

Approved by the Board of Trustees
January 21, 2021

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Board Meeting
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APPOINT ASSOCIATES TO THE CENTER FOR ADVANCED STUDY, URBANA

Action: Appoint Associates to the Center for Advanced Study for the Academic Year 2021-2022

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 Urbana, and Vice President, University of Illinois System recommends the following list of Associates selected for the 2021-2022 academic year, and offers brief descriptions of their projects:

Lynne Dearborn, Professor, School of Architecture, *Advancing Affordable Housing that Supports Health and Wellness*

Housing is a critical determinant of health, particularly for vulnerable and low-income households at risk for a variety of health impairments resulting from conditions in their homes and neighborhoods. Through documentation and analysis of a series of built affordable housing developments characterized as health housing, this project addresses the need for knowledge-based resources for housing developers, architects, and contractors to improve the healthiness of new and rehabilitated affordable

housing.

Mani Golparvar-Fard, Associate Professor, Civil and Environmental Engineering,
AI-Driven Construction

This project focuses on preliminary research and conducting planning activities that aim to create the foundational ideas, technologies and technical workforce that allow Artificial Intelligence (AI) research to support safe, productive, efficient design, construction, and maintenance of national buildings and infrastructure systems. Any small improvement in the \$1.4 trillion inefficient, unsafe construction industry can save billions of dollars and many lives.

Mark Hauber, Professor, Evolution, Ecology, and Behavior, *In search of Neuroendocrine Mechanisms of Host-Parasite Interactions*

Professor Hauber plans to formalize and test the hypothesis that the contrasting needs of a parent bird having to incubate its own eggs, while also rejecting parasitic eggs, are mediated by opposing hormonal mechanisms already involved in aggression and parental care. The project will have broad implications for behavioral ecologists studying coevolutionary arms-races as well as for comparative psychologists interested in concepts of self- vs. non-self-discrimination.

Marc Hertzman, Associate Professor, History, *Palmares after 1695: Diasporic Inheritance and the Deaths and Afterlives of Zumbi*

The project examines the afterlives and cultural, spiritual, physical, and monetary inheritances of Palmares, one of history's largest and longest-standing fugitive slave settlements. The research and methodology will put into dialogue the scholarship on Brazilian and Latin American history, the African Diaspora, Indigenous Studies, and Environmental History, as well as ongoing conversations about slavery reparations.

Gilbert Holder, Professor, Physics, *South Pole Telescope Data Analysis*

The South Pole Telescope is a 10m telescope at the geographic South Pole that is making sensitive high-resolution maps of the mm-wave sky. These maps will be used in a search for gravitational waves produced when the universe began, as well as to map the mass fluctuations on scales of billions of light years.

Craig Koslofsky, Professor, History, *Skin in the Early Modern World, 1450-1750: The Deep Surface*

Professor Koslofsky's book project examines human skin as a place where history is made. He focuses on skin marking (including tattooing and branding), skin color, and medical discoveries about skin in the early modern era, the period in which

intensifying global trade, especially the slave trade, transformed the place of skin in world history.

Lijun Liu, Associate Professor, Geology, *Impacts of Continental Evolution on Global Climate Change*

How Earth's continents survived the long geological history and modulated surface environment and climate is an important open question. Professor Liu's multidisciplinary effort considering geology, geophysics, and climate change within a geodynamic framework points out a way forward.

Sonali Shah, Associate Professor, Business Administration, *The Fruits of One's Labor: Uncovering the Factors that Shape Sustained Technology Adoption to Reduce Post Harvest Loss*

This research project seeks to uncover the factors that support the sustained adoption of technologies used to reduce post-harvest loss by smallholder farmers in sub-Saharan Africa. Findings will inform theories of technology adoption and collective action, as well as help target interventions towards those individuals most likely to implement them, continue to use them over time, and diffuse them to others in their community.

Helga Varden, Professor, Philosophy, *Transforming Our Social Contracts*

In *Transforming Our Social Contracts*, Professor Varden seeks to present a historically informed, Kant-based contemporary theory of justice as human freedom. She aims to show that despite the many shortcomings and failures of the existing liberal theories and philosophical practices, freedom, human dignity, and shared, accountable public governance are still ideals worth working toward by developing the tools that Kant—in close dialogue with his predecessors—left us.

David Wilson, Professor, Geography, *Toward an Understanding of Gentrification's Third Wave in Chicago*

This research examines the little understood third wave of gentrification in America's quintessential gentrifying city, Chicago. Professor Wilson will assess a central dimension of how current gentrification unfolds in this city: its social, psychic, and economic impacts on populations.

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.