

# OSU Solutions Hub Ideation Sessions Program

## Day 1

April 15, 2022, 4pm

### Welcome

- Irem Tumer, Vice President for Research

### Session 1      8 presentations, Q & A

- Adam Schultz ~ *Energy and Mineral Resources and Resilience*
- Davide Lazzati ~ *Augmented reality as a tool for leveraging the power of computer simulations of physical systems*
- Xiulei "David" Ji ~ *Energy Storage Research at OSU*
- May Nyman ~ *Interfacial reactions for carbon capture in natural and synthetic systems*
- Merrick Haller ~ *Multi-disciplinary Research on Coastal Processes for the Development of Resilient and Sustainable Solutions*
- Chih-hung Chang ~ *Materials Under Extreme Conditions*
- Oksana Ostroverkhova ~ *Ultrafast optics center for discovery and understanding of new electronic, magnetic, optical and thermal materials: towards next-generation quantum materials and devices for renewable energy and beyond*
- Ed Brook ~ *Melt Probes for in situ Exploration of Ice Shear Interiors*

### Session 2      8 presentations, Q & A

- Adrianna Marlen ~ *CommunityBridge, a pathway of access for Transfer, Low-Income and First-generational College Students.*
- Lorenzo Ciannelli ~ *Evidence and prospects for an OSU collaboratorium to study coupled natural-human marine coastal systems*
- Rajat Panwar ~ *Climate Leadership through Circular Economy Innovations*
- Fuxin Li ~ *Scientific Ideation from Explainable Deep Models*
- Bahman Abbasi ~ *SCEPTER Technology*
- Geoff Hollinger ~ *Marine and Aerial Robotics at Oregon State University*
- Matt Johnston ~ *Sensors in the Wild Innovation Lab: Sea, Land, Sun, and Space*
- Joseph Agor ~ *Computational Models for Disaster Resource Management: A Merger of Epidemiological and Optimization Modeling*

### Session 3      8 presentations, Q & A

- Jonathan Nash ~ *The OSU Center for Audacious Solutions - our approach to tackle society's most-pressing challenges*
- Matt Campbell ~ *Design Framework for Global Challenges*
- Susanne Brander ~ *The need for transdisciplinary approaches to the global plastics predicament*
- Maria Kavanaugh ~ *Innovation and Partnerships for Oceans, Climate, and Human Health*
- Michael Olsen ~ *The Geospatially Linked and Organized Built Environment for Thriving, Equitable Communities*
- Kathryn Higley ~ *Data ponds, puddles, lakes & oceans: CQLS's proposal for navigating collaborative data science research*
- Francis Chan ~ *The collaborative, use-inspired, and equitable ocean climate change research horizon*
- Lew Semprini ~ *Clean and Sustainable Water Technology: CIC as a Living Laboratory*

### Reception & Networking

# OSU Solutions Hub Ideation Sessions Program

## Day 2

April 18, 2022, 4pm

### Welcome

- Irem Tumer, Vice President for Research

### Session 4      7 presentations, Q & A

- Aleksandra E. Sikora ~ *Human and Animal Vaccine Center*
- Jamon Van Den Hoek ~ *Expanding the Humanitarian Horizon*
- Xavi Siemens ~ *The NANOGrav Physics Frontiers Center*
- Ryan Mehl ~ *The GCE4ALL Center: Unleashing the Potential of Genetic Code Expansion for Biomedical Research*
- Molly Kile ~ *Children's Health and Well-Being*
- Ben Dalziel ~ *Engineering Pandemic Resilient Cities*
- John Simonsen ~ *Food coatings for food insecurity reduction*

### Session 5      7 presentations, Q & A

- Bill Jaeger ~ *An interdisciplinary graduate program in sustainability – spillovers into research and outreach*
- Thomas Sharpton ~ *Testing the Missing Microbes Hypothesis: Does modern living disrupt the gut microbiome's contribution to physiology to cause chronic diseases?*
- Eric T Jones ~ *Building Cultural Bridges: The Example of Interdisciplinary Applied Research on Bigleaf Maple Foods in PNW Communities*
- Michael Kent ~ *Fish models for intestinal pathogens, diet and microbiome*
- Sheri Cole ~ *Innovation Hub for Sustainable Food Manufacturing*
- Julie Risien ~ *Building up a head of STEAM at OSU*
- Arup Indra ~ *The Cancer Horizon*

### Session 6      7 presentations, Q & A

- Matt Robinson ~ *Growth in collaborative research of human metabolism between OSU and Samaritan Health*
- Jeff Chang ~ *Microbial Population Genomics: Unraveling Histories to Predict Emergence of Agricultural Diseases*
- Megan McClelland ~ *Improving Children's Health and Well-being through the Early Learning Systems Initiative (ELSI)*
- Emily Ho ~ *Integrated Health Sciences: Healthy Aging and Precision Health*
- Susan Rowe ~ *Precollege Programs: Ensuring Broader Impacts and Funding Competitiveness for Collaborative Research*
- Elisar Barbar ~ *SARS-CoV2 nucleocapsid phosphoprotein N as a drug target*
- Jennifer Sargent ~ *BSL-3 laboratory space for developing One Health solutions to emerging infectious disease*

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