancement Committee (BRAC)— 2009

Consulting on reports from Research and Evaluation Division of BRAC.

Program for Appropriate Technology in Health (PATH), Washington DC — 2009

Advised on assessment of nutritional needs among HIV-positive pregnant and lactating Rwandan women.

Instituto Nacional de Salud Pública (INSP), Cuernavaca, Mexico — 2007

Evaluation of quantitative and qualitative data on the acceptability of micronutrient tablets, sprinkles and a fortified food to pregnant and lactating Oportunidades recipients.

PROFESSIONAL AFFILIATIONS & SERVICE**AFFILIATIONS**

American Anthropological Association; American Society for Nutrition; Human Biology Association; Society for Applied Anthropology; Society for Implementation Science in Nutrition

NATIONAL AND INTERNATIONAL PROFESSIONAL SERVICE

American Society for Nutrition :: Chair, Global Nutrition Council 2020-2022; At Large Member of the Global Nutrition Executive Council 2014-2016; Graduate and Professional Education Executive Committee Member— 2006-2008

Water Insecurity Experiences-Latin America & the Caribbean :: Founding member, co-host of 2023 [inaugural meeting](#) in Mexico City

WHO/UNICEF JMP :: Virtual Expert Group on Enhanced Monitoring of Gender in relation to SDG WASH targets 2021

Household Water Insecurity Experiences-Research Collaborative Network :: Executive Committee 2018-2020, Steering Committee 2020-2022

Global Food Security Strategy Working Group :: 2019. Advised the USAID Bureau for Resilience and Food Security and the Feed the Future interagency group on the Global Food Security Strategy-Refresh.

Dannon Nutrition Leadership Institute :: President — 2015-2017; President-elect — 2012-2015; Treasurer — 2010-2012

World Food Program :: Inter-agency Task Team for Food, Nutrition, and HIV — Member 2014-2017

Food and Agriculture Organization :: High Level Panel of Experts Committee on Critical and Emerging Issues for Food Security and Nutrition — 2014

Society for the Anthropology of Food and Nutrition :: Vice-President — 2012-2014; National Meeting Program Chair — 2010-2012

One Laptop Per Child :: Co-developer of children's math game Kuku Anakula (<http://wiki.laptop.org/go/Kuku>) — 2007

Nutrition Graduate Student Organization :: Secretary, Social Director, Faculty Liaison, Founder and member of the Committee on Professional Development : Cornell University— 2003-2007

OTHER MATTERS RELATED TO RESEARCH AND PUBLICATION

TRAINING

The OpEd Project :: Public Voices Fellowship — 2018-2019

National Institute of Health's Advanced Training Institute on Health Behavior Theory — Summer 2012

American Psychological Association's Cyber Mentor Program for HIV research, Committee on Psychology and AIDS — Fall 2009-Fall 2011

Dannon Nutrition Leadership Institute — Spring 2009

New Investigator in Global Health Program, Global Health Council — Spring 2009

Cells to Society Biomarker Institute, Northwestern University — Spring 2008

FIELD RESEARCH, BY TOPIC

Food and water insecurity:

Quantifying WASH experiences in institutions :: 2023-present.

We are collaborating with a network of individuals to develop reliable and valid measures of WASH in schools and health care facilities.

Water Insecurity Experiences-Latin America and the Caribbean (WISE-LAC) Network :: 2023- present.

A group of practitioners, researchers, and policymakers who are working to bring attention to the value of experiential measures of water insecurity for policy development in a variety of projects across the region.

Synergisms between water and food insecurity :: 2022-present.

Quantifying the compounding vulnerabilities of water and food insecurity among Mexican adults and US children and adolescents using nationally representative datasets.

Quantifying individual hygiene experiences :: 2024-present

Hygiene experiences are shaped by more than just water. We are in the early stages of developing a measurement of experiences with bodily, domestic, and food hygiene that can be globally suitable.

Rapid at-home water diagnostics (WISE-Dx) :: 2022-present.

Field testing the accuracy and usability of at-home biosensor tests to detect water contamination, including detecting geogenic fluoride in Kenya and lead in Chicago.

Individual Water Insecurity Experiences (IWISE) Scale :: 31 countries :: Northwestern University, UNESCO, Gallup World Poll 2019-present.

A collaboration to refine and validate a scale to measure water insecurity at the individual level.

