

Michael V. Drake, MD President

Office of the President 1111 Franklin St. Oakland, CA 94607

universityofcalifornia.edu

CAMPUSES Berkeley Davis Irvine UCLA Merced Riverside San Diego San Francisco Santa Barbara Santa Cruz

MEDICAL CENTERS

Davis Irvine UCLA San Diego San Francisco

NATIONAL LABORATORIES

Lawrence Berkeley Lawrence Livermore Los Alamos

DIVISION OF AGRICULTURE AND NATURAL RESOURCES

April 4, 2022

CALIFORNIA CONGRESSIONAL DELEGATION

Dear Members of Congress:

On behalf the University of California (UC), thank you for your continued investments in the agencies and programs that support students obtaining higher education and the vast research and health care occurring on our campuses, national laboratories, and at our academic health centers. The fiscal year (FY) 2022 omnibus provided critical investments for UC and our nation's education, research, and health care enterprises. In particular, I want to express our gratitude for the \$400 increase in the maximum Pell Grant award—the largest single increase in a decade—and the \$1 billion for the Advanced Research Projects Agency for Health (NIH), National Science Foundation (NSF) and the Department of Energy Office of Science (DOE OS), among others.

As Congress now turns to the FY 2023 appropriations process, UC urges your full support for the federal agencies and programs that are critical to the University's ability to successfully carry out its education, research, health care and public service mission.

The federal government is an essential partner to the University of California, helping ensure that UC can continue to serve as an economic and innovation engine for California and the nation—together we educate the workforce of the next generation, advance scientific and technological breakthroughs, and provide world-class medical training and patient care.

The enclosed document outlines the University's FY 2023 federal appropriations priorities, but there are a few areas of specific importance I would like to call your attention to:

• Student Support: With federal support, UC provides one of the most comprehensive financial aid programs in the nation, but additional federal support is needed to ensure that higher education remains within reach for all students who wish to pursue it. Specifically, UC urges Congress to double the Pell Grant so that the maximum award reaches \$13,000. By increasing the maximum Pell Grant, students will be less inclined to take out loans, and more likely to graduate without a mountain of debt. The University has established an ambitious goal of a debt-free path to a UC degree, but this will require renewed investments from both the federal and state governments, including doubling the Pell Grant. Additionally, UC supports increased investments in programs for Minority-Serving Institutions (MSIs). At UC, five of our ten campuses have met the federal criteria for a Hispanic-Serving Institution (HSI)—while three are considered "emerging" HSIs—and two have met the criteria for an Asian American and Native American Pacific Islander-Serving Institution.

Page 2

- Research and Innovation: Building upon strong bipartisan support in Congress to pass comprehensive innovation legislation, UC encourages Congress to support these authorizations with robust and sustained appropriations funding for research. Further, UC researchers are well-positioned to win competitive grants across the full spectrum of federal research and UC supports robust and sustained funding for the federal research enterprise, including the NIH, NSF, DOE OS, USDA, NOAA and NASA, among others. UC also strongly supports efforts to increase the diversity of researchers, including efforts to encourage partnerships between leading research universities and MSIs. Additionally, efforts to address climate change remain a top priority for UC, and we encourage Congress' full support of programs and initiatives that invest in climate and sustainability research and technology.
- Health Workforce and Medical Research: As the nation continues to respond to COVID-19, while also preparing for future pandemics, investing in our health care system and those who keep it running has never been more critical. With six academic health centers and 20 health professional schools, University of California Health (UCH) is a national leader in providing high-quality patient care, health education, and health-related research. A strong federal partnership—including robust investment in health professions training and public health and prevention programs at the Health Resources and Services Administration, the Centers for Disease Control and Prevention and the Agency for Healthcare Research and Quality—is necessary to maintain the quality and magnitude of services that UC provides Californians. Further, as we look to the future of health and medicine, UC urges your continued investment in the NIH, as well as the recently authorized ARPA-H, which will accelerate advances, innovation, and transformative change in biomedical research and health care.

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) 997-3150 or by email at <u>Chris.Harrington@ucdc.edu</u>.

Sincerely,

Michael.

