



# 2024 Christine Mirzayan Science and Technology Policy Graduate Fellowship

**Fellow Biographies** 



Atif Ashraf Gulf Offshore Energy Safety Board Gulf Research Program

Atif Ashraf is a doctoral candidate in the Industrial and Systems Engineering Department at Texas A&M University. His research analyzes how workers interact with procedures to establish guidelines that enhance task completion. Over the past 5 years, Atif has led human factors research initiatives in the oil and gas sector, focusing on projects related to hazard communication, pandemic impacts on safety, and differences between work-as-imagined and work-as-done. Atif brings a global perspective to his work, having studied and worked across Asia, the Middle East, and North America. This international exposure allows him to incorporate diverse viewpoints into his research and advocacy work. He is an active member of the Human Factors and Ergonomics Society

(HFES) and recently served as the President of the Texas A&M University HFES Student Chapter. With his background spanning human factors, process safety, and chemical engineering, Atif is passionate about continuing impactful research and engaging in initiatives to enhance safety and performance. Post PhD, Atif aspires to enable organizations to optimize workforce efficiency and help shape policy informed by evidence-based insights. He is dedicated to leading positive change in workplaces and communities by leveraging his multifaceted expertise.



### Matt Boehm

Health Policy Fellowships and Leadership Programs National Academy of Medicine

Matt Boehm is a recent neuroscience PhD graduate who is passionate about entering the field of science policy after accruing over twelve years of experience in academia, industry, and government. His journey in higher education began at the University of St. Thomas (St. Paul, MN) where he earned a B.S. in biology and graduated summa cum laude with minors in chemistry and psychology. During his time there, he worked as a laboratory teaching assistant, study group leader, recycling team member, and student researcher. He performed research quantifying methane emissions from shallow wetlands and published a research article exploring the connections between tobacco use, sleep, and mental health using a large national dataset. After receiving his undergraduate

degree, Matt worked in the biomedical industry as a lab technician at WuXi AppTec where he performed cell culture operations and in vitro toxicology assays for testing medical products. After a year in industry, he went on to pursue a PhD in neuroscience at Brown University in a partnership program with the National Institutes of Health (NIH), where he worked on research at the National Institute on Drug Abuse (NIDA) in Baltimore, MD. Matt's dissertation focused on developing PET imaging applications for gene therapy technologies, and he also performed experiments investigating the abuse liability of ketamine. While at the NIH, he became interested in science policy careers, and after graduating began volunteering at the NIDA Science Policy Branch to gain experience working with health science policy analysts on topics related to cannabis, psychedelics and substance use disorder screening/treatments. In addition to his volunteer work at NIDA, Matt currently teaches biology courses as an adjunct assistant professor at the University of Maryland Global Campus. His goal is to transition into a career in science policy while living in the DC area.



### Aparajita Datta

Board on Energy and Environmental Systems Division on Engineering and Physical Sciences

Aparajita Datta is a Ph.D. candidate in the Department of Political Science at the University of Houston. Her dissertation evaluates the policy feedback effects of means-tested home energy assistance programs. She studies the burdens and disparities in program participation, and the resultant impacts on racial equity, energy affordability and justice, and climate policymaking. She is collaborating with the Texas Poverty Research Institute to evaluate how disparities in energy assistance and equity are currently impacting civic engagement across socioeconomic and racial groups in Texas and how the findings from her research can be applied to improve policy outcomes. Aparajita also serves as a researcher

at UH Energy, the energy initiative across the University of Houston System. In this role, she focuses on federal and state policies for net-zero decarbonization and climate resilience, public opinion on carbon management and sustainability, and workforce development for the energy transition. She teaches policy analysis for sustainable energy development and the hydrogen economy micro-credentialing programs to support interdisciplinary education for current and future energy professionals. Aparajita holds a bachelor's degree in computer science and engineering from the University of Petroleum and Energy Studies, India, and master's degrees in energy management and public policy from the University of Houston. She enjoys swimming, cooking, and pottery. Aparajita looks forward to contributing to the Board of Energy and Environmental Systems' efforts to advance a just net zero transition during her time as a Mirzayan Fellow.



