

Charting Your Path – Speakers' Bios

March 16, 2011, UNC Charlotte, Barnhardt Student Activity Center

◆ **Dr. Joan Lorden, UNC Charlotte, Provost and Vice Chancellor for Academic Affairs**

Joan Lorden, PhD, is the Provost and Vice Chancellor for Academic Affairs at UNC Charlotte. She assumed her role in 2003 and provides leadership for seven colleges, an array of research institutes, and a university-wide graduate school at North Carolina's urban research university. Since joining UNC Charlotte, Joan has led significant growth, including enrollment growth from 19,800 students in 2004-05 to almost 25,000 in 2009-10. The university has seen a 17% growth rate in fulltime faculty and an increase from 12 to 19 doctoral programs.

Before moving to Charlotte, she was Associate Provost for Research and Dean of the Graduate School at the University of Alabama at Birmingham, where she was a Professor of Psychology and directed the university-wide graduate program in neuroscience.

Throughout her career, Dr. Lorden especially has directed initiatives to improve the recruitment and success of women and minority students and faculty in science, technology, engineering and mathematics. She currently serves as the principal investigator for the National Science Foundation ADVANCE Institutional Transformation grant.

Before moving to Charlotte, Dr. Lorden was Associate Provost for Research and Dean of the Graduate School at the University of Alabama at Birmingham, where she was a Professor of Psychology and directed the university-wide graduate program in neuroscience. With funding from National Institutes of Health, NSF, and other agencies, she conducted research in animal models of inherited movement disorders and was awarded the Ireland Prize for Scholarly Distinction by UAB. She has been a member of review panels and study sections at NIH, NSF, Department of Defense, and private agencies. While at UAB, she established one of the first offices for postdoctoral scholars.

She has chaired the Boards of Directors of the Council of Graduate Schools (CGS) and Oak Ridge Associated Universities and served as the Dean in Residence at the Division of Graduate Education at NSF and as president of the Conference of Southern Graduate Schools. She was a member of the National Research Council's Committee on the Methodology for the Study of the Research Doctorate. She is a member of the Society for Neuroscience, the American Psychological Association, and the American Psychological Society. She received a B.A. from the City College of New York and a Ph.D. in psychology from Yale University.

◆ **Dr. Nancy Tuana, Penn State, Director, Rock Ethics Institute (Plenary Speaker)**

Dr. Tuana is the founding director of Penn State's Rock Ethics Institute and DuPont/Class of 1949 Professor of Philosophy, Science, Technology, and Society, and Women's Studies. Dr. Tuana is a philosopher of science and feminist science studies theorist who has been a long time advocate of interdisciplinary research and education.

She is part of a collaborative research team at Penn State whose focus has included: developing a more robust model of research ethics that more adequately reflects the impacts of ethical issues in scientific practice; examining the impact of including ethical uncertainty in global climate change integrated assessment modeling (IAM) with the goal of using this new IAM to address how uncertainty about potential climate threshold responses and future ethical value judgments affects the choice of efficient climate risk management strategies; and a research project that includes ethical analysis in modeling concerning sea-level rise due to global climate change.

The Rock Ethics Institute has as its mission to promote ethical awareness and inquiry across the University by integrating the study of ethics throughout the curriculum and ensuring that integrity is a part of the culture of our community. It has been Dr. Tuana's goal as Director to ensure that one of the legacies of a Penn State education is ethical integrity and ethical leadership. The Rock Ethics Institute, under her direction, had also taken the lead nationally and internationally in developing innovative interdisciplinary ethical research. Current research foci include climate change ethics, bioethics, and K-12 moral literacy.

