

Beamline Scientist at the BioCAT Beamline at the Advanced Photon Source

The [Biophysics Collaborative Access Team \(BioCAT\)](#) at Illinois Tech operates the world-class biological small angle X-ray scattering and diffraction beamline 18ID at the Advanced Photon Source at Argonne National Laboratory (near Chicago, IL). The facility is used by scientists and students from university, government, and industrial labs around the world. These groups use BioCAT to conduct research in areas from basic biomedical research to translational medicine.

BioCAT is seeking a Ph.D. level scientist to lead the X-ray Fiber Diffraction Program at the beamline with a major emphasis on studies of striated muscle systems. You will have primary responsibility for supporting Fiber Diffraction users at the beamline as well as maintaining the state-of-the-art sample preparation and sample delivery and characterization equipment. You will also collaborate scientifically with users and other beamline staff.

Responsibilities:

- Support and grow an active user community, including users from academia, government, and industry, using X-ray Fiber Diffraction on biological materials.
- Collaborate scientifically with users, including on experimental design, data analysis and interpretation, and publication.
- Contribute to the development and implementation of advanced methodologies for X-ray Fiber Diffraction, both experimental and analytical, and to continuing improvements to the X-ray scattering instrument.
- Train students and new users in data collection and analysis for X-ray Fiber Diffraction.
- Maintain and enhance the sample preparation, characterization, and delivery capabilities for X-ray Fiber Diffraction. This includes extensive physiological instrumentation.

Essential qualifications:

- Ph.D. or equivalent in biochemistry, biophysics, structural biology, or a related field.
- Interest and ability to work in a fast-paced collaborative research environment.
- Record of scientific publications.
- Ability to work and communicate effectively with technical experts, operations staff, and researchers at all levels, including students, postdocs, and facility users.

Preference will be given to candidates with significant experience in hands-on physiological experiments with striated muscle systems. Some structural biology experience is also highly desirable. Experience with small-angle diffraction or scattering is an asset, but training in this technique can be provided on the job.

Salary, hours, and benefits:

Salary range is from \$70,000-\$90,000 per year depending on qualifications and experience. The position is full time. Benefits include health insurance; vacation, parental, bereavement,

personal and sick leave; matched retirement plan contributions (additional time served eligibility requirements); tuition reimbursement and more.

For further information about the position, please contact BioCAT Director Jesse Hopkins (jhopkins1@illinoistech.edu). Applications received by June 13th are guaranteed full consideration, but applications will be accepted until the position is filled.

Applicants should send:

- A cover letter
- A curriculum vitae
- A list of publications (can be included in the CV)
- The names and contact information for three references

to Jesse Hopkins (jhopkins1@illinoistech.edu).

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