# Christopher J. Bannochie

President, SRS GLOBE; Director, NOGLSTP; Co-Chair, Out to Innovate 2014 Savannah River National Laboratory / National Organization of Gay & Lesbian Scientists and Technical Professionals

Chris Bannochie is currently a Fellow at the Savannah River National Laboratory. From 1998 – 2001 he was a Visiting Scientist at Lawrence Livermore National Laboratory. Dr. Bannochie received a B.A. degree in Chemistry with a minor in Mathematics from St. John's University and a Ph.D. in Inorganic Chemistry from Texas A&M University under Art Martell. He completed a postdoctoral fellowship under Michael Welch at the Mallinckrodt Institute of Radiology of the Washington University School of Medicine in St. Louis. Dr. Bannochie is a graduate of Leadership Augusta. His research focuses on nuclear tank waste processing, stabilization, and characterization. He has authored or co-authored over 60 technical publications and given numerous courses, lectures, and posters covering nuclear tank waste, professional development, and LGBT diversity to both technical and community audiences. Dr. Bannochie has won numerous awards including being named an ACS Fellow (2009), the ACS E. Ann Nalley Southeastern Award for Volunteer Service (2012), the Walt Westman Award from the National Organization of Gay and Lesbian Scientists and Technical Professionals (NOGLSTP) (2007), the ACS Stanley C. Israel Regional Award for Promoting Diversity in the Chemical Sciences (2005), a George Westinghouse Signature Award (1992), and has been inducted into Sigma Xi and Phi Lambda Upsilon. He is a member of the Board of Directors of NOGLSTP and Augusta Pride, Inc. Active in the American Chemical Society, he has served in leadership roles on several committees as well as the Division of Professional Relations. Dr. Bannochie is currently the Chair of the Public Policy and Communications Subcommittee for the Committee on Science, is a Topic Reviewer for the 2015 International Chemical Congress of Pacific Basin Societies (Pacifichem), Chair-Elect of SERMACS, Inc., and Councilor for the Savannah River Local Section.

### Erin Cech

Assistant Professor, Department of Sociology Rice University

Erin Cech is an Assistant Professor in the Department of Sociology at Rice University. Before coming to Rice in 2012, Cech was a postdoctoral fellow at Stanford's Clayman Institute for Gender Research. She received her Ph.D. in Sociology from the University of California, San Diego and B.S. degrees in Electrical Engineering and Sociology from Montana State University. Cech's research seeks to uncover cultural mechanisms of inequality reproduction—particularly gender, sexual identity and racial/ethnic inequality within science and engineering professions. Her current research projects focus on the recruitment and retention of women, Native Americans, and LGBT individuals, and the role of professional cultures in inequality in STEM. Her research appears or is forthcoming in the *American Sociological Review, Social Forces, Social Problems*, and *Engineering Studies*.

# Ted Conway

*Program Director, Chemical, Bioengineering, Environmental & Transport Systems Division National Science Foundation* 

Dr. Conway is currently the Program Director for the:

- 1) General & Age Related Disabilities Engineering Program (GARDE);
- 2) CBET-National Robotics Initiative (NRI);
- 3) CBET-Broadening Participation Research Initiation Grant in Engineering Program (BRIGE); and
- Science and Technology Center (STC): Emergent Behaviors of Integrated Cellular Systems (EBICS)

