

## Research and Economic Development Newsletter

## October 29, 2020

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## **RED Updates**

## A Message from the Vice Chancellor



Lincoln, 11, from the United Kingdom
"When it is safe, I'll hold my arms open wide,
and shout to the world we can all go outside!
Don't give up hope the end is in sight,

if we all stick together, we'll all win this fight!" <a href="https://www.savethechildren.org">https://www.savethechildren.org</a>

Dear Research Community,

I continue to be impressed by our campus' resilience and by how careful everyone has been in following safety protocols and trying to keep all of us as protected as possible from the pandemic. Let me thank you one more time for your efforts in this regard while keeping our research enterprise and education mission going.

As you may know, we have about 900 students living in university dormitories who are being tested for COVID-19 twice per week in our lab in the Multidisciplinary Research Building (MRB). With some new additional equipment and space, our lab is increasing its test capacity from its current 400-500 tests per day to hopefully some 900 tests per day, which will allow testing other groups of individuals on campus. I want to thank again everyone involved in the process, which continues to be a great community effort. This time I particularly want to publicly thank Eddie Zagha, Assistant Professor in Psychology, for generously allowing us to temporarily use his assigned space in MRB to expand our testing capacity.

We have been very encouraged by the low rate of infection on campus and were ready to further ramp-up some of our research activities but, unfortunately, the county slipped back to the purple risk tier, the most restricted one in California's phases. Despite this step back at the county level, we are not further restricting any of our on-going research undertakings, but we cannot ramp-up activities until we better know how the situation will evolve, as the numbers in the county do not look good. I know this is disappointing and I appreciate your patience very much.

There is still some good news in many aspects of research and economic development, like the \$7.5M grant for a new Department of Defense Center of Excellence at the Marlan and Rosemary Bourns College of Engineering, or the precise measurement of the total amount of matter in the universe by researchers in the Physics Department, which are just two of the many recent accomplishments of our faculty, students, and staff. Important events have moved to the virtual world but continue to take place, like our recent Annual SoCAL SBIR/STTR CON 2020 (see note below), or the 2020 UCR Tomás Rivera Conference, which is currently happening online.

We know the situations created by the pandemic have not affected all people and research areas in the same way. In particular, some junior and female faculty are being disproportionally affected. RED is considering ways to try to help those individuals in their research and scholarly activities and if you have specific suggestions, I would be very glad to hear them.

Earlier this year we launched, jointly with the Graduate Division, a **Training Grant Proposal Preparation Fund (TGPPF)** to help faculty pursue externally sponsored training grants. We want to provide a new call for this initiative. Please see full details below.

Finally, I want to reiterate the **special request** I made in RED's last newsletter. We have seen a big increase in the number of research studies and protocols that need to be approved by our compliance committees: IRB, IACUC, and IBC. This puts additional burden on the committees' members and the staff that support them and we desperately need more faculty to become members. Please pay special consideration when asked to serve in one

of these committees. If you can accommodate this service in your already over-stretched time it would provide a great benefit for your colleagues, especially those within your immediate area of expertise. Chairs and Deans. please encourage your faculty to take on this service and continue to value and reward such important contributions to campus in your faculty evaluations and promotion processes. Thank you for your consideration to this important matter.

Please take a few minutes to read the announcements and funding opportunities in the rest of this newsletter.

Stay safe,

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## Office of Technology Partnership Update

### SBIR/STTR CON 2020

UCR's Office of Technology Partnerships hosted its 2<sup>nd</sup> Annual SoCAL SBIR/STTR CON 2020! UCR's SBIR/STTR Resource Center organized a virtual conference with two full weeks of in-depth SBIR programming. With over 40 presenters, the conference held 17 presentations from federal agencies and seven expert workshop panels ranging from proposal development to venture capital funding opportunities. 632 entrepreneurs, founders, and UCR employees registered for this exciting conference. In addition to the expert programming, the center was able to facilitate over 92 one-on-one appointments between entrepreneurs and the agency program officers.

In partnership with UCR's EPIC Small Business Development Center (SBDC), the Office of Technology Partnerships provides comprehensive SBIR/STTR proposal support through its SBIR/STTR Resource Center. The Center provides hands-on, one-on-one mentorship to clients and has a higher than average success rate of 35% on SBIR proposals. Our team has provided support for over 50 SBIR/STTR proposals and our clients have received over \$5M in funding.

If you have any questions, please contact UCR's SBIR/STTR Resource Center Manager, Misty Madero at misty.madero@ucr.edu. Check out our website at https://sbir.ucr.edu/.

**KNOW HUB Ignition** 

The Office of Technology Partnerships' (OTP) team has been busy on the international front. On October 6th the team concluded a 10-week intensive training program delivered to Chilean entrepreneurs in partnership with Know Hub Chile, a technology transfer hub funded by the Chilean government agency CORFO. During the 10-week program, called Know Hub Ignition, the OTP team trained 54 entrepreneurs, which made up 14 teams. The OTP team provided over 200 hours of class, mentoring and accompaniment to the teams in a program that was highly rated by participants and our client in Chile. The program culminated with a large celebratory event where the 14 teams presented their final pitches in front of a panel of investors, academia and industry. The final ceremony was attended by 150+ individuals and included presentations by the Ministry of Science of Chile, Rosibel Ochoa from OTP who led the program, and CORFO among others. Four winners were selected to move on to the next phase of the program, a one-week immersion in Riverside to take place in 2021. Some of these teams have the potential to being incubated in Riverside in the future. The winning teams' technologies are:

- A nanotechnological paint additive that reduces greenhouse gases by 18 kg per square meter/year when applied to a surface
- A biological vault (DNA-based physical barrier) for encryption keys to provide advanced data security
- A sonar headband that facilitates handsfree spatial orientation for individuals with visual impairment
- A scalable unit that transforms plastic waste into diesel fuel

For more information about the international entrepreneurship and technology transfer work of the Office of Technology Partnerships contact Alexandra Orozco <u>alexandra.orozco@ucr.edu</u>.

