**THE HORMEL INSTITUTE**
**UNIVERSITY OF MINNESOTA**

**CRYO-ELECTRON MICROSCOPY PROCESSING SCIENTIST**

The Cryo-EM Processing Scientist will provide technical guidance to department research faculty and staff with the primary goal to reconstruct maps of single particle protein complexes pivotal to cancer research. The successful candidate will be in charge of the data processing and computational workflow of the Cryo-EM Lab in collaboration with the Cryo-EM Facility manager, support microscope users with processing tasks, and manage the data storage infrastructure.

Essential Functions:
- Process Cryo-EM data including handling raw data, interpretation, reconstruction and refinement of single particle maps and model building
- Support high-performance computing infrastructure including management of large data storage and processing clusters

The Hormel Institute, a biomedical research center of the University of Minnesota, was established in 1942 and has an excellent reputation and long history for producing world-class medical research. The Institute's research success has resulted in a second major expansion of its research facilities and includes an additional new state-of-the-art laboratory building that opened in January 2016. The Hormel Institute offers its research scientists complete access to state-of-the-art cutting edge equipment that includes a new Cryo-EM Lab; FACS cell sorter; confocal microscopy; flow cytometry; protein crystallography robotics and diffraction system; nano-HPLC-AB SCIEX triple TOF 5600 mass spectrometry; Leica tissue processor, sample embedder and microtome; real-time PCR instrumentation; 3 racks of Linux GPU supercomputers for computational biology and bioinformatics; spectrophotometers; and Western blot imagers.

Required: BA/BS plus at least 4 years of experience, or advanced degree plus 2 years of experience or a combination of related education and work experience to equal 8 years.

Preferred: MS in computer science (or related field); Significant documented experience with high performance computing and Cryo-EM processing workflow including in-depth knowledge of Relion, EMAN, CryoSparc, Chimera, Spider and related software packages; Ability to utilize scripting and troubleshoot code in common computing languages like PYTHON, C++.

To apply, please send a curriculum vitae, a research plan, and the contact information for three references to bobashley@hi.umn.edu.

*The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.*