

Welcome to the CMMI Virtual Office Hour!



Division of Civil, Mechanical and Manufacturing
Innovation
National Science Foundation

17 February 2021
4:00 PM Eastern





CMMI Virtual Office Hour

Attendees are muted during the presentation

Please use the Q&A Feature on Zoom

Please limit questions to broadly applicable topics

Contact your Program Director for specific questions about proposals and program fit

This session will be recorded and available on the NSF website

Today's Agenda

- Overview of Core Programs and Solicitations
- Current Opportunities for Supplemental Funding
- Other Funding Opportunities
- Proposal Review and Award Process (Briefly!)
- Coming Soon: CMMI Panel Fellows
- How to Stay in Touch
- Your Questions



CMMI's Core Programs

- Advanced Manufacturing (AM)
- Biomechanics and Mechanobiology (BMMB)
- Civil Infrastructure Systems (CIS)
- Dynamics, Control and Systems Diagnostics (DCSD)
- Engineering Design and Systems Engineering (EDSE)
- Engineering for Civil Infrastructure (ECI)
- Fundamental Research on Robotics (Robotics)
- Humans, Disasters and the Built Environment (HDBE)
- Mechanics of Materials and Structures (MOMS)
- Mind, Machine and Motor Nexus (M3X)
- Operations Engineering (OE)

No deadlines for Engineering proposal submissions to Core Programs

No limit on number of submissions (different scientific questions)

1 year “waiting period” between submissions of the same (or similar) research idea



Some CMMI-related Solicitations

Keep an eye out for
2021 Solicitations!

Leading Engineering for America's Prosperity, Health, and Infrastructure (LEAP HI) (NSF 17-602)

Engineering Leadership to address compelling problems with substantial societal impact

Letters of Intent due July 15, 2021

Future Manufacturing (NSF 21-564) (new!)

Scientific discovery for manufacturing technologies not currently possible

Proposals Due May 14, 2021. [Webinar](#) February 26, 1-2PM EST

Disrupting Operations of Illicit Supply Networks (D-ISN) (NSF 20-561)

Operational, computational, social, cultural and economic expertise applied to improve the understanding of illicit supply networks



Faculty Early Career Development Program (CAREER)

- Proposals Due July 26, 2021
- Proposals submitted to the CAREER solicitation (NSF 20-525) with a CMMI (or other Division's) Program specified
- Strongly recommended to confirm program fit with the Program Director prior to submission
- NSF Engineering CAREER Proposal Writing Workshop: Applications due **February 19, 2021 (this Friday!)**

<https://apply.hub.ki/career/>



Supplemental Funding Opportunities

Supplements to *Current CMMI Awards*

Career-Life Balance (NSF 21-021)  up to \$30k for salary, additional costs allowable, submit any time

INTERN (NSF 21-013 & NSF 21-029 [AFRL])  up to \$55k, Target April 15

Research Experience for Undergraduates (REU)  \$8k per student, 1-2 students per year
Research Experience for Teachers (RET)  \$10k per teacher, 1-2 teachers, Target May 1

Data Science Activities (NSF 20-027)  up to \$70k or <20%, submit any time



Any other supplemental need



Other Funding & Collaboration Opportunities

- International Collaborations
 - NSF and the US-Israel Binational Science Foundation (BSF) (NSF 20-094)
 - US-Ireland-Northern Ireland R&D Partnership (NSF 20-064)
 - NSF Engineering - UKRI Engineering and Physical Sciences Research Council Lead Agency Opportunity (ENG-EP SRC) (NSF 20-510)
 - NSF and DFG Opportunity for Collaborations in Advanced Manufacturing (NSF 20-088)
- Manufacturing USA Institutes (NSF 17-088)
- Grant Opportunities for Academic Liaison in Industry (GOALI)
- Mid-Career Advancement (NSF 21-516)
- Computation and Data-Enabled Science & Engineering (CDS&E) (PD 20-8084)



EAGER and RAPID Proposals

Early-Concept Grants for Exploratory Research (EAGER)

- High risk, high reward
- Cannot be used to support proposals that are appropriate for submission elsewhere
- Contact the Program Director before submission

Grants for Rapid Response Research (RAPID)

- Severe urgency wrt availability or access to data, facilities or specialized equipment
- Often includes quick-response research on natural or anthropogenic disasters and similar unanticipated events
- Contact the Program Director before submission



NSF Proposal Review Process

- The best time to submit is when your proposal is ready. Proposals submitted towards the end of a Fiscal Year may be funded the next FY
- Proposal review timeline is six months from submission to notification of award or decline - Most proposals need the full six months
- Your proposal may change hands and status during this process - this is common and reflects our process of assuring the most qualified reviewers are assigned
- Increase your chances by reaching out to the Program Director(s) before submission (every time), and following up two weeks after decline notification for feedback
- Learn the process from multiple angles



Get Involved!