Michael V. Drake, M.D. President

Enclosures

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



TABLE OF CONTENTS

SUBCOMMITTEE ON AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES	.3
Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA)	3
Agriculture and Food Research Initiative (AFRI) USDA Capacity Grants programs – Hatch Act, Smith-Lever 3(b)-3(c) and McIntire-Stennis	
Cooperative Forestry	3
Expanded Food and Nutrition Education Program (EFNEP) Supplemental Nutrition Assistance Program Education (SNAP-Ed)	
Specialty Crop Research Initiative (SCRI)	
Citrus Disease Research	
Agriculture Advanced Research and Development Authority (AGARDA)	
Agriculture Research Infrastructure Needs	4
SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES	.5
National Aeronautics and Space Administration (NASA)	5
NASA Science Mission Directorate (SMD)	5
NASA Space Technology Programs	
Space Grant College and Fellowship Program	
National Science Foundation (NSF)	
Department of Commerce, National Oceanographic and Atmospheric Administration (NOAA))7
Office of Oceanic and Atmospheric Research (OAR)	7
National Sea Grant College Program, OAR	7
Office of Marine and Aviation Operations (OMAO), Aviation Operations and Aircraft	~
Services, Operations, Research, and Facilities (ORF) Regional Integrated Ocean Observing System (IOOS) in the National Ocean Service	
Department of Commerce, Economic Development Agency	
Economic Development Agency (EDA), Regional Innovation Program	
	0
SUBCOMMITTEE ON DEFENSE	9
Department of Defense (DOD)	9
Basic Research (6.1)	9
SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES	0
Department of Energy (DOE)1	0
Office of Science (OS)1	0
Advanced Research Projects Agency-Energy (ARPA-E)1	

Office of Environmental Management	12
SUBCOMMITTEE ON HOMELAND SECURITY	12
Department of Homeland Security (DHS)	12
Science and Technology (S&T) Directorate University Programs, S&T Directorate	
SUBCOMMITTEE ON THE INTERIOR, ENVIRONMENT AND RELATED AGENCIES	12
Department of Interior, Bureau of Reclamation	12
Bureau of Reclamation	12
Department of Interior, U.S. Geological Survey (USGS)	12
USGS Earthquake Hazards Program (EHP) USGS State Water Resources Research Institutes (WRRI), Water Resources Research Program	arch 13
Department of Interior, Wildland Fire Management	
Joint Fire Science Program National Endowment for the Humanities (NEH)	
National Endowment for the Arts (NEA)	
Environmental Protection Agency (EPA)	
EPA, Office of Science and Technology (S&T)	14
SUBCOMMITTEE ON LABOR, HEALTH AND HUMAN SERVICES, EDUCATION AND RELAT	
	14
AGENCIES Department of Education (ED)	14 14
AGENCIES	14 14 14
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG)	14 14 14 15 15
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS).	14 14 15 15 15
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans	14 14 15 15 15 15 16
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs	14 14 15 15 15 16 16
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP	14 14 15 15 15 16 16 16
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan	14 14 15 15 15 16 16 16 16 16 16
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions	14 14 15 15 15 16 16 16 16 16 17
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS). Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca	14 14 15 15 15 16 16 16 16 17 laureate
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans	14 14 15 15 15 16 16 16 16 17 laureate 17
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation	14 14 15 15 15 16 16 16 16 17 laureate 17 17
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation Child Care Access Means Parents In Schools (CCAMPIS)	14 14 15 15 15 16 16 16 17 laureate 17 laureate 17
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation Child Care Access Means Parents In Schools (CCAMPIS) Teacher Quality Programs Title VI International Education Programs	14 14 15 15 15 16 16 16 16 17 laureate 17 laureate 17 17 17 18 18
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation Child Care Access Means Parents In Schools (CCAMPIS) Teacher Quality Programs.	14 14 15 15 15 16 16 16 16 17 laureate 17 laureate 17 17 17 18 18
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation Child Care Access Means Parents In Schools (CCAMPIS) Teacher Quality Programs Title VI International Education Programs Graduate Assistance in Areas of National Need (GAANN) Institute of Education Sciences (IES)	14 14 15 15 15 16 16 16 16 17 laureate 17 laureate 17 17 17 17 17 18 18 18 19
AGENCIES Department of Education (ED) Pell Grant Maximum Award Pell Grant Discretionary Appropriations Supplemental Educational Opportunity Grant (SEOG) Federal Work-Study (FWS) Student Loans TRIO Programs GEAR UP Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispan Serving Institutions Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting Postbacca Opportunities for Hispanic Americans Teacher Preparation Child Care Access Means Parents In Schools (CCAMPIS) Teacher Quality Programs Title VI International Education Programs Graduate Assistance in Areas of National Need (GAANN)	14 14 15 15 15 16 16 16 16 17 laureate 17 laureate 17 17 17 17 17 18 18 18 19