◆ **Dr. Brenda Allen, Winston-Salem State University, Provost and Vice Chancellor for Academic Affairs**

Dr. Allen was named Provost and Vice Chancellor for Academic Affairs December 15, 2008. Dr. Allen is also a tenured member of the faculty, holding the title of Professor of Psychology in the Department of Behavioral Sciences and Social Work. Prior to her appointment, Dr. Allen held the position of Associate Provost and Director of Institutional Diversity at Brown University in Providence, Rhode Island

Dr. Allen's primary responsibility as Provost and chief academic officer is to provide executive level leadership for the institution as it pursues its academic mission. Dr. Allen is responsible to the Chancellor for the overall coordination and effective implementation of the University's academic programs, and exercises leadership in promoting quality instruction, research, and university and public service. She has responsibility for developing and administering the academic policies and regulations of the University, and in collaboration with other senior officers, she has lead responsibility for the development of the University's annual budget and long-term financial plans.

Prior to joining Brown University, Dr. Allen held a number of academic and administrative positions at Smith College in Northampton, Massachusetts. Dr. Allen also spent three years at Yale University in New Haven, Connecticut where she held several positions. Dr. Allen holds a bachelor's degree in Psychology from Lincoln University in Lincoln, PA, a master's degree in Experimental Psychology and a doctorate in Developmental Psychology, both from Howard University in Washington, DC.

◆ **Dr. Jay Raja, UNC Charlotte, Senior Associate Provost**

Jayaraman "Jay" Raja, has been senior associate provost at UNC Charlotte since June 2008. Previously, Raja was chair of the Department of Mechanical Engineering and Engineering Science. When appointing Raja to his position, Provost Joan Lorden noted that he had served eight years as a highly successful department chair. Of particular note was his ability to create an environment conducive to student and faculty success, as a leader who works in a collegial fashion to translate a strategic vision into plans with practical outcomes.

Raja joined the University in 1989 as an associate professor in the William States Lee College of Engineering and advanced through the ranks to become professor and department chair. He earned a doctorate in mechanical engineering from the Indian Institute of Technology, Madras, and bachelor's and master's degrees from the University of Madras.

Raja is an international expert in the area of surface and form metrology with applications to manufacturing process control and functional performance of engineering components. His work on surface and form metrology has been used in the automotive, film and microelectronics industry. Government agencies, such as the National Science Foundation and the National Institute of Standards and Technology, and companies, such as Cummins, Caterpillar, Ford, Kodak, Veeco and Mhar-Federal, have funded his research programs.

◆ **Dr. Alan White, East Carolina University, Dean of the Thomas Harriott College of Arts & Sciences**

Alan R. White has been Dean of Thomas Harriot College of Arts and Sciences at East Carolina University, in Greenville, NC since August 2005. Previously, Dr. White served as Dean of the College of Science and Mathematics at North Dakota State University in Fargo, ND (2000-2005), and was Chair of the Department of Botany at the same institution (1997-2000).

Dr. White is a plant cell biologist and carbohydrate chemist, with a BS in Biology and a PhD in Botany from the University of North Carolina at Chapel Hill. After earning his PhD, Dr. White joined the North Carolina Research Triangle Institute's Chemistry and Life Sciences Group as a Postdoctoral Research Associate. He also was a National Institutes of Health Postdoctoral Fellow in the Department of Chemistry at the

University of Colorado, Boulder. Dr. White has held faculty positions at Marshall University, North Dakota State University and East Carolina University. He has extensive published research supported by extramural funds.

In addition to his research on plant cell wall structure and synthesis, Dr. White has been a key contributor in the development and testing of the Virtual Cell, a virtual environment for learning cell biology. He has served on the board of directors of the Council of Colleges of Arts and Sciences since 2009.

◆ **Dr. Christine Grant, North Carolina State University, Associate Dean of Faculty Development and Special Initiatives, College of Engineering**

Dr. Grant is a Professor of chemical and biomolecular engineering at North Carolina State University. She earned her B.S. in chemical engineering from Brown University and her M.S. and Ph.D. in chemical engineering from the Georgia Institute of Technology.

She has received numerous honors for mentoring, including an NSF Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. She also received a National Technical Association Top Women in Science and Engineering Award. She was one of the first chosen as a Boeing Senior Fellow of the National Academy of Engineering's Center for the Advancement of Scholarship on Engineering Education (CASEE).