- Serve on an NSF Review Panel

Email your program director with your CV and/or link to your research website

Many Spring and Summer panels are being planned now, for core programs and Solicitations

- Serve as an NSF “Rotator”

NSF Program Directors can be permanent or on a 1-4 year rotation

Part of a long-term career plan - start planning early

No better way to learn the process!

Open PD Position: Operations Engineering and Data Initiatives

<https://beta.nsf.gov/careers/openings/eng/cmml/cmml-2021-2025>

email CV and cover letter to CMMI_Applications@nsf.gov



Coming Soon:

Panel Fellows Program
The CMMI Game Changer Academy



NEWS · 15 OCTOBER 2019

Thousands of grant peer reviewers share concerns in global survey

Peer review process helps funders make decisions, but researchers say it is time-consuming and lacks transparency.

Dalmeet Singh Chawla

The latest findings, released on 10 October, suggest that most researchers are generally happy with how grant review works, but that there is room for improvement. About two-thirds of those surveyed were satisfied with the process overall (see 'The researcher experience'), and 78% thought peer review was the best way to decide how to allocate research funds.

But around half were dissatisfied or very dissatisfied with the level of transparency, and a similar proportion think that grant proposals from junior researchers aren't judged as objectively as those from senior faculty. More than one-third said they don't believe this kind of peer review is fair and unbiased.

“87.8% of survey respondents said more peer review training would have a positive or very positive impact.”

The [Grant Review In Focus](#) report (4,700 researchers worldwide) produced by Publons (part of the Web of Science Group), October 2019

Panels that know
PIs well may
judge more than
the proposal

Strong opinions against proposals that were shown not
be founded on the proposal materials (either
misunderstanding the proposal or basing the
assessment on their perceptions of the proposers, etc.).

The loudest individual was able to
sway others in the discussion
without any true factual
information. This individual was not
a method expert but critiqued the
approach without grounding.

Sometimes
panelists are not
expert in
technical area of
the proposal but
can have strong
opinions on
merits that are
unfounded.

I have felt sad and powerless
many times when some
reviewers were not fair
probably due to lack of time
or knowledge or interest in
some proposals

Certain panel
members are not
open-minded and, for
instance, only want to
fund experimental
work and not
computational
simulation.

A reviewer rated a
proposal very highly
based on the relevance
of the research topic to
his own agenda, rather
than on the overall
quality of the proposal
(which was very low)

A heated discussion - because of
the panel members differences in
technical backgrounds they
struggled with how to communicate
with each other about their
concerns with the proposal.

Panelists having
different
backgrounds speak
for different
directions at
different levels.

Head strong panel
member dictates
the outcome of the
panel discussions.

CMMI Game Changer Academy

COMING SOON

- Goal: Create a cohort of CMMI Panel Fellows who will be able to understand, articulate and address:
 - **benefits and challenges associated with funding high-risk/high-reward proposals;**
 - the role of diversity in accomplishing innovation;
 - **their own strengths and weaknesses in the context of merit-review discussions;**
 - common group dynamics, their pitfalls, and their solutions in the context of merit-review discussions; and
 - **strategies for normalizing, valuing, and making effective use of conflict and disagreement as a beneficial tool in merit review discussions.**



Game Changer Academy

COMING SOON

- Panel Fellows will ‘anchor’ review panels for all programs, with an intended commitment for **two panels per year**
- Applications to the CMMI Game Changer Academy will open soon – look for the email blast in the coming days



Future Solicitations & Funding Opportunities

Many new solicitations are in the works! Keep an eye out at NSF.gov

<https://nsf.gov/funding/>



Funding

Email Print Share

Find Funding

You can also find NSF funding opportunities at [Grants.gov](https://grants.gov). Get NSF funding information by  [email](#) or by  [RSS](#).

Enter Your Search Term



Question and Answer Session

Please type your questions using
the Q&A function in Zoom