### Aida Davila

Committee on Women in Science, Engineering, & Medicine Policy and Global Affairs Division

Aida Davila is a Ph.D. candidate in the Department of Neuroscience at Albert Einstein College of Medicine. She obtained her B.A. from The City University of New York (CUNY), Hunter College, where she studied Psychology with a concentration in Behavioral Neuroscience. Her current research relates sensory perception to neural activity in the visual cortex. She investigates whether neural correlates of salience, a form of bottomup attention, exists for complex naturalistic textures and whether our recent sensory experience influences this salience. Outside of her research, she has been dedicated to outreach, teaching, and mentoring students at different levels of their academic training. Her own experience with mentorship programs throughout her academic career as well as her

mentoring experience has influenced her interests in policy. Specifically, how policy can play a role in increasing diversity and fostering inclusivity within STEM fields. As a Mirzayan Fellow, Aida is excited to work with the Committee on Women in Science, Engineering, and Medicine (CWSEM) as well as engage with the science policy community in DC. In her free time, Aida enjoys running, hiking, and exploring music and art in New York.



### Marlotte de Jong

Board on Environmental Change and Society Division on Behavior and Social Sciences and Education

Marlotte (Lotte) de Jong is a 5th year Ph.D. Candidate in Natural Resource Policy and Behavior from the School for Environment and Sustainability at the University of Michigan with a graduate certificate in African Studies. Her academic training is in geography, political ecology, and environmental justice. Her Masters thesis examined factors influencing wildlife poaching and conservation management strategies. Her Ph.D. research centers on three themes: (1) environmental change and conflict in East Africa; (2) conservation, climate change, and disease interactions; and (3) impacts of environmental change on livelihood security. She conducts mixed methods research such as parametric statistics, qualitative interviews, household surveys and geospatial

mapping. She utilizes ethnographic and immersive fieldwork to understand how displaced peoples cope with political and environmental changes. She has several publications in peer-reviewed academic journals and has presented at numerous academic conferences. She has also lectured at universities in Kenya and the United States and has developed teaching cases designed to help students better understand the complexities of natural resource conflicts. She is interested in developing public policy-focused research products such as opinion articles and policy briefs and analyses. She has worked for the International Center for Research in Agroforestry (ICRAF) and the Center for International Forestry Research (CIFOR), where she helped develop mechanisms for policy and research advancement. Her overall goal is to encourage the plurality of environmental knowledge and its merging with policymaking. In her free time, Lotte loves to go on hikes with her dogs, experiment with new recipes in the kitchen, and watch Formula 1.



### Luis Delgado

National Academy of Engineering Programs National Academy of Engineering

Luis R. Delgado is a Ph.D. Candidate in the Department of Mechanical Engineering at Pennsylvania State University. He received a B.S. in Mechanical Engineering from The University of Texas at El Paso and a M.S. in Civil Engineering with a minor in Public Policy from Penn State. Luis is an Alfred P. Sloan Foundation Minority Scholar, a Hispanic Scholarship Fund (HSF) Scholar, and a GEM Fellow. He is a Graduate Research Assistant in the Engineering Cognitive Research Laboratory and the Leonhard Center for Enhancement of Engineering Education. Luis's research expertise and interests lie in engineering educatior; graduate student mentoring; faculty development; and diversity, equity, inclusion, and belonging (DEIB). His doctoral research incorporates

critical race theories, decision-making theories, and multiple and mixed methods techniques to help make DEIB an integral part of engineering education. In his time at Penn State, Luis has held executive board positions in multiple organizations that strengthen underrepresented students' careers and foster an equitable and inclusive environment for graduate students. Specifically, he is actively involved with the Society of Hispanic Professional Engineers (SHPE) and the Multicultural Engineering Graduate Association (MEGA). Additionally, he co-founded Penn State's Civil & Environmental Engineering Diversity, Equity & Inclusion Committee. As a Mirzayan Fellow, Luis is excited to explore a career path in STEMM education policy, learn how equity-focused research gets translated into policy, and build a network of STEMM education policy experts. Outside of work, Luis enjoys volunteering, hiking, traveling, and playing soccer with his friends.



