NATIONAL ACADEMIES Sciences Engineering Medicine

2025 Christine Mirzayan Science and Technology Policy Graduate Fellowship

Fellow Biographies

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Toyib Aremu

Committee on Population (CPOP)
Division of Behavioral and Social Sciences and Education (DBASSE)
2025 Estes Fellow
Home Institution: University of Vermont

Toyib Aremu is completing a Ph.D. in Sustainable Development Policy, Economics, and Governance at the University of Vermont and serves as a co-Principal Investigator on a National Science Foundation research grant on evidence-informed policymaking. His research interest includes understanding the use of science in public policy decision making. He also currently works as a short-term hire at the Catholic Relief Service, assisting the organization with understanding its current research efforts and helping it to shape a strategy for evidence-based programming. Toyib has experience in five sub-Saharan African countries, working within government, private, and international non-governmental organizations using research to proffer solutions to policy-relevant questions. He has academic background both in the natural and social sciences, having completed a bachelor's degree in chemistry, a master's degree in sustainable development practice, and another master's degree in fertilizer science and technology. As a representative of his doctoral program in the graduate student senate, Toyib contributed to a bill advocating for an open access fund to increase knowledge access to those who need it. During his time as a Mirzayan fellow, Toyib is excited to contribute his expertise and experience to the National Academies while gaining practical experience in federal-level policy making. In his leisure time, he loves to spend time with his toddler son by the beach and listening to interviews granted by people who have had more life experiences than him. Toyib Aremu is the 2025 Estes Fellow, a named fellowship of the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program.

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Gloria (Judah) Bates

Board on Health Sciences Policy (HSP)
Health and Medicine Division (HMD)
Home Institution: California Institute of Technology

Judah Bates is a 4th year Ph.D. candidate in the Department of Biology & Bioengineering at Caltech. She earned her B.A. from Claremont McKenna College, majoring in Biochemistry. During her undergraduate studies, Judah opted to work with biotechnology industry leaders instead of pursuing a traditional academic thesis. She enjoyed using creative data visualization to translate complex biological concepts to non-scientists at Ascendis Pharma. Judah graduated into the COVID-19 pandemic and worked as an essential worker, which highlighted the links between individual health and community support. She joined Ninth Avenue Foods as a quality technician, mitigating microbiological risks during the company's expansion. This experience inspired her to pursue a Ph.D. in bioengineering at Caltech. Judah's current research involves applying metabolic modeling to the microbiome to investigate complex diseases in the Drosophila model. She traces microbial contributions to host metabolism to trigger regenerative responses to amputation in flies, which typically experience limb loss and shortened lifespans. Outside of her research, Judah is dedicated to mentoring students through programs like Summer Research Connections and WAVE. She also presents her work at local conferences to promote scientific interest. Her public outreach experiences and passion for public health have shaped her interest in policy. She became interested in science and technology policy after engaging with speakers at the Linde Institute. As a Mirzayan Fellow, Judah is eager to condense research for decision-makers with the power to act. In her free time, she is a retired college basketball player who serves as an assistant coach with Caltech's women's basketball team.

LinkedIn Profile: https://www.linkedin.com/in/judah-bates

Kiara Brown

Board on Children, Youth, and Families (BCYF)
Division of Behavioral and Social Sciences and Education (DBASSE)
Home Institution: Virginia Commonwealth University

Kiara Brown is a Ph.D. Candidate in Developmental Psychology at Virginia Commonwealth University. Her journey in psychology began at the Pennsylvania State University where she earned a B.S. in Psychology with a concentration in Life Sciences. During her undergraduate studies, she was active in many research labs, was a volunteer student tour guide, and was a Ronald E. McNair scholar. Currently, her research broadly focuses on comprehending the experiences of individuals systematically marginalized due to their race or ethnicity but, more specifically, how different adversities across the ecological system affect the development of minority groups. Furthermore, identifying protective factors to buffer the association between these complex challenges and health outcomes. As a graduate student, Kiara has worked on community participatory action projects with various developmental periods and stakeholders, engaging in quantitative and qualitative research. This past summer, Kiara was a Commonwealth of Virginia Engineering and Science (COVES) Fellow working with the Behavioral Health Commission. During her time there, she continued to develop her interest in policy and how analysts influence policymakers. Kiara plans to take her knowledge into the science-policy career field to aid in policy reform and action that can lend to better outcomes and address systemic barriers for minority groups. Outside of her research, she has been dedicated to community outreach, mentoring students at different levels of their academic journey, and volunteering for a high school girl empowerment group. In her leisure time, Kiara enjoys traveling, listening to podcasts, and spending time with family and friends.

