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F. SWEENEY

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[HTTP://WWW.SURGERY.EMORY.EDU/ABOUT-  
US/FACULTY\\_DIRECTORY/FACULTY\\_PROFILE\\_JO  
HN\\_SWEENEY.HTML](http://www.surgery.emory.edu/about-us/faculty_directory/faculty_profile_john_sweeney.html)

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### **Required Skills:**

Expertise in SMART on FHIR and web server development, Project Management, Communications

### **Preferred Team**

#### **Communications:**

Weekly or as needed

#### **Data Sources:**

The mentors have de-identified electronic medical records data.

#### **Other Items:**

Project has timezone flexibility. Mentors and students will determine a good time for virtual meeting.

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## SMART ON FHIR APPLICATION FOR A CLINICAL DECISION SUPPORT SYSTEM FOR HOSPITAL DISCHARGE DECISION MAKING

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The mentors developed an alpha version of a clinical decision support system (CDSS) for hospital discharge decision making that performed well in experiments with residents and advanced medical students. They are looking to develop a SMART on FHIR application of the CDSS for use on Emory University Hospital's SMART on FHIR server when available. They worked with students in this course in Fall 2016 to begin development of a SMART on FHIR application. The current team can build on documented progress from last year.

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### PROJECT OBJECTIVES

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This project is further development of the CDSS as a SMART on FHIR application to be hosted by Cerner.

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### SUCCESSFUL PROJECT

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This team will develop a fully functional Cerner SMART on FHIR hosted application with OAuth2 authentication. The hosted application will request needed data from FHIR services and apply a mathematical model to queried FHIR data to generate a discharge recommendation.

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**Intellectual Property:** My project cannot share IP. The IP is owned by my organization. Students will be recognized as contributors.