

FRIB Experiment Bridge Faculty Position, Framework, and Guidance for Applications

1 Objective

This document provides guidelines for those Universities planning to apply for an FRIB Experiment Bridge Faculty position with the FRIB Experiment Bridge Initiative. Special procedures will be in place if a host institution proposes a Bridge Faculty in accelerator physics.

2 Description of the Bridge Faculty Position

The motivation of the FRIB Experiment Bridge Faculty program (the Bridge program) is to enhance the opportunities for faculty hires at U.S. universities with a focus on experimental research at FRIB or developments relevant for science at FRIB. These positions will be loosely modeled after those created by the FRIB Theory Alliance, with 50% of the cost being covered by FRIB – salary, benefits and travel – administered through the FRIB Experiment Bridge Initiative and 50% by the home institution, over an initial period of up to 6 years or until the faculty member is granted tenure.

Bridge Faculty are outstanding junior experimentalists who hold the promise to develop strong experimental research programs based at FRIB or developments relevant for FRIB. Bridge Faculty are 100% employees of their home institution, with all the associated benefits. Bridge Faculty are expected to build a research group, attract federal funding, and have teaching and other duties, equivalent to the other faculty at their home institution. In addition, Bridge Faculty are expected to contribute significantly to the scientific program at FRIB and be spokespersons for FRIB science, nationally and internationally. They are expected to spend time at FRIB and, for this reason, teaching relief could be negotiated on a case-by-case basis.

3 Selection Process

The FRIB Experiment Bridge Initiative Board is responsible for identifying institutional partners for the Bridge program and making the selection of the institution that will be the potential home of a bridge position. If several institutions are selected, the board may attempt to stagger them in time as appropriate.

In selecting academic departments, typically physics or chemistry, to carry out the Bridge Faculty search, the main selection criterion will be that the science scope of the search is aligned with FRIB science. From the applications to host, the committee will select academic departments at doctoral universities with very high or high research activity [1] using additional criteria including the intellectual environment of the university, the diversity of its physics research program, the institutional record in mentoring junior faculty and the access to graduate students. The FRIB Experiment Bridge Initiative managing director will seek approval from the FRIB Laboratory director on the selection of the host institution by the Board.

4 Guidelines for Applications

Departments interested in competing for a bridge position will be asked to prepare a brief proposal. The proposal should contain:

- i. A letter from the dean of the college, with the commitment of a 50% salary match in the event that the institution is selected, and a hire is made.

- ii. A letter from the academic department chair, explaining how this new hire will fit into the long-term vision of the department and indicating the timescale for advertisement, interviews and hire, in the event that this institution is selected.
- iii. A letter from the main point of contact, providing background information on the quality of the graduate program and the nuclear physics research program if one exists. Examples of recently graduated students in nuclear physics should be given, if applicable. Information on junior faculty hiring in the department over the last decade, as well as the support provided by the department to these junior faculty needs to also be documented.
- iv. Supporting documents as described in the template attached to this document.
- v. A one-page statement from the department chair on faculty mentoring programs and related activities that further the workplace experience and career trajectory and thus enhance the likelihood of success of the to-be-hired junior faculty.

5 Memorandum of Understanding

Once a partner is identified, the FRIB Experiment Bridge Initiative managing director works closely with the chair of the home academic department to develop the Memorandum of Understanding (MoU) that establishes the conditions of the appointment and the various contributions involved (in which FRIB, administered through the Experiment Bridge Initiative provides up to 50% of compensation – salary, benefits and travel). This document is developed before the search takes place.

The MoU does not commit funds, the commitment of funds will be through a financial assistance sub recipient agreement between Michigan State University and the home institution. As with all financial assistance agreements, expended effort fractions must be certified.

6 Recommendation

The home department is responsible for conducting the search process. The short list of interviewees should be communicated to the FRIB Experiment Bridge Initiative board through the search committee chair of the host institution. At the end of the search, the selected candidate needs to be approved by the FRIB Experiment Bridge Initiative Board. When and if this happens, the FRIB Experiment Bridge Initiative managing director informs the FRIB Laboratory director. The home department should inform the FRIB Experiment Bridge Initiative managing director as soon as the selected candidate accepts the position so that it can be promptly announced to the FRIB Experiment Bridge Initiative stakeholders.

7 Guidance on the Timeline for Bridge Position Process

- A. The Chair of the FRIB Experiment Bridge Initiative board sends out a call for bridge partners in mid-July, with an October deadline for applications for the inaugural selection. In the following years, a call for bridge partners will be sent out in March, with an application deadline in September.
- B. In October, the FRIB Experiment Bridge Initiative board studies the applications, rank orders them and provides a recommendation to the FRIB Laboratory director as to the selected host institution.
- C. If accepted, the FRIB Experiment Bridge Initiative managing director develops the MoU with the selected home institution.
- D. The home institution conducts the search in the spring: Advertisements are sent out in November or soon thereafter, candidates are interviewed in the spring, and a candidate is selected soon after that.

