Approved by the Board of Trustees
March 26, 2008

5

Board Meeting
March 26, 2008

APPOINT FELLOWS TO THE CENTER FOR ADVANCED STUDY, URBANA

Action: Approve Appointments of Fellows in the Center for Advanced Study for the Academic Year 2008-09

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 double asterisks denotes faculty members who 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 Chancellor at Urbana recommends the following list of Fellows selected for the 2008-09 academic year, and offers a brief description of their projects:

****Peter Abbamonte, Assistant Professor, Physics**, *Construction of a New Facility for Studies of Quantum Frustration in Matter*

The purpose of this project is to construct a new beam line at the Advanced Photon Source (APS) for studying the electronic structure of quantum frustrated

materials. This facility, called IEX-CDT, was funded this year by the National Science Foundation at the level of $3.8 million over four years. Construction will begin in 2008. Abbamonte will co-oversee the kick-off phase of construction when most of the expected technical problems are expected to arise. In addition, during this time Abbamonte will construct (locally in Urbana) one of the endstations, which is to be delivered to the APS by 2010.

Tami Bond, Assistant Professor, Civil and Environmental Engineering, *Synthesizing Urban and Regional Data into Global Emission Inventories*

This project will improve emission estimates needed as inputs to global climate models which simulate the present and future atmosphere. This project will develop computational tools to extract data on activity and technology from urban and regional air quality data, collaborate with local efforts in Asia, and synthesize these data into global emission estimates.

Robert John Brunner, Assistant Professor, Astronomy and NCSA, *Creating the Next Generation of Cosmological Computational Codes*

Every ten years, the astrophysics community publishes a list of defining questions. In the last such Decadal Report, two of the five defining questions for astrophysics relate to the formation of structure in the Universe. The proposed research creates novel cosmological computational codes that will enable the first determination of the full, higher-order correlation function for millions of galaxies. This work will result in unprecedented constraints on theoretical models for the formation of structure in the Universe.

****Behrooz Ghamari-Tabrizi, Assistant Professor, History and Sociology,** *The Sacred and the Mundane in the Tales of Iranian Veterans of the Iraq War*

The Iran-Iraq war, 1980 to 1988, was perhaps the bloodiest unknown war of the twentieth century. In public references to Saddam Hussein's atrocities, one seldom hears about his aggression against Iran, which ultimately claimed close to one million lives on both sides of the conflict. The newly founded Islamic Republic was forced to mobilize a volunteer army composed of more than two million troops of teenage militia as well as brigades of post-retirement men to fend off the Iraqi aggression. In Iran alone, the war displaced between four to five million people, and left a legacy of collective trauma that has directly affected more than fifteen percent of the country's entire population. Revolutionary guards and other volunteer militia religiously justified the violence and trauma of the war, how they coped with the difficulties of reintegration into society, how their family relations changed, and how, more generally, they reconciled their wartime sacred aspirations with the mundane concerns of everyday life. Rather than as individual pathology, research indicates trauma must be understood as a culturally specific, politically instrumental, socially constructed, and historically contested phenomenon.

Stephanie M. Hilger, Assistant Professor, Comparative and World Literature and Germanic Languages and Literature, *The Warrior and the Traveler: Women in the French Revolution*

This project examines the depiction of socially and politically active women in German literature during the thirty-year period following the French Revolution. The book focuses on two representations: the fighting woman and the

female traveler. Whereas the fighting woman battles the old body politic, the traveler explores new forms of social order.

In the texts under consideration, the protagonists are constructed as counter-images to representations of women as docile daughters and dutiful wives and mothers. The border between history and fiction is fluid in these texts. Historical figures are fictionalized and fictional figures are described with the attributes of historical agents. In so doing, the authors demonstrate their awareness of the crucial role of narrative in the writing of history and stress the need to insert women as political agents into post-Revolutionary historiography. The texts under consideration were written in the thirty-year period after the French Revolution, which enabled the authors to reevaluate the events of this major political and historical rupture with the benefit of hindsight. Moreover, these authors' texts were also written in German and are thus geographically and politically removed from the events in France and display greater freedom to address the Revolution than the texts of French authors, who were forbidden to comment on it explicitly under Napoleon. In addition, the Empire continued the erosion of women's rights that had begun during the Terreur, with the banning of women's political clubs and the executions of important figures such as Charlotte Corday, Marie Antoinette, Olympe de Gouges and Madame Roland. In writing about the French Revolution, German authors were also implicitly commenting on the situation in their own society.