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Priyanka Bushana

Board on Higher Education and Workforce (BHEW)
Policy and Global Affairs Division (PGA)
Home Institution: Just KozS, LLC

Priyanka Bushana is a neuroscientist, seasoned organizer, and advocate for public health. She earned her Ph.D. in Neuroscience from Washington State University, where her research focused on identifying neural and biochemical mechanisms that mitigate the harmful effects of sleep deprivation. Before pursuing her doctorate, Priyanka earned dual degrees in Information Systems and Biological Sciences from the University of Maryland, Baltimore County, where she was awarded a scholarship from the Center for Women in IT. She also completed a post-baccalaureate fellowship at the FDA, contributing to the development of high-throughput neurotoxicology assays using alternative animal models. Throughout her academic career, Priyanka has been a dedicated advocate for professional development and mentorship programming. Her goal has always been to create a more equitable and accessible academic environment. During graduate school, this passion expanded into an interest in science policy. Priyanka co-founded a science advocacy organization that provides training and opportunities to scientists, trainees, and advocates to engage with policymakers. This work introduced Priyanka to large-scale community organizing, where she focused on empowering others to create meaningful change. She collaborated on efforts to improve access to community water fluoridation in Spokane, ensure public health experts have a voice on local health boards across Washington, and unionize student employees at

Washington State University. Since earning her Ph.D., Priyanka has focused on building a career at the intersection of science and labor policy. Priyanka currently serves as the COO of Just KozS, L.L.C., where she specializes in securing funding and evaluating program effectiveness for nonprofit organizations. She enjoys applying her interdisciplinary knowledge and experience to solve complex problems and create positive change. Outside of science and policy work, Priyanka rock climbs regularly and performs as a duo acrobat and aerialist.

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David Canales Garcia

Space Studies Board (SSB)
Division on Engineering and Physical Sciences (DEPS)
Home Institution: Embry-Riddle Aeronautical University

David Canales Garcia started his professional career at the Polytechnic University of Catalonia, Spain, where he earned his BSc and MSc degrees in Aerospace Engineering. He also completed an MSc degree in Astrophysics, Particle Physics, and Cosmology at the University of Barcelona. His most notable professional experience in the space industry was working for Satlantis LLC as a space technology engineer, where he contributed to developing Earth-observation cameras for micro-satellites. He earned his Ph.D. in Astrodynamics and Space Applications as a member of the multi-body dynamics research group at Purdue University, under the supervision of NAE member Dr. Kathleen C. Howell. Dr. Canales is currently an Assistant Professor in the Department of Aerospace Engineering at Embry-Riddle Aeronautical University (ERAU), where he founded the Space Trajectories and Applications Research (STAR) group. He also serves as the ERAU representative to the Universities Space Research Association (USRA). His research interests include astrodynamics in multi-body regimes, cislunar operations, space policy, space weather, astrophysics, and applied mathematics.

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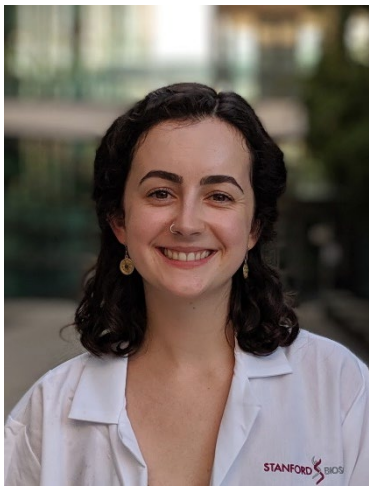

Emma Katherine Costa

Committee on Science, Engineering, Medicine, and Public Policy (COSEMPUP)
The Strategic Council for Research Excellence, Integrity and Trust
Policy and Global Affairs Division (PGA)
Home Institution: Stanford University

