

Christine Mirzayan Science and Technology Policy Graduate Fellows 2003 Fall Biographical Sketches



Mary K. Anderson (Fall 2003, PGA/COSEPUP) completed her PhD in molecular biology at the Johns Hopkins University School of Medicine in 2000. She earned an AB in biochemistry from Smith College. She is interested in large scale biology and the role of information management and the developing standards needed to provide structure and context to the "genomics revolution." She hopes that working at the National Academies will provide her with insight into and experience with the government decision-making processes. Mary is vice president of the Smith College Club of Baltimore and is closely involved in the annual book sale fundraiser. She also serves on the board of her local neighborhood association. She is an avid hiker, traveler, gardener and cook and someday hopes to write books about strange lands and distant foods. (Updated 4/2009)



Tracy L. Blake (Fall 2003, NAE/CASEE) has been working towards her PhD in higher education administration at the University of Florida. She earned a MEd in education from George Mason University. She feels one possible career option would be to obtain a teaching position at a major institute of research and continue to research and publish. Another option is related to securing a research position at a government organization dedicated to the promotion of educational excellence. Tracy is interested in mentoring, graduate student education, and policy issues in higher education. She is interested in examining these issues through themes concerning minority access, equity, outcomes, and assessment. Tracy feels the single most important aspect of a Mirzayan Fellowship is the deeper understanding of the responsibility that advisors play in assisting the government in addressing areas of science and technology.

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Laura (Brockway) Lunardi (Fall 2003, PGA/GUIRR) joined the Melanoma Research Alliance (MRA) as Scientific Program Director in May 2009. At MRA she is responsible for managing the research program including the grant portfolio, scientific meetings, outreach, and communications. Prior to MRA, she was scientific program manager at the International Life Science Institute North America where she coordinated programs on nutrition and health. From 2004-2008, Dr. Brockway-Lunardi was senior science policy analyst at the Federation of American Societies for Experimental Biology, developing policy recommendations on biomedical research issues including conflicts of interest, scientific publishing, grant review as well as contributing to advocacy efforts for federal research funding. She was a Christine Mirzayan Science and Technology Policy Fellow at the Government-University-Industry Research Roundtable of the National Academy of Sciences, contributing to their studies of intellectual property in academic-industry relationships and U.S. science and technology competitiveness. Dr. Brockway-Lunardi received her doctorate in Vision Science from the University of Alabama at Birmingham where she was president of the Industry Roundtable, an organization dedicated to fostering a greater awareness of science careers outside academia. She received her bachelor's degree in biology with honors from Florida State University. (Updated 9/2010)



Sarah Brown (Fall 2003, DEPS/BMSA) earned her master's degree in mathematics from the University of Maryland, College Park and her BA degrees in mathematics and computer science from Oberlin College. Her interest is in how mathematics and computer science research and government decision-making influence each other in the areas of national security. Working at the National Academies enhanced her career skills through experiences in teamwork, formulating government policy, and research on scientific matters. She is currently a senior information security engineer with the MITRE Corporation, and since 2008 has worked from MITRE's location in The Hague, The Netherlands. She works on information security and interoperability engineering problems that arise in problems, working with engineers in industry and government. Sarah enjoys cooking, traveling, and spending time with her husband, daughter, and their Flemish giant rabbit. (Updated 9/2010)



