

Dean's Quarterly Retreat on Research

Saturday, May 11, 2013

Agenda

Fostering Successful Science for the 21st Century

- 8:00 – 8:10 **Dean Goldschmidt** welcomes everyone
- 8:10 – 8:20 **Dr. Velazquez** introduces subject matter
- 8:20 – 9:30 **Noshir Contractor, Ph.D.** speaking on Network Science
- 9:30 – 9:45 Break
- 9:45 – 10:45 **Glen Gaulton, Ph.D.** speaking on Research Program Development
- 10:45 – 10:50 **Dr. Velazquez** congratulates top funded researchers
- 10:50 – 11:50 **Atul Butte, MD, Ph.D.** speaking on data-driven versus hypothesis-driven research
- 11:50 – 12:15 Break and pick up box lunch
- 12:15 – 12:45 Define issues in small groups to present to Panel – working lunch
- 12:45 – 1:45 Panel Discussion with **Drs. Contractor, Gaulton, Butte, Velazquez**
- 1:45 – 2:00 **Dr. Velazquez** wraps up
-
- 2:00 – 3:00 Time available for informal networking with speakers and UM colleagues



Noshir Contractor, Ph.D. is the Jane S. & William J. White Professor of Behavioral Sciences in the McCormick School of Engineering & Applied Science, the School of Communication and the Kellogg School of Management at Northwestern University, USA. He is the Director of the Science of Networks in Communities (SONIC) Research Group at Northwestern University.

He is investigating factors that lead to the formation, maintenance, and dissolution of dynamically linked social and knowledge networks in a wide variety of contexts including communities of practice in business, translational science and engineering communities, public health networks and virtual worlds.

The insights gained are used to enable networks by building sophisticated recommender systems that provide individualized suggestions on who to collaborate with or what team to assemble.

His research program has been funded continuously for almost two decades years by major grants from the U.S. National Science Foundation with additional funding from the U.S. National Institutes of Health (NIH), Army Research Laboratory, Air Force Research Lab, Army Research Institute, Army Research Laboratory, NASA, Rockefeller Foundation, Gates Foundation, and the MacArthur Foundation.

Professor Contractor has published or presented over 250 research papers dealing with communicating and organizing. His book titled Theories of Communication Networks (co-authored with Professor Peter Monge and published by Oxford University Press, and translated into simplified Chinese in 2009) received the 2003 Book of the Year award from the Organizational Communication Division of the National Communication Association. He is the lead developer of C-IKNOW (Cyberinfrastructure for Inquiring Knowledge Networks On the Web), a socio-technical environment to understand and enable networks among communities, as well as Blanche, a software environment to simulate the dynamics of social networks. Professor Contractor has a Bachelor's degree in Electrical Engineering from the Indian Institute of Technology, Madras and a PhD from the Annenberg School of Communication at the University of Southern California.

Professor Contractor is the co-founder and Chairman of Syndio Social, which offers organizations products and services based on network analytics.



Glen N. Gaulton, Ph.D. is the Executive Vice Dean and Chief Scientific Officer, and Professor of Pathology and Laboratory of Medicine at the University of Pennsylvania's Perelman School of Medicine. Dr. Gaulton's responsibilities are to oversee both the Office of the Executive Vice Dean and Chief Scientific Officer and his active research laboratory. The Executive Vice Dean and Chief Scientific Officer leads the School's research and research training enterprise and is responsible for both stimulating new research endeavors and providing the optimal intellectual and administrative support for ongoing research programs. This includes the Office of the Executive Vice Dean and Chief Scientific Officer, Biomedical Graduate Studies, Biomedical Postdoctoral Programs, Combined Degree and Physician Scholar Programs, Corporate Alliances, Human Research, Global Health, Masters Programs, and Research Program Development.

Dr. Gaulton received his Ph.D. in biochemistry and molecular biology from the University of California, Santa Barbara. He conducted postgraduate research in immunology at the School of Public Health and School of Medicine at Harvard University. Dr. Gaulton was appointed Assistant Professor of Pathology and Laboratory Medicine, in the School of Medicine at the University of Pennsylvania in, he was subsequently appointed as Associate Professor with tenure and is currently full Professor. Dr. Gaulton was appointed Associate Dean and Director of the Combined Degree and Physician Scholar Programs in 1993, Director of Biomedical Graduate Studies in 1995, Vice Dean for Research and Research Training in 1998, and Executive Vice Dean and Chief Scientific Officer in 2006.

Dr. Gaulton's research interests are in the area viral pathogenesis. This work centers on a molecular description of the mechanisms that control a retrovirus — induced cell fusion and the detection of virus particles through nanotechnology. Dr. Gaulton has published over 100 manuscripts and texts, and directly supervised the research training of over thirty graduate students and fellows.

Dr. Gaulton serves on the Board of Directors of two organizations, is a reviewer for nine scholarly journals, and has been chair of four NIH study sections. Dr. Gaulton has received numerous awards for teaching and research, including the Dean's Award for Basic Science Teaching, the Berwick Memorial Teaching Award, the Lindback Award, the Harry Weaver Neuroscience Scholar Award from the National Multiple Sclerosis Society, and the Leukemia Society Scholar Award.



Atul Butte, MD, Ph.D. is Chief of the Division of Systems Medicine and Associate Professor of Pediatrics, and by courtesy, Medicine and Computer Science, at Stanford University and Lucile Packard Children's Hospital. Dr. Butte trained in Computer Science at Brown University, worked as a software engineer at Apple and Microsoft, received his MD at Brown University, trained in Pediatrics and Pediatric Endocrinology at Children's Hospital Boston, then received his PhD in Health Sciences and Technology from Harvard Medical School and MIT. Dr. Butte is also a founder of Personalis, providing clinical interpretation of whole genome sequences, and NuMedii, finding new uses for drugs.

The Butte Laboratory builds and applies tools that convert more than 300 billion points of molecular, clinical, and epidemiological data -- measured by researchers and clinicians over the past decade -- into diagnostics, therapeutics, and new insights into disease. Dr. Butte has authored more than 120 publications and delivered more than 140 invited presentations in personalized and systems medicine, biomedical informatics, and molecular diabetes, including 30 at the National Academies of Science, Institute of Medicine, National Institutes of Health or NIH-related meetings. Dr. Butte's research has been featured in the New York Times Science Times and the International Herald Tribune (2008), Wall Street Journal (2010 -2012), and San Jose Mercury News (2010). Dr. Butte's recent awards include the 2012 FierceBiotech IT "Top 10 Biotech Techies", 2011 National Human Genome Research Institute Genomic Advance of the Month, 2010 Society for Pediatric Research Young Investigator Award, 2008 AMIA New Investigator Award, the 2007 Genome Technology "Tomorrow's Principal Investigator" Award, the 2007 Society for Medical Decision Making Award for Outstanding Short Course, the 2006 Howard Hughes Medical Institute Early Career Award, and the 2006 PhRMA Foundation Research Starter Grant in Informatics. Dr. Butte also co-authored one of the first books on microarray analysis titled "Microarrays for an Integrative Genomics" published by MIT Press.