Emma Costa is a recent Ph.D. graduate in Neuroscience from Stanford University School of Medicine. Her experiences span academia, industry, and non-governmental organizations (NGOs), with a focus on advancing scientific research, fostering rigorous scientific practices, and improving access to cutting-edge technologies. During her undergraduate studies at the Massachusetts Institute of Technology (MIT), Emma worked on developing synthetic biology tools for neuroscience, including protein sensors to monitor neuronal activity in mice and a high-resolution imaging method compatible with widely available microscopes. Outside the lab, she was actively involved in social impact initiatives, working with the U.S. Agency for International Development (USAID) and several international NGOs to develop technology-based solutions. After earning her B.S. in Brain and Cognitive Sciences, she joined Google Accelerated Science, where she collaborated with engineers and fellow biologists to create a novel platform for protein sequencing. In her Ph.D. thesis work, Emma advanced the development of the African turquoise killifish as an emerging animal model system. Her research included generating a foundational dataset to investigate the biological mechanisms of aging, a major risk factor for human diseases. As a graduate student, she was also deeply engaged in science communication and education. She led informal science programs for various age groups on a variety of topics

including programming and neuroanatomy and co-founded the Stanford Neuroscience Application Assistance Program (SNAAP) to support underrepresented students applying to Ph.D. programs. She is also active in promoting open science practices within the Stanford community. During the Mirzayan Fellowship, Emma is looking forward to working closely with the Committee on Science, Engineering, Medicine, and Public Policy and the Strategic Council for Research Excellence, Integrity, and Trust to enhance scientific infrastructure and encourage broader inclusion and participation in STEMM fields.

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Christiana Eziashi

Gulf Offshore Energy Safety (GOES)
Gulf Research Program (GRP)
Home Institution: Mississippi State University

Christiana Eziashi is a dedicated and skilled Geoscientist originally from Nigeria. With a strong academic foundation, she holds a Bachelor's degree in Geology, a Master's degree in Geosciences, and a Ph.D. in Geosciences. Over the past five years, she has gained valuable industry experience in the oil and gas and hydrogeology sectors, specializing in well logging, digitization, seismic interpretation, and reservoir characterization. Christiana is known for her enthusiasm and passion for geosciences, as well as her ability to collaborate effectively within multidisciplinary teams. She is an excellent communicator, excelling in both verbal and written formats. Her current research spans several critical areas, including energy, geochemistry, groundwater nutrient monitoring and remediation, petroleum geology, and advanced reservoir characterization. Christiana's commitment to driving innovation and sustainability in geosciences reflects her deep dedication to making a meaningful impact in the field.

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Lauren Giurini

Board on Health Care Services (HCS)
Health and Medicine Division (HMD)
Home Institution: University of Wisconsin-Madison

Lauren Giurini is a Ph.D. candidate in Epidemiology at the University of Wisconsin-Madison and holds a B.A. in Mathematics, with a minor in Neuroscience from Lake Forest College. Broadly, her research interests are racial and socioeconomic health disparities, with a specific focus on barriers to cancer prevention created by socioeconomic status and geography. Her doctoral research looks at the association between neighborhood socioeconomic status and colorectal cancer screening in a cohort that primarily identifies as non-Hispanic Black and low-income in the southeastern United States. Since the start of graduate school, Lauren has been actively involved in student affairs through the Population Health Sciences Student Organization. She was also a Public Service Fellow at the Wisconsin Institute for Science Education and Community Education in 2023, which gave her the opportunity to teach an undergraduate course focused on the intersection between social issues and scientific careers. Lauren's most impactful experience in graduate school was presenting to government officials and community members at the American Society of Preventive Oncology's Environmental Justice Workshop in 2024. In the future, she hopes to have a career that allows her to engage with communities and policymakers to improve access to healthcare and

preventive screening. In her free time, she enjoys painting, gardening, hiking, playing ultimate frisbee, and traveling to new cities.

