

Christine Mirzayan Science and Technology Policy Graduate Fellows 2004 Summer Biographical Sketches



Victoria Blaho (Summer 2004, IOM/HSP) earned her PhD from the University of Missouri in the Department of Molecular Microbiology and Immunology in May 2007. Her research focused on elucidating the contribution of bioactive lipid molecules, specifically eicosanoids, to the development and resolution of inflammatory and immune responses to infection. Victoria is currently a postdoctoral associate at Weill Cornell Medical College in New York City. Her fellowship with the IOM Board on Health Sciences Policy and time in the D.C. area allowed for a glimpse of the cogs that turn science policy that most scientists will never have the opportunity to witness. In the spare five minutes that she has each day, Victoria tries to read something not science-related and dreams of a magical land with plenty of science funding where the Chicago Bears and Cubs are over 0.500. . (Updated 10/2011)

Timothy Brennan (Summer 2004, IOM/BGH) has been enrolled in a joint MD and MPH program at Tulane University School of Medicine. His MPH concentration had been in international health and development. He received a BS in foreign service from Georgetown University. Timothy's Mirzayan Fellowship marks a return to the Institute of Medicine, because he previously worked as a research assistant at the National Cancer Policy Board. The IOM experience enabled him to witness health care policy on the front-lines and influenced his decision to pursue a dual MD/MPH program. Tim envisions a medical career that allows him to combine his passion for foreign affairs policy with cutting-edge medical science. Tim aspires to a career as a medical officer for the State Department in order to incorporate his interest in medicine with his desire to live and work abroad. A member of the track team in college, Tim enjoys participating in local road races. He also enjoys cheering for Boston-area sports teams. Tim is absolutely certain that he wants to be a health care policy maker.

Michelle Chavis (Summer 2004, DELS/BCST) was scheduled to receive an MSc degree in chemical engineering from Howard University in 2004. She received her bachelor's degree in the same field of study at Howard. She has a special interest in the field of materials science focusing on nanotechnology research and had planned to pursue her PhD in chemical engineering/material science. As a Robert F. Kennedy Fellow (2002-2003) she learned first-hand about education conditions of at risk youth in an urban environment which fostered her continued interest in working with students in the community. She has served as a volunteer/mentor at a juvenile detention center in Virginia where she counsels young adults and helps to prepare them for life outside of the detention center.

Melissa Cole Harvey (Summer 2004, DELS/DR) is the director of the Division of National Healthcare Preparedness Programs in the Office of the Assistant Secretary for Preparedness and Response (ASPR) at the Department of

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Health and Human Services. In this role, she is responsible for developing and advancing the implementation of policies and capabilities that aim to improve the nation's overall healthcare preparedness, including the Hospital Preparedness Program Cooperative Agreement. Recently, Melissa led ASPR's domestic healthcare system response to Ebola, including the development of a new regional and tiered strategy for the nation's healthcare facilities. She previously served as the Special Assistant to the ASPR, advising and supporting the Assistant Secretary on policy development, program implementation, and disaster response operations to ensure that the office met its public health emergency preparedness and response mission. Melissa has also served as a global health analyst, preparing assessments of foreign governments' capabilities to detect and respond to emerging infectious diseases, terrorism, and natural disasters. Prior to her work in the U.S. government, Melissa was the program manager of emergency management for the North Shore-LIJ Health System in New York, where she was responsible for all-hazards planning and response operations for the nation's second largest, non-profit, secular healthcare system. She was also an EMT for the Health System's New York City 911 and inter-facility EMS divisions. Melissa attended Boston College, George Mason University, and Harvard University. She is a registered nurse in the Commonwealth of Virginia. (Updated 2/2016)

Carolyn Cunningham (Summer 2004, NAE/DEW) received her PhD from the Department of Radio-Television-Film at the University of Texas at Austin in 2009. She is currently an Assistant Professor in the Communication Arts Department at Gonzaga University. Her research looks at the social impacts of new technologies. She is especially interested in issues related to race, class and gender. She enjoys spending time with her son Jack, who was born in August 2008. (Updated 9/2010)

