



National Institutes of Health
National Institute of
Environmental Health Sciences
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Research Triangle Park, NC 27709

***Veterinary Student Pathology Externship
Cellular and Molecular Pathology Branch
National Toxicology Program
National Institute of Environmental Health Sciences (NIEHS)
Research Triangle Park, North Carolina 27709***

The NIEHS externship is designed for veterinary students to work directly with veterinary clinical and anatomic pathologists within National Toxicology Program (NTP) and National Institute of Environmental Health Sciences (NIEHS) as well as visit area pathologists working in various pathology careers such as academia, industry, and diagnostic laboratories. The externship can be catered to meet the student's interests/goals and provide for experiences in research and diagnostic pathology of rodents. Externships can be arranged for 1 to 12 weeks and offer exposure to a variety of pathology activities including participation in the NTP pathology peer reviews, NTP and NIEHS research, and visits to North Carolina State University College of Veterinary Medicine, contract research organization laboratories, and Environmental Protection Agency research laboratories.

The NIEHS employs at least 10 veterinary pathologists working in areas of toxicologic pathology and research. Research projects are ongoing in areas of molecular carcinogenesis, toxicological pathology, and toxicogenomics, utilizing investigative techniques such as microarray gene expression analysis, real time RT-PCR, magnetic resonance imagery (MRI) microscopy, in situ hybridization, electron microscopy, and immunohistochemistry. The RTP area is home to more than 70 veterinary pathologists who are employed at various institutions including academia (such as University of North Carolina, North Carolina State University including the College of Veterinary Medicine, and Duke University), private industry (Experimental Pathology Laboratories, Integrated Laboratory Systems, and Charles River Laboratories), veterinary diagnostic laboratories (Rollins Animal Disease Diagnostic Labs and Antech Diagnostics), and other government agencies (Environmental Protection Agency). In addition, the NIEHS has a strong program in laboratory animal medicine with five board certified (ACLAM) laboratory animal veterinarians and a training program in laboratory animal medicine.

Depending upon the duration of the externship and the interests of the extern, small research projects will be encouraged, some possibly leading to co-authorship and/or presentations. The goal is to learn the variety of roles that veterinary pathologists play at NIEHS and various other RTP area institutions.

Some relevant web sites include:

NIEHS <http://www.niehs.nih.gov/>

NTP <http://ntp.niehs.nih.gov/>

CMPB <http://www.niehs.nih.gov/research/atniehs/labs/lep/index.cfm>

Visiting NIEHS (security measures, directions, link for hotels in the area)
<http://www.niehs.nih.gov/about/visiting/>

Potential funding opportunities for externships:

1. ACVP Externship Scholarship Program: for veterinary students, the details of which can be found at the ACVP website.
2. NIH Summer Internship Program (SIP)
(<https://www.training.nih.gov/programs/sip>)

Paid summer research positions for undergraduate, graduate, or professional students at NIH institutes, including the NIEHS (note: these paid opportunities are not available within the National Toxicology Program).

Contact information regarding externships can be obtained from:

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