

Summer Research Program

The Biomedical Research Institute of New Jersey (BRI_{nj}) is committed to the training, education and mentorship of aspiring research scientists and physicians. In pursuit of that goal, BRI_{nj} has partnered with MidAtlantic Neonatology Associates (MANA) and other leading organizations to offer an Summer Research Program. The program is designed to give students exposure to cutting-edge research, an appreciation for scientific and medical careers, and an opportunity to refine their research skills. We invite outstanding undergraduate students to conduct biomedical research in our state-of-the-art laboratory in collaboration our scientists.

Research opportunities are a great way for undergraduate students to assess their inclination for careers in science and medicine. Pre-clinical research opportunities are diverse. Students working in the lab will have the opportunity to learn a wide variety of laboratory techniques while working alongside scientists. Students may contribute to different aspects of the research process, e.g. literature review, generating hypotheses, designing experiments, analyzing data, data entry, and interpreting/presenting results. Techniques commonly used in the laboratory include:

- Mammalian cell culture (immortalized lines)
- Primary rat brain cell culture
- Transfection
- RNA silencing
- Immunohistochemistry
- Fluorescence Microscopy
- ELISA
- Western Blot
- PCR, RT-PCR
- Recombinant DNA techniques
- Animal husbandry and modeling
- Rodent models of disease
- Rodent behavioral analysis (tests of motor function and cognition)

2019 Summer Research Opportunities:

- **RESEARCH INTERN**

Number of Students - (1 – 2)

Description - Students will be paired with a research scientist and allowed to assist with all research activities.

Dates/Times – To be determined based on your availability and the needs of your scientific mentor

- **TEACHING ASSISTANT**

Number of Students - (1)

Description – Student will work alongside our High School Research Program Coordinator to facilitate the High School Summer Research Program. The student will master many laboratory techniques and mentor students. The position will be paid.

Dates/Times – Monday, June 24th - Friday, August 2nd