Household Water Insecurity Experiences (HWISE) Scale :: 26 sites worldwide :: Northwestern University — 2016-2019

A 28-site, multi-partner collaboration to design and refine a novel cross-culturally validated household water insecurity scale.

Health Consequences of Water Insecurity for HIV+ Women & Their Infants :: Kisumu, Kenya :: Northwestern University, Kenyan Medical Research Institute, and Family AIDS Care and Education Services, — 2016-2020

An observational study of the consequences of water insecurity for adverse maternal and infant health outcomes among a cohort of HIV-infected and uninfected pregnant and lactating women in western Kenya.

Singida Nutrition and Agroecology Project :: Singida, Tanzania :: Cornell University, Northwestern University, Action Aid Tanzania, Nelson Mandela Agricultural Institution of Science and Technology 2014-2020

We are assessing if a participatory educational intervention about nutrition, climate change, agroecology, and gender equity that we co-created with rural farmers in E. Africa improves women's empowerment, food insecurity, and infant feeding practices in Singida, Tanzania.

Health Consequences of Food & Nutrition Insecurity for HIV+ Women & Their Infants :: Kisumu, Kenya :: Northwestern University, Cornell University, Kenyan Medical Research Institute, and Family AIDS Care and Education Services, — 2013-2019

An observational study of the role of food insecurity in adverse maternal and infant health outcomes among a cohort of HIV-infected and uninfected pregnant and lactating women in western Kenya.

Food insecurity and nutritional status of patients infected with tuberculosis and HIV in Gulu, Northern Uganda (The FINITH Study) :: Gulu, Uganda :: Cornell University and Gulu University — 2013-2014

A cross-sectional study of the effects of food insecurity on disease and nutritional status among adult Ugandans infected with TB and/or HIV.

Prenatal Nutrition And Psychosocial Health Outcomes (PreNAPs) study :: Gulu, Uganda :: Cornell University and Gulu University — 2012-2015

A longitudinal cohort study of the effects of food insecurity on depression, stress, and gestational weight gain among HIV-infected and -uninfected pregnant women.

Nutrition and HIV:

PROMOTE study (Prevention of Malaria and HIV disease in Tororo) :: Tororo, Uganda :: University of California, San Francisco and Makerere University — 2011-2013

Assessing and intervening to improve nutritional and obstetric outcomes among a cohort of HIV+ women receiving anti-retroviral therapy and their HIV-exposed infants.

Feasibility and pilot efficacy of Flash heated breastmilk to reduce pediatric HIV :: Dar es Salaam, Tanzania — 2008-2011

Scientific coordinator of a multi-disciplinary study of the effects of home-based education on exclusive breastfeeding and the uptake and consequences of rapid heating of breastmilk among HIV+ women in urban Tanzania.

Program Development and Implementation Research:

Understanding the Barriers and Facilitators to Uptake, Provision, and Management of Prevention of Vertical Transmission of HIV Services in Inhassoro District, Mozambique :: Cornell University and CARE-Mozambique — 2012-2015.

A pilot intervention study to determine if performance based incentives can improve the quality of care provided to HIV-infected pregnant women.

Reaching the Hard to Reach: Documenting World Vision Haiti Mobile Clinic Best Practices :: Haiti :: Cornell University and World Vision — 2011

Determining best practices for reducing maternal anemia among rural women via mobile clinic services.

Maternal anemia care, program evaluation :: Pemba Island, Zanzibar, Tanzania : Cornell University / Zanzibar Ministry of Health— 2006

Conducted community surveys, focus group discussions and interviews with traditional and biomedical health care workers, private medicine retailers and pregnant women to understand how use of anemia medicine can be improved.

Adapting EFNEP to the changing needs of food-assistance eligible families in the era of welfare reform ::

Qualitative Researcher : **Cornell University** — 2003-2004

Conducted interviews and focus group discussions with nutritional education program staff as part of a USDA-funded multi-state research project to understand the effects of welfare reform on nutritional status and well-being.

Pica

Antojitos study, the relationship between pregnancy, pica, iron status, and cognitive function :: Salinas, California — 2008-2011

Primary investigator of a study of nutritional behaviors and beliefs, and their associations with iron status and cognitive function among pregnant Hispanic women.