#### **Stella Fors**

Committee on Science, Technology, and Law Policy and Global Affairs

Stella is a PhD. candidate in chemistry at Northwestern University (NU) where she develops sustainable, electrochemical processes for transforming CO2 into high-value, industrial chemicals. Before her graduate career, Stella worked as a research chemist at HRL Laboratories, contributing to several projects in polymer coatings, inks, and adhesives, and becoming an inventor on four patents. She holds a B.S. with honors in chemistry from UCLA, where she performed research as a Dorothy and Raymond Wilson Research Fellow. She is a technical writer for the Science Policy Outreach Taskforce at NU, where she promotes scientifically-sound policy decisions in the IL legislature by writing informational briefings for state legislators. As part of NU's

delegation to COP28, she learned how science policy is enacted at the international level. Stella also works to make higher education more accessible and equitable as an Organizing Co-Chair for NU's graduate labor union, NUGW-UE. Outside of work, she volunteers with the International Younger Chemists Network as a translator of high-school level environmental science experiments (English to Swedish). Stella hopes the skills she develops and connections she makes in the Mirzayan Fellowship will enable her to understand how state, federal, and international policy intersect, and how to facilitate collaboration between scientists, lawmakers, and advocacy groups in policymaking.



Victoria Hernandez Board on Life Sciences Division on Earth and Life Sciences

Victoria is a 6th-year Ph.D. candidate in Biochemistry at the Massachusetts Institute of Technology. She studies TorsinA, a protein with unknown function that when mutated leads to a heritable form of the neuromuscular disorder, Dystonia. Victoria's quest to bring us closer to understanding TorsinA's biological role aligns with her desire to solve complex, challenging problems. Victoria is close to completing her Ph.D. and will defend her thesis in February 2024. Victoria obtained her B.S. in Chemistry at Arizona State University. As an undergraduate student, she built a strong science communication background through writing for the Embryo Project Encyclopedia, an open-access, peer-reviewed journal aimed at general audiences. Victoria wrote about the history of DNA

replication research in the 1950s, with a focus on both scientific and social contexts. From that experience, she learned to examine science with a wide lens and consider the interwoven factors that impact scientific advancement. Outside of the lab as a graduate student, Victoria engaged in outreach activities as a Graduate Community Fellow with MIT's Violence Prevention & Response (VPR) and the Media Chair for the Latinx Graduate Student Association (LGSA). Both of those groups support minority and underrepresented students at MIT. Through her work with VPR and LGSA, Victoria helped foster a vibrant academic community by promoting diversity, equity, and inclusion on campus. Victoria became interested in science and technology policy through a science policy "bootcamp" course and an MIT-sponsored trip to Washington, D.C. From those experiences, Victoria learned how she can tackle large-scale, complex problems using skills she obtained in her academic studies. As a Mirzayan Fellow, Victoria is excited to utilize her problem-solving and science communication skills with the Board on Life Sciences. She is also eager to explore science policy in Washington, D.C., and learn how she can contribute to the field.



**Clara Herrera** Board on Health Care Services Health and Medicine Division

Clara Herrera is finishing up her PhD in cell biology at the University of California, San Francisco. She holds a BA in biochemistry and molecular biology from Reed College. For her graduate thesis, she is investigating how a bacterium, Chlamydia trachomatis, uses specialized proteins to manipulate host cells. Through her involvement in the UCSF Science Policy group and the National Science Policy Network, she became interested in the role that scientists can play in legislation. As a Christine Mirzayan Fellow on the Board on Health Care Services, she is excited to acquire new skills relevant to policy work and to learn about how research is integrated into policy. In her spare time, Clara enjoys work-out classes with friends, running, reading, and playing fetch with her cat.



