**Select Funding Opportunities for Research Centers**

*Collaborative Research: Preparing for a Center*

May 21, 2018 – Berkeley Research Development Office

The following pages provide a number of expected, recurring, or possible funding opportunities for center grants (or planning grants leading to center grants). These opportunities are nearly all federal and mostly focused on STEM fields, as recurring funding opportunities are far less common among other funders or disciplines. This is not an exhaustive list, and it does not include, for example, center opportunities that may not be offered again. Refer back to notes from the event “Collaborative Research: Preparing for a Center” for thoughts on other ways to find, cultivate, or otherwise prepare for funding options. Please let us know if you have any questions ([brdo@berkeley.edu](mailto:brdo@berkeley.edu)).

**Current planning/pilot grant funding opportunities:**

| **Program Info** | | **Summary** | **For more info…** |
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| **UCOP** | **Multicampus Research Programs and Initiatives (MRPI)**  LOI due noon **May 24** | MRPI funding supports innovative multicampus research collaborations that strengthen UC’s position as a leading public research university. Awards are intended to facilitate outstanding research and cutting edge discoveries that can:   * Advance research in areas important to UC, California, its people, environment and economy * Increase UC’s competitiveness in attracting faculty, graduate students, awards and honors, and extramural funding * Support innovative graduate student research at UC | <https://www.ucop.edu/research-initiatives/programs/mrpi/index.html> |
| **NSF** | **Planning Grants for Engineering Research Centers**  Proposals due **June 6**, 5pm | These planning grants are intended to build capacity in the engineering community for center-scale, convergent engineering research. These are not required to submit an ERC proposal, but should help prepare engineering-led teams for them (or for other collaborative opportunities). | <https://www.nsf.gov/pubs/2018/nsf18549/nsf18549.htm> |
| **NSF** | **NSF Convergence Prospectus**  (and potential RAISE)  Deadline for FY19 funding is Oct 15 | NSF is soliciting potential future research areas that go beyond NSF's Big Ideas, require a convergence approach, cross internal and/or external organizational and disciplinary boundaries, and advance the progress of science as articulated in NSF's mission. NSF encourages the submission of prospectuses to identify these new areas and specific projects within them. | <https://www.nsf.gov/pubs/2018/nsf18058/nsf18058.jsp> |

