Board Meeting January 31, 2019

APPOINT ASSOCIATES TO THE CENTER FOR ADVANCED STUDY, URBANA

Action: Appoint Associates to the Center for Advanced Study

Funding: State Appropriated Funds

Each year the Center for Advanced Study awards appointments as

Associates in the Center, providing one semester of release time for creative work.

Associates are selected in an annual competition from the tenured faculty of all

departments and colleges to carry out self-initiated programs of scholarly research or

professional activity.

The Chancellor, University of Illinois at Urbana-Champaign, and Vice

President, University of Illinois recommends the following list of Associates selected for

the 2019-2020 academic year, and offers brief descriptions of their projects:

Dolores Albarracin, Professor, Psychology, *Why People Believe Strange Things: Understanding Pseudo-Realities and Pseudo-Theories*

The project will test a model of conspiracy theories and other unsubstantiated beliefs. The methodology combines survey and laboratory experiments.

Steven Bradlow, Professor, Mathematics, *Holomorphic Differentials in Mathematics and Physics*

Together with four co-organizers, Professor Bradlow will oversee a fourmonth research program on Holomorphic differentials in mathematics and physics scheduled for Fall 2019 at the Mathematical Sciences Research Institute (MSRI) in Berkeley. The program will bring together mathematicians and physicists with diverse backgrounds and perspectives but for whom the central objects of the program (holomorphic differentials) have emerged as a unifying factor.

Marcelo Bucheli, Professor, Business Administration, From Coffee Estates to the

Coffee State: A Global History of the Colombian Coffee Economy in the Twentieth Century

This project studies the process of insertion of Colombian coffee in global markets as a result of the political and corporate strategies of the Colombian Coffee Growers' Federation. Throughout the twentieth century, this organization shaped Colombia's economic and foreign policy to favor the coffee export industry leading them to turn Colombia into a coffee-state.

David Cahill, Professor, Materials Science and Engineering, *Three-Dimensional Temperature Mapping of Semiconductor Devices*

The architecture of computers increasingly makes use of vertical-stacking of integrated circuits to increase performance. Professor Cahill will study the physical principles that could lead to practical methods for mapping the three-dimensional temperature distribution within vertically-stacked integrated circuits during operation.

Aida El-Khadra, Professor, Physics, The Muon as a Window to New Physic

The muon g-2 experiment, which started running at Fermilab (a national laboratory located near Chicago) is using muons as a window to search for new physics, but this requires theoretical input. Professor El-Khadra will use her CAS appointment to embark on the needed theoretical calculations at the precision required to unambiguously interpret the experimental measurement.

Christopher Freeburg, Professor, English, *Counterlife: Slavery after Resistance and Social Death*

Counterlife: Slavery after Resistance and Social Death demonstrates that the social life of slaves in art and other forms of media should be read for their philosophical and aesthetic significances instead of their connection with past or current political praxis.

Charles Gammie, Professor, Astronomy, Understanding the First Images of a Black Hole

Energy release by hot plasma falling into black holes powers some of the most luminous objects in the universe. Professor Gammie and his group plan to develop theoretical models of this process aimed at explaining the results of a new experiment that will soon generate, for the first time, a resolved image of a black hole.

Professor Hur will put together rigorous analysis, numerical computation and modeling to address fundamental issues in the mathematical aspects of water waves: particularly, global regularity versus finite time singularities, the existence of traveling waves and their characterization, the stability and instability of traveling waves. Her projects emphasize large scale dynamics and genuinely nonlinear behaviors, such as breaking and peaking, and disintegration.

Fatima Husain, Professor, Speech and Hearing Science, *Developing Theoretical and Computational Models of Habituation to Chronic Tinnitus*

Despite the fact that chronic tinnitus, or 'ringing in the ears', can be debilitating, a majority of individuals who have tinnitus learn to habituate to it, but little is known about the mechanisms of such habituation. Findings from this project will build on the innovative work being done in Professor Husain's lab to increase our knowledge of the brain regions affected by tinnitus, by developing theoretical and computational models of resilience shown by individuals as they adapt to chronic tinnitus.

Lilya Kaganovsky, Professor, Comparative and World Literature, *The Visible and the Invisible: Soviet Cinema and Women's Work*

This project tells a new history of Soviet cinema from the perspective of the women film pioneers who were instrumental to its development, but whose contributions have gone largely unnoticed. The book significantly broadens our understanding of Soviet cinema, women's cinema, and film history, while also serving as a model for new directions in feminist film studies.

Anke Pinkert, Professor, Germanic Languages and Literatures, *Remembering 1989: Future Archives of Public Protest*

Remembering 1989: Future Archives of Public Protest examines the massive unrest in the streets of East Germany which led to the fall of the Berlin Wall. The book assembles an entirely new dynamic archive of 1989 that challenges the false narrative about the inevitability of Germany's reunification and allows an entirely new understanding of popular movements which have been forgotten or considered failures.

Gilberto Rosas, Professor, Anthropology, Witness: Testimony and the Ends of Refuge

Witness: Testimony and the Ends of Refuge will be among the first books that address the competing ends of refuge as it plays out in the complexities of immigration and asylum proceedings and the often-divisive discourses that surround them. The book will capture an emergent current of migration from Mexico: those who are fleeing the drug war and resisting deportation by struggling for recognition as asylees and drawing from the vantage point from Professor Rosas's experience providing expert testimony on behalf of people in asylum and related legal proceedings.

Alex Shakar, Professor, English/Creative Writing, Unite the Tribes, a novel

Unite the Tribes is a novelistic exploration of America's cultural divides and tensions between pluribus and unum. It draws on the tradition of the American road novel, and its central framing around a genre-crossing music tour makes possible a unique take on American geographies, ideologies, and points of intersection.

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 Executive Vice President and Vice President for Academic Affairs

concurs.

The President of the University recommends approval.