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## CALIFORNIA CONGRESSIONAL DELEGATION

Dear Members of Congress:

As Congress begins work on appropriations for fiscal year (FY) 2020, the University of California (UC) urges your full support for federal programs and initiatives that are critical to the University's ability to successfully carry out its education, research, health care and public service missions.

As the largest public research university system in the world, UC is concerned about the Trump Administration's recently released FY 2020 budget blueprint, which proposes significant disinvestments in education, scientific, technological, and medical research. After two years of relief from the deep cuts prescribed in the Budget Control Act of 2011, the administration's budget blueprint assumes the return of non-defense sequestration caps. These caps would force draconian cuts to education, research, and health programs that would hurt America's students, research enterprise, and our economy. I urge Congress to set aside this budget proposal and come together to develop a bipartisan agreement that properly funds all aspects of our government – from education and health care to defense and scientific pursuits.

The attached document outlines the University's FY 2020 federal appropriations priorities, but there are a few areas of specific importance to which I would like to call your attention:

- **Pell Grants Program:** UC supports funding for the Pell Grant Program – through a combination of discretionary and mandatory funds – that will allow the program to adjust to inflation for the maximum FY 2020 award and ensure that grants are available year-round. UC enrolls a higher percentage of Pell Grant recipients than any other top research university in the country and four UC campuses each enroll more low-income students than the Ivy League institutions combined. Pell Grants are an integral part of the financial aid packages UC offers to its students. Approximately 37 percent of UC students are eligible for Pell Grants and Pell Grant recipients graduate at comparable rates to non-Pell recipients.
- **Basic and Applied Research:** The University supports robust and sustained funding for research, especially at the National Institutes of Health; the National Science Foundation; the Departments of Defense, Energy and Agriculture; NASA; and the

National Oceanographic and Atmospheric Administration. UC researchers are well positioned to compete for competitive grants across the full spectrum of research programs – from precision medicine, artificial intelligence, and the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative to agriculture, energy, the environment, national security, and advanced manufacturing.

- **Public Health Services:** With five nationally-acclaimed UC medical centers and 18 health science schools – collectively referred to as “UC Health” and currently serving as the fourth-largest health care delivery system in California – the University depends on robust federal investment in health professions as well as public health and prevention programs. Robust and sustained funding for these programs through the Health Resources and Services Administration, and the Centers for Disease Control and Prevention, among others, allow UC to provide complex medical services, treat highly acute patients and serve as a vital safety net provider to California’s most vulnerable patient populations.

Thank you for your continued support of the University of California. The priorities outlined in the attached document are listed by appropriations subcommittee for your consideration. If you have questions, please do not hesitate to contact me or UC Associate Vice President for Federal Governmental Relations Chris Harrington. He can be reached at (202) 974-6319 or by email at [Chris.Harrington@ucdc.edu](mailto:Chris.Harrington@ucdc.edu).

Yours very truly,



Janet Napolitano  
President

Enclosure

cc: Chancellors  
Provost and Executive Vice President Michael T. Brown  
Senior Vice President Claire Holmes  
Associate Vice President Chris Harrington

**University of California Fiscal Year (FY) 2020 Appropriations Priorities**

**TABLE OF CONTENTS**

**Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies**  
 Department of Agriculture  
     National Institute of Food and Agriculture ..... 1

**Subcommittee on Commerce, Justice, Science and Related Agencies**  
 National Aeronautics and Space Administration ..... 2  
 National Science Foundation ..... 3  
 Department of Commerce  
     National Oceanographic and Atmospheric Administration ..... 4

**Subcommittee on Defense**  
 Department of Defense ..... 6

**Subcommittee on Energy and Water Development, and Related Agencies**  
 Department of Energy ..... 7

**Subcommittee on Homeland Security**  
 Department of Homeland Security ..... 9

**Subcommittee on the Interior, Environment and Related Agencies**  
 Department of the Interior  
     U.S. Geological Survey ..... 10  
 National Endowment for the Humanities ..... 10  
 National Endowment for the Arts ..... 11  
 Environmental Protection Agency ..... 11

**Subcommittee on Labor, Health and Human Services, Education and Related Agencies**  
 Department of Education ..... 12  
 Department of Health and Human Services  
     National Institutes of Health ..... 16  
     Health Resources and Services Administration ..... 17  
     Centers for Disease Control and Prevention ..... 18  
     Agency for Healthcare Research and Quality ..... 19  
     Substance Abuse and Mental Health Services Administration ..... 20

**Subcommittee on State, Foreign Operations and Related Programs**  
 U.S. Agency for International Development ..... 20

**Subcommittee on Transportation, Housing and Urban Development and Related Agencies**  
 Department of Transportation ..... 21

**SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES**

**Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA)**

The University of California (UC) requests a \$125 million increase for NIFA Research, Education and Extension Programs that enable UC’s partnership with California’s agricultural producers and ensure a safe, secure and plentiful supply of food and energy, as well as clean and sustainable air, water and other natural resources. USDA funding also supports UC’s effective nutrition education efforts throughout California. Programs vital to UC include:

**Agriculture and Food Research Initiative (AFRI)**

- **Recommendation:** UC supports \$500 million for AFRI.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$500 million	\$415 million	\$500 million

UC supports \$500 million for the AFRI, which funds competitive research on human nutrition and health, agricultural productivity and sustainability, renewable energy and biofuels, water supply, and air and water quality. In the 2017-18 academic year, UC had 110 active AFRI projects, totaling \$53 million in competitively awarded funding to find cutting edge solutions for high-priority issues affecting California’s rural and urban communities.

