Research Overview:
Our ultimate goal is to investigate the mechanisms by which stress influences brain plasticity and resilience. The stress response is key to organism survival: It is highly conserved across vertebrate species and it allows organisms to respond to environmental change. However, a stress response that persists or is repeatedly activated can have substantial negative consequences on brain plasticity and resilience. A reduction in brain plasticity could be detrimental for organismal survival as it pertains to the hippocampus and its spatial memory function. For example, learning locations of predators or routes for escape can make all the difference in the wild; disruptions by chronic stress of the neural substrates required for optimal spatial memory could be dire. In addition to its effects on spatial learning and memory, chronic stress is thought to contribute to many psychological conditions that include depression, anxiety disorders, post-traumatic stress disorder (PTSD), Alzheimer’s disease, and drug abuse/addiction. Chronic stress may even accelerate aging processes, which can be exacerbated by poor diet and other contributing variables. Consequently, studying conditions that attenuate or accentuate brain plasticity are essential to understanding mechanisms of adaptation and resilience, as well as many health conditions.
Position Details:

We continuously consider new undergraduate students as Research Assistant (RA) non-paid volunteers. We welcome students from any major, especially those considering a career path to graduate school as a behavioral neuroscientist. Duties involve working with rats, assisting with handling and testing them on mazes; quantifying behavior; and using the computer to upload data. Other tasks may involve, as needed, small rodent surgery and/or tissue processing; chemical assays; and microscope work. Students work closely with postdoctoral or graduate students and must be able to follow instructions; trouble-shoot; and be comfortable raising questions. Undergrad RAs are also expected to attend weekly lab meetings and read research articles ahead of time to contribute to the discussion.

Undergraduate Research Assistant Requirements

- Highly responsible
- Highly motivated and enthusiastic
- Can work independently as well as within a group
- Willing to work on the microscope for long hours and at odd times of the day
- Willing and able to work with rats and to assist with surgery
- Have a year (at minimum) before graduating (training takes time)
- Be available for a minimum of 10 hours a week, with more hours desirable.
- Highly desirable are undergraduates who have a particular interest in furthering their education in graduate school with an emphasis in neuroscience

Note: Undergraduates work on a volunteer basis, but some have earned funding through the College of Liberal Arts and Sciences SOLUR program.

To Apply, please fill out the following application and send it to conradc@asu.edu along with your CV or Resumé.

For more information, please visit our website at https://psychology.clas.asu.edu/conrad
Conrad Lab

Undergraduate RA Application

Name:
Major/Minor:
Expected graduation date (semester/year):
Estimated Immediate Post-baccalaureate plans (what will you be doing in 2-4yrs)?
Estimated Long-term career goals (what do you see yourself doing in 10-15yrs)?
Relevant classes you have taken that might pertain to the work we do in our lab:
Previous research experience:
Other labs that you are currently (or are considering being) a member of?
How long of a commitment to our lab would you be able to make?
What is the range or hours per week you would be able to be in the lab?
Would you be available to work weekends or holidays?
Do you currently have a job? How many hours a week do you work?
When are you looking to begin?
What is your course load/schedule like in the semester you wish to begin?
What paper have you read from our research lab? Also, tell us in no more than six sentences, what the key finding was and why it was novel. (All of the Conrad Lab publications are listed here: https://psychology.clas.asu.edu/conrad/publications)
Please describe, in detail, your reason for selecting this lab, and why behavioral neuroscience research in stress interests you: