Staff Scientist: Antibody Engineering and Optimization

Job Summary

A research **Staff Scientist** position at the Indiana Biosciences Research Institute is available in the Center for Pharmaceutical Biotechnology. We are looking for a highly motivated researcher to join the IBRI and help launch a new program in therapeutic product development. This program will work with academic and industrial partners to develop biological therapies and molecular diagnostics (monoclonal antibodies, vaccines, recombinant proteins), primarily focused in diabetes, cardiometabolic and autoimmune disorders.

The selected candidate will lead a team responsible for the development of recombinant antibodies and optimization of selected antibody leads. The candidate and team will be responsible for the design and implementation of immunoglobulin gen isolation from multiple starting sources, humanization, affinity-maturation and effector function engineering strategies of lead molecules based on target characteristics. A strong understanding of disease biology in the context of antibody structure-function relationships is critical, as is the ability to work closely with a cross functional group to guide and experimentally evaluate these strategies. The selected individual will also contribute to the development of therapeutic program ideas, meeting and developing collaborations with internal and external partners.

Responsibilities and Duties

Primary responsibilities include:

- Develop process and assays to discover, generate and characterize antibodies (and the genes encoding these) against selected target antigens
- Work on projects that involve the discovery of novel antibodies or engineering of existing antibodies to improve their functional activities
- Collaborate and contribute to antibody discovery from B cell and hybridoma cloning
- Executing the strategy for lead antibody optimization efforts employing advanced molecular biology, biochemistry, cell biology techniques and protein analytics
- Provide technical impact and leadership for design and early development of lead antibodies
- Contribute to target discovery and development programs

Qualifications and Skills

Specific skills and qualifications for the position include:

- PhD in Molecular Biology, Immunology, Biochemistry or a related field with 3-5 years of experience
- Experience and expertise in therapeutic antibody development
- Strong hands-on molecular biology experience is required
- Expertise in application of deep sequencing/bar coding in antibody cloning and engineering (human and multiple animal species) and bioinformatics is beneficial
- Experience in mentoring, training and managing others
- Significant experience with mammalian cell expression systems is required
- Experience with flow cytometry and SPR is beneficial

Interested individuals should apply online and include a cover letter.

Compensation

Competitive salary and comprehensive benefits offered.

The Organization

The Indiana Biosciences Research Institute (IBRI) is the first industry-inspired applied research institute focused on the discovery and development of innovative solutions to address major health concerns. Our initial focus areas include diabetes, cardio-metabolic disease, and poor nutrition. IBRI is structured as an independent, non-profit organization strategically positioned in Indianapolis: the center of Indiana's vibrant life sciences network of innovators including corporations, academics, and foundations.

IBRI is building an organization of premier entrepreneurial researchers and innovators. We are motivated to create discoveries that transform into solutions that positively impact people's lives. Our mission of "Discovery with Purpose" prioritizes recruiting exceptional talent, building a highly-collaborative culture, and establishing a diverse portfolio of projects and programs supported by industry, government, and philanthropic sources.