6th LHS Tech Forum

Topic:
Synthetic Patient Data – A Game Changer for LHS?

Program:
While the vision of Learning Health Systems (LHS) from the National Academy of Medicine is inspiring, challenges remain in progressing towards implementing and running LHS in clinical care and public health. One major hurdle is the lack of access to patient data by the larger technology community. Can synthetic patient data be a game changer for LHS? This LHS Tech Forum will cover a brand-new topic on the impact of synthetic patient data in the emerging field of LHS. We will hear the inside story behind the development of the leading synthetic patient data technology: the Synthea patient generator from MITRE development team. It will be followed by presentation and discussion of a recent study of using Synthea patient data for simulating a basic LHS unit (as published in *Nature*). You are welcome to ask questions and discuss synthetic patients and LHS.

The LHS Tech Forum Initiative of the Learning Health Community brings together innovators from healthcare, academics, and industries to discuss LHS technologies and practices. For the past forums, please visit the LHS Tech Forum Initiative webpage and join our Learning Health Systems LinkedIn Group.

Agenda:

1. Community announcements. (Josh, 2 min)
2. Presentation 1: Synthea patient generator, by Andy Gregorowicz, MITRE. (20 min)
3. Presentation 2: LHS simulation using Synthea patient data, by Dr. AJ Chen. (15 min)
4. Audience Q/A. (25 min)

Moderator: Dr. Blackford Middleton

Date/Time: 2PM PST (5PM EST), December 5, 2022.
Registration: RSVP to forum lhs.tech.forum@gmail.com for free registration.
Webinar: A Zoom link (courtesy of Stanford University) will be provided after registration.
Audience: LHS leaders, IT industry innovators, academic researchers, healthcare professionals, engineers, scientists, and business professionals.

Speaker Bios:

Andy Gregorowicz has over 20 years of experience as a software engineer for MITRE. Since joining, he has applied his software and interoperability expertise to current challenges faced by the Centers for Disease Control (CDC), Department of Veterans Affairs and Health and Human Services (HHS) Office of the National Coordinator (ONC). Andy is a member of the Synthea development team, recently implementing simulation of COVID-19 Immunization and currently working on features to ease the generation of telemedicine data.

AJ Chen, PhD is a Learning Health System technology consultant in Silicon Valley. AJ co-chairs the LHS Tech Forum Initiative at the non-profit Learning Health Community. Previously AJ co-chaired the US HHS Southwest and Pacific Region Health Equity Council, and served in the Consumer Technology Workgroup of the US HHS Federal Advisory Committee on Health IT Standards. AJ won US HHS developer national challenges twice. He had developed the core semantic search technology that helped healthline.com and partners to reach 100M consumers per month. Earlier, AJ partnered with Nobel Prize winner Dr. Barry Marshall to promote disrupted medical discovery.

Blackford Middleton, MD, MPH, MS's work is focused on clinical informatics – the applied science surrounding strategy, design, implementation, and evaluation of clinical information systems in clinical environments, or wherever clinical decisions are made. His overarching goal is to improve healthcare: one decision at a time. His special interests are in augmented clinical intelligence, knowledge representation and sharing, and quality measurement – all mediated through clinical information management systems (EHR, PHR, etc.). He has deep experience in team building, innovation, and leadership roles in academe and industry. He was a professor of biomedical informatics, and or of medicine, at Stanford, Harvard, and Vanderbilt Universities, and he held executive leadership roles at Stanford University Medical Center (CMIO), MedicaLogic/Medscape (CMO), Partners Healthcare System (Corporate Director, Clinical Informatics R&D; now Mass General Brigham), Vanderbilt University Medical Center (CIO/Assistant Vice Chancellor), and at Apervita (Chief Informatics & Innovation Officer).

Forum Organizers:
Learning Health Community (https://www.LearningHealth.org)

Outreach Partners:
University of Michigan, Stanford University, AMIA, HIMSS Accelerate, UCSF Health Hub, University of Melbourne.

Forum Organizing Committee:
AJ Chen, PhD, Learning Health Community, US
Joshua C. Rubin, JD, MBA, MPH, MPP, Learning Health Community, US
Sophia Wang, MD, Stanford University, US
Tom Foley, MD, Newcastle University, UK

Forum Advisor Committee:
Chair: Charles Friedman, PhD, University of Michigan