**USDA Capacity Grants programs – Hatch Act, Smith-Lever 3(b)-3(c) and McIntire-Stennis Cooperative Forestry**

- **Recommendation:** UC supports \$292 million for Hatch Act; \$359 million for Smith-Lever 3(b)-3(c); and, \$41 million for McIntire-Stennis capacity grants programs.

	UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
Hatch Act	\$292 million	\$259 million	\$243.2 million
Smith-Lever 3(b)-3(c)	\$359 million	\$315 million	\$299.4 million
McIntire-Stennis	\$41 million	\$36 million	\$28.9 million

UC supports the above requested funding levels for the Hatch, Smith-Lever 3(b)-3(c) and McIntire-Stennis capacity grant programs, which are crucial to UC’s agricultural research and extension work across every county in California. These programs enable UC to support California agricultural producers by improving varietal development, production efficiencies, cropping methods and conservation practices.

UC also supports \$20 million for the National Animal Health Lab Network, robust funding for the Crop Protection/Pest Management (CP/PM) Program, \$19 million for the Minor Crop Pest Management (IR-4) Program, \$3 million for the Veterinary Services Grant Program and \$2.5 million for the Food Avoidance Residue Databank.

**Expanded Food and Nutrition Education Program (EFNEP)**

- **Recommendation:** UC supports \$72.5 million for EFNEP.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$72.5 million	\$69 million	\$55 million

UC supports \$72.5 million for EFNEP, through which UC delivers hands-on, practical lessons on food, nutrition and healthy lifestyles to needy families. National studies show that for every \$1 invested in this Cooperative Extension program, approximately \$8 are saved in current and future health care costs for “at risk” populations.

**SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES**

**National Aeronautics and Space Administration (NASA)**

**NASA Science Mission Directorate (SMD)**

- **Recommendation:** UC supports \$7.5 billion for the NASA SMD.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$7.5 billion	\$6.905 billion	\$6.304 billion

UC supports \$7.5 billion for the NASA SMD, which funds research on the Earth, our solar system and the universe. UC researchers are highly successful in competing for NASA research awards, further enabling them to be international leaders in astronomy, earth and space sciences.

Within SMD, UC supports \$2.027 billion for NASA Earth Science programs, the mission of which is to “develop a scientific understanding of the Earth system and its response to natural and human-induced changes...[which] enables us to improve prediction of climate, weather, and natural hazards.”

UC also supports \$445.7 million for continued development of the Wide Field Infrared Survey Telescope (WFIRST) mission within the Astrophysics Exoplanet Exploration program, which NASA has referred to as “the highest-priority large mission in the National Research Council Decadal Survey (2010).”

**NASA Space Technology Programs**

- **Recommendation:** UC supports \$973 million for the NASA Space Technology Program.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$973 million	\$926.9 million	\$0 (reorganization)

UC supports \$973 million for NASA Space Technology programs, including innovation initiatives such as the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. Under these programs, UC and other academic

institutions partner with NASA and other stakeholders to research and rapidly develop new space technologies. UC opposes the president’s budget request to merge Space Technology Programs into a new Exploration account.

**NASA Space Grant College and Fellowship Program**

- **Recommendation:** UC supports \$50 million for the Space Grant College and Fellowship Program.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$50 million	\$44 million	\$0

**UC supports \$50 million for the Space Grant College and Fellowship Program**, a national network that gives students practical hands-on training in support of NASA’s aeronautics and space missions, and inspires them to pursue science, technology, engineering and mathematics (STEM) careers. Headquartered at UC San Diego, the California Space Grant Consortium engages 28 California affiliates, including nine UC campuses, 10 California State University campuses, three NASA centers and other universities.

**National Science Foundation (NSF)**

- **Recommendation:** UC supports \$9 billion for the NSF.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$9 billion	\$8.075 billion	\$7.1 billion

**UC supports \$9 billion for NSF programs** supporting merit-reviewed, fundamental research across all areas of science, engineering and education in NSF’s seven research directorates and in cross-cutting research programs, including:

- Geosciences (GEO) – NSF’s GEO research directorate addresses critical earth, oceans and atmospheric processes that impact our economic and national security;
- Social, Behavioral and Economics (SBE) – multidisciplinary research promoting understanding of people through the study of human behavior and societal questions and problems;
- Understanding the Brain (UtB) – cognitive and neuroscience research enabling understanding of brain complexity, developing tools to assist in this research and training future neuro-engineers;
- Advanced Manufacturing – cutting-edge tools and techniques that will transform the fields of bioengineering, cyber-manufacturing, nanosystems design and clean energy development; and
- Innovations at the Nexus of Food, Energy and Water Systems (INFEWS) – interdisciplinary research looking at the interconnections between these critical resource systems.

NSF sponsors about 20 percent of all merit-based university research across every discipline and helps to train and educate the next generation of the scientific and engineering workforce.

California researchers compete extremely well for NSF funding. In FY 2018, UC researchers successfully competed for \$512 million in NSF funding on 2,243 grant awards. Historically, UC’s NSF research funding represents more than half of the total for all California institutions.

UC supports a robust increase for the Major Research Equipment and Facilities Construction (MREFC) account to fund needed facility and equipment construction and instrumentation improvement programs.

NSF Education and Human Resources programs achieve excellence in STEM at all levels – including graduate and undergraduate education – contributing to a well-trained scientific workforce. Among them, the **Graduate Research Fellowship Program (GRFP)** provides critical support for the nation’s top graduate students’ research studies. In 2018, a significant number of UC graduate students from the 10 UC campuses earned prestigious GRFP fellowships – nearly 15 percent of the total awards for that year.

UC students and campuses are also strongly represented in the **Innovation Corps (I-Corps)** programs, whose purpose is to strengthen the national innovation ecosystem to carry fundamental research discoveries into technologies, products, processes and services that benefit society. UC also participates in and supports the **INCLUDES program** – an initiative to develop science and engineering talent across all sectors of society, including underrepresented groups.

**UC also supports multidisciplinary public health research to better understand the nature, causes and consequences of violence, unintended injury and death involving firearms.**

**Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA)**

**Office of Oceanic and Atmospheric Research (OAR)**

- **Recommendation:** UC supports \$556 million for OAR.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$556 million	\$525.06 million	\$309 million

**UC supports \$556 million for OAR research programs.** UC researchers rely on NOAA competitive research funding for the collection of climate, weather and water data, including ocean observing for accurate weather forecasting, which is essential to California agriculture, energy and fisheries. UC also contributes to national priorities for world-class weather, atmospheric, water and drought research and observations that are vital for effective disaster preparedness, as well as the mission needs of the U.S. Navy, NASA and other federal agencies.

Within OAR, **UC supports robust funding for climate, weather and oceans research programs, including: \$52.7 million for the Regional Climate Data and Information Program, \$74 million for the Climate Laboratories and Cooperative Institutes, \$53 million for Sustained Ocean Observations and Monitoring and \$22 million for the Integrated**

**Ocean Acidification Program.** Historically, UC receives about 10 percent of OAR funding annually. This account also funds the **National Integrated Drought Information System (NIDIS)** and the **Regional Integrated Sciences and Assessments (RISA)** programs, which provide dynamic and accessible drought information for the nation, and support research teams that work with public and private users to build our capacity to prepare for and adapt to environmental variability and change.

**National Sea Grant College Program, OAR**

- **Recommendation:** UC supports \$93.5 million for the National Sea Grant College Program.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$93.5 million	\$68 million	N/A

**UC supports \$93.5 million for the National Sea Grant College Program**, a university-based coastal and marine research network, which facilitates knowledge transfer from researchers to the marine industry and the public. Based at the UC San Diego Scripps Institution of Oceanography, California's Sea Grant Program sponsors research and extension activities involving public and private institutions throughout the state.

**Office of Marine and Aviation Operations (OMAO), Aviation Operations and Aircraft Services, Operations, Research, and Facilities (ORF)**

- **Recommendation:** UC supports \$38.7 million for OMAO ORF.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$38.7 million	\$35.7 million	N/A

**UC supports \$38.7 million for the OMAO ORF, including \$3 million for Increased Western Winter Storm Observations.** The location, timing and intensity of heavy precipitation events on the US West coast are controlled largely by the characteristics of land-falling atmospheric rivers (ARs). There is a pressing need to improve prediction of ARs to support water management and flood control information needs – as revealed by the Oroville Dam Spillway event. Enhanced observations, modeling and data assimilation are critical to improving predictability of AR landfalls with lead times of weeks to months.

**Regional Integrated Ocean Observing System (IOOS) in the National Ocean Service**

- **Recommendation:** UC supports \$43.7 million for IOOS.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$43.7 million	\$38.5 million	N/A

**UC supports \$44.1 million for IOOS.** IOOS involves 17 federal agencies and a national network that provides new tools and forecasts for maritime commerce, fisheries, aquaculture, offshore energy, coastal communities, public health and other users' needs. UC is active in two



systems, the Central and Northern California Ocean Observing System (CeNCOOS) and the Southern California Coastal Ocean Observing System (SCCOOS).

**SUBCOMMITTEE ON DEFENSE**

**Department of Defense (DOD)**

**Basic Research (6.1)**

- **Recommendation:** UC supports \$2.77 billion for Defense Basic Research (6.1).

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$2.77 billion	\$2.62 billion	\$2.32 billion

**UC supports \$2.77 billion for Defense 6.1 Basic Research within a total request of \$16.996 billion for the Defense Science and Technology (6.1-6.3) research and development portfolio.** This ratio will help to ensure a balanced research and development pipeline that is vital to our national security. Conducted by the Army, Navy, Air Force and the Office of the Secretary, Defense Basic (6.1) and Applied (6.2) research programs fund the largest share of DOD-sponsored university research, especially in the physical and computer sciences and engineering. The UC research partnership with DOD spans more than 50 years and has led to a wide range of technological innovations, including new advanced materials, communications and computing, and life-saving medical discoveries and technologies.

Within the Defense Science and Technology portfolio, **UC supports:**

- **\$3.634 billion for the Defense Advanced Research Projects Agency (DARPA)**, which invests in high-risk, high-reward research to develop breakthrough military capabilities.
- **\$120.8 million for Army University and Industry Research Centers (PE 0601104A)**, including:
  - **\$15 million for the Army University Affiliated Research Center (UARC) – the Institute of Collaborative Biotechnologies** – at UC Santa Barbara;
  - **\$30million for the Army Capability Accelerator**, a partnership involving UC Berkeley to promote technology-focused entrepreneurship addressing national security challenges.
- **\$334.5 million for Army Defense Research Science Programs (PE 0601102A)**, including an increase of \$8 million for a UC Berkeley and UC Santa Barbara partnership with Army Research Laboratory to develop hierarchical agile resonate materials.
- **\$528.6 million for Navy Defense Research Science Programs (PE 0601153N)**, which support scientific study and experimentation to increase knowledge and understanding in national security-related aspects of physical, engineering, environmental and life sciences.
- **\$170.9 million for Navy University Research Initiatives, including an increase of \$20 million for the Defense University Research Instrumentation Program (DURIP) (PE 0601103N);**

- **\$90 million for Ocean Warfighting Environment Applied Research, including an increase of \$10 million for Research at Sea in support of Task Force Ocean priorities and an increase of \$10 million for Naval Special Warfare Research and Development (PE 0602435N);**
- **\$25 million for the National Security Innovation Network (PE 0603950D8Z) for the National Security Academic Accelerator.**
- **\$5 million for the Smart Base initiative in the Emerging Environmental Program at SPAWAR (The Space and Naval Warfare Systems Command), which will create new opportunities for smart transportation and digital security technology research.**
- **\$185.2 million for Defense-Wide Manufacturing Science and Technology Program (PE 0603680D8Z), including \$25 million for the American Institute for Manufacturing Integrated Photonics consortium, of which UC Santa Barbara is a partner.**

Defense Basic Research accounts also support education and training for students who will become DOD’s future scientific and technological workforce. UC supports the highest possible funding levels for the **National Defense Education Program and the National Defense Science and Engineering Graduate Fellowships program**. UC researchers also provide vital information through the social science research **Minerva Initiative**, which deepens our understanding of the cultural and political conditions in areas of the world of strategic importance to our national security.

**SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES**

**Department of Energy (DOE)**

**Office of Science (OS)**

- **Recommendation:** UC supports \$7 billion for the DOE Office of Science.

<b>UC Request</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President’s Budget Request</b>
\$7 billion	\$6.585 billion	\$5.5 billion

**UC supports \$7 billion for the DOE OS**, the primary federal agency supporting basic physical sciences research, which are vitally important to our country’s economic and national security. OS research at UC includes: basic energy sciences, advanced clean energy sources, energy efficiency technologies, biological and environmental research, high performance scientific computing, new materials, engineering and STEM education and fellowship programs. UC researchers also collaborate at DOE’s 17 world-class national laboratories with access to the largest collection of major scientific user facilities in the world. Collectively, these facilities serve over 32,000 university researchers, students and industry scientists every year.

Within OS, **UC supports research programs and scientific infrastructure investments that are fundamental to U.S. innovation leadership**, including:

- Maintaining a healthy balance among core research programs and facilities construction and operations is critical. UC urges appropriators to ensure that core research programs are adequately funded to address this balance.

- **\$7.3 million for the Large Synoptic Survey Telescope (LSST) commissioning.** In addition, **UC supports \$1.674 million for LSST operations.** UC Davis, UC Santa Cruz and the Lawrence Livermore National Lab are major scientific partners for the LSST, which was ranked as the top large ground-based astronomy project by the National Research Council’s 2010 Decadal Survey.
- **\$638 million for Fusion Energy Sciences.** UC and Lawrence Berkeley National Laboratory are performing leading-edge fusion research and training the next generation of researchers. **\$110 million for Berkeley Lab’s National Energy Research Scientific Computing Center and \$90 million for the Energy Sciences Network (ESnet),** which play vital roles in the nation’s high-performance computing and advanced computing networking ecosystem (Advanced Scientific Computing Research);
- **\$62 million to keep the upgrade of the Lawrence Berkeley National Laboratory (Berkeley Lab) Advanced Light Source (ALS-U) on schedule** (Basic Energy Sciences (BES));
- In order to sustain world leadership in scientific user facilities, **UC supports \$530 million for operation of the department’s light sources, \$140 million for the Nanoscale Science Research Centers (NSRC), and new funding for the recapitalization of scientific equipment at the NRSCs.**
- **Robust funding for the Energy Frontier Research Centers (EFRCs),** which are partnerships focused on grand challenges and use-inspired basic research, **and for the Energy Innovation Hubs** – centers that combine basic and applied research with engineering to accelerate scientific discovery on critical energy issues. These programs support multidisciplinary collaborations that enable UC faculty and students to work with federal laboratories and industry scientists (BES).
- **\$722 million for Biological and Environmental Research,** including **\$100 million for the Bioenergy Research Centers (BRCs), \$79.4 million for the Joint Genome Institute,** and funding to support the following three initiatives led by the Berkeley Lab:
  - **\$7 million for Next Generation Ecosystem Experiments (NGEE) – Tropics;**
  - **\$6.8 million for the Watershed Function Scientific Focus Area (SFA);** and
  - **\$5.1 million for the AmeriFLUX Long-Term Earth System Observations.**
- **\$28 million for the Biological and Environmental Program Integration Center (BioEPIC),** a Science Laboratories Infrastructure construction project which will help bridge the biological sciences with earth and environmental sciences in novel and productive ways.

**UC supports robust funding for the Office of Energy Efficiency and Renewable Energy (EERE) at a level of at least \$2.38 billion. UC supports funding for programs** within EERE that support UC and the UC-affiliated labs to research, develop, demonstrate and deploy clean energy technologies.

**UC supports DOE’s efforts to address “energy-water nexus” issues** related to the interconnections between our nation’s energy and water systems, **including \$20 million for the Energy-Water Desalination Hub under the Advanced Manufacturing Office.**

**Advanced Research Projects Agency-Energy (ARPA-E)**

- **Recommendation:** UC supports \$400 million for ARPA-E.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$400 million	\$366 million	\$0

**UC supports \$400 million for ARPA-E**, which funds technology concepts with potential to radically transform the energy sector but are too early in development to attract private-sector investments. In less than a decade, ARPA-E has invested in more than 400 projects, leading to the creation of new companies and attracting more than \$1.25 billion in follow-on private sector investment. UC researchers are among the most successful ARPA-E awardees.

**SUBCOMMITTEE ON HOMELAND SECURITY**

**Department of Homeland Security (DHS)**

**Science and Technology (S&T) Directorate**

- **Recommendation:** UC supports \$840.9 million for DHS S&T Directorate.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$840.9 million	\$819.7 million	\$582.1 million

**UC supports \$840.9 million for the S&T Directorate**, which funds basic and applied research to develop advanced technologies and methodologies to protect the nation's communities, ports, coasts, food supplies, borders and infrastructure. UC researchers have successfully competed for research grants on nuclear detection, food system protection, public health assessment and first responder safety.