Department of Health and Human Services, Health Resources and Services Administrati (HRSA)	
Title VII Health Professions Training	20
Title VIII Nursing Workforce Development	
Children's Hospital Graduate Medical Education (CHGME)	
Ryan White HIV/AIDS Program	
Department of Health and Human Services, Centers for Disease Control and Prevention	
(CDC)	21
CDC	21
Advanced Research Projects Agency-Health (ARPA-H)	
National Institute for Occupational Safety and Health (NIOSH)	
NIOSH Education and Research Centers (ERCs)	
NIOSH Agriculture, Forestry and Fishing (AFF) Program	23
Department of Health and Human Services, Agency for Healthcare Research and Quality	1
(AHRQ)	23
AHRQ	23
SUBCOMMITTEE ON STATE, FOREIGN OPERATIONS AND RELATED PROGRAMS	23
U.S. Agency for International Development (USAID)	23
Global Health Security Program	23
Higher Education Institutional Capacity Development Partnerships	
Feed the Future Food Security Innovation Labs	
SUBCOMMITTEE ON TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELA	ATED
	ATED 24
AGENCIES	ATED 24 24

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

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

Agriculture and Food Research Initiative (AFRI)

• Recommendation: UC supports \$564 million for AFRI.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$564 million	\$445 million	\$564 million

UC supports \$564 million for NIFA's AFRI program, which funds competitive research on human nutrition and health, agricultural productivity and sustainability, renewable energy and biofuels, water supply, and air and water quality. For fiscal year 2019-2020, UC Agriculture and Natural Resounces (ANR) had 139 AFRI projects with over \$98 million in competitively awarded funding to find cutting edge solutions to high-priority issues affecting California's rural and urban communities. This increased funding is critical to support existing as well as emerging crops in California such as coffee, moringa and hemp.

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

• **Recommendation:** UC supports \$300 million for Hatch Act, \$430 million for Smith-Lever 3(b)-3(c); and \$46 million for McIntire-Stennis capacity grants program.

	UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
Hatch Act	\$300 million	\$260 million	\$265 million
Smith-Lever 3(b)-3(c)	\$430 million	\$320 million	\$320 million
McIntire-Stennis	\$46 million	\$36 million	\$43 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 \$30 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, \$4 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 \$75.6 million for EFNEP.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$75.6 million	\$70 million	\$70 million

UC supports \$75.6 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.

Supplemental Nutrition Assistance Program Education (SNAP-Ed)

• **Recommendation:** UC supports \$900 million for SNAP-Ed.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$900 million	\$TBD	\$TBD

UC supports \$900 million for SNAP-Ed, a nationwide nutrition education program, through which UC carries out the UC CalFresh Nutrition Education Program, referred to as CalFresh Healthy Living, University of California. As one of four State Implementing Agencies in California for CalFresh Health Living, UC helps to teach individuals eligible for SNAP benefits about nutrition-based education and physical activity practices, in educational settings, including in schools, as well as community settings. The significant increase in funding will lead to more low-income individuals securing a healthier diet. A healthier diet leads to a lower risk of chronic health problems such as diabetes, heart disease and cancer.

Specialty Crop Research Initiative (SCRI)

UC supports full funding for the SCRI program, which provides critical funding for specialty crop research. UC also supports the inclusion in FY 2023 of language enacted in FY 2022, which allows the secretary of agriculture to waive the matching funds requirement under Section 412(g) of the Agricultural Research, Extension and Education Reform Act of 1998 (7 U.S.C. 7632(g)). Allowing the secretary of agriculture to continue to be able to waive the matching funds requirement applicable to the SCRI program is critical to allowing cutting edge specialty crops research, including research to address diseases and challenges facing the specialty crop industry, such as citrus greening disease.