Edward V. Etzkorn (Fall 2003, DEPS/BPA) is Program Examiner for Energy Efficiency and Renewable Energy in the Office of Management and Budget (OMB). He previously served as a AAAS Science and Technology Policy Fellow (2009-2011) in the Solar Energy Technologies Program at the U.S. Department of Energy. He works in the photovoltaics subprogram, and his current primary areas of focus include the design and implementation of a PV Manufacturing Initiative to improve U.S. solar photovoltaic manufacturing capability, a Next Generation PV program to develop revolutionary new PV technologies, and the planning process for PV research and development funded at the national laboratories. Prior to the AAAS Fellowship, Ed was a Senior Process Engineer at TriQuint Semiconductor, in its semiconductor manufacturing fab near Portland, OR. At TriQuint, he was responsible for developing and sustaining dry plasma etch processes for the production of GaAs-based wireless communications modules, and for leading project teams to improve defect levels, film adhesion, and interconnect via etching. Ed has a Ph.D. in Materials from the University of California at Santa Barbara and a B.S. in Applied Physics from the California Institute of Technology. His dissertation research explored the growth of GaN substrates by vapor phase epitaxy for optoelectronic and high power transistor applications. As a graduate student, he also spent three months as a Christine Mirzayan Science and Technology Policy Fellow at the National Academies, where he worked with the Board on Physics and Astronomy examining U.S. materials research facilities. Ed's current professional interests include renewable energy, domestic manufacturing and U.S. competitiveness, innovation and commercialization, public-private partnerships, international development, technology assessment, and program evaluation and metrics. Beyond work, Ed enjoys hiking, travelling, art and

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music, board gaming, exploring local neighborhoods, and pleasant evenings in the company of family and friends. (Updated 3/2012)



Patricia C. Freeland (Fall 2003, PGA/CSTL) recently earned an MA in marine affairs from the University of Rhode Island. She earned an MS in educational linguistics from the University of Pennsylvania. As an educator, she became aware of the importance of working toward increased public awareness of current scientific issues which will shape the future. As she considers her career goals, Patricia finds that that she is most interested in the particular ways that governmental policies and regulations must evolve to reflect advances in technology, particularly biotechnology and its applications to crops and animals. She is also interested in international issues pertaining to trade and the environment relating to genetically modified organisms. She hopes eventually to make a contribution by working in a government agency in the area of international environmental policy, possibly in fisheries management or ocean governance. She believes this fellowship will contribute to her career goals by broadening her experience and enabling her to learn how issues concerning science and policy are considered and how policy is ultimately determined. (Updated 3/2010)



Arti Garg (Fall 2003, PGA/COSEPUP) is a program examiner in the Energy Branch at the Office of Management and Budget. She received her PhD in physics from Harvard University in 2008. Her research focused on using astronomical observations of a nearby galaxy to detect Dark Matter. After completing her graduate work, she was a post-doctoral research staff at Lawrence Livermore National Laboratory. Prior to beginning her doctoral work, she received an MS from Stanford University in aeronautical and astronautical engineering. She also received bachelor's degrees in physics and English from Stanford. Her Mirzayan Fellowship at the National Academies helped deepen her commitment to being an active participant in policy issues. (Updated 10/2011)



Doug George (Fall 2003, DELS/OSB) completed his Mirzayan Fellowship and graduated with his MSc in oceanography in 2003 from Dalhousie University. He worked for the Coastal and Marine Geology Team of the US Geological Survey from 2004 - 2008 in California. His research focused on sediment transport and estuary restoration in Puget Sound. From 2008-2010, Doug worked for the California Ocean Protection Council on marine and ocean policy for California, covering topics such as marine debris, coastal mapping, water quality, and sediment management. In August 2010, he moved back toward more technical work at an environmental consulting company in San Francisco where he works on climate change adaptation, coastal sediment management, and estuary restoration in California and Washington State. Doug also maintains his freelance journalism work, starting immediately after completing his MS in Journalism from Columbia University in 2001, and continues to publish in magazines and newspapers. (Updated 9/2010)

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Theresa L. Goedeke (Fall 2003, DELS/BANR) earned her degree in rural sociology with emphasis on natural resource sociology from the University of Missouri-Columbia in 2003. She was a Christine Mirzayan Science and Technology Policy Fellow in Fall 2003 and a post-doctoral research associate at Florida A&M University's Environmental Sciences Institute from 2004-2007. Throughout her career, she has worked on range of topics including climate change and coastal communities, social conflict over resource use and management, and the intersection of science and law related to wildlife. She has published two books and several journal articles in her substantive areas of interest, which are environmental/natural resource sociology, the social dimensions of wildlife, sociology of law and policy, and the sociology of science. Theresa joined the National Oceanic and Atmospheric Administration's National Ocean Service in 2007 where she is now working to build a social science research program to inform policy in the areas of coastal and marine spatial planning, oceans and human health, and community adaptation to climate change. (Updated 10/2011)