**University Programs, S&T Directorate**

- **Recommendation:** UC supports \$43.5 million for University Programs.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$43.5 million	\$40.5 million	\$21.7 million

**UC \$43.5 million for University Programs within the DHS S&T Directorate.** University Programs support collaborative, multi-disciplinary research at universities across the country that contribute to prevention and response to homeland security threats, as well as STEM education programs.

**SUBCOMMITTEE ON THE INTERIOR, ENVIRONMENT AND RELATED AGENCIES**

**Department of Interior, U.S. Geological Survey (USGS)**

**USGS Earthquake Hazards Program (EHP)**

- **Recommendation:** UC supports \$85.9 million for EHP.

<b>UC Request</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget Request</b>
\$85.9 million	\$83.4 million	\$64.3 million

**UC supports \$85.9 million for the USGS EHP.** Within the EHP program, **UC requests \$18.6 million to fully develop and operate the West Coast earthquake early warning system.** UC scientists are also working to improve capabilities of the Central and Eastern United States Network (CEUSN). Effective earthquake preparedness and monitoring tools are critical to public safety in California and the nation. Researchers at UC and other California universities contribute greatly to the study and analysis of these natural disasters.

**USGS State Water Resources Research Institutes (WRII), Water Resources Research Program**

- **Recommendation:** UC supports \$10 million for the WRII program.

<b>UC Request</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget Request</b>
\$10 million	\$6.5 million	\$0

**UC supports \$10 million for the USGS WRII Program,** which is the only federally supported, national network for applied water resource research, education, training and outreach. UC operates the California Institute for Water Resources (CIWR), which supports researchers in developing solutions to costly and difficult water problems in California. With ongoing drought and water management concerns, CIWR is actively engaged in providing information and resources to California producers, consumers, businesses, and state and local governments. CIWR maintains a [website](#) that is updated daily with flood- and drought-related information.

**National Endowment for the Humanities (NEH)**

- **Recommendation:** UC supports \$167.5 million for the NEH.

<b>UC Request</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget Request</b>
\$167.5 million	\$155 million	\$38 million

**UC supports \$167.5 million for the NEH,** which provides critical support to the only federal agency dedicated to promoting and enhancing research, education and public programs in the humanities. UC researchers and scholars compete for NEH funds to strengthen teaching and learning; create new knowledge through extensive, in-depth study; and preserve and protect cultural and educational treasures. The UC Humanities Network supports, stimulates and facilitates excellence in humanities research across all 10 UC campuses. The network allows for

important academic discourse, while promoting knowledge, discovery and modes of understanding that are crucial to California and its local and global communities. The president’s budget request eliminates the NEH and provides only sufficient funding to wind down the endowment’s operations over two years.

**National Endowment for the Arts (NEA)**

- **Recommendation:** UC supports \$167.5 million for NEA.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$167.5 million	\$155 million	\$29 million

**UC supports \$167.5 million for the NEA**, which is dedicated to providing people across the U.S. with opportunities to participate in and experience the arts. NEA funding supports arts partnerships, special initiatives, individual projects and research in all 50 states that contribute to the strength and success of America’s neighborhoods, students, schools and cultural life. UC researchers and scholars compete for NEA funds, and successful NEA-funded projects benefit students and the public by providing access to art that would not otherwise be available in many California communities. The president’s budget request eliminates the NEA and provides only sufficient funding to wind down the endowment’s operations over two years.

**Environmental Protection Agency (EPA)**

**EPA, Office of Science and Technology**

- **Recommendation:** UC supports \$746 million for EPA S&T.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$746 million	\$706 million	\$463 million

**UC supports \$746 million for EPA Science and Technology programs** to protect human health and the environment. EPA’s research programs – Air, Climate and Energy (ACE), Safe and Sustainable Water Resources (SSWR), Sustainable and Healthy Communities (SHC) and Chemical Safety for Sustainability (CSS) – fund foundational science related to chemical safety, land restoration, air and water pollution prevention and national security. UC researchers have current EPA research grants on issues such as nutrient transport in groundwater, the future use of pesticides in warming environments and environmental risks to children’s health.

**SUBCOMMITTEE ON LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELATED AGENCIES**

**Department of Education (ED)**

**Pell Grant Discretionary Appropriations**

- **Recommendation:** UC supports the funding level necessary to reach a maximum award of \$6,345.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
Sum necessary to reach a maximum award of \$6,345.	\$22.48 billion	\$22.48 billion

**More than 82,000 UC undergraduate students currently receive Pell Grants, a critical foundation for the state and institutional aid UC students receive.** Currently, California residents with family incomes of up to \$80,000 receive aid that covers their tuition, and nearly two-thirds of UC undergraduates receive grant assistance that allows them to cover part of the cost of food, housing and other expenses. All UC students are expected to contribute to their own cost of education with loans, earnings from work or savings. Without robust funding for Pell Grants, UC students would have to borrow more, work beyond what is considered manageable and/or could take longer to complete their degrees.

**Pell Grant Maximum Award**

- **Recommendation:** UC supports raising the maximum annual Pell Grant to \$6,345, without further eroding funding from the Pell surplus.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$6,345	\$6,195	\$6,195

**UC recommends increasing the maximum Pell Grant to \$6,345.** Increasing the maximum Pell Grant protects recipients from inflationary pressures and makes higher education more affordable and attainable for students with limited means.

