MOFFITT CANCER CENTER

Grand Rounds in Population Science (GRIPS)

Thursday, May 11, 2017

11:30 am—12:30pm

SRB — Ferman Family Conference Room

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"Data in the Cloud, Analyze Thyself!

In January 2015 I took a new position as Professor and Chief Technology Officer at the Biomedical Informatics Department of Stony Brook University (State University of NY, Long Island). This follows 4 years as the inaugural director of a new Division in Informatics in the Dept of Pathology of the Univ Alabama at Birmingham (UAB), and 5 years as Professor of Bioinformatics in the Division of Applied Mathematics of the University of Texas MDAnderson Cancer Center (2005-2010). My current research interests are at the intersection of **Semantic Web** abstractions and distributed **Cloud Computing** approaches to **Bioinformatics application development** in the pervasive **Web Platform**. The use of computational statistics at the intersection of those two fields now gets a fancy new name, **Big Data Science**, which is also the focus of my educational and service activities. This research pulls together threads from past, and ongoing, work on mathematical modeling and machine learning for **Medical Genomics**, at a time when these fields are challenged by the increasingly data driven nature of modern Biomedical research. In my own work this has often focused on **The Cancer Genome Atlas (TCGA)**, a Biomedical Big Data resource that enables, and requires, this new synthesis for the development of **Personalized Medicine** applications. As **Population Health** data becomes available in real-time (see for example http://bit.ly/pqiSuffolk), the opportunities for pursuing Machine Learning as a pervasive Web Computing exercise are emerging, with a new avenues for research in **Artificial Intelligence** applications embedded in the increasingly patient-facing Health-Care enterprise.

Lunch will be served to the first 60 attendees to sign-in at the registration table outside the SRB Ferman Family Conference room