**Current/upcoming center grant opportunities:**

| **Program Info** | | **Summary** | **For more info…** |
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| **NSF** | **Engineering Research Centers (ERC)**  ~$20M for 5 years renewable.  Next solicitation late 2018  (about every 3 years) | The ERC Program integrates engineering research and education with technological innovation to transform prosperity, health, and security. NSF is reviewing the program in response to the National Academy of Engineering report *A New Vision for Center-Based Engineering Research*. In March, NSF released a solicitation for ERC planning grants. *Past campus-led awards include Synberc and PEER.* | https://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5502 |
| **NSF** | **Science and Technology Centers (STC)** ~$20M for 5 years, renewable.  Next solicitation early 2019  (about every 3 years) | The STC program supports innovative, potentially transformative, complex research and education projects that require large-scale, long-term awards. STCs may involve any areas of science and engineering that NSF supports. While it is not expected that the solicitation to be restricted to the NSF Big Ideas, they are expected to feature strongly in proposals. *Campus-led awards include E3S and TRUST.* | [https://www.nsf.gov/od/oia/programs/st c/  https://www.nsf.gov/news/special\_reports/big\_ideas/](https://www.nsf.gov/od/oia/programs/st%20c/https://www.nsf.gov/news/special_reports/big_ideas/) |
| **NSF** | **Centers for Chemical Innovation (CCI)**  Some centers receive multiple renewals  *Solicitation currently open* Annual. | The CCI program supports research centers focused on major, long-term fundamental chemical research challenges. CCIs that address these challenges will produce transformative research, lead to innovation, and attract broad scientific and public interest.  ***SOLICITATION IS CURRENTLY OPEN*** Phase I Preliminary Proposals due August 14, 2018  Phase I Full Proposals due February 20, 2019 (by invitation only) | <https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13635>  Current solicitation: <https://www.nsf.gov/pubs/2018/nsf18555/nsf18555.htm> |
| **NSF** | **Materials Research Science & Engineering Centers (MRSEC)**  Up to $4M/year for 6 years  Next solicitation early 2019  (about every 3 years) | MRSECs provide sustained support of interdisciplinary materials research and education of the highest quality while addressing fundamental problems in science and engineering. A MRSEC may be located at a single institution, or may involve multiple institutions in partnership. | https://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5295 |
| **NSF** | **Expeditions in Computing (Expeditions)**  ~$2M/year for 5 years  Next solicitation in 2020  (about every two years) | Expeditions provides the CISE research and education community with the opportunity to pursue ambitious, fundamental research agendas that promise to define the future of computing and information. Investigators are encouraged to come together within or across departments or institutions. | https://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=503169 |
| **NSF** | **Industry-University Cooperative Research Centers (IUCRC)**  Pre-proposals due Oct. and April | The IUCRC program enables industrially relevant, pre-competitive research via multi-member, sustained partnerships among industry, academe, and government. *Past campus-led award: Berkeley Sensor & Actuator Center.* | https://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5501 |
| **NSF** | **Convergence Accelerators**  Format or timing not yet announced | NSF has highlighted *Convergence Accelerators* to address its Big Ideas in the Future of Work at the Human Technology Frontier and Harnessing the Data Revolution. Accelerators will facilitate public-private partnerships and translational activities such as prototyping and testbeds and access to new hardware and data tools. | <https://www.nsf.gov/about/budget/fy2019/pdf/31_fy2019.pdf> |
| **NASA** | **Space Technology Research Institutes (STRI)**  $15M over 5-years  Competition in FY18? | STRIs strengthen NASA’s ties to the academic community through long-term, sustained investment in research and technology development critical to NASA’s future, while enhancing the capabilities of the Nation’s universities to meet the needs of NASA’s science and technology programs. *Current campus-led award: The Center for the Utilization of Biological Engineering in Space (CUBES),* which may make a second institute unlikely in the near term. | https://www.nasa.gov/directorates/spacetech/strg/stri |
| **NASA** | **Heliophysics Grand Challenge Science Centers**  ~$3M/year for 4-6 years  Solicitation expected by fall. | These new centers are intended to address grand challenge research questions in solar and space physics through the cross-disciplinary application of theoretical and computational modeling and simulation tools. | https://smd-prod.s3.amazonaws.com/science-red/s3fs-public/atoms/files/07\_KOZYRA-Drive\_Center\_RFI\_HPAC\_v8.pdf |
| **NIH** | **Centers of Excellence in Genomic Science (CEGS) (RM1)**  Up to $1.75M direct/year for 5 yrs.  LOIs due April 8, 2019  Applications due May 20, 2019 | The NHGRI/NIMH CEGS program supports multi-investigator, interdisciplinary teams to develop genomic approaches to biomedical problems. The program aims to fund high-risk, high- reward research.  *Current campus-led award: Center for Genomic Editing and Recording,* which may make a second institute unlikely in the near term. | Current Solicitation:  <https://grants.nih.gov/grants/guide/pa-files/PAR-16-436.html> |
| **NIH** | **Clinical and Translational Science Award (CTSA) (U54)**  Applications due in September. | These very large awards from the National Center for Advancing Translational Sciences (NCATS) support participation in the CTSA program, which supports translational and clinical research and fosters innovation in research methods, training, and career development. These are generally institution-level opportunities. | https://grants.nih.gov/grants/guide/pa-files/PAR-18-464.html |
| **NIH** | **Bioengineering Research Partnerships (U01)**  Awards up to 5 years.  Applications due September 13 | This program encourages bioengineering applications that will accelerate the development and adoption of promising tools and technologies that can address important biomedical problems. The goal of the program is to support projects that can realize meaningful solutions within 5-10 years. | <https://grants.nih.gov/grants/guide/pa-files/PAR-18-208.html> |