She has been director of NCSU's Promoting Underrepresented Presence On Science and Engineering Faculties (PURPOSE) Institute, focused on growing the number and success of engineering faculty members from underrepresented groups. She joined NCSU after completing her doctorate. Her research is in surface and interfacial phenomena in the areas of electronic materials and polymers. She has been a leader in the American Institute of Chemical Engineers (AIChE.)

◆ **Dr. Yvette Huet, UNC Charlotte, Director, ADVANCE Faculty Affairs Office, and Professor, Department of Biology**

Dr. Huet is a Professor in the Department of Biology at the University of North Carolina at Charlotte. She is also serving as the Faculty Director for the UNC Charlotte ADVANCE Faculty Affairs Office funded through an NSF ADVANCE Institutional Transformation Award. In addition, she serves as the College of Liberal Arts and Sciences Faculty Development Coordinator.

Dr. Huet received her B.A. Degrees in Human Biology and Microbiology from the University of Kansas (Lawrence, KS) and her Ph.D. with honors in Physiology from the University of Kansas (KUMC, Kansas City, KS). During her graduate years she received a Mid-American Universities Association Teaching Assistantship, a National Science Foundation Minority Graduate Fellowship, and a Ford Foundation Minority Dissertation Fellowship.

Her research interests are in the areas of sex steroid hormone regulation of dimorphism in normal and abnormal physiology and the role of estrogen in early embryo development and embryo-uterine interactions. She has presented her research at numerous conferences and invited talks.

Dr. Huet has an extensive record of leadership and service in the biology and medical communities. She is currently a member of the Community Advisory Board of Mecklenburg Area Partnership for Primary Care Research (MAPPR) and a Member of the National Academy of Sciences Associateship and Fellowships Office Advisory Board. Dr. Huet has led numerous projects and initiatives designed to enhance faculty development and to increase opportunities in science and engineering for members of underrepresented groups and she currently serves as the North Carolina Liaison for the Ford Foundation Fellowship program.

◆ **Dr. Teresa A. Dahlberg, UNC Charlotte, founding Director of the Diversity in Information Technology Institute (DITI) and Professor, Department of Computer Science**

Dr. Dahlberg is Professor of Computer Science and founding Director of the Diversity in Information Technology Institute (DITI). Beginning July 2011, she will assume the role of Associate Dean of Administration and Undergraduate Programs for the College of Computing and Informatics. She received the B.S. degree in Electrical Engineering from the University of Pittsburgh and the M.S. and Ph.D. degrees in Computer Engineering from North Carolina State University. She has over 25 years of experience in computer science and engineering - as an academic researcher and educator, research center director, and industry developer. Since 1999, she has been principal investigator or co-PI for over \$20 million in grants for research and education.

As DITI Director, she has created a set of pipeline programs for student recruitment, education and broadening participation from K-12 through graduate school. She is co-founder and director of the STARS Alliance, a consortium of 20 colleges and universities and over 80 regional partners in industry and the community with a mission to broaden participation in computing through research, service-learning and civic engagement. She leads the STARS Alliance effort to scale to 50 colleges and universities by 2016. She created the *Socially Relevant Computing Research Experiences for Undergraduates* program; the *Pathways from Community College to Graduate School* program; and the *Computing Scholarships for Ph.D. Students* program.

She leads the national formation committee for the Association of Computing Machinery Special Interest Group on Broadening Participation (ACM SIGBP). She serves on the National Science Foundation Computing and Information Science and Engineering Advisory Committee, and she is an expert consultant to the NSF Education Workforce Cluster. As a Computer Science professor, her research and teaching focus on areas of communications networking, computing education, and broadening participation.

◆ **Dr. Robin Coger, UNC Charlotte, Director, Center for Biomedical Engineering Systems; Professor, Mechanical Engineering & Engineering Science; and member, ADVANCE leadership team**

Dr. Coger is the Founder and Director of the Center for Biomedical Engineering Systems (CBES.uncc.edu) at the University of North Carolina at Charlotte. Dr. Coger is also a Professor of Mechanical Engineering and Engineering Science where in June 2009 she completed service to the department as its Interim Chair. Her research is focused on solving design and performance problems related to tissue engineered organs, with special emphasis on liver replacement devices and their safe storage for off-the-shelf availability. Her work has been supported by funding from the National Institutes of Health and the National Science Foundation.