## Office of Research Integrity Update

## **Zoom Registration for ORI Seminar: Meat Eating and Ethics Courses**

<u>The ORI Seminar Series</u> focuses on ethical dilemmas and hot topics in research, integrity, and research with human participants. The next seminar, entitled "*Meat Eating and Ethics Courses*" will be led by **Dr. Eric Schwitzgebel**, Professor in the Department of Philosophy. The presentation will take place at 1:00 PM on Friday, November 20, 2020. Advance registration is required.

You can register for the seminar here: https://ucr.zoom.us/webinar/register/WN\_Qg\_HDckdSDGUPg7eOKkH8w

### Summary

Do students who take university-level ethics classes behave any differently as a result of their coursework? The issue is difficult to study, both because of the difficulty of randomly assigning some students to study ethics and others not to do so and because real-world moral behavior is difficult to measure. Dr. Schwitzgebel will report on one study in which exposure to classroom instruction on the ethics of eating meat appeared to substantially influence students' dining choices on campus in the following weeks, as measured by students' dining receipts with their identifying information removed.

### **Biography**

Eric Schwitzgebel is a professor of philosophy at UC Riverside. His most recent book is A Theory of Jerks and Other Philosophical Misadventures. At The Splintered Mind, he blogs regularly on issues at the intersection of philosophy and psychology.

This event is free and open to the public. Prior registration via the Zoom link above is required. The number of registrants is limited.

## **Sponsored Programs Update**

### Life Cycle of the Award Series

Sponsored Programs Administration (SPA) has launched a new on-demand education training portal containing video webinars and supporting resources which will walk the participant through the entire life cycle of an award.

The award life cycle refers to the entire process of an award — from finding an opportunity and developing a proposal through award implementation and ending with the closeout of an award.

Please join Research Administrators INC on **Tuesday, November 10**<sup>th</sup> **at Noon** as we dive into the first of a three-part series on **Proposal Development**. This first 90-minute webinar will cover proposal planning and review of the project and the application requirements.

To receive the ZOOM link to the meeting, please register here

Note: RA-INC will be going through this entire Life Cycle of the Award Series together beginning in November 10, 2020 and continuing throughout the next year; however, those wishing to view the series at their own pace, or those wishing to jump to a particular topic of interest, are able to do so now at their convenience via the new SPA training portal located at <a href="https://research.ucr.edu/spa/training">https://research.ucr.edu/spa/training</a>. (A UCR NetID is required.)

## **Federal Relations Update**

### **Little Progress on COVID-19 Relief Funding Negotiations**

Discussions are expected to resume today on the next comprehensive COVID-19 relief package between House Speaker Nancy Pelosi and Treasury Secretary Steven Mnuchin. Negotiators have not spoken since October 21, and reports indicate that disagreements over a coronavirus testing and contact tracing plan, among other issues, still exist. Despite continued talks, lawmakers and the White House appear pessimistic about reaching a deal before Election Day on November 3 following the slow pace of the negotiations.

## **Welcome New Campus Export Control Officer**

RED welcomed Roberto Galvan Ramos, Jr. to UCR as the campus Export Control Officer on October 2, 2020. Roberto is a certified U.S. Export Compliance Officer® (CUSECO) from the International Import-Export Institute (IIEI) Certification Board. Prior to joining UCR, Roberto had a 20-year career in contract management, export control and trade compliance with the aerospace industry.

### What does export control have to do with UCR?

Export control regulations are federal laws that prohibit the unlicensed export of certain commodities or information about certain commodities for political, economic and national security reasons. In general, the export control federal regulations cover four main types of university activities: (1) transfers of controlled information, including technical data, to persons and entities outside the United States; (2) shipment of controlled physical items, such as scientific equipment, that require export licenses from the United States to a foreign country; (3) verbal, written, electronic, or visual disclosures of controlled scientific and technical information related to export controlled items to foreign nationals ("deemed exports"), even when it occurs within the United States; and (4) transactions with sanctioned or embargoed countries or restricted or debarred individuals or entities.

## **Training Grant Proposal Preparation Fund (TGPPF)**

The financial support of graduate students continues to be a significant burden on programs, colleges and faculty. Increased external support through federal grants is one way to help alleviate this burden of graduate funding and common practice at research universities. Our collaborative research, our high-quality graduate programs and our diverse student population make UCR a competitive institution for NIH and NSF support.

However, writing these large grants is an altruistic, time-consuming process for faculty. In collaboration with the Graduate Division, RED is announcing new support for well-qualified faculty wishing to write graduate student training grants.

The "Training Grant Proposal Preparation Fund" (TGPPF) will provide:

**The Graduate Division** will provide one quarter of GSR support for each faculty, for up to 3 faculty, who are *writing* the training grant. The GSR would be provided following submission of the grant. It could be used anytime within one academic year. An additional further quarter of support will be provided if the grant is successful.

The Office of Research will provide dedicated administrative support to help coordinate data collection. This will be in the form of:

- the participation and organizational skills of someone with proposal preparation and institutional knowledge
- a graduate student position that will help collect and organize data.

**Departments and Colleges** will provide an incentive under their purview for the support of those faculty writing training grants. This could include but is not limited to: course release, summer salary, or research dollars.

Interested faculty should apply via the link provided below and submit:

- 1. Faculty information: biosketch / CV including a statement on their qualifications to lead a training grant proposal.
- 2. Grant information: funding opportunity and proposed submission date
- 3. Timeline: these proposals require a lot of preparation time you will be asked to upload a short paragraph explaining the period of preparation
- 4. Proposal outline: One page max on the theme and goals of the proposal and how they fit with the funding opportunity.
- 5. Departmental or College matching support.

