

Board Meeting  
January 16, 2020

APPOINT FELLOWS TO THE CENTER FOR ADVANCED STUDY, URBANA

**Action:** Appoint Fellows to the Center for Advanced Study for the Academic Year 2020-2021

**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 untenured 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 Fellows selected for the 2020-2021 academic year, and offers brief descriptions of their projects:

**Catherine Christian, Assistant Professor, Molecular & Integrative Physiology,**  
*Distributed and Discrete Modulatory Actions of DBI in the Neurocircuitry of Social Behavior*

Professor Christian's laboratory recently discovered that mice that genetically lack the diazepam binding inhibitor (DBI) protein show reduced social interest towards other mice, a result that may have implications for understanding autism and other human mental health conditions characterized by low social motivation. During the CAS appointment, Professor Christian and her research team will use genomic analyses and neural activity mapping tools to identify cell types and brain regions affected by the genetic loss of DBI, and will evaluate the effects of selectively manipulating these neuronal populations on social behavior in live mice.

**Amanda Ciafone, Assistant Professor, Media & Cinema Studies, *Growing Old in a Mediated Age: Old Age and Technology in the 20th and 21st Centuries***

During her CAS appointment, Professor Ciafone plans to work on a new book, *Growing Old in a Mediated Age: Old Age and Technology in the 20th and 21st Centuries*, which will argue that mediating technologies have transformed the experience and understanding of aging in recent U.S. history with new definitions of productivity, cultural representations of old age, means for financing retirement, mechanisms for independent living, and biotechnical interventions to extend life. The book will show how the promise of a “successful” old age—independent, productive, and healthy with proper technological assistance enabling self-maintenance—has also come with new expectations, judgments, and inequalities around how people grow old in the 21<sup>st</sup>-century U.S.

**Kaiyu Guan, Assistant Professor, Natural Resources and Environmental Sciences, *Ensuring Co-Sustainability of Food Production and Environmental Quality in the U.S. Midwest Agroecosystems***

This proposed project adopts a “system” view to holistically model and quantify the coupled “food-water-nutrient nexus” for the U.S. Midwest agroecosystems. A coupled land-river network model (ecosys-THREW) will be developed to quantify feedbacks/interactions among the water cycle, nitrogen cycle, and crop production across spatial scales in this agroecosystem, as well as to assess the potential of promising human management practices to allow co-sustainability of food production and environment quality in the U.S. Midwest.

**\*Niao He, Assistant Professor, Industrial & Enterprise Systems Engineering, *New Optimization Paradigms for Large-scale Probabilistic Inference***

Modern big data applications bring big challenges for scaling up probabilistic inference methods. This project aims to address this fundamental challenge based on new optimization paradigms and perspectives, towards enabling a variety of high-impact applications that are not currently feasible.

**Daniel Miller, Assistant Professor, Natural Resources and Environmental Sciences, *Understanding the Allocation and Effectiveness of Global Funding for Forest Conservation***

This project addresses the crucial global challenge of forest loss. To do so, its goal is to advance interdisciplinary knowledge of the allocation and effectiveness of international forest conservation aid and develops a novel approach to track future funding flows.

**Alyssa Prorok, Assistant Professor, Political Science, *Tainting the Well or Priming the Pump? The Dynamics of Cooperation in Civil War***

This project examines the determinants and effects of cooperative behavior between combatants during civil wars. Using original data, it argues that small successful acts of cooperation build trust between enemies, encouraging deeper cooperation and peaceful conflict resolution, while failed cooperation exacerbates violence and prolongs conflict.

**\*Stacey Robinson, Assistant Professor, Art + Design, *STE(A)M Powered Stories***

Stacey Robinson will create 3 in-depth Science, Technology, Engineering, (through Art), and Math-based graphic novel proposals, each one including inner campus collaboration and community outreach, resulting in community youth-based collaborative publishing and arts exhibitions.

**\*Lila Sharif, Assistant Professor, Asian American Studies, *Historiographies of Displacement: A Comparative Study of Palestinians in Berlin, Santiago and Chicago***

Through an in-depth ethnographic study of Palestinian refugees, the largest and most protracted refugee population to date, Professor Sharif will explore the divergent and intersecting historical, political, social, and cultural conditions that have made Berlin, Santiago, and Chicago key sites for Palestinian resettlement since the Palestinian exodus of 1948, as well as the ways in which these refugee experiences converge and differ, thus complicating both our conception of the “West” as well as the figure of the “refugee.” She asks: how have Palestinian refugees made a life in these distinct “Wests”, how do they expand upon what we know about refugee lifeworlds, and what does this mean for the generations of refugees to come?

**Diwakar Shukla, Assistant Professor, Chemical & Biomolecular Engineering, *Unraveling the Molecular Magic of Witchweed***

This proposal aims to understand the molecular mechanisms responsible for perception of plant hormone, strigolactones by parasitic plant, witchweed. The mechanism will shed light on new approaches for engineering chemical control of parasitic weeds.

**\*Chadly Stern, Assistant Professor, Psychology, *Does Political Attitude Disagreement Foster Societal Conflict? A Global Examination Across 40 Years and 98 Countries***

In this project, Professor Stern will examine the antecedents and consequences of political attitude disagreement across 40 years and 98 countries. Specifically, he will investigate (a) whether the structure of a society’s legal system impacts levels of attitude disagreement among everyday citizens over time, (b) whether changes in attitude disagreement predict fluctuations in levels of conflict within a society, and (c) whether there is a particular amount of attitude disagreement that shifts constructive disagreement toward the incitement of conflict.

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.

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\*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 relatively younger Fellow candidates who have already made distinctive scholarly contributions to their respective fields.