

SPEAKER BIOGRAPHIES

Keynote Address

Archie Ervin

Dr. Archie Ervin is a native of Brevard, North Carolina and received his early education in the public schools of that city. He earned his BA and MA degrees in Political Science from Appalachian State University, and earned his Ph.D. degree in Educational Organizations and Policy Studies from the University of North Carolina at Chapel Hill.

Dr. Ervin served as Associate Provost for Diversity and Multicultural Affairs and Chief Diversity Officer for the University of North Carolina at Chapel Hill. He was a member of the Chancellor's cabinet and was the senior advisor to the Chancellor and Executive Vice Chancellor and Provost on diversity policies, programs and issues. He also worked with all academic deans and other senior administrative staff to address the University's diversity goals and priorities as articulated in UNC's Diversity Plan. Prior to his appointment to his past position, Dr. Ervin served as the Assistant to the Chancellor for Minority Affairs.

Dr. Ervin also served as the Director of the Office for Diversity and Multicultural Affairs. His office has responsibilities for recruitment and outreach programs to enhance diversity and inclusion, multicultural educational programs, diversity assessment, consultation and education for faculty, staff, and student communities.

Throughout his 20+ year tenure at UNC- Chapel Hill, Dr. Ervin has chaired and served on numerous university committees, ad hoc groups, and advisory boards. He has provided administrative leadership for the development of a variety of programs and inclusive strategies that promote access and diversity for all citizens of the state of North Carolina. During his tenure, the University has consistently ranked near the top among research universities for having the highest percentage of African Americans enrolled in the first year class among Research I universities (Journal of Blacks in Higher Education, 2008).

During 2004-2005, Dr. Ervin chaired the Chancellor's Task Force on Diversity that completed an assessment of the state of diversity at the University. In 2005 -2006, Dr. Ervin chaired the committee that utilized the research from the assessment to draft a diversity action plan. In the fall of 2006, the University implemented its first university-wide Plan for Diversity as way to monitor and benchmark its progress for addressing goals for diversity.

Dr. Ervin regularly presents at national conferences and provides organizational consulting on diversity and inclusion strategies in higher education. He is a member of the Board of Directors of the National Association of Diversity Officers in Higher Education (NADOHE) where he serves as Membership Chair, and has also served as the institutional representative with the Hispanic Association for Colleges and Universities (HACU). Dr. Ervin provided leadership for the formation of a state wide association of diversity officers in North Carolina.

Dr. Ervin currently serves as Georgia Tech's inaugural vice president for Institute Diversity. After a national search, President G. P. "Bud" Peterson announced on October 5, 2010 the appointment of Dr. Ervin. He assumed his full time roll on January 3rd, 2011. The start of a new year will bring many changes to the Office of Institute Diversity, starting with Dr. Ervin's position.

Diversity Equity in the Meritocracy

Rigoberto Hernandez

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 for the Advancement of Science (AAAS, 2004), and the American Chemical Society (ACS, 2010). 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.

Session 1: Contributing Factors

Denise Sekaquaptewa

Denise Sekaquaptewa, Ph.D., is an Associate Professor of Psychology at the University of Michigan, Ann Arbor. She also serves as Director of the Honors Program in Psychology and Brain, Behavior and Cognitive Science. 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 journal *Cultural Diversity and Ethnic Minority Psychology*, and is an incoming Associate Editor for *Personality and Social Psychology Bulletin*.

Fred Smyth

Dr. Smyth directs the Full Potential Initiative, an NSF-funded longitudinal study of the development and influence of implicit attitudes about intellectual ability and academic belonging. He and his colleagues have found that biased implicit associations in the minds of students, teachers and scientists are not simple functions of the stereotypes in their environment, but vary predictably with their personal experiences and identities. Female and male scientists, for example, differ greatly in the strength of their implicit stereotype of science as the domain of men (weak stereotyping among the women but strong among the men), even though these women and men are equally aware of the cultural stereotype. An ongoing focus of his research is on the causal role that such implicit associations may play in shaping identities and contributing to perseverance in scientific training and careers.

Virginia Valian

Dr. Virginia Valian is Distinguished Professor of Psychology at Hunter College and is a member of the doctoral faculties of Psychology, Linguistics, and Speech-Language-Hearing Sciences at the CUNY Graduate Center. She is also co-director of Hunter's Gender Equity Project.

Dr Valian works in two domains: first and second language acquisition and gender equity. In language acquisition she studies syntactic competence and performance, using a variety of methods and investigating a range of languages. In gender equity she studies the reasons behind women's slow advancement in the professions and proposes remedies for individuals and institutions. She is currently particularly interested in what determines who receives awards and prizes.

