



## INSTITUTION

Johnson & Johnson

## EDUCATION

University of Maine

Purdue University

# MAHDIEH AGHAZADEH

Dr. Aghazadeh was born and raised in Qazvin, Iran and received my first engineering degree in chemical engineering from Sharif University of Technology. Multiple socio-economic issues and the passion to have equitable access to wider areas of research, encouraged her to pursue graduate degrees (Masters in Chemical Engineering at University of Maine and PhD in Biological Engineering at Purdue University) in the United States; during which she has been involved in graduate mentorship, Women in Engineering, and acted as an Engineering Graduate School Recruiter in SWE, NASBE, and SHPE. Immediately after graduation she entered the private sector as a Scientist at DePuy Synthes' (Johnson & Johnson's Orthopedic Company) R&D department. Most recently, she has been working on assignments with Janssen (Pharmaceutical company of Johnson & Johnson) to enhance Customers' experience and satisfaction level with drug delivery devices.

Working at a heavily regulated medical device company, in addition to her graduate school research experience in the areas of biofuel production and efficiency enhancement, clarified the importance of governmental policy on all aspects of her research. In her current role as a Senior Scientist on the polymer research team, Dr. Aghazadeh has initiated many technical collaborations within different sectors of Johnson & Johnson as well as external innovators and academia. Advocating for multi-functional collaborations and partnerships for new technology development, data collection and analysis, customer experience improvements, community outreach and education, and eventually promoting workplace inclusion and equity have become the primary goals of my career in Johnson & Johnson. It is my privilege to have a diverse academia and industry network and knowledge which she hopes to leverage during my cohort years in New Voices.



## INSTITUTION

National Science Foundation, Division of Civil, Mechanical and Manufacturing Innovation

## EDUCATION

University of Massachusetts, Amherst

# JESÚS ALVELO MAUROSA

Jesús G. Alvelo Maurosa is an Engineer/Science Analyst for the Division of Civil, Mechanical and Manufacturing Innovation in the Directorate for Engineering at the National Science Foundation where he provides data and scientific analysis across the division. He also works in various research solicitations such as the Disaster Resilience Research Grants, an initiative with the National Institute of Standards and Technology, and the Navigating the New Arctic, an NSF 10 Big Idea Initiative. Jesús also serves as the division partnership liaison where he supports federal, international, and industrial collaboration within the division. He also worked in the Directorate for Engineering COVID-19 RAPID Proposal Working Group

Prior to his current position, he was an AAAS Science & Technology Policy Fellow (2017-2019) in the division of Engineering Education and Centers where he worked on standardizing and visualizing the Engineering Research and Centers portfolio. Jesús also served as a science advisor for two gubernatorial candidates in Puerto Rico in the 2016 and 2020 elections. In addition to his policy experience, he was a postdoctoral researcher at Massachusetts Institute of Technology at the Department of Civil and Environmental Engineering researching how viruses and bacteria spread through sneezes and cough. In 2016, Jesús obtained his Ph.D. in microbiology from University of Massachusetts Amherst where he investigated how bacteria convert non-edible food crops into biofuels. He received his B.S. from Universidad de Puerto Rico, Recinto de Río Piedras in 2008. In 2020 he received the Special Act Award for Coordinating the Data for the Division of Civil, Mechanical and Manufacturing Innovation COVID-19 RAPID proposals and in 2021 he was the recipient of the National Science Foundation Director's Award for Superior Accomplishment (Group) for exceptional achievement in broadening engagement between indigenous communities and researchers, achieving inclusive and meritorious Arctic science through the Navigating the New Arctic Program.



## INSTITUTION

Georgia Institute of  
Technology, School of  
Public Policy

## EDUCATION

University of Southern  
California

University of California, Los  
Angeles

# OMAR ASENSIO

Dr. Omar Asensio is an Assistant Professor in the School of Public Policy at the Georgia Institute of Technology. His research focuses on big data and public policy, with applications to energy systems and consumer behavior, smart cities, and machine learning in transportation and electric mobility. He directs the Data Science and Policy Lab at Georgia Tech, where he collaborates with the private sector and city governments on data innovations in policy analysis and research evaluation. He is a faculty affiliate at the Institute for Data Engineering and Science (IDEaS), the Machine Learning Center, and the Strategic Energy Institute. Dr. Asensio's research has been published in leading journals such as *Nature Energy*, *Nature Sustainability*, and *PNAS*. His work uses statistical and computational tools to advance our understanding of how large-scale civic data and experiments can be used to increase participation in civic processes, while addressing resource conservation and environmental sustainability. Dr. Asensio's research also has been featured in policy advisory communications by the European Commission, NSF Public Affairs, the World Bank, and national governments — including the U.K., and the IndiaAI initiative.