Grace H. Huynh (Fall 2003, NAE/ CDEW) recently completed her MD at Stanford University. She completed her PhD in Bioengineering at UCSF in 2007, where she studied convection enhanced drug delivery of particulates and small molecules to the brain. She is interested in health policy, drug delivery and translational medicine. (Updated 9/2010)



Rebecca A. Janes (Fall 2003, PGA/COSEPUP) received her PhD in inorganic chemistry at the University of California, Los Angeles. She earned a BS in chemistry from Loyola College in Maryland. She has always been fascinated by both the inception of science policy and the effects its implementation has on the country. As a Mirzayan Fellow, she gained an intimate understanding of the inner workings of the political system, particularly how the science agenda is handled by the National Academies. The knowledge she acquired during her Fellowship helped her see how to make lawmakers better understand new technological developments, increase the general public's understanding of science through dissemination of scientific information, work to diversify the scientific field, and ensure equal opportunity in science for everyone. After completion of the fellowship Rebecca obtained a job with the government. (Updated 3/2010)



Cherise R. Johnson (Fall 2003, PGA/CSTL) has been working towards a master's degree in marine affairs and policy at the Rosenstiel School at the University of Miami. She also earned a BA in the same field of study at University of Miami. She has been studying marine policy for five years and she is a self-described activist who plans to "change the world" by working within the system. She feels strongly that our environment is threatened more and more each day by natural and anthropogenic causes and feels she can, through proper assessment, analysis, law making and enforcement, help to end that. She had been planning to attend law school and focus on environmental law and then work at the federal level with the EPA or with a consulting firm assisting with environmental impact statements and further aiding in the preservation of our fragile ecosystems. Cherise had hoped that the Mirzayan

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Fellowship would help her better understand how science policy is created and provides the opportunity to interact with leaders in science, government, and industry. In her spare time she loves to spend time appreciating the arts, whether it is a play, a museum or a good documentary or film. Her favorite art form is dance and she has been a dancer since childhood.



Jodi Lubetsky (Fall 2003, PGA/BHEW) is a manager of science policy at the Association of American Medical Colleges (AAMC). Among her responsibilities is serving as Program Leader of the Group on Graduate Research Education and Training (GREAT). The GREAT Group is a professional development group that serves the interests of over 500 medical school graduate deans, MD-PhD program directors, and postdoctoral program directors that have responsibility for biomedical PhD and postdoctoral training. Prior to joining AAMC, Jodi was a Howard Hughes Postdoctoral Associate at the University of Medicine and Dentistry of New Jersey. She was also a Christine Mirzayan Science and Technology Policy Fellow during the fall of 2003 in the Board of Higher Education and Workforce of the Policy and Global Affairs Division at The National Academies. She earned a PhD in molecular biophysics and biochemistry at Yale University and a BS in chemistry from MIT. (Updated 10/2011)



Horacio Murillo (Fall 2003, IOM/HSP) did his Mirzayan Fellowship in the Board of Health Sciences Policy at the Institute of Medicine. He did a MD-PhD program at the Mayo Clinic College of Medicine in Rochester, Minn. and his PhD was in Molecular Pharmacology and Experimental Therapeutics. He received his BA in chemistry/biochemistry from San Jose State University in San Jose, Calif. Through this fellowship, Horacio gained insights into the process of public policy making as it relates to biomedical research and clinical research training. Subsequently, Horacio became an Association for the Advancement of Science (AAAS), Science and Technology policy Congressional Fellow sponsored by AAAS in the US Senate HELP Committee. (Updated 9/2010)



