



**Mississippi State**  
UNIVERSITY

College of Veterinary Medicine



## **USDA, Animal and Plant Health Inspection Service (APHIS), Veterinary Services Temporary Training Opportunities – Externships (Clerkships)**

The Mississippi State University's College of Veterinary Medicine represents many disciplines that address urgent issues including new or emerging disease pathogens some of which may be zoonotic or exotic, agroterrorism, bioterrorism, environmental safety, and food safety problems that pose a risk to the well-being of citizens in the United States and around the world. As these threats grow and diversify, there is an increasing demand for veterinarians in the field of public practice and food supply veterinary medicine. The faculty within the Department of Pathobiology and Population Medicine works to prepare students for employment opportunities which will meet these needs. Students are encouraged and provided time to complete externships involving public and corporate practice.

In response to the needs posed by these challenges, Mississippi State has embarked on a partnership with the **United States Department of Agriculture, Animal and Plant Health Inspection Service, Veterinary Services (USDA, APHIS, VS – [www.aphis.usda.gov](http://www.aphis.usda.gov))** to provide experiential learning opportunities for students during summers, breaks and open rotations. The focus of the learning opportunities is to provide veterinary students with hands-on experience in public veterinary practice through externships as described below. Information on the externships as well as other opportunities may be found at:  
<http://www.cvm.msstate.edu/usdaextern/index.html>.

### **General information on externships**

Externships usually last 2-4 weeks and do not require a formal competitive application process. They can be completed throughout the calendar year dependant upon the student's schedule and the program availability. **There is no reimbursement of expenses or a salary provided for externships. Please be aware that the student will have to arrange for housing and transportation during the externship.** The local offices can assist with this if a student is accepted. **Costs for travel and housing are the responsibility of the student.**

### **Application for Externship**

To apply the student is required to submit 1 letter of reference, a cover letter that describes interest, background and the dates of availability for the 2- 4 week externship, and a resume. **The application should be submitted electronically.** Submissions should be made to:

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The following descriptions are some of the currently available externship opportunities:

Centers for Epidemiology and Animal Health (CEAH) – Fort Collins, Colorado

The externships at CEAH require at least 3-4 weeks.

Students selected for externships at CEAH will participate in various stages of studies, research and special projects utilizing specialized data systems and tools. The student may also develop reports. CEAH is comprised of the following centers:

The Center for Emerging Issues (CEI) identifies and analyzes both emerging animal health issues and emerging market conditions for animal products. CEI's work on emerging animal health issues keeps key agency and industry decision makers and interested members of the public informed regarding health issues that may impact the United States. CEI's work on emerging market conditions serves to inform decision makers on how to better align APHIS products and services to best meet the needs of the public. CEI performs these roles by applying a multidisciplinary approach drawing on the experience of its team of veterinarians, economists, policy analysts, statisticians, and epidemiologists. The Spatial Epidemiology Team (SET) within CEI supports Veterinary Services' spatial analysis needs in animal disease surveillance, incident management, and epidemiological analysis. Within CEI, the Risk Analysis Team (RAT) contributes to and utilizes the VS information technologies and data from external sources to develop and apply risk analysis approaches and computer-based models to support regulatory and strategic decision-making for animal health.

The National Surveillance Unit (NSU) is the coordinating entity for activities related to U.S. animal health surveillance. The NSU develops and enhances animal health surveillance through evaluation, design, analysis, prioritization, and integration. NSU projects focus on (1) coordination and integration of surveillance information, (2) surveillance planning and design, (3) data analysis and dissemination of results, (4) evaluation of surveillance programs, and (5) prioritizing surveillance activities.

The National Animal Health Monitoring System (NAHMS) Program Unit conducts national livestock and poultry health studies. The USDA initiated the National Animal Health Monitoring System (NAHMS) in 1983 to collect, analyze, and disseminate information for decision makers. Studies are designed to fill information gaps concerning animal health, animal production, animal welfare, product wholesomeness and the environment.