He is a recipient of the National Science Foundation CAREER award, the Association for Public Policy Analysis and Management (APPAM) 40-for-40 fellowship, and the ONE-NBS Research Impact on Practice award by the Organizations and the Natural Environment Division of the Academy of Management. Dr. Asensio serves as Associate Editor of *Data and Policy* journal published by Cambridge University Press. He holds a doctorate in environmental science and engineering from UCLA with field specialties in economics. He is a faculty participant in the Research University Alliance (RUA) Research Exchange and is engaged in multiple activities to increase the representation of women and under-represented students and professionals in STEM fields.



## INSTITUTION

Facebook Reality Lab

## EDUCATION

Simon Fraser University

# BEHNAM BASTANI

Behnam Bastani, PhD, is director of engineering architecture at Facebook Reality Lab, driving new initiatives towards computing platform accelerations. His research initiatives focus on understanding and modeling human visual systems that are used today in the sensory, plantable and wearable computing systems. Prior to Facebook, he led new technology development at a number of corporations including Google [X], Qualcomm, Samsung Silicon and Hewlett-Packard Labs.

Dr. Bastani is also a visiting scientist at Harvard Medical School, Mass Eye and Ear Center, where the lab focuses on research related to human visual deficiency.

He has held a number of cross industrial collaborations. His recent research effort with Stanford, the proposed project of accelerating mRNA vaccine development was selected as top 15 winners globally.

Dr. Bastani received his PhD from Simon Fraser University in Canada in 2009 with a focus on multi-spectral reproduction in non-linear spaces. He has over 35 granted patents in the field of computational vision, sensor design and rendering.



## INSTITUTION

BBC Entrepreneurial  
Training & Consulting

## EDUCATION

Indiana University  
Bloomington

Indiana University School  
of Medicine

# BAINDU BAYON

Baindu L. Bayon, Ph.D. is a biomedical scientist from Indianapolis, Indiana. Dr. Bayon received her B.S in Biology from Indiana University Bloomington and her Ph.D. in Medical & Molecular Genetics from Indiana University School of Medicine with a focus on the Neurogenetics of Alzheimer's disease and transcription factor regulation of beta-secretase. She is currently a Principal Consultant for BBC Entrepreneurial Training and Consulting where she specializes in the SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer) programs. Prior to her time at BBC, she was a Health Programs Specialist at the National Institutes of Health (NIH) National Institute of Neurological Disorders and Stroke (NINDS) in the Repair and Plasticity Cluster. She is a former AAAS Science and Technology Policy Executive Branch Fellow at the NIH Office of the Director in the Small business Education and Entrepreneurial Development (SEED) Office. Before joining SEED, she worked at the National Center for Advancing Translational Sciences in the Division of Clinical Innovation where she explored commercialization and entrepreneurship at CTSA (Clinical Translational Science Award) hubs.

Dr. Bayon enjoys STEM outreach and driving youth toward solving problems with life science. She is one-half of the science-tech YouTube duo "The STEM SiSTARS" along with her sister Amie. She has earned a myriad of awards throughout her career, including the coveted Indianapolis Business Journal's Forty Under 40. She also has been named one of United Way of Central Indiana's 100 Heroes and was among Junior Achievement of Central Indiana's 2017 Indy's Best and Brightest. Bayon currently serves as a board member of the Indiana University College of Arts and Sciences, the advisory board of Nvolve Inc., is the current President-Elect of the Rotary Club of Downtown Silver Spring and is an active member of Alpha Kappa Alpha Sorority, Incorporated.