Link TGPPF application: https://form.jotform.com/200544506539959

Deadline for applications is January 30th 2021

## **Important Messages From NSF**

### **NSF Fall 2020 Virtual Grants Conference**

The National Science Foundation (NSF) will be hosting its first-ever Virtual Grants Conference during the weeks of **November 16** and **November 30, 2020**.

Registration will be free of charge and opens on Thursday, October 29 at 12 P.M. EST. To register for this conference, please visit the <u>conference website</u> on October 29. In the meantime, feel free to check the <u>website</u> for the agenda and other information about the virtual conference.

For those who cannot attend the live conference, all conference sessions will be recorded and available ondemand shortly after the event.

If you have any questions, please send an email to grants\_conference@nsf.gov.

### **NSF ERA Forum Webinar**

You are invited to participate in the National Science Foundation (NSF) Electronic Research Administration (ERA) Forum Webinar on November 5, 2020 from 2:30 – 4:00 PM Eastern Time. To participate in this forum, please Register Now.

The topics for this Forum webinar will cover the <u>Research.gov</u> Proposal Preparation and Submission: Upcoming Features in <u>Research.gov</u>, Implementation of Important Notice 147: Migrating Proposal Preparation from FastLane to <u>Research.gov</u>, and New Proposal Preparation Demonstration Site, SciENcv – Overview of Capabilities for Preparing <u>Biographical Sketch</u> and <u>Current and Pending Support</u> Documents, PI Transfers and New Sign-in Options for <u>Research.gov</u>.

We encourage you to send questions ahead of the November 5, 2020 ERA Forum webinar to nsferaforum@nsf.gov.

For more information about the NSF ERA Forum Webinar, please visit our website at <a href="https://www.nsf.gov/bfa/dias/policy/era">https://www.nsf.gov/bfa/dias/policy/era</a> forum.jsp.

Please share this information with your colleagues. They can also subscribe to our ERA Forum listserv to receive future ERA Forum notifications by simply sending a blank email to <a href="mailto:NSF-ERA-FORUM-subscribe-request@listserv.nsf.gov">NSF-ERA-FORUM-subscribe-request@listserv.nsf.gov</a> to be automatically enrolled.

## Demo Site for Research.gov Proposal Preparation Now Available

We are pleased to announce that the National Science Foundation (NSF) has launched the <u>Research.gov</u> proposal preparation demonstration site. The new demo site offers proposers the opportunity to create proposals in <u>Research.gov</u> with the role of a Principal Investigator (PI) prior to preparing and submitting proposals in the actual <u>Research.gov</u> Proposal Submission System. We invite you to try the Research.gov proposal preparation features on the new demo site, such as:

- Initiating Research proposals (other proposal types will be added to the demo site as they are enabled in the actual system):
  - Single submissions from one organization
  - Collaborative proposals with subawards
  - Separately submitted collaborative proposals from multiple organizations
- Adding co-Pls, Senior Personnel, and Other Authorized Users (OAUs)
- · Uploading required and optional proposal documents
- Creating budgets
- Checking proposal compliance
- Adding subawards
- Linking collaborative proposals
- Enabling Sponsored Project Officer (SPO)/Authorized Organizational Representative (AOR) access

### What You Need to Know About the New Research.gov Demo Site

- All users must sign in to Research.gov with an NSF ID or primary email address to access the demo site.
  - Users without an NSF account (i.e., NSF ID) will first need to register for one to use the demo site

- Users who already have an NSF ID must not register for another NSF ID for demo site use. As a reminder, each individual user of NSF systems (e.g., FastLane and <u>Research.gov</u>) should not have more than one NSF ID, per the NSF *Proposal & Award Policies & Procedures* Guide <u>Chapter I.G.3.</u>
- A red "Proposal Preparation Demo Site" banner is at the top of each demo site page to indicate the user is using the demo site.
- Each user will be given the PI role for demo site purposes only. No other user roles (e.g., SPO and AOR) are available on the demo site or are needed to use the demo site.
- The demo site does not support proposal submission to NSF and will not trigger any system-generated email notifications.
- Proposals created on the demo site will be deleted after six months. Neither NSF staff nor users will be
  able to access deleted proposal data from the demo site.
- Demo site proposals will not be available on the actual <u>Research.gov</u> Proposal Submission System, and proposals cannot be transferred between the demo site and the actual system.
- For further demo site details, please see the demo site Frequently Asked Questions (FAQs) available via the Research.gov About Proposal Preparation and Submission page left navigation menu. A set of topic-specific video tutorials is also available.

### Accessing the Research.gov Proposal Preparation Demo Site

To access the Research.gov demo site, you **must** have an NSF account (i.e., NSF ID) and be signed in to Research.gov.

- If you have an NSF account:
  - Access <u>Research.gov Demo Site: Prepare Proposals</u>. (If you are not signed in, you will be prompted to sign in before accessing the demo site.)
- If you do not have an NSF account:
  - Open Research.gov.
  - Use the Register tab located on the top right of the screen to create an NSF account.
  - Input the requested account registration information.

Important Note: Your primary registered email address will be used for NSF account notifications including password resets and can be used to sign in to <a href="Research.gov">Research.gov</a>. Please ensure that you have ongoing access to your primary registered email (e.g., a personal email address), even if you change organizations. Refer to the Research.gov About Account Management page for additional registration guidance.

### Retirement of FastLane Demo Site

The FastLane demo site has been retired, however, we encourage you to try the new <u>Research.gov</u> proposal preparation demo site. In accordance with <u>Important Notice No. 147: Research.gov Implementation Update</u>, NSF is taking proactive steps to incrementally move the preparation and submission of all proposals from FastLane to <u>Research.gov</u>.