Michael Ehst (Summer 2004, DBASSE/CEGIS) works with the science, technology, and innovation policy working group at the World Bank, which attempts to increase the level of innovation in developing country economies. He pursued this work after studying for an MA in international science and technology policy from the Elliott School of International Affairs at the George Washington University. During graduate school, Michael held positions with the House Science Committee and with Washington CORE, consulting on technology policy issues for the Japanese government. Prior to his move to Washington \, he worked in the software industry in San Francisco and Chicago. He received his bachelor's degree in information systems from the University of Colorado. He spends his free time in the outdoors mountain biking, skiing, and backpacking or in the city exploring DC neighborhoods and watching live music. (Updated 09/2010)

Geraldean Hourigan (Summer 2004, DELS/BASC) expects to receive an MSc in paleoclimatology from the University at Albany this May. She earned a bachelor's degree in earth science from Syracuse University. Her thesis research looked at a species of deep-sea coral that had never been rigorously analyzed before in order to test the ability of the coral to act as a chronometer of intermediate water properties and, ultimately, to discover links to changes in climate. Geraldean has been a contributing science writer to an Albany newsweekly called *Metroland*, writing mostly about environmental and radiation related topics. Her long-term career goal is to make use of her understanding of science, sound research, and the need for good communicators of complex information while pursuing a career in science writing that would allow for direct access and involvement in current climate research.

Amy Jiron (Summer 2004, PGA/CWSE) has been working towards a law degree at American University-Washington College of Law. She received a BS in architectural engineering from the University of Colorado. As an engineer, she analyzed building energy use to determine cost efficient sustainable design and energy efficiency features. In law school she studies the laws and regulations that governed her engineering analyses. Amy is enjoying the active energy of Washington, D.C. and seeks to take advantage of the many opportunities to learn about and participate in the political process. She has volunteered at the D.C. Appleseed Center for Law and Justice, where she worked to improve local governance over education, health and the environmental issues. Amy enjoys spending her free time doing anything and everything outside (especially if it involves mountains and/or snow).

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Sarah (Lightbody) Litchney (Summer 2004, PGA/CSTL) is an attorney and founding partner of a law firm. She received her BS in food science/biotechnology from Cornell University where she participated in research and product development, and solved complex problems in food chemistry, microbiology and molecular biology. A native Californian, she returned to Northern California to attend law school at the highly regarded McGeorge School of Law at the University of the Pacific. There, she obtained her JD and a certificate in intellectual property, was the recipient of the Dean's Merit Scholarship and the American Bar Association's Intellectual Property award for academic excellence in intellectual property studies. She was active on the campus in organizations affiliated with her area of study, as well as with the law school's student bar association. Since founding her law firm, it has experienced tremendous growth; the firm now has nearly 30 employees including seven attorneys and multiple offices throughout California. The firm practices in several areas of law including real estate, civil litigation, business law, intellectual property, estate planning and bankruptcy. In her limited spare time she enjoys spending time with friends and family, traveling, wine tasting and skiing. (Updated 3/2010)

Michael Martin (Summer 2004, PGA/BISO) is currently a AAAS Science and Technology Fellow at the Office of Science, U.S. Department of Energy's. Prior to joining the Department of Energy, he was a post-doctoral fellow at the Naval Research Laboratory, and a faculty member at Louisiana State University. He completed his doctorate in aerospace engineering from the University of Michigan, where he also earned an M.S. in mechanical engineering and an M.A. in Asian studies. He received a B.S. in mechanical engineering from the University of Florida. His research interests include fluid mechanics and micromachinery, and applications of microtechnology to aerospace systems. Before returning to school, he was an engineer at Boeing Commercial Airplane Group. He has also been a visiting researcher at Hitachi's Mechanical Engineering Research Laboratory in Japan, and at NASA's Jet Propulsion Laboratory. (Updated 2/2016)

Lindsay Millard (Summer 2004, DEPS/AFSB) is an associate engineer at RAND Corporation and an adjunct researcher at Purdue University. At RAND, Lindsay studies intelligence reconnaissance, and surveillance capabilities for both unmanned aerial systems and distributed space platforms. She also researches how quantitative tools, such as agent based modeling and network analysis, may be applied to policy analysis. Before joining RAND in 2008, Lindsay worked at the Jet Propulsion Laboratory, NASA Goddard Space Flight Center, and the Air Force Studies Board at the National Academies. Lindsay holds a PhD in astrodynamics (minor in systems engineering) from Purdue University and an MS/BS from the University of Michigan in aerospace engineering. (Updated 03/2010)