## INSTITUTION

University of California at  
Los Angeles

## EDUCATION

University of Virginia

University of Pittsburgh  
School of Medicine

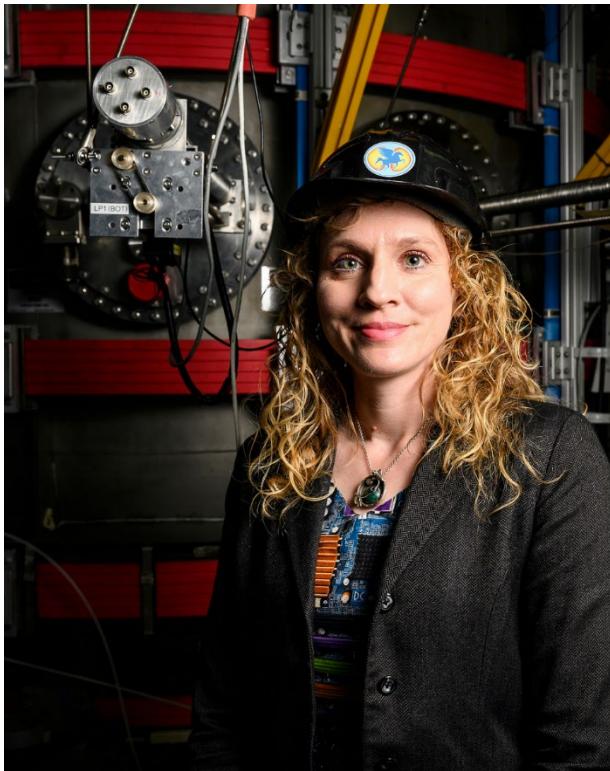
Columbia University

University of California,  
Los Angeles

# ENRICO CASTILLO

Dr. Castillo is an Assistant Professor in the Center for Social Medicine in the Department of Psychiatry and Biobehavioral Sciences at the University of California – Los Angeles (UCLA). Dr. Castillo’s research focuses on health equity and health justice, serious mental illness, and community-public-academic partnerships. Combining health services and social medicine research methods, Dr. Castillo aims to improve the capacity of public systems to address disparities, particularly in homelessness and incarceration. He is currently leading a NIMH-funded project on the jail-to-homelessness pipeline experienced by individuals with serious mental illness (K23 MH125201).

Dr. Castillo received his BA with High Distinction from the University of Virginia, his medical degree with a Concentration in Underserved Populations from the University of Pittsburgh, and his MS in Health Policy and Management from the UCLA Fielding School of Public Health. He completed his residency and public psychiatry clinical fellowship at Columbia University and his postdoctoral research fellowship at the UCLA Robert Wood Johnson Foundation Clinical Scholars Program. He is an Associate Director of Residency Education at UCLA and teaches on topics of homelessness, health equity, structural competency, and physician advocacy.



## INSTITUTION

University of Wisconsin,  
Engineering Physics  
Department

## EDUCATION

University of Wisconsin  
Princeton University

# STEPHANIE DIEM

Dr. Diem is an Assistant Professor in the Engineering Physics Department at the University of Wisconsin-Madison, where her experimental plasma physics research focuses on using microwaves to heat and drive current in magnetically confined, high-temperature plasmas for fusion energy development. Dr. Diem is the PI of the Pegasus-III Experiment, a new magnetic confinement fusion experiment funded by the US Department of Energy studying innovative plasma startup techniques in an effort to reduce the cost and complexity of future fusion reactors. Prior to joining the faculty at UW-Madison, she was a Staff Scientist in the Fusion Energy Division at Oak Ridge National Laboratory on long-term assignment at DIII-D National Fusion Facility in San Diego, CA.

Dr. Diem currently serves on the American Physical Society Division of Plasma Physics (APS-DPP) Executive Committee, the APS-DPP Committee for Women in Plasma Physics and is the faculty advisor of the new APS-sponsored UW Women+ in Plasma Physics student group focused on recruitment, retention and improving the climate in the field. She created the APS-DPP sponsored annual Visual Science Communication Award and is Co-Leader of the US Fusion Outreach Team (grassroots organization focused on reducing barriers to outreach efforts). Additionally, she was one of the organizers of the Early Career Fusion Scientists (ECFS) forum, a grassroots organization which initiated discussions and polling among the early career community to provide input to the NASEM Committee on a Strategic Plan for U.S. Burning Plasma Research.



## INSTITUTION

University of California,  
San Francisco

## EDUCATION

University of California,  
Berkeley

Stanford University

University of Buffalo

# MEGHANA GADGIL

Dr. Gadgil is an Assistant Professor of Medicine at the University of California San Francisco (UCSF) and an Adjunct Assistant Professor at the UC Berkeley (UCB) School of Public Health. She is also the Director of Innovation at The Better Lab, a human-centered design research and practice venture at UCSF with a focus on vulnerable populations. Dr. Gadgil received her dual undergraduate degrees and Masters in Public Health (MPH) from UC Berkeley. She completed her medical degree (MD) at the Jacobs School of Medicine at the University at Buffalo, and trained in Internal Medicine at Stanford in the Global Health Track.