#### **Enhancements Coming Soon to Research.gov**

Effective in late November 2020, NSF will:

- Enable the following proposal types on <u>Research.gov</u> and on the new <u>Research.gov</u> proposal preparation demo site:
  - Rapid Response Research (RAPID)
  - EArly-concept Grants for Exploratory Research (EAGER)
  - Research Advanced by Interdisciplinary Science and Engineering (RAISE)
- Remove the **font type** and **font size** compliance checks and associated warning messages per feedback from the research community.

Stay tuned for additional information about these updates in the next couple of weeks.

**Questions?** If you have IT system-related questions, please contact the NSF Help Desk at 1-800-381-1532 (7:00 AM - 9:00 PM ET; Monday - Friday except federal holidays) or via <a href="mailto:rgov@nsf.gov">rgov@nsf.gov</a>. Policy-related questions should be directed to <a href="mailto:policy@nsf.gov">policy@nsf.gov</a>.

We look forward to seeing you on the new Research.gov proposal preparation demo site!

## Warning messages when submitting NSF proposals via Research.gov using TeX/LaTeX files

This message should be of interest to those who submit proposals prepared using TeX/LaTex to the NSF via Research.gov.

The National Science Foundation has implemented additional automated compliance checking in Research.gov for project descriptions as of 10/5/2020. One of the compliance checks is for font size. Currently, files prepared using TeX/LaTeX will generate warnings when submitted to Research.gov because of the way PDF files are processed. We believe that these warnings will be gone next year. For the time being, the warnings will not prevent proposal submission.

In case you're interested in the details, please read on. Roughly speaking, in word processing programs, when an 11 pt font size is used, a subscript is still in 11 pt type, just shrunk down a bit when it is printed to a screen or on a printer. In typesetting programs like TeX, when an 11 pt typeface is used, a subscript is set using 9 pt type. The smaller type size in a PDF file triggers the warning because the compliance-checking software can't tell what is a subscript and what isn't.

A similar issue can generate an error regarding the required Broader Impacts heading. Depending on the LaTeX input, the compliance checking software may not realize that "Broader Impacts" is indeed on a line by itself when the PDF file is printed.

Again, for the time being, these warnings will not prevent proposal submission.

## **Funding Opportunities**

## **Limited Submissions with Upcoming Deadlines**

For more information about current and past limited submission competitions, as well as details on how to apply, please visit our website at https://research.ucr.edu/ord/limitedsubmissions.

### W.M. Keck Foundation

Internal Deadline: December 3, 2020

Agency Deadline for Nominations: May 1, 2021

Number of Submissions Allowed: 1

Agency Application Instructions: https://research.ucr.edu/ord/limitedsubmissions

#### Overview

The W.M. Keck Foundation offers the opportunity to discuss potential projects with universities before proposals are submitted. UCR may submit one proposal each in the areas of Medical Research and Science/Engineering research every six months. The next deadline is May 1, 2021, following a January 1 – February 15 consultation period. The ideal target for a Keck grant is \$1 Million over three years. See <a href="http://www.wmkeck.org/grant-programs/research/eligibility-and-priorities">http://www.wmkeck.org/grant-programs/research/eligibility-and-priorities</a> for details.

A successful Keck proposal:

- Focuses on important and emerging areas of research
- Has the potential to develop breakthrough technologies, instrumentation or methodologies
- Is innovative, distinctive and interdisciplinary
- Demonstrates a high level of risk due to unconventional approaches, or by challenging the prevailing paradigm
- Has the potential for transformative impact, such as the founding of a new field of research, the
  enabling of observations not previously possible or the altered perception of a previously intractable
  problem
- Falls outside the mission of public funding agencies

An abstract might present a disruptive concept and must already have been declined by a federal agency. Reviewer comments following a federal decline are required before applying to Keck. Ideally, reviews reflect that the research is innovative, exciting and would have a large impact, but is too risky due to the lack of preliminary data. The Keck Foundation will request previous federal feedback as part of their review process.

Some common reasons why concepts are rejected by Keck:

- The project is not ambitious enough (i.e. it represents only a small advance vs. creating a new paradigm).
- The proposal does not fully detail the scope of work and potential impact.
- The proposal lacks clear research methodology.
- The project focuses on disease-related therapies or treatments (in the case of medical research) as
  opposed to bench science.
- The project focuses on incremental revision. Scalability of existing technology is rarely competitive.
- The project focuses on implementation or policy.

An abstract of one page or less will help focus the conversation with Keck and is needed by December 3, 2020, in advance of the next phone consultation period which begins January 1. **Interested faculty should submit an internal preproposal following the below one-page format at <a href="http://or.ucr.edu/ord/limitedsubmissions.aspx">http://or.ucr.edu/ord/limitedsubmissions.aspx</a> by <b>December 3.** Please **do not** submit anything directly to the Keck Foundation.

Single-paged concepts for the Research Program must be in 12 point Times New Roman font with 1 inch margins and should include:

- 1. an overview of the proposed project emphasizing any unique aspects and pilot studies (for Research Program concepts, indicate area of emphasis for project medical research or science and engineering research):
- 2. a description of the methodologies and listing of key personnel;
- 3. a brief justification of the need for W.M. Keck Foundation support; and
- 4. an estimated budget broken down, if possible, by major areas, e.g., personnel, equipment, consumable supplies, etc. (budgets can be rough approximations at this stage).

If space allows, the authors are free to add other details (e.g., background to put the research into perspective, description of the institution's prominence in the field, etc.). Illustrations are not recommended at this phase as they take space needed for text. If a reference is necessary, abbreviate it as (Science, 323, 45, '11). DO NOT USE (Jones et al., 2011).