Quantitative and qualitative study of non-food cravings, primary investigator :: Pemba Island, Zanzibar, Tanzania : **Cornell University**— 2004

Secured funding, hired, and trained Zanzibari fieldworkers to collect epidemiological data about consumption of non-food substances (pica) in 700 adults as part of a larger trial on the prevention of severe anemia (PI Rebecca Stoltzfus). Conducted in-depth interviews about pica (the cravings for and consumption of non-food substances) with community members and health care workers. Collected samples of pica substances for biochemical analysis.

Perceptions of anemia during pregnancy :: Pemba Island, Zanzibar, Tanzania : **University of Amsterdam** — 2002

Qualitative data was collected about the perceived causes, cures, and appropriateness of UNDP-supplied ferrous sulfate and traditional medicines for the treatment of anemia during pregnancy. Analyzed data to make suggestions about how traditional and biomedical treatments can be linked.

Other

Hospital Renovation, project manager :: Pemba Island, Zanzibar, Tanzania — 2001, 2003, 2005.

Identified areas of need, raised all funds, and oversaw renovations of Mental Hospital, Maternity Ward and Children's Ward.

"Down for the count in the Bijlmer" :: Interviewer : **University of Amsterdam** — 2002.

Censused and interviewed homeless people about drug use, health care, and general well-being in low-income neighborhoods in Amsterdam.

Polygyny and child mortality :: Mali, West Africa/**University of Michigan** —1998.

Field manager of longitudinal biological anthropological study comparing infant mortality by family structure. Responsibilities included fieldworker hiring, anthropometry of 1000 0-5 year old children, household surveys, censusing villages, house construction, and data organization.

WATER INSECURITY EXPERIENCES (WISE) DATA IN FLAGSHIP REPORTS

Intergovernmental Panel On Climate Change (IPCC). (2023). Climate Change 2022 – Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (1st ed.). Cambridge University Press. <https://doi.org/10.1017/9781009325844>

Jepson, W., Stellbauer, M., & Thomson, P. (2023). Revaluing multiple-use water services for food and water security. FAO. <https://doi.org/10.4060/cc7317en>

UNICEF, JMP, & WHO. (2023). Progress on household drinking water, sanitation and hygiene 2000-2022: Special focus on gender. <https://data.unicef.org/resources/jmp-report-2023/>

PENSSAN Network. (2022). National Survey on Food Insecurity in the Context of the COVID19 Pandemic in Brazil. <https://olheparaafome.com.br/wp-content/uploads/2022/06/Relatorio-II-VIGISAN-2022.pdf>

World Bank (2022). Water Matters: Resilient, Inclusive and Green Growth through Water Security in Latin America. <http://hdl.handle.net/10986/37214>

LANGUAGES

English : Dutch : French : Swahili

PRESS COVERAGE

News articles and blog coverage:

Major media coverage of our 2024 Nature Communications paper about global trust in drinking water.
<https://nature.altmetric.com/details/166673684/news>

The Guardian, 2024. ‘A pile of dirt makes me drool’: why some people crave and eat inedible things. <https://www.theguardian.com/lifeandstyle/2023/dec/18/a-pile-of-dirt-makes-me-drool-why-some-people-crave-and-eat-inedible-things>

Australia Broadcasting Corporation, 2023. “The Australian town where water insecurity is felt more than some communities in Bangladesh” <https://www.abc.net.au/news/2023-04-13/walgett-nsw-water-insecurity-worse-than-bangladesh/102212784>

La Razón, 2023. “Nuevo León se adhiere a la Red Latinoamericana y del Caribe para la Inseguridad de Agua” <https://www.razon.com.mx/estados/nuevo-leon-adhiere-red-latinoamericana-caribe-inseguridad-agua-534842>

Chicago Tribune, 2023. “350 Chicago households will get free lead tests as part of Northwestern study” <https://www.chicagotribune.com/news/environment/ct-chicago-lead-water-kits-northwestern-20230911-h6hp43jbzzccrdevknvaeazi3q-story.html>

Front page story: https://www.dropbox.com/scl/fi/p0vpw9du0rg0cj93nvtg/2023_Tribune_Frontpage.jpeg?rlkey=e9ciz1h4bakktolxhy2pidqmx&dl=0

Evanston Now, 2023. <https://evanstonnow.com/nu-researchers-develop-at-home-water-safety-test/>

The Sydney Morning Herald, 2023. <https://www.smh.com.au/national/nsw/the-town-where-coca-cola-runs-more-freely-than-drinking-water-20230410-p5cz93.html>

