

U.S. Army Institute of Surgical Research

2021 Virtual Summer Undergrad Research Program - Request for Intern – ISR-BCRD-03

Department: Blood Coagulation Research (BCRD)

What are your expectations for the student?

Enthusiastic and curious student with an interest in bioenergetics in the context of surgical critical illness, with an emphasis on burn and resuscitation. Daily availability to read relevant literature in the fields of mitochondrial function and dysfunction, bioenergetics, and resuscitation. Deliver multiple small presentations to the lab group over the course of the summer. Interest in writing a formal review article in a relevant area.

How would the student benefit from working on your project?

Gain experience reading and interpreting the literature. Gain experience with scientific writing and scientific presentation. We will read several core texts and some recent research literature relevant to bioenergetics and critical illness.

Brief project description (please list the skills and techniques they will learn):

Our lab has expertise in large animal research using swine, as well as high-resolution respirometry to assess mitochondrial function. We use these techniques to study pharmacological modulation of critical illness states. While there will not be any hands on learning, we will discuss these techniques at length.

Would you be interested in advising the intern for writing an abstract for a conference proceedings publication (example at the link below)? **YES**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5773900/>