### Ishita Kamboj

Board on Chemical Sciences and Technology Division on Earth and Life Sciences

Ishita Kamboj is a fifth year PhD Candidate and NSF Graduate Research Fellow in Materials Science & Engineering at North Carolina State University where she studies cathode materials for lithium-ion batteries. She is a two-time recipient of the KIETS Climate Leadership Scholarship which supported a research internship at Argonne National Laboratory to study low cost, earth-abundant oxide materials for electric vehicle batteries. She also holds a Bachelors in Materials Science & Engineering from the University of Minnesota, Twin Cities, where she researched the synthesis of magnetic nanoparticles. Ishita disseminated her work through several co-authored research publications, a book chapter, and conferences at local, national, and international levels. Most notably,

Ishita was selected to participate in the Joint Undertaking for an African Materials Institute Workshop in Nairobi, Kenya. There she assembled a team of students featuring 9 countries to propose & secure funding for research assessing the feasibility of constructing and deploying locally developed, iron-air microgrids in rural Kenya. Ishita engaged with state and local climate policy as an officer of Science Policy Pack at NC State, with whom she co-authored a status report of PFAS pollution in North Carolina and an award-winning policy memo on the importance of paid family leave in the STEM workforce. Through Mirzayan programming, Ishita is eager to study federal policymaking and experience the full DC policy ecosystem alongside a cohort of like-minded individuals. Ishita is broadly interested in building sustainable and ethical supply chains for technologies at the nexus of energy and the environment. She is eager to work with BCST to learn about challenges on the frontiers of sustainable chemistry from experts and decision-makers while contributing to the policy process in action. In her spare time, Ishita enjoys reading fiction, dancing, live music, gardening, and existing in nature in any capacity.



#### **Mason Klemm**

National Materials and Manufacturing Board Board on Mathematical Sciences and Analytics Division on Engineering and Physical Sciences

Mason Klemm is a fifth year PhD candidate in the department of Physics and Astronomy at Rice University. His research focuses on the interplay of exotic electronic, magnetic, and structural phenomena in crystalline materials via a combination of neutron scattering and angle-resolved photoemission spectroscopy experiments. In particular, his interest lies in the use of uniaxial pressure to study how lattice distortion modifies the electronic and magnetic properties of materials. Neutron scattering requires a specialized nuclear reactor, affording Mason the opportunity to travel internationally to perform experiments. His travels provide him with

a unique insight into how other countries fund and foster scientific research. Additionally, Mason works with Rice University's Baker Institute for Public Policy on their oral history project documenting first-hand accounts of former members of the President's Committee of Advisors on Science and Technology (PCAST). He uses his experience at the Baker Institute to emphasize the importance of historicizing scientific advancement, including systemic barriers to science education. In his free time, he enjoys reading nonfiction and thrifting.



#### Hannah Mast

Gulf Environmental Protection and Stewardship Board Gulf Research Program

Hannah Mast is a PhD candidate in the Department of Environmental Sciences at the University of Virginia and holds a B.A in Biochemistry from the University of Wisconsin-Madison. In her dissertation research, she studies photosynthesis of coastal wetlands and the benefits these ecosystems provide to humans. As a Virginia Sea Grant Graduate Research Fellow, she is examining the ecological and environmental justice outcomes of Virginia's wetland management policy and creating data visualizations to inform wetland management decisions in collaboration with state government stakeholders. Hannah is also president of the Virginia-Scientist Community Interface, a coalition of volunteer early career scientists committed to providing scientific

expertise for community-driven advocacy. In this position, she has led interdisciplinary teams writing public comments, op-eds, and peer-reviewed publications that promote science in decision-making and have been cited in federal court litigation. Her research and volunteer work have shown her how science can inform policy and piqued her interest in working at the intersection of scientific research and policy. In the long term, she aims to work as a scientist at an organization that is closely involved with policy related to environmental justice and coastal resiliency. Through the Mirzayan Fellowship, Hannah is excited to learn how the National Academies synthesizes academic research into digestible policy recommendations, interact with NGOs and think tanks, and explore the science policy and advocacy environment in Washington, D.C. In her free time, she enjoys running, art, reading, and baking bread.



### Matias Milia Climate Crossroads Climate Crossroads

Matias Milia has a Ph.D. in Social Science Research from the Latin American Faculty of Social Sciences in Mexico, a high-performance program recruiting top candidates from all over the region to foster socially relevant scholarship. He has a broad trajectory in diverse cultural and intellectual settings. He has worked in Argentina, Ecuador, France, and Mexico, wearing various hats as a professor, policy advisor, and researcher in universities, NGOs, and collaborative projects.



#### Alexis Myers Board on Gulf Education an

Board on Gulf Education and Engagement Gulf Research Program

Dr. Alexis Myers earned a PhD in Chemistry from the University of Colorado Boulder. She conducted her PhD research at the National Renewable Energy Laboratory (NREL), focusing on mimicking photosynthesis in low dimensional semiconductor materials for use in photovoltaics and solar fuels. In 2018, Alexis received a B.S. in Chemistry from Furman University where she researched charge transfer dynamics in organometallic materials for use in dye-sensitized solar cells. With over ten years of research experience in renewable energy, her love of fundamental research has evolved into a passion for a successful energy transition, which she believes is only sustainable if energy remains affordable and equitable. Alexis is looking forward to working with the

Board on Gulf Education and Engagement on the development and deployment of educational programs intentionally aimed at the inclusion of the gulf region population. As a first-generation college student from South Carolina, Alexis has a unique perspective on the impact that gaps in STEM education and engagement have on historically disadvantaged communities. Outside of the lab, Alexis is a founding member of the Chemistry Graduate Student Committee, where she advocates for BIPOC and queer students and builds new lines of communication on issues regarding pay transparency and disability accommodations. Alexis also worked with NREL's Circular Economy for Energy Materials, researching and presenting relevant funding opportunities to potential stakeholders. To increase visibility for future young scientists of color, Alexis has spoken on panels, given a TEDx Talk on being mixed race in America and been a guest speaker at various middle schools. When she isn't working, Alexis can be found with friends, sipping chai, practicing Ashtanga yoga or teaching a dance fitness class. As a Mirzayan fellow, Alexis' goals are to expand her professional network and collaborate with stakeholders from different sectors to generate funding for programs.



in the most urbanized places.

### **Melinda Paduani** Ocean Studies Board Division on Earth and Life Sciences

Melinda Paduani is an ecologist, social scientist, and advocate working to solve the plastic pollution crisis. She received a BS in Biology and a minor in Environmental Studies from the University of Central Florida where she discovered her passion for mangrove ecology. Melinda is a Ph.D. candidate at Florida International University researching the role of coastal mangrove forests in trapping microplastics (plastic particles < 5 mm in size) and its implications for water quality management in Biscayne Bay, an important estuary in southeastern Florida. She also developed a citizen science program called "Miami Plastic Patrol" to engage the community in collecting microplastic data around Biscayne Bay. Being an artist and an amateur birdwatcher, she finds inspiration from nature even



### Alyssa Rudelis

Board on Science, Technology, and Economic Policy Policy and Global Affairs

Dr. Alyssa Rudelis recently earned her Ph.D. in atomic physics from the Massachusetts Institute of Technology. During her graduate studies, Alyssa focused on developing a new hardware platform for quantum computing with error correction based on high-finesse optical cavities and neutral atom quantum bits. This research required teamwork, pushing new theoretical quantum computing frameworks, and technical depth in diverse areas such as materials, software, mechanical, electrical, and controls engineering. Outside of the lab at MIT, Alyssa was involved in the Graduate Student Union as a Union Representative and entered the world of science policy through the MIT Science Policy Initiative (SPI). She oversaw the SPI Blog as Communications Chair and travelled to