Forbes, 2023. “Home Water Quality Testing Kits For Lead, Copper And PFAS To Debut In Chicago” <https://www.forbes.com/sites/jeffkart/2023/08/12/home-water-quality-testing-kits-for-lead-copper-and-pfas-to-debut-in-chicago/>

The Daily Northwestern, 2023. “Study led by Northwestern professor quantifies experiences with global water insecurity” <https://dailynorthwestern.com/2023/01/03/campus/study-led-by-northwestern-professor-quantifies-experiences-with-global-water-insecurity/>

Gallup, 2023. “Tunisia's Water Crisis Fuels Frustration” https://news.gallup.com/poll/473315/tunisia-water-crisis-fuels-frustration.aspx?utm_source=google&utm_medium=rss&utm_campaign=syndication

Erin Brokovich, 2022. <https://www.thebrokovichreport.com/p/are-you-a-tap-water-avoider>

Mother Jones, 2022. “America’s Food-Security Crisis Is a Water-Security Crisis, Too” <https://www.motherjones.com/food/2022/11/americas-food-security-crisis-is-a-water-security-crisis-too/>

Axios, 2022. “Water insecurity is stressing mental health” <https://www.axios.com/2022/11/17/water-insecurity-climate-change-mental-health>

El Universal (Mexico), 2022. “One in 3 households has insecurity in the access and use of water.” <https://www.eluniversal.com.mx/cartera/1-de-cada-3-hogares-mexicanos-presenta-inseguridad-en-uso-y-acceso-al-agua-indica-estudio> (This story was picked up by more than 25 news outlets in Mexico.)

Press conference with the President of Mexico's National Institute of Statistics and Geography (INEGI) about nationally representative survey of Mexican's experiences with water insecurity, 2022. <https://www.youtube.com/watch?v=uytJlVQAbh4>

Helvetas, 2022. "The WISE Scales: A New Way to Measure Water Insecurity" <https://reliefweb.int/report/world/wise-scales-new-way-measure-water-insecurity>

The Hill, 2022. "Solving water insecurity could be key to global hunger crisis: study" <https://thehill.com/policy/equilibrium-sustainability/3522821-solving-water-insecurity-could-be-key-to-global-hunger-crisis-study/>

Planet's Water, 2022. <https://www.planetwater.com/food-insecurity-and-water-insecurity-go-hand-in-hand-study-finds-study-suggests-water-may-be-key-to-addressing-hunger-in-low-and-middle-income-countries-science-daily>

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The Lanigan and Malone Morning Show, 2011. Cleveland, OH.

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CBS-Chicago, 2010: "Coping with the dangers of pica" <http://chicago.cbslocal.com/2010/12/31/coping-with-the-dangers-of-pica/>

CBS-San Francisco, 2010: "Health Watch—Craving Earth"

Good Food with Evan Kleinman, on Los Angeles's KCRW, 2011; radio interview: http://www.kcrw.com/etc/programs/gf/gf110416matzo_balls_eating_d; "Evan eats clay" <http://blogs.kcrw.com/goodfood/2011/04/video-evan-eats-clay/>

Zanzibar Public Television, 2006. An interview with Said M. Ali, Sarah Beckham, and me about our research on the relationship between anemia and pica. http://www.youtube.com/watch?v=kfGQ6Je8_vo

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Chicago Tribune, 2021. "The efficiency behind Amazon and the idea behind HelloFresh: How one Chicago neighborhood charity is rethinking food insecurity" <https://www.chicagotribune.com/news/breaking/ct-food-insecurity-englewood-dion-chicago-dream-20210728-vnz2kqeuoncyfmoqr2pulyqi6a-story.html>

Circle of Blue, 2020. "Who in the U.S. Is in 'Plumbing Poverty'? Mostly Urban Residents, Study Says" <https://www.circleofblue.org/2020/world/who-in-the-u-s-is-in-plumbing-poverty-mostly-urban-residents-study-says/>

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ARTISTIC ENGAGEMENT

Science Gallery Lab. Detroit, MI, 2019. "Precarity: water and power."

