

position description

Date:

Title: Research Assistant 1

Department:

School:

Location:

Supervisor Name and Title:

****Highlighted areas are required if the position is working with animals.**

POSITION OBJECTIVE (Briefly describe objective of research project and position's role. Provide a brief summary of the scope, objective or role, and key responsibilities of the position. Describe how the position supports, contributes, or is linked to the project's or program's mission.)

Working under moderate supervision, perform research work in medical and related technical. **This position will work with animals.**

Example: Working under moderate supervision the Research Assistant 1 will perform research work in pathology-related areas involving the use of lab/ research skills with a large genetics, molecular biology and tissue culture focus. The research assistant will construct plasmids and perform molecular biology, cell signaling and immunological assays.

Example: Working under moderate supervision, the Research Assistant 1 will perform research work and support scientists by performing standard molecular techniques (PCR, electrophoresis, RNA extraction), tissue-culturing /cell culture work, animal work, tissue processing (immunohistochemistry) and general lab maintenance. The research assistant will also collect, verify, record, and compile data and information related to the ongoing research carried out in the lab. This position will work with animals.

ESSENTIAL FUNCTIONS (Action statements to attaining job objective that would include the below benchmarks. Essential functions would include any function that represents a percentage of 6% or more)

1. Perform research work in medical and related technical areas involves use of lab skills.

Instruction: Describe the type of research work the position will be performing. Describe the techniques the position will be using to perform the research.

Example: Perform research work on human and murine immune cells using ELISA, flow cytometry, cell isolation and purification methods to gather data on how MTB infection and disease can be controlled and eradicated

Example: Perform research work using standard techniques of molecular biology/biochemistry and cell culture (PCR, DNA analysis, protein analysis, retroviral/lentiviral construct, and cloning/sub-cloning).



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2. Conduct analysis of samples.

Instruction: Describe the type of samples the position will be analyzing and the analysis the position will be conducting.

Example: Generate, maintain and analyze tissue culture cell lines for experimental purposes.

Example: Process tissue, perform immunohistochemistry and analyze samples.

3. Record results for a particular experiment or closely related series of experiments.

Instruction: Describe the type of results are being recorded and how they are being recorded.

Example: Collect and record histological experimental data. Organize raw data and update lab-related data folders.

Example: Collect and record results from cell culture experiments and provide data to laboratory members.

4. Maintain records of experiments.

Instruction: Describe the types of records and data the position will be maintaining.

Example: Maintain clear and organized notebooks documenting procedures used and cell growth data generated.

Example: Maintain accurate records in the database system of all patient samples participating in clinical trials

5. Maintain test equipment utilized in experiments.

Instruction: Specify any particular experimental equipment the position is responsible for maintaining.

Example: Configure and operate laboratory instruments; ensure instruments are kept in working order.

Example: Perform routine lab maintenance including cleaning equipment and lab ware; dispose of biohazardous waste.

6. Order laboratory supplies.

Instruction: Specify if there are any particular supplies the position is responsible for ordering.

Example: Order reagents and other laboratory supplies. Maintain chemical/biological inventory in compliance with EHS.

Example: Maintain stock reagents, supplies and inventory used the facility for microscopy, flow cytometry and athymic mice as needed for certain experiments. Order appropriate supplies.

NONESSENTIAL FUNCTIONS (Marginal or infrequent functions. Nonessential functions would include any function that represents a percentage of effort of 5% or less)

Perform other duties as assigned.

CONTACTS (indicate frequency (daily, weekly, etc.); position contacted; frequency; and purpose of contact)

Department: Daily contact with supervisor and lab members to discuss research and maintain workflow.

University: Occasional contact with other departments to share information and collaborate on projects.

External: Limited or no contact with vendors to exchange information.

Students: Occasional contact with student employees to explain policies and procedures.

SUPERVISORY RESPONSIBILITY

This position has no direct supervision of staff employees.

QUALIFICATIONS (List any additional certifications and/or licensing needed to be successful in this position)

Education/Experience: Bachelor's degree in science and 0 to 1 year of experience or Associate's degree in an approved biotechnology program and 0 to 2 years of experience required.