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Garis Grant

Board on Life Sciences (BLS)
Division on Earth and Life Studies (DELS)
Home Institution: University of Maryland, Baltimore

Garis Grant is a fourth year PhD candidate in the Departments of Pharmacology and Microbiology & Immunology at the University of Maryland, Baltimore (UMB). She earned a B.S. in Biochemistry and Molecular Biology from Agnes Scott College (Decatur, GA). Her dissertation research focuses on the interactions between innate immune cells and pancreatic cancer cells within the tumor microenvironment, with a particular emphasis on how these interactions enhance metastatic phenotypes. Garis is deeply committed to addressing health disparities and improving healthcare access in underserved communities. Her work in cancer research has fueled a strong interest in policy advocacy to enhance scientific advancement and promote health equity. She actively participates in outreach initiatives that aim to elevate the experiences of communities disproportionately impacted by barriers to healthcare. In addition to her research, Garis is a member of the student advisory board for the Initiative for Maximizing Student Development (IMSD) program at UMB, where she advocates for stronger research training opportunities and increased participation in biomedical research among underrepresented groups. She also represents her graduate program in the Graduate Student Association (GSA), where she works to promote science equity and amplify the voices of graduate students.Through her academic, research, and advocacy efforts, Garis is dedicated to solving complex issues in healthcare and science while championing the communities she serves.

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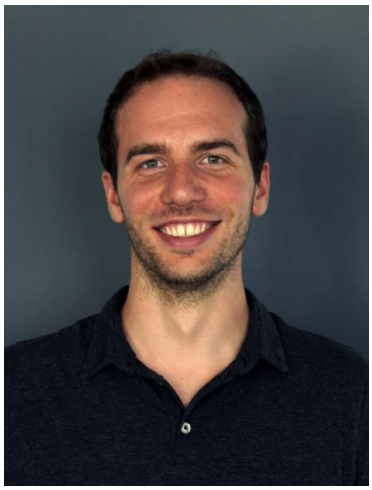

Tim Kodalle

Board on Energy and Environmental Systems (BEES)
Division on Engineering and Physical Sciences (DEPS)
Home Institution: Lawrence Berkeley National Laboratory

Tim Kodalle is a physicist working at Lawrence Berkeley National Laboratory (LBNL), where he enables and conducts renewable energy research at the intersection of physics, materials science, chemistry, and engineering. He has always been interested in the science of renewable energy conversion and storage but has also conducted research in nuclear medicine and mathematical oncology. Originally from Germany, Tim received his MSc and PhD from Humboldt University Berlin and Martin-Luther-University Halle-Wittenberg, discovering and optimizing new materials for highly efficient and cost-effective solar cells. He was then awarded a fellowship by the German Research Foundation to conduct research on tandem solar cells at LBNL in Berkeley, California. He holds a joint postdoc position at the two open user facilities of LBNL: Molecular Foundry and Advanced Light Source. Tim leads research efforts on new materials for Li-ion batteries and PV materials and manages collaborations between the two facilities and visiting scientists. He furthermore develops tools and software for automated, in-situ synthesis and characterization of these functional materials. E.g. he works on developing closed-loop synthesis workflows for robot- and machine-learning-assisted material discovery and characterization. Tim co-authored more than 50

research papers, served as a reviewer for renowned journals, and has experience working with funding agencies from the German and U.S. governments, as well as the European Union.

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Hanna Leapaldt

Board on Earth Sciences and Resources (BESR)
Division on Earth and Life Studies (DELS)
Home Institution: The Pennsylvania State University

Hanna is currently a Ph.D. candidate at The Pennsylvania State University, where she is earning a dual-title Ph.D. in Geosciences and Biogeochemistry. Hanna's research focuses on characterizing carbon-storing rocks (carbonates) and the microbial processes that can result in their formation. In 2023, she received the Future Investigators of NASA Earth and Space Science and Technology (FINESST) award for her proposed research on biosignatures in carbonate minerals. Aside from research, Hanna's current leadership roles include serving as the co-president of the Science Policy Society at Penn State and serving on the advisory board for the Commonwealth of Pennsylvania Science and Technology Policy Fellowship (COPA-STEP). Prior to pursuing her Ph.D., Hanna received her Master of Science from The Pennsylvania State University in geosciences, and her Bachelor of Science from the University of Minnesota, Duluth in environmental science..