| **NIH** | **NIBIB Quantum Program: Technological Innovation to Solve a Major Medical or Public Health Challenge (U01)**  ~$1M/year direct costs for 4 years | This program supports bioengineering research that catalyzes significant advances in the prevention, detection, diagnosis, or treatment of a major disease or public health problem.  NIBIB expects to issue a solicitation, pending appropriations and the appointment of a new NIBIB Director. | Previous solicitation:  <https://grants.nih.gov/grants/guide/pa-files/PAR-15-031.html> |
| **NIH** | **Countermeasures Against Chemical Threats (CounterACT) Research Centers of Excellence (U54)**  $2.5M direct costs/year, for 5 yrs.  LOIs due August; applications due September (2018, 2019, and 2020). | These centers support research and development of new and improved therapeutics for accidental or intentional exposure to chemical threats with the objective of reducing mortality and morbidity. Supported by NINDS, NEI, NIEHS, NIAMS, and NIDA, this program is a trans-NIH initiative in translational research that collaborates with other HHS programs focused on identifying new medical countermeasures. | https://grants.nih.gov/grants/guide/pa-files/PAR-18-657.html  https://www.ninds.nih.gov/Current-Research/Trans-Agency-Activities/CounterACT |
| **DOE** | **Energy Frontier Research Centers (EFRCs)**  $2-4M/year for 4 years  Next solicitation by 2020. | These integrated, multi-investigator Centers involve partnerships among universities, national laboratories, nonprofit organizations, and for-profit firms that will conduct fundamental research focusing on one or more “grand challenges” and use-inspired “basic research needs” identified in major strategic planning efforts by the scientific community. *Current campus-led award: Center for Gas Separations.* | <http://science.energy.gov/bes/efrc/>  (Recent proposal deadline now past.) |
| **DOE** | **ARPA-E OPEN**  Up to $10M for up to 3 years  Next solicitation 2021 (about every 3 years) | FOA to address the full range of energy-related technologies and fund those potentially disruptive technology concepts not currently supported through an ARPA-E focused FOA. ARPA-E supports transformational energy research that can be meaningfully advanced with a small investment over a defined period of time. | <https://arpa-e.energy.gov/?q=site-page/open> |
| **DOE** | **Bioenergy Research Centers (BRC)**  Next solicitation in FY21? | Bioenergy Research Centers are intended to accelerate basic research in the development of cellulosic ethanol and other biofuels, in pursuit of increased efficiency and diversification of clean energy sources. *Current LBL-led award: Joint BioEnergy Institute (JBEI),* which may make a second institute unlikely in the near term. | <https://genomicscience.energy.gov/centers/> |
| **DOE** | **Clean Water Technology Centers**  Solicitation by summer | Originally proposed as the low-energy desalination hub, the focus changed to clean water technology to have broader application beyond desalination. DOE hosted two workshops in 2017 to help define the scope of the solicitation. The centers will be managed by the Advanced Manufacturing Office within the Office of Energy Efficiency and Renewable Energy (EERE). | https://www.energy. gov/eere/amo/events/workshop-clean-water-processing- technology-research-and-development-0 |
| **DOE** | **Predictive Science Academic Alliances**  Multi-discipline $3.2M/yr for 5 yrs  Single-discipline: $1.6M/yr for 5 yrs  Solicitation this summer? | The three focus areas will be:   1. Technologies and methodologies to support effective Exascale computing in the context of science/engineering applications 2. “Predictive Science” based on verification and validation and uncertainty quantification for large- scale simulations 3. Discipline-focused research needed to further 1 and 2. | <https://nnsa.energy.gov/mediaroom/pressreleases/psaap062713> |
| **DoD** | **Air Force Centers of Excellence (COEs)**  ~$1M/year for 5 years  Next solicitation unknown | While not a regularly released solicitation, the Air Force utilizes COEs to pursue topics of significant benefit to their mission. | https://teamafrl.afciviliancareers.com/aboutus.php |
| **DoD** | **Army Research Laboratory (ARL) Collaborative Technology and Research Alliances (CTA/CRA)** ARL releases these solicitations on an ad hoc basis to address specific technology needs. | These Alliances are partnerships between Army labs/centers, private industry and academia to focus on the rapid transition of innovative technologies to the Warfighter.  There are no new alliance opportunities publicly forecasted or presently open in the CTA or CRA programs. | https://www.arl.army.mil/www/default.cfm?page=93 |
| **DHS** | **University Centers of Excellence**  ~ $20-30M for 5 year  Possible solicitation in FY18 | COEs develop multidisciplinary, customer-driven, homeland security science and technology solutions and help train the next generation of homeland security experts. | http://www.dhs.gov/homeland-security-centers-excellence |
| **DOT** | **University Transportation Centers**  Up to $3M  Next competition by FY21 | A UTC is a consortium of universities that come together to form a unique center of excellence on a specific research topic. Together, they advance technology and expertise in the many disciplines comprising transportation through education, solutions-oriented research and technology transfer, and the exploration and sharing of cutting-edge ideas and approaches.  *Past campus-led award: University of California Transportation Center* | <https://www.transportation.gov/utc> |
| **DOT** | **Federal Aviation Administration Centers of Excellence** | The program facilitates collaboration between government, academia, and industry to advance aviation technologies and expand FAA research capabilities through congressionally required matching contributions. FAA often recompetes centers after 10-year terms. | https://www.faa.gov/about/office\_org/headquarters\_offices/ang/offices/management/coe/ |
| **NOAA** | **Cooperative Institutes (CIs)**  $5-15M/year for 5 years | CIs are academic research institutes that conduct research that supports NOAA's Mission Goals and Strategic Plan. NOAA currently operates 16 CIs that are recompeted every five-year cycle. NOAA also releases an annual BAA for CIs that is open year-round. | https://ci.noaa.gov/ |