

### Christine Mirzayan Science and Technology Policy Graduate Fellows 2004 Winter Biographical Sketches



**Heather Agler** (Winter 2004, PGA/COSEPUP) is a Ph.D. graduate in biomedical engineering from the Johns Hopkins School of Medicine. She received her B.S. in chemical engineering at the University of South Carolina. At the Johns Hopkins Calcium Signals Lab, Heather used electrophysiology studies to create a mathematical model to describe the kinetics of G-protein modulation of calcium channels and molecular biology to determine the key binding points between neuronal calcium channels and G-proteins. Heather previously participated in an internship with the American Institute of Chemical Engineers in Washington, D.C. where she analyzed the reform debate of the Food and Drug Administration's approval process for new drugs and medical devices. Currently, Heather works for the Food and Drug Administration in the Center for Devices and Radiological Health as a Senior Science Health Advisor. She currently works on digital health issues such as medical device interoperability, wireless technology in medical devices, and medical mobile applications. In her free time Heather enjoys spending time with her family including her two sons, coaching her son's soccer team, and running with her running club. (Updated 2/2016)

**Cara Allen** (Winter 2004, DELS/BLS) holds a bachelor's degree in chemistry from the University of North Carolina, Chapel Hill, and a PhD in Neurosciences from the University of California, San Diego, where she studied synaptic plasticity in rat somatosensory cortex. As a Mirzayan Fellow with the Board on Life Sciences, she assisted with a study focusing on ways to foster career independence for young investigators in the life sciences. After completing her doctoral research, she worked as an associate editor for the journal Nature Neuroscience, then as project manager for the Brain Architecture Project, a collaborative research effort in human neuroanatomy and connectivity based at Cold Spring Harbor Laboratory. In 2007, she joined the Office of Science Policy and Planning at the National Institute of Neurological Disorders and Stroke, National Institutes of Health. (Updated 7/2010)

**Bruce Altevogt** (Winter 2004, IOM/NBH) is Director of Science Policy and Science Advocacy within Pfizer Inc.'s Global Policy and International Public Affairs. In this role Dr. Altevogt is responsible for managing policy issues in support of Pfizer's research & development enterprise. In addition, he is responsible for developing and implementing a science advocacy platform, which includes a public affairs and stakeholder management functions. Finally he provides policy support for the Neuroscience and Pain, Vaccines, and Establish Products business units. Dr. Altevogt also has expertise in research reproducibility and robustness, serving on the Advisory Board of the Partnership for Assessment and Accreditation of Scientific Practice, which is a consultancy to various organizations interested in establishing and maintaining good scientific practice procedures. Prior to joining Pfizer Inc., Dr. Altevogt spent more than 11 years as a senior program officer at the Institute of Medicine, leading policy initiatives related to basic and translational research, drug discovery and development, and preparedness for catastrophic events. Dr. Altevogt received his doctorate from Harvard University's neuroscience program and his B.A. from the University of Virginia in



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Charlottesville, where he majored in biology and minored in South Asian Studies. He is a published author of multiple scientific articles. (Updated 2/2016)

**Monisha Arya** (Winter 2004, IOM/BGH) was awarded her MD and master's in public health with a health policy concentration at The George Washington University in Washington, D.C. in May 2000. During medical school, she was a health policy fellow with the American Medical Student Association and had the opportunity to work in Congress and meet with physicians serving as health policy advisors to the Senate. Monisha completed her residency training in internal medicine at Georgetown University. She earned her BS in psychology from the University of Maryland, College Park. Following her Mirzayan Fellowship, she began a three-year infectious diseases fellowship program at the Beth Israel Deaconess Medical Center in Boston, Mass. Although she thrives in the intensity of patient care in the hospital, her passion lies in serving as a patient advocate beyond the bedside. Monisha hopes to become a physician-leader in the health policy arena. Her specific interests are in international HIV/AIDS prevention policy and women's rights and she hopes to learn more about these issues in the course of her training. (Updated 04/2009)

