**Healthcare Data Science at Yale Institute for Foundations of Data Science**

Location: YINS, 17 Hillhouse Avenue, 3rd Floor, New Haven, CT

Date: May 1, 2023

8:00-8:05 - **Rohan Khera, MD, MS**: Introduction

8:05-9.00 - **Lucila Ohno-Machado, MD, PhD** - “Keynote Presentation: The unique challenges and opportunities in healthcare data science”

*Session notes: The session will define why healthcare increasingly relies on data science and how there is an incredible opportunity to improve the health of people and societies by appropriately leveraging the various data streams. It will also identify the uniqueness of healthcare data sciences and the need for building specific expertise to translate scientific discoveries to healthcare.*

9.00-9.15 - Coffee Break

9.15-10.15 - **Marc Suchard MD, PhD**: "Data science across silos in healthcare"

*Session notes: This solution-oriented talk by Dr. Suchard will demonstrate the power of collaborative science for data-driven discoveries while successfully tackling data silos in healthcare. The work will highlight successful federated approaches that have proven to be a highway to successful multicenter and multinational studies.*

10.15-10.30 - Break

10.30-11.00 - **Smita Krishnaswamy, PhD**: “Strategies to Tackle Multimodal Sparse Data in the Electronic Health Record”

*Session notes: Dr. Krishnaswamy will provide methodological approaches to overcoming the challenges of working with real-world healthcare data that spans multiple domains and with often informative missingness. The overview will provide a way to appreciate how innovation in methods can solve key challenges in healthcare data science.*

11.00-12.30 - **Harlan Krumholz, MD, SM; Puneet Batra, PhD & Panelists:** “How to build successful clinician-investigator and data scientist collaborations”

*Session notes: This interactive panel discussion will tackle how to best bridge the gap between clinician investigators and data scientists to enable successful discovery and have a major impact. The panel will discuss the talks in the morning, and where panel chairs will share their unique experiences building these bridges as a clinician (Dr. Krumholz) and a data scientist (Dr. Batra), with participation from the panel and audience.*

12.30-13.00 - Lunch Break

13.00-14.30 - "Hands-on EHR Workshop by the CarDS Lab"

*Session notes: Members of the Cardiovascular Data Science (CarDS) Lab at Yale School of Medicine will lead a hands-on demonstration of working with structured data in the electronic health record, the most widely available data stream across health systems. The EHR workshop will focus on applying research best practices when working with the EHR. The workshop will be interactive and will follow an instructor-led session format with the following learning objectives:*

*• key issues when working with structured data from EHR*

*• how to work with common data models to design scalable studies*

*• how to apply statistical best practices to data from the EHR*

*The demonstration will include real-world de-identified EHR and a web-based format that allows participants to learn key analytic principles and design and test conducting a mini-study.*