

Summer Student Research Program
Project Description

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PROJECT TITLE (200 Characters max):

Quality Improvement Projects in Trauma Patients with Substance Use Disorder

HYPOTHESIS:

Substance use disorder is a common diagnosis in patients seen with traumatic injuries. Often, they have polysubstance use, and after polytrauma these patients are at high risk for withdrawal, delirium and increased overall morbidity while inpatient. These patients are also at high risk for sustaining additional traumas due to their substance abuse disorder. To our knowledge no center in the country has established protocols to take care of these patients in the acute care setting and beyond. The trauma center at University Hospital is unique in that we have a "survivor clinic" where we follow patients who are victims of violent crimes and polytrauma. The hope is to be a leading center for trauma patients with substance use disorders by taking care of these patients acutely, and follow them chronically to address not only their traumatic injuries but free them of their substance abuse.

PROJECT DESCRIPTION (Include design, methodology, data collection, techniques, data analysis to be employed and evaluation and interpretation methodology)

Students will work on quality improvement projects with the department of trauma. These students will assist in evaluating our data on patients diagnosed with substance abuse disorder to formalize protocols that will be published for the trauma teams to care for these patients. Protocols will include screening and intervention guidelines for a variety of substances, provider guideline on managing opioid withdrawal in a patient with polytrauma and who meets criteria for referral to addiction medicine due to their substance abuse history. Since this is not done in other trauma centers, our hope is to publish our protocols so that it can be mimicked at other centers.

We have also established a research collaboration over the past few years where we try to have weekly meetings for all students working with the ACS team over the summer to learn about research methods and present various phases of their research to each other. Through this forum, students may end up collaborating also with other faculty, fellows, and residents in our division and beyond.

SPONSOR'S MOST RECENT PUBLICATIONS RELEVANT TO THIS RESEARCH:

None

THIS PROJECT IS: Clinical Laboratory Behavioral Other

THIS PROJECT IS CANCER-RELATED

Please explain Cancer relevance

THIS PROJECT IS HEART, LUNG & BLOOD- RELATED

Please explain Heart, Lung, Blood relevance

THIS PROJECT INVOLVE RADIOISOTOPES?

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THIS PROJECT INVOLVES THE USE OF ANIMALS
PENDING APPROVED IACUC PROTOCOL #

THIS PROJECT INVOLVES THE USE OF HUMAN SUBJECTS?
PENDING X APPROVED IRB PROTOCOL # M

THIS PROJECT IS SUITABLE FOR:

UNDERGRADUATE STUDENTS ENTERING FRESHMAN
SOPHOMORES ALL STUDENTS X

THIS PROJECT IS WORK-STUDY: Yes X or No

THIS PROJECT WILL BE POSTED DURING ACADEMIC YEAR
FOR INTERESTED VOLUNTEERS: Yes X or No

WHAT WILL THE STUDENT LEARN FROM THIS EXPERIENCE?

Students working on this project will learn how to address problems within the realm of patient safety and care, and how to develop quality improvement within the department of trauma and critical care surgery. This is a unique patient population where this health issue is currently not being addressed in the literature of acute care surgery. The requirement I propose is presentating at the end of the summer for the SSRP symposium, and I also hope students projects will be presented at a National meeting and published in peer-reviewed journal.