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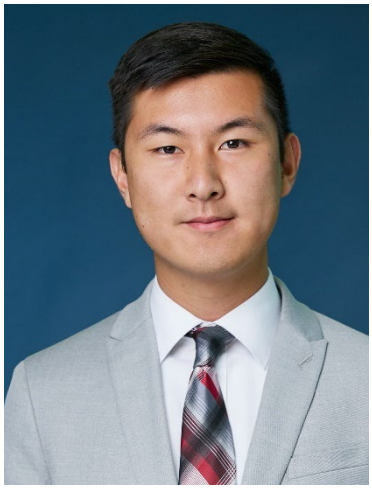

David Lu

Board on Chemical Sciences and Technology (BCST)
Division on Earth and Life Studies (DELS)
Home Institution: University of Kentucky

David Lu is a Ph.D. candidate in the Department of Chemical and Materials Engineering at the University of Kentucky. He received a B.S in Chemical Engineering and a minor in Mathematics at the University of Kentucky. David's dissertation research focuses on improving the sustainability and manufacturing scale-up of polymeric membranes for water filtration. His notable research achievements include incorporating green solvents and recycled plastics as membrane materials, demonstrating membrane fabrication using slot die coating and 3D printing technologies, and performing a life cycle assessment to quantify the environmental and health impacts of membrane production. David received the American Membrane Technology Association Reclamation Fellowship on Membrane Technology in 2023 and the NSF Fellowship on Innovations at the Nexus of Food, Energy & Water Systems in 2021. Outside the lab, he is a student trainee in the UK National Research Traineeship Program and the UK Superfund Research Center, as well as an officer in the UK Graduate Student Congress and the Materials and Chemical Engineering Graduate Student Association. David first entered the science policy field as a DOE Scholars intern in the DOE Office of Environmental Management (EM), helping evaluate technology development projects for tank waste cleanup at the Hanford site, create communication materials about EM R&D Roadmap initiatives, and review policy drafts pertaining to various elements of the EM mission. David is looking forward to the Mirzayan Fellowship as an opportunity to learn more about the connection between scientific research and the federal government. In his free time, David enjoys travelling, hiking, skiing, going to concerts, and playing basketball.

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Zia Lyle

Water Science and Technology Board (WSTB)
Division on Earth and Life Studies (DELS)
Home Institution: Carnegie Mellon University

Zia Lyle is a dual degree Ph.D. candidate at Carnegie Mellon University (CMU) in the Department of Civil and Environmental Engineering and the Department of Engineering and Public Policy. Her research is aimed at understanding the risks climate change poses to drinking water utility systems and helping these systems better adapt to climate change. Through this work, she has conducted interviews with drinking water utility managers to understand climate risk perceptions and developed a climate risk index for drinking water utilities that includes projected climate change hazards and existing utility exposure and vulnerability indicators. She earned her B.S. in Civil Engineering and B.A. in Plan II Honors, an interdisciplinary liberal arts program, from The University of Texas at Austin. Beyond her academic research, Zia is involved in service and outreach activities. She serves as Vice President of External Affairs for the CMU Graduate Student Assembly where she leads voter engagement efforts and advocates for key legislative issues for graduate students at local, state, and federal levels. As president of CMU's Environmental Water Resources Institute Chapter and organizer for the Summer Center for Climate, Energy, and Environmental Decision Making, she develops educational activities to teach students about climate change and drinking water systems. She loves baking sweet treats, hosting dinner parties, and reading. As a Mirzayan Fellow with the WSTB, she hopes to explore what research-driven policy looks like in practice, expand her science communication skills, and better understand the advising role scientists and engineers play in policy development.

LinkedIn Profile: https://www.linkedin.com/in/zia-lyle/

Emily Nabong

Climate Crossroads (CCX)
Home Institution: The University of Sydney

Emily Nabong is a PhD candidate in Civil Engineering at the University of Sydney, specializing in Humanitarian Engineering. Her work bridges engineering and interdisciplinary systems thinking to address the impacts of climate change and support communities in developing adaptation strategies. Emily's research focuses on participatory approaches, ensuring that solutions are inclusive, practical, and responsive to local needs. Her PhD thesis focuses on understanding the dynamics of habitability in the Pacific using participatory systems thinking. Emily earned her MS in Environmental Engineering from the University of South Florida, where she specialized in Engineering for International Development and conducted a thesis on community-driven climate adaptation in the Philippines. She gained her BS in Civil/Environmental Engineering from Florida State University. Emily is passionate about applied research and impact, reflected through service in the US Peace Corps (Philippines) and work at the Asian Development Bank. Her research has been recognized and supported through numerous awards, including the Habitat for Humanity-USAID/BHA's International Humanitarian Shelter and Settlements Research Fellowship, the American-Australian Association Graduate Scholarship, and the University of Sydney Southeast Asia Centre's Student Residency program, among others. In her spare time, Emily enjoys playing soccer, baking, and spending time with her husband and cat.

