



MacCHESS Program Director (Senior) Research Associate

December 2021

The MacCHESS Synchrotron Source for Molecular Biology facility (MacCHESS), a long-running NIH-funded program to support structural biologists using the Cornell High Energy Synchrotron Source (CHESS), is seeking a Director. MacCHESS is a component of CHESS, a recently-upgraded synchrotron source serving a wide variety of researchers with X-ray science needs, jointly funded by NIH, NSF, and DOD, with assistance from New York State. MacCHESS provides a facility where scientists can use both established and emerging technologies to pursue the goals of the biomedical research community. Work performed at MacCHESS, using tools including, e.g., crystallography and small-angle X-ray scattering, yields important insights into fundamental biological processes, such as signaling across membranes, regulation of ion channels in neuronal function, enzyme catalysis, and gene expression. The MacCHESS Director will play a key role, alongside the MacCHESS PI and other members of the CHESS leadership team, in the management of the CHESS facility to promote scientific research.

The primary functions of the MacCHESS Director are (1) to ensure smooth operation of the facility (personnel management, budgeting, upgrades), (2) to act as Co-PI on the NIH grant (preparing reports, renewal applications, etc.), and (3) to participate in collaborative scientific developments at MacCHESS. A detailed list of responsibilities is given below.

Desired attributes for a successful candidate include:

- The personal stature to be able to represent CHESS with senior administrators and faculty within Cornell as well as with other organizations.
- Excellent communication skills, both oral and written. Ability to understand and communicate effectively with a variety of audiences the purpose, goals, and value of CHESS research and the impact this research can have to solve real world problems.
- Strong skills as a team player - listen to others but also provide firm supervision when needed.
- Problem solving and project management skills.
- Capability to adapt to change, and be able to drive changes within the organization.

Education and experience:

- PhD and/or a terminal professional degree in a subject area relevant to CHESS is highly desirable.
- Experience in managing a group is required. Preferably the group would include scientific and non-scientific (e.g., technical, administrative) personnel.
- Experience with writing grant applications for government agencies or other funding sources is highly desirable.
- Experience at a user facility is a plus.

Cornell University embraces diversity and seeks candidates who will contribute to a climate that supports students, faculty and staff of all identities and backgrounds. If you don't meet 100% of the job qualification, but see yourself contributing, please submit an application. We strongly encourage individuals from underrepresented and/or marginalized identities to apply. Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans and Individuals with Disabilities.

About us:

Cornell University is an innovative Ivy League university located in Ithaca, New York. Our inclusive community of scholars, students and staff impart an uncommon sense of larger purpose and contribute creative ideas to further the university's mission of teaching, discovery and engagement. Cornell provides great benefits that include comprehensive health care options, generous retirement contributions, educational benefits (Employee Degree, Tuition Aid, Cornell Children's Tuition Assistance Programs), access to wellness programs, and employee discounts with local and national retail brands. Our leave provisions include 22 days of vacation and 13 holidays, including winter break from December 25th through January 1st.

Cornell has been nationally recognized as an award-winning workplace for our health, well-being, sustainability, and diversity initiatives. For more information, follow the link: [Benefits at Cornell](#).

The Cornell High Energy Synchrotron Source (CHESS) is one of the most advanced scientific facilities in the world, and its pioneering capabilities are helping to keep the United States at the leading edge of scientific research. Located on the central campus of Cornell University, CHESS is internationally recognized for providing high intensity X-ray beams and advanced instrumentation to scientists and students around the world. The lab comprises seven state-of-the-art beamlines, each of which routinely hosts world-leading research in physics, chemistry, biology, environmental sciences, materials science, cultural heritage, and engineering. CHESS is a world leader in innovation for complex sample environments including in situ heating and loading, accelerators, detectors, and x-ray optics and plays a key role in many medical discoveries and scientific breakthroughs, including research that received Nobel Prizes in Chemistry in 2003 and 2009. The recent CHESS-U upgrade has expanded the lab's capabilities to allow scientists to address the most pressing global challenges facing our society. CHESS is committed to engaging with industry, academia and government through its funding from the National Science Foundation, Air Force Research Lab, National Institutes of Health, and New York State.

Responsibilities in detail

1. Personnel management
 - a. Supervision of the academic staff primarily responsible for supporting the program, including annual performance evaluations, academic review process recommendations.
 - b. Coordination with operations management to direct activities of technical support staff.
 - c. Primary role in hiring of temporary and permanent personnel (staff scientists, post-docs, students, consultants).
2. Budget and reporting management
 - a. Day-to-day oversight of budget and reporting management. May include things such as: ad hoc program officer questions, monthly financial review.
 - b. Preparation of annual (or semi-annual) reports for funding agencies.
 - c. Preparation of supplemental funding requests, if needed.
3. Fulfillment of program objectives
 - a. Responsibility for coordinating and deploying resources (people, funding, technical) to further the specific aims of the award.
 - b. Evaluation of program success through interaction with users, staff, etc.
 - c. Diligent attention to rapid correction of any deficiencies discovered in service to users.
 - d. Interaction with advisory committees to prioritize focus areas for the program.
 - e. Supervision of Education/Outreach activities.
 - f. Information exchange to promote MacCHESS and get ideas for improvements, via scientific conferences, visits to other facilities, etc.
 - g. Occasional assistance in direct user support.
4. Preparation of new and renewal grant applications
 - a. Primary MacCHESS grant from NIH.
 - b. Supplementary grants, e.g. from NYSTAR.
5. Scientific activities
 - a. Development of hardware/software to enhance capabilities of beamlines.
 - b. Participation in user research when results may benefit what MacCHESS can offer the user community.
 - c. Participation in activities such as organizing conferences, reviewing papers, etc.
6. Contributions to CHESS-wide leadership
 - a. Regular meetings with other directors, upper-level management.
 - b. Preparation of science highlights for public distribution.
 - c. Users' meeting organization.
 - d. Preparation/leadership of additional proposals.

Applications should be submitted at <https://academicjobsonline.org/ajo/jobs/20602> and should include a cover letter, a CV, a list of publications, and a detailed summary of research experience and interests. Applicants must arrange to have at least three letters of recommendation sent, as per instructions on the academicjobsonline website. The starting date is negotiable.

Cornell University requires all employees, whether they work on campus or work fully remotely, to be fully vaccinated against COVID-19, or to have obtained a university-approved medical or religious exemption. For additional information on this requirement, visit: <https://hr.cornell.edu/covid/university-response/vaccination>.

Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans and Individuals with Disabilities. We also recognize a lawful preference in employment practices for Native Americans living on or near Indian reservations. Cornell University is an innovative Ivy League university and a great place to work. Our inclusive community of scholars, students, and staff impart an uncommon sense of larger purpose, and contribute creative ideas to further the university's mission of teaching, discovery, and engagement.