

Research Associate, Analytical Chemistry

Job Title: Research Associate, Analytical Chemistry

Location: West Lafayette, IN

Job Type: Full-time

Company Overview: The Low Institute for Therapeutics is a nonprofit research organization established to reduce human suffering from disease based on the pioneering work of Dr. Philip Low, Presidential Scholar for Drug Discovery and the Ralph C. Corley Distinguished Professor of Chemistry at Purdue University. The Low Institute is focused on advancing clinical studies of innovative medicines designed to precisely treat a wide range of diseases by preferentially targeting diseased tissue, thereby improving efficacy, reducing side effects and improving patient outcomes. The institute is focused on diseases which significantly impact human health, including malaria, many types of cancer, chronic kidney disease, pulmonary fibrosis, heart failure, rheumatoid arthritis, organ transplant rejection, fatty liver disease, Alzheimer's disease, sickle cell anemia and bone fractures.

Position Summary:

We are looking for an Analytical Chemist to join our innovative research and development team, focusing on the preclinical development of novel, targeted therapeutics. In this role, you will be instrumental in developing analytical assays for the detection and quantification of therapeutics in various biological matrices. You will also play a key part in assessing the purity and stability of lead molecule formulations, utilizing techniques such as HPLC and mass spectrometry. Beyond performing critical analyses and quality control testing, you will manage laboratory inventory to ensure seamless operations. Ideal candidates will possess strong experience in analytical chemistry, biochemistry, or a closely related field, with specific expertise in developing mass spectrometry-based analytical methods.

Responsibilities and Duties:

- Determine the relationships of chemical and physical properties, composition, structures, and reactions of organic and inorganic compounds using chromatography, spectrophotometry, and spectroscopy techniques
- Quantify target compounds in biological samples using MS/MS
- Develop robust methods for isolating analytes from complex biological samples.
- Drug formulation and stability analysis
- Drug metabolite identification
- Analytical method development
- Maintain and manage analytical equipment, including HPLC, LCMS, QQQ, or similar
- Develop, improve, and customize equipment, products, formulas, analytical methods, and processes
- Document findings in technical papers and reports

Qualifications and Skills

- Experience with developing methods for quantification by MS/MS
- Drug formulation and stability experience
- Pharmacokinetic experience
- Experience in developing methods for analysis of biological samples
- BS (2+ years) or MS in chemistry with a focus on analytical chemistry or organic chemistry (or in related areas such as Biochemistry)

- Good communication and interpersonal skills
- Written communication skills to publish finding and prepare reports
- Experience with Microsoft Word, Excel, PowerPoint, Graph Pad Prism, Masslynx, Mestrenova, Chemdraw and other analytical software
- Critical thinking and problem-solving
- Time management
- Analytical and data manipulation skills
- Organizational skills

Interested candidates should submit a Cover Letter and CV to jobs@lowinstitute.org