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NATIONAL ACADEMIES Sciences Engineering Medicine

Sophia Rahnke

Ocean Studies Board (OSB)
Division on Earth and Life Studies (DELS)
Home Institution: University of Hawaii Manoa

Sophia Rahnke is a PhD candidate at the University of Hawaii at Manoa and a National Marine Fisheries Service-Sea Grant Fellow with the University of Hawaii Sea Grant College Program. Her research focuses on Hawaii's nearshore fisheries, examining historical trends and future projections through simulation modeling. She investigates how management strategies, climate change, and predator-prey dynamics influence these critical resources. In collaboration with scientists and managers from the Hawaii Institute of Marine Biology, the He'eia National Estuarine Research Reserve, and NOAA's Pacific Island Fisheries Science Center, Sophia addresses questions at the intersection of fisheries science and management. Her efforts to advance conservation and sustainability goals in Hawaii have sparked a deep interest in bridging the gap between scientific research and policy implementation, particularly in marine science, sustainability, climate change, and resource management. As a Mirzayan Fellow, Sophia looks forward to immersing herself in the policymaking process in Washington, D.C., and deepening her understanding of science policy. She is particularly excited to collaborate with the Ocean Studies Board and engage with the pressing challenges at the forefront of ocean sciences.

Divya Ramesh

Computer Science and Telecommunications Board (CSTB)
Division on Engineering and Physical Sciences (DEPS)
Home Institution: University of Michigan

Divya is a human-centered AI researcher completing her PhD in Computer Science and Engineering, along with a Science, Technology, and Public Policy certificate at the University of Michigan, Ann Arbor. Her interdisciplinary research investigates the ethical and governance questions in AI. Taking a holistic approach, Divya designs AI systems that empower underserved communities by enhancing, rather than diminishing, their agency. She combines insights from the fields of human-computer interaction and science and technology studies, employing a diverse range of computational and social science methods. Divya's research has featured in premier AI, AI ethics, and HCI venues, where she has received paper awards. Beyond academia, she has shared her findings through invited talks, workshops, and panels. Notably, in 2023, she was invited to discuss the role of AI and emerging technologies in India-US relations with President Biden's Chief Foreign Policy Officer and NSC Chief of Staff, Curtis Ried. During her PhD, Divya completed research internships at Microsoft Research and Google Research, where her work influenced Google's direction on culturally inclusive AI and shaped the media and policy discourse. She has also held leadership roles in initiatives focused on fostering inclusive excellence at the University of Michigan. Prior to her PhD, Divya worked as a deep learning engineer at CloudSight Inc., where she architected the company's human-AI interaction pipeline, earning a US patent. Divya was previously recognized as a 2023 Quad Fellow by the governments of Australia, India, Japan, and the United States, and a 2024 Barbour Scholar from the University of Michigan. Divya seeks to develop policy skills during the Mirzayan Fellowship to advance a research agenda that serves historically marginalized communities. By strengthening the connections between computing and public service, Divya aims to create socially responsible AI that prioritizes the needs of underserved communities.

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NATIONAL ACADEMIES Sciences Engineering Medicine

Vianey Rueda

Board on Gulf Education and Engagement (BGEE)
Gulf Research Program (GRP)
Home Institution: University of Michigan at Ann Arbor

