

Job Code: 7259
Salary Grade: S09
Job Title: Staff Research Associate

Description

Dr. Lindsay Hayes's laboratory in the Department of Cell Biology at the University of Oklahoma Health Sciences Center is seeking an enthusiastic and responsible Research Technician to support research projects studying the neuro-immune mechanisms in brain health and disease across the lifespan. Research in the Hayes Lab focuses on how developmental immune stressors lead to changes in brain development and risk for neurodevelopmental disorders. We're a new group committed to fostering diversity and inclusion in STEM. Come join our growing group as we tackle exciting questions in neuroscience!

The primary responsibilities of the position include assistant in mouse colony maintenance, performing experiments, data collection, management, and analysis. The candidate is expected to have some basic laboratory experience, contribute to team science, and have an intrinsic curiosity for science and discovery. The candidate will have the opportunity to contribute to multiple research projects and publish research articles in peer-reviewed journals. The position is perfect for individuals interested in applying for graduate school and need to gain laboratory experience or are looking for a long-term laboratory position with the possibility for career advancement.

Essential Duties

Contribute to ongoing research projects and serve as a functional lead to other research staff. Conduct research and laboratory analyses to include but not limited to measure and weigh compounds and solutions, isolate, identify and prepare specimens, and collect samples and other sample processing. Collect various forms of data pertaining to the research projects. Perform data analyses, interpret data, draw conclusions, and discuss results with principal investigator. Keep a detailed logs of all research related projects or activities. Conduct literature searches. Prepare various reports containing descriptive, analytical, and evaluative content that may be submitted for publication. Design research studies. Train and collaborate with other researchers or colleagues. Participates in meetings and presents research findings to fellow researchers and Principal Investigator. Supervises a staff of research assistants and technicians. Responsible for training, delegating, and overseeing broader project progress. Performs various duties as needed to successfully fulfill the function of the position.

Other job duties include but are not limited to:

- Basic molecular biology techniques: nucleic acid isolation, PCR, qPCR, western blotting and ELISA
- Tissue culture: Maintain cells using sterile techniques
- Microscopy: analyze immunofluorescence images of brain tissues and cells including cell counting, cell morphology, and volumetric analysis
- Participate in formulating research methods and experimental designs such as: protocol implementation, troubleshooting, suggesting options for improving quality, and recommending solutions.
- Data analysis: computer database design, maintenance, organization, and analysis of many types of data
- Data Presentation: summarize research results in presentations for lab meetings as well as for use in public presentations and publications
- Maintain and develop appropriate research documentation and databases
- Expertise: Stay up to date on research related to their projects by reading the literature and attending selected seminars
- Interpret and analyze data and discuss with principal investigator and lab members
- Lab Safety: Support strict lab safety practices as related to wet chemicals, compressed gases, tissue culture, and hazardous materials, and support the laboratory's compliance with federal and state safety regulations
- Ordering: Ensure that all supplies for the lab are stocked accordingly
- Lab organization: Help keep the laboratory tidy and organized
- Train other lab members and assist with other projects as needed
- Performs other duties as assigned to support overall lab functions and success

Working Conditions

Physical: Ability to remain active, focused, and productive during a shift. Expect to be up, moving around, and multitasking for most of the day. Manual dexterity sufficient to accurately work with small, delicate pieces of equipment or large heavy objects/ containers/ machinery, sometimes involving repetitive motions. Visual acuity sufficient to visually confirm sub-microliter amounts of clear liquid in pipette tips and accurately pipette into tiny wells. Ability to lift up to 25 pounds. Standing for prolonged periods. Reaching, bending, stooping, and walking. Wearing appropriate protective gear when required, including mask, gloves, safety goggles.

Environmental: Laboratory Environment. Exposure to chemicals, biohazardous materials, carcinogens, or other hazardous materials.

Experience

Required 60 months research specialty experience. Preferred experience in supervisory work.

Education

Required: Master's Degree in a Biological Science, Neuroscience, Chemistry, Physics, Psychology, Sociology, or other health related field. Equivalency/Substitution: Will accept a MD or PhD plus 36 months experience as a Postdoctoral Research Fellow.

Certifications or Licenses

None.

Knowledge, Skills, & Abilities

- Comply with Federal, State, and University regulations and guidelines regarding safe handling and disposal of biohazardous materials or chemicals (guidance provided as necessary).
- Proficient with computers including data software and Microsoft Office Suite (Outlook, Excel, Word, and PowerPoint).
- Ability to communicate verbally and in writing.
- Ability to be detail oriented.
- Ability to collect and analyze data and keep detailed records.
- Strong organizational skills.
- Demonstrate critical thinking skills.
- Ability to precisely follow written and verbal instruction.