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| Job Description Title: | Lead Scientist |
| FLSA Classification: | Full Time – Exempt |
| Department | Biology Research & Development |
| Reporting | VP Product Development / CEO |
| Reviewed Date | 01/24/2020 |

### JOB SUMMARY:

The Lead Scientist is involved in the design, development, testing, and support of QCDx cell and molecular assays for RareScope™ microscopy. Will supervise, mentor, or provide leadership to laboratory scientists and technologists. Participates in specific projects and provides technical guidance for a variety of cross functional activities. Helps initiate, direct, and coordinate activities necessary to complete a major project or several immediate projects. Will serve as liaison between Engineering & Biology R&D departments on specific projects.

### ESSENTIAL JOB FUNCTIONS AND RESPONSIBILITIES

* Participates in planning, execution and follow-up of Company’s yearly timelines.
* Implements product development plans.
* Helps execute research programs leading to development of new products.
* Monitors smooth execution of product development plans and research programs.
* Prepares work instructions, SOPs, oral and written reports and Quality System related documents as needed.
* Participates in interdepartmental planning and collaboration.
* Works interactively with peer group in Biology as well as managers, Directors/VP's of R&D, Quality & Regulatory, Operations, Human Resources, and Sales & Marketing.
* May be responsible for communications (as appropriate) to senior management.
* Must be able to communicate technical and non-technical information effectively to all levels of internal and external stakeholders.
* May be responsible for managing multi-site relationships including both direct and indirect reports (as appropriate).
* Contributes to strategies aimed at optimizing all phases of the product development.
* Responsible for compliance with Quality Management System on a day-to-day basis.
* Ensures adherence to design control guidelines and regulatory compliance requirements a

### OTHER RESPONSIBILITIES:

* Coordinates with other departments and groups to analyze and resolve problems.
* Helps provide input to company strategic planning.
* Negotiates with other staff and departments to resolve conflicts and bottlenecks affecting projects.

### EDUCATION AND EXPERIENCE

Education:

Advanced degree (PhD, or equivalent) in a scientific discipline (biology, cell biology, molecular biology, pharmacy or related), medical technology, or the equivalent.

Experience:

**Cancer Immunology**

* Immune Checkpoint Blockade Antibodies, Flow Cytometry, FACS.

***Desirable:*** Single Cell RNA-Seq, T Cell Biology, Regulatory T cells, Cryostat Tissue Sectioning.

**Cell Biology**

* Cell-Based Functional and Biochemical Assays, Cell viability assays, mammalian cell culture and isolation (commercial cell lines, iPSC, adult stem cells, mesenchymal stem cells, primary donor tissues and commercial cell lines).

***Desirable:*** 3D Continuous Cultures, 3D Tissue Engineered Constructs.

**Molecular Cell Biology**

* Western Blotting, Immunohistochemistry and Immunofluorescence. Antibody Conjugation, Microarrays, Protein and RNA Isolation and Quantification, RT-PCR, FISH.

**Microscopy**

* Phase, Fluorescence and Confocal

***Desirable:*** Light Sheet Microscopy

**Laboratory Management**

* Clinical Trial Protocol Assistance, Grant Writing (SBIR/STTR Grant Programs), Project Management, Lab Supply Budgeting and Ordering

***Desirable:*** Animal Protocol Management,

**Research Mentoring**

* Student Mentoring, Experimental Design, Hands-on Training, Presentation/Poster Preparation, Lecturing

**Computer Technology and Software Analysis**

* Data Analysis Software, FIJI/ImageJ, Prism-GraphPad, FlowJo.

***Desirable:*** SeqGeq, 10X Loupe Cell Browser

* Microsoft Project, MS Office Suite
* Reference Databases (EndNote, ProCite).

**Scientific and Grant Writing**

* Develop, write and submit NIH grants
* Review, edit, critique and change other current grant proposals prior to submission
* Continued publication of ongoing research projects
* Assisting with the development of new grants

Should have 2+ years of relevant academic or industrial experience, including supervision of laboratory personnel.

M.Sc. degree may qualify with 2-3 years additional experience

JOB KNOWLEDGE, SKILLS AND ABILITIES

* Demonstrated success in innovative research and bringing concepts to fruition.
* Must possess initiative and focus to help drive projects from planning and initiation through completion.
* Requires excellent written and verbal communication skills and the ability to work with individuals from a variety of backgrounds.
* Requires education and experience in cell and molecular biology.
* Must possess laboratory experience and skills necessary for development and supervision of research projects in the area of human diagnostic testing including, for example, methods for isolating cell populations from human blood and other bodily fluids; methods to stabilize and transport diagnostic specimen; methods to prepare specimen for microscopic analysis; immunofluorescence methods; FISH methods; methods to analyze and interpret stained diagnostic slides; single cell isolation and manipulation.
* Knowledge and experience of the operation and maintenance of general laboratory instrumentation and safety procedures is required.
* Must have appropriate computer skills.

### SUPERVISORY RESPONSIBILITIES

* Will oversee the management of scientists and technicians.
* Will be responsible for managing projects relating to new development or support of biological development.
* Will mentor junior members of the team, including interns.

**TRAINING REQUIREMENTS**

1. General Safety
2. Quality System and Design Controls Training
3. Sexual Harassment
4. Employee Management