User Proposal Policy
National High Magnetic Field Laboratory (MagLab)

A. Proposal Review and Magnet Time Assignment

The MagLab operates seven user facilities (DC Field, Electron Magnetic Resonance-EMR, Ion Cyclotron Resonance-ICR, and Nuclear Magnetic Resonance-NMR in Tallahassee at FSU; Pulsed Field Facility at LANL; High B/T and Advanced Magnetic Resonance Imaging and Spectroscopy-AMRIS at UF). Each facility is managed by a Head of User Program (HUP) who is a MagLab-employed scientist. This document contains the specific MagLab policy for proposal review, magnet time assignment, and appeal of magnet time assignment decisions.

1. Proposals for magnet time at any of the facilities are submitted online at the same user portal. All proposals must include:
    - Up to three (3) page description of the proposed science and/or technology development, including intellectual merit and broader impacts of the work;
    - Up to one (1) page description of previous relevant work; and
    - Two (2) page biographic sketch, including up to five (5) publications related to the proposed project.
    - User FAIR Data Plan (reviewed by facility manager or facility director)

    In addition to the proposal, a magnet time request (experiment) is submitted as the next step in which the details of the experiment are enumerated; specific magnet system requested; funding source information; sample information; experimental plan; and requested scheduling windows are provided by the submitter. Access to systems in the DC Field Facility requires an additional report of prior results at lower fields to demonstrate the need for high fields. In limited cases, the MagLab Director may give a waiver of this requirement. NMR Facility users at FSU working with live vertebrate animals are required to follow the policy related to animal research at the MagLab at FSU.

    Proposals are valid for three (3) years from the date of submission.

    Each of the seven user facilities has a User Proposal Review Committee (UPRC) that is responsible for rating user proposals submitted to that facility and thereby recommending which user proposals should receive magnet time to the Head of User Program for that facility. Each Head of User Program appoints the members of the UPRC for their facility upon the approval of the NHMFL Director. Each UPRC consists of MagLab-affiliated staff members/users and external users or other members of the scientific community at large. "External" is defined for this purpose as not affiliated with the MagLab, FSU, UF, or LANL. The UPRC will have at least seven (7) members and have more external members than internal. Due to the breadth of the proposed science conducted at Magnet Lab facilities, the HUP may seek additional external or

staff-written reviews on a proposal-by-proposal basis to ensure a comprehensive and high quality review process.

To preserve confidentiality, the membership of the UPRCs is available for review by NSF and MagLab advisory committees, but it is not posted publicly.

2. Per NSF policy in NSF Grant Proposal Guide, Section A. Review Criteria, proposal reviews are based on two criteria: (1) the scientific and/or technological merit of the proposed research, and (2) the "broader impacts" of the proposed work. Proposals are graded online using the following scale:

   A–Proposal is high quality and magnet time must be given a high priority
   B–Proposal is good quality and magnet time should be granted
   C–Proposal is acceptable and magnet time should be granted at MagLab discretion
   D–Proposal has minimal merit and granting magnet time should be a low priority
   F–Proposal has little/no merit and magnet time should not be granted.

3. Reviews are conducted in strict confidence. UPRC members are allowed to submit proposals, but they will not be used as reviewers for any proposal for which they are cited as the PI or collaborator. Obvious conflicts of interest are removed when the HUP selects reviewers; and reviewers will be required to certify that they have no conflict of interest with the proposal under review. Following NSF guidelines, conflict of interest occurs in situations such as: present or past PhD advisor/student; a collaborator within the past 48 months; a co-editor within the past 24 months; or any other circumstance where impartiality could be questioned.

   The MagLab is careful not to discourage review committee members from submitting proposals and/or from being MagLab users.

4. The HUPs recommend magnet time assignments for their facility to the MagLab Director in accordance with the written recommendations and grades assigned to user proposals by the UPRC. The HUPs dovetail the UPRC recommendations with the availability and scheduling of specific magnets, experimental instrumentation and user support scientists. Considerations that increase prioritization given to a particular proposal are:
   - PI is an early career researcher (7 years since receipt of PhD).
   - PI is from an underrepresented group or from an institution serving underrepresented populations.
   - PI is a first-time principal investigator.