Here is more information from the Keck Foundation's home page: Supporting pioneering discoveries in science, engineering and medicine has been our mandate from the beginning. By funding the high-risk/high-impact work of leading researchers, we are laying the groundwork for new paradigms, technologies and discoveries that will save lives, provide innovative solutions, and add to our understanding of the world. Both Senior and Early Career investigators are encouraged to apply.

Questions may be directed to Bryan Carlson, Executive Director of Foundation Development, at <a href="mailto:bryan.carlson@ucr.edu">bryan.carlson@ucr.edu</a>.

### Major Research Instrumentation (MRI) Program

Internal Deadline: November 12, 2020

Agency Deadline for Nominations: January 1 - January 19, 2021

Number of Submissions Allowed: 2 submissions for track 1, and 1 submission for track 2

Agency Application Instructions: https://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5260

Application Instructions: <a href="https://research.ucr.edu/ord/limitedsubmissions">https://research.ucr.edu/ord/limitedsubmissions</a>

The Major Research Instrumentation (MRI) Program serves to increase access to multi-user scientific and engineering instrumentation for research and research training in our Nation's institutions of higher education and not-for-profit scientific/engineering research organizations. An MRI award supports the acquisition or development of a multi-user research instrument that is, in general, too costly and/or not appropriate for support through other NSF programs.

MRI provides support to acquire critical research instrumentation without which advances in fundamental science and engineering research may not otherwise occur. MRI also provides support 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.

An MRI proposal may request up to \$4 million for either acquisition or development of a research instrument. Beginning with the FY 2018 competition, each performing organization may submit in revised "Tracks" as defined below, with no more than two submissions in Track 1 and no more than one submission in Track 2.

- Track 1: Track 1 MRI proposals are those that request funds from NSF greater than or equal to \$100.000<sup>1</sup> and less than \$1.000.000.
- Track 2: Track 2 MRI proposals are those that request funds from NSF greater than or equal to \$1,000,000 up to and including \$4,000,000.

Consistent with the America COMPETES Act of 2007 (Public Law 110-69), cost sharing of precisely 30% of the total project cost is required for Ph.D.-granting institutions of higher education and for non-degree-granting organizations. Non-Ph.D.-granting institutions of higher education are exempt from the cost-sharing requirement and cannot include it. National Science Board policy prohibits voluntary committed cost sharing.

In your application, start the title with "Track 1" or "Track 2". In general, equipment that will be used by existing NSF funded researchers is more likely to funded, and equipment that has a financial plan for sustained maintenance (such as a recharge) is more likely to be funded. A good location (such as MRB or a core facility) for equipment will also increase chances of success.

It is *anticipated* that VCRED will contribute 20%, Provost 40% and Academic Units (deans, chairs, Pls) 40% of the 30% total project cost. Pls are advised to begin consulting with chairs and deans on strategies

for the required cost match. Preference will be given to proposals which include a) a description of how the academic unit cost match will be met, and b) a description of where the instrument will be located.

# Mid-scale Research Infrastructure-1 (Mid-scale RI-1)

The National Science Foundation (NSF) Mid-scale Research Infrastructure (Mid-scale RI) Big Idea is intended to provide an agile, Foundation-wide process to fund experimental research capabilities in the mid-scale range (\$6 million to \$100 million), between the Major Research Instrumentation (MRI) and Major Facilities thresholds. Recently, the solicitation (NSF 21-505) for the Mid-scale RI-1 program (total project cost of \$6 million up to but not including \$20 million), one of two funding opportunities that span the mid-scale range, was published with a deadline of January 7, 2021 for preliminary proposals.

On Wednesday, November 4, 2020 and Thursday, November 5, 2020, NSF will host outreach webinars with information about the Mid-Scale RI-1 funding opportunity. Each session will begin at 1:00 p.m. EST and have two parts: a general Mid-scale RI-1 information session (1:00 p.m. -1:40 p.m. EST) with Q&A followed by Directorate-specific breakouts (1:45 p.m. – 2:30 p.m. EST) where more technical questions will be addressed. Information on Day 1 will be repeated on Day 2.

To access the main webinars and follow-on directorate-specific breakouts: https://www.nsf.gov/events/event summ.jsp?cntn id=301515&WT.mc id=USNSF 13&WT.mc ev=click

# **Collaborative Research in Computational Neuroscience (CRCNS)**

Full Proposal Deadline Date: December 10, 2020

Please see <a href="https://nsf.gov/funding/pgm\_summ.jsp?pims\_id=5147">https://nsf.gov/funding/pgm\_summ.jsp?pims\_id=5147</a> for details.

Computational neuroscience provides a theoretical foundation and a rich set of technical approaches for understanding complex neurobiological systems, building on the theory, methods, and findings of computer science, neuroscience, and numerous other disciplines.

Through the CRCNS program, the U.S. National Science Foundation (NSF), National Institutes of Health (NIH), and Department of Energy (DOE); the German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF); the French National Research Agency (Agence Nationale de la Recherche, ANR); the United States-Israel Binational Science Foundation (BSF); Japan's National Institute of Information and Communications Technology (NICT); and Spain's State Research Agency (Agencia Estatal de Investigación, AEI) and National Institute of Health Carlos III (Instituto de Salud Carlos III, ISCIII) support collaborative activities that will advance the understanding of nervous system structure and function, mechanisms underlying nervous system disorders, and computational strategies used by the nervous system.

Two classes of proposals will be considered in response to this solicitation:

- · Research Proposals describing collaborative research projects, and
- Data Sharing Proposals to enable sharing of data and other resources.

Domestic and international projects will be considered. As detailed in the solicitation, international components of collaborative projects may be funded in parallel by the participating agencies. Specific CRCNS opportunities for parallel funding are available for bilateral US-German Research Proposals, US-German Data Sharing Proposals, US-Israeli Research Proposals, US-Israeli Proposals, US-Israeli Proposals, US-Israeli Proposals, US-Japanese Research Proposals, US-Japanese Data Sharing Proposals, US-Spanish Research Proposals, US-Spanish Data Sharing Proposals, and multilateral proposals involving the United States and two or more CRCNS partner countries (see Section VIII of the solicitation for country-specific limitations). Collaborating Pls from outside of the United States are referred to Section VIII of the solicitation for further instructions about applying to the appropriate partner funding agency.