Citrus Disease Research

UC supports the highest possible funding level to support research efforts to combat and further understand Huanglongbing (HLB), known as citrus greening disease, which continues to pose a critical threat to citrus crops. UC also supports the highest possible level of funding for Agriculture Research Service Building and Facilities, including funding for citrus screen houses. UC also supports providing continued funding for the Citrus Multi-Agency Coordination program in order to support growers' and researchers' abilities to quickly respond to citrus greening disease and Asian Citrus Psyllid.

Agriculture Advanced Research and Development Authority (AGARDA)

UC supports robust funding for AGARDA, which was authorized in the 2018 Farm Bill to leverage successful public-private partnerships to improve efficiency and accelerate research and development in pursuit of overcoming long-term and high-risk agricultural and food related science challenges. UC supports the request for \$5 million included in the FY 2023 president's budget request for AGARDA, to allow the AGARDA program to begin.

Agriculture Research Infrastructure Needs

UC supports \$365 million to be provided as part of an infrastructure package, or through the FY 2023 appropriations, to support addressing agriculture research infrastructure needs on campuses throughout the United States, including needs on UC campuses, as well as on UC ANR facilities throughout California. Many existing agriculture research-related buildings and

facilities, such as greenhouses and research and extension sites, are aging and are in need of replacement or updates. Bringing agricultue research facilities up to modern standards would allow for agriculture-related research to be conducted more effectiviely and efficiently. With updated agriculture research facilities in place, it would be possible to conduct greater levels of cutting-edge agricultural research.

SUBCOMMITTEE ON COMMERCE, JUSTICE, SCIENCE AND RELATED AGENCIES

National Aeronautics and Space Administration (NASA)

NASA Science Mission Directorate (SMD)

• **Recommendation:** UC supports \$9 billion for the NASA SMD.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$9 billion	\$7.614 billion	\$7.988 billion

UC supports \$9 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 **\$3 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."

NASA Space Technology Programs

• **Recommendation:** UC supports \$1.5 billion for the NASA Space Technology Program.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$1.5 billion	\$1.1 billion	\$1.4 billion

UC supports \$1.5 billion for NASA Space Technology programs, including innovation initiatives such as the Space Technology Research Institutes (STRIs), 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. There are four NASA STRI's and UC is home to two of them—the CUBES Institute at UC Berkeley and HOMES Institute at UC Davis.

Space Grant College and Fellowship Program

• **Recommendation:** UC supports \$60 million for the Space Grant College and Fellowship Program.

UC Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$60 million	\$54.5 million	\$57.0 million

UC supports \$60 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 \$11 billion for the NSF.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$11 billion	\$8.838 billion	\$10.5 billion

UC supports \$11 billion for NSF programs supporting merit-reviewed, fundamental research across all areas of science, engineering and education in NSF's eight 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 2020, UC researchers successfully competed for \$587 million in NSF funding across 2,195 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 Convergence Accelerator, a new capability to accelerate use-inspired, convergence research in areas of national importance. UC encourages the program to consider research focused on addressing natural disasters and wildfires.

UC supports robust funding for Mid-scale Infrastructure (MRI) projects. NSF, the National Science Board, Congress and the scientific community have all identified midscale research infrastructure as a critical need for NSF to bridge the gap between MRI and Major Research Equipment and Facilities Construction (MREFC). UC also supports a robust increase for the MREFC account to fund needed facility and equipment construction and instrumentation improvement programs.

NSF STEM education 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 2021, a significant number of UC graduate students from all 10 UC campuses earned prestigious GRFP fellowships – nearly 12 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 **Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES)** – an initiative to develop science and engineering talent across all sectors of society, including underrepresented groups.

UC 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 \$800 million for OAR.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$800 million	\$599.4 million	TBD

UC supports \$800 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:

- \$63 million for the Regional Climate Data and Information Program;
- \$113 million for the Climate Laboratories and Cooperative Institutes;
- \$75 million for Sustained Ocean Observations and Monitoring; and
- \$20 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 \$140 million for the National Sea Grant College Program.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$140 million	\$76 million	TBD

UC supports \$140 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 \$37.5 million for OMAO ORF.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$37.5 million	\$34.5 million	TBD

UC supports \$37.5 million for the OMAO ORF. The location, timing and intensity of heavy precipitation events on the US West Coast are controlled largely by the characteristics of landfalling 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 \$75.3 million for IOOS.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$75.3 million	\$41 million	TBD

UC supports \$75.3 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).

Department of Commerce, Economic Development Agency

Economic Development Agency (EDA), Regional Innovation Program

UC supports robust funding for the EDA Regional Innovation Program for universitybased incubators. UC encourages EDA to invest in university-based, high-tech business incubators to encourage entrepreneurship and promote technology commercialization through business startups. Furthermore, this program should support public-private partnerships for economic growth and job creation in areas with historically high unemployment and with a focus on Minority-Serving Institutions.

SUBCOMMITTEE ON DEFENSE

Department of Defense (DOD)

Basic Research (6.1)

• Recommendation: UC supports \$3.023 billion for Defense Basic Research (6.1).

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$3.023 billion	\$2.763 billion	\$2.275 billion

UC supports \$3.023 billion for Defense 6.1 Basic Research within a total request of \$18.732 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:

\$4.161 billion for the Defense Advanced Research Projects Agency (DARPA), which invests in high-risk, high-reward research to develop breakthrough military capabilities.

\$109.2 million for Army University and Industry Research Centers (PE 0601104A), including **\$4 million for the Army University Affiliated Research Center (UARC) – the Institute of Collaborative Biotechnologies – at UC Santa Barbara.**

\$64 million for Army Ground Technology (PE 0602114A), including **\$12 million for remote** sensing, modeling and forecasting for water storage research at UC Santa Barbara.

\$156.4 million for Army Network C3I Technology (PE 062146A, Line 15), including an increase of **\$10 million for a UC Berkeley and UC Santa Barbara partnership with Army Research Laboratory to develop hierarchical agile resonate materials.**

\$602.5 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.

\$249.5 million for Navy University Research Initiatives, including an increase of \$20 million for the Defense University Research Instrumentation Program (DURIP) (PE 0601103N).

\$82.7 million for Ocean Warfighting Environment Applied Research, including an increase of \$10 million for Research at Sea in support of Task Force Ocean priorities.

\$13 million for Commercial Economic Analysis (PE 0304310F), including \$9 million to establish a public-private consortium to improve and broaden professional military education for military officers and civilian employees of the federal government. **\$267 million for Defense-Wide Manufacturing Science and Technology Program** (PE 0603680D8Z), including **\$10 million for the maturation of high-volume integrated silicon-based lasers for use in national security critical applications at UC Santa Barbara.**

\$84.6 million for Basic Research Initiatives (PE 060111D8Z), including **\$14 million for the Minerva Initiative**, which deepens our understanding of the cultural and political conditions in areas of the world of strategic importance to our national security.

\$19.85 million for Defense Threat Reduction Agency (DTRA) University Strategic Partnership Basic Research (0601000BR), including **\$8 million for the Materials Science in Extreme Environments (MSEE)** program to better understand, predict and control the behavior of materials in extreme conditions caused by weapons of mass destruction.

\$1.283 billion for the DOD Congressionally Directed Medical Research Programs, which fosters novel approaches to biomedical research. These programs fill research gaps by funding high impact, high risk and high gain projects that other agencies may not venture to fund.

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT, AND RELATED AGENCIES

Department of Energy (DOE)

Office of Science (OS)

• **Recommendation:** UC supports \$8.8 billion for the DOE OS.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$8.8 billion	\$7.45 billion	\$7.8 billion

UC supports \$8.8 billion for the DOE OS, the primary federal agency supporting basic physical sciences research, which is 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 DOE OS, **UC supports research programs and scientific infrastructure investments that are fundamental to U.S. innovation leadership**, including:

- \$135 million to keep the upgrade of the Lawrence Berkeley National Laboratory (Berkeley Lab) Advanced Light Source (ALS-U) on schedule (Basic Energy Sciences (BES).
- **\$1 billion for Fusion Energy Sciences, including \$242 million for ITER.** UCLA, UCSD, UCR, UCI and Berkeley Lab are performing leading-edge fusion research and training the next generation of researchers.
- \$120 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).