**Eric Bone** (Winter 2004, PGA/OIA) works as an applied research mathematician for the Defense Department. From 2009 to 2012, he worked in the Office of the Science and Technology Adviser to the Secretary of State. Between 2006 and 2008, Eric served in Afghanistan as the USAID officer at the Provincial Reconstruction Team in the southern province of Uruzgan. From 2004 to 2006 he was a AAAS Fellow in the Bureau of European and Eurasian Affairs at the State Department. At the National Academies in Winter 2004, Eric worked in the PGA's Office of International Affairs. Eric earned his Ph.D. in mathematics from Brandeis University in 2004 by researching elliptic curve cryptography. As a Peace Corps volunteer in Malawi between 1995 and 1997, he taught high school classes of up to 170 students. He graduated from Amherst College with a BA in mathematics and English. (Updated 2/2016)

**Kori (Brabham) Murray** (Winter 2004, DELS/ILAR) received her MSc in biomedical engineering at Mississippi State University. She also received her BS in biological engineering with an emphasis in pre-medicine and biomaterials at Mississippi State and studied abroad at the University of Bristol in Bristol, England. During her Mirzayan Fellowship at The National Academies, Kori performed background research and assisted in committee formation for a study that focused on identifying gaps in transportation guidelines for laboratory animals. She also aided in writing preliminary sections of reports and was responsible for the design of the ILAR Annual Report that was distributed at the ILAR Council meeting and to potential study sponsors. Kori is currently employed as a biomedical engineer at Pennington Biomedical Research Center in Baton Rouge, La. (Updated 9/2009)

**Liza Bundesen** (Winter 2004, NAS/PNAS) holds a bachelor's degree in molecular biology from Lehigh University and a PhD in neuroscience from Georgetown University Medical Center. While at Georgetown, her graduate studies focused on stem cell biology, neural development, neural regeneration, and spinal cord injury. During her Mirzayan Fellowship at the National Academies, Liza spent her time at the scientific journal *Proceedings of the National Academy of Sciences*, where she wrote press tips on newsworthy manuscripts and biographies of newly elected members of the National Academy of Sciences. In addition, she investigated how U.S. trade sanctions enforced by the Treasury Department's Office of Foreign Assets Control affect scientific publishing and peer review. Liza is currently a health science policy analyst in the Office of Science Policy, Planning, and Communications at the National Institute of Mental Health, where she was also a AAAS-NIH Science Policy Fellow from 2004 to 2006. (Updated 3/2010)

**Michelle Corte-Real lacoletti** (Winter 2004, DEPS/NMMB) earned her PhD in experimental materials physics from the University of Delaware in October 2002. She received her MA in physics from Boston University, an MSc in physics from the Indian Institute of Technology and a BSc in physics from Bombay University in India. After receiving her doctorate, Michelle worked as a research physicist where she was the P.I. on research projects funded by the NSF. The decision to switch gears from academic research to a more dynamic and impactful field was a result of working in a small research company that relied on SBIR funding. She noticed that there were loopholes in the system that she hoped someone would fix. She came to realize that she was more passionate about how the government's money was allocated, than she was about doing the bench-top research that the funding



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required. Michelle believed that her Mirzayan fellowship would be a stepping stone in the direction of a career in science and technology policy, and recommends it to anyone who is eager to play a role in facilitating the funding of scientific and technological research. (Updated 4/2009)

Kathleen "Katie" Crahan (Winter 2004, PGA/STEP) has been working on a PhD in the Department of Atmospheric Sciences at the University of Washington, where she is studying atmospheric chemistry and aerosols. Katie received her BS in chemistry from the College of William and Mary. She spent two years in the Peace Corps in Samoa, where she worked as a secondary school science teacher, served as head of the Science Department, and was a member of the Training Advisory Committee. Katie enjoys teaching and tutoring and has volunteered her time in the Homework Helper Program, where she assisted middle school children in their studies, and taught English as a Second Language to native Spanish speakers through an adult skills program. She also values challenges, as illustrated by her current training for the Vancouver Marathon. After earning her PhD in atmospheric sciences, Katie hopes to apply what she has learned about the science of global warming and climate change toward developing public policy. She hoped the Mirzayan Fellowship would allow her to better determine the steps she'll need to take to enter the public policy realm.

