

4TH ANNUAL
CONFERENCE
ON

CONVERGENCE AND THE FUTURE OF RESEARCH

AUGUST 29, 2019 | BURTON D. MORGAN CENTER FOR ENTREPRENEURSHIP

- 12:15-1:00 pm **Poster Session: Discovery Park Undergraduate Research Internship (DURI) and Big Idea Challenge 2.0 / Lunch – MRGN Café**
- 1:00 pm **Welcome Remarks – MRGN 121**
Alexandra Boltasseva, Discovery Park Fellow, Professor, School of Electrical and Computer Engineering, College of Engineering
Theresa Mayer, Executive Vice President for Research and Partnerships
- 1:10-1:17 pm **Addressing the Biodiversity Crisis: A Four-Platform Boilermaker Solution**
Presented by: Bryan Pijanowski, College of Agriculture
- 1:20-1:27 pm **BioSystemics: Development of Integrated Omics for Systems Level Biodiscovery**
Presented by: Marshall Porterfield, College of Engineering
- 1:30-1:37 pm **Building a community network and clinical consultation service for dual diagnosis mental health and substance use disorder prevention and treatment**
Presented by: Carol Ott, College of Pharmacy
- 1:40-1:47 pm **Climate BufferNet: Biodiversity and Food Security in a Changing Climate**
Presented by: Robert Marzec, College of Liberal Arts
- 1:50-1:57 pm **Community Resilience Considering the Interdependence of Innovation Ecosystem and Physical Infrastructures**
Presented by: Saurabh Bagchi, College of Engineering
- 2:00-2:07 pm **Conversion of Plastic Waste into Pristine Polymers, Naphtha, Fuels, and Other Products for Sustainability**
Presented by: Nien-Hwa Linda Wang, College of Engineering
- 2:10-2:17 pm **Improving neurological health outcomes of rural communities by studying a novel multi-generational cohort of families with a history of debilitating parkinsonism**
Presented by: Aaron Bowman, College of Health and Human Sciences

- 2:20-2:27 pm **Innovations for Economic Viability and Environmental Sustainability of Indoor Agriculture**
Presented by: Cary Mitchell, College of Agriculture
- 2:30-2:50 pm **Break**
- 2:50-2:57 pm **LATICE: Framework for Longitudinal Analysis of Time-Course Data from Patient Generated Health Data**
Presented by: Mohammad Adibuzzaman, Regenstrief Center for Healthcare Engineering
- 3:00-3:07 pm **Quantum Informatics for Businesses and Economies**
Presented by: Karthik Kannan, Krannert School of Management
- 3:10-3:17 pm **Recovery and Reuse of Low-Grade Thermal Energy in Urban Settings**
Presented by: Ernest Blatchley, College of Engineering
- 3:20-3:27 pm **The Energy Corridor Along the US/Mexico Border: Changing the Conversation**
Presented by: Luciano Castillo, College of Engineering
- 3:30-3:37 pm **Urban Pre-emptive Research and Planning Activities for REal-world Disasters**
Presented by: Daniel Aliaga, College of Science
Dev Niyogi, College of Agriculture
- 3:40-3:50 pm **From Cell Cultures to Community Cultures: Bringing Precision Health to Autism**
Presented by: Bridgette Kelleher, College of Health and Human Sciences
- 3:55-4:05 pm **Revolutionizing the development and manufacturing of next-generation biologics**
Presented by: Rainer Fischer, College of Science
- 4:10-4:20 pm **Solving problems previously reserved to quantum computing with Purdue's p-bits and how these future computational capabilities will impact security, politics and the society as a whole**
Presented by: Supriyo Datta, College of Engineering,
on behalf of Joerg Appenzeller, College of Engineering
- 4:30-5:30 pm **Big Idea Challenge 2.0 Kick-Off Reception – MRGN Café**
(Closing remarks provided by Alexandra Boltasseva)