Dr Valian's book *Why So Slow? The Advancement of Women* has been hailed by reviewers as "compelling", "scholarly and convincing", "accessible and lively", and "a breakthrough in the discourse on gender". Dr Valian's audiences have ranged from natural scientists such as chemists and astronomers to theater actors and directors. Her science-based approach has been featured in the *New York Times*, the *Washington Post*, *Nature*, *Scientific American*, *The Women's Review of Books*, and many other journals and magazines. She has also appeared on NPR, the BBC, and The News Hour with Jim Lehrer.

Session 2: Interventions

Frank Dobbin

Dr. Frank Dobbin joined the Harvard sociology department in February of 2003, after spending fifteen years in the sociology department at Princeton. He received his B.A. from Oberlin College in 1980 and his Ph.D. from Stanford University in 1987.

Professor Dobbin studies organizations, economic behavior, and public policy. His *Inventing Equal Opportunity* shows how American employers defined what it meant to discriminate, through an historical survey of what employers were doing to practice "equal opportunity" and later "diversity management."

In his most recent work, with Alexandra Kalev, Dobbin has been developing an evidence-based approach to diversity management. Time describes some of the key findings about the efficacy of programs that make managers part of the solution, such as mentoring programs and diversity taskforces, and the failure of programs that label them as part of the problem, such as diversity training and diversity performance evaluations for managers. Those findings are summarized in an article in Contexts. The research has been covered in The Washington Post, the Boston Globe, Le Monde, and National Public Radio.

Dobbin's work in economic sociology more generally is both historical and contemporary. His book, *Forging Industrial Policy: United States, Britain, and France in the Railway Age* (winner of the American Sociological Association's 1996 Max Weber Award), traces nations' modern industrial strategies to early differences in their political systems. In 2004 he published two edited volumes. *The New Economic Sociology: A Reader* contains old and new classics in economic sociology, and begins with a synthetic overview of the field. *The Sociology of the Economy*, Russell Sage Foundation Press, compiles new research in economic sociology from leading scholars. In *The Global Diffusion of Markets and Democracy* (coedited with Beth Simmons and Geoffrey Garrett), Dobbin and colleagues explore the conditions that favored the rise of neoliberal policies in the post-war period.

Jean Stockard

Dr. Jean Stockard received her Ph.D. in Sociology from the University of Oregon in 1974 and then joined the University's faculty, teaching in the Departments of Sociology and Planning, Public Policy, and Management. Currently, she holds the rank of Professor Emerita, teaches part-time at the University and does research for educational and environmental non-profit groups. In recent years she has helped the COACH project by analyzing data evaluating their efforts. Much of her other writing has focused on the ways in which variations in the environments in which people live and interact influence their social, emotional, and physical well-being. In 2002-3 she served as President of the Pacific Sociological Association, the major professional association of sociologists in the western United States, Canada, and Mexico.

Sheryl Burgstahler

Dr. Sheryl Burgstahler is an Affiliate Professor in the College of Education at the University of Washington in Seattle. Her teaching and research focus on the successful transition of students with disabilities to college and careers and on the application of universal design to technology, learning activities, physical spaces, and student services in educational settings. She founded and continues to direct the DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Center and the Access Technology Center. These two centers promote (1) the use of mainstream and assistive technology and other interventions to support the success of students with disabilities in postsecondary education and careers and (2) the development of facilities, computer labs, academic and administrative software, websites, multimedia, and distance learning programs that are welcoming and accessible to individuals with disabilities. The ATC focuses efforts at the UW; the DO-IT Center reaches national and international audiences with the support of federal, state, corporate, foundation, and private funds. Dr. Burgstahler's current projects include the Alliance for Students with Disabilities in Science, Technology, Engineering, and Mathematics (AccessSTEM), the Alliance for Access to Computing Careers (AccessComputing), the RDE Collaborative Dissemination project, AccessDL, and the Center for Universal Design in Education. Dr. Burgstahler and her projects have received many awards, including the National Information Infrastructure Award in Education, the President's Award for Mentoring, the Golden Apple Award in Education, the Program Recognition award of the Association of Higher Education and Disability, and the Harry J. Murphy Catalyst Award.

Dr. Burgstahler has published articles and delivered presentations at national and international conferences that focus on universal design of distance learning, websites and multimedia, computer labs, instruction, student services, and other applications in education; and the management of electronic communities, work-based learning activities and transition programs for youth with disabilities. She is the author or co-author of eight books on using the Internet with pre-college students and directing e-mentoring and transition programs and lead editor of the book *Universal Design in Higher Education: From Principles to Practice*. Dr. Burgstahler has degrees in mathematics, education, and administration of higher education. She has taught precollege mathematics and postsecondary mathematics, computer programming, assistive and accessible technology, and preservice/in-service courses for teachers on mathematics instruction and technology applications.