Theresa O'Brien (Summer 2004, NAS/Koshland) is the Director of Research Strategy and Special Projects at the University of California, San Francisco (UCSF), School of Medicine Dean's Office. In this role, she provides advice, consultation, and analysis on scientific research and training initiatives and issues, and their effects on the strategic direction of the School. She also directs the Graduate Student Internships for Career Exploration (GSICE) program, which provides career path education, career planning, and internship opportunities for UCSF's basic and biomedical PhD students in fields outside of academic research. Prior to joining the School of Medicine, Theresa worked as an Industry Contracts Officer at UCSF, where she negotiated industry sponsored research agreements. She is a graduate of UCSF's Tetrad Graduate Program and carried out her doctoral work in biochemistry with Jim McKerrow, MD, PhD, studying cysteine proteases as potential drug targets for the treatment of African sleeping sickness. She received a BA in biology from Williams College. (Updated 10/2011)

Meeko Oishi (Summer 2004, DEPS/BMSA) received her Ph.D. (2004) and M.S. (2000) in mechanical engineering from Stanford University, and a B.S.E. in mechanical engineering from Princeton University (1998). She is an associate professor of electrical and computer engineering at the University of New Mexico. Her research interests include nonlinear dynamical systems, hybrid control theory, control of human-in-the-loop systems, reachability analysis, and modeling of motor performance and control in Parkinson's disease. She previously held a faculty position at the University of British Columbia at Vancouver, and postdoctoral positions at Sandia National Laboratories and at the National Ecological Observatory Network. She is the recipient of the UNM Regents' Lectureship, the NSF CAREER Award, the UNM Teaching Fellowship, the Peter Wall Institute Early Career Scholar Award, the Truman Postdoctoral Fellowship in National Security Science and Engineering, and the George Bienkowski Memorial Prize from Princeton University. She was a Summer Faculty Fellow at AFRL Space Vehicles

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Directorate, and a Mirzayan Fellow at The National Academies of Sciences, Engineering, and Medicine in the summer of 2004. (Updated 4/2016)

Jerusha Nelson Peterman (Summer 2004, DBASSE/CNSTAT) is an assistant professor of nutrition at the University of Massachusetts Amherst. Jerusha's current work focuses on causes and nutritional consequences of food insecurity in vulnerable populations, particularly refugees and other immigrants. She holds a BS in molecular biology from Brigham Young University, an MS in foods and nutrition from the University of Utah, where she completed her dietetic internship, and a PhD in food policy and applied nutrition from the Friedman School of Nutrition Science and Policy at Tufts University. (Updated 10/2011)

Anne Mariel Peters (Summer 2004, PGA/OIA) is assistant professor of government at Wesleyan University, where she teaches courses in comparative politics, state formation, and the politics of the Middle East. Peters' research interests include the political economy of development, state formation, foreign aid, economic reform, and science and technology policy. She has conducted fieldwork in Egypt and Jordan as a Fulbright scholar and a Council of American Overseas Research Centers fellow. Her recent dissertation, entitled "Special Relationships, Dollars, and Development," addresses how authoritarian coalitions in Egypt, Jordan, South Korea, and Taiwan incorporated U.S. foreign aid into strategies for state-building, late development, and economic reform. Peters is also conducting research on American neotrusteeship and domestic politics in Iraq and Afghanistan. (Updated 9/2009)

G. Nagesh Rao (Summer 2004, DEPS/NMMB) serves as chief technologist & entrepreneur in residence with the U.S. Small Business Administration's Office of Investment & Innovation. His portfolio of work includes the SBIR/STTR program and coordination of the Fueling Small Business Innovation Interagency Policy Committee for the White House's Lab to Market Commercialization Agenda, as well to handle all things "techie" and "nerd-related." He played an instrumental role in the creation and execution of five major interagency policy committee reports regarding the SBIR/STTR program on behalf of the White House-OSTP and SBA for Congress, as well currently co-leading the re-vamped build-out of the www.sbir.gov platform that centralizes the programmatic efforts of the 11 participating federal agencies. He holds an M.B.A. in global strategy and entrepreneurship from the University of Maryland-College Park, a M.Sc. in legal studies-intellectual property law from Albany Law School, a B.Sc. dual-major in materials engineering and philosophy from Rensselaer Polytechnic Institute, and a Patent Bar License from the USPTO. He also serves as an advisor to LAUNCH (a public-private partnership between NASA, USAID, US State Department, and Nike) and the AAAS-Lemelson Invention Ambassador Program, as well served over the past five years as on the RPI Alumni Association Board of Trustees. Nagesh is also a 2016 USA Eisenhower Fellow and will be embarking to Vietnam and Sri Lanka as part of this leadership exchange program later this year. (Updated 2/2016)

