



NSF EPSCoR Workshop: Artificial Intelligence (AI) with No-Boundary Thinking (NBT) to Foster Collaborations in Research, Education and Training

Event Agenda (all times in Central)

Sunday April 3, 2022

Venue: Clinton Presidential Center, 1200 President Clinton Ave, Little Rock, AR 72201

* Proof of Vaccine required upon entry. Please bring your vaccine cards with you to the event.

Transportation: A shuttle bus has been arranged to transport attendees from the Marriott to the Clinton Center in two trips at 4:45 and 5:00, then returning to the Marriott at 8:30 and 8:45. Other transportation options include Uber and the Little Rock Taxi service (501-222-2222).

5:00PM Reception Arrival & Registration

5:30PM Welcome & Introductory Remarks

- Introduction by Jennifer Fowler, Arkansas NSF EPSCoR PI/PD, & Dr. Tom Risch, A-State Vice Provost for Research & Tech Transfer, Arkansas Biosciences Institute Executive Director
- Video Message from Dr. Kelly Damphousse, A-State Chancellor
- Dr. Alan Utter, A-State Provost and Executive Vice Chancellor for Academic Affairs and Research
- Dr. Larry Cornett, Director of the Arkansas IDeA Network of Biomedical Research Excellence (Arkansas INBRE)

6:00PM Dinner Served

6:30PM AI Campus Student Awards Ceremony & Showcase

- Introduction by Dr. Emily Bellis & Dr. Jake Qualls
- Student Awards presented by Dr. Alan Utter, Dr. Karl Walker, Dr. Abhijit Bhattacharyya
- Brendan Kosnik, Shelby McCormick, Caity Sims – Herbarium Images
- Zach Caspall - Fire Detection
- Muhammad Ashraf - Natural Language Processing
- Jason Causey - Agricultural Imaging
- Emilio Chavez - Maize Genomics
- Winthrop Harvey, Jose Azucena - Reinforcement Learning with Connect Four
- Chris Saldivar - COVID-19 study with Chest X-Ray Images (CXR)
- Laquita Noel - Deep Learning to Detect Drug-Induced Kidney Injury

8:30PM Adjourn

Monday April 4, 2022



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Venue: Little Rock Marriott, 3 Statehouse Plaza, Little Rock, AR 72201

7:00AM Registration & Continental Breakfast *in Riverview Room*

8:00AM **Welcome & Introductory Remarks** *in Arkansas Ballroom*

- Jennifer Fowler, Principal Investigator & Project Director, Arkansas National Science Foundation EPSCoR
- Dr. Xiuzhen Huang, A-State Founding Director of the Center for No-Boundary Thinking, Professor of Computer Science
- Video Message from Governor Asa Hutchinson
- Dr. Tucker Patterson, Food & Drug Administration National Center for Toxicological Research (FDA NCTR)

8:45AM **The K-12 to Postsecondary Continuum: Ensuring a Highly Skilled Future Workforce**
Dr. Tina Moore, ADE *in Arkansas Ballroom*

9:00AM **Opening Keynote Talk** *in Arkansas Ballroom*
Arkansas Secretary of Commerce Mike Preston

9:30AM **Technical Session: AI for drug development – from Preclinical Studies to RWD**
by the Food & Drug Administration National Center for Toxicological Research (FDA NCTR)
in Arkansas Ballroom

- Dr. Joshua Xu, PathogAI: An AI framework for preclinical digital pathology
- Dr. Xi Chen, ToxGAN: An AI Alternative as in-silico animal studies
- Dr. Yue Wu, Mining drug labeling documents for safety evaluation
- Dr. Leihong Wu, Explainable AI for regulatory science
- Dr. Dong Wang, Harness the power of AI for real-world data analysis

11:00AM **Challenges and Opportunities for Advancing Biomedical Artificial Intelligence in NBT**
by Dr. May Wang, *in Arkansas Ballroom*

12:00PM Lunch Served *in Riverview Room*

1:00PM **Breakout Technical Sessions** (additional presenters and final schedule to be announced)

- Dr. Jiaqi Gong, AI-Empowered Geographical Research in Rural Social Determinants for Combating Opioids
- Dr. Zhongming Zhao, Identifying Viruses from Host Genomes and Predicting Virus-host Interactions and Disease Severity



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- Dr. Hana Khamfroush, AI at the Edge for Smart Decision Making in Smart Cities

2:30PM Technical Session: AI in Statistics & Data Science in Arkansas Ballroom

- Dr. Lei Liu, HIMA2: High-dimensional Mediation Analysis and its application in epigenome-wide DNA methylation data
- Dr. Bradley C. Stadie, Making Sense of the Past with Hindsight Divergence Minimization
- Dr. Yifan Peng, Prior Knowledge Enhances Radiology Report Generation

3:45PM Short Break & Refreshments in Riverview Room

4:00PM Short Presentations & Lightning Talks in Arkansas Ballroom

5:00PM Closing Remarks in Riverview Room

5:30PM Adjourn