position description

Date: February 23, 2021

Title: Research Associate

Department: Genetics and Genome Sciences

School: Medicine

Location: BRB

Supervisor Name and Title: Anne Harris, Professor and Vice Chair for Research

Please send CV's along with three references to: jobsview@case.edu

POSITION OBJECTIVE

The Research Associate will plan and carry out molecular and cell biology research projects in accordance with general plans. The Harris lab uses functional genomic approaches to elucidate the molecular and cell biology of human epithelia and their dysfunction in disease states such as cystic fibrosis. Projects will involve genome editing, gene expression analysis and assays of chromatin accessibility and structure.

ESSENTIAL FUNCTIONS

1. Conduct state-of-the-art genomics technologies and functional assays including but not limited to: 1) CRISPR/Cas9 protocols to manipulate *cis*-regulatory elements in the *CFTR* locus and 2) Analysis of the impact of therapeutic gene editing on *CFTR* locus architecture and gene expression. Protocols will depend upon skill set of successful applicant and additional training will be given as necessary. These may include: analysis of DNA, RNA and proteins; and all related protocols of functional genomics including chromatin and RNA purification and analysis by deep sequencing and single cell sequencing. Also protocols of cell biology and biochemistry such as cell culture and protein analysis (30%).
2. May assist in developing improved techniques based on those described above, projection methods or procedures. (20%).
3. RA will collect data using appropriate laboratory machines designed for performing cell biological, biochemical and molecular analysis. Data will involve images and numbers, which will be analyzed by appropriate statistical packages. Familiarity with Excel and Graphpad an advantage. (15%).
4. Maintain certain equipment facilities including laboratory cell culture facility and functional genomics equipment room with advanced thermal cyclers for quantitative gene expression analysis, bioruptors etc. Assist in overseeing supply inventory and ordering. Maintain chemical and biological inventories. (10%)
5. Collaborates with faculty members and scientists in training in the performance and analysis of complex and advanced research studies. (10%)
6. Participates in meetings to present research study findings. (5%)

7. Maintains research related materials to include study data, publications, submitted grants and other scientific documents. Maintains laboratory databases. (5%)

8. Collaborates with Scientists in the preparation of manuscripts. (5%)

NONESSENTIAL FUNCTIONS

1. Perform other duties as assigned.

CONTACTS

Department: Daily contact with principal investigators, postdocs, research associates, research assistants and graduate students to review reagent needs or organize research interactions between different research teams in the department.

University: Daily contact with principal investigators, postdocs, research associates, research assistants, graduate students outside department. The supervisor has many collaborations both internal to the university and elsewhere, which will be facilitated by the research associate.

External: Limited contact with outside vendors to obtain quotes for reagents, organize maintenance of equipment or solve problems relating to ordering and invoicing.

Students: Daily contact with graduate students and fellows to facilitate their research and ensure an efficient work environment.

SUPERVISORY RESPONSIBILITY

Provide technical assistance and help to trouble shoot research problems.

QUALIFICATIONS

1. PhD in Medical or Biological Sciences, Forensics or related field required.

2. A minimum of 1-3 years of related experience in molecular cell biology and genetics or functional genomics research is required.

REQUIRED SKILLS

1. Prior experience in cell biology, genetics, molecular biology, functional genomics techniques and analysis is required.

2. Prior work experience in an academic medical setting and/or a clinical research setting in strongly preferred.

3. Strong numeracy and data analysis skills.

4. Advanced computer proficiency in Microsoft Suite.

5. Strong oral and written communication skills.

6. Strong organizational and management skills and ability to work in a fast-paced environment.

WORKING CONDITIONS

The position entails working in a biomedical research laboratory. The selected applicant will be expected to maintain all required certification for laboratory work and adhere to all safety regulations. The position may require extended hours including weekends as experiments dictate.

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.