AUBURN
Human Resources

Research Fellow III, Animal Health Research

Job Description

JOB INFORMATION

Job Code	HA13
Job Description Title	Research Fellow III, Animal Health Research
Pay Grade	RE09
Range Minimum	$58,600
33rd %	$72,270
Range Midpoint	$79,110
67th %	$85,950
Range Maximum	$99,620
Exemption Status	Exempt
Organizational use restricted to the following divisions	139 College of Veterinary Medicine
Approved Date:	11/26/2024 9:31:59 AM

JOB FAMILY AND FUNCTION

Job Family:	Research
Job Function:	Disciplinary Research

JOB SUMMARY

Conducts research and calculates statistics to evaluate host-pathogen interactions and protective responses to evaluate viral diseases in cattle with a specific emphasis in Pestivirus research, identifies emerging viruses and divergent strains of known pathogens from samples to provide Animal Health Research (AHR) for characterization, studies immune response and immunopathology, employs serology, flow cytometry, immunohistochemistry in-situ hybridization techniques, and concepts with histological microscopic examination using samples collected both in vivo and in vitro experiments, and develops and optimizes experimental models and characterizes protective responses that require advanced-level scientific research derived from preceding and ongoing studies.

AHR encompasses five cattle units that total 1,000+ head of cattle and facilitates cattle-focused research in addition to virology and immunology. Due to the complexity of AHR, this position must have knowledge of each component to understand how cattle production practices impact research studies, how to design and implement these research studies, and how to analyze samples in the laboratory for herd screening and research studies.

RESPONSIBILITIES

- Develops original Institutional Animal Care and Use Committee (IACUC) plans and protocol and refines existing protocols.
  Reviews and enhances Biological Use Authorization (BUA) protocols. Serves as a member of the AHR Team. Assists in the development of complex project proposals, plans, and protocols and research designs with a focus on bovine virology and immunology.
- Designs and conducts complex, AHR experiments, investigations and/or studies related to programs and projects in pursuit of new knowledge, techniques and concepts specific to bovine virology and immunology with an emphasis on Pestivirus research. Develops new research areas to complement and expand the existing program. Assists with existing AHR projects and grants, providing essential support and critical reviews to ensure project success.
- Coordinates or assists with logistics of research to include equipment, materials, and labor needs. Organizes and structures labs to achieve efficiencies. Coordinates daily activities within the labs to maintain output and enhance cohesiveness and camaraderie with people that use the labs and by scheduling tasks for students. Supports research by serving as the point of contact for helping others utilize the AHR lab space and activities.
- Using aseptic techniques, collects data/samples specific to bovine virology and immunology related to research and herd screening both in the labs and the farm. Records, compiles, processes, and analyzes data/samples. Documents results and observations in writing and presents results to others in a manner that

RESPONSIBILITIES

	is easy to understand. Facilitates preparation of research results for publication or presentation at conferences to include performing literature reviews and writing results and discussions.
•	Writes National Institute of Food and Agriculture (NIFA) grant proposals targeting funding to advance agriculture-related sciences that will ensure the long-term viability of agriculture. Prepares grant applications and generates preliminary data to support the grant proposal with the goal of being more competitive for research funding.
•	Serves as an instructor and/or supervisor to other researchers and students in the area of Virology. May provide consulting to third party organizations related to research activities in the area of Virology.

The responsibilities listed above show the typical duties for jobs in this classification. Actual tasks may differ depending on the department's needs. Other similar duties may be assigned with discretion of the supervisor. Not every duty will apply to every position, and the amount of time spent on each task can change based on department needs.

SUPERVISORY RESPONSIBILITIES

Supervisory Responsibility	May supervise employees but supervision is not the main focus of the job.

MINIMUM QUALIFICATIONS

To be eligible, an individual must meet all minimum requirements which are representative of the knowledge, skills, and abilities typically expected to be successful in the role. For education and experience, minimum requirements are listed on the top row below. If substitutions are available, they will be listed on subsequent rows and may only to be utilized when the candidate does not meet the minimum requirements.

MINIMUM EDUCATION & EXPERIENCE

Education Level	Focus of Education		Years of Experience	Focus of Experience	
PhD	Animal Health	and	4 years of	experience in research practices and protocols and virology	Or
Doctorate of Veterinary Medicine (DVM)	Animal Health	and		experience in research practices and protocols and virology	

MINIMUM KNOWLEDGE, SKILLS, & ABILITIES

Professional knowledge and expertise in veterinary immunology, pathophysiology, virology (emphasis in Pestiviruses), molecular biology, computer imaging, cell biology, cell culture and statistics.	
Knowledge of virus isolation, virus propagation, serology, PCR, electron and light microscopy, next generation sequencing and phylogenetic analysis.	
Knowledge of and proficiency in cattle handling, sample collection, production practices, and herd screening protocols.	
Highly advanced knowledge in the field of research and the design of experiments and broad expert knowledge of a wide range of complex equipment, materials and processes related to research planning, funding, and operations.	
Specific training and fundamental virology knowledge related to Pestiviruses.	
Cell culture training and knowledge related to Pestiviruses.	
Fundamental knowledge of virology and immunological knowledge associated with cattle and Pestiviruses.	
Knowledge of cattle handling and sampling.	
Laboratory Management skills.	
Ability to design, plan, develop protocols, and conduct experiments.	
Ability to develop algorithms, formulas, and a systematic approach to calculate immune responses associated both with disease progression and protective responses.	

MINIMUM LICENSES & CERTIFICATIONS

Licenses/Certifications	Licenses/Certification Details	Time Frame	Required/ Desired	
	Job related licensure may be required for specific positions.	Upon Hire	Required	
	Valid Driver's License	Upon Hire	Required	

PHYSICAL DEMANDS & WORKING CONDITIONS

Physical Demands Category:	Other

PHYSICAL DEMANDS

Physical Demand	Never	Rarely	Occasionally	Frequently	Constantly	Weight
Standing				X		
Walking			X			
Sitting				X		
Lifting			X			10 lbs
Climbing			X			
Stooping/ Kneeling/ Crouching			X			
Reaching				X		
Talking				X		
Hearing				X		
Repetitive Motions				X		
Eye/Hand/Foot Coordination				X		

WORKING ENVIRONMENT

Working Condition	Never	Rarely	Occasionally	Frequently	Constantly
Extreme cold		X			
Extreme heat			X		
Humidity			X		
Wet			X		
Noise			X		
Hazards		X			
Temperature Change		X			
Atmospheric Conditions	X				
Vibration	X				

Vision Requirements:

Ability to see information in print and/or electronically.