in the Chemical, Bioengineering, Environmental and Transport Systems Engineering (CBET) Division of the Engineering Directorate at the National Science Foundation (NSF). Before returning to NSF he was a Professor and Associate Dean for Research Services in the School of Education at Virginia Commonwealth University. Prior to his appointment at VCU he was the Program Director for the Research in Disabilities Education (RDE) Program in the Education and Human Resources (EHR) Directorate at NSF while he maintained his tenured position as Associate Professor in Mechanical, Materials and Aerospace Engineering at the University of Central Florida (UCF) in Orlando, FL. Before arriving at UCF, he accepted the tenure-track position of Assistant Professor in Mechanical Engineering at the University of Akron (U of A) in Akron, OH. He was promoted to Associate Professor and held a joint appointment in Biomedical Engineering at the U of A. Dr. Conway received his B.S. degree in Chemistry from Florida State University and the M.S. and Ph.D. degrees in Theoretical and Applied Mechanics in the College of Engineering at the University of Illinois at Urbana-Champaign. While a Ph.D. student, he was a Summer Federal Employee for the Department of the Navy at the Naval Underwater Systems Center in Newport, RI and the Naval Research Laboratory in Washington, DC. Prior to attending graduate school, Dr. Conway worked in the industrial sector as a Research Scientist with Olin Corporation in St. Marks, FL, Quality Control Director with Oil-Dri Corporation in Ochlocknee, GA and a Polymer Engineer with Michelin Americas Research and Development Corporation in Greenville, SC. He has had over 34 years of experience working in the government, academic and industrial sectors.

# F. Fleming Crim

Assistant Director, Directorate for Mathematical and Physical Sciences National Science Foundation

Professor Crim was born in Waco, Texas and earned a Bachelors degree in chemistry from Southwestern University, Georgetown, Texas, in 1969 and a Ph.D. degree in physical chemistry from Cornell University in 1974. He was a member of the research staff at Western Electric Company and then a Postdoctoral Staff member at the Los Alamos

National Laboratory. He joined the Department of Chemistry at the University of Wisconsin -Madison in 1977 where he is the John E. Willard Professor and the Hilldale Professor of Chemistry. He is presently serving as the Assistant Director of the National Science Foundation overseeing the Directorate for Mathematical and Physical Sciences.

He has received the Earle K. Plyler Prize in Molecular Spectroscopy from the American Physical Society, the Irving Langmuir Award in Chemical Physics from the American Chemical Society, and the Centenary Silver Medal from The Royal Society of Chemistry among other awards. He is a member of the National Academy of Sciences.

Professor Crim has chaired the Physical Chemistry Division of the American Chemical Society and the Committee on Professional Training of the Society. He was also been the Co-Chair of both the Chemical Sciences Roundtable of the National Academy of Sciences and the Board on Chemical Sciences and Technology of the Academy. He is currently Chair of the Chemistry Section of the National Academy of Sciences. The unifying theme of his research is understanding the role that vibrational energy plays in chemical reactions. A pioneering aspect of his work is controlling reactions using vibrational excitation to break bonds selectively.

### Larry R. Dalton

*B. Seymour Rabinovitch Chair Professor (Emeritus), Department of Chemistry University of Washington* 

Larry R. Dalton is a member of the OXIDE Advisory Board. He is the B. Seymour Rabinovitch Chair Professor of Chemistry (Emeritus), the George B. Kauffman Professor of Chemistry and Electrical Engineering (Emeritus), and since 2002 has served as the Director/Executive Director of the NSF Science & Technology Center on Materials and Devices for Information Technology Research. Recent awards include the 2008 Lifetime Achievement Award of SPIE-International Society of Optics and Photonics, the Dalton Festschrift Issue of the Journal of Physical Chemistry (2008), the 2006 IEEE/LEOS William Streifer Scientific Achievement Award, the Quality Education for Minorities Giants in Science Award (2005), the 2003 Chemistry of Materials Award of the American Chemical Society, and the Richard C. Tolman Award and Linus Pauling Regional Awards of the ACS. He is a Fellow of the American Chemical Society, the Materials Research Society, the Optical Society of America, the SPIE-International Society of Optics and Photonics, the American Association for the Advancement of Sciences, and a Senior Member of IEEE. He received his Ph.D. in Chemistry from Harvard University (1971) and his B.S. in Chemistry from the Honors College of Michigan State University (1965).