Vianey Rueda is a PhD candidate at the University of Michigan's School for Environment and Sustainability, where she leads research on the Rio Grande for the Global Center for Climate Change and Transboundary Waters. Her work focuses on understanding the impacts of climate change on transboundary water agreements, with an emphasis on how riparian countries can adapt and modernize treaties to address emerging challenges. A native of San Elizario, Texas, Vianey's interest in environmental science and policy was sparked early through her experiences on the family farm and her proximity to the Rio Grande/Bravo. Witnessing the increasingly dry river and the growing strain on local agriculture due to water scarcity and climate change motivated her to explore sustainable solutions. Vianey holds a B.A. in Environmental Studies and Government from Dartmouth College, and a Master of Science in Energy and Earth Resources from the University of Texas at Austin, where her research used system dynamics modeling to assess conservation strategies aimed at reducing water supply-demand imbalances. Before pursuing her PhD, Vianey worked as Data Architect for the City of Boerne, Texas, where she developed a water dashboard that would facilitate the communication of water-relevant data to decision-makers. Her work focuses on leveraging science and policy to build sustainable, equitable, and politically viable socio-hydrological systems.

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Sarah Shainker-Connelly

Gulf Environmental Protection and Stewardship (GEPS)
Gulf Research Program (GRP)
Home Institution: University of Alabama at Birmingham

Sarah recently graduated with her PhD in Biology from the University of Alabama at Birmingham. Her research focused on the population genetics and ecology of freshwater algae. During this time, she became involved with science policy through a graduate certificate program and the Scholars Strategy Network. Prior to graduate school, she served as a Peace Corps volunteer in the Philippines, working with the local government, schools, and fisherfolk to implement projects in environmental education and coastal resource management. Sarah is excited to strengthen her science policy skills through the Mirzayan Fellowship and aims to pursue a career in community-engaged, science-based environmental management or conservation.

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NATIONAL ACADEMIES Sciences Engineering Medicine

Hayfa Sharif

Science and Engineering Capacity Development (Capacity)
Policy and Global Affairs Division (PGA)
Kuwait Foundation for the Advancement of Sciences Fellow
Home Institution: Jaber Al-Ahmad Armed Forces Hospital

Dr. Hayfa Sharif is a Diagnostic Imaging Specialist with a PhD in Medicine from the University of Nottingham. She holds a Fellowship of Advance Higher Education (FHEA) and has extensive expertise in radiographic technology and pediatric gastrointestinal imaging. Dr. Sharif has contributed significantly to research, with multiple peer-reviewed publications and presentations at international conferences. Her work includes innovative MRI techniques to study gastrointestinal diseases in children. Currently, she practices at Jaber Al-Ahmad Armed Forces Hospital in Kuwait, bringing her academic insights and clinical expertise to her role. Dr. Sharif has been recognized with several awards for her contributions to medical education and research. Hayfa Sharif is the 2025 Kuwait Foundation for the Advancement of Sciences (KFAS) Science Policy Fellow, a pilot program addition to the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program.

Shaikhah Shuaib

Forum on Neuroscience and Nervous System Disorders (HSP)
Health and Medicine Division (HMD)
Kuwait Foundation for the Advancement of Sciences Fellow
Home Institution: Boston University

Shaikhah ("Shay") Alshuaib is a PhD candidate in Neurobiology at Boston University, where she explores how non-invasive technologies like ultrasound can influence brain function by examining its effects on cellular mechanisms. Her work aims to advance these innovations toward meaningful clinical applications. Shay also earned her undergraduate and master's degrees both in Neuroscience from Boston University, where she studied drug therapies for drug-resistant epilepsy and Parkinson's disease. In 2023-2024, Shay served as President of Boston University's Graduate Women in Science & Engineering (GWISE), following more than five years of active involvement in the organization. During this time, she worked to empower graduate women in STEM through mentorship, networking, and career development. She also co-founded the Boston University Biotech Club, which created new connections between science students and industry professionals. Outside academia, Shay enjoys yoga, pilates, and long walks. She holds a brown belt in taekwondo which brought discipline and focus to all aspects of her life. Shaikhah Shuaib is the 2025 Kuwait Foundation for the Advancement of Sciences (KFAS) Science Policy Fellow, a pilot program addition to the Christine Mirzayan Science and Technology Policy Graduate Fellowship Program.