Jamie L. Ostroha (Fall 2003, NAE/CEE) is a PhD candidate in material engineering at Drexel University where she also earned her MS in the same field of study. Upon completion of her PhD program, she plans to enter academia. It is within this environment that she believe she will be best able to tackle one of her most prominent career goals: to address national and international issues involving science and technology education and promote education in science and technology among children and young adults. Through the Mirzayan Fellowship, she had hoped to learn how to affect change in policy to bring science and technology education to those without, to improve the learning of science in general, and to improve education for future teachers of science and technology. She wants to learn how to effectively integrate policy with her future career in academia and help affect change in policy to better the lives of local, national, and international communities. Jamie is already invested in the area of science and technology education through educational outreach programs at the University where she is able to influence the education of high school students as young as the freshman level; and through the teacher-training program, reach children in middle schools.

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Rebecca J. Romsdahl (Fall 2003, DBASSE/HDGC) holds a Ph.D. in environmental science and public policy from George Mason University; her M.S. from Michigan State University and B.A. from Gustavus Adolphus College. Rebecca has worked in environmental advocacy, taught hands-on ecology, and worked seasonally with the National Park Service, and the National Forest Service. She was also a fellow in the AAAS Science & Technology Policy program (2005-2006); she worked with the EPA Global Change Research Program and the U.S. Climate Change Science Program. Rebecca is currently an associate professor in the department of earth system science & policy at the University of North Dakota where she teaches courses on environmental policy and science communication. Her research interests include the human dimensions of global environmental change, protected lands management, and examining the roles of science, communication, and public participation in environmental policy-making. (Updated 2/2016)



Andrei A. Sirchenko (Fall 2003, DBASSE/CNSTAT) is a PhD candidate in economics at the European University Institute at Florence, Italy. He earned an MA in economics at the University of Iowa. He also earned an MS in biophysics and a BS in applied physics and mathematics from Moscow Institute of Physics and Technology. He has a beautiful wife (born in Siberia) and two wonderful daughters (born in the middle of Iowa and Tuscany). Upon completion of his PhD, Andrei hopes to continue his quest for a harmonious lifestyle. (Updated 10/2011)



Amanda (Slocum) Stevens (Fall 2003, DEPS/NMMB) began working for the U.S. Environmental Protection Agency ENERGY STAR program in Fall 2010, as the product development lead for home appliances. Prior to this, she was consultant with Energy Solutions, in the San Francisco Bay area, where she managed several projects to strengthen minimum efficiency standards and to develop new targeted efficiency rebate programs. Amanda worked in Washington D.C. from 2004-2006 as science assistant with the National Science Foundation/National Science Board Office where she provided research and policy assistance on a variety of science, engineering and R&D policy issues. Amanda completed a master's in engineering and public policy from Carnegie Mellon University in 2008, and holds a master's in public policy from the Rochester Institute of Technology (RIT). While at RIT she worked with the National Center for Resource Recovery and Remanufacturing where her research focused environmental compliance and product stewardship, with an emphasis on emerging technologies such as fuel cells. As a graduate student, she spent a summer working with the National Center for Environmental Economics at the Environmental Protection Agency in Washington D.C. She earned a BS in physics from Bates College in Lewiston, Maine. (Updated 01/2011)

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Christina Tat (Fall 2003, PGA/COSEPUP) has been working towards her master's degree in policy analysis and evaluation at Baruch School for Public Affairs in New York City. She earned a BS in biology and Japanese from Vassar College and has worked as a research assistant at Memorial Sloan-Kettering, studying the role of anti-oxidants in the treatment of cancer. The goal of her graduate study is to gain a better insight into the intricacies of human resources policies for the scientific workforce. Issues of particular interest are the alignment of higher education requirements with the needs of private sector employers and the gauging of benefits and challenges arising out of a labor force made up of over 50% non-resident scientists. Christina is looking forward to learning from and working alongside COSEPUP staff researching similar problems. Christina had planned to enroll into Columbia University's Science and

Technology Program in 2004 with designs on working for a government agency formulating human resources policy for the scientific workforce. In her spare time, she enjoys collecting and experimenting with recipes from her native country of Romania, skiing and mountain-biking.