

Christine Mirzayan Science and Technology Policy Graduate Fellows 2000 Summer Biographical Sketches



Albert Einstein Memorial Statue © 1978 by Robert Berks.



David Bruggeman (Summer 2000, PGA/COSEPUP) is currently the public policy analyst for the Association for Computing Machinery. Following his Mirzayan Fellowship, David continued working in the Policy and Global Affairs Division for the Government-University-Industry Research Roundtable (GUIRR) and the Forum on Information Technology and Research Universities. He assisted program staff with various projects geared toward supporting the national research infrastructure. He provided program and logistical support for GUIRR meetings and contributed to the Information Technology and The Future of the Research University project. Its report, *Preparing for the Revolution*, was published in 2002. During David's fellowship at COSEPUP (which was converted into regular employment through

December 2000) he worked on two projects: *Science and Technology in the*

Public Interest: the Presidential Appointments Process and *Implementing the Government Performance and Results Act: A Status Report*.

David completed his master's degree in science, technology and public policy at George Washington University in May 2001, and has been working towards his PhD in science and technology studies from Virginia Tech. Prior to the National Academies, David worked for the National Oceanic and Atmospheric Administration. A native of the Pacific Northwest, David is more than happy to extol the virtues of the "other" Washington and surroundings. (Updated 02/2011)



Joanna Burton (Summer 2000, DBASSE/BCYF) is pursuing a joint MD (neurology) and PhD (speech-language pathology) at the University of Illinois where she is enrolled in the Medical Scholars Program. Before deciding on her current course of study, Joanna joined the program Teach For America. She continued to teach bilingual special education for four years, working primarily with students with learning disabilities, mental retardation, and behavior disorders in grades 2 through 6 in basic living and academic skills. During this time, she coordinated an afterschool program for at risk children and was chairperson of the Special Education Department. Joanna plans to focus her medical practice and academic teaching on pediatric neurology and her research on language ability and disability. Joanna hopes to work primarily with under-resourced urban and immigrant populations. She has been hoping to combine

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her experience at the Board on Children, Youth and Families with her medical interests to further develop skills in policy advising.



Kevin Crosby (Summer 2000, IOM/BGH), who is currently completing coursework in microbiology, immunology, cell biology, and molecular biology at Virginia Tech, has recently held fellowships at the Institute of Medicine's Board on Global Health (BGH) and the Fogarty International Center of the National Institutes of Health (NIH). At BGH, he contributed to studies focused on birth outcomes and nervous system disorders in developing countries. At NIH, he researched the relationships between biomedical science and international health policy. Kevin holds a BA in history from Mary Washington College and is working towards an MA in international relations from Syracuse University.



Sheri Denslow (Summer 2000, DELS/BANR) has been working towards her PhD candidate in crop science at North Carolina State University. Her doctoral research, funded by USDA, NSF and DOE, focuses on plant defense mechanisms at the molecular level. She holds a BS from Emory University where she graduated with highest honors in biology. Her scientific background includes using protein immunolocalization techniques in rat neurons to study Alzheimer's disease. From August 1997 through August 1998 she held a position as Hybridizer at Green Hill Farm, Inc. in Chapel Hill, N.C, where she directed the Hosta hybridizing program. Prior to that, she was a laboratory assistant for the Cell Biology Department at Emory University.



Jo Ferrigno-Stack (Summer 2000, STEP & PGA/GUIRR) has been working towards PhD in communication at the University of Pennsylvania/Annenberg School for Communication. She received her MA in communication, culture and technology and a BA in government and French from Georgetown University. She studies the interaction of communications technology, and economic, political and societal institutions, especially as these institutions are affected by the shift to The Internet Age. She provided Internet design and maintenance services at Halcyon Consulting, a small company she founded, and was communications manager for The Institute for Reproductive Health where she was responsible for in-house computer training and maintenance, as well as coordinating the distance learning program. Over the past year, Josephine has researched Internet policy issues and online political behavior at the Annenberg Public Policy Center at the University of Pennsylvania, where she was scheduled to return after her Mirzayan Fellowship.

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Katie Gramling (Summer 2000, NAE/NAEPO) works for Diamax Information Systems, a D.C. consulting firm that specializes in helping knowledge organizations use technology to do more with information. Diamax builds websites and business applications and provides advice on process analysis and strategic planning. Most Diamax clients are policy and international development organizations like the National Academies, the World Bank, and the United Nations. Katie received an MS in environmental science (water resources & applied ecology) from Indiana University, and a BS in business economics and policy analysis from Indiana-Purdue University at Fort Wayne. During her graduate studies, Katie worked on environmental issues such as the investigation of historical wetland sites and ecological history of a riparian wetland system where she applied her knowledge of science to public policy issues. Katie joined the staff of the National Academy of Engineering after her Mirzayan Fellowship and has had professional experience in consulting and public relations. (Updated 10/2004)