**Supplemental Educational Opportunity Grant (SEOG)**

- **Recommendation:** UC supports \$1.028 billion for SEOG.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$1.028 billion	\$840 million	\$0

**SEOG provides students who have exceptional financial need with additional grant aid to help promote degree completion.** These grants range from \$100-\$4,000, and at UC during the 2017-18 academic year, 16,500 students received an average award of \$656. Investing in this program is critical to ensuring that the students who are most financially vulnerable have the support they need to complete their academic studies. The president's budget request's

elimination of the program severely disadvantages UC’s lowest-income students, potentially lengthening the time to degree or forcing students to drop out due to unexpected hardship. Further, SEOG is targeted to the most financially vulnerable students at UC and is complementary to efforts to help students graduate on time—this aid should not be viewed as an alternative to the Pell program, but as a *supplement*.

**Federal Work-Study (FWS)**

- **Recommendation:** UC supports \$1.434 billion for FWS.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$1.434 billion	\$1.130 billion	\$500 million

**FWS supports students who elect to work during their academic studies and encourages community service and on-campus work.** FWS funding makes up a portion of a student’s earnings, and the remainder is provided by the employer, thereby encouraging employers to hire students who have earned FWS as part of their financial aid package. Many students gain valuable work experience through their FWS opportunity and it often guides them to a career path they want to pursue upon graduation. The president’s budget request’s proposed reduction in funds for FWS reduces the amount of support that students can potentially earn as part of their financial aid package and reduces the overall aid available to students.

**Federal Perkins Loan Program**

**UC supports sums necessary for the reimbursement of Federal Perkins Loan cancellations.** These funds, at a minimum, should be directly appropriated to reimburse campuses for loan cancellations made when borrowers completed public service commitments, as required by law. At the present time, the university estimates the cumulative reimbursable cancellations owed to UC campuses by the Department of Education totals approximately \$25.6 million.

**Student Loans**

**UC supports strong and sustained efforts to keep the cost of student loans manageable,** and to ensure that the federal government provides borrowers with the essential services they need. UC also supports the restoration of federal loan subsidies for graduate students and maintaining the subsidy for low-income undergraduate students. Proposals that provide relief to needy students are the basis of the federal investment in federal student aid, and efforts to reform and streamline loan repayment plans and improve program effectiveness will benefit borrowers and the federal government.

**TRIO Programs**

- **Recommendation:** UC supports \$1.160 billion for TRIO programs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$1.160 billion	\$1.060 billion	\$950 million



**GEAR UP**

- **Recommendation:** UC supports \$395 million for GEAR UP.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$395 million	\$360 million	\$0

**UC supports \$1.16 billion and \$395 million for TRIO and GEAR UP programs, respectively.** These complementary and demonstrably successful early intervention and academic preparation programs only reach a small fraction of eligible students and should be expanded to allow further participation. TRIO's Student Support Services program is specifically targeted to help low-income, first-generation students with undergraduate retention, transfer and completion success. At UC, 41 percent of undergraduate students are first-generation and 37 percent of undergraduate students qualify for Pell Grants. Reductions to TRIO programs in the president's budget request, and wholesale elimination of GEAR UP would undermine UC's efforts to support the pipeline from K-12 through higher education.

**Aid for Hispanic-Serving Institutions (HSIs) – Title V**

**Part A – Strengthening Hispanic-Serving Institutions**

- **Recommendation:** UC supports \$150 million for Title V Part A programs.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$150 million	\$124.4 million	\$0

**Aid for Hispanic-Serving Institutions (HSIs) – Title V Programs**

**Part B – Promoting Postbaccalaureate Opportunities for Hispanic Americans**

- **Recommendation:** UC supports \$30 million for Title V Part B programs.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$30 million	\$11.16	\$0

**UC supports \$150 million for Title V, Part A competitive grants to help HSIs expand and enhance their undergraduate academic programs, and \$30 million for Title V, Part B, which promotes postbaccalaureate opportunities for Hispanic Americans designed to help them succeed in graduate school.** UC has several campuses that serve large numbers of Hispanic students and would be eligible to apply for these funds. The president's budget request eliminates these vital programs, and instead proposes consolidating minority-serving institution funding into a single grant—the "Consolidated Minority Serving Institution Grant"—and provides only \$147.0 million for the program.

**Teacher Preparation**

- **Recommendation:** UC supports \$2.295 billion for teacher preparation grants.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$2.295 billion	\$2.055 billion	\$0

**UC supports \$2.295 billion for Supporting Effective Instruction State Grants authorized in Title II of the reauthorized Elementary and Secondary Education Act.** These funds improve teacher preparation programs and help recruit and train high-quality K-12 teachers, as well as reduce classroom sizes. The president's budget request eliminates these grants.

**Teacher Quality Programs**

- **Recommendation:** UC supports \$53.1 million for Teacher Quality Partnership Grants.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$53.1 million	\$43.1	\$0

**UC supports \$53.1 million in Teacher Quality Partnership Grants.** UC also supports robust funding for Department of Education programs that promote teacher quality, spark improvements in computer science instruction, promote preparation of STEM education teachers, support school leadership training, enhance professional development and advance innovations in teaching and learning. These programs faced significant cuts – and in the case of Teacher Quality Partnership Grants, total elimination – in the president's budget request, undermining the university's ability to help address the growing shortage of high-quality educators.

