Research and Economic Development Newsletter

August 11, 2020

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RED Updates

A Message from the Vice Chancellor

Dear Research Community,

The conditions created by COVID-19, in regards to health, work, and finance, continue to be very dynamic and challenging, but in the same way the efforts of our campus continue to impress me. I am extremely grateful for all that you are doing. We still have a lot to go through, but the storm will eventually pass, a rainbow will then follow...
the rain, and I know we will emerge from this more resilient and forward-thinking than ever.

Research Ramp-up

We were hoping the summer would find us starting the next level of ramp-up in our research plan but, as I am sure you have seen in the news, the numbers related to the pandemic in our state and county are still very worrisome. The situation is fluid and changes may continue to take place, especially now that the state has issued the COVID-19 INDUSTRY GUIDANCE: Institutions of Higher Education. I would like to remind you that, since June 8, we are still in Phase 2 of our own plan and that UCR leadership will broadly communicate any modifications, if necessary, and when they should take place.

I would also like to remind you that, according to the Research Ramp-up Agreement form they have signed, the lead PIs should share their labs’ ramp-up implementation plans with their teams. For those labs which are required to have written Standard Operation Procedures (SOP) available to all lab members, the COVID-19 ramp-up plan can simply be attached to them. For labs or research facilities which are not required to have SOP, the ramp-up plans can be printed and made available in the facility so that any member can consult them without needing to ask the leader PI. The PIs should inform Deans and their lab members that this requirement has been fulfilled. We also request that the information about how to contact EH&S to report safety concerns also be posted in the facilities and made visible to all lab members.

Some good news

More than ever we need to hear some good news. Despite the frustrating limitations, delays, and obstacles affecting the research and scholarly activities of many of our faculty, students and staff, there is some great news in the research and economic development area. I highlight some below. My appreciation and thanks again go out to all the investigators involved as well as all the staff that support the different operations needed for our research to flourish.

- Preliminary numbers for the total external funding received by our campus for the fiscal year 2019-20 is higher than ever before and shows that we are almost at the $200M mark, even exceeding it if we include the CARES Act funds we received.
- Our junior faculty have received 11 NSF CAREER awards, 7 of which went to women, another all-time record for our campus.
- UC Riverside joins new NSF center for the preservation of biological systems. This is a $26 million Engineering Research Center grant for Advanced Technologies for the Preservation of Biological Systems, involving the University of Minnesota and Massachusetts General Hospital in collaboration with UC Riverside and UC Berkeley.
- Sustainable nanotechnology partnership renewed. This represents NSF $20M support for the Center for Sustainable Nanotechnology, a collaboration between 11 universities, including UCR, and two national laboratories.
- UCR wins $10 million to develop AI for sustainable agriculture. This is a USDA National Institute of Food and Agriculture grant to develop artificial intelligence that will increase the environmental and economic stability of agriculture in the Western U.S.

This is only a small sample; to make sure you did not miss any of our campus’ recent great discoveries and creative activities, I encourage you to visit the UCR News website.

A special request

We have recently 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 is great news and another indication of the tremendous efforts by our campus to keep our research enterprise going. This has, however, put additional burden on the committees’ members and the staff that support them. While we are already looking at improving our infrastructure to better serve the campus in those areas, we desperately need more faculty
to become members of the compliance committees.

**Faculty**, please pay special consideration when asked to serve in one of those 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 all for your consideration of this matter.

**Reallocation of F&A**

Some of you have already heard of the new allocation of F&A recovery cost funds between the RED and the Provost offices. Previously, 50% of those funds were allocated to the Provost Office and 10% to RED. The remaining 40% was allocated to Schools/Colleges, Departments and PIs. The new distribution will be 40% Provost Office and 20% RED. The amounts going to the rest of campus are not affected in any way. This will allow for a more strategic use of the funds to continue to support research and scholarly work across campus. Some of the funds will be immediately devoted to addressing important gaps in our research infrastructure as well as supporting our researchers. I am particularly concerned with junior faculty being disproportionately affected by the current pandemic and we are already looking at ways to better support them.

I want to take this opportunity to thank Chancellor Wilcox and Interim Provost and Executive Vice Chancellor Smith for their continuous commitment to supporting our research enterprise and for their leadership making this reallocation. I would also like to thank Vice Chancellor for Planning and Budget Bomotti and his team for finding a way to make this possible, and the group of Deans and their associates who provided invaluable input and advice in working out these difficult budgetary decisions. I will share more information about our new plans soon, so please stay tuned.

I want to conclude this message by encouraging all of us to continue to work with faculty, students and staff, campus organizations, stakeholders outside our community, representatives, and government officials in order to address the unacceptable racial disparities and injustices in our nation. In particular, my heart goes out to the members of the UCR Black community and my commitment to all is to redouble our efforts within the research and economic development enterprise as well to create a more inclusive and equitable society.

