

# RaMP Student Research Experience in the Cornwall Laboratory

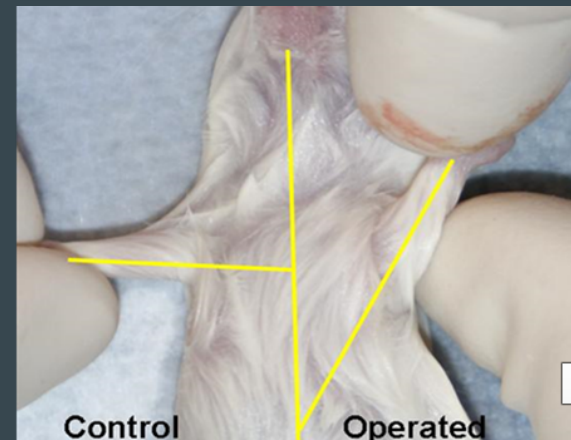
...

Annie Emmert  
Mentor: Dr. Qing Goh



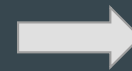
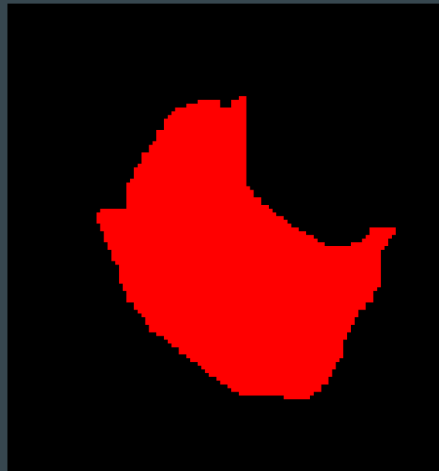
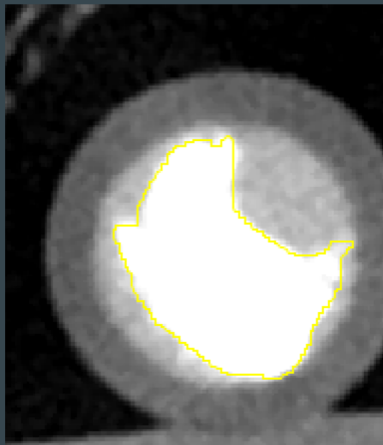
# The Cornwall Laboratory

- Division of Orthopaedics at Cincinnati Children's Hospital Medical Center
- Cerebral palsy and neonatal brachial plexus injury
  - Most common causes of paralysis in children
  - Induces muscle contractures
- Muscle contractures
  - Physically debilitating
  - Severely impair function and mobility in affected limbs
  - Currently incurable
- Current project: Determine the efficacy of bortezomib in preventing contractures in a mouse model of neonatal brachial plexus injury



# My Research

- Measure and record weights of mice
- Prepare drugs and assist with drug injections
- Observe the surgeries that induce contractures in mice
- Investigate the size of skeletal muscles in mice



# So What?

## Professional Growth

- First experience working in a biomedical research laboratory
- Working alongside medical professionals
- Observing surgeries from an internationally-renowned pediatric hand surgeon
- Opportunities to contribute to a scientific manuscript and to present my research

## Personal Growth

- Collaborative work environment
- Learning to ask questions when necessary
- Making a direct impact on another person's life



# Now What?

- Summer plans
  - Continue research for the Cornwall Laboratory
- Long-term goal of becoming a physician
  - Biomedical research and scientific advances at the forefront of medicine
- Thank you to the Cornwall Lab and to the University Honors Program for granting me this invaluable opportunity!

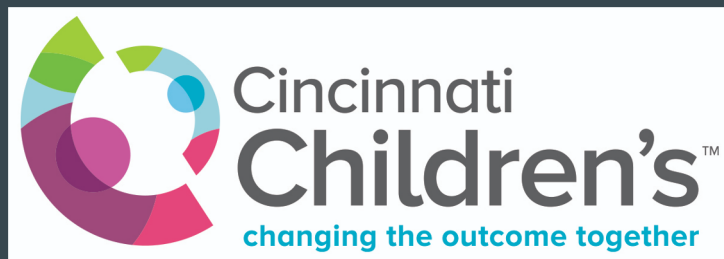


Photo by Cincinnati Children's Hospital website



Photo by University Honors Program website