Eating Earth Workshop. Amsterdam, 2018. "Craving Earth." (<https://nias.knaw.nl/events/eating-earth/>)

TEACHING AND ADVISING

AREAS OF TEACHING

Anthropology, global health, mixed methods

COURSES TAUGHT AT NORTHWESTERN

Freshman Seminar, Northwestern University: "Biocultural perspectives on infant feeding" Spring 2023

Turning your numbers into a story: A quantitative methods class, Northwestern University: Anthropology 390-0-23/Global Health 390-0-22 — Fall 2017, Fall 2018, Fall 2019, Fall 2021, Spring 2025

Biocultural perspectives on water insecurity, Northwestern University: Anthropology 390-0-22/Global Health 390-0-253 — Spring 2018, Spring 2019, Spring 2020, Spring 2022 (Weinberg & Northwestern Prison Education Program), Fall 2022 (Weinberg & Northwestern Prison Education Program), Winter 2025 (Weinberg & Northwestern Prison Education Program)

Ecology of Infant feeding, Northwestern University: Anthropology 390-0-32/Global Health 390-0-24 — Winter 2017, Winter 2018, Winter 2019

Undergraduate independent research, Northwestern University: Anthropology 399-0-32/Global Health 399-0-3 — each quarter Fall 2016 to present

COURSES TAUGHT AT PREVIOUS INSTITUTIONS

Undergraduate independent research, Cornell University: NS 4010 - Empirical Research; BIOG 2990; BIOG 4990 — Fall 2012-2015

Community and International Nutrition Seminar Series, Cornell University: NS 6980 — Fall 2012, Spring 2013

Nutrition in Developing Countries, UC Berkeley School of Public Health: Lecturer: PH 298.41 — Spring 2008

Nutritional Problems of Developing Nations, Cornell University: Teaching Assistant: NS 306 — Spring 2004

English Literature, Special Ed, Port Huron School District, Michigan: Substitute Teacher: — Spring 2000

Secondary Level Teaching Certificate, University of Michigan, Ann Arbor: — 1999

Cultural Anthropology, Plymouth Canton High School, Michigan: Student Teacher : — Spring 1999

AP English, Cass Technical High School, Detroit, Michigan: Student Teacher: — Fall 1998

CURRICULUM DEVELOPMENT

Created “Turning your numbers into a story: A quantitative methods class”; “Biocultural perspectives on water insecurity,” & “Ecology of Infant feeding”

UNDERGRADUATE STUDENTS MENTORED

Undergraduate students at Northwestern: Nihmotallahi Adebayo, Rahul Aggarwal, Kelly Alvarez, Samuel Balka, Amelia Beck, Casey Benzaken, Aidan Boleyn-Fitzgerald, Hollyn Cetrone, Cheryl Chen, Kathleen Clark, Jo Ann Efobi, Priyanka Garigipati, Talia Ginsberg, Maxime Godart, Ishani Gupta, Tracy Guo, Brooke Hassan, Jordan Harris, Luana Hillman, Lyra Johnson, Alina Junejo, Samanvi Kanugula, Aarthi Kottapalli, Amy Lin, Denise Lopez, Esra Maududi, Ashleigh Maclean, Erin McCotter, David McCuskey, Annika Mittu, Joao Branco Mota Silva Martins, Daniel Peters, Hayley Platt, Clara Oh, Sophia Olmos, Sarah Padon, Lahari Ramani, Francesca Rosen, Anna Scarbrough, Lily Settel, Revika Singh, Benjamin Thomae, Emilie Umuhire, Mira Wang, Julia Yeam

Undergraduate students at Cornell: Cedric Ahn, Chaele Arkfeld, Eleonore Baughan, Lauren Blacker, Corrine Casal, Pooja Desai, Melanie Graber, Damarys Hernandez, Josephine Hong, Jen Huang, Hijab Khan, Paige Killeala, Joanie Kim, Heather Larkin, Ann Lei, Janice Lin, Phoebe Lo, Rachel Lumish, Abena Maranga, Emily Martey, Devon McMahon, Chloe Michel, Joshua Miller, Lusine Mehrabyan, Sophie Mou, Jacqueline Rivera, Marion Robine, Keith Ryan, Evelyn Samuel, Gretchen Seim, Rie Seu, Santana Silver, Shanna Smith, Christina Son, Alexis Steinmetz, Luisa Temple, Irene Tsai, Kelechi Umoga, Shiliu Wang, Tingting Wu, Amy Zheng

MASTERS STUDENTS MENTORED

Master's students: *Past:* Lyra Johnson (APHP), Mira Wang (APHP), Hollyn Cetrone (APHP), Allison Mark (APHP), Virginia Nowakowski (APHP)