   Considerations in cases of oversubscription for a particular magnet or instrumentation include:
   - The PI has not received magnet time recently, i.e. during the previous scheduling period.
   - The PI has used past magnet time effectively.
   - Data collected by the PI at the MagLab has been published in a timely manner.

- The PI's prior results and/or discussions with the PI provide compelling evidence that the requested experimental technique is not likely to yield high quality data.

The MagLab Director is responsible for final decisions on scheduling of magnet time based on these recommendations. Anonymous reviews are provided to the PI via the online system. All documentation regarding magnet time assignments are available upon request to the NSF and NSF Review Committees, but they are otherwise kept confidential.

5. Each year as part of the annual User Committee Meeting, the five MagLab User Advisory Sub- Committees (DC/ High B/T; Pulsed; NMR/AMRIS; ICR; EMR) will review the MagLab proposal review process for quality and fairness. These advisory sub-committees will also serve as external reviewers of last resort for any proposals that did not receive adequate review during the previous year. Examples of situations that may occur include;
   a. a proposal was not fully reviewed because a minimum number of external reviews was not available,
   b. a new user was awarded discretionary magnet time by the Director prior to the full review of a formal proposal
   c. discretionary magnet time was awarded by the MagLab Director prior to a full review of a formal proposal. These "Rapid Access" requests allow MagLab users to quickly respond to extraordinary scientific opportunities, e.g., iron-based superconductivity research during the first months after their discovery; a breakthrough in quantum information or energy research, or a transformative development in biochemistry. To request Rapid Access, the user/submitter i) provides a justification at the experiment level under *Experiment Plan*, ii) uploads a PDF under the *Prior Results* section, and iii) checks the box requesting *Rapid Access* prior to click *Confirm Submission*, which then triggers an e-mail notification to the Director and applicable HUP. Rapid Access requests will only rarely be approved.

   Criteria upon which requests for Rapid Access will be judged:
   I. New scientific or technical results that have resulted in a high degree of worldwide interest and activity.
   II. Granting Rapid Access will result in the group not being penalized by waiting for the normal review and scheduling period when there is a competing group. Competing groups can be at other magnet labs or even within the MagLab. If the competition is within the MagLab particular attention must be given to fairness to all parties involved.
   III. The scientific or technical excellence of the experiment being proposed.
   IV. The feasibility of the experiment given the availability of resources and staff.
   V. When the Rapid Access request involves rescheduling an already scheduled user, the bar for approval of the request is significantly higher than just bypassing the normal scheduling / reviewing period.

B. Appeal of Magnet Time Assignment Decision

A scientist who is denied magnet time has the right to appeal the decision. The Magnet Time Appeals Committee is chaired by the Director of the MagLab and includes the Chair of the MagLab User Committee (or his/her designee) and one additional member of the MagLab User Committee selected by the MagLab Director on an ad hoc basis.

The appeals committee will review the unsuccessful proposal in the context of competing proposals, both accepted and rejected, as well as the total amount of magnet time distributed to users in the relevant user program(s). The Director will make a final decision and inform the appealing scientist and the relevant Head of User Program. A summary of the appeal and decision will be provided at the next MagLab Users Committee meeting.

The appeals committee has wide latitude in developing its recommendation. It can endorse the denial of magnet time, recommend that magnet time be granted as a high priority at the earliest possible date (potentially displacing a lower priority user), or recommend that the proposal receive magnet time in the next allocation of magnet time. If the MagLab Director overturns a denial of magnet time, the MagLab Director will inform the relevant Head of User Program and explicitly consider whether to provide him/her feedback regarding any perceived bias in assigning magnet time.

Document revision control

Date	Version	Comments
11.17.2009	Original	
02.10.2010	1	
02.22.2011	2	
06.27.2011	3	
10.24.2013	4	
03.20.2014	5	
09.18.2017	6	Updating NSF web links, adding language regarding "Rapid Access" and "Animal Research at MagLab"
11.02.2017	7	Updating NSF web links to reflect 2018
12.08.2020	8	Added User FAIR Data Plan component of proposal
04.12.2022	9	Clarifications regarding Rapid Access Request
08.01.2022	10	Updating NSF web links to reflect 2021
01.05.2023	11	UPRC approved by NHMFL Director