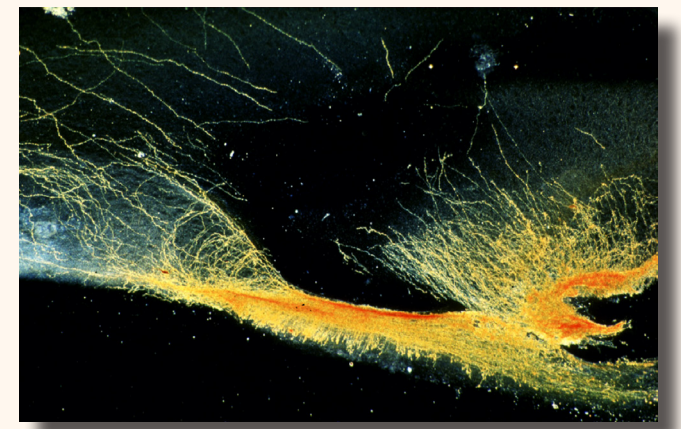


Undergraduate Research Opportunities



Cooperative Research Partnerships to Promote Workforce Diversity in the Reproductive Sciences (CPDR)



"It starts with a KISS[peptin]"



Purpose: To promote biomedical workforce diversity in reproductive sciences by supporting multi-Principal Investigator research and undergraduate training partnerships between faculty at minority-serving institutions (MSIs) and faculty at academic institutions with established research programs. Our program focuses on how the brain regulates reproduction (puberty and cycles in females). Students accepted into the program will learn and use the basic techniques that fill gaps in the field.



Two approaches are emphasized:

Connectome approaches

- Hypothalamic neuroanatomy
- Immunocytochemistry and in situ hybridization
- Stereotaxic surgery
- Viral and conventional tract-tracing

Systems Biology approaches

- Assessment of reproductive hallmarks (puberty, cyclicity, fertility)
- Cell biology of kisspeptin signaling in vitro
- Transgenic and knock-out mouse methods



Who is eligible? Full-time Freshman or Sophomore students (citizens or non-citizen nationals of the USA or individuals who are lawfully admitted for permanent residence in the United States) and have a GPA \geq 3.0.

- Individuals from racial and ethnic groups that are underrepresented in the biomedical sciences
- Individuals with disabilities, who are defined as those with a physical or mental impairment that substantially limits one or more major life activities
- Individuals from disadvantaged backgrounds (family/personal incomes below state poverty levels)

High School Students, Graduate Students, Postdocs, and Junior Faculty are not eligible for CPDR research training.

What does the program provide? This program trains students to conduct intensive laboratory research. A course in Fundamentals of Endocrine Physiology at MSU during the summer and a course at JHU in Reproductive Physiology are provided. The program provides salaries for up to 10 hr/week during the academic year and 40 hr/week during the summer months, and local transportation between MSU and JHMI. Students will attend seminars at JHMI, journal clubs at MSU, and they are given an opportunity to present their work at national meetings. The program will pay for transportation, food and housing, and registration costs.

Who are the Faculty? MSU - Dr. Gloria Hoffman (program director) and Dr. Michael Koban. JHMI - Dr. Sally Radovick (program director) and Dr. Andrew Wolfe.

Contact Kate Levinzon, ylevinz1@jhmi.edu, to obtain more information