GRADUATE AND POST-DOCTORAL STUDENTS MENTORED

Post-doctoral fellows: *Current:* Indira Bose; *Past:* Hilary Bethancourt, Vidya Venkataramanan, Marianne Vicky Santoso, Godfred Boateng, Yolanda Brooks, Katie Fiorella, Paula Pebsworth, Aditi Roy, Emily Tuthill, Elizabeth Widen

Doctoral students, committee chair: *Current:* Elijah Watson (Northwestern), *Past:* Margaret Butler (Northwestern, Anthropology graduated 2023), Patrick Mbullo (Northwestern, Anthropology graduated 2023), Marianne Vicky Santoso (Cornell, Nutrition graduated 2019), Roseanne Schuster (Cornell, Nutrition graduated in 2016), Barnabas Natamba (Cornell, Nutrition graduated in 2015)

Doctoral students, committee member: *Current:* Colleen O'Brien (Northwestern, Civil Engineering), *Past:* Elizabeth Koselka (Northwestern, Anthropology, 2023); Shalean Collins (Tulane, Nutrition 2023); Melissa Manus (Northwestern, Anthropology 2022); Betty Samburu (Kenyatta University, graduated 2020), Sarah Dumas (Cornell, graduated 2017), Elizabeth Fox (Cornell, 2017), Anne Williams (University of California, Davis, 2016), Sarah Pedersen (Cornell, 2015)

Medical students: *Past:* Maya Jackson-Gibson (Northwestern), Angela Arbach (Cornell Weill), Natalie Krumdieck (Cornell Weill), Jason Nagata (University of California, San Francisco), Alexis Steinmetz (Loyola)

TEACHING AWARDS & HONORS

Faculty Honor Roll :: Office of Undergraduate Research — 2022-2023. For mentoring 20 students to successfully obtain research funding.

Faculty and Administrator Honor Roll :: Associated Student Government — 2019-2020. For the course "Ecology of Infant and Young Child Feeding".

Searle Fellows Program :: Northwestern University. 2017-2018. Program for learning and implementing evidence-based approaches to teaching.

Sugar Award :: One Laptop Per Child — 2007. For the development of the best educational children's software.

Student-Intern Teacher of the Year Honorable Mention :: State of Michigan — 1999. For the demonstration of outstanding potential as an educator.

DEPARTMENT, COLLEGE, AND UNIVERSITY SERVICE

Northwestern service

Diversity Representative on Anthropology Search Committee — 2025

EDGS Faculty Advisory Council — 2024-present

IPR Executive Council—2022-present

Ad hoc Tenure Committee Member :: Weinberg College, Northwestern University — 2022

Lecture for Northwestern New York and the Northwestern University Leadership Circle at Neuberger Bergman, NYC "The Art and Science of Today's Social Challenges" — 2022

Institute for Policy Research, Executive Committee— 2021-present

Undergraduate Research Programs, Review Committee— 2021-present

Tenure & Promotion Committee for Global Health — 2017-present

Accelerated Master's in Public Health Admissions Committee — 2017-present

One Book Northwestern Committee—2021-2022

Weinberg College of Arts and Sciences Committees on Academic Appeals — 2019-2022

Program in African Studies, Executive Committee — 2017-2022

Global Health Curriculum Committee — 2016-2021

Office of the Provost Research Networking Lunch, Co-leader — 2018-2020

Global Health Case Competition Judge — 2017

Cornell service

Cornell University :: Search Committee, Master's in Public Health Curriculum Development Committee 2016

Nutrition Graduate Student Organization :: Secretary, Social Director, Faculty Liaison, Founder and member of the Committee on Professional Development : Cornell University— 2003-2007

Academic Integrity Hearing Board :: Graduate Representative : Cornell University— 2004

COMMUNITY WORK

Turnaround Park :: Evanston, IL 2021-present.

Spearheaded the naming, renovation, and installation of a pollinator garden in Turnaround Park, Evanston.

<https://evanstonroundtable.com/2021/10/03/turnaround-park-marks-the-spot/>

We Are Water Evanston :: Evanston, IL 2020-2022

A community-based participatory research project led by Citizens' Greener Evanston to understand water insecurity and how water is valued in and around Evanston (<https://greenerevanston.org/we-are-water>). This resulted in an 8-part series in the local paper about water in Evanston: <https://evanstonroundtable.com/2021/09/20/we-are-water-evanston-about-this-series/>