Session 3: Reports from Previous Workshops

Ken Houk

Dr. K. N. Houk was born in Nashville, Tennessee, in 1943. He received his A.B. (1964), M.S. (1966), and Ph.D. (1968) degrees at Harvard, working with R. A. Olofson as an undergraduate and R. B. Woodward as a graduate student in the area of experimental tests of orbital symmetry selection rules. In 1968, he joined the faculty at Louisiana State University, becoming Professor in 1976. In 1980, he moved to the University of Pittsburgh, and in 1986, he moved to U.C.L.A., becoming a Distinguished Professor in 1987. From 1988-1990, he was Director of the Chemistry Division of the National Science Foundation. He was Chairman of the UCLA Department of Chemistry and Biochemistry from 1991-1994.

Professor Houk received the Akron American Chemical Society (ACS) Section Award in 1984. He was awarded the Arthur C. Cope Scholar Award of the ACS in 1988, the James Flack Norris Award in Physical Organic Chemistry of the ACS in 1991, the Schrödinger Medal of the World Association of Theoretically Oriented Chemists (WATOC) in 1998, the Tolman Medal of the Southern California Section of the ACS in 1999, the ACS Award for Computers in Chemical and Pharmaceutical Sciences in 2003, and the Arthur C. Cope Award of the ACS in 2009. He was a Camille and Henry Dreyfus Teacher Scholar, a Fellow of the Alfred P. Sloan Foundation, the von Humboldt Foundation U.S. Senior Scientist in 1981, an Erskine Fellow in New Zealand in 1993, the Lady Davis Fellow at the Technion in Haifa, Israel in 2000, and a JSPS Fellow in Japan in 2001. He was elected to the American Academy of Arts and Sciences in 2002 and the International Academy of Quantum Molecular Sciences in 2003. He is a Fellow of the AAAS, the ACS, and the WATOC. At UCLA, he was named Saul Winstein Chair in Organic Chemistry in 2009, and he was elected a member of the National Academy of Sciences in 2010.

Houk received the L.S.U. Distinguished Research Master Award in 1968, was named the Faculty Research Lecturer at UCLA for 1998, received the Bruylants Chair from the University of Louvain-la-Neuve in Belgium in 1998, and was awarded an honorary doctorate (Dr. rer. nat. h. c.) from the University of Essen in Germany in 1999.

Houk has served on the Advisory Boards of the Chemistry Division of the National Science Foundation, the ACS Petroleum Research Fund, and a variety of journals, including *Accounts of Chemical Research*, the *Journal of the American Chemical Society*, the *Journal of Organic Chemistry*, *Chemical and Engineering News*, the *Journal of Computational Chemistry*, the *Journal of Chemical Theory and Computation*, *Chemistry - A European Journal*, and *Topics in Current Chemistry*. He has been a member of the NIH Medicinal Chemistry Study Section and the NRC Board of Chemical Sciences and Technology. He was Chair of the Chemistry Section of the AAAS in 2000-2003. He served as Chair of the NIH Synthesis and Biological Chemistry-A Study Section in 2008, and is a Senior Editor of *Accounts of Chemical Research*. He is Director of the UCLA Chemistry-Biology Interface Training Program, an NIH-supported training grant, and a member of the UCLA Molecular Biology Institute.

Professor Houk is an authority on theoretical and computational organic chemistry. His group develops rules to understand reactivity, computationally models complex organic reactions, and experimentally tests the predictions of theory. He collaborates prodigiously with chemists all over the world. Among current interests are the theoretical investigations and design of enzyme-catalyzed reactions, the quantitative modeling of asymmetric reactions used in synthesis, the mechanisms and dynamics of pericyclic reactions and competing diradical processes, and the molecular dynamics and reactions of hemicarcerands and other host-guest complexes. He has published approximately 800 articles in refereed journals and is among the 100 most-cited chemists.

Isiah Warner

Dr. Warner is Vice Chancellor for Strategic Initiatives, LSU System Boyd Professor, Philip West Professor of Chemistry, and HHMI Professor. He was a tenured professor at Texas A&M and was named Samuel Candler Dobbs Professor at Emory University in 1987. He has 300 published or submitted refereed articles and has been recognized as being among the top cited chemists in the world. He has been issued eight patents for his work and has two others pending. Recent honors include: 2009 American Chemical Society Fellow - Inaugural Class; 2009 Minority Access National Role Model Award; 2008 ACS Division of Analytical Chemistry Spectrochemical Analyses Award; 2007 Association of Analytical Chemists (Anachem) Award; 2006 Southern Chemist Award. Professor Warner has also been actively involved in developing new educational models involving metacognitive learning strategies and the use of a mentoring ladder that extends the impact of an individual mentor.

