

## Call for Indications of Interest NSF Major Research Instrumentation (MRI) Program

Sacramento State will hold an internal competition to select projects for submission to the National Science Foundation's 2022 Major Research Instrumentation (MRI) program competition.

### About the MRI Program

The MRI Program serves to increase access to multi-user scientific and engineering instrumentation for research and student research training. MRI provides support to acquire critical research instrumentation and to develop next-generation research instruments that open new opportunities to advance the frontiers in science and engineering research. Additionally, an MRI award is expected to enhance research training of students who will become the next generation of instrument users, designers and builders.

A MRI proposal may request up to \$4 million for either acquisition or development of a research instrument. Each institution may submit in "Tracks" as defined below, *with no more than two submissions in Track 1 and no more than one submission in Track 2.*

- Track 1: proposals that request funds greater than or equal to \$100,000 and less than \$1 M.
- Track 2: proposals that request funds greater than or equal to \$1 M and up to and including \$4 M.

Proposals are due January 19, 2022. See details at: [nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5260](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5260). Note: these guidelines are current at the writing of this internal award competition; any changes NSF might make to these guidelines will be posted during the fall semester.

### Sacramento State's MRI Submission

To put forth the strongest proposals from our campus, an internal competition will be held to select applicants to submit a proposal to the NSF. To apply, submit an **Indication of Interest** consisting of a c.v. and a one-page project summary including details on: 1) whether the request is for an acquisition or development project; 2) the proposed instrument and why it is needed; 3) the estimated cost; 4) the faculty research activities that will be enabled with the instrument; 5) student research training the instrument will support; and 6) the intellectual merit and broader impacts of the proposed research activities. All documents are **due by 5 pm on Monday, September 6, 2021** to [research@csus.edu](mailto:research@csus.edu).

Applicants are expected to fully read the MRI guidelines before submitting and to devote as much attention to their one page summary as they would if submitting the same to the NSF. We have found that many internal applicants were not considered because their project summary did not show an understanding of the MRI program. Thus, to help applicants prepare for this internal competition, the Offices of Research, Innovation, and Economic Development (ORIED) will provide a ½ hour webinar to interested applicants titled "How to Write Successful NSF Major Instrumentation Proposals." Please contact Dr. Jill Shannon at [jill.shannon@csus.edu](mailto:jill.shannon@csus.edu) to view the webinar.

Representatives from the relevant college dean's offices and ORIED staff will review the submissions for the internal competition using the following review form. Applicants will be notified by Friday, October 1st whether their proposals have been selected for submission to NSF, allowing time to work with ORIED research development staff on the full proposal prior to NSF's January 19<sup>th</sup> deadline.

Should you have any questions, feel free to contact Dr. Jill Shannon at [jill.shannon@csus.edu](mailto:jill.shannon@csus.edu).

## 2022 NSF Major Research Instrumentation (MRI) Program Review Form for Indications of Interest

**Reviewer Initials:** \_\_\_\_\_ **Applicant Name:** \_\_\_\_\_ **Department:** \_\_\_\_\_ **Estimated Cost:** \_\_\_\_\_ **Type of Proposal:** Acquisition or Development

**Research Instrument and Need** – technical description of the requested instrumentation and why it is needed.

0-1	2	3	4	5	6	7	8	9	10
Unacceptable	Fair		Good		Very Good		Excellent		Exceptional

**Points:** \_\_\_\_\_

**Research Activities to be Enabled** – the specific faculty research program(s) and student research training activities that drive the request for instrumentation.

0-1	2	3	4	5	6	7	8	9	10
Unacceptable	Fair		Good		Very Good		Excellent		Exceptional

**Points:** \_\_\_\_\_

**Intellectual Merit** -the degree to which the planned uses of the proposed instrumentation constitute enhanced and potentially transformative research that will advance knowledge.

0-1	2	3	4	5	6	7	8	9	10
Unacceptable	Fair		Good		Very Good		Excellent		Exceptional

**Points:** \_\_\_\_\_

**Broader Impact** – ways the project would contribute to desired societal outcomes including: 1) how it will improve the quality of research training; 2) broaden the participation in science and engineering research by women, underrepresented minorities and persons with disabilities; and/or 3) have other social impact.

0-1	2	3	4	5	6	7	8	9	10
Unacceptable	Fair		Good		Very Good		Excellent		Exceptional

**Points:** \_\_\_\_\_

**Based on your overall impression, should the project be selected to submit a proposal to the NSF?**

1	2	3	4
Should <u>not</u> be selected	Could be selected	Should be selected	Must be selected

**Points:** \_\_\_\_\_

**Optional Comments:**

**Total Points:** \_\_\_\_\_