- E. Information on the selected candidate is communicated to the FRIB Experiment Bridge Initiative Board, and the Board approves the candidate.
- F. The home institution makes the offer to the selected candidate to start in the Fall.
- G. Immediately after the candidate accepts, the outcome is communicated to FRIB Experiment Bridge Initiative managing director who informed the Board and the FRIB Laboratory director.

8 Framework

Administered by the FRIB Experiment Bridge Initiative, FRIB will fund FRIB Experiment Bridge Faculty positions in the field to seed faculty hires in FRIB-related experimentation. Participation is limited to U.S. institutions.

9 Roles – Responsibilities

9.1 FRIB Experiment Bridge Faculty

Bridge Faculty are outstanding junior experimentalists who hold the promise to develop strong experimental research programs at FRIB. The positions are funded 50% by FRIB and 50% by their home institution, over an initial period of up to 6 years or until the faculty member is granted tenure. Bridge Faculty are 100% employees of their home institution, with all the associated benefits. Bridge Faculty are expected to build a research group, attract federal funding, and have teaching and other duties, equivalent to the other faculty at their home institution. In addition, Bridge Faculty are expected to contribute significantly to the scientific program at FRIB and be spokespersons for FRIB science, nationally and internationally. This does not preclude the faculty member from having a complementary research program at the home institution or at other facilities for the fraction of effort not funded by FRIB.

9.2 FRIB Experiment Bridge Initiative Board

The Board represents FRIB User community and assures programmatic balance. It will have members of the research U.S. research universities with a program in low-energy nuclear physics. The Board identifies (canvassing) and selects from applications host institutions for FRIB Experiment Bridge Faculty positions, is informed about the interview short lists, and approves the selected candidate for the position. Host institutions may request a member of the board as observer or ex-officio search committee member. The Board members are expected to advertise the program and so help create a pool of host institutions for Bridge Faculty positions. The Board is in place with the membership posted [2].

9.3 FRIB Experiment Bridge Initiative Managing Director

Administers the program on the FRIB side and works closely with the Board. The position is appointed by the FRIB Laboratory director.

10 References

- [1] Carnegie Classification of Institutions of Higher Education®
- [2] FRIB Experimental Bridge Initiative Board: <https://frib.msu.edu/user-facilities/user-community/bridge-fellowship-programs/experimental-bridge-faculty/board>

Addendum for Accelerator Physics

Since the FRIB Experiment Bridge Initiative board will be composed of members of the University-based low-energy nuclear science community, expertise in accelerator physics will be limited. As it is critical to judge the relevance to FRIB of a proposed accelerator physics faculty position, a special board and managing director will be appointed by the FRIB Laboratory director to explore such a proposition and administer the search.

Supporting information for the FRIB Experiment Bridge Program Application

This document should contain all relevant data concerning the potential home institution for an FRIB Experiment Bridge position.

Faculty hires in the Department

Provide a table with the list of the Faculty members hired in the last decade by your department, including the following information. The expressions of nuclear science and nuclear experiment are meant to be inclusive of nuclear physics and nuclear chemistry.

Faculty	Yr Hired (departed)	Yr Tenure	Area of Research	Yrs Funded	Faculty Mentor	Number of Students Total (PhD)(MS)
Jane Doe	1980(2000)	1986	Nuclear Experiment	1981-2000	John Smith	10(5)(5)

Postdoctoral Researchers in Nuclear Experimentation

Please provide a complete list of the postdoctoral researchers who have worked in nuclear experimentation during the last decade at your institution. Provide the name, duration of the postdoctoral contract as well as their current position/location. Please include their primary research area.

Nuclear Science Long-Term Visitors

Please provide a list of all long-term visitors working in nuclear science (experiment and theory), including sabbatical visits, during the past decade at your home institution. Please provide their names, year, duration of stay as well as their permanent affiliation.

Current Students

Please provide a list of current students working in nuclear science (including experimental nuclear science) at your institution. Include their names, the name of the advisor, the starting year, and the research topic.

PhD Awarded in Nuclear Experiment

Please provide a list with all the students that received a PhD from your institution during the last decade. Include name, year of PhD completion, Advisor and Current Position.

Recent Start-up Packages

Please describe the start-up packages offered to recent hires in your department or describe the start-up package you expect to provide to the Bridge Faculty hire.