- \$50 million to provide adequate funding for the Cosmic Microwave Background Stage IV experiment, a critical international scientific collaboration led by Berkeley Lab in partnership with other national laboratories and the National Science Foundation (High Energy Physics).
- In order to sustain world leadership in scientific user facilities, UC supports \$570 million for operation of the Department's light sources, \$151 million for the Nanoscale Science Research Centers (NSRC) and \$35 million for the recapitalization of scientific equipment at the NSRCs.
- 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.
- \$820 million for Biological and Environmental Research, including \$30 million for the Joint BioEnergy Institute, \$95 million for the Joint Genome Institute and \$6 million for the prototyping fabricated ecosystems, automation, sensors and computational tools to enable a predictive understanding of soil-plant-microbe interactions across molecular to ecosystem scales.
- \$47.5 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.
- Funding to support additional critical Science Laboratories Infrastructure projects, including \$35 million for the Linear Assets Modernization Project.

UC supports robust funding for the Office of Energy Efficiency and Renewable Energy (EERE) at a level of at least \$4.1 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 \$25 million for the Energy-Water Desalination Hub under the Advanced Manufacturing Office.

Advanced Research Projects Agency-Energy (ARPA-E)

• **Recommendation:** UC supports \$700 million for ARPA-E.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$700 million	\$450 million	\$700 million

UC supports \$700 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.

Office of Environmental Management

UC supports \$19 million within the Non-Defense Environmental Cleanup Program for the continuation of demolition and cleanup of legacy buildings to make room for modern, safer research facilities at Berkeley Lab.

SUBCOMMITTEE ON HOMELAND SECURITY

Department of Homeland Security (DHS)

Science and Technology (S&T) Directorate

• Recommendation: UC supports \$939 million for DHS S&T Directorate.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$939 million	\$886.3 million	\$901.2 million

UC supports \$939 million for the DHS 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 \$61.5 million for University Programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$61.5 million	\$57.8 million	\$51 million

UC supports \$61.5 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 the prevention and response to homeland security threats, as well as STEM education programs. UC also supports expanding the center of excellence program to align with industries of the future.

SUBCOMMITTEE ON THE INTERIOR, ENVIRONMENT AND RELATED AGENCIES

Department of Interior, Bureau of Reclamation

Bureau of Reclamation

UC supports \$22 million for projects that mitigate the Salton Sea's decline. These resources will support the multi-faceted approach that is key to making progress in protecting the health of local residents and the environment around the Salton Sea.

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

USGS Earthquake Hazards Program (EHP)

• Recommendation: UC supports \$96 million for EHP.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$96 million	\$90 million	\$TBD

UC supports \$96 million for the USGS EHP. Within the EHP program, UC requests \$26 million to fully develop and operate the West Coast earthquake early warning system. UC scientists are 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.

USGS State Water Resources Research Institutes (WRRI), Water Resources Research Program

• **Recommendation:** UC supports \$18 million for WRRI.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$18 million	\$14 million	\$TBD

UC supports \$18 million for the USGS WRRI 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 <u>website</u> that is updated daily with flood- and drought-related information.

Department of Interior, Wildland Fire Management

Joint Fire Science Program

• **Recommendation:** UC supports \$20 million for the Joint Fire Science program.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$20 million	\$8 million	\$TBD

UC supports \$20 million for the Joint Fire Science Program. Wildfire is a rapidly growing threat to communities, ecosystems, and families across the nation. As fire seasons grow longer and increasingly severe, our nation needs to increase investment in high-quality fire science delivery to support policymakers, managers and practitioners in addressing the complex challenges of wildfire.

National Endowment for the Humanities (NEH)

• **Recommendation:** UC supports \$204 million for the NEH.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$204 million	\$180 million	\$200.7 million

UC supports \$204 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 understanding.

National Endowment for the Arts (NEA)

• **Recommendation:** UC supports \$204 million for the NEA.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$204 million	\$180 million	\$203.6 million

UC supports \$204 million for the NEA, which is dedicated to providing people across the country 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.

Environmental Protection Agency (EPA)

EPA, Office of Science and Technology (S&T)

• **Recommendation:** UC supports \$864.2 million for the EPA S&T.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$864.2 million	\$750.1 million	\$864.2 million

UC supports \$864.2 million for EPA S&T 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 Maximum Award

• **Recommendation:** UC supports doubling the maximum annual Pell Grant to \$13,000 and indexing the grant to inflation.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$13,000	\$6,895	\$8,670

UC recommends <u>doubling the maximum Pell Grant</u> to \$13,000. Doubling the maximum Pell Grant award and indexing it to inflation ensures that all students who wish to attend higher education can afford to do so and protects the Pell Grant from inflationary pressures that have eroded the grant's purchasing power over time. This increase would substantially contribute to students' overall aid packages, and will help sustain students' basic needs—including housing and food security, health care and access to child care—and promote on-time graduation among the most vulnerable student populations.

Pell Grant Discretionary Appropriations

• **Recommendation:** UC supports the funding level necessary to reach a maximum award of \$13,000.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
Sums necessary to reach a maximum award of \$13,000	\$25.48 billion	Sums necessary to double maximum grant by 2029

More than 77,000 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 may take longer to complete their degrees.

Supplemental Educational Opportunity Grant (SEOG)

• Recommendation: UC supports \$1.090 billion for SEOG.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$1.090 billion	\$895 million	\$880 million

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 during the 2020-21 academic year, 23,799 UC students received an average award of \$763. 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. 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 Grant program, but as a *supplement* for emergency situations.

Federal Work-Study (FWS)

• **Recommendation:** UC supports \$1.520 billion for FWS.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$1.520 billion	\$1.210 billion	\$1.190 billion

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, often guiding them to a career path they want to pursue upon graduation.

Student Basic Needs

UC supports continued funding for the pilot program funded in the Fund for the Improvement of Postsecondary Education (FIPSE) program at \$10 million for FY 2023. This funding is to support programs that address the basic needs of students and report on best practices. In order to qualify, grantees must use funds to carry out or expand at least two of the following activities: to fund basic needs programs that support temporary housing, secure sleeping arrangements, provide free or subsidized food, access to on-campus child care, and/or other basic needs to eligible students; conduct outreach to students to encourage participation in basic needs programs and services; help eligible students apply for and enroll in local, state and federal public assistance programs; or coordinate and collaborate with government and/or community-based organizations. Awards shall continue to be prioritized for at least 25 percent of grants going to community colleges and at least 25 percent going to fouryear Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs) and other Minority Serving Institutions (MSIs). Grant priority shall go to institutions with 25 percent or higher Pell enrollment.

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 and protections 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, including the **Public Service Loan Forgiveness Program**, and improve program effectiveness will benefit borrowers and the federal government.

TRIO Programs

• **Recommendation:** UC supports \$1.307 billion for TRIO Programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$1.307 billion	\$1.137 billion	\$1.298 billion

GEAR UP

• **Recommendation:** UC supports \$435 million for GEAR UP.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$435 million	\$378 million	\$408 million

UC supports \$1.307 billion and \$435 million for TRIO and GEAR UP, 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, 39 percent of undergraduate students are first-generation and 34 percent of undergraduate students qualify for Pell Grants.

<u>Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part A – Strengthening Hispanic-Serving Institutions</u>

• **Recommendation:** UC supports \$250 million for Title V Part A programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$250 million	\$182.9 million	\$237 million

<u>Aid for Hispanic-Serving Institutions (HSIs) – Title V, Part B – Promoting</u> <u>Postbaccalaureate Opportunities for Hispanic Americans</u>

• **Recommendation:** UC supports \$100 million for Title V Part B programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$100 million	\$19.6 million	\$29 million

UC supports \$250 million for Title V, Part A competitive grants to help HSIs expand and enhance their undergraduate academic programs, and \$100 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 Latinx students and would be eligible to apply for these funds. These funds not only provide support services for Latinx students but also offer services to the campus community as a whole.

UC supports a \$20 million pilot to increase the number of Latinx PhDs via the FIPSE

program. This funding should support an award to a consortium of Hispanic-Serving Institutions (HSIs) that currently award PhDs. Funding should be used to develop and test new models of cross-institutional intellectual, research, and resource-sharing communities, create mentorship programs for PhD students, support graduate research experiences, and other uses associated with the pursuit of PhDs by Latinx students. While the number of Latinx university students continues to increase across the country, fewer than six percent of PhDs go to students that identify as Latinx. Moreover, because Latinx terminal degree holders pursue academic careers at lower percentages than average, fewer than five percent of faculty nationwide are Latinx.

Teacher Preparation

• **Recommendation:** UC supports \$2.148 billion for Teacher Preparation Grants.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$2.148 billion	\$2.171 billion	\$2.148 billion

UC supports \$2.148 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.

