



# Open Challenge to Realize the Vision of Global Learning Health Systems

LHS Tech Forum Inaugural Webinar

Dec 7, 2020 3:00-4:30 PM PST

New Initiative of Global LHS Community

# Special Tribute to Joe Kanter



Joseph H. Kanter

- Kanter Family Foundation organized and sponsored the First LHS Summit at the Press Club in 2012
- Joe's vision will live on

# Forum Program:

1. Community announcement by Josh Rubin (5 min)
2. Aim: Presentation by Dr. Charles Friedman (20 min)
3. Set: Presentation by Dr. John Glaser (20 min)
4. Go: Presentation by Dr. James Zou (20 min)
5. Q&A: Moderated by Dr. AJ Chen (25 min)

Will take only a couple of burning questions from the audience after each talk.  
Please post your questions in Zoom chat window.

# Community Announcement

## Learning Health Community **LHS Tech Forum Initiative**

### Organizing Committee:

- Co-Chair: Dr. AJ Chen (SV)
- Co-Chair: Mr. Josh Rubin (LHC)
- Dr. Sophia Wang (Stanford U)

### Advisor Committee:

- Chair: Dr. Charles Friedman (U Michigan)

<http://www.learninghealth.org/2020-lhs-technology-forum>

# Thanks to Community Outreach Partners

- U. of Michigan Learning Health Sciences Department
- Stanford University
- UCSF Health Hub
- AMIA

# Setup

## Background

- National Academy of Medicine vision: [Learning Health System](#)
- Last NAM report: [BEST CARE AT LOWER COST](#) - The Path to Continuously Learning Health Care in America
- Recent AHRQ push to support [Learning Health System](#) transformation

## Today's Goals

- AIM: Dr. Friedman will describe the LHS vision and core thinking.
- SET: Dr. Glaser will propose fundamental changes in health information systems for the future
- GO: Dr. Zou will share health AI research results - building blocks for LHS

# Presentation: LHS Vision

**Charles Friedman, PhD** is the Josiah Macy Jr. Professor of Medical Education and Chair of the Department of Learning Health Sciences at the University of Michigan Medical School. In recent years, he has focused his academic interests and activities on the concept of Learning Health Systems, and the socio-technical infrastructure required to sustain them. He is editor-in-chief of the open-access journal Learning Health Systems and co-chair of the movement to Mobilize Computable Biomedical Knowledge. Prior to coming to Michigan, Friedman held executive positions at the Office of the National Coordinator for Health IT (ONC) in the U.S. Department of Health and Human Services. Immediately prior to his work in the government, Dr. Friedman was Associate Vice Chancellor for Biomedical Informatics, and Founding Director of the Center for Biomedical Informatics at the University of Pittsburgh



# Presentation: Fundamental Changes Required

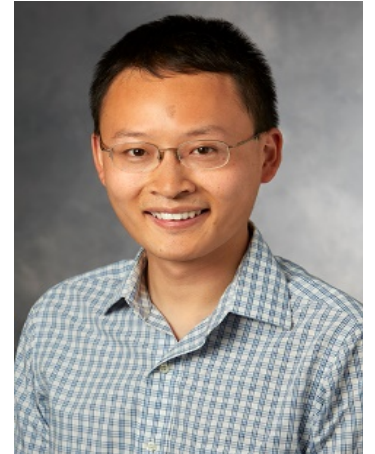
**John Glaser, PhD** is an Executive-in-Residence at Harvard Medical School Executive Education. He is a former senior vice president of Population Health at Cerner. Previously he was chief executive officer of Siemens Health Services. Prior to Siemens, John was chief information officer at Partners HealthCare. John was the founding chair of CHIME and the past-president of HIMSS. He is former Senior Advisor to the Office of the National Coordinator for Health Information Technology. John received his Ph.D. from the University of Minnesota. He is on the faculty of the University of Pennsylvania Wharton School and the UTHealth School of Biomedical Informatics





# Presentation: Healthcare AI and LHS

**James Zou, PhD** is an Assistant Professor of Biomedical Data Science at Stanford University. He is also a Chan-Zuckerberg investigator and the faculty director of Stanford AI for Health. James develops novel machine learning algorithms that have strong statistical guarantees and that are motivated by human health challenges. Several of his methods are widely used by tech, biotech and pharma companies. He also works on questions important for the broader impacts of AI—fairness, accountability, interpretations, and robustness. He has received several best paper awards at top CS venues, the 2019 RECOMB best paper award, a NSF CAREER Award, a Google Faculty Award, and a Tencent AI award



# Q&A

- Please post your questions in Zoom chat window.
- Moderator will read questions to the speakers

# Next Steps

- Future forums will cover key technology areas required by LHS
  - ✓ Healthcare AI, big data, analytics, data modeling, data interoperability
  - ✓ Real-time pragmatic clinical trial technologies, rapid health system evaluation
  - ✓ Rapid learning cycles, robotic process automation, and hospital quality improvement
  - ✓ Clinical research network, real-time clinical collaboration
  - ✓ Rapid dissemination of knowledge, computable biomedical knowledge
  - ✓ Technologies for reducing health care disparities
  - ✓ And more ...
- Recruiting more volunteers to organize forums. Please contact organizing committee
- Need more leaders to join Advisor Committee. Please contact AJ, Josh, or Chuck
- Please Join “Learning Health Systems ” linkedin group for discussion

<https://www.linkedin.com/groups/10532735/>