# National Artificial Intelligence (AI) Research Institutes

Full Proposal Deadline Date: December 04, 2020

Please see http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=505686 for details.

Artificial Intelligence (AI) has advanced tremendously and today promises personalized healthcare; enhanced national security; improved transportation; and more effective education, to name just a few benefits. Increased computing power, the availability of large datasets and streaming data, and algorithmic advances in machine learning (ML) have made it possible for AI research and development to create new sectors of the economy and revitalize industries. Continued advancement, enabled by sustained federal investment and channeled toward issues of national importance, holds the potential for further economic impact and quality-of-life improvements.

The 2019 update to the <u>National Artificial Intelligence Research and Development Strategic Plan</u>, informed by visioning activities in the scientific community as well as interaction with the public, identifies as its first strategic objective the need to make long-term investments in AI research in areas with the potential for long-term payoffs in AI. The President's Council of Advisors for Science and Technology has published <u>Recommendations for Strengthening American Leadership in Industries of the Future</u>, including AI, and calls for new and sustained research in AI to drive science and technology progress. The National AI Research Institutes program enables longer-term research and U.S. leadership in AI through the creation of AI Research Institutes.

This program is a joint government effort between the National Science Foundation (NSF), U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA), U.S. Department of Homeland Security (DHS) Science & Technology Directorate (S&T), and the U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA). New to the program this year are contributions from partners in U.S. industry who share in the government's goal to advance national competitiveness through National Al Research Institutes. This year's industry partners are Accenture, Amazon, Google, and Intel Corporation.

This program solicitation invites proposals for full institutes that have a principal focus in one or more of the following themes, detailed in the Program Description:

- Theme 1: Human-Al Interaction and Collaboration
- Theme 2: Al Institute for Advances in Optimization
- Theme 3: Al and Advanced Cyberinfrastructure
- Theme 4: Advances in AI and Computer and Network Systems
- Theme 5: Al Institute in Dynamic Systems
- Theme 6: Al-Augmented Learning
- Theme 7: Al to Advance Biology
- Theme 8: Al-Driven Innovation in Agriculture and the Food System

# University of California - Hispanic Serving Institutions Doctoral Diversity Initiative (UC-HSI DDI)

(UCR qualifies for this initiative)

The Office of the President is pleased to announce the release of the **University of California-Hispanic Serving Institutions Doctoral Diversity Initiative (UC-HSI DDI).** This systemwide effort is designed to support faculty diversity by enhancing pathways to the professoriate for underrepresented students from California Hispanic Serving Institutions (HSIs). The UC-HSI DDI program includes two components—

- Competitive grant awards to UC faculty/faculty administrators that will support short-term and long-term programs/projects to enhance and expand pathways to the professoriate for underrepresented minorities, with a goal to increase faculty diversity and inclusion at UC. Please see the Request for Proposals for detailed application information.
- Funding to support graduate student preparation for the professoriate. Specifically, there are resources to help support a limited number of PhD students, who are California HSI alumni and have advanced to candidacy at UC, to foster their interest and preparation for the professoriate, and additional professional development outreach and support for underrepresented PhD students with a goal to encourage and help equip them to consider careers in the professoriate. UCOP will coordinate directly with campus graduate divisions for this component of the Initiative.

As part of UC's systemwide effort to enhance faculty diversity, annual funding has been allocated to support efforts that will expand pathways to faculty diversity. This commitment enables the University to advance the system-wide UC-HSI program and support the following goals:

- 1. Increase the pathways to UC PhD completion for underrepresented students from California HSIs.
- 2. Expose, encourage and help prepare students for the professoriate.
- Encourage research and enrichment collaborations between UC faculty and faculty at partner California HSIs—supporting partnerships that will foster long-term engagement opportunities among faculty, students, programs, departments and campuses.
- 4. Enhance the climate of academic programs through interventions, incentives and efforts that foster an academic culture of inclusion and equity—especially for faculty and students from underrepresented communities.

As part of the 2020-21 cycle, I am sharing the **UC-HSI DDI Request for Proposals (RFP)** to encourage UC faculty and administrators to enhance existing partnerships or explore new California HSI collaborations (within and external to UC). This grants program offers two funding mechanisms (small awards up to \$50K and large awards up to \$350K) that will address the four program goals listed above. Please review the RFP for specific program guidelines. For more information, please visit the UC-HSI DDI webpage: <a href="https://ucop.edu/graduate-studies/initiatives-outreach/uc-hsi-ddi.html">https://ucop.edu/graduate-studies/initiatives-outreach/uc-hsi-ddi.html</a> or contact Graduate Studies at <a href="mailto:graduate-graduate

Please share the information below with faculty/faculty administrators on your campus and encourage them to apply.

## RFP Application Instructions & Forms

The Initiative is in direct support of appointment and promotion review and appraisal criteria as established in the Academic Personnel Manual: APM 210 - <a href="https://ucop.edu/academic-personnel-programs/\_files/apm/apm-210.pdf">https://ucop.edu/academic-personnel-programs/\_files/apm/apm-210.pdf</a>. This effort also supports the revised Diversity Statement, adopted as policy in 2010, by the UC Regents.

# **Templeton World Charity Foundation: Grand Challenges for Human Flourishing**

Templeton World Charity Foundation is investing \$40 million in interdisciplinary scientific research through the new **Grand Challenges for Human Flourishing**.