Prior to joining the University of California, Dr. Gadgil spent five years on the faculty at Dell Medical School at UT Austin, where her work as an academic hospitalist was complemented by positions with the Design Institute for Health, the Value Institute, and in the Division of Global Health. Dr. Gadgil's research interests include health system resilience in response to climate change and environmental health vulnerabilities, chronic disease in South Asian and Latin American populations, and the innovative applications of human-centered design to understand and address complex, system-level challenges that cross disciplines. For the past ten years, she has also been engaged in research, advocacy and mentorship to improve gender equity in medicine. Dr. Gadgil's clinical foci include the care of vulnerable populations, medical education, and capacity building in low-resource health care and public health settings. Dr. Gadgil has been recognized with a Fulbright Fellowship to Bangladesh and has twice been a Johnson & Johnson Global Health Scholar for work in Uganda and Borneo. At UT Austin, she was awarded the President's Award for Global Learning for work in Mexico, and won the Dell Medical School Teaching Excellence Award. Dr. Gadgil is a Fellow of the American College of Physicians.



## INSTITUTION

National Institutes of  
Health

## EDUCATION

University of Kentucky

James Madison University

Universidad Veracruzana

# MARY GARCIA-CAZARIN

Dr. Mary L. Garcia-Cazarin is a Scientific Advisor in the Tobacco Regulatory Science Program at the National Institutes of Health (NIH). Dr. Garcia-Cazarin has committed her career to public service and is passionate about training and mentoring. She has led initiatives implement research and programs related to disease prevention, tobacco, nutrition, physical activity, regulatory science, and public health. She served three years as an elected board member of SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science). She volunteers her time and expertise to advocate and mentor in outreach programs working to increase the participation of underrepresented groups in science. In recognition, she won the prestigious NIH 2020 Ruth L. Kirschstein Mentoring Award. She received her Ph.D. in Pharmacology, her M.S. in Biology, and her B.S. in Chemistry. Previously, Dr. Garcia-Cazarin was an American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellow in the Office of Dietary Supplements at the NIH.



## INSTITUTION

Case Western Reserve  
University, Mechanical  
and Aerospace  
Engineering

## EDUCATION

Middle East Technical  
University, Turkey  
  
Purdue University

# UMUT GURKAN

Umut A. Gurkan, PhD is the Warren E. Rupp Associate Professor with tenure at Case Western Reserve University. Dr. Gurkan holds BS degrees in Chemical Engineering and Mechanical Engineering from the Middle East Technical University in Turkey, and a PhD degree in Biomedical Engineering from Purdue University in Indiana, United States. He completed his postdoctoral training at Harvard Medical School and Harvard-MIT Health Sciences and Technology. Dr. Gurkan innovates technologies that enable global equitable access to diagnostics and personalized health. Dr. Gurkan is a leader in efficient translation of point-of-care diagnostics for inherited blood disorders and anemia in underserved populations. He has led international clinical studies on sickle cell disease research in the United States, Africa, Southeast Asia, and India. Dr. Gurkan has authored over 80 peer-reviewed journal articles. His research has been supported by the National Science Foundation and National Institutes of Health. Dr. Gurkan's inventions led to 10 issued US patents and four successful biotechnology companies to date with products in global markets. Dr. Gurkan's innovations won numerous awards, including USPTO Patents for Humanity recognition and USFDA Breakthrough Device Designation. Dr. Gurkan's dedication to diversity, inclusion, equity, mentoring, and societal impact of his research has been recognized. His honors include National Science Foundation CAREER Award, Turkish American Scientists & Scholars Association Young Scholar Award, American Society for Engineering Education Curtis W. McGraw Research Award Finalist, Translational Research Featured New Investigator Award, Biomedical Engineering Society Rising Star Award, MIT Technology Review Innovator under 35 Award, Doris Duke Innovations in Clinical Research Award, and Belcher-Weir Family Pediatric Innovation Award. Dr. Gurkan is a member of the Global Gene Therapy Initiative, American Society of Mechanical Engineers, Biomedical Engineering Society, and American Society of Hematology. Dr. Gurkan is a Senior Elite Member of the National Academy of Inventors (NAI).