Karen Harwell (Summer 2000, DEPS/ASEB) is a student at the McAfee School of Theology at Mercer University pursuing a Master of Divinity degree. She also works to support the Missional Congregations initiative at the Cooperative Baptist Fellowship in Atlanta. She stepped down as Director of Georgia Tech's Undergraduate Research Opportunities Program (UROP) in August of 2010 to pursue this new career direction. In her capacity at Georgia Tech, she developed opportunities for students to learn more about research, administered funding for undergraduate research, sponsored an Institute-wide undergraduate research symposium, and directed the Institute's emphasis on undergraduate research in the Quality Enhancement Plan. She was faculty advisor for Georgia Tech's newly established undergraduate research journal, *The Tower*. Her past experience includes more than five years with the Aeronautics and Space Engineering Board (ASEB) of the National Academies. She began her time at the National Academies as a Christine Mirzayan Science and Technology Policy Graduate Fellow during the summer of 2000 when she led ASEB's effort to assess NASA's Space Solar Power Investment Strategy. Upon completion of this fellowship, she accepted a permanent position with the ASEB as a Program Officer. Dr. Harwell was promoted to Senior Program Officer and then ultimately to the Associate Director of the ASEB. During this time, Dr. Harwell worked with the National Academy of Engineering's Aeronautics R&T Roundtable, developed and directed the beginnings of the Aeronautics Decadal Survey, led the review of NASA's Pioneering Revolutionary Technology Program, and led the planning for a series of space technology workshops, among others. Dr. Harwell received her PhD. and MS degrees in aerospace engineering from North Carolina State University and her BS in aerospace engineering from the University of Alabama. (Updated 10/2011)

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Christine



Henderson (Summer 2000, PGA/OIA) graduated with a PhD in marine biology/ecology from Texas A&M University, with a minor in environmental management and policy. Her degrees conferred from California State University, Northridge, include an MS in marine biology/ecology and a BA in both biology and environmental studies. In addition, she holds an AA in pre-veterinary sciences and an AS in animal health technology. Since moving to Washington, she has taken a number of science and technology policy courses at the USDA Graduate School. She is presently

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employed as the senior reports officer for the NRC Division on Earth and Life Studies (DELS) Executive Office. From previous positions, Christine gained experience with fisheries management, and the caretaking of marine and terrestrial organisms. Her favorite outdoor activities are scuba diving, bicycling, hiking, and gardening, all of which are welcome respites from the mental aerobics of her work. Christine's career interests centering on international environmental policy with emphasis on the ocean's diverse ecosystems were prompted by her personal attachment to the marine environment and the current state of mismanagement of fisheries and coastal ecosystems.



Jill Johnston West (Summer 2000, DELS/BB) earned her PhD in botany at the University of Georgia in 2002. She holds a BS from the University of California, Davis. Her dissertation research on the evolution of ecophysiological traits in Louisiana Irises sparked questions for her about the role of science in our society. She sought a Mirzayan Fellowship to better understand how policy makers mediate the relationship between scientists and the public. As a postdoc at Ohio State University working with Allison Snow in 2002-2003, she became involved in the GMO Environmental Risk Assessment Project, working with a team of international scientists to evaluate risks of genetically modified crop introduction in developing countries. Three countries – Kenya, Brazil, and Vietnam – served as test cases and hosted workshops to evaluate one type of genetically modified crop introduction inside their borders. After leaving academia,

Jill worked for the Utah Division of Wildlife Resources from 2004-2008, where the intersection of science and policy (and the overlay of politics) were apparent on a daily basis. Jill is currently a stay-at-home mom in College Station, Tex. (Updated 10/2011)



Susan Laessig (Summer 2000, DELS/OSB) earned a Ph.D. in toxicology in 2000 from the University of Maryland, Baltimore where she studied the effects of environmental contaminants on the developing brain. She also has an M.S. in aquatic toxicology, and a B.S. in marine science. She is currently a toxicologist at the U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics (OPPT) where she leads risk assessments for industrial chemicals. Previous positions include planning and managing a research grant program to characterize health effects from environmental exposures to chemicals and developing a national ocean policy. Prior to joining EPA, Dr. Laessig was employed at Sciences International, Inc. as an environmental health consultant analyzing federal and state regulations and performing risk assessments and technical reviews. She participates in mentoring and leadership development. Outside

of work, she enjoys spending time outdoors with her family. (Updated 2/2016)