Benjamin Rusek (Summer 2004, PGA/CISAC) works as a staff officer for the Committee on International Security and Arms Control (CISAC) at the National Academies of Sciences, Engineering, and Medicine on issues related to nuclear and biological nonproliferation and arms control and the misuse of science and technology. Ben manages CISAC's interaction with the Chinese People's Association for Peace and Disarmament in Beijing, CISAC's sub panel examining threats related to biological weapons and dual use biotechnology and serves as program staff on CISAC's "Track II" dialogues and CISAC-administered NRC studies. Outside of the NAS, Ben is the chair of the executive board of International Student Young Pugwash (ISYP) and frequently works with the Nobel Peace Prize winning Pugwash Conferences on Science and World Affairs. He has participated as an ISYP member and CISAC representative at Pugwash conferences in Nova Scotia, The Hague, Bari, Cairo, Tehran, Hiroshima, and Seoul. Previously he held various positions at the Henry L. Stimson Center, the Arms Control Association, and the National Air and Space Museum (as an Ohio State University John Glenn Institute Policy Fellow). Ben has political science degrees from The Ohio State and Purdue University, where he was the president of Purdue University Student Pugwash. (Updated 2/2016)

Yvette Seger (Summer 2004, PGA/COSEPUP) Prior to joining FASEB, Yvette held senior policy analyst positions at Thomson Reuters, the National Institutes of Health, and the research advocacy group FasterCures. As a Summer 2004 Christine Mirzayan Science & Technology Policy Graduate Fellow, Yvette worked with the Committee on Science, Engineering, and Public Policy (COSEPUP) on the third edition of a report that examined the presidential

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and federal advisory committee appointment process for science- and technology-related positions. She holds a Ph.D. in genetics from Stony Brook University and a B.A. in zoology (genetics concentration) and politics & government from Ohio Wesleyan University. In her free time, Yvette is an avid equestrian and competes her two horses in the sport of eventing. (Updated 10/2016)

Danielle (Smith) Vick (Summer 2004, DELS/BESR) earned an MSc in forest engineering (hydrology) from Oregon State University in May 2004. While at Oregon State, she served as president of Hydrophiles, the OSU graduate student chapter of the American Water Resources Association and American Institute of Hydrology. She received a BS in natural resource studies (concentrations in forestry and wildlife/fisheries) from the University of Massachusetts, Amherst. After her time at the National Academies, Danielle worked as a Water Conservation Specialist for the City of Santa Fe, N.M., and a hydrologist for the Interstate Stream Commission. With this strong background in both technical work and public policy, Danielle now works as a freelance copywriter with a focus on environmental organizations and green businesses. Delivering the right message to the right people in just the right way is an exciting challenge, and if done correctly, can bring about sweeping change. Danielle works with organizations and businesses all over the world, communicating their messages of positive change and enthusiasm for environmental works with clear, thoughtful, story-driven writing. You can see her work at www.copyforchange.com. (Updated 4/2016)

Janille Smith (Summer 2004, TRB/TA) was scheduled to start work on her master's degree in civil engineering at the University of Wisconsin in the fall of 2004. She received a BA in Engineering from Lafayette. Her interest in this fellowship program stems from her desire to be involved in a policy-oriented environment that focuses on sustaining the relationship between transportation, urban form and the environment. This desire explains her continued quest for opportunities that facilitate the integration of a policy approach into the study of urban infrastructure, particularly transportation systems. Her future goal is to be involved in projects that focus on the redevelopment of urban infrastructure and management of the environment, through the implementation of policy and technology changes. She also hopes to focus her work on developing counties and in international communities. Janille expects that the fellowship program will allow her to move a step closer to this goal by allowing her to work on engineering and technology policy issues.