# Peter K. Dorhout

Dean, College of Arts and Sciences Kansas State University

Dr. Peter Dorhout earned a bachelor's degree in chemistry from the University of Illinois at Urbana-Champaign and a doctorate in inorganic chemistry from the University of Wisconsin-Madison. His list of professional awards includes the Research Corporation Cottrell Scholar, Camille Dreyfus Teacher-Scholar, A. P. Sloan Foundation Fellow, National Science Foundation CAREER Fellow, and the ACS-ExxonMobil Faculty Award in Solid State Chemistry. He is a recognized expert in solid state and materials chemistry and environmental chemistry. He has had active research programs in solid state f-element chemistry and nanomaterials science and has mentored 12 PhD and Master's students, 16 postdoctoral fellows, 5 visiting scientists, and 30 undergraduate coworkers. His research interests have included heavy metal detection and remediation in aqueous environments, ferroelectric nanomaterials, actinide and rare-earth metal solid state chemistry, and nuclear non-proliferation. He has published over 115 peer-reviewed journal articles, book chapters, and reviews while presenting over 130 international and national invited lectures on his chemistry. Dr. Dorhout serves as the Dean of Arts and Sciences at Kansas State University, where he has been since January 2012. Prior to coming to Kansas State, he served as Interim Provost at Colorado State University-Pueblo (2011-12) and Vice Provost for Graduate Studies, Assistant Vice President for Research, and Professor of Chemistry at Colorado State University-Fort Collins since 1991. He is a member of the American Chemical Society (Board of Directors 2009-12), AAAS, and a life member of SACNAS.

### **Eve Fine**

Researcher, WISELI University of Wisconsin – Madison

Eve Fine received her PhD from the History of Science Department at the University of Wisconsin–Madison. Her research and teaching focus on the history of women as practitioners of science and medicine, the history of women as subjects of scientific research and/or theories, and the history of women as recipients and purveyors of medical advice. As a researcher for WISELI: the Women in Science and Engineering Institute at the University of Wisconsin-Madison, Dr. Fine relies on her historical background and training to identify and analyze research from a broad array of disciplines that pertains to contemporary women and underrepresented minorities in science, to disseminate current research to academic communities, and to participate in WISELI's workshops. These include Searching for Excellence and Diversity: A Workshop for Search Committees and Assessing and Enhancing Department Climate: A Workshop for Department Chairs. These workshops aim to improve the hiring and retention of a diverse faculty and staff. Dr. Fine also writes WISELI's educational booklets and brochures, has authored several articles and a book chapter on the history of women physicians, and is co-author of several articles on

increasing the representation of women in science. Together with Jo Handelsman, PhD, Yale University, she recently published Searching for Excellence and Diversity: A Guide for Search Committees, National Edition (2012).

# **Rigoberto Hernandez**

OXIDE Director and Professor, School of Chemistry and Biochemistry Georgia Institute of Technology

Dr. Rigoberto Hernandez is a Professor in the School of Chemistry and Biochemistry at the Georgia Institute of Technology and a co-director of the Center for Computational Molecular Science and Technology. He holds a B.S.E. in Chemical Engineering and Mathematics from Princeton University and a Ph.D. in Chemistry from the University of California, Berkeley. He is the recipient of a National Science Foundation (NSF) CAREER Award (1997), Research Corporation Cottrell Scholar Award (1999), and the Alfred P. Sloan Fellow Award (2000). He is a Fellow of the American Association of Arts and Science (AAAS, 2004), the American Chemical Society (ACS, 2010), and the American Physical Society (APS, 2011).

His research area can be broadly classified as the theoretical and computational chemistry of systems far from equilibrium. This includes a focus on microscopic reaction dynamics and their effects on macroscopic chemical reaction rates in arbitrary solvent environments. His current projects involve questions pertaining to the chemical reaction dynamics of thermosetting polymers and living polymers, the diffusion of mesogens in colloidal suspensions and liquid crystals, the transport and control of adsorbates on a surface, the binding dynamics of proteins, the structure and transport in gas-expanded liquids and the dynamics of protein folding and rearrangement. Dr. Hernandez's research programs are currently funded by the NSF, AFOSR, and the Kimberly Clark Corp.