## INSTITUTION

University of District of Columbia, Department of Sciences and Mathematics

## EDUCATION

Xavier University

University of New Orleans

Virginia Tech

# BRANDY HUDERSON

Dr. Brandy Huderson is a STEM educator with extensive experience in higher education instruction, scientific research, formal and informal STEM education programming, project management, qualitative and quantitative portfolio analysis, program evaluation, and federal grant management. She completed her undergraduate studies at Xavier University of Louisiana (New Orleans, LA) receiving a bachelor's degree in Biology. From there Dr. Huderson earned a Master's of Biological Sciences degree with concentrations in Molecular Genetics from the University of New Orleans (LA). Dr. Huderson joined the Dairy Science Department at Virginia Tech (Blacksburg, VA) where her dissertation research focused on mammary gland development in pre-pubertal Holstein calves. Dr. Huderson completed two cancer biology postdoctoral fellowships at Tulane University School of Medicine (New Orleans, LA) and Georgetown University's Lombardi Comprehensive Cancer Center (Washington, DC). Dr. Huderson is an Assistant Professor at the University of the District of Columbia in our nation's capital. Dr. Huderson's research program focuses on steroid receptor biology, in normal and abhorrent systems, as well as STEM Education and experiential learning.

Dr. Huderson is a former American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellow (STPF) at the National Science Foundation (NSF) in the Directorate for Education and Human Resources (EHR). As a fellow, Dr. Huderson used her expertise in STEM education and research to support the Division of Research on Learning in Formal and Informal Setting's (DRL) Advancing Informal STEM Learning (AISL) program. Specifically, she used her experience and knowledge gained from academia to conduct qualitative and quantitative portfolio analysis and program evaluation. In addition to abstracts, presentations, and publications related to her research program, Dr. Huderson has also published two book chapters examining STEM-related environments for public school students and African American women, *Urban STEM Education: A Vehicle for Broadening Participation in STEM* (Huderson and Huderson, 2019) and *Societal Factors and Workplace Perceptions: Understanding Social Determinants of Professional STEM Achievement and Persistence for Black Women* (Huderson and Huderson, 2019), respectively.



## INSTITUTION

Arizona State University

## EDUCATION

University of Michigan

# DARSHAN KARWAT

An unexpected academic, Darshan is an aerospace engineer by training, with a background in combustion chemistry, gas dynamics, and sustainability ethics from the University of Michigan. Over the last few years, as an assistant professor at Arizona State University, he has focused on (1) issues related to engineering, environmental protection, social justice, peace, and human rights; (2) questioning (and changing) the assumptions that underpin how and why we engineer the way we do; and (3) reimagining the future of energy and environmental governance. He misses working on space systems, and is figuring out his way back into that world. (Insights always welcome!) Originally from Mumbai, he's spent time as a AAAS Science and Technology Policy Fellow at the US EPA and US DOE. He loves soccer than most things.



## INSTITUTION

Physicians, Scientists, and  
Engineers for Healthy  
Energy

## EDUCATION

Princeton University  
Harvard University

# ELENA KRIEGER

Dr. Elena Krieger is the Director of Research at Physicians, Scientists, and Engineers for Healthy Energy (PSE), an energy science and policy research institute based in Oakland, California. She joined PSE in 2013 to launch the organization's clean energy practice area, and now oversees its scientific research efforts. Her current work focuses on accelerating the transition to clean and renewable energy resources, and developing transition pathways that realize health, environment, equity, and resilience co-benefits. She serves as principal investigator on numerous scientific research projects, and simultaneously works closely with community organizations, non-profits, policymakers, regulators, and other stakeholders to use data and science to inform energy policy decisions. In turn, her research is deeply informed by the questions posed and challenges faced by these stakeholders.

Dr. Krieger's recent and ongoing projects include a research initiative focused on solar + storage resilience hubs at schools across California; analysis integrating health, equity, and environmental metrics into state-level deep decarbonization strategies; and the development of a novel framework to reduce greenhouse gas and criteria pollutant emissions with distributed energy resources while increasing clean energy access for underserved communities, focusing on peaker power plant replacement with energy storage. She has authored numerous peer-review and technical reports, developed interactive data visualization tools for public use, and frequently serves in a scientific advisory role for non-profit and community-based organizations. She received her PhD in Mechanical & Aerospace Engineering from Princeton, where her research focused on optimizing energy storage in renewable systems, holds an AB in Physics and Astronomy & Astrophysics from Harvard, and is a member of the Disadvantaged Communities Advisory Group to the California Energy Commission and the California Public Utilities Commission.