**Aimee Curtright** (Winter 2004, DEPS/BEES) has a PhD in physical chemistry from the University of California, Berkeley and a BS in chemistry from the University of Miami. She was a postdoc in engineering and public policy at Carnegie Mellon University immediately following her time at the Academies. Since late 2007, she has been in the Pittsburgh office of the RAND Corporation. When she's not thinking about energy and technology policy, she can usually be found trying to keep up with her two daughters or working in the garden, weather permitting. (Updated 3/2010)

**Neesha Desai** (Winter 2004, DBASSE/CEGIS) is in the MD/MPH program at the University of South Carolina and was scheduled to graduate in May 2005. Neesha received her BA in mathematics and Spanish from Vanderbilt University. She recently worked as a research associate evaluating a pediatrics special needs clinic with an organization that also provides low-income families with a medical home and access to both preventive and subspecialty medical services. S he also combined her passion for Spanish with her medical background in a program sponsored by the South Carolina Office of Rural Health called "Hablar el Idioma de su Cliente," where she teaches medical professionals to speak basic Spanish in order to form a better relationship with their patients. Neesha feels that the wide array of disciplines and opportunities present at The National Academies has broadened her view of medicine and her understanding of the myriad factors which affect our health and wellbeing. In the future, Neesha looks forward to a career as a clinician, researcher, and policymaker. She also hopes to encourage more physicians to become leaders in the health policy arena. In her free time, Neesha enjoys running, exploring, the great outdoors, dancing, yoga, and believes laughter is the best medicine for many of life's everyday problems. (Updated 4/2009)

**Suzanne Goh** (Winter 2004, PGA/OIA) is in her final year of the MD program at Harvard, where she also received her BA in history and science. She received both her master's of business administration (management studies) and a master's degree of studies (women's studies) at Oxford University as a Rhodes Scholar. Suzanne is a professional dance instructor and choreographer. She has competed at the British Open Championships and the U.S. National Ballroom Dance Championships and was awarded the 1998 United Kingdom Collegiate Latin Dance Championship. Suzanne has also shared her talents in her volunteer work. At the Chinese Golden Age Center, Suzanne developed an English language program for Mandarin-speaking elders in Boston's Chinatown, taught ballroom dance lessons, and provided basic health education and medical services. She has also taught violin lessons to low-income elementary and high school students. Suzanne has offered a strong scientific and medical background to The National Academies. After her Mirzayan Fellowship, she was scheduled to pursue her residency training in pediatrics at the Massachusetts General Hospital and her fellowship training in pediatric neurology at the University of California, San Francisco.

**Jesse Gray** (Winter 2004, PGA/COSEPUP) is currently an assistant professor of genetics at Harvard Medical School, where he is applying genetic and genomic strategies to understand how experience rewires the brain. He



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received a BS in political science from the University of Wisconsin at Madison and a PhD in genetics from the University of California at San Francisco. His PhD work, which was punctuated with a Mirzayan Fellowship, involved behavioral studies of the nematode C. elegans; these studies were performed under the direction of Cornelia Bargmann and focused on the circuitry underlying navigation. The Mirzayan Fellowship was not only an fantastic opportunity to learn about science policy; it also did much to solidify a long-term fascination with the United States Congress, as Jesse was thankfully permitted to spend many an afternoon attending hearings, chatting up Hill staffers, and even on occasion [blush] attending some of the famous Hill staffer receptions. The Mirzayan Fellowship marked one arm of a two-pronged effort to explore alternative careers (the other centered on business). In Jesse's case, the Fellowship was as much a toe-dipping into politics as into policy, and in the end neither the pursuit of power nor the pursuit of money could overpower love of the search for knowledge. Jesse aspires to head an academic lab to continue his research applying functional genomics to understand genome evolution. He also aspires to one day serve as an NAS committee member, and his advice to incoming fellows is to read about science policy before, during, and after the Fellowship. A reading list is available upon request. (Updated 10/2001)

**Elizabeth "Betsy" Kitchens** (Winter 2004, PGA/DSC & IOM/BGH) earned her PhD in molecular and cellular biology, from the Department of Immunology at the University of California, Berkeley, where she studied the developmental process of T-cells. She received a BS from the University of California, San Diego in biochemistry and cell biology. Before and during her undergraduate years, she received two summer science fellowships to research and study autoimmune pathology of arthritis and lupus at the University of California, San Francisco. Before graduate school, Betsy participated in academic immunological research at Harvard Medical School and followed with various clinical trials, the most recent being a phase II clinical trial on an HIV vaccine. While these research experiences were very satisfying, she has felt disconnected from their societal impact and benefits of medical research. This sparked her interest in policy, and she believed that her Mirzayan Fellowship at The National Academies exposed her to the most pressing topics confronting us at the interface of science and society. Upon completion of the fellowship, she joined BGH/IOM and worked on a number of projects, including *Pandemic Influenza: Are we ready?* After some time, family and home (CA) lured her back and she is currently a Global Publications Leader for a pharma company in San Francisco. (Updated 7/2010)

**Peter J. Kozel** (Winter 2004, STEP & PGA/STL) is a Scientific Review Officer (SRO) at the National Center for Complementary and Alternative Medicine (NCCAM) at the National Institutes of Health (NIH). Dr. Kozel runs the review of several research and training mechanisms as part of his duties. Prior to working in the review of grant applications, he was a Scientific Program Analyst at NCCAM, working primarily on its research training and special populations portfolios. Dr. Kozel earned his PhD at the University of Cincinnati College of Medicine for work on the physiological roles of calcium pumps in the renal, cardiac, central nervous, and auditory systems. He continued this research as a postdoctoral fellow in the NIH's intramural research program. Prior to joining NCCAM, Dr. Kozel contributed to a recently-published National Research Council report on the role intellectual property plays in genomic and proteomic research and innovation as a consultant and as a Christine Mirzayan Science and Technology Policy Fellow at The National Academies. Dr. Kozel earned his bachelor's degree in biochemistry and chemistry at the University of Massachusetts at Amherst. (Updated 10/2011)

**Tanya Mazur** (Winter 2004, PGA/COSEPUP) is an associate in Gibson, Dunn & Crutcher's Washington, D.C. office. She currently practices in the firm's Litigation Department, with a focus on the areas of Intellectual Property, Antitrust, and Appellate law. Dr. Mazur earned her law degree with high honors in 2007 from The George Washington University Law School, where she was Projects Editor on The George Washington Law Review and was a member of the Order of the Coif. She was also a member of the Moot Court Board and served as a Writing Fellow in the Legal Research and Writing Program. While in law school, Dr. Mazur received several awards and scholarships, including the International Trade Commission Trial Lawyers Association Outstanding Article Award for her publication, "An Analysis of Trade Dress Protection at the International Trade Commission." Dr. Mazur has also published several other articles on the topic of intellectual property. Prior to law school, Dr. Mazur had the privilege of serving as a Christine Mirzayan Fellow at the National Academies of Science. While there, she worked on a variety of science policy issues including mentorship, scientific ethics, and postdoctoral fellow's rights. In addition to her law degree, Dr. Mazur has two degrees in Chemistry. She earned her Ph.D. in Chemistry from the University of



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California, Berkeley in 2003. While a graduate student, Dr. Mazur published several articles and gave numerous presentations on her research. Her thesis was titled, "New Methodologies in Nuclear Magnetic Resonance for the Study of Biological Molecules." She also earned her Bachelor of Science degree, magna cum laude, in 1998 from Vanderbilt University in Chemistry and Physics where she was a member of the Gamma Beta Phi service honor society. Prior to joining Gibson, Dunn & Crutcher, Dr. Mazur served as a law clerk to The Honorable Daniel M. Friedman in the United States Court of Appeals for the Federal Circuit. A member of the Federal Circuit Bar Association, and the American Bar Association and the Giles S. Rich American Inn of Court, Dr. Mazur is admitted to practice before the United States Court of Appeals for the Federal Circuit, the United States District Court for the Eastern District of Michigan, and is a member of the California and District of Columbia Bars. (Updated 7/2010)

