Biomedical Informatics Grand Rounds
Wednesday, May 5, 2021 3:00 pm – 4:00 pm

Secondary use of clinical and patient-generated data for mental health research

Jyotishman Pathak, PhD, FACMI
Frances & John L. Loeb Professor of Medical Informatics & Psychiatry
Chief, Division of Health Informatics
Vice Chair, Department of Population Health Sciences
Weill Cornell Medicine, Cornell University
New York, NY

Remote Access
Join Zoom Meeting https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09
Meeting ID: 956 1719 7636 Passcode: 924293

Bio: Dr. Pathak is the Frances & John L. Loeb Professor of Medical Informatics and Psychiatry, Chief of the Division of Health Informatics, and Vice Chair of the Department of Population Health Sciences at Weill Cornell Medicine, Cornell University in New York City. His research focuses on secondary uses of electronic health record (EHR) and insurance claims data, clinical decision support systems for personalized therapeutics, and integration of genomic and mHealth data within EHRs for improving mental and behavioral health.
Dr. Pathak received his Ph.D. in Computer Science from Iowa State University, Ames (2007) and a B.Engg. in Computer Science and Engineering from National Institute of Technology, Jamshedpur, India (2002). He is the recipient of Iowa State University Graduate Research Excellence Award and Mayo Clinic Early Career Development Award in 2007 and 2010, respectively. Dr. Pathak's research has been funded by multiple major national grants from the U.S. National Institutes of Health (NIH), the Patient-Centered Outcomes Research Institute (PCORI), the Agency of Healthcare Research and Quality (AHRQ), the American Heart Association (AHA), Merck Pharmaceuticals, and several private foundations. He has published over 230 papers including many book chapters and invited reviews.
He is also the Founder of Iris OB Health Inc. – a startup company spun out of Weill Cornell developing digital health solutions for preventing the development of postpartum depression using behavioral health analytics.

Abstract: In recent years, big data, including electronic health records and patient-generated health data, have attracted significant interest across healthcare. Yet when it comes to big data science in mental health research, the successes have remained relatively limited to date. We continue to use primitive ways to identify and measure mental illness, lack organizational capacity for building and maintaining large and longitudinal data repositories, and have yet to define a robust model for turning individual data into collective knowledge that can benefit patient care. Our research is an attempt to address these challenges by developing and applying novel big data analytics methods in understanding effective ways to diagnose, treat and manage patients suffering from mental health conditions, such as major depression.

Educational Objects: Upon completion, participants should be able to:
- Develop scalable informatics infrastructure for mental health research.
- Understand the utility of clinical and patient-generated data for mental health research.
- Understand the application of machine learning methods for mental health research.

Disclosure Statement: In compliance with the ACCME Standards for Commercial Support, everyone who is in a position to control the content of an educational activity provided by the School of Medicine is expected to disclose to the audience any relevant financial relationships with any commercial interest that relates to the content of his/her presentation.
The faculty: *Jyotishman Pathak, Ph.D.*, the planners; and the CME provider have no relevant financial relationship with a commercial interest (defined as any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients), that relates to the content that will be discussed in the educational activity.

Continuing Medical Education Credits: The School of Medicine, State University of New York at Stony Brook, is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The School of Medicine, State University of New York at Stony Brook designates this live activity for a maximum of **1** *AMA PRA Category 1 Credits™.* Physicians should only claim credit commensurate with the extent of their participation in the activity.