REQUIRED SKILLS (List those measurable or observable knowledge, skills, abilities, and/or behaviors that are required to succeed in performing the essential functions.)

1. Has knowledge of commonly-used concepts, practices, and procedures within a particular field.
2. Relies on instructions and pre-established guidelines to perform the functions of the job.
3. Ability to operate laboratory equipment.
4. Ability to meet consistent attendance.
5. Ability to interact with colleagues, supervisors, and customers face to face.

Additional examples:

6. *Must demonstrate compliance with university animal research and care (ARC) policies and procedures and compliance to regulations of the Animal Welfare Act, Public Health Service Policy, AAALAC guidelines and other applicable regulatory guidelines.*
7. *Must demonstrate compassion for animals within university facilities and dedication to the Animal Resource Center's mission. Must handle animals with care and respect at all times.*
8. *Must be able and willing to learn new techniques, procedures, processes, and computer gear to protect the health of the animals.*
9. *Previous experience working with animals preferred.*
10. *Strong molecular biology skills (PCR, Western blots, Retroviral/Lentiviral constructs).*
11. *Strong organization skills and good habit of maintaining a clean lab working environment; demonstrate attention to detail and accuracy, time management skills, and proven ability to successfully follow-through on assigned projects.*
12. *Professional and effective verbal and written communication skills and good interpersonal skills with the ability to work and communicate with various individuals within and external to the University.*
13. *Ability to work effectively independently and collaboratively within a team (must be highly motivated, responsible, dependable and a self-starter).*
14. *Ability to work with sensitive information and maintain confidentiality.*
15. *Proficiency in Microsoft Office and GraphPad Prism is preferred. Experience using Adobe Photoshop, Illustrator, and FlowJo is a plus.*

16. Must have the ability to maintain meticulous, complete, and easily retrievable laboratory data.
17. Must have the ability to willingly learn new techniques and procedures as needed, follow established protocols or laboratory procedures and request clarification if necessary.

WORKING CONDITIONS (Identify the general working conditions Describe general conditions, exposure hazards, ergonomic concerns, personal protective equipment required, travel requirements and physical demands, which relate to the essential functions of the position. Hazards may include exposure to chemicals, commercial products, bloodborne pathogens, radioactive materials, x-ray, fumes, laser, infectious agents, etc.)

Example: General laboratory environment. The employee will be exposed to blood-borne pathogens, chemicals, and radiation. Employee will need to wear appropriate protective equipment such as gloves, coat, and eyewear. Working conditions will require working at the bench in a molecular genetics/ biology laboratory, working with mice and other animal models in the laboratory and in the animal facility, and when needed working outside standard working days or hours as required by the needs of a given experiment.

Example: General laboratory environment: The lab is an open floor plan with abundant bench space for animal handling and manipulations. Ample desk space with computers are also provided. The lab is equipped with one shared fume hood for storage of hazardous and non-hazardous materials. A common equipment room located adjacent to the lab are equipped with animal euthanization station. The cell culture room nearby is equipped with incubators, culture hood, and microscope. Access to a multi-color Flow Cytometer and a Seahorse Analyzer belonging in a neighboring lab. The candidate should expect frequent interactions with lab members from that lab and must be willing to collaborate. Major physical demands include transferring animals between the lab and the animal holding facility, maintaining the animal colonies, as well as weekly changes of mouse/rat cages.

Case Western Reserve University's animal facilities are accredited by the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) and is managed according to the "Guide for the Care and Use of Laboratory Animals" appropriate Federal Animal Welfare Regulations, and the Public Health Service "Policy on the Humane Care and Use of Laboratory Animals." This position, and all animal research personnel, are subject to internal compliance to SOM Animal Resource Center Standard Operating Procedures and to compliance regulations of the Animal Welfare Act, Public Health Service Policy, AAALAC guidelines, the State of Ohio Veterinary Practice Act, Federal Drug Enforcement Administration regulatory guidelines, US Food and Drug Administration Center for Veterinary Medicine regulations and other applicable regulatory guidelines.