Dr. Coger's research has resulted in extensive publications in the areas of liver tissue engineering and cryopreservation, plus two patent applications. She has received several research and teaching awards over the years, where Dr. Coger has been most recently awarded the 2010 Harshini V. de Silva Award for graduate student mentoring at UNC Charlotte. Dr. Coger is a fellow of both the American Society of Mechanical Engineers and the American Institute for Medical and Biological Engineering. She also serves as a peer reviewer for several journals and agencies – including her current role as an appointed member of the National Institutes of Health Center for Scientific Review's Gene and Drug Delivery Systems study section.

She earned a Bachelor of Science from Cornell University, and holds a Master of Science and Ph.D. degrees from the University of California - Berkeley, all in Mechanical Engineering. Prior to joining the faculty of UNC Charlotte in 1996, Dr. Coger worked as a research fellow at Harvard Medical School and the Department of Surgery at Massachusetts General Hospital in Boston

◆ **Dr. Kim Buch, UNC Charlotte, coordinator of ADVANCE mid-career mentoring effort and an Industrial/Organizational Psychologist, Department of Psychology**

Dr. Buch is an Industrial/Organizational Psychologist at UNC Charlotte. Her research is in the area of organizational and institutional change programs and their effects on individual behaviors and attitudes and on organizational structure and culture. She is involved in many efforts promoting diversity and broadening participation in higher education, particularly in the STEM disciplines. She is a member of the ADVANCE leadership team and is currently leading the ADVANCE mid-career mentoring program. She is a past faculty director of UNC Charlotte ADVANCE.

She is the Psychology Learning Community Coordinator and is lead evaluator for the STARS Alliance (Students & Technology in Academia, Research & Service) for Broadening Participation in Computing, funded by the NSF. She has numerous publications, including recently in *Change: The Magazine of Higher Learning* and the publication *Computer Science Education*.

◆ **Dr. Anita Blowers, UNC Charlotte, Associate Professor, Department of Criminal Justice and Criminology**

Dr. Blowers has a B.A. in sociology and a M.S. and Ph.D. degree in criminal justice from the University at Albany – State University of New York. She is an Associate Professor of Criminal Justice & Criminology and an Affiliated Professor in the Department of Gerontology at UNC Charlotte.

Dr. Blowers' research focuses on elder mistreatment, court processing, criminal justice policy, and the scholarship of teaching and learning. Dr. Blowers teaches a wide array of undergraduate courses including: Introduction to Criminal Justice; American Criminal Courts; Problem & Decisions Criminal Justice; Elderly, Crime and the Criminal Justice System; Movies and the Portrayal of Crime and Justice. At the graduate level Dr. Blowers has taught courses such as: The Criminal Justice System; Prosecution and Adjudication; Elderly, Crime and the Criminal Justice System.

She is coordinator of a peer coaching program designed to assist women associate professors in the social and behavioral sciences in UNC Charlotte's College of Liberal Arts & Sciences.

◆ **Dr. Ron Sass, UNC Charlotte, Associate Professor, Department of Electrical and Computer Engineering; and coordinator of mid-career mentoring efforts among engineering faculty**

Dr. Sass has been an Associate Professor in the Electrical & Computer Engineering department at UNC-Charlotte since 2005. Prior to that he was a Research Assistant Professor at the University of Kansas and an Assistant Professor at Clemson University.

He graduated from Michigan State University in 1999. His research interests include Reconfigurable Computing Systems, High-End Computing Systems, and Embedded Systems. He is the author of over fifty peer-reviewed conference and journal papers and co-author of the book, *Embedded Systems Design with Platform FPGAs* published by Morgan-Kaufmann in 2010. His research has been supported by NSF, DARPA, IBM, and NASA.

He is coordinator of mentoring efforts within the college among associate professors, working in concert with the ADVANCE Faculty Affairs Office.