**Title VI International Education Programs**

- **Recommendation:** UC supports \$106 million for Title VI programs.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$106 million	\$72.2 million	\$0

**UC supports \$106 million for Title VI International Education programs.** At UC, Title VI supports research and expertise through National Resource Centers, which are important tools in serving the nation's economic, diplomatic, defense and national security needs. Title VI funding has suffered significant cuts in the past several years. Increased investments in Title VI programs are needed for our nation's increasingly global economy to ensure a steady pipeline of individuals with global understanding and language proficiency across professions. The increase in funding would support new National Resource Centers and Centers for International Business Education and Research (CIBER). Additional funding would also make Foreign Language and Area Studies (FLAS) fellowship stipends equal NSF graduate student stipends and increase the number of FLAS fellowships. UC opposes the elimination of Title VI programs, which are unique in their interdisciplinary mission.

**Graduate Assistance in Areas of National Need (GAANN)**

- **Recommendation:** UC supports \$48 million for GAANN.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$48 million	\$23 million	\$0

**UC supports \$48 million for graduate education support in the Department of Education to drive excellence and innovation in business, science, academia and government.** The continued erosion of federal graduate fellowship support over the past several years – including the elimination of GAANN, which awards fellowships to graduate students who contribute to federally-determined fields of national interest – is bad for the country and devastating to the talented scholars who require this support to continue their work. A stronger national commitment to graduate education is needed to sustain a pipeline of skilled workers in all sectors of the economy, as well as qualified professors who will mentor and train the teachers and students of tomorrow.

**Institute of Education Sciences (IES)**

- **Recommendation:** UC supports \$670 million for IES.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$670 million	\$615 million	\$521.6 million

**UC supports \$670 million for IES programs.** The university is a major innovator in educational research and is continuously working to increase the knowledge base on teacher effectiveness and the science of learning, while working in K-12 schools to improve the quality of educational practice. UC researchers use competitive funds from IES to address the nation's most pressing education needs, from early childhood to adult education, including increasing the number and quality of math and science teachers, improving teacher evaluations and the creation of successful professional development models.

**Department of Health and Human Services, National Institutes of Health**

**National Institutes of Health (NIH)**

- **Recommendation:** UC supports \$41.6 billion for NIH.

UC Request	FY 2019 Enacted	FY 2020 President's Budget Request
\$41.6 billion	\$39.1 billion	\$34.4 billion

**UC supports \$41.6 billion for NIH,** which is needed to drive U.S. biomedical research progress with breakthrough discoveries in cancer, the brain and precision medicine, and to achieve life-saving cures and treatments for chronic illnesses and life-threatening diseases. This request includes support for the highest levels of funding for the multi-year 21<sup>st</sup> Century Cures Act, in addition to increased annual NIH funding. NIH research funding enables California's biomedical research industry to remain a global innovation leader and supports hundreds of thousands of

jobs and economic growth in California and across the nation. In FY 2018, UC researchers successfully competed for more than \$1.9 billion in NIH awards in support of biomedical research and training, nearly half of the amount awarded to all California research institutions, and about two-and-one-half times as much NIH funding as the next highest institution.

**Department of Health and Human Services, Health Resources and Services Administration (HRSA)**

**Title VII Health Professions Training**

- **Recommendation:** UC supports \$424 million for Title VII Health Professions Training programs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$424 million	\$392.2 million	\$116.6 million

**UC supports \$424 million for the HRSA Title VII Health Professions Training programs.**

Title VII programs provide grants to medical schools for primary care education and training activities, including residency, internships and other accredited professional training programs in family medicine, general internal medicine and pediatrics. This funding helps UC Health medical school graduates defray their educational debt. UC Health medical residents carry on average \$154,047 in educational debt, with the national average nearly 19 percent higher.

The Title VII medical education training and loan programs are critical sources of financial support for UC students and physician faculty as they are designed to educate providers in interdisciplinary settings to meet the needs of special and underserved populations, as well as increase minority representation in California’s health care workforce. Programs under Title VII that reduce medical student debt in exchange for practicing in underserved areas are critical incentives that encourage new physicians to establish roots where their medical services are most needed. For example, data from HRSA shows that as many as 48 percent of National Health Service Corps (NHSC) recipients remain in the practice in which they fulfilled their Title VII funded work after their NHSC obligation is fulfilled.

**Title VIII Nursing Workforce Development**

- **Recommendation:** UC supports \$266 million for Title VIII Nursing Workforce Development programs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$266 million	\$249.5 million	\$83 million

**UC supports \$266 million for the HRSA Title VIII Nursing Workforce Development programs,**

which provide training for entry-level and advanced degree nurses to improve access to and quality of health care in underserved areas. Under these programs, nurses working in designated shortage areas have access to two student loan repayment programs. Primary care nurse practitioners, certified nurse midwives and psychiatric nurse specialists are eligible to apply to the National Health Service Corps Loan Repayment Program, while

registered nurses, including nurse practitioners, are eligible to apply to the NURSE Corps Loan Repayment Program. Title VIII programs support more than 1,500 nursing students who study in nursing programs at four UC campuses (Davis, Irvine, Los Angeles and San Francisco). Title VIII funding is critical to reducing educational debt of nurses.

**Department of Health and Human Services, Centers for Disease Control and Prevention**

**Centers for Disease Control and Prevention (CDC)**

- **Recommendation:** UC supports \$7.8 billion in program level funding for the CDC.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$7.8 billion	\$7.3 billion	\$6.5 billion

**UC supports \$7.8 billion in program level support for the CDC.** UC’s campuses are at the forefront of public health, and robust investment is needed to fulfill UC’s tripartite mission of training the next generation of clinicians (including experts in public health), innovating biomedical discoveries and delivering high-quality patient care. In FY 2018, UC received approximately \$41.6 million from the CDC to conduct a broad range of research, training and service projects. In addition to funds received directly from CDC, the university also receives sub-awards from non-federal sponsors with CDC contracts. **UC also supports multidisciplinary public health research to better understand the nature, causes and consequences of violence, unintended injury and death involving firearms.**

**National Institute for Occupational Safety and Health (NIOSH)**

- **Recommendation:** UC supports \$346 million for NIOSH.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$346 million	\$336.3 million	\$190 million

**UC supports \$346 million for NIOSH,** which is the primary federal agency dedicated to occupational injury prevention and control. The programs funded by NIOSH include scientific research, training and education activities that support efforts to address occupational health and safety needs and improve working conditions. The president’s budget request, which proposes a \$146.3 million cut to NIOSH over the FY 2019 enacted funding level, would severely reduce funding for critical workplace injury prevention and control efforts and eliminate funding for extramural research programs, including for the NIOSH Education and Research Centers and the NIOSH Agriculture, Fisheries and Forestry Program. The proposed funding cut would also limit the effectiveness of the National Occupational Research Agenda.

