

Board Meeting
March 9, 2006

APPOINT FELLOWS TO THE CENTER FOR ADVANCED STUDY, URBANA

Action: Approve Appointments of Fellows in the Center for Advanced Study for the Academic Year 2006-07

Funding: Private Gift Funds from the Beckman Endowment and State Appropriated Funds

Each year the Center for Advanced Study awards appointments as Fellows in the Center, providing one semester of release time for creative work. Fellows are selected in an annual competition from the faculty of all departments and colleges to carry out self-initiated programs of scholarly research or professional activity.

The Chancellor at Urbana recommends the following list of Fellows selected for the 2006-07 academic year, and offers a brief description of their projects:

****Brian DeMarco, Assistant Professor, Physics, *Quantum simulation using ultra-cold atoms***

This research program concentrates on working toward resolving outstanding questions regarding many-body quantum mechanics by realizing quantum simulation using ultra-cold atoms trapped in an optical lattice. The experimental tools required for this research will be completed and tested, and the technical limitations of various methods for quantum simulation in this system will be explored.

****Eileen Diaz McConnell, Assistant Professor, Sociology, *The G-men behind the curtain: The federal government and the social construction of difference, change, and progress in America***

This project explores how the federal government contributes to knowledge making in the United States, through the creation, institutionalization, and legitimization of particular understandings of race, ethnicity, demographic change, and the “American Dream.” Drawing from a range of qualitative and quantitative sources, this study documents how the federal government provides the content, context, and institutional

support for racialized discourses about what the United States has been, what it is now, and what it can be in the future.

****Minh Do, Assistant Professor, Electrical & Computer Engineering, *Sampling signals from a union of subspaces***

Sampling is a corner stone of signal processing that allows real-life signals in the continuous domain to be represented and processed in the discrete-domain by computers via measured samples. This research aims to fundamentally extend the existing sampling theory by considering signals from a union of subspaces instead of a single vector space.

****Clarence Lang, Assistant Professor, African-American Studies & Research Program and History, *Black working-class formation and social movements in St. Louis, Missouri, 1936-1969***

Using the border-state city of St. Louis, Missouri, as an illustration, this project argues that the historical development of African American urban working-class communities propelled the major black social movements that occurred between 1936 and 1969, including the modern Civil Rights Struggle. The black popular agendas emerging from these movements represented the racial and class interests of African American working people, not only in demands for political participation, but also for social citizenship--greater employment opportunity, and better housing, education, and public services.

Lisa Rosenthal, Assistant Professor, School of Art & Design, *For pleasure, profit, and persuasion: constructions of art's many virtues in The Netherlands of the Seventeenth Century*

This project is a book-length study of the theme of artistic virtue in seventeenth-century Dutch and Flemish paintings and prints. It specifically explores how constructions of art's pleasures, profitability, and persuasive powers served three contested domains of cultural meaning: the body, the home, and the political sphere.

****Christian Sandvig, Assistant Professor, Speech Communication, *Visualizations of the electromagnetic spectrum in policy debates about wireless***

Recent advances in communication regulation and in wireless technology have made measurement of the electromagnetic spectrum newly relevant in policy debates. This research investigates the tactics, aesthetics, and consequences of visualizing these measurements, and considers the way that new cartographies of electromagnetic radiation affect the ability to imagine communication systems, technology, and nature.

****M. Christina White, Assistant Professor, Chemistry, *Hydrocarbon functionalization methods for synthesis***

This is a proposal to discover and develop a general "toolbox" of selective methods for C-H functionalization for the synthesis of complex molecules. Such methods will impact significantly on the discovery of small molecules for human health.

**These faculty members have been recommended for appointment as Beckman Fellows in the Center for Advanced Study named for the donor of a gift that permits additional recognition for outstanding younger Fellow candidates who have already made distinctive scholarly contributions.

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 President of the University concurs.