### Janice M. Hicks

Deputy Division Director, Division of Materials Research National Science Foundation

Janice Hicks has an A.B. from Bryn Mawr College and a Ph.D. in physical chemistry from Columbia University (1986) and was a postdoctoral fellow in the physics and chemistry departments at the University of Pennsylvania. For a decade, she was on the faculty of Georgetown University, reaching associate professor with tenure. Her research involved nonlinear optical laser studies of surface chemistry and physics. Dr. Hicks was recipient of the NSF Presidential Young Investigator Award and a Sloan Foundation Fellowship. For the past twelve years, she has worked at the National Science Foundation in Arlington VA, where she served as a Program Officer and Deputy Director in the Division of Chemistry, and more recently as the Deputy Director of the Division of Materials Research. She is a fellow of the American Association for the Advancement of Science (AAAS). Throughout

her career she has been interested in broadening the participation of women, minorities and LGBT people in science.

### **Paul Lyon Houston**

Dean, College of Sciences Georgia Institute of Technology

Paul Houston is Dean of the College of Sciences at the Georgia Institute of Technology, a post he assumed in 2007. He is also a Professor in the School of Chemistry and Biochemistry at Georgia Tech. Prior to taking these positions, he was at Cornell University for 32 years, most recently as the Peter J. W. Debye Professor of Chemistry. He joined Cornell in 1975 following undergraduate study at Yale, doctoral work at MIT, and postdoctoral research at the University of California at Berkeley.

Houston was a Senior Associate Dean from 2002-2005 in the College of Arts and Sciences at Cornell, where his job included working with roughly half the programs and departments in the College, from such diverse areas as Medieval Studies, Theatre Arts, and English, to Sociology and Economics, to Molecular Biology and Genetics. Faculty hiring, tenure and promotion, and budgetary matters occupied half of his time. This half is now occupied with teaching chemistry at the graduate and undergraduate levels.

Houston was also Chair of the Cornell Department of Chemistry and Chemical Biology from 1997-2001, and previously served as Senior Associate Editor of the *Journal of Physical Chemistry* and as Chairman of the Division of Laser Science of the American Physical Society. His research centers on the interaction of light with matter, particularly how light causes or can be used to study chemical reactions in such environments as the upper atmosphere and in combustion flames. He is also interested in using light to study materials, both inorganic, such as light-emitting devices, and organic, such as biofilms. He has authored or co-authored approximately 150 publications in the field of physical chemistry and a textbook on chemical kinetics. In 2001 he shared the Herbert Broida Prize of the American Physical Society with colleague David W. Chandler. In 2002 he was elected as a Fellow of the American Association for the Advancement of Science, and in 2003 as a Fellow of the American Academy of Arts and Sciences.

What little is left of his waking day is devoted to his hobbies and family. He is married to Barbara Deutsch Lynch, Visiting Associate Professor in the Sam Nunn School of International Affairs and the Department of City and Regional Planning at Georgia Tech. The family includes three daughters, each of whom is also a professor, one in ecology, one in oceanography, and one in political science. Four grandchildren keep the six parents and two grandparents more than a little busy. Professor Houston often seeks refuge in his wood shop.

# Eric V. Patridge

President, Out in Science, Technology, Engineering & Mathematics (oSTEM) Incorporated Research Associate, Yale Center for Molecular Discovery, Yale University

Eric Patridge is a research associate at Yale University's Center for Molecular Discovery, where he contributes to high-throughput research to identify new pharmaceuticals to combat cancer and other metabolic diseases. His scientific background crosses multiple disciplines and includes expertise in protein chemistry, pharmacology, enzymology, electrochemistry, bioinformatics, and computational chemistry. Aside from his scientific work, he is also founder of the LGBT STEM society Out in Science, Technology, Engineering and Mathematics (oSTEM) and currently serves as president of the national board (oSTEM Incorporated). Eric received a bachelors degree from Skidmore College with a dual major in chemistry and molecular & cellular biology, and he obtained a doctorate in Integrative Biosciences (Chemical Biology) from the Pennsylvania State University. As a pioneer for integrative scientific endeavors, he remains dedicated to multi-disciplinary research and to sustainable infrastructure for mentorship.

