



Machine Learning, AI, and Health Collaborations Workshop

Agenda

Thursday, March 21, 2024 | 10:00 AM–4:30 PM | [McFerrin Center for Entrepreneurship](#)

This workshop aims to promote collaboration between Machine Learning/AI researchers and researchers in Public Health and Medicine. Our objective is to offer guidance, showcase available collaboration resources, and inspire joint applications for major grants.

Additional information can be found on the TAMIDS's website at <https://u.tamu.edu/AI-Health>.



Workshop Leaders



Nilanjana Laha, PhD

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Paula K Shireman, MD, MS, MBA

*Professor, Departments of Medical Physiology
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10:00 AM–10:30 AM

Opening Session

Moderator: [Nilanjana Laha](#), Assistant Professor, Department of Statistics

10:30 AM–11:00 AM

Keynote Presentation

[Henry Fadamiro](#), PhD; Associate Vice President for Research & Strategic Initiatives

11:00 AM–11:10 AM

Coffee Break

Panel Discussion

Topic: What makes a cross-disciplinary project successful

Moderator: [Nick Duffield](#), PhD; TAMIDS Director

Panelists:

- [Paula K Shireman](#), MD, MS, MBA; Professor, School of Medicine
- [Gang Han](#), PhD; Professor, School of Public Health
- [Bani K. Mallick](#), PhD; Distinguished professor, Department of Statistics
- [Hye-Chung Kum](#), PhD; Professor, School of Public Health
- [Ricardo Gutierrez-Osuna](#), PhD; Professor, Computer Science & Engineering

11:10 AM–12:00 PM

Networking Lunch & Breakout Tables

Discussion Topics:

- Health Applications for Sensors (wearable and others)
- AI/ML for biological data (bioinformatics)
- AI/ML for clinical data
- Health Applications for Digital Twins
- AI in Urban Planning

12:00 PM–1:00 PM



Spotlight Presentation One — Health & Medicine

Facilitator: [Alicia L Carriquiry](#), PhD; Distinguished Professor and President's Chair in Statistics, Iowa State University, Director of The Center for Statistics and Applications in Forensic Evidence, Hagler Fellow (2023–2034) at Texas A&M

Presenters:

1:00 PM–2:30 PM

- “The use of AI in dealing with disaster response and recovery from a rural public health perspective”
[Jason Moats](#), PhD, FSCEO, CTT; Director, USA Center for Rural Public Health Preparedness
- “Governing AI for population health and well-being”
[Cason Schmit](#), JD; Director of Program in Health Law and Policy and Assistant Professor in the Department of Health Policy and Management
- “Leveraging LLM for Health Promotion”
[Lu Tang](#), PhD; Professor, Department of Communication and Journalism
- “Unveiling the Cellular Universe: Where Machine Learning Meets Single-Cell Biology”
[James Cai](#), PhD; Professor, Veterinary Medicine & Biomedical Sciences
- “Advancing Cancer Research with Single Cell Technologies”
[Tapasree Roy Sarkar](#), PhD; Assistant Professor, Biology

2:30 PM–3:00 PM

Coffee Break

Spotlight presentation Two — AI & Machine Learning

Facilitator: [Tracy Hammond](#), PhD; Professor, Computer Science and Computer Engineering

Presenters:

3:00 PM–4:30 PM

- “Collaborative experiences from a community health and aging researcher”
[Marcia Ory](#), PhD; Regent and Distinguished Professor, Environmental and Occupational Health, School of Public Health
- “Bridging Health Access Gaps in Small, Rural Communities: Integrating Autonomous Transit and Telemedicine Technologies”
[Wei Li](#), PhD; Associate Professor, Landscape Architecture and Urban Planning
- “Machine Learning in human postmortem microbiome.”
[Sing-Hoi Sze](#), PhD; Associate Professor, Computer Science & Engineering
- “Ordinality Preserving Variational Auto-Encoder for Omics Data Analysis”
[Xiaoning Qian](#), PhD; Professor, Electrical & Computer Engineering
- “Efficient Invariant Neural Networks via Weighted Frame Averaging”
[Jonathan W. Siegel](#), PhD; Assistant Professor, Mathematics

4:30 PM–4:40 PM

Exit Survey