

NSF & NHMFL Cooperative Agreement
User Operations
January 2013

The National High Magnetic Field Laboratory is funded by the National Science Foundation under **DMR-1157490** and operated under a Cooperative Agreement with Florida State University. Excerpts of the Cooperative Agreement related to user programs and operations are presented below, verbatim:

“1. Project Description: High magnetic fields play a critical role in developing materials that affect nearly every modern technology. Lasers, computers, motors, plastics, and MRI all came about after researchers learned more about materials through magnet-related research. The NHMFL is the largest and highest-powered magnet laboratory in the world. Every year, more than 1,100 researchers use the lab's magnetic fields to study a wide range of materials and processes, using state-of-the-art, highly customizable equipment. The most powerful magnets at the lab produce fields over 2 million times stronger than the Earth's magnetic field. What happens in experiments under such conditions gives scientists important insights that pave the way for advances in physics, biology, bioengineering, chemistry, geochemistry, biochemistry, and materials research. This interdisciplinary approach allows scientists to collaborate on research questions bigger than their individual disciplines. The NHMFL makes this remarkable science not just possible, but also accessible. Their doors are open to visitors, and their educational arm, the Center for Integrating Research and Learning, offers a variety of immersive programs and resources to teachers and students at all academic levels. The NHMFL is a consortium of researchers and facilities at Florida State University in Tallahassee, Los Alamos National Laboratory in New Mexico, and the University of Florida in Gainesville.

2. Project Governance: Florida State University will, in coordination with the University of Florida and Los Alamos National Laboratory, assume overall responsibility for the planning, operation and scientific and technical management of the NHMFL...The overall mission of the NHMFL is to provide high magnetic field facilities, instrumentation and necessary services for research conducted by users from various disciplines, including, but not limited to; physics, chemistry, materials science, engineering, and the biological sciences. Access to the NHMFL is based on review of competitive proposals. Proposals shall be considered on the basis of scientific and technical merit and on broader implication of the work proposed as defined in the NSF Merit Review Criteria.

B. Principal Investigator (PI): Dr. Gregory S. Boebinger is the PI and he serves as the Director of NHMFL. The Director, in consultation with NSF staff, shall appoint the NHMFL User Collaboration Grants Program (UCGP) Committee (3.F) and the User Facility Directors that run the NHMFL User Program (3.D). The Director is responsible for the proposal review process and the final decisions on scheduling of magnet time based on recommendations by the User Facility Directors.

D. User Facility Directors: The NHMFL User Program comprises seven user facilities, each led by a User Facility Director:

- i. DC Magnetic Field User Facility
- ii. Pulsed Magnetic Field User Facility
- iii. High B/T User Facility
- iv. Electron Magnetic Resonance User Facility
- v. Nuclear Magnetic Resonance / Magnetic Resonance Imaging User Facility at Florida State University

- vi. Nuclear Magnetic Resonance / Magnetic Resonance Imaging User Facility at the University of Florida
- vii. Ion Cyclotron Resonance User Facility.

The User Facility Directors are selected from among the co-PIs or NHMFL scientists to manage the respective user facilities. The Facility Directors recommend magnet time allocations to the NHMFL Director with inputs from their respective User Proposal Review Committee (UPRC). The Facility Directors appoint the members of their UPRC.

F. The NHMFL User Collaboration Grants Program (UCGP) Committee: Membership of the UCGP Committee shall be such as to ensure proper coverage of the breadth of science in the UCGP proposals. The UCGP Committee shall conduct reviews of all UCGP proposals in a manner that is consistent with the NSF proposal review criteria. Members of the UCGP are selected from among NHMFL staff and external users.

G. Users of the NHMFL: Users of the NHMFL come from US academic institutions, national laboratories, other federal agencies, industry and international institutions. User time at NHMFL is allocated on the basis of competitive proposal review. Users shall elect the NHMFL User Committee.

H. The NHMFL User Committee: The User Committee is composed of representatives of the external scientific and engineering communities. Members of the User Committee will be external (non-NHMFL personnel) users of high magnetic field facilities and instrumentation and knowledgeable in their development. The User Committee shall meet at least annually to provide advice to the NHMFL Director on policies relating to the use and development of NHMFL facilities and instrumentation for experiments by users. The User Committee should submit an annual written report to the cognizant NSF Program Officer and the NHMFL Director. The User Committee report should be included in the annual report to NSF. The cognizant NSF Program Officer and the NHMFL Director will encourage the User Committee to publish these reports and other relevant material on the NHMFL Users website at <http://maglabusers.org>

I. NHMFL User Proposal Review Committees (UPRC): Each of the seven user facilities has a User Proposal Review Committee that is responsible for selection and recommendation of user proposals to the User Facility Director. Members of the seven UPRC's are chosen for their scientific expertise from among NHMFL users, NHMFL staff or prominent members of the scientific community at large.”