Washington, D.C. with the group to discuss the CHIPS and Science Act with members of Congress. Alyssa is currently an energy policy advisor at the California Energy Commission (CEC) in Chair David Hochschild's office, working to push forward clean energy initiatives and help the state reach its goal of 100% renewable energy by 2045. Alyssa believes it is important for scientists to engage with society and government at all levels to push for decisions made on the basis of sound data and equity. Specifically, due to its pervasive nature, Alyssa is interested in big-picture policy addressing climate change. During the Mirzayan Fellowship, Alyssa is excited to expand her policy experience serving on the Board of Science, Technology, and Economics Policy to promote the creation, diffusion, and application of new scientific knowledge to address some of society's biggest issues. In her free time, Alyssa enjoys cooking new recipes with her partner Roberto, running, practicing yoga, learning Spanish, and crocheting.



### **Kaelyn Sanders**

Board on Children, Youth, and Families Committee on Law and Justice Division on Behavioral and Social Sciences and Education

Kaelyn Sanders is a fourth-year Ph.D. candidate in the School of Criminal Justice at Michigan State University. In her research, she explores the experiences of people on community supervision, their reintegration, and their digital exclusion. Her research has been published in the Journal of Criminal Justice and Feminist Criminology. Kaelyn is also a National Science Foundation GRFP Fellow. She received a B.A. in Sociology and Criminology from The Ohio State University. As a Ph.D. candidate, Kaelyn has worked on program evaluation projects for reentry and gun violence programs in the state of Michigan. She also serves as the graduate

assistant for her program's Prospective Doctoral Student Recruitment and Retention Program Grant. In this role, she works to increase DEI in her graduate program by meeting with students at MSIs and HBCUs and assessing areas where current graduate students can be better supported. Outside of school, Kaelyn enjoys traveling, exercising, reading, listening to podcasts, and spending time with loved ones.



### Wesley Schnapp

Board on Health Sciences Policy Forum on Neuroscience and Nervous System Disorders

Wesley Ilana Schnapp is a fifth-year Ph.D. candidate in the University of Arizona Neuroscience Graduate Interdisciplinary Program. Her dissertation work focuses on investigating how neural circuits in the amygdala regulate eating behavior and energy balance and, more specifically, their role in development of the eating disorder, anorexia nervosa. Prior to UArizona, Wesley completed her undergraduate degree at Cornell University, majoring in Neurobiology & Behavior and minoring in Psychology and Spanish. She studied abroad in Cuba for a semester, where she conducted field research with bats, studying the neuroethology of their communication calls. She also did a post-baccalaureate fellowship at the National Institutes of Health, researching molecular mechanisms of

mitochondrial transport in neurons using zebrafish. Beyond the bench, Wesley is an advocate for bridging the gap between scientific research, societal impact, and public engagement through science communication and outreach. Recently, she has been working with a local non-profit to develop and utilize a curriculum for primary through high school students that introduces neuroscience to foster an understanding of brain function, emotional behavior, and social interactions while promoting brain health awareness. Wesley is also passionate about being active and spending time outdoors. In her past, she was a tree climbing instructor with Cornell Outdoor Education and spent summers working at an outdoor camp in Oregon for individuals with disabilities. Currently, she is a fitness and training instructor at a CrossFit gym in Tucson, AZ. Wesley is enthusiastic about her experience as a Mirzayan Fellow to learn more about how she can contribute to action and change for a healthier and more sustainable future through science policy. In her leisure time, Wesley enjoys mountain biking, trail running, skiing, cooking delicious meals, and baking treats for her friends.