Karl Booksh

Dr. Karl S. Booksh is a Professor in the Department of Chemistry at the University of Delaware. He holds a B.S. in Chemistry from the University of Alaska (1990), and a Ph.D. in Analytical Chemistry for the University of Washington (1994). His honors include a National Science Foundation CAREER Award (1997-2001), and a Camille and Henry Dreyfus Award (1996). The overarching theme of his research group is the development of in-situ chemical sensors for environmental, biomedical, and industrial process monitoring. His research is predicated on the belief that it is better to build small chemical sensors capable of reliable measurements in the field or in the process than to collect samples for future laboratory analysis. Booksh is focusing largely on fiber optic surface plasmon resonance, Raman, and fluorescence sensor. Chemometric analysis of collected data and multivariate sensor calibration are also major research directions. He is the author of over 80 peer-reviewed articles.

Lawrence Wagner

Larry Wagner is currently President of LWSN Consulting Inc., formed in late 2008. LWSN provides training in communications skills and diversity training along with IC Failure Analysis consulting. Larry was the 2006-2007 President of ASM International and on the ASM Board of Trustees for 6 years. He was a founder and the first President of the Electronic Device Failure Analysis Society, an affiliate society of ASM International, as well as the first editor of the Electronic Devices Failure Analysis Newsletter. He retired after 30 years in various areas of IC Failure Analysis at Texas Instruments including management of the worldwide Quality FA labs. He also represented the GLBT diversity initiative on the TI Diversity Network for many years and led the TI Diversity Leadership Conference for two years. He was the first person recognized with the GLBT Award by NOGLSTP. He has published extensively including a book, "IC Failure Analysis: Tools and Techniques", several book chapters, numerous international tutorials and presentations. Larry graduated from Marquette University with a BS in Chemistry and from Purdue University with a PhD in Physical Chemistry. He joined Texas Instruments after two years at Argonne National Lab.

Donna Nelson

Dr. Donna Nelson, is a professor of chemistry at the University of Oklahoma. She took her BS in chemistry at the University of Oklahoma in 1974, obtained her PhD in chemistry at the University of Texas at Austin with Michael J. S. Dewar in 1980, did her postdoctorate at Purdue University with Herbert C. Brown during 1980-1983, and joined the University of Oklahoma in 1983. She was a Faculty Fellow in the OU Provost's Office 1989-1990, a Visiting Professor at MIT 2003, and assistant to American Chemical Society President Dr. Ann Nalley since 2005.

Dr. Nelson's current research pertains to energy and scientific workforce development and she frequently speaks on the interrelationship of both topics. She has over 100 publications. She has received several honors, including Fulbright Scholar, ACS Fellow, NSF ADVANCE Leadership Award, SACNAS Distinguished Scientist of the Year, Women's eNews "21 Leaders for the 21st Century," AAAS Fellow, Guggenheim Award, National Organization for Women "Woman of Courage" Award, Ford Foundation Fellowship, Oklahoma Outstanding Professor Award, Minority Health Professions Foundation Hall of Fame Inductee, Sigma Xi Faculty Research Award, NSF Creativity Extension, and many keynote talks. In the last 4 years, she has spoken at over 100 national meetings of professional societies and organizations, US Congress Capitol Hill briefings, teleconferences, universities, and radio and TV programs, such as McNeil-Lehrer News Hour.

Her scientific workforce development research entailed surveys of faculty race/ethnicity, gender, and rank in "Top 50" departments in each of 15 science and engineering disciplines. Comparing her faculty data vs NSF PhD and BS attainment revealed that women and minorities are much less represented among professors than among degree recipients. Her faculty data are complete populations, rather than samples, so they accurately reveal the small number or absence of underrepresented groups and compare across disciplines. The Nelson Diversity Surveys final report is at <http://chem.ou.edu/~djn/diversity/briefings/Diversity%20Report%20Final.pdf>.

Her chemical research involves functionalizing single walled carbon nanotubes (SWNTs), which has applications in energy research and technology development. Recently her group reported the first COSY NMR spectrum of covalently functionalized SWNTs. More information is available at <http://chem.ou.edu/~djn/djn.html>

Eric Kaler

Dr. Eric W. Kaler earned a B.S. degree in Chemical Engineering (with honors) from the California Institute of Technology in 1978 and a Ph.D. in Chemical Engineering from the University of Minnesota in 1982. He is the Provost and Senior Vice President for Academic Affairs at Stony Brook University, as well as the Vice President for Brookhaven Affairs. His research interests are in the area of surfactant and colloid science, statistical mechanics, and thermodynamics. Dr. Kaler has received numerous awards for his research, including the American Chemical Society (ACS) Award in Colloid or Surface Chemistry in 1998. He is a Fellow of both the American Association for the Advancement of Science and the ACS. He has authored or co-authored over 200 peer-reviewed papers and holds ten U.S. patents. He was elected to the US National Academy of Engineering in 2010, and will assume the Presidency of the University of Minnesota 1 July 2011.