

# JOB DESCRIPTION

Job Title: Senior Scientist

Reports to (Title): Director of Analytical Development

Employment Type: Full-time, on site

Location: Philadelphia, PA

### **About BlueWhale Bio**

BlueWhale is a startup biotechnology company committed to expediting the expansion and acceptance of cell-based therapies. Given the overwhelming demand for cell therapy products that outstrip the available supply, BlueWhale Bio is addressing crucial deficiencies within the existing manufacturing framework.

BlueWhale Bio's founding scientific team is led by Dr. Carl June and Dr. James Riley (University of Pennsylvania). Our team of scientists draws from a wealth of expertise, and it is developing an innovative platform and groundbreaking product portfolio to address critical shortcomings in the current process of cell therapies. Our technology holds the promise of bringing the full benefits of cell therapy to a broader spectrum of patients, doing so more rapidly and at a reduced cost.

### **About The Role**

We are seeking an exceptionally driven Senior Scientist with a proven background in product characterization to join our Analytical Development (AD) team at BlueWhale Bio. As a key contributor to our dynamic AD team, you will engage in the development, validation, and implementation of a diverse range of assays crucial for optimizing manufacturing processes and enhancing product features.

Within the framework of BlueWhale Bio's overall process and product development, the AD team plays an integral role in unraveling the connections between manufacturing processes, product quality, and product functionality. The successful candidate will spearhead IND-enabling studies, orchestrating the design and execution of essential potency, characterization, and safety studies, thus propelling candidates towards clinical advancement.

In this pivotal role, the candidate will play a vital part in qualifying assays for in-process testing, characterization, and the release of BlueWhale's diverse product portfolio. The responsibilities encompass designing and executing experiments to evaluate assay performance, with a keen focus on specificity, accuracy, precision, linearity, robustness, and reproducibility. The candidate will collaborate closely with the Research & Development (R&D) and Process Development teams, contributing to a synergistic and collaborative work environment. If you are passionate about making significant contributions to the advancement of innovative bio-products and possess the expertise



to lead impactful studies, we invite you to be a driving force in our dynamic team at BlueWhale Bio.

## **Key Responsibilities**

- Develop, review, and execute laboratory protocols for particle isolation and characterization, such as quantification methods, flow cytometry, WB, ELISA
- Develop, review, and execute laboratory protocols for characterization of common cells used for cell therapy (T cells, NK cells) such as immunoassays, potency assays, cell killing assays
- Conduct and analyze data for RNA and DNA quantification
- Conduct and analyze data for protein quantification
- Effectively collect and communicate data to the team or in cross-functional meetings
- Execute and report qualification of assays
- Prepare complex technical reports including SOPs, test methods and method development reports
- Participate in technology transfer to CROs and CDMOs under cGMP compliance
- Assist in routine laboratory tasks such as ordering, inventory, and cleaning

### **Basic Qualification**

- BSc (with 5-6 years) or MSc (with 3-4 years) in Cell Biology/Oncology/Immunology or related field, with experience in assay development
- A mix of multidisciplinary training/expertise in cellular biology, immuno-oncology as well as integrative data analysis
- Significant experience in DoE. In specific, experience with determination of assay specificity, accuracy, precision, linearity, range, reproducibility, and robustness
- Significant experience with cGxP compliance
- Cellular biology skills: particle isolation and characterization; cell cultures of human primary cells and tumor cell lines
- Molecular biology and immunology skills: Nucleic acid extraction, ELISA, WB, MSD, Flow cytometry, ddPCR, qPCR
- Cell-based assay and immune-assay experience
- Ability to communicate with team members from different backgrounds with excellent interpersonal skills
- Ability to deliver high quality data in a timely fashion and strong organizational skills
- Ability to work in a fast-paced environment

### **Preferred Qualifications:**

PhD (with 2-3 years) in Cell Biology/Oncology/Immunology or related field



- Previous relevant experience in a biopharmaceutical industry environment
- Track record of scientific publication
- Strong strategic thinking and problem-solving skills
- Strong experience with development, optimization, and qualification of analytical methods in cell therapy
- At least 2 years of experience with flow cytometry (Agilent NovoCyte Quanteon)

### Join our Team

BlueWhale Bio is an equal opportunity employer. We offer an inspiring and innovative environment for talented professionals to contribute to groundbreaking research and advancements in the biotech industry. If you have a strong background in Analytical Development and a desire to make a significant impact, we invite you to apply for the role of Senior Scientist. Join us as we shape the future of cell therapy and improve human lives through scientific excellence.

Contact us: <a href="mailto:careers@bluewhale.bio">careers@bluewhale.bio</a>