Stay safe,

*Rodolfo*

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**Federal Relations Update**

**Emergency Supplemental Update**

The federal response to the COVID-19 pandemic remains on Washington's agenda. On July 27, Senate Republicans introduced an emergency package called the Health, Economic Assistance, Liability and Schools (HEALS) Act, which appropriates $1 trillion toward relief, including $25 billion for the Provider Relief Fund, $29.1 billion for the Higher Education Emergency Relief Fund and $10.1 billion for the National Institutes of Health.
The House passed the HEROES Act in May, which is serving as its benchmark for negotiations. As of Aug. 6, congressional leaders had not reached a bipartisan, bicameral agreement with the White House.

RISE Act

While Congress has made significant investments in COVID-19-related research, existing research has slowed down or stopped due to the virus, resulting in a need for additional research funding. To help address this, on July 22, Sens. Tom Tillis (R-NC), Ed Markey (D-MA), Cory Gardner (R-CO) and Gary Peters (D-MI) introduced, S. 4286, the Research Investment to Spark the Economy (RISE) Act. The Senate bill is identical to H.R. 7308, which was introduced in the House (see Federal Update, 2020, Issue 6) in June. Currently, the House bill has over 80 cosponsors and is supported by over 300 universities and scientific organizations. This legislation was initiated by UC FGR and developed in close partnership with UC research leadership and the university community.

DACA Advocacy

Following the June 18 Supreme Court decision, UC launched a UC Advocacy Network (UCAN) campaign asking advocates to call on Congress to pass legislation to permanently protect DACA recipients and other members of our undocumented community.

Special thanks to Kathy Eiler, UCR Director of Federal Relations, for providing this information

Office of Technology Partnership Update

UCR OTP Launches 2nd Year of the Chilean Entrepreneurship Training Program Kow Hub Ignition

On July 28th the UCR OTP team launched the second year of the Chilean Entrepreneurship training program Know Hub Ignition with its partner Know Hub Chile. The VCREP spoke to an audience of 150 people in the virtual launch presided by the Chilean Government’s Undersecretary for the Ministry of Science and attended by representatives from various levels of the Chilean government as well as from UC Riverside, County of Riverside, and State of California.

2020 is the second year of Know Hub Ignition. This unique entrepreneurship program delivered in partnership between Know Hub Chile and UC Riverside’s Office of Technology Partnerships is now being considered a benchmark and a pre-requisite to other entrepreneurship programs in Chile. Last year we trained 11 entrepreneurial teams in an intensive UCR mentor-accompanied program, we then brought 5 of the teams to Riverside for a one week immersion in our entrepreneurial ecosystem and as a result, one of the companies, a drug delivery platform, will be further incubated in Riverside to access the US market.

This year, 16 teams with innovative technologies spanning a variety of industries are being trained intensively for 10-weeks accompanied by a group of UCR and Chilean mentors. For more information about this program or other international entrepreneurship initiatives contact alexandra.orozco@ucr.edu.
Office of Research Integrity Update

RED's Office of Research Integrity (ORI) is headed by AVC Dario Kuzmanovic and strives to promote excellence in research while ensuring compliance with federal and state regulations. The ORI has oversight and responsibility over the various research integrity and compliance committees on campus. All the boards and committees remain fully operational during the summer and COVID-19 pandemic; however, there may be some delays due to increases in volume on the IRBs and IACUC in particular.

The Committees / Boards:
- Two Institutional Review Boards (IRBs): one for Socio-Behavioral research, one for Clinical-biomedical research. These 2 boards are responsible for the review of all human subjects research conducted on behalf of the institution.
- An Institutional Biosafety Committee (IBC) responsible for the oversight of research activities, including teaching laboratories, involving the use, storage and handling of biohazardous materials. This includes activities involving recombinant/synthetic nucleic acids and any human derived materials such as human cell lines
- An Institutional Animal Care and Use Committee (IACUC) which has authority over all activities involving vertebrates and the ordering of custom antibodies.
- A Promoting Research Objectivity (PRO) Committee (formerly the Conflict of Interest Committee) which is charged with reviewing investigator statements of financial interest related to their sponsored research activities to determine if any conflict of interest issues impact the objectivity of the research
- A Stem Cell Research Oversight (SCRO) Committee responsible for the review of all activities involving human pluripotent and neural stem cells

Please note: You may not begin your research nor get access to your funds until all the relevant approvals from the ORI are in place.