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NATIONAL ACADEMIES Sciences Engineering Medicine

Zachariah Vice

Board on Agriculture and Natural Resources (BANR)
Division on Earth and Life Studies (DELS)
Home Institution: Texas A&M University

Zachariah Vice is a PhD student in the Department of Animal Science at Texas A&M University. A Texas native and an Army National Guard veteran, he holds a B.S. in Agricultural Leadership and Development and an M.S. in Animal Science with a focus on food safety microbiology, also from Texas A&M University. With over 12 years, Zach has engaged with various aspects of agriculture, including extension, regulation, policy, and research. He has worked as an Intern with the Texas A&M AgriLife Extension Service, a Feed & Fertilizer Investigator with the Office of the Texas State Chemist, and most recently as a Government Affairs Intern with The Fertilizer Institute in Arlington, Virginia. Zach's PhD research investigates the intricate microbial networks found in food processing facilities. He is interested in unraveling the mechanisms that enable foodborne pathogens to survive and thrive. By understanding these complex interactions, he seeks to develop innovative strategies to mitigate food safety risks and safeguard public health. His graduate program has combined aspects of microbiology, public health, regulatory science, bioinformatics, and computational biology. Upon graduation, Zach hopes to combine his knowledge and expertise with his passion for public service to address critical issues and promote food safety practices that protect consumers worldwide.

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Anita Wo

Committee on Women in Science, Engineering, and Medicine (CWSEM)
Policy and Global Affairs Division (PGA)
Home Institution: University of Illinois Urbana-Champaign

Anita Wo is currently a PhD candidate in the Department of Chemistry at the University of Illinois Urbana-Champaign (UIUC) and holds a BA in Chemistry from Wellesley College. Her graduate research explores the interactions between gold nanoparticles and biological systems. Her work addresses the growing use of nanotechnology in consumer products and biomedical applications, with a focus on advancing safer and more effective nanoparticle designs. Beyond the lab, Anita is actively involved in advocating for graduate students' rights and expanding diversity, equity, and inclusion (DEI) initiatives within the department. While serving as the chair of the Women Chemists Committee and Student Wellness Coalition, she led initiatives to improve department climate and student well-being at UIUC. Her leadership in fostering community and advocating for underrepresented groups has earned her the university's Inclusive Leadership and Strive Awards. These experiences have inspired her to work at the interface between science and policy, where she hopes to continue her DEI advocacy work and contribute to translating research into impactful policy. She is excited to find herself back on the East Coast as a Mirzayan Fellow and is eager to support CWSEM's mission of promoting gender equity in STEM at the national level. Outside of her professional pursuits, Anita enjoys spending time outdoors, taking dance classes, exploring new restaurants, and hosting dinner parties.

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NATIONAL ACADEMIES Sciences Engineering Medicine

Hao Nick Zhang
Government-University-Industry-Philanthropy-Research Roundtable (GUIPRR)
Policy and Global Affairs Division (PGA)
Home Institution: Johns Hopkins University

Nick is a Ph.D. candidate in the Department of Materials Science and Engineering at Johns Hopkins University (JHU) and a research intern at the National Institute of Standards and Technology (NIST). As an NSF GRFP Fellow, he utilizes electrochemical methods to design efficient processes for converting greenhouse gases into sustainable fuels. His research aims to advance carbon technology, promote a circular economy, and mitigate the effects of climate change. At Hopkins, Nick holds multiple leadership positions, including Chair of the Graduate Materials Society, Communications Chair in the student government, and VP of the JHU Science Policy Group. Nick also serves as an American Chemical Society Ambassador and co-leads projects at COP28 in Dubai and COP29 in Baku, focusing on climate education and youth engagement. Passionate about science policy, Nick interns at the Bureau of Oceans and International Environmental and Scientific Affairs (OES) at the State Department. There, his research includes two portfolios: green hydrogen policy and technology analysis among U.S. Free Trade Agreement countries (FTAs) and research on the current state of critical minerals extraction from e-waste and lithium-ion batteries among FTAs and Minerals Security Partnership (MSP) countries. Through these roles, he promotes science literacy, advocacy, and multilateral diplomacy projects. Before starting his Ph.D., Nick earned a B.S. in Chemical Engineering from UC Berkeley. He was a research fellow at Berkeley and Brookhaven National Labs, working on bio-imaging and battery projects. Nick also gained experience in the private sector in Silicon Valley before joining Hopkins. In his free time, Nick enjoys traveling, attending live shows, hiking, standup paddling, and kayaking around the DMV area.

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