### **Bianca Serda** Space Studies Board Division on Engineering and Physical Sciences

Bianca Serda is a Ph.D. candidate in Biochemistry and Molecular Biology, and Molecular Plant Sciences at Michigan State University (MSU). She is currently investigating the underlying mechanisms of the protective role of isoprene against ozone stress in Dr. Tom Sharkey's Laboratory. Bianca previously studied at San Jose State University (SJSU) and holds a Bachelor of Arts degree in Psychology. At SJSU, she studied the psychological impacts of domestic violence under Dr. Elena Klaw. Bianca then switched to life sciences and graduated from the University of New Mexico (UNM) with a Bachelor of Science degree in Biology. In Dr. David Hanson's Laboratory at UNM, Bianca's undergraduate research investigated growth development, anatomical, and photosynthetic rates of

Arabidopsis thaliana grown in the International Space Station. She was a NASA Space Life Science Training Program research assistant at NASA Ames Research Center. She studied the genome of a bacterial strain found to survive space flights. This experience led her to a leadership role on the student board of the American Society of Gravitational and Space Research, gaining a passion and knowledge of science communication through policy advocacy in Washington, D.C. She continues this passion for science communication as a part of the MSU community, as she coordinates and participates in many of the outreach activities with the local community. Bianca is excited to learn new skills from the Mirzayan Fellowship about policy making and hopes to apply these skills to improve further her science communication skills for the various outreach activities she participates in.



### **Emilie Sinkler**

Board on Atmospheric Sciences and Climate Polar Research Board Division on Earth and Life Sciences

Emilie Sinkler is an advocate for evidence-based policy with a diverse background in the geosciences. She is currently pursuing a Ph.D. in Glaciology at the University of Alaska Fairbanks, where she studies ice flow in Antarctica through borehole deformation. Emilie is excited to build on her previous experiences as an intern at the American Geosciences Institute and the Center for Climate and Energy Solutions, where she contributed to reports on topics like critical minerals and climate resilience. She looks forward to the Mirzayan Fellowship as a platform to refine her science policy skills, expand her professional network, and drive positive

change in science and technology policy. Outside of work, you can find Emilie reading, gardening, hiking, or skijoring with her husband and two huskies on their local trails.



**Meredith Sutton** Water Science and Technology Board Division on Earth and Life Sciences

Meredith Sutton is a Ph.D. student at the University of Nebraska-Lincoln (UNL) in the Department of Civil and Environmental Engineering (CEE) and a National Science Foundation GRFP fellow. Their research explores the impact of microplastic and nitrate contamination on water quality in agricultural environments as well as methods to facilitate more inclusive participation in citizen science. In 2022, Meredith earned their M.S. in Environmental Engineering from UNL while studying the impact of microplastics on constructed wetlands used for nitrate remediation. Before coming to Nebraska, they earned their B.S. in Civil Engineering with a specialization in environmental and water resources from the University of Virginia. In addition to research, Meredith co-developed and

taught a course on science communication and policy for STEM undergraduates at UNL and is active in graduate student governance, serving as the president of the CEE Department Graduate Student Association and civil engineering representative for the UNL Graduate Student Assembly. Meredith is involved in the Voices for Science program through the American Geophysical Union (AGU), where they have been working with community partners in Nebraska to expand community engagement with water quality research and utilize this research to inform policy at a local and state level. They are a strong advocate for making science and engineering accessible to all audiences and are passionate about working with communities to employ evidence-based solutions to water quality issues. With the Mirzayan Fellowship, they are excited to gain a more in-depth understanding of the role science plays in informing policy on a federal level. In their free time, Meredith enjoys gardening, photography, and finding new crafts to learn.



### Joineé Taylor

Board on Science Education Division on Behavioral and Social Sciences and Education

Joineé Taylor is a Ph.D. candidate in the Department of Teaching and Learning at Florida International University (FIU) and a Preeminent Grad Scholar with the STEM Transformation Institute at FIU. Holding an A.S. in Geography from The College of The Bahamas, a B.S. in Physics from Fisk University, and an M.Ed. in Science Education from the University of Missouri-Columbia, she brings a diverse educational background to her research endeavors. Currently, Joineé works at the intersection of science and education as a physics education researcher on the national project "STEP UP for Women" at FIU. Her doctoral dissertation focuses on enhancing student engagement in physics, particularly for traditionally marginalized groups, including female, Black, and Hispanic individuals.