Information and Resources:
In order to provide important information and resources to researchers, the ORI has revised its website. Some of the key relevant webpages include:
- Forms page contains links to access application forms for all the committees/boards
- Resources page contains links to information that may be useful to researchers and committee members
- Frequently Asked Questions page contains answers to many of ORI's most frequently asked questions
- Staff Contacts page lists contact information for each committee/board
- For those conducting human subjects research requiring IRB oversight, please see the following:
  IRB Research and COVID-19: Newly created guidance highlights the 4 UCR phases and key resources to consider for those doing human subjects research – the 2-page guidance can be found on this link.
- ‘How to IRB’ tutorial - This simple, 30-minute, interactive tutorial was created to help new researchers navigate the IRB process including how to submit an IRB application, what forms are required, and what resources are available.
- IRB training requirements - At UCR, Collaborative Institutional Training Initiative (CITI) Program is used to satisfy training requirements for Human Subjects Research (IRB).

Please take a moment to view the Office of Research Integrity home page to see what other services we offer that will assist you with your research needs.

The ORI is on social media! Follow us on Twitter: https://twitter.com/ucr_ori

All revised ORI webpages have an anonymous feedback section, and faculty and students are encourage to provide comments.

Questions? Contact Us
Launch of Sophia Inventor Portal

Attention all UCR inventors! The Office of Technology Partnerships has launched an inventor portal called Sophia that allows you to log-in and easily check the status of your invention disclosures and patent filings in real time. This will provide greater transparency and insight to your UCR intellectual property portfolio. You will also have the ability to run an “Invention Report” and “Patent Application Report” then export to a spreadsheet for grant proposals, personnel file for merit reviews, CVs, etc. We anticipate future improvements to be rolled out, including an online invention disclosure submission portal.

Please bookmark this website: https://ucr.wellspringsoftware.net

Click on the “Login Using UCR NetID and Password” link under the Login box (shown below). This will take you to the UCR multi-factor authentication page and enter your UCR NetID and password, as you normally do to gain access to other UCR sites.

For any questions or trouble logging in, please contact Brian Suh, Director, Technology Commercialization, brian.suh@ucr.edu.

Cybersecurity and Research

Attacks from both state and criminal organizations have been increasing the last few years and this trend seems to be even more evident in the US. Universities are a rich target for cyber attackers due to the open and decentralized nature of Universities along with the vast quantity of the different types of data a University manages. This is made worse by the pandemic and the number of individuals working remotely.

Different attackers have different motives. For example, state-sponsored attackers look to steal agricultural,
medical, economic, and engineering research, and recently anything around COVID-19. Whereas organized cyber criminals are less concerned about the data itself, but instead are focused on extorting money from large organizations. These organized cyber criminals infiltrate the technical environment, make backups irretrievable, steal data, and hold it for ransom.

These types of attacks have a wide range of impacts on researchers, from damaged reputations with grant agencies and data sharing organizations, to losing a lifetime of research. Central IT works to protect the University but researchers need to do their part to ensure that their computer technology is updated and secure. Here are the top five things that researchers can do to help increase their security posture and reduce the likelihood of a catastrophic cyber-attack.

1.) Backup your data!
   - Have backups of your research data that are not connected to the primary systems where the data is held, i.e. offsite back up.

2.) Make sure your work and personal systems are updated and patched.
   - Attackers will often target personal systems since remote workers often have their home and work computers accessible on the same WiFi network.

3.) Leverage UC Riverside’s Duo multi-factor authentication.[1]

4.) Do not permit off-campus access to on-campus systems except through a campus virtual private network, or VPN, such as UCR’s GlobalProtect.[2]

5.) Be mindful of phishing and report it to: abuse@ucr.edu.[3]
   - Email phishing is often used by scam artists to trick users into giving out usernames and passwords or secretly installing viruses. If the email makes claims that look too good to be true, it probably is.

An honorable mention would be for researchers to draft security plans for their research projects. Researchers should work with their IT departments, ITS Research Support, and the Information Security Office to ensure these controls are in place and well managed.

If you have any questions, reach out to the Information Security Office at infosecoffice@ucr.edu.

[1] Duo Multi-Factor Authentication
[2] Virtual Private Networking (VPN) - GlobalProtect Connection
[3] Email Phishing: How to notify the UCR Information Security Office

Funding Opportunities

Foundations to Increase Support

Foundations Will Increase Support for Higher Ed (Inside Higher Ed)

The Andrew W. Mellon Foundation, the Doris Duke Charitable Foundation, the Ford Foundation, the W. K. Kellogg Foundation and the John D. & Catherine T. MacArthur Foundation have announced that they will increase grant making by $1.7 billion to support nonprofit institutions in higher education, the arts and the humanities. https://www.insidehighered.com/quicktakes/2020/06/12/foundations-will-increase-support-higher-ed
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.aspx.

