FACULTY SEARCH SEMINAR

Jointly sponsored by the Departments of
Biomedical Engineering and Applied Mathematics and Statistics

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HOST: Dr. Laurent Younes,
Chair, Applied Mathematics and Statistics

Wednesday, April 4, 2018
12:00PM
Schaffer Hall 101

MACHINE LEARNING FOR HEALTH CARE

ABSTRACT: We will present multiple ways in which healthcare data is acquired and machine learning methods are currently being introduced into clinical settings. This will include: 1) Modeling the prediction of disease, including Sepsis, and ways in which the best treatment decisions for Sepsis patients can be made, from electronic health record (EHR) data using Gaussian processes and deep learning methods. 2) Predicting surgical complications and transfer learning methods for combining databases and 3) Using mobile apps and integrated sensors for improving the granularity of recorded health data for chronic conditions. Current work in these areas will be presented and the future of machine learning contributions to the field will be discussed.