

Job Code: 7258  
Salary Grade: S07  
Job Title: Staff Research Assistant

### 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

Aid lab members by conducting research experiments, collecting data and samples, keeping records, conducting literature searches, analyzing data, and preparing reports. Provide general laboratory support by preparing solutions, stocking reagents, making aliquots, maintaining workstations, performing equipment maintenance/cleaning, organizing/storing samples appropriately, and conducting research experiments independently. Comfort with mouse handling, maintenance, treatment, and experimentation including preparing tissues and specimens for procedures is required. Interpret and analyzes data and discusses with principal investigator. Prepares reports concerning the progress of the projects. Keep detailed logs of all research related activities. Conduct literature searches. Performs various duties as needed to successfully fulfill the function of the position. After training and displaying proficiency, this position will involve a devoted project in line with the scientific mission of the lab.

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 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 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
- 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 12 months research laboratory experience. Preferred experience includes basic grasp of biology, neuroscience, genetics, and chemistry; full time work experience; experience working on a team. Preferred laboratory experience working with mouse models, cell culture, microscopy, and/or rodent behavior.

#### Education

Required: Bachelor's Degree in a Biological Science, Neuroscience, Chemistry, Physics, Psychology, Sociology, or other health related field. Equivalency/Substitution: Will accept 48 months equivalent experience in lieu of the bachelor's degree.

#### 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.