

Job Title: Biomedical Engineer  
Department: Product Development  
Reports To: Systems Group Manager

## **GENERAL DESCRIPTION**

The Biomedical Engineer is responsible for the applied research and development of biomedical systems to be used in the development of the Paratus foundational point-of-care cartridge technology. The candidate should be highly proficient with CAD and have a strong interdisciplinary knowledge base to facilitate the rapid development of fluidic, mechanical, and optical systems in a multiplex analyte detection device. This position requires strong math and logical reasoning skills, a high level of innovative capacity, and great attention to detail. A successful candidate will be a fast and highly motivated learner able to adapt quickly to a wide variety of tasks and fields of research. This is an entry level position.

## **REQUIREMENTS**

### **Education:**

- BS in Biomedical Engineering

### **Skills and Experience Required:**

- Strong analytical and communication skills
- Strong CAD proficiency, preferably SolidWorks
- Strong interdisciplinary knowledge base, particularly in the fields of mechanics, fluidics, and optics
- Experience with plastics (design, fabrication, 3D printing, injection molding) highly desired
- Proficiency with MATLAB desired
- Experience with paper based diagnostics desired

## **ESSENTIAL DUTIES AND RESPONSIBILITIES**

### **Responsibilities:**

- Design and fabrication of primarily plastic components and devices meant to house and manipulate biochemical reagents at sub-milliliter volumes
- Design of paper based fluidic networks
- Design of optical components for detection of low-light signals
- Testing and validation of aforementioned devices and components
- Design of complex laboratory experiments
- Data analysis and statistical testing
- Contribute to the creation of innovative solutions
- Assist with the maintenance, cleanliness and safety of the laboratory
- Interface and work effectively with multiple interdisciplinary departments

### **Working Conditions:**

- Work is normally performed in a typical office or lab work environment.
- Possible exposure to mechanical, biologic and chemical hazards.
- Frequent use of personal computer, copiers, printers, and telephones.
- Frequent standing, walking, climbing stairs, sitting, listening, and talking.
- Frequent work under stress, as a team member, and in direct contact with others.
- Infrequent lifting of up to 25 lbs.