Jennifer Nyman (Summer 2000, BRWM/CGER) is a senior environmental engineer with Malcolm Pirnie, Inc. in Emeryville, Calif. She earned her PhD in environmental engineering and science at Stanford University as a NSF/Phi Kappa Phi Fellow. For her PhD thesis, she worked on the Oak Ridge field project for uranium bioremediation, stimulating the *in situ* microbial reduction of uranium. She completed her BS in chemical engineering at Montana State University, with a minor in music performance. Jennifer is a native of Montana and has long been concerned with land and water restoration. Her research experience includes investigations into the microbial remediation of hexavalent chromium, dense non-aqueous phase liquids (DNAPLs), and methyl tertiary butyl ether (MTBE). She has held internships at Conoco, Inc. in engineering and at Dow Chemical Company in research. From the Mirzayan

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Fellowship with the National Academies, she gained a better understanding of science policy and national issues concerning radioactive waste. (Updated 08/2010)



Michael Reilly (Summer 2000, IOM/HCS) received his BSPH (1999) and MD (2003) degrees from the University of North Carolina at Chapel Hill. Go Tar Heels! He then went on to complete his residency in Otolaryngology--Head & Neck Surgery at Georgetown University in 2008 and his fellowship in Facial Plastic & Reconstructive Surgery at UCLA Medical Center in 2009. He is currently an associate professor at Georgetown University Medical Center, where he specializes in plastic and reconstructive surgery of the face (<http://www.reillyfps.com>). Mike also serves as the Associate Chief Medical Information Officer at Medstar Georgetown University Hospital, and he continues to have a strong interest in optimizing accountable care.(Updated 2/2016)



administrative computer network.

Gregory Sherr (Summer 2000, IOM/HSP) is enrolled in the joint MD/MPH program at New York Medical College. His master's-level work is focused on the area of medical informatics, which involves integrating computer science with both clinical and research medicine. Fluent in French and Spanish, he holds both a BA in French and romance philology and a certificate in pre-medical science from Columbia University. He is leaving his joint full-time appointment as Webmaster at New York Medical College and Instructor of Medical Informatics at St. Vincent's Hospital to begin medical school this summer. At NYMC, he manages a website that serves a community of about 6,000. The site features on-line gene sequencing applications, database-driven examination systems, and distance learning applications. Greg's previous position at Columbia University involved supervising the daily operations of an academic



1999 and is an instructor of Hawththya Iyengar Yoga. She received her PhD in biochemistry from the University of Maryland at College Park and her BA with a double major in molecular cellular developmental biology and history from the University of Colorado at Boulder. Susan gained research experience through a research assistantship at the National Institutes of Health (NIH) where she participated in the human genome initiative. She also had an assistantship at the Marine Biological Laboratory (MBL), where she studied (in)vertebrate rhodopsin.

Susan Trapp (Summer 2000, PGA/CWSEM) is currently a postdoctoral research associate at the Institute of Biological Chemistry (IBC) at Washington State University (WSU), with a research focus in plant-fungal molecular genetics and functional genomics. She has initiated several projects at WSU in the area of plant genomics including genomic organization, metabolic pathway gene clustering, promotor analysis, and molecular origins of terpene synthases. (Terpenoids comprise one of the largest classes of natural products in plants). Most recently, she co-authored a review on the "Defensive Resin Biosynthesis in Conifers," published in *Annual Reviews of Plant Physiology and Plant Molecular Biology* in 2001. In addition to her research at WSU, she founded a forum (Women in Science at the IBC) that discusses issues pertaining to women in sciences. Susan also started her own yoga studio in

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Stanley Trepetin (Summer 2000, DEPS/CSTB) has been working towards a joint MS/PhD in the technology and policy program at the Massachusetts Institute of Technology. He received his MA in liberal studies (technology and society) from Duke University. He received his bachelor's degree in mathematics and computer science from Cornell University. Stanley has over ten years' experience in information technology and has held positions at IBM as a project manager and software developer and at Duke University as a consultant. He has conducted a choir for several years, helped immigrants to assimilate to American life, and has given speeches in public.



Kevin Whittaker (Summer 2000, PGA/CSTL) received a JD from Syracuse University College of Law. As a first-year student, Kevin was chosen to serve on the editorial staff of *The Labor Lawyer*, the country's leading legal publication on labor issues. He holds a BA in philosophy from the University of Iowa. Kevin currently practices Labor & Employment law with the San Francisco office of Gordon & Rees LLP. (Updated 8/2010)



Maria Witmer-Rich (Summer 2000, DELS/BASC) received an MS in chemistry from the University of Michigan and a BA in chemistry from Goshen College. As a graduate researcher, Maria worked at the Program for Research on Oxidants: Photochemistry, Emissions, and Transport (PROPHET), a multi-university collaborative research effort which monitors tropospheric air pollution as it flows from mid-west urban centers such as Chicago and Detroit. She is presently employed as an environmental consultant at Natural Science Technologies, Inc. In her spare time, Maria enjoys running, reading classics and growing plants. (Updated 8/2010)