Her research also delves into improving accessibility to systems of scientific knowledge within classrooms. Her prior research experiences include conducting systematic literature reviews in both human and physical geography, researching smart separator technology with the Naval Engineering Education Consortium, designing launch vehicles and experimental payloads for NASA student launches, and exploring methods to enhance science education with the Wipro Science Education Fellowship and the Howard Hughes Medical Institute Inclusive Excellence Project. With a diverse interdisciplinary background and an unwavering dedication to impactful research, she is passionate about leveraging scientific knowledge to enrich societies. It is this passion that drives her interest in science policy. Beyond her scholarly pursuits, Joineé loves mentoring the next generation of scientists. She also finds relaxation in the rhythms of reggae music, traditional rake n' scrape music, and the tranquility of the beach.



### **Sophia Vicente**

Science and Engineering Capacity Development Board Policy and Global Affairs

Sophia Vicente is a Ph.D. Candidate in Engineering Education at Virginia Tech. Her research interests include experiential learning, internships, and professional development in engineering education. Sophia has worked in various teaching and research roles during her time as a graduate student at Virginia Tech and has also worked as a research assistant for Penn State's Applied Research Lab. She received a Bachelors in Industrial Engineering from Penn State University and a Masters of Engineering in Industrial and Systems Engineering with a concentration in Management Systems from Virginia Tech.



### Constanza Vidal Bustamante

Board on Health Sciences Policy Health and Medicine Division

Constanza is a Ph.D. candidate in the Department of Psychology at Harvard University and will graduate in the spring of 2024. Her doctoral research uses mobile and wearable technology to study how real-world experiences of stress influence individuals' emotions, sleep, and social behavior, and how these dynamics shape health and wellbeing in the longer term. Constanza is interested in understanding different policy approaches to build science and technology innovation capacity and cross-sectoral partnerships in service of national and societal goals. She has been pursuing these interests as a Research Assistant with the Belfer Center for Science and International Affairs at the Harvard Kennedy School of Government and as President of the Harvard Science Policy

Group. She hopes to launch a full-time career in S&T policy following her Ph.D. graduation. Having grown up in Chile and completed high school in Singapore on a United World College scholarship, Constanza enjoys engaging with individuals from diverse backgrounds and perspectives. She has developed several initiatives in her department and beyond to promote effective mentorship and belonging among graduate students across disciplines. In her spare time, she enjoys running and biking, learning Mandarin Chinese, and hanging out in her local park.



### Justin Wang Board on Higher Education and Workforce Policy and Global Affairs

Justin Wang is a PhD Candidate in Chemical and Biological Sciences at the Scripps Research Institute and previously received a BS in Chemical Biology from the University of California, Berkeley. His research centers on uncovering new therapeutic targets for breast cancer using molecular and cell biology techniques. Before pursuing his PhD, he worked at Kindred Biosciences developing assays to test the quality of biologics intended for pets. At Scripps, Justin has engaged in educational outreach through the Community Teaching Lab and helped get a mentorship program for community college students, Summer Program Application Mentorship or SPAM, off the ground. He also developed an interest in student advocacy and presided over the Scripps Graduate Student

Council, working with Scripps administration to improve working conditions and policies for graduate students. This experience kindled his interest in science policy, leading him to become a delegate of the Advocacy Training Program hosted by the American Society for Biochemistry and Molecular Biology. He learned the basics of science policy and developed a project to address mental health and well-being for students at Scripps. Justin is also an intern with the Scripps Research Translational Institute on the PowerMom study, which is a digital trial to understand the factors that contribute to maternal health. Justin looks forward to joining BHEW at the National Academies, where he's excited to tackle his broader goal: making science a more welcoming and supportive space for everyone. Outside of all that, Justin loves playing video games and exploring different genres of music. He is an avid rock climber, occasional tennis player, and full-time cat dad.