## INSTITUTION

University of Pennsylvania  
Perelman School of  
Medicine, Department of  
Anesthesiology and  
Critical Care

## EDUCATION

University of California,  
Berkeley

Yale University

University of Pennsylvania

# MEGHAN LANE-FALL

Dr. Meghan Lane-Fall is the David E. Longnecker Associate Professor and Vice Chair of Inclusion, Diversity, and Equity for the Department of Anesthesiology and Critical Care at the Perelman School of Medicine at the University of Pennsylvania, where she also has a secondary faculty appointment in epidemiology. She is the founding co-director of the Penn Center for Perioperative Outcomes Research and Transformation, Director of Acute Care Implementation Research at the Penn Implementation Science Center of the Leonard Davis Institute of Health Economics, and Director of Research and Scholarship for the Penn Center for Healthcare Improvement and Patient Safety.

Dr. Lane-Fall is a practicing physician with board certification in anesthesiology and critical care medicine. She is also a researcher whose work bridges implementation science, improvement science, and human factors engineering. Her innovative team-based NIH-funded research is based in acute care settings, combining approaches from multiple disciplines to facilitate the uptake and sustained use of evidence-based practices. She has a particular interest in handoffs, patient safety, communication, and teamwork, and has methodological expertise in the use of qualitative and mixed methods approaches to scientific inquiry. Finally, Dr. Lane-Fall is a dedicated teacher and mentor committed to equipping emerging scholars with the skills to conduct paradigm-shifting research.



## INSTITUTION

Colorado State University,  
Civil Engineering

## EDUCATION

University of Illinois at  
Urbana-Champaign

University of Minnesota

# HUSSAM MAHMOUD

Dr. Mahmoud is the George T. Abell Professor in Infrastructure in the Department of Civil and Environmental Engineering at Colorado State University (CSU) and is the director of the Structural Laboratory. He obtained his BSc and MSc in civil engineering from the University of Minnesota and his PhD from the University of Illinois at Urbana-Champaign (UIUC). Prior to pursuing his Ph.D., he was the manager of the NEES Earthquake Laboratory at the UIUC. Prior to arriving to UIUC he was a research scientist focusing on deteriorated infrastructure at Lehigh University. Dr. Mahmoud's research program has three major thrusts including assessing community resilience and socio-technical recovery following extreme events with emphasis on schools and hospitals as social institutions, quantifying building damage to extreme single and multiple hazards, and evaluating and proposing repairs and inspection intervals for deteriorated infrastructure with focus on bridges, ships, and underwater systems. He has authored over 230 publications and has given more than 100 presentations including 80 invited talks at national and international conferences. He has chaired and served on numerous technical committees, including the ASCE Committees on Fire Protection, Multi-hazard Mitigation, and Steel Bridges. He is the recipient of various awards, and he has been invited to various U.S. National Academies Frontiers symposia. His research has received media coverage through citations and interviews in numerous venues, including Nature Climate Change, Smithsonian Magazine, the Independent, The Economist, CBS Denver, CBS Egypt, and CNN.



## INSTITUTION

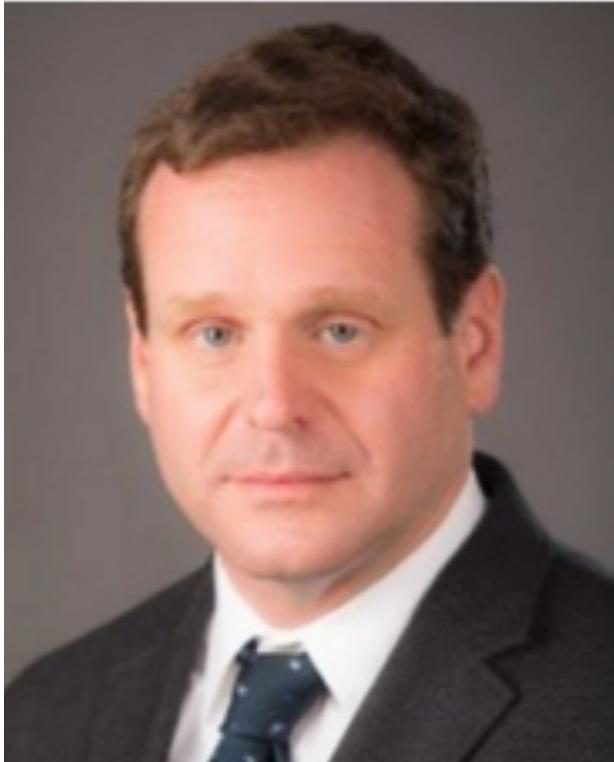
Massachusetts Institute of  
Technology, Civil and  
Environmental  
Engineering

