

Board Meeting
July 25, 2013

APPOINT PROFESSORS TO THE
CENTER FOR ADVANCED STUDY, URBANA

Action: Approve Appointment of Professors to the Center for Advanced Study

Funding: State Appropriated Funds

The Chancellor, University of Illinois at Urbana-Champaign, and Vice President, University of Illinois with the recommendation of the Vice Chancellor for Research in consultation with the Professors in the Center, recommends the following faculty members for appointment as Professors¹ in the Center for Advanced Study.

James Anderson, Education, Policy, Organization and Leadership

Professor Anderson's research focuses on the history of African American education in the South from 1860 to 1935, the history of higher education desegregation in southern states, the history of public school desegregation, institutional racism, and the representation of Blacks in secondary school history textbooks. His current research projects include the history of African American public higher education and the development of African American school achievement in the twentieth century.

¹ Professors in the Center for Advanced Study (Center) are permanent members of the Center community, chosen for their outstanding scholarship. Appointment to a professorship in the Center is one of the highest academic recognitions that the campus can bestow upon a member of its faculty. Center Professors continue to serve as full members of their home department.

Concurrently, the Professors in the Center are: Renée L. Baillargeon, Tamer Basar, May R. Berenbaum, Bruce C. Berndt, David M. Ceperley, Leon Dash, Matthew W. Finkin, Martha U. Gillette, Laura H. Greene, Bruce Hajek, Nick Holonyak, Jr., Frederick E. Hoxie, Thomas S. Huang, Brigit P. Kelly, Anthony J. Leggett, Michael S. Moore, Gene E. Robinson, Lou van den Dries, and Dale J. Van Harlingen.

Nigel Goldenfeld, Physics

Professor Goldenfeld's research explores how patterns evolve in time; examples include the growth of snowflakes, the microstructures of materials, the flow of fluids, the dynamics of geological formations, and even the spatial structure of ecosystems. He has authored one of the standard graduate textbooks in statistical mechanics, and is widely regarded as one of the most popular graduate-level lecturers in the Department of Physics. In 1996, Professor Goldenfeld took an entrepreneurial leave-of-absence to found NumeriX, the award-winning company that specializes in high-performance software for the derivatives marketplace.

Stephen Long, Plant Biology

Professor Long's research areas include: environmental physiology including cold tolerance; global atmospheric change impacts on crops and natural vegetation; C4 photosynthesis; biomass energy crops including Miscanthus and switchgrass; and mathematical models of photosynthesis. His lab integrates molecular and biochemical studies with physiological studies of photosynthesis, using state-of-the-art and custom built gas-exchange, fluorescence and controlled environment instrumentation. Much of the work involves developing and testing hypotheses on plant environmental responses under controlled conditions and then testing these in large-scale multi-partner field facilities.

Terrance O'Connor, Dance

Professor O'Connor is recognized as one of our nation's most influential contemporary choreographers. He has been making dances since 1982, creating over 35 works for his company as well as numerous commissioned works for other dance companies around the world, including the Lyon Opera Ballet and solo pieces for Jean Butler and Mikhail Baryshnikov. He is the recipient of numerous national awards, including most recently the Doris Duke Performing Artist Award.

John Rogers, Materials Science and Engineering

Professor Rogers' work seeks to understand and exploit interesting characteristics of 'soft' materials, such as polymers, liquid crystals, and biological tissues as well as hybrid combinations of them with unusual classes of micro/nanomaterials, in the form of ribbons, wires, membranes, tubes, or related materials. These efforts are highly multidisciplinary, and combine expertise from nearly every traditional field of technical study. Most recent work includes injectable, cellular-scale optoelectronics and stretchable lithium ion batteries.

Jay Rosenstein, Journalism

Professor Rosenstein is a Peabody and Emmy Award winning independent documentary writer, producer, director, and editor. His documentaries have been seen around the world on public television stations as well as at film festivals including Ebertfest, Sundance Film Festival, and the South by Southwest Film Festival, among others. His works are well-recognized examples of the impact of social issue documentary film.

Klaus Schulten, Physics

Professor Schulten's research applies concepts and methodologies from condensed matter physics to the organization and function of the machinery in biological cells. His group has made fundamental contributions to numerous areas of biology, most recently to vision, photosynthesis, force generation, membrane channels, and large-scale cellular organization. He has made profound advances to theoretical biophysics where he studied how biological processes are well controlled despite strong thermal disorder. He also contributed to state-of-the-art computational biology having been the first to demonstrate that parallel computers could be practically employed to solve the classical many-body problem in biomolecular modeling.

Jonathan Sweedler, Chemistry

Professor Sweedler's research interests are in bioanalytical chemistry, and focus on developing new methods for assaying nanoliter volume samples, and applying these methods to study the distribution and dynamic release of neurotransmitters and neuropeptides from individual neurons. Specifically, he is investigating the roles that peptide hormones, neurotransmitters, and neuromodulatory agents play in behavior, learning, and memory.

Maria Todorova, History

Professor Todorova specializes in the history of the Balkans in the modern period. Her research revolves around problems of nationalism, especially the symbolism of nationalism, national memory, and national heroes in Bulgaria and the Balkans. She is the recipient of numerous awards (including the Guggenheim) and honorary degrees (most recently, European University Institute, Florence).

The Board action recommended in this item complies in all material respects with applicable State and Federal laws, University of Illinois *Statutes, The*

General Rules Concerning University Organization and Procedure, and Board of Trustees policies and directives.

The Vice President for Academic Affairs concurs with this recommendation.

The President of the University recommends approval.