

## **Principal Scientist/Associate Director, Host Biology**

**WHO WE ARE:** Artizan Biosciences is a growth-stage biotechnology company that utilizes a proprietary platform to identify critical microorganisms in our intestinal microbiota that play causative roles in important human diseases, with an initial focus on chronic inflammatory syndromes. Using our technology, we define the specific mechanisms by which these organisms promote disease, determine the host functions affected, and then develop effective therapeutics to block these pathogenic processes. Through this approach, we are creating a portfolio of therapeutic agents that address important areas of unmet medical need in an unprecedented manner. Artizan Biosciences was founded by leading Yale immunologists and is currently located at Science Park in New Haven, adjacent to the Yale University campus and within a growing biotech community. We are seeking additional talented scientists to join our team and help us deliver on the promise of our approach.

### **KEY RESPONSIBILITIES**

- Establish, optimize, conduct and/or oversee various in vitro, ex vivo, and in vivo assays to define host targets for virulence factors and to evaluate, prioritize and validate therapeutic drug candidates.
- Plan and perform immunology, biochemistry, and molecular biology experiments to deepen the team's understanding of host responses to pathogenic organisms and how these relate to specific human inflammatory diseases, including but not restricted to Inflammatory Bowel Disease.
- Conduct and coordinate immune phenotyping using multi-color flow cytometry and ELISA.
- Work with various pre-clinical models of inflammatory disorders including colitis in specific pathogen free and, preferably, gnotobiotic settings.
- Support the progression of promising discovery projects towards pre-clinical studies and eventual human clinical trial evaluation.
- Supervise the activities of direct reports engaged in the above experimental activities, including goal setting, performance feedback and career development.
- Maintain proper records and laboratory compliance in accordance with SOPs and safety policies.

### **KEY SKILLS AND EXPERIENCE**

- Minimum 5 years of experience working in a biopharmaceutical drug discovery setting, preferably involving small molecule, monoclonal antibody or vaccine therapeutic modalities.
- Familiarity with advanced in vitro cell-based methods such as organoid or transwell systems.
- Experience with in vivo procedures with rodents such as study design, handling (gavage, injection, husbandry) and dissection. Experience with primary immune cell isolation from mucosal tissue is a plus.
- Strong knowledge of immunology principles based on educational and experiential training.
- Strong supervisory experience with demonstrated effectiveness in developing junior colleagues for their benefit as well as that of the organization.
- Working familiarity with the concepts of translational science and the creation of drug discovery paradigms that support the progression of development candidates towards clinical proof-of-concept studies.
- High motivation with a sense of urgency and responsibility.

### **MINIMUM QUALIFICATIONS**

- PhD degree in a relevant biological area, with a preference for immunology, inflammation or epithelial biology. Individuals with a background in microbiology that has provided insights into host immune responses to microbes are also invited to apply.
- At least 5 years of biomedical research experience in a drug discovery setting with a track record of productive project team support.

- Excellent organizational, collaboration and communication skills.
- Experience presenting scientific information to key internal and external stakeholders.
- Proof of eligibility for employment in the United States

## **Senior Laboratory Associate/Scientist, Microbiology**

**ABOUT ARTIZAN BIOSCIENCES:** Artizan Biosciences is a growth-stage biotechnology company that utilizes a proprietary platform to identify critical microorganisms in our intestinal microbiota that play causative roles in important human diseases. Using our technology, we define the specific mechanisms by which these organisms promote disease and then develop effective therapeutics to block these pathogenic processes. Through this approach, we are creating a portfolio of therapeutic agents that address important areas of unmet medical need in an unprecedented manner. Artizan Biosciences was founded by leading Yale immunologists and is currently located at Science Park in New Haven, adjacent to the Yale University campus and within a growing biotech community. We are seeking additional talented scientists to join our team and help us deliver on the promise of our approach.

**ABOUT THE POSITION:** We are seeking a full-time Laboratory Research Scientist to research the characterization of microorganisms associated with human inflammatory diseases. This position entails working with a small and dedicated group of scientists in microbiology, immunology and microbiome research in a dynamic team setting. The successful candidate will have relevant educational and practical experience and actively participate in the laboratory's important research. In addition to versatility within the laboratory setting, this role requires a high level of self-motivation, responsibility, and ability to quickly gain new skills. The candidate must be capable of working independently as well as in a team environment.

### **KEY RESPONSIBILITIES:**

- Culture and isolation of pure bacterial species from complex community samples
- Perform high throughput DNA sequencing
- Conduct laboratory work and documentation according to SOPs
- Maintain proper records and laboratory compliance in accordance with SOPs and safety policies
- Troubleshoot and complete routine procedures independently and efficiently

### **KEY SKILLS AND EXPERIENCE:**

- High throughput of nucleic acid sequence analysis
- Experience with anaerobic bacterial culture methods
- Standard molecular biology methods including cloning, PCR, gel electrophoresis/blotting and ELISA
- Computational biology experience (Python and/or PERL, R, Matlab)
- Excellent research record-keeping practices
- Flexibility to learn and adapt to new procedures
- Ability to independently devise solutions to scientific challenges
- High motivation with a sense of urgency and responsibility

### **MINIMUM QUALIFICATIONS:**

- PhD degree, Master's degree with 2+ years experience or bachelor's degree with 5+ years experience, in biological sciences or related subject area
- Biomedical research experience in microbiology/molecular biology in an industry setting is preferred
- Excellent organizational skills