Akila Ram receives PhD

05/12/2021

Dissertation Title: The Periaqueductal Gray in Opioid Tolerance and Chronic Pain

Major Professor/PI: Dr. Erin Bobeck

My Doctoral research has been focused on understanding specific changes in the brain that take place after long-term opioid use. A remarkable part of the brain, called the Periaqueductal Gray, is responsible for the body’s own pain relief regulation. It is also this brain region that is severely affected by long-term opioid use. Using methods targeted to this region of the brain, I was able to alter cell signaling pathways to extend the useful window of opioids. Further, I showed we can use different and safer pain therapeutics in place of opioids. I’ve been fortunate to be able to attend meetings to share my work and develop a wonderful network of mentors and collaborators. My experiences during graduate school have helped shape my career directions. I’m looking forward to continuing my journey in pharmacology research and will work to develop new and better therapies to benefit patients.