

2022 Call for CCMR Seed Proposals

Submission Deadline: Noon on Friday July 15, 2022.

Submission Format: Electronic only (see below)

Size of Awards: Variable (\$80K-200K/yr is typical)

Start Date: September 1, 2022

Duration of Award: One year of funding guaranteed, with extension to two years possible, dependent upon availability of funding.

The CCMR Executive Committee is soliciting proposals for new Seed Research grants. The CCMR has budgeted ~\$280,000 for year 1 of the seed program, which is equivalent to approximately 3–4 full GRA positions or 5–6 partial GRA positions. These funds will be distributed through a competitive, two-stage proposal process, described below, and reviewed by an ad hoc committee of impartial experts. The committee will be assembled with the advice of the CCMR Executive Committee and current IRG leaders, and may include members both internal and external to Cornell. The timeline for this process is as follows:

Friday July 15, 2022	Full proposals due (3 pages maximum, + references)
Late July 2022	Oral presentation to ad hoc committee (by invitation only)
September 1, 2022	Funding begins
September 2023	Year 1 review of 2022 seed projects
August 31, 2024	Mandatory end of funding for all 2022 Seed projects

The Executive Committee is particularly interested in funding seeds at the 1 or 2 GRA level (~\$80K–\$160K/year). A modest amount of capital equipment funds may also be requested, with total funding for seed capital equipment anticipated to be less than \$50K. The grants will initially be funded for one year; funding for a second year is anticipated upon successful review in September 2023.

Principal investigators on Seed proposals must be members of the faculty. However, the Center encourages the participation of postdoctoral associates in preparation of Seed proposals, with the expectation that the postdoctoral associate would participate in supervision of the project if funded. In this case the postdoctoral associate could be designated a Senior Investigator in the project.

Review Criteria

The CCMR seeks to fund interdisciplinary seed projects in materials. Research in the CCMR may address any area of research supported by the NSF Division of Materials Research, which includes 8 programs: Biomaterials (BMAT), Ceramics (CER), Condensed Matter Physics (CMP), Condensed Matter and Materials Theory (CMMT), Electronic and Photonic Materials (EPM), Metals and Metallic Nanostructures (MMN), Polymers (POL), and Solid State and Materials Chemistry (SSMC). It is generally valuable to point out where proposed projects respond to the NSF's 10 Big Ideas

https://www.nsf.gov/news/special_reports/big_ideas/.

The seed program is designed, in part, to allow the Center to pursue high-risk projects that have the potential to be transformative or to have high impact. Importantly, seed funding is not meant to be a substitute for individual investigator funding.

The primary consideration for funding will be the quality of the proposed science – which must be novel, exciting and world-leading – and its potential payoff. From the outset, all seed projects must have a plan for growth after seed funding ends. Possible paths include independent funding by a federal agency, industrial funding, incorporation into an existing IRG, or even displacement of an existing IRG.

Most successful seed proposals include CCMR members from two or more departments. Multiple-PI proposals must be highly collaborative and should result in joint publications. The rationale for each person's involvement must be clear and compelling.

An important secondary criterion for selection of seed projects is the diversity of the research group with respect to age, gender, and race. Broadening participation in science and engineering is a priority of the NSF, and we are eager to increase diversity in the Center. If the seed project will support a member of an under-represented population group who is also a US citizen or permanent resident, this should be stated, and the name(s) of the participant(s) should be provided.

Examples of successful seed projects can be found at the [CCMR website](#).

Previously funded seed projects are not eligible for this program. (Previously funded faculty are, however, eligible.)

Review Process

Written proposals, which are described below, must be submitted electronically to Frank.Wise@cornell.edu and jbs24@cornell.edu by noon on Friday, July 15, 2022. The written proposals will be reviewed, and a subset of the strongest proposals will be invited to present their plans in a 20-minute oral presentation to the ad hoc committee. These reviews are typically held on a Saturday morning. If you have any questions, please contact me.

Frank

Format for 2022 CCMR Seed Proposals

A seed proposal should consist of a **single pdf document** that contains the following items:

- A description of the proposed activity (3 pages maximum, not including references), and
- A brief, 1-year budget (including capital equipment) and budget justification (The year 2 budget will be identical to year 1, but with no capital equipment.)

Description of proposed activity: This section should begin with a list of participating faculty members and their department affiliation. This should be followed by a concise (~1/2 page) description of the long-term research goals and intellectual focus of the seed. The third section of the proposal should describe the planned research activities in sufficient detail to enable their scientific merit and significance to be assessed. If multiple PIs are involved, the need for an interactive, interdisciplinary approach involving several investigators, and the means of achieving this, should be clearly established. The role and intellectual contribution of each PI should be explained. Plans for the project after the end of seed funding should be briefly addressed.

Although members of the seed are expected to be active in CCMR educational outreach activities, outreach should not be addressed in the proposal.

The written proposal should be entirely understandable by any member of the Executive Committee. Jargon and specialized vocabulary should be avoided. Figures are strongly encouraged.

Budget: The budget should include the number and type of supported participants (GRAs or postdocs), an estimate of their support and expendables costs, and an itemized list of capital equipment with an estimated cost for each item. This budget should be justified in a short explanatory paragraph. [Adrian Morales](#) is available to help in the preparation of the budget.