Simons Investigators Program

Internal Deadline: September 3, 2020
Agency Deadline for Nominations: October 28, 2020
Number of Submissions Allowed:
2 for Mathematics
2 for Theoretical Physics
2 for Theoretical Astrophysics
2 for Theoretical Computer Science
1 for Theoretical Physics in Life Sciences

Agency Application Instructions: https://www.simonsfoundation.org/mathematics-physical-sciences/simons-investigators/simons-investigator-program-nominations/
Past awardees: https://www.simonsfoundation.org/mathematics-physical-sciences/simons-investigators/simons-investigators-awardees/

Overview

The Simons Foundation’s Mathematics and Physical Sciences division invites nominations for Simons Investigators in Mathematics, (Theoretical) Physics, (Theoretical) Astrophysics and Theoretical Computer Science. Within the Physics program, the foundation also invites nominations for Theoretical Physics in Life Sciences Investigators.

In 2021, the foundation expects to appoint up to four Investigators in Mathematics, up to seven in Physics (including up to two in Theoretical Physics in Life Sciences), up to two in Astrophysics and up to three in Theoretical Computer Science.

Rationale: The Simons Investigators program aims to provide a stable base of support for outstanding theoretical midcareer scientists, enabling them to undertake long-term investigations of fundamental questions in their fields. The intent of the program is to support these scientists in their most productive years, when they are establishing new research directions, providing leadership in the field and effectively mentoring junior scientists.

Level and Duration of Funding: A Simons Investigator is appointed for an initial period of five years for up to $132,000 per year. Renewal for an additional five years may be considered, contingent upon the evaluation of scientific impact of the Investigator prior to the end of year five. Renewal beyond the 10-year period will not be considered. Appointments will begin August 1, 2021.

An Investigator will receive research support in the amount of $100,000 per year. An additional $10,000 per year will be provided to the Investigator’s department. The Investigator’s institution will receive an additional 20 percent per year in indirect costs.

Sony Research Award and Samsung Global Outreach
Programs

Sony Research Award Program - https://www.sony.com/electronics/research-award-program

- Program comprises the Faculty Innovation Award and the Focused Research Award within three broad subject categories: Information Technology, Devices & Materials, and Life Sciences.
- Awards of up to $150,000 per year for each accepted proposal
- Interested in learning more about the Program and Topic Areas, see the webinar here.

Samsung Global Research Outreach Program - https://www.sait.samsung.co.kr/saithome/about/collabo_overview.do

- 11 Topic areas with 19 Call for Proposals. New Topic areas include: Cryogenic Computing, Next Generation DRAM/NAND, Semiconductor Equipment, Privacy Preserving Computing, 6G, and Bulk Acoustic Wave to name a few.
- Submissions due Monday, August 24 at 5pm Pacific Daylight Time

For questions on these or any Industry Sponsored Research, please contact Misty Madero at misty.madero@ucr.edu.

Fast Funding for COVID-19 Science

Science funding mechanisms are too slow in normal times and may be much too slow during the COVID-19 pandemic. Fast Grants are an effort to correct this.

If you are a scientist at an academic institution currently working on a COVID-19 related project and in need of funding, we invite you to apply for a Fast Grant. Fast Grants are $10k to $500k and decisions are made in under 14 days. If we approve the grant, you'll receive payment as quickly as your university can receive it.

To apply, just head to fastgrants.org.

NIH Common Fund's High-Risk, High-Reward Research Program

Funding opportunities for outstanding scientists at all career stages

The NIH Common Fund’s High-Risk, High-Reward Research program (commonfund.nih.gov/highrisk) supports exceptionally creative scientists pursuing highly innovative research with the potential for broad impact in biomedical, behavioral, or social sciences within the NIH mission. The program’s four constituent NIH Director’s awards provide a diverse set of funding opportunities.
For scientists with outstanding records of creativity pursuing pioneering approaches to major challenges

- Open to all career stages
- Single PD/PI
- Must be new research direction
- Requires major portion of research effort (at least 51%)
- $3.5 million for 5 years

For exceptionally creative early career scientists proposing innovative, high-impact projects

- Must be Early Stage Investigator
- Single PD/PI
- $1.5 million for 5 years

For individuals or teams proposing groundbreaking, unconventional research with the potential to create new scientific paradigms

- Open to all career stages
- Single or multiple PDs/PIs
- Flexible budget for 5 years

For exceptional junior scientists bypassing postdoctoral training to launch independent research careers

- Must complete doctoral degree or clinical training within ~1 year of applying
- Single PD/PI
- Must be in non-independent research position at time of application
- Limited to 2 applications per institution
- $1.25 million for 5 years