****Ping Ma, Assistant Professor, Statistics,** *Statistical Modeling for High Resolution Imaging of Earth's Deep Interior*

The core-mantle boundary (CMB), at a depth of ~2890km, marks the most dramatic change in dynamic processes and material properties in our planet, and accurate

images of the structure at or near the CMB—over large areas—are crucially important for our understanding of present day geodynamical processes and the thermo-chemical structure and history of the mantle and mantel-core system. The proposed work will establish a comprehensive statistical framework to enable the detection, imaging, and characterization of lowermost mantle structure using the many (ten, hundred) thousands of broadband seismograph network data.

****Ruby Mendenhall, Assistant Professor, Sociology and African-American Studies and Research Program,** *Race and Place: Pathways to Mobility in the Gautreaux Housing Program*

The proposed project examines how the Gautreaux Assisted Housing Program—which emphasized racial desegregation—enhanced many of the participants' upward mobility. The Gautreaux program is the result of a 1966 class action lawsuit on behalf of Black families who were residents of Chicago public housing or on the waiting list. The lawsuit argued that the Chicago Housing Authority (CHA) and the U.S. Department of Housing and Urban Development (HUD) violated the 1964 Civil Rights Act, which prohibits racial discrimination in activities financed by federal dollars. In 1976, the Supreme Court authorized an expansive housing desegregation remedy. Between 1976 and 1998, over 7,100 families moved to new city and suburban neighborhoods. The research focuses on issues of social inequality (race, class, and gender; housing; employment; and wealth accumulation) over the life course and the role of public policy in facilitating social and economic mobility.

From the Gautreaux research data, three sole-authored publications will be forthcoming. The first paper discusses Gautreaux participants' perceptions of how

contexts and social structures shape social and economic outcomes over three generations of their families (their parents, themselves, and their children). The second paper discusses policies and adds analysis describing micro level social processes. Specifically, how social networks in the Gautreaux participants' new neighborhoods provide information about jobs that lead to social mobility over the life course. The last paper will discuss how housing policies influence mobility over ten years (1995 to 2005) in the life course of Gautreaux participants. Specifically, how Gautreaux placement neighborhoods affect participants' ability to move out of the poorest income group in America towards more of a middle-class or higher status.

****Charles Roseman, Assistant Professor, Anthropology,** *Integrating Phenotypes and Genomes in the Study of Human Evolution*

While genomic approaches may be revolutionizing our ability to study human evolution and the evolutionary basis of human disease, it is important to understand that humans are whole organisms and not simply a very long DNA sequence. In order to reap the benefits of genomic developments for the study of human evolution, we must have a better understanding of how evolutionary forces acting on complex characteristics, such as brain size, affect the evolution at the genomic level.

****Rebecca M. Stumpf, Assistant Professor, Anthropology**, *Juvenile and Adolescent Social and Sexual Development in Wild Chimpanzees*

This study examines the patterns of social and sexual development in wild chimpanzees by integrating behavioral observations with hormonal data collection. Because chimpanzees are humans' closest living relatives and share many behavioral, genetic and developmental similarities, this study will place human patterns of maturation

in evolutionary context and identify the ways in which human development is similar to chimpanzees and the ways in which humans are unique.

Deke Weaver, Assistant Professor, Art and Design, *The Unreliable Bestiary*

Provocative and haunting, *The Unreliable Bestiary* is an interdisciplinary solo performance with video. The work looks at the intersection of spirit, taboo and truth through the lens of the Animal with the hope of finding compassion for what is Human.

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.