

Antibody Discovery Specialist

at Varro Llfe Sciences, Inc. St. Louis, Missouri

Who We Are

Join us on our mission to bring our breakthrough Micro-Immunoelectrode (MIE) Technology to market for real-time detection of respiratory pathogens, a leading cause of disease transmission. At Varro, we're developing innovative, ultrafast, and cost-effective devices to detect pathogens in breath and indoor air and prevent the transmission of infectious disease. Our devices are designed for ease of use, portability, and seamless integration with other systems for early and accessible disease detection.

Working with Varro is an opportunity to reshape the future of public health through transformative technology.

What We Live By

- **Data-Driven Decisions:** We strive for the best solutions, informed by data and optimized for speed, simplicity, and scalability.
- **Support Each Other:** We celebrate the ideas and contributions of our teammates, recognizing that success is achieved together when everyone feels heard and valued.
- **Simplify:** We create intuitive solutions that lead to clear, meaningful outcomes, enhancing public health and improved patient care.

Key Responsibilities

What You Will Be Doing

The Antibody Discovery Specialist will be a key member of the Varro Life Sciences research and development team. This position will have multiple technical responsibilities supporting R&D internally by extracting antibody/nanobody sequences from camelid lymphocytes, expressing nanobodies in *E. coli*, creating nanobody libraries, and screening for nanobodies that recognize respiratory and airborne pathogens.

The Antibody Discovery Specialist will also be responsible for antibody purification, testing antibody specificity, and determining binding kinetics, cell culture, PCR, chromatography, ELISA, and conducting binding and functional assays to characterize antibody-antigen interactions such as surface plasmon resonance (SPR). As the Antibody Discovery Specialist, you will be the subject matter expert, driving close alignment with collaborative teams to meet manufacturing and R&D deliverables. Your background and experience need to enable you to design experimental strategies, troubleshoot obstacles in achieving your goals, and work within a multidisciplinary team to ensure that Varro can achieve its objectives.

As part of our team, your core responsibilities will be to:



- Serve as a technical lead collaborating closely with program management both internally and externally supporting the execution of key programmatic deliverables
- Perform a variety of culturing techniques for bacteria and mammalian cell culture.
- Screen antibody candidates using a range of immunoassays (e.g., ELISA, dot blots, SPR, etc.) to identify promising binders.
- Evaluate antibody binding kinetics, affinity, and epitope specificity using advanced analytical techniques.
- Develop, validate, and troubleshoot new assays for improved sensitivity, throughput, and reproducibility.
- Maintain accurate, detailed laboratory notebooks and electronic data records in compliance with internal and external standards.
- Prepare comprehensive technical reports, presentations, and summaries of experimental findings to inform decision-making within project teams and management.
- Adhere to all laboratory safety, biosafety, and regulatory guidelines.
- Ensure that all experimental procedures and documentation are compliant with company quality standards

What We Are Looking For

Baseline Skills, Experiences, & Attributes:

- Masters degree in Molecular Biology, Biochemistry, Immunology or a related science discipline 5+ years of applicable scientific experience or a bachelors degree with 8+ years of applicable experience
- Experience in antibody screening and antibody assay research and development, with knowledge of scaling, automated processes, and manufacturing
- Extensive knowledge of antibody affinity screening techniques (e.g. ELISA, SPR)
- Strong written and verbal communication skills
- Strong, cross-functional laboratory, research and development, "scale-up" skills
- Strong organizational skills
- Experience with Google Workplace and Microsoft Suite

Preferred Qualifications:

- Advanced Degree in a related discipline
- Knowledge of high throughput screening and optimization techniques for antibodies with focus
 on automated processes
- Experience with affinity measurement and optimization techniques such as surface plasmon resonance, microfluidic platforms, or flow cytometry
- Knowledge of techniques for antibody-based assays related to diagnostic viral detection
- Experience conducting molecular biology to modify nanobody sequences to optimize binding properties for specificity, cross reactivity and affinity and other kinetic specifications not required, but preferred..

Physical Job Requirements:



The physical demands described within the responsibilities section of this job description are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

- Must be able and willing to lift 40 lbs
- This position is required to work onsite at our office location in St. Louis, MO

Location and Compensation

This is an onsite, full-time position located in St. Louis, MO.

Anticipated Salary Range: \$80,000-100,000 annually. The base salary range represents the anticipated low and high end of the salary range for this position. Actual salaries will vary and may be above or below the range based on various factors including but not limited to work location, operational needs, potential employee qualifications and other considerations permitted by law. The range listed is just one component of our total compensation package for employees. Other rewards may include annual bonuses, equity and program-specific awards.

In addition, we provide a variety of other benefits to employees including but not limited to:

- Medical, dental, and vision coverage.
- 401(k) plan
- Remote work arrangements
- Annual bonuses, equity options, and other awards

You will have the opportunity to build revolutionary products that can save millions of lives!

VARRO does not accept agency resumes.

VARRO Life Sciences is an E-Verify and equal opportunity employer regardless of race, color, ancestry, religion, gender, national origin, sexual orientation, age, citizenship, marital status, disability or Veteran status. All your information will be kept confidential according to EEO guidelines.

Apply at careers@varrobio.com