X-ray Crystallography Scientist  
Protein Structure and X-Ray Crystallography Lab  
KU Office of Research

Founded in 1865, KU is an R1-rated research university with more than 40 graduate programs ranked by U.S. News & World Report. KU enrolls 28,500 students and employs nearly 2,900 faculty members across five campuses (Lawrence, Kansas City, Overland Park, Wichita and Salina). The Office of Research oversees 10 university research centers, two state surveys and about a dozen core laboratories. Core lab personnel play a critical role in research success at KU – collaborating with faculty, students and industry researchers to acquire data, train users on instrumentation, and help plan experiments and interpret data. They also frequently co-author publications and serve as co-investigators on grant proposals.

Thanks in part to core lab support, faculty and staff on all KU campuses generated $263.9 million in externally funded research expenditures in fiscal year 2019. Collectively, that activity fuels KU’s mission to be an institution “making discoveries that change the world.” It’s also among the reasons KU retains membership in the prestigious Association of American Universities — one of just 36 U.S. public institutions among 65 that are transforming lives through education, research and innovation.

The KU Office of Research seeks a Ph.D. scientist with expertise in small molecule X-ray crystallography to fill a full-time, benefit’s eligible unclassified professional staff position as an Associate Researcher, contingent upon available funding. The scientist will provide small molecule X-ray crystallography services to KU and outside users. Duties include operation and maintenance of X-ray diffractometers, training and assisting users, and providing crystal structure determinations to KU and outside users. The position will be housed in the Protein Structure and X-Ray Crystallography Lab, a centrally-funded KU core research laboratory, and will report to the Director of the Protein Structure and X-Ray Crystallography Lab.

As a premier international research university, The University of Kansas is committed to an open, diverse, and inclusive learning and working environment that nurtures the growth and development of all. KU holds steadfast in the belief that a variety of values, interests, experiences, and intellectual and cultural viewpoints enrich learning and our workplace. The Office of Research actively seeks applications from members of groups underrepresented in higher education.

The successful candidate must have valid U.S. work authorization prior to the start date of appointment.

Description

1. 35% - Execute the technical and scientific aspects of X-ray crystallography services provided by the Protein Structure and X-Ray Crystallography Lab. These include working with users, running the single crystal and powder diffractometers, solving small molecule crystal structures, report preparation, ordering parts and supplies, and arranging for service/maintenance on equipment.

2. 35% - Collaborate and assist with all the appropriate aspects of research projects of faculty, staff, and students requiring molecular structure determination. These aspects include sample preparation, data collection, structure solution, and report generation, as well as, when necessary, assisting faculty, staff, and students with interpretation of crystallographic data and the preparation of grant applications. This can include serving as co-author on manuscripts and co-investigator on grant proposals as appropriate.
3. 10% - Work with the Protein Structure and X-Ray Crystallography Lab director in organizing, maintaining, and operating the hardware, software, facilities, and organizational resources of X-ray crystallography services, including working with vendors to fix or purchase equipment.

4. 10% - Work with the Protein Structure and X-Ray Crystallography Lab director on the financial management of X-ray crystallography services in the lab. This includes evaluating core lab rates for users, invoicing users for services rendered, and reporting metrics to the Office of Research.

5. 10% - Train students and research staff in the use of the laboratory’s equipment and in the determination of molecular structures.

**Required Qualifications**

1. Ph.D. degree in Chemistry or a related field.

2. Experience in operation and support of single-crystal and/or powder X-ray diffractometers, including hardware and software.

3. Experience in the determination of small-molecule organic/inorganic/organometallic crystal structures by single-crystal X-ray methods and analysis of powder diffraction patterns.

4. Excellent organizational skills as demonstrated by application materials.

**Preferred Qualifications**

1. Experience working in a core research laboratory setting.

2. Ability to work collegially in a collaborative research environment, as evidenced by application materials and in-person interview.

3. Excellent verbal communication skills as evidenced by in-person interview.

4. Experience working with a diverse group of scientists on a variety of crystallographic problems.

5. Experience with managing budgets, purchasing, and invoicing in a core lab setting.