## EDUCATION

Politecnico di Milano  
McGill University

# BENEDETTO MARELLI

Benedetto Marelli is the Paul M. Cook Career Development Associate Professor in the Department of Civil and Environmental Engineering at the Massachusetts Institute of Technology. He received a B.Eng. and a M.Sc. in Biomedical Engineering from Politecnico di Milano in 2005 and 2008 and a PhD in Materials Science from McGill University in 2012. After a Postdoc in the Silklab at Tufts University, Benedetto joined the MIT Faculty in November 2015. At MIT, the Marelli research group works in the area of structural biopolymers and nanomanufacturing. By using biofabrication strategies that integrate bottom-up and top-down techniques, the research efforts are focused on the design of materials that act at the biotic/abiotic interface with applications in precision agriculture, urban farming, food safety, and food security. Benedetto has received several awards, including PECASE, NSF CAREER, ONR Young Investigator Award and ONR Director of Research Early Career Award. Benedetto's research resulted in more than 16 IP positions and he is co-founder of Mori Inc., which uses silk technologies to enhance the preservation of perishable food.



## INSTITUTION

National Renewable  
Energy Laboratory

## EDUCATION

University of Michigan  
Virginia Tech  
University of Florida

# MICHAEL MARTIN

Michael James Martin is a scientist in the Computational Sciences Center at the National Renewable Energy Laboratory (NREL), where his research includes simulation of new energy technologies operating at extreme temperatures and the sustainability of new technologies. Dr. Martin also leads NREL activities in applying high-performance computing to advanced manufacturing, and co-leads initiatives in atmospheric sciences at NREL's Joint Institute for Strategic Energy Analysis. Prior to joining NREL, Dr. Martin held scientific positions at the Naval Research Laboratory, Louisiana State University, and NASA's Jet Propulsion Laboratory; as well as science policy fellowships at the Department of Energy, the United States Senate, and the National Academies. Dr. Martin is a volunteer advisor at the Institute for International Education's Scholar Rescue Fund (SRF) and a member of the American Society of Mechanical Engineers (ASME) Energy Policy Committee. Dr. Martin has also held multiple committee positions in the American Institute of Aeronautics and Astronautics (AIAA). Dr. Martin's professional recognition includes the Secretary's Appreciation Award from the Department of Energy, the ASME Congressional Fellowship, Associate Fellow of the AIAA, and multiple awards for outstanding teaching. Dr. Martin received a PhD in Aerospace Engineering, an MA in Asian Studies, and an MS in Mechanical Engineering from the University of Michigan. Dr. Martin also holds an MS in Science and Technology Studies from Virginia Tech and a BS in Mechanical Engineering from the University of Florida.



## INSTITUTION

University of Kentucky,  
Department of  
Entomology

## EDUCATION

University of Florida  
Cornell University

# CLARE RITTSCHOF

Dr. Clare Rittschof is an Assistant Professor of Entomology at the University of Kentucky. Her unusually integrative research program, focused primarily on honey bees, includes approaches from molecular neuroscience to landscape ecology. She studies how the social environment shapes behaviors, and the interplay between social behaviors and health. In pursuit of principles that unify social species, she has studied diverse organisms including humans, and collaborated broadly across the social and medical sciences. For the last 6 years, Clare has served as a science policy fellow and committee member for the 7,000-member Entomological Society of America (ESA), leading the development of position statements on climate change and pollinator health, and organizing a symposium on policy and communication. She also chairs the Ethics Committee, focused on modernizing the society's code of conduct to emphasize inclusive behavior. She has participated in over 30 public outreach events on neuroscience and bee biology in the last five years alone, and she recently launched a citizen-science honey bee virus project. Clare's original courses, Bees & People and The Neuroscience of Pollination, emphasize the diverse cultural and biological connections between pollinators and humans while educating students on the process of scientific consensus building. Clare's work has been recognized for its unusual breadth and novelty, earning her an Outstanding New Investigator Award (Animal Behavior Society), an Early Career Innovation Award (ESA), and a Career Development Award from the National Science Foundation. Her research-education program includes a strong emphasis on high school and undergraduate career mentoring in agricultural STEM.