Just announced in <u>Nature</u>, you are invited to help us identify Grand Challenges for Human Flourishing and scientifically tractable ways to address them. Your ideas will guide the Foundation's direction in supporting at least \$40 million in interdisciplinary research. We are especially interested in scientific research on humanity's cognitive, affective, social, economic and spiritual capacities.

Any qualified respondent with substantial research experience, and employed full-time at a research institution, may submit an idea through our portal. Learn more about the program and sign up for the upcoming informational webinars on our **website**.

Be part of the future of science and submit your ideas today: Grand Challenges for Human Flourishing.

## 2021 UC Startup Innovation Challenge

### ANNOUNCING THE LAUNCH OF THE 2021 UC SYSTEMWIDE STARTUP CHALLENGE

In partnership with Extreme Tech Challenge (XTC)

Open to startups founded by UC students, faculty, staff, alumni, and postdocs. Win a \$50K cash prize\* and connect with a community of venture capitalists and Fortune 500 companies to build relationships for fundraising, strategic partnerships, and scaling your world-changing startup.

### **APPLY BY NOVEMBER 10, 2020**

\*One winner for each track (early stage and growth stage) will receive \$50K in cash prize.

The UC Startup Innovation Challenge is an annual systemwide entrepreneur competition that highlights the impressive innovations of the UC community. Launched in 2016 by the UC Office of the President, Innovation & Entrepreneurship Office, this challenge draws student, faculty and staff participants from all ten campuses, five medical centers, three affiliated national labs, and the broader alumni entrepreneur network. Participants will gain exposure to global funder and investor networks, increase visibility for corporate collaborations, and be reviewed by world-class VC judges.

The top five finalists of each track (Early Stage and Growth Stage) will be selected to pitch at the final showcase during the GCV Digital Forum. One Winner of each track will be selected by venture capitalist judges at the final showcase. The contest is being held in partnership with Extreme Tech Challenge (XTC), the world's largest startup competition for entrepreneurs addressing global challenges. All applicants to the UC Startup Innovation Challenge will be automatically entered into XTC. UC Startup Innovation Challenge winners will automatically advance as finalists in XTC's regional startup competition.

For full details: https://ucinnovationchallenge.org/

## **Upcoming Dates at the BSF**

This is a periodical reminder of the existing funding opportunities in the BSF and NSF-BSF joint funding programs, with the currently known dates of the next submission deadlines.

You can find a table, on our website (<a href="https://www.bsf.org.il/funding-opportunities/nsf-bsf-joint-research-grants/statistics/">https://www.bsf.org.il/funding-opportunities/nsf-bsf-joint-research-grants/statistics/</a>), showing statistics for the number of NSF-BSF applications in recent years with their success rates, which in most cases are equivalent, or even higher than the average for US investigators going it alone in the same programs. In particular, note the high success rates in Biology, which we predicted in a previous letter. This is due to the decline in the overall submissions following the NSF move to omit deadlines, without a parallel decrease in the budget for these programs.

Please be reminded that the BSF allows concurrent submissions to both the regular program and the NSF-BSF programs, including those that propose projects with identical questions and objectives. However, if similar or significantly overlapping submissions are both recommended for funding, then only those submitted to the NSF-BSF program will be funded.

Also, the BSF allows the concurrent submission of up to two, different NSF-BSF applications, as long as one of them is to a program with no deadline.

The following is a list of the changes and deadlines in the BSF and NSF-BSF programs in the coming months.

- BSF Regular Research Grants Program. Deadline for applications has been changed and is now December 9, 2020. The website is now open for submission. The program regulations can be found here.
- BSF program Prof. Rahamimoff Travel Grants for Young Scientists program. Due to the current situation with COVID-19, the deadline for submissions of new applications is now postponed until further notice.

### **NSF** -BSF Programs

- Applications to the division of Civil, Mechanical and Manufacturing Innovation (CMMI) may be already possible for some programs, or become possible in the near future for additional ones.
   Before engaging in the preparation of a new CMMI proposal, the BSF MUST BE CONSULTED.
- The NSF Office of International Science and Engineering (OISE) has announced a new program that will be open for joint NSF-BSF applications. The program seeks to understand the nature and scope of COVID-19 impacts on international collaboration in research and education. OISE further seeks to encourage creative efforts to leverage the unique moment to enable more robust, resilient and sustainable collaborations. More details can be found using the link: BSF will not accept applications related to education, even though education is part of this program. https://www.nsf.gov/pubs/2020/nsf20132/nsf20132.jsp?WT.mc\_id=USNSF\_25&WT.mc\_ev=click
- Directorate for Computer & Information Science & Engineering (CISE) has moved to a no deadline policy, with applications accepted throughout the year. This change includes all three divisions: Computing and Communication Foundation (CCF); Computer and Network Systems (CNS); Information and intelligent Systems (IIS); Cyber Security & Privacy Program. Please note that such a move is likely to result in a higher success rate, since in the previous directorates that went through this change, the number of applications dropped significantly with the available financial resources staying constant.
- The **Rules of Life program** in the Biology Directorate, has been temporarily suspended. It is anticipated that a new funding opportunity supporting RoL research activities will be released.

### These NSF-BSF programs have the following deadlines:

### **Directorate of Mathematical and Physical Sciences:**

 NSF-BSF programs in Biomaterials; Condensed Matter Physics; Metals and Metallic Nanostructures and Polymers within the **Materials division**. Deadline for application by the U.S. partner to the NSF is November 2, 2020 and by the Israeli partner to the BSF is November 8, 2020. Call for Proposals can be found here.