### **Roderic Ivan Pettigrew**

Director, National Institute of Biomedical Imaging and Bioengineering National Institutes of Health

Roderic I. Pettigrew, Ph.D., M.D., is the first Director of the National Institute of Biomedical Imaging and Bioengineering at the NIH. Prior to his appointment at the NIH, he was Professor of Radiology, Medicine (Cardiology) at Emory University and Bioengineering at the Georgia Institute of Technology and Director of the Emory Center for MR Research, Emory University School of Medicine, Atlanta, Georgia. Dr. Pettigrew is known for his pioneering work at Emory University involving four-dimensional imaging of the cardiovascular system using magnetic resonance (MRI). Dr. Pettigrew graduated cum laude from Morehouse College with a B.S. in Physics, where he was a Merrill Scholar. He earned an M.S. in Nuclear Science and Engineering from Rensselaer Polytechnic Institute and a Ph.D. in Applied Radiation Physics from the Massachusetts Institute of Technology, where he was a Whitaker Harvard-MIT Health Sciences Scholar. Subsequently, he received an M.D. from the University of Miami School of Medicine in an accelerated twoyear program, did an internship and residency in internal medicine at Emory University and completed a residency in nuclear medicine at the University of California, San Diego. Dr. Pettigrew then spent a year as a clinical research scientist with Picker International, the first manufacturer of MRI equipment, where he helped develop their first cardiac imaging technology. In 1985, he joined Emory as a Robert Wood Johnson Foundation Fellow with an interest in non-invasive cardiac imaging. His current research focuses on integrated imaging and predictive biomechanical modeling of coronary atherosclerotic disease. Dr. Pettigrew's awards include membership in Phi Beta Kappa, the Bennie Award (Benjamin E. Mays) for Achievement, and being named the Most Distinguished Alumnus of the University of Miami (1990). He was the Radiological Society of North America's 75th Diamond Jubilee

Eugene P. Pendergrass New Horizons Lecturer. He is also the recipient of the Herbert Nickens Award of the ABC, the Pritzker Distinguished Achievement Award of the Biomedical Engineering Society, and the Distinguished Service Award of the National Medical Association. He has been elected to membership in two components of the U.S. National Academies: the Institute of Medicine, and the National Academy of Engineering.

# Victoria C. Plaut

Professor, Berkeley Law University of California, Berkeley

Victoria C. Plaut, Ph.D., a social and cultural psychologist, is Professor of Law and Social Science at Berkeley Law, where she directs the Culture, Diversity, and Intergroup Relations Lab. She is also affiliated faculty in the Psychology Department. Her research on social psychological processes related to diversity and inclusion has been published in the field's top journals, including *Psychological Science* and *Journal of Personality and Social Psychology*. Recent projects include studies of implications of colorblindness and multiculturalism for intergroup relations and minority group outcomes, diversity climate and resistance in organizations, feelings of inclusion and belonging in organizational and education environments, and gender diversity in science, among others. She is currently finishing a co-edited volume on diversity ideologies in organizations and co-editing a special issue of *Cultural Diversity and Ethnic Minority Psychology* on racial and ethnic minorities in the workplace. She obtained her Ph.D. in psychology from Stanford, M.Sc. from the London School of Economics, and B.A. from Harvard.

### Denise Sekaquaptewa

Professor, Department of Psychology University of Michigan

Denise Sekaquaptewa, Ph.D., is Professor of Psychology at the University of Michigan, Ann Arbor. She also serves as Associate Director of the University of Michigan ADVANCE program. Dr. Sekaquaptewa received her undergraduate degree in psychology from Arizona State University and her master's and doctoral degrees from the Ohio State University. Her research in experimental social psychology focuses on stereotyping and intergroup dynamics, in particular how being in the numerical minority in terms of gender or race influences academic outcomes and experiences. The consequences of unintended stereotyping for intergroup behavior and individual performance in stereotyped domains are also a focus of her work. She has served as an Associate Editor for the journals *Cultural Diversity and Ethnic Minority Psychology*, and *Personality and Social Psychology Bulletin*.

