### JOB PROFILE: STAFF ASSOCIATE

The group of <u>Ashley Laughney at Weill Cornell Medicine in New York City</u>, is seeking a motivated and independent research technician to contribute to the development of novel single cell genomic assays for cancer biology and drug discovery using advanced biochemistry and molecular biology techniques.

Who are we? A cancer systems biology lab tackling the genotype-to-phenotype problem in cancer. We are made up of high inter-disciplinary team; wet and dry lab members readily synergize to identify and design experiments that test datadriven hypotheses.

What do we do? We combine high-throughput single cell sequencing with development of new computational tools, synthetic biology approaches and cancer models, to understand how the same genome-encoded components can give rise to diverse phenotypes, or cell functions, at different stages of disease progression.

What are we looking for? Independently and collaboratively, we are seeking a research technician that will assist scientists with the execution and development of many laboratory assays. These include functional, molecular and biochemical assay, imaging experiments, in vitro tissue and cell culture. The technician will also assist with administrative tasks in the lab, ensuring safe laboratory practices are followed and helping to maintain/receive supply inventories, maintain updated open-source lab protocols, and provide working supervision to junior lab members as needed.

### Job Responsibilities

Independently or semi-independently, designs and carries out experiments. Analyzes and interprets experimental results and provides input to subsequent experimental design.

Participates in planning experiments and preparing research protocols.

Performs routine molecular biology assays: PCR, protein and DNA electrophoresis, cloning and DNA preparation.

Performs routine biochemistry assays including western blotting and RT-PCR.

Contributes to maintenance of tissue and cell culture; including routine mycoplasma screening and validation of cell lines.

Will routinely engineer cell lines using CRISPR approaches and lentiviral expression systems.

Will be responsible for DNA sample and single cell library preparations for NGS, including assisting with the development, evaluation and validation of new single cell sequencing approaches.

May perform routine microscopic image analysis.

Evaluates, recommends and develops new techniques to improve laboratory efficiency.

Prepares and maintains detailed records, logs and summary reports of all procedures and results including graphs, scientific calculations and statistical analysis charting.

Assists in orienting and training new investigators, technical staff, residents, postdoctoral associates, fellows and students in the proper use of equipment, products and experimental techniques in the lab. Provides working supervision to junior laboratory staff as needed.

Ensures a clean working area and is responsible for washing and storing glassware.

Ensures safe laboratory practices are followed, including use and disposal of chemicals and hazardous materials.

Maintains inventory of supplies, equipment and/or reagents. Will contribute to ordering this inventory to ensure lab needs are met and will receive supply orders and confirm accuracy of delivery. May assist with cost control.

Routinely audits and screens vendors/suppliers to evaluate quality of products and equipment provide. Communicates with vendors for product technical support.

Ensures that facilities and equipment are in optimal and proper working condition. Coordinates preventative maintenance and repairs as need. May advise on system upgrades for performance enhancements.

# **Education**

Bachelor's or Master's Degree

# Experience

At least 2 years of related laboratory work experience is preferred.

# Knowledge, Skills and Abilities

Demonstrated organizational skills and attention to detail.

Ability to plan and prioritize work while responding to flexible and rapidly changing priorities.

Excellent oral and written communication skills.

## Licenses and Certifications

## Working Conditions/Physical Demands

Standard laboratory conditions. This position may handle biological materials from human subjects as required. This position may require standing or sitting for long periods of time. This position may require working within Biological Safety Level 1, 2 and/or 3 facilities. Ability to work flexible hours is preferred.

## **Competencies**

Demonstrates integrity and ethics at all times.

Excellent written and oral communication skills.

Maintains a flexible and forward thinking approach to the way work is done.

Possesses excellent work-related skills and the ability to apply them, while continually seeking ways to improve.

Understands the need to be responsible for own outcomes, and takes pride in developing the best possible work product.

A team player that cultivates a positive and collegial workplaces.

Appreciates and understands the relationship between individual, lab, departmental and institutional goals.

Strongly supports open-source science.

Weill Cornell Medicine is a comprehensive academic medical center that's committed to excellence in patient care, scientific discovery, and the education of future physicians in New York City and around the world. Our doctors and scientists-faculty from Weill Cornell Medical College, Weill Cornell Graduate School of Medical Sciences, and the Weill Cornell Physician Organization-are engaged in world-class clinical care and cutting-edge research that connect patients to the latest treatment innovations and prevention strategies. Located in the heart of the Upper East Side's scientific corridor, Weill Cornell Medicine's powerful network of collaborators extends to its parent university Cornell University; to Qatar, where an international campus offers a U.S. medical degree; and to programs in Tanzania, Haiti, Brazil, Austria and Turkey. Our medical practices serve communities throughout New York City, and our faculty provide comprehensive care at NewYork-Presbyterian Hospital/Weill Cornell Medical Center, NewYork-Presbyterian/Lower Manhattan Hospital, and NewYork-Presbyterian/Queens. At Weill Cornell Medicine, we work together to treat each individual, not just their conditions or illnesses, as we strive to deliver the finest possible care for our patients - the center of everything we do. Weill Cornell Medicine is an Equal Employment Opportunity/Minorities/Females/Vet/Disabled employer.