Evan Michelson (Winter 2004, NAS/Koshland) is an Associate Director at The Rockefeller Foundation, where he is responsible for developing and implementing foresight and trend scanning research processes for technology and international development issues. Previously, he served as a Research Associate for the Project on Emerging Nanotechnologies at the Woodrow Wilson International Center for Scholars in Washington, D.C. While at the Wilson Center, Michelson conducted nanotechnology policy analysis and created the first publicly available inventory of nanotechnology consumer products. Michelson received an MA in international science and technology policy from The George Washington University, an MA in philosophical foundations of physics from Columbia University, and a BA in philosophy of science from Brown University. He has worked as a visiting researcher in the Korea Science and Engineering Foundation as part of the National Science Foundation's East Asia and Pacific Summer Institute program and as a science outreach instructor in Columbia University's Physics Emasondosondo project in South Africa. He has also developed public outreach and education programs as a Christine Mirzayan Science and Technology Policy Graduate Fellow at the Marian Koshland Science Museum of The National Academies. Michelson received a 2006 Young Scholar Award from George Mason University to participate in the U.S.-China Forum on Science and Technology Policy and a 2005 Navigator Award from the Potomac Institute for Policy Studies and the Phi Beta Delta Honor Society for International Scholars. His work has covered a wide range of issues in science and technology policy, including the impact of science and technology on international development, science and technology foresight, and the governance of emerging technologies. He has published articles and book chapters in several journals and collections, including Science and Public Policy, Journal of Industrial Ecology, Ecotoxicology, Bulletin of Science, Technology & Society, Journal of Technology Studies, Ethics and Infectious Disease, Nanotechnology and Society, Nanotechnology Applications for Clean Water, and Converging Technologies for Human Progress. He was also co-editor of a special issue of the journal Foresight, focusing on the intersection of foresight methodologies and poverty alleviation. He is currently a PhD candidate in public administration at the Robert F. Wagner Graduate School of Public Service at New York University. (Updated 11/10)

**Joseph Milone** (Winter 2004, NAS/NSRC) is a biologist in the Office of Combination Products, Food and Drug Administration. He is responsible for providing scientific support for formal Request for Designation (RFD) submissions, making informal product classification and jurisdictional assessments, monitoring and managing the FDA intercenter consultation/collaboration review process, combination product guidance document development for FDA staff and industry, and for other activities facilitating the pre-market and post-market regulation of combination products. Joseph joined the U.S. Department of Health and Human Services in July of 2005 as a member of the Emerging Leader Program. Prior to joining FDA, he was with the Christine Mirzayan Science and Technology Policy Fellowship Program. Joseph completed his PhD in microbiology and molecular genetics in 2004 from the University of Medicine and Dentistry of New Jersey. His graduate work focused on mRNA degradation pathways in Trypanosomatid protozoan parasites. He received his bachelor's in biotechnology from Rutgers University. (Updated 03/2010)

**Purva Rawal** (Winter 2004, DBASSE/BCYF) eearned her PhD in clinical psychology from Northwestern University. She completed a three-year predoctoral fellowship in health services research during graduate school. Her research activities in graduate school focused on children's mental health service delivery and policy. She also conducted research at the Johns Hopkins University Bloomberg School of Public Health and the Kennedy Krieger Institute providing clinical services to parents with children with behavior disorders and family support research for parents with depression and their children. She served as a Congressional Fellow through the



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Society for Research on Child Development and AAAS in Senator Lieberman's office and then remained there until 2008 as his health advisor. From 2008-2010 was a health care analyst on the majority staff of the Senate Budget Committee working on health care reform legislation, where she specialized in the coverage expansion, Medicaid and CHIP policy, and delivery system reforms. She currently works as a consultant in the Health Reform Practice at Avalere Health LLC, an advisory services firm where she advises a broad range of clients on health reform implementation. In addition, she is an adjunct faculty member at Georgetown University where she teaches health policy courses. (Updated 07/2011)

