

position description

Date: December 2020

Title: Senior Research Associate

Department: Genetics and Genome Sciences

School: Medicine

Location: BRB

Supervisor Name and Title: Christopher McFarland, Assistant Professor

Please email your CV/Resume to christopher.mcfarland@case.edu

POSITION OBJECTIVE

This position is a senior level position. The Sr. Research Associate will collaborate with faculty, department staff, post-doctoral fellows, students and technicians in the performance and analysis of complex and advanced research studies. The individual in this position will use genetic engineering, mouse modeling, tissue culture, DNA sequencing and functional strategies as part of ongoing projects related to the study of human cancer, in particular lung adenocarcinoma, from an evolutionary perspective.

ESSENTIAL FUNCTIONS

1. Devise and implement complex new protocols for *in vivo* genome editing of mouse models using state of the art CRISPR-Cas-based strategies. 20%
2. Develop strategies and new approaches for functional analysis of tumor suppressors that are somatically mutated in cancer. 15%
3. Serves as an advisor and provides mentorship to other researchers in the conduct and analysis of research studies. 10%
4. Manages and maintains cultures of cancer cell lines and recombinant viral stocks. 10%
5. Work with and guide others in the lab to carry out functional analysis of DNA variants. 10%
6. Collaborate with PI in preparation of manuscripts. 10%
7. Carry out all basic molecular biology techniques including but not limited to plasmid construction and cloning, PCR, DNA sequencing, RNA sequencing, and western blotting. 10%
8. Analyze all data and co-author research manuscripts with lab research teams. 5%
9. Conducts literature searches and generates data for the development of grant proposals. 5%
10. Help PI supervise graduate students. 5%

NONESSENTIAL FUNCTIONS

1. Perform other duties as assigned.

CONTACTS

Department: Daily contact with department staff

University: Frequent contact with department administrators

External: Regular contact with outside collaborators from Stanford and Johns Hopkins.

Students: Frequent interaction with graduate students, informaticians, and technicians.

SUPERVISORY RESPONSIBILITY

Supervise student employees and/or temporary employees and volunteers.

QUALIFICATIONS

PhD in Microbiology or related area of study.

5+ years of postdoctoral training required.

Must have extensive experience mouse modeling, tumor biology, stem cell biology and genetics.

Must have multiple first author publications in peer reviewed journals.

Must have leadership experience.

REQUIRED SKILLS

1. Knowledge and understanding of commonly-used concepts, practices, and procedures within the field of tumor biology.
2. Ability to perform culturing of human cells and management of genetically engineered mouse models.
3. Knowledge and understanding of/Working knowledge of/Demonstrated ability to functionally analyze tumor suppressor losses.
4. Excellent oral and written communication skills and interpersonal skills; must demonstrate the ability to effectively and professionally communicate and work with various individuals from a broad spectrum of disciplines, technical and educational backgrounds within the department, School and University, and with individuals outside the University.
5. Good/Strong organization skills; ability to multi-task, prioritize and meet deadlines. Must demonstrate attention to detail and accuracy, time management skills, and follow-through.
6. Effective management skills; ability to lead, train, work with, and elicit cooperation from team members and staff.
7. Ability to work effectively independently and collaboratively within a team. Must be highly motivated, responsible, dependable and a self-starter.
8. Ability to work with sensitive information and maintain confidentiality.
9. Effective problem-solving skills; must demonstrate excellent analytical skills, sound judgment and good decision-making.

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10. Must demonstrate flexibility and ability to work under pressure; must be able and willing to work in a fast-paced, changing environment, and conform to shifting priorities, demands and timeline.
11. Willingness and ability to rely on and follow instructions and pre-established guidelines to perform the functions of the job.
12. Ability to operate laboratory equipment.
13. Must demonstrate willingness to learn new techniques, procedures, processes, and computer programs as needed.

WORKING CONDITIONS

Identify the working conditions and physical demands which relate to the essential functions of the position, such as working indoors/outdoors, working with exposures to hazards, including recombinant viral vectors, etc. Include special considerations for the position, such as occasional travel or necessary overtime.

DIVERSITY STATEMENT In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Women, veterans, members of underrepresented minority groups, and individuals with disabilities are encouraged to apply.