Request for Proposals: BME 580.670-671 "Precision Care Design Studio"

We are requesting proposals from ACCM faculty for Precision Care Design Studio student projects.

This course will be offered in Fall 2019 and Spring 2020 semesters to first year graduate and undergraduate students of the JHU School of Engineering. This will be a combined lecture and project course which will be taught in the ACCM department and at the School of Engineering. Small student teams will work on each accepted project under the supervision of the project mentors (ACCM faculty and core faculty from the Johns Hopkins Institute for Computational Medicine (ICM)). The overall goal of each project is to apply computational medicine methods to the solutions or improvements of important health care problems. To achieve these goals project teams may access institutional or other data sets including the PhysioCloud that has been established at the ICM.

Successful proposals require clear problem statements, identification of potential data sets, and a commitment by the faculty member to serve in a mentor role. The faculty commitment includes a requirement to meet with your project team for approximately one hour each week of the University's academic year and to evaluate individual student performance. The student teams will develop a solution strategy in collaboration with their ACCM and Engineering faculty advisors but of their own choice. An Advisory Committee composed of members of the ACCM Informatics and Predictive Analytics Research Group will select the projects from those submitted.

Template:

Project Title:

Problem Statement: In one paragraph describe the clinical problem which you propose to address with this project. Specific reference should be made to how data will be used to develop the project solution.

Project Team: Identify key personnel and their roles (eg. Mentor, co-Investigator, research associate, etc.)

Background: Describe the current state of research and practice as it relates to the proposal. Estimates of the impact of a successful project will be helpful. (No more than 1 page).

Potential Solution: Describe your vision of the result of the student team's work.

Preliminary Data/Relevant Experience: Include any preliminary data that you may already have that relates to the proposal. Please indicate if you have specific experience or education that enhances your ability as a project mentor.

Data Set Identification: Indicate the data sets or a brief synopsis of elements that you believe will be needed to develop the proposed project. Examples could include physiologic data from OR and ICU monitors, narrative elements from Epic, data from hospital finance systems, etc.

Other Supporting Information: Please include letters from co-investigators or other information that you believe support your application.

References: Please include no more than 10 references that support your proposal.