### New York Animal Import Center – Newburgh, New York (3<sup>rd</sup> and 4<sup>th</sup> year students)

The New York Animal Import Center (NYAIC) serves as a quarantine facility for livestock and pet birds entering the United States from Europe and other parts of the world. The majority of the time NYAIC serves horses and various species of birds, but can also house ruminants, swine and zoo animals. The student will shadow the veterinarians and animal caretakers at NYAIC, learning about the business of international livestock transportation, regulatory control of imported animals, and husbandry/veterinary care of quarantined livestock. There is also the potential for exposure to the airport entry point for NYAIC.

### Eastern Regional Office – Raleigh, North Carolina

The Regional Offices for Veterinary Services function as a liaison between the policy staffs in Riverdale, Maryland and the field offices. This particular externship would be working with the regional import/export staff. Each student would spend time on import/export issues working on questions from the field. They would be assigned questions and provided the resources to research those questions. Their responses would be reviewed by the staff before being distributed. This will give them the opportunity to learn about the way Veterinary Services policy is communicated to staff and customers. They will also have the opportunity to work on portions of larger projects such as information gathering from the field or preparation of materials for training. If the student has an interest, the import/export staff would also be willing to help each student coordinate visits with other Eastern Regional Office personnel to learn about domestic programs.

### Western Regional Office – Fort Collins, Colorado

The Regional Offices for Veterinary Services function as a liaison between the policy staffs in Riverdale, Maryland and the field offices. The extern would be integrated into management and implementation of regional operations including disease control and eradication programs (e.g. tuberculosis, scrapie, CWD, Avian Influenza, brucellosis in the Greater Yellowstone area), import/export and emergency management. Opportunities to interact with regional epidemiologists (eight in total), 2 import/export coordinators and the regional management team will provide a very broad scope of activity within Veterinary Services. Arrangements may be made to conduct field visits.

The Western Regional Office oversees Veterinary Services programs in the 23 states west of the Mississippi through the 20 area offices. Opportunities for interaction at Area Offices to observe field level activities may be available.

### National Center for Animal Health Programs – Riverdale, Maryland

The National Center for Animal Health Programs initiates, leads, coordinates, and facilitates, national certification and eradication programs which promote, ensure, and improve U.S. animal health, by preventing, minimizing, or eradicating animal diseases of economic concern in light of constituent values. Please visit <http://www.aphis.usda.gov/vs/nahps> to learn more about the VS National Center for Animal Health Programs.

This Veterinary Services (VS) volunteer externship assignment will provide students with the opportunity to shadow a Program Managers of the VS National Center for Animal Health Programs, in Riverdale, Maryland. The student may choose to spend the majority of the time

working with the national coordinator of the Scrapie program. The student would learn about the scrapie program in detail. The student would be involved with assisting in reviewing data and correspondence and answering questions regarding the program, drafting policy memos, etc. Alternatively, the student may choose to spend some time with several managers of the various programs such as tuberculosis and brucellosis briefly learning about each program; its objectives, methods, authorities, and how VS collaborates with State animal health officials, the livestock industries, private veterinarians, other agencies, and congress.

### Emergency Management Staff – Riverdale, Maryland

The National Center for Animal Health Emergency Management (NCAHEM) has three sections. Collectively they develop strategies and policies for effective incident management and coordination of incident responses. These sections assist in the planning and delivery of training that will ensure personnel preparedness for emergency response assignments.

- The Interagency Coordination staff coordinates and creates partnerships with other Federal, State, and local entities to strengthen early detection and rapid response capabilities at all levels. It identifies resources that may be utilized during an incident and markets current response strategies to partners.
- The Preparedness and Incident Coordination staff plans, organizes and leads efforts to support and improve response preparedness. It also develops and disseminates emergency response guidelines based on the Incident Command System for responding effectively and efficiently to a foreign animal disease (FAD) or pest. This staff also ensures these guidelines are current, flexible, and adaptable to any disease or animal pest situation. They coordinate investigations and disseminate information about suspected FAD outbreaks.
- The National Veterinary Stockpile staff leads efforts to ensure that supplies and equipment are readily available in sufficient supply to assist personnel in a response to an animal emergency incident.

The selected student will work in an office environment as part of a team of NCAHEM veterinarians and support personnel on issues related to highly contagious FAD preparedness/response and agriculture homeland security issues. The NCAHEM student coordinator may assign projects (some with a short turnaround time) that may require the student to research, organize, analyze, and present data in a Microsoft Word, PowerPoint, or Excel format suitable for presentation or distribution. The student may assist with the development of FAD or emergency management training materials, or may be assigned to another APHIS staff working collaboratively with NCAHEM.