# Timothy M. Swager

OXIDE Assistant Director and John D. MacArthur Professor, Department of Chemistry MIT

Timothy M. Swager is the John D. MacArthur Professor of Chemistry at the Massachusetts Institute of Technology. A native of Montana, he received a BS from Montana State University in 1983 and a Ph.D. from the California Institute of Technology in 1988. After a postdoctoral appointment at MIT he was on the chemistry faculty at the University of Pennsylvania and moved back to MIT in July of 1996 as a Professor of Chemistry and served as the Head of Chemistry at MIT from 2005-2010. He has published over 275 peerreviewed papers and serves on multiple editorial, governmental and corporate scientific advisory boards.

Swager has received a number of honors including: the John Scott Award (2008), Election to the National Academy of Sciences (2008), Honorary Doctorate from Montana State University (2008), the Lemelson-MIT Award for Invention and Innovation (2007), Election to the American Academy of Arts and Sciences (2006), the Christopher Columbus Foundation Homeland Security Award (2005), and The Carl S. Marvel Creative Polymer Chemistry Award (ACS, 2005).

### Valerie Jones Taylor

Assistant Professor, Department of Psychology Spelman College

Valerie Jones Taylor received a doctorate in social psychology from Stanford University in 2009, where she was advised and mentored by Dr. Claude M. Steele. Upon completion of her graduate training, she was a National Science Foundation Postdoctoral Fellow (2009 -2011) at Princeton University, under the guidance of Dr. J. Nicole Shelton. Dr. Taylor began her tenure as an assistant professor of psychology at Spelman College in the fall of 2011 and was awarded a Ford Postdoctoral Fellowship (2011 – 2012) to support her research at Spelman. Broadly, Dr. Taylor's research explores how and when identity threat (e.g., racial or gender stereotyping) may be advantageous or detrimental to people's cognitive and behavioral outcomes. In one line of research, she examines the conditions under which threatening academic and professional environments motivate members of negatively stereotyped and numerically underrepresented groups to work hard to succeed and to persist in these settings—rather than cause them to disengage or to give up. In a second line of research, she applies her work on threat and motivation to interpersonal interactions to explore how people manage interracial (vs. intraracial) interactions after witnessing samerace peers commit stereotype-confirming acts. Finally, Dr. Taylor's third line of research continues the development of stereotype threat theory by examining: (1) the conditions under which achievement gaps are induced and eliminated and (2) the cumulative effect of stereotype threat on stereotyped students' learning. Dr. Taylor was recently awarded a

National Science Foundation Research Grant (2012 – 2015) to continue her work at Spelman College.

# Shannon Watt

OXIDE Research & Program Manager and Research Scientist, School of Chemistry and Biochemistry Georgia Institute of Technology

Dr. Shannon Watt combines her training in chemistry (specifically conjugated polymer synthesis and characterization) and experience in academic diversity administration in her position as OXIDE Research & Program Manager. She holds B.S./M.S. degrees and the Ph.D. in chemistry from Carnegie Mellon University and the Georgia Institute of Technology, respectively. She founded the Georgia Tech Women in Chemistry Committee to provide support for, raise awareness of, and propose/implement solutions to the challenges faced by female chemistry trainees. The Committee earned the American Chemical Society's Stanley C. Israel Award for Advancing Diversity in the Chemical Sciences (2006) and ChemLuminary Award for Outstanding Single Event Promoting Women (2007).

She continued her conjugated polymer characterization research as a National Science Foundation Discovery Corps Postdoctoral Fellow at the University of Michigan, where she served on the University-wide President's Advisory Commission on Women's Issues. As part of her Fellowship, she collaborated with the University of Michigan ADVANCE program to assess the needs of Chemistry-related graduate students and postdoctoral associates from diverse backgrounds and to address those needs by establishing the University of Michigan Chemistry Professional Development Organization. After serving on the chemistry faculty at Xavier University of Louisiana, she joined OXIDE in August 2012.