## INSTITUTION

Indiana University  
Bloomington

## EDUCATION

University of Buenos  
Aires, Argentina

# PATRICIA SILVEYRA

Dr. Patricia Silveyra is an Associate Professor at Indiana University Bloomington School of Public Health. Her research focuses on sex differences and the role of sex hormones and steroid hormone receptors in inflammatory lung disease. Dr. Silveyra earned her bachelor's and master's degrees in Molecular Biology and Biotechnology, and her Ph.D. in Biochemistry, from the University of Buenos Aires, Argentina and did her postdoctoral training at Penn State College of Medicine. In 2013, she established her independent research program as an Assistant Professor at Penn State with an NIH K12 BIRCH award, and later received K01 and R03 awards from NHLBI. She was promoted to Associate Professor in 2018, prior to joining UNC-Chapel Hill, where she led the Biobehavioral Laboratory as a Beerstecher-Blackwell Associate Professor for two years. In 2021, she joined the Department of Environmental and Occupational Health at Indiana University School of Public Health. Dr. Silveyra has received numerous awards for her research, mentoring, and efforts to promote diversity in STEM. She is an advocate for underrepresented and international trainees, and she serves in various national organizations and committees, including the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), and the National Academies of Sciences, Engineering and Medicine (NASEM), where she is a member of the Board on Higher Education and Workforce and was co-chair for the initial cohort of New Voices.



## INSTITUTION

University of Washington,  
Department of  
Bioengineering

## EDUCATION

Massachusetts Institute of  
Technology

University of Washington

University of Wisconsin-  
Madison

# KELLY STEVENS

Dr. Kelly R. Stevens is an Assistant Professor of Bioengineering, and Laboratory Medicine & Pathology at the University of Washington. Dr. Stevens' research team focuses on human organ design. Her team is developing molecular blueprints of human organs, as well as new fabrication methods to build human organs, such as by 3D printing. Dr. Stevens has received awards for this work such as the NIH New Innovator Award, BMES CMBE Rising Star Award, John Tietze Stem Cell Scientist Award, Keck Foundation Award, and Gree Scholar Award. Her work in 3D Bioprinting and organ mapping has been spotlighted by over 500 media outlets worldwide.

Dr. Stevens co-founded and co-leads a nationwide coalition of ~400 scientists and engineers working to dismantle racial and ethnic inequities in the academy. This coalition's first effort generated the Fund Black Scientists movement, which refocused attention on racial funding disparity in biomedical research. Dr. Stevens works to disseminate the message that to develop advances that equitably improve the lives of all people, our profession needs to include all people – diversity is the requisite engine of innovation and impact that will lead us successfully into the post-pandemic world.



## INSTITUTION

SHEPHERD Foundation

## EDUCATION

Cornell University

University of Missouri

University of North  
Carolina

# CATHARINE YOUNG

Dr. Catharine Young holds a doctorate degree in Biomedical Sciences and serves as the Executive Director for the SHEPHERD Foundation, an organization seeking to revolutionize treatment, care, education and support for rare cancer patients and their families through the levers of federal legislative reform, storytelling and relationship building. Prior to this position, Catharine served as the Senior Director of Science Policy for the Biden Cancer Initiative. Here she fostered discussion and collaboration within the biotech, technology, science, and academic fields to drive innovative solutions and breakthroughs against cancer. Catharine also served as the Senior Science and Innovation Policy Advisor and Head of the DC team for the Foreign Ministry of the UK. Based at the British Embassy, Catharine influenced science and innovation policies of both the UK and US governments, industry, and academia. Following her Postdoctoral training at Cornell University in Biomedical Engineering, Catharine was selected as a AAAS Science and Technology Policy Fellow in the Office of the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs. Here she led international engagements on eliminating biological weapons, improving biosafety and biosecurity, and assisting in the DoD's response to the Ebola outbreak in Western Africa. Catharine also co-founded Blueprint International, a non-profit dedicated to providing novel technological solutions to some of the world's most pressing social issues.

Recent awards include being selected as a Presidential Leadership Scholar, TED Fellow, Alexandria 40 Under 40 and Social Enablers top 100 most inspiring social entrepreneurs. Catharine is an advocate for women in STEM and has been a contributor to major social and media networks including TED-Ed, the Guardian and the UK Science and Innovation Network.



## INSTITUTION

University of Wyoming

## EDUCATION

University of Colorado

University of Georgia

# JANE ZELIKOVA

Tamara Jane Zelikova is an ecosystem scientist working at the intersection of climate science and policy. She earned a PhD from the University of Colorado, has published in scientific journals and popular media outlets and written and contributed to climate policy reports. Her research focuses on examining the effects of global change in natural and managed ecosystems. Most recently, she focused on scaling engineered and natural carbon sequestration and advancing the science of carbon removal. She is also the co-founder of 500 Women Scientists, a global grassroots organizing with the mission to make science open, inclusive, and accessible and to fight racism, patriarchy, and oppressive societal norms. In addition to her science and activism, she is also a filmmaker and works on bringing a creative eye to science-based projects.