### Field Positions – Various Locations

Veterinary Services (VS) area offices carry out the agency mission at the State level across the country. Each office has an Area-Veterinarian-in-Charge who is responsible for the actual implementation of the disease prevention, control, and eradication programs mandated by Congress. The area offices also provide the necessary services to support the importation and exportation of animals and animal products. Specific programs and services include, but are not limited to:

- Health certificate endorsement
- Export certifications
- Import inspections
- Disease surveillance for brucellosis, tuberculosis, pseudorabies, bovine spongiform encephalopathy, scrapie, and chronic wasting disease
- Veterinary accreditation
- Responding to animal health emergencies and conducting FAD investigations
- Cervidae tuberculosis accreditation
- Scrapie program
- Informational presentations and materials
- Animal health monitoring programs

The selected extern would be exposed to a vast array of activities and would participate in actual field work. These activities may include drawing blood, observing the application of a comparative cervical tuberculosis test, taking samples required for disease surveillance, assisting in the development of an epidemiology work-up, and performing inspections for importation/exportation. If the selected state has a laboratory, the student may spend time learning about the variety of diagnostics tests required to support VS programs. The Center for Public and Corporate Veterinary Medicine will work with the student to secure a position in a State which is of interest. Some specific positions are listed below:

#### Minnesota Area

As a primary assignment the extern will assist with various aspect of the bovine tuberculosis eradication effort in Minnesota. These duties will include both office and field assignments. There may also be opportunities to gain experience with other program diseases.

#### Oklahoma Area

The selected extern would be exposed to a variety of Oklahoma Area Veterinary Services activities and would assist regulatory personnel in actual field work. These activities will include observance of biosecurity measures to prevent the spread of disease prior to field work. Activities may include blood collection from various species, assistance in necropsies and postmortem sample collection, observing the application of supplemental tuberculosis tests, observation and assistance in field epidemiological investigations for various disease programs, assisting in the development of an epidemiological work-up, observation and assistance with foreign animal disease investigations, performing inspections for importation/exportation of animals and animal products, and spending time in the state/federal laboratory learning about the variety of diagnostic tests required to support VS programs.

#### Ohio/West Virginia Area

The extern would be involved with a number of field activities including epidemiological investigations of scrapie, brucellosis, tuberculosis, and avian influenza. The extern may also participate in obtaining blood, tissue or swabs from sheep, cattle, swine, horses, poultry and other species. Other activities would include inspections of animals, products or facilities to assure compliance with import and export requirements. The student may also be involved in investigations of suspected foreign animal diseases as well as participation in emergency management planning, training and exercises. The extern will also have the opportunity to observe the various roles of the Area office professionals.

### California – Import/Export and Field Activities

The duties of USDA, APHIS, Veterinary Services in California are diverse. They include all of the field position responsibilities as listed below as well as port functions.

Port Functions: The California Area oversees the importation and exportation of animals and animal products at the port of Los Angeles and the Mexican border. The Los Angeles International Airport/Long Beach serves as an approved port of entry for horses, pet birds and other animals as well as animal products. Veterinary Services employees insure that imported animals and products are inspected and meet the import requirements of the United States.

Specific programs and services include, but are not limited to:

- Health certificate endorsement
- Export certifications
- Import inspections
- Bird Quarantine Facility

Field Responsibilities: Veterinary Services and California Department of Food and Agriculture (CDFA) personnel work throughout California.

Specific programs and services include, but are not limited to:

- Disease surveillance for brucellosis, tuberculosis, pseudorabies, bovine spongiform encephalopathy, scrapie, Exotic Newcastle Disease, Avian Influenza and chronic wasting disease
- Veterinary accreditation
- Responding to animal health emergencies and conducting FAD investigations
- Outreach and Education Programs

The selected extern would be exposed to a vast array of activities and would participate in actual field or port work. These activities may include drawing blood, observing the application of a comparative cervical tuberculosis test, taking samples required for disease surveillance, assisting in the development of an epidemiology work-up, and performing inspections for importation/exportation.

For further information and questions or to apply for an externship, please contact:

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