**Hsiu-Ming Saunders** (Winter 2004, PGA/GUIRR) is a Principal patent attorney at Intellectual Property Connections, Inc., CA. Previously, she was a U.S. patent attorney at Morris, Manning & Martin, Atlanta, GA. She earned a JD from the William Mitchell College of Law in May 2003, and became a registered patent attorney to practice before the United States Patent & Trademark Office in December 2003. She received her PhD in pharmacology and toxicology from the University of Mississippi Medical Center. She holds an MS in pharmacology from National Taiwan University and a BS in pharmacy at Taipei Medical College in Taiwan. Hsiu-Ming was a postdoctoral fellow at the National Institutes of Health in neurophysiology and biochemical genetics. (Updated 7/2010)

**Joshua Schnell** (Winter 2004, PGA/COSEPUP) is currently Director of the Analytics Services Group at Discovery Logic/Thomson Reuters, a Rockville, Md.-based firm that provides program evaluation, analytic services and grants management and IT solutions to government clients such as the NIH. After completing his Mirzayan Fellowship, he served as assistant chair in the department of Biochemistry, Molecular Biology and Cell Biology at Northwestern University. In this role, he managed the day-to-day operations of a basic biomedical research department at a Research I university. He received his PhD in biochemistry, molecular biology and cell biology from Northwestern, and his BS in cell and molecular biology from Tulane University. In January 2008, Josh relocated to the D.C. area with his wife and 2 year old son. (Updated 3/2010)

**Peggy Tsai** (Winter 2004, PGA/DSC) is a program officer with the National Academies' Board on Agriculture and Natural Resources. She has worked on various studies ranging from agricultural biotechnology to animal health to international agriculture. Peggy earned a bachelor's degree in microbiology and molecular genetics with a double major in political science from UCLA. She has a master's degree in international science and technology policy from George Washington University. Peggy began her work with the National Academies as a Christine Mirzyan Science and Technology Policy Intern (DSC/PGA). Prior to this, she held several intern positions: research subcommittee intern with the U.S. House of Representatives, House Science Committee; science and technology cooperation intern with the U.S. Department of State, Bureau of Oceans, Environment, and Scientific Affairs; and as an international technology policy Intern with the U.S. Department of Commerce. Peggy enjoys cooking, singing, watching chick flicks, discovering new dining establishments, and planning events.

**Pablo Whaley** (Winter 2004, DEPS/NMMB) is currently a biotechnology patent examiner at the U.S. Patent and Trademark Office. Pablo graduated from the University of California, Berkeley in 1997 with a BS in mathematics, and later taught eighth-grade algebra for three years before attending graduate school. He completed his MSc in biomedical engineering at the Mayo Clinic College of Medicine in 2005. During his Mirzayan Fellowship with the Roundtable on Biomedical Engineering Materials and Applications (BEMA), he gained in-depth experience on the interplay between industry, research, and science policy. More recently, Pablo completed a two-month special detail project for Director Kappos, creating a strategic plan for USPTO IP education and outreach initiatives. Also an accomplished MC/producer and motivational speaker, Pablo remains committed to using the arts to increase the pipeline of women and minority students pursuing careers in science, technology, engineering, and mathematics (STEM). (Updated 10/2011)

**Rieko Yajima** (Winter 2004, COSEPUP/PGA) is a project director with the American Association for the Advancement of Science (AAAS). She recruits and directs panels of senior research and policy professionals providing universities and state governments technical assistance for improved research, development, and innovation strategies. Rieko has co-authored technical reports on improving institutional research capacity and development, statewide research consortia and collaboration, and strategic planning for academic departments. In



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addition, she has managed the competitive, peer-reviewed funding for state-supported research and economic development. More broadly, Rieko's interests lie at the intersection of science with society including culinary arts, design, human rights, and policy. She has organized symposium on emerging interdisciplinary topics for the AAAS annual meeting on research collaborations between artists and scientists as well as the science of delicious food. Rieko received awards for her PhD research on RNA catalysts and has published over ten research and review articles on the molecular structure and function of protein and RNA enzymes. She earned a PhD in chemical biology from The Pennsylvania State University and an Honours BSc from the University of Waterloo. (Updated 02/2012)