- NSF-BSF program in **Geometric Analysis**; **Topology**. Deadline for application by the U.S. partner to the NSF is November 3, 2020 and by the Israeli partner to the BSF is November 9, 2020. Call for Proposals can be found here.
- NSF-BSF program in **Applied Mathematics**. Deadline for application by the U.S. partner to the NSF is November 16, 2020 and by the Israeli partner to the BSF is November 23, 2020. Call for Proposals can be found here.
- NSF-BSF program in Astronomy and Astrophysics. Deadline for application by the U.S. partner to the NSF is November 16, 2020 and by the Israeli partner to the BSF is November 23, 2020. Call for Proposals can be found here.
- NSF-BSF program in Atomic Molecular and Optical Physics Experiment and Theory; Gravitational Physics Experiment and Theory; Integrative Activities in Physics; LIGO Research Support.

  Deadline for application by the U.S. partner to the NSF is November 25, 2020 and by the Israeli partner to the BSF is December 1, 2020. Call for Proposals can be found here.
- NSF-BSF program in Nuclear Physics Experiment and Theory; Elementary Particle Physics –
   Experiment; Particle Astrophysics Experiment; Computational Physics. Deadline for application by
   the U.S. partner to the NSF is December 1, 2020 and by the Israeli partner to the BSF is December 7,
   2020. Call for Proposals can be found here.
- NSF-BSF program in **Computational Mathematics**. Deadline for application by the U.S. partner to the NSF is December 1, 2020 and by the Israeli partner to the BSF is December 7, 2020. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF program in Elementary Particle Physics Theory; Particle Astrophysics and Cosmology –
  Theory; Physics of Living Systems; Quantum Information Science. Deadline for application by the
  U.S. partner to the NSF is December 9, 2020 and by the Israeli partner to the BSF is December 14, 2020.
  Call for Proposals can be found here.
- NSF-BSF program in **Statistics**. Deadline for application by the U.S. partner to the NSF is December 15, 2020 and by the Israeli partner to the BSF is December 21, 2020. Call for Proposals can be found <a href="https://pers.ncbi.nlm.nc

### **Directorate of Computer and Information Science and Engineering:**

• NSF-BSF program in **Computational Neuroscience**. Deadline for applications by the U.S. partner to the NSF is December 10, 2020 and by the Israeli Partner to the BSF is December 16, 2020. Call for Proposals can be found <a href="here">here</a>.

### **Directorate of Geosciences:**

 NSF-BSF programs in Marine Oceanography. Deadline for applications by the U.S. partner to the NSF is February 15, 2021 and by the Israeli Partner to the BSF is February 21, 2021. Call for proposals can be found here.

### **Directorate of Biological Sciences:**

• NSF-BSF program in **Ecology and Evolution of Infectious Disease**s. Deadline for application by the U.S. partner to the NSF is November 18, 2020 and by the Israeli partner to the BSF is November 24, 2020. Call for Proposals can be found here.

### **Directorate of Social, Behavioral and Economics Sciences:**

- NSF-BSF programs in **Social Psychology**. Deadline for applications by the U.S. partner to the NSF is January 15, 2021 and by the Israeli Partner to the BSF is January 21, 2021. Call for proposals can be found here.
- NSF-BSF programs in **Developmental Sciences**. Deadline for applications by the U.S. partner to the NSF is January 15, 2021 and by the Israeli Partner to the BSF is January 21, 2021. Call for proposals can be found here.
- NSF-BSF programs in **Economics and Decision Sciences**. Deadline for applications by the U.S. partner to the NSF is January 18, 2021 and by the Israeli Partner to the BSF is January 24, 2021. Call for proposals can be found <a href="here">here</a>.
- NSF-BSF programs in **The Science of Learning and Augmented Intelligence Program**. Deadline for applications by the U.S. partner to the NSF is January 20, 2021 and by the Israeli Partner to the BSF is January 26, 2021. Call for proposals can be found here.

- NSF-BSF programs in Perception, Action and Cognition. Deadline for applications by the U.S. partner
  to the NSF is February 1, 2021 and by the Israeli Partner to the BSF is February 7, 2021. Call for
  proposals can be found <a href="here">here</a>.
- NSF-BSF programs in Cognitive Neuroscience. Deadline for applications by the U.S. partner to the NSF is February 11, 2021 and by the Israeli Partner to the BSF is February 17, 2021. Call for proposals can be found here.

### These following NSF-BSF programs have no deadlines and are open for submission throughout the year:

- NSF-BSF programs in **Computing and Communication Foundations** (CCF)are open to receive applications anytime throughout the year. Call for Proposals can be found <a href="https://example.com/here">here</a>.
- NSF-BSF programs in **Computer and Network Systems** (CNS)are open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF programs in Information and Intelligent Systems (IIS) are open to receive applications
  anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF programs in **Chemical, Bioengineering, Environmental, and Transport Systems** are open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF programs in Ceramic; Condensed Matter and Materials Theory; Electronic and Photonic Materials and the Solid State and Materials Chemistry programs in the Materials division are open to receive applications anytime throughout the year. Call for Proposals can be found <a href="https://example.com/here">here.</a>
- NSF-BSF program in **Electrical, Communications and Cyber Systems** is open to receive applications anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF program in Mind, Machine and Motor Nexus in the Civil, Mechanical and Manufacturing Innovation (CMMI) division is open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF program in Earth Sciences is open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF program in Atmospheric and Geospace Sciences is open to receive applications anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF program in **Cyber Security** is open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF program in Marine Geology and Geophysics is open to receive applications anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF program in **Biological Oceanography** is open to receive applications anytime throughout the year, starting January 2021. Call for Proposals can be found here.
- NSF-BSF program in **Molecular and Cellular Biosciences** is open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF program in **Integrative Organismal Systems** (IOS) is open to receive applications anytime throughout the year. Call for Proposals can be found here.
- NSF-BSF program in **EDGE-IOS** is open to receive applications anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.
- NSF-BSF program in **Environmental Biology** (DEB) is open to receive applications anytime throughout the year. Call for Proposals can be found <a href="here">here</a>.

We would be happy to see you among the applicants to any of these programs.