**NIOSH Education and Research Centers (ERCs)**

- **Recommendation:** UC supports \$31 million for NIOSH ERCs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$31 million	\$29 million	\$0

**UC supports \$31 million for the NIOSH ERCs**, which provide academic and research training programs in the occupational safety and health disciplines, as well as education and outreach programs to prevent workplace related injury and disease. UC operates two of the nation’s 18 ERCs – the northern California ERC based at UCSF and UC Berkeley, and the southern California ERC based at UCLA and UC Irvine. The president’s budget request would eliminate funding for extramural programs at NIOSH resulting in the elimination of the ERC program, which focuses on preventing workplace injuries.

**NIOSH Agriculture, Forestry and Fishing (AFF) Program**

- **Recommendation:** UC supports \$27.5 million for NIOSH AFF program.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$27.5 million	\$25.5 million	N/A

**UC supports \$27.5 million for the NIOSH AFF program.** The AFF program is the only substantive federal effort designed to prevent workplace injuries in the agricultural sector. UC operates one of nine regional NIOSH AFF Centers, the Center for Agricultural Disease and Injury Research, Education and Prevention located at UC Davis. The president’s budget request eliminates funding for extramural programs at NIOSH, resulting in the elimination of the AFF Program.

**Department of Health and Human Services, Agency for Healthcare Research and Quality**

**Agency for Healthcare Research and Quality (AHRQ)**

- **Recommendation:** UC supports \$460 million for AHRQ.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$460 million	\$338 million	\$256 million

**UC supports \$460 million for AHRQ**, the singular federally-funded agency charged with improving the safety and quality of America’s health care delivery system. In FY 2018, UC received \$15.8 million from AHRQ, which was invested in clinical effectiveness research and patient care initiatives to make health care safer and of higher quality, as well as more accessible, equitable and affordable. UC is concerned with annual reductions in AHRQ funding along with the Patient Centered Outcomes Research Institute’s (PCORI) Patient Centered Outcomes Research (PCOR) Trust Fund expiring Sept. 30, 2019. Together, PCORI and AHRQ promote advances in health care safety and quality that must be maintained. UC is a beneficiary of AHRQ grants. For example, AHRQ awarded funding to the UCLA Center for Health Policy Research to conduct the California Health Interview Survey (CHIS), the nation’s largest state health survey and a critical source of data on Californians. CHIS provides representative data on all 58 counties in California, including a detailed picture of health and the health care needs of California’s large and diverse population. Instead of maintaining AHRQ as a standalone

agency, the president’s budget request proposes to integrate AHRQ’s research into NIH as the National Institute for Research on Safety and Quality.

**Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA)**

UC System asks that the Substance Abuse and Mental Health Services Administration (SAMHSA), in coordination with the Health Resources and Services Administration (HRSA), award up to \$4 million annually to establish Regional Centers of Excellence in Substance Use Disorder Education, as set forth in Section 7101 of Public Law No 115-271, the SUPPORT for Patients and Communities Act.

**SUBCOMMITTEE ON STATE, FOREIGN OPERATIONS AND RELATED PROGRAMS**

**U.S. Agency for International Development (USAID)**

**Global Health Security Program**

- **Recommendation:** UC supports \$150 million Global Health Security Programs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$150 million	\$140 million	\$90 million

**Higher Education Institutional Capacity Development Partnerships**

- **Recommendation:** UC supports \$35 million for Higher Education Institutional Capacity Development Partnerships.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$35 million	\$35 million	N/A

**Feed the Future Food Security Innovation Labs**

- **Recommendation:** UC supports \$60 million for the Feed the Future Food Security Innovation Labs.

UC Request	FY 2019 Enacted	FY 2020 President’s Budget Request
\$60 million	\$55 million	N/A

**UC supports \$150 million for Global Health Security Programs; \$35 million for Higher Education Institutional Capacity Development Partnerships; and \$60 million for the Feed the Future Food Security Innovation Labs.** These USAID-university partnerships bring unparalleled research capabilities to the U.S. government’s global development and food security initiatives. UC leads six of the 24 Innovation Labs, a network of U.S. colleges and universities that partner with institutions in developing countries to conduct research and training in order to develop agricultural practices and technologies to improve safe and sustainable food production.

**SUBCOMMITTEE ON TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES**

**Department of Transportation**

**University Transportation Center Program**

- **Recommendation:** UC supports \$92.5 million for the University Transportation Center Program.

<b>UC Request</b>	<b>FY 2019 Enacted</b>	<b>FY 2020 President's Budget Request</b>
\$92.5 million	\$77.5 million	\$77.5 million

**UC supports \$92.5 million for the University Transportation Center Program.** While the Fixing America's Surface Transportation Act authorized \$77.5 million, the funding is insufficient. Additional funding should be appropriated to establish additional centers to promote better transportation, cultivate innovation, and address workforce issues that our transportation industry face.