

## Internship Proposal Guidelines

**Name (Student ID#):**

**Email:**

**Phone:**

**Major:** Biology

**Class standing:** Senior

**Internship supervisor/contact info (phone & email):** Jenny Kubacak (501.364.6527)  
(KubacakJ@archildrens.org)

**Internship institution/location:** Arkansas Children's Hospital/ 13 Children's Way, Little Rock, AR 72202

**UCA Faculty Advisor:** Roger Wainwright

**Credit Hours Requested:** 4 (Upper level biology elective) (3 credits needed to graduate in December)

**Internship Duration** (40 hrs per week for 8 weeks) (June 5- July 28)

**Applying for:** SUMMER (deadline Apr 15)

### Objectives

The purpose for me to participate in this internship/research is to gain first hand, clinical research experience. Arkansas Children's Hospital is a leader in pediatric and medical research in the state of Arkansas. This program would allow me the opportunity to work hands on in a hospital setting, and develop medical research experience that I cannot achieve at UCA. At the same time I will be working under medical doctors and other healthcare professionals to gain a better understanding of how a career in the healthcare setting will be.

### Description

#### Project Title:

Retrospective chart review of patients with hypothermia with isolated head and multiple trauma compared to eutermic isolated head and multiple trauma and correlating the degree of head CT scan severity

Trauma is the leading cause of death in pediatric patients. Head trauma, whether isolated or in multiple trauma, has a significant impact in pediatric patient outcomes. The current assessment for the severity of head trauma is derived from the adult literature with a lack of scientific research supporting its application in the pediatric isolated head or multiple trauma patients. Currently there is a lack of supported early assessment tools to help identify severity of pediatric brain injury in pediatric trauma, and this warrants further investigation. Identification of reliable early indicators of the severity of pediatric brain injury could facilitate earlier therapies to prevent further damage and improve neurological outcome. Previous research on a national scale has shown core temperature in a pediatric trauma patient has a significant relationship to pediatric outcomes. We would like to investigate this relationship further using de-identified data from Arkansas Children's Hospital (ACH) trauma database. We plan to examine pediatric trauma patients from the past 5 years on at ACH to evaluate for any correlation between trauma patients (isolated head trauma and multiple traumas) who present with hypothermia and severity of corresponding head injury on CT scan. We will compare these patients to trauma patients presenting with normal temperatures. We will use the official diagnostic interpretation of CT imaging in isolated head trauma and multiple trauma patients made by attending radiologists at ACH. We will utilize the ACH trauma database. Data will be

obtained through retrospective chart review with no personal identifiable information to be retained. Data collected and analyzed will include age, sex, type of injury, Glasgow coma scale, vital signs, pediatric shock index, positive/negative CT scan findings, procedures/interventions, mode of transport, and patient outcomes. If found to be statistically significant, this study would help improve early recognition and stabilization of the pediatric trauma patient by expediting diagnostic and therapeutic interventions at the referring centers or at ACH. If we are able to identify a correlation between hypothermia and worse patient outcomes, then our goal is to better prepare for treatment of head injury and multiple trauma patients. We hope to improve the ability to and recognition of need to warm these patients, which could improve patient morbidity and mortality rates at ACH. This study can help us better be able to communicate, upon patient transfer from an outside facility, the importance of keeping this patient subset's temperatures in the normal range.

Roles: I will be helping with data input as well as compiling reports and dissecting the data with doctors.

### **Educational Benefits**

This program will provide me with knowledge on how clinical research is conducted as well as give me an opportunity to be published in a medical journal. I will also meet doctors and other healthcare professionals, and make connections that will benefit me as I pursue my career as a physician assistant. The research program will also add to my application to physician assistant school.

### **Assessment**

I still have not received all of the information on how my on-site supervisor will assess my performance; however I will be working very closely with the doctor I'm assigned to, and will report all findings to them.

I will record all of my procedures and daily tasks in a journal, along with weekly summaries and important findings. The journal will be updated daily with pertinent information including: progress notes, skills learned, connections made, results, conclusions, etc.

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Student Signature Date  
Jerry Kubiak      4/4/17  
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Internship Supervisor Signature Date  
Ken Wainwright      4-4-2017  
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UCA Internship Advisor Signature Date