Q1: Faculty Information:
Last name: Raghupathi
First name: Ramesh
Faculty Position: Professor
Department: Neurobiology and Anatomy
Institution: Drexel University
Phone: 2159918405
Email Address: ramesh.raghupathi@drexelmed.edu

Q2: Type of Research?
Basic Science Research

Q3: Please describe your research interests:
Brain injury focusing on concussions and severe brain trauma in neonate and adolescent animals. Determining sex differences in neurochemical, pathologic and behavioral outcomes following concussion. Identifying treatment strategies (pharmacologic and behavioral) to improve outcomes.
### Q4: Please provide a brief description of research opportunity/project(s):

1) Title of project(s): Long term consequences of repetitive concussions in adolescent animals

**Brief Description:**
We are interested in determining whether the brain becomes more susceptible to damage following multiple mild concussions. Further, we are exploring the neural basis for dysfunctionality since concussion typically do not cause extensive structural damage.

**Duration:** 2 months - indefinite

**Time commitment:** Negotiable

**Specific Requirements:** Interest in basic translational research

**Funded or unfunded (yes or no):** Partially

2) Title of project(s): Role of inflammation in pathology of pediatric brain trauma

**Brief Description:**
We are evaluating the role of microglia in mediating neuronal damage in the immature brain after trauma. The primary focus is on testing currently approved antibiotics as a treatment strategy. We will use a combination of biochemistry, histology, and behavior to determine efficacy of treatment.

**Duration:** 2 months - indefinite

**Time commitment:** Negotiable

**Specific Requirements:** Interest in basic translational research

**Funded or unfunded (yes or no):** Yes

### Q5: Please indicate the specific level of experience required, if applicable:

Open to all medical students