Erik Stemmy (Summer 2004, NAS/PNAS) earned a MSc in microbiology and science policy from Georgetown University after his Mirzayan Fellowship. In August of 2006, he entered the PhD program at the Institute for Biomedical Sciences at The George Washington University, where he has been working on two projects. The first explores immune responses to the human hookworm parasite, and the second investigates the mechanisms underlying chronic allergic asthma. (Updated 9/2009)

Sarita Tukaram (Summer 2004, DBASSE/CPOP) is an Editorial Consultant with Words & Numbers Inc. She received her master's in journalism from the University of California, Berkeley, and a BA in journalism, psychology, and English literature, from Bangalore University in Karnataka, India. She has previously investigated gender disparities in education in developing countries, the affect of poverty on education attainment, and has authored news and feature articles on rural development, health, education, and street children. (Updated 8/2010)

Shara Williams (Summer 2004, DELS/NMMB) is an associate engineer at RAND Corporation, where she performs research on technology and national security. Previously she worked in the Office of Technology and Assessments in the Bureau of Verification, Compliance, and Implementation at the State Department, where she focused on weapons of mass destruction issues. She had previously served in the same office as the first American Chemical Society Science and Diplomacy Fellow at the State Department. Before working at State, Shara was a Christine Mirzayan Science and Technology Policy Fellow at the National Academies, working for the National Materials Advisory Board on a report on developing applications of biomedical materials for the military and on planning for a review of the National Nanotechnology Initiative. She received her bachelor's in chemistry from Stanford and her PhD in chemistry at the University of California, Berkeley in 2003. (Updated 03/2010)

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Thomas Worster (Summer 2004, PGA/COSEPUP) has been pursuing a master's degree in science, technology, and public policy from the Elliott School of International Affairs at the George Washington University. Prior to that, he worked for three years at Snapfish, a digital photography company, as the release and QA manager. He received a BA in computer science with a minor in communication studies from Boston University in 2000. He has completed an internship at the Woodrow Wilson Center for International Scholars, where researched how anonymity will be impacted by the move to digital media. He hopes to further his studies of innovation systems, how the various players in science and technology interact to produce new innovations that enhance national and global well-being, and how government can help enhance these interactions.

Jae-Hee Yi (Summer 2004, IOM/NCPF) is an assistant professor at the University of Utah, College of Social Work. She graduated from University of Michigan with a master's degree in social work, and received her Ph.D. in social work from the University of Southern California. She is working on findings ways to help individuals and families cope with and rise above traumatic life adversities, including cancer. (Updated 2/2016)

Eleni Zika (Summer 2004, PGA/CSTL & STEP) is currently the Head of Sector for fundamental life sciences and health in the life sciences unit of the European Research Council. She was previously a programme manager (Public Partnerships and International Policy) at the Medical Research Council and before that, a scientific officer in the Institute for Prospective Technological Studies (IPTS) of the European Commission. Her work at the IPTS focused on the analysis of the socio-economic impacts of biotechnology, including pharmacogenetics and the contribution of modern biotech applications to EU policies. Prior to that, she was as a Christine Mirzayan Science and Technology Policy Fellow at the National Academies, where she performed research on the role of intellectual property in research innovation, particularly as related to genomics and proteomics. In her current position, she overviews and manages the ERC funding schemes in the domain of life sciences. She received her PhD in genetics and molecular biology from the University of North Carolina at Chapel Hill. Her graduate work focused on the regulation of immunity but also on the ethical, legal and social implications of genetics. (Updated 2/2016)

Eric Zimmerman (Summer 2004, PGA/COSEPUP) was recently appointed academic secretary and director of research at the Interdisciplinary Center (IDC) in Herzliya, Israel. He provides leadership and service to members of the IDC scholarly community, assisting the Provost and President in implementing policy and decisions of the IDC academic and governing committees. He serves as advocate for all people in the IDC community who are interested in identifying, applying for, receiving, and conducting research and scholarly work, and in assisting community members with the stewardship of research funds. He regularly advises organizations on information management and workflow practices as they affect academics and administrators. Prior to joining the leadership team of IDC Herzliya he worked at the Bar-Ilan University research support office, coordinating efforts to secure competitive grants in the sciences and humanities. (Updated 9/2009)