Child Care Access Means Parents In Schools (CCAMPIS)

• **Recommendation:** UC supports \$95 million for CCAMPIS.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$95 million	\$65 million	\$95 million

UC supports \$95 million for CCAMPIS. CCAMPIS provides low-income student-parents with reliable and affordable access to campus-based child care services, allowing parents to pursue higher education while raising young children. Current funding levels only allow for a small number of student-parents to benefit from this assistance nationally; expansion of the program would address basic needs issues prevalent on campuses across the country and provide safe, affordable and local educational opportunity for students' children.

Teacher Quality Programs

• **Recommendation:** UC supports \$132 million for Teacher Quality Partnership Grants.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$132 million	\$59.1 million	\$132 million

UC supports \$132 million for Teacher Quality Partnership Grants. UC supports robust funding for 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.

Title VI International Education Programs

• **Recommendation:** UC supports \$161 million for Title VI Programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$161 million	\$81.6 million	\$78 million

UC supports \$161 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. Increased investments in Title VI programs are needed to support our nation's increasingly global economy and 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.

Graduate Assistance in Areas of National Need (GAANN)

• **Recommendation:** UC supports \$35 million for GAANN.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$35 million	\$23.5 million	\$24 million

UC supports \$35 million for graduate education support in the Department of Education to drive excellence and innovation in business, science, academia and government. Graduate fellowship support, including GAANN, which awards fellowships to graduate students

who contribute to federally-determined fields of national interest, is vitally important to the country and the talented scholars who require this support to continue their work. A stronger federal 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 \$815 million for IES.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$815 million	\$737 million	\$662.5 million

UC supports \$815 million for IES programs. The university is a major innovator in educational research and is continuously working to increase the knowledgebase 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. As we move into the recovery phase after the pandemic, it will be important for regional research on how virtual learning affected our most vulnerable students.

Department of Health and Human Services, National Institutes of Health (NIH)

<u>NIH</u>

• **Recommendation:** UC supports a program level of \$49.048 billion for core NIH functions.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$49.048 billion	\$44.959 billion	\$45.234 billion

UC supports \$49.048 billion for the NIH base budget, 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 21st Century Cures Act, in addition to increased annual NIH funding. **This request does not include funding for the HHS Advanced Research Projects Agency for Health (ARPA-H). UC supports funding ARPA-H outside of NIH as Congress did in the FY 2022 omnibus appropriations bill, and lists ARPA-H separately in this document. 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 2020, UC researchers successfully competed for more than \$2.5 billion in NIH awards in support of biomedical research and training, receiving 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.**

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

UC urges NIH to fund cannabis-related research. Across the UC system, researchers are studying the public health and safety effects of cannabis use. The current classification of cannabis as a Schedule I drug is an impediment to biomedical research and poses a significant barrier for researchers wanting to conduct research. UC urges changes in federal law that will facilitate researchers being able to both cultivate and study the cannabis sold in dispensaries within the states that have legalized cannabis consumption.

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

Title VII Health Professions Training

• **Recommendation:** UC supports \$1.037 billion for Title VII Health Professions Training programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$1.037 billion	\$518.7 million	\$714.9 million

UC supports \$1.037 billion 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, and helps UC's medical school graduates defray their educational debt. 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 prepare providers practicing medicine 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 to encouraging 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 medical practice in which they fulfilled their Title VII funded work after their NHSC obligation is fulfilled.

Title VIII Nursing Workforce Development

• **Recommendation:** UC supports \$561 million for Title VIII Nursing Workforce Development programs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$561 million	\$280.5 million	\$295.0 million

UC supports \$561 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 NHSC 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).

Children's Hospital Graduate Medical Education (CHGME)

• **Recommendation:** UC supports \$718.8 million for CHGME.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$718.8 million	\$375 million	\$350

UC supports \$718.8 million for the HRSA CHGME program. CHGME helps fund residency programs that train pediatricians and pediatric sub-specialists at free-standing children's hospitals across the country, including UCSF Benioff-Oakland Children's Hospital. CHGME has helped train nearly half of the nation's pediatric general residents. Increased funding for CHGME will ensure free-standing children's hospitals can continue to take care of our nation's children, especially during the current mental health crisis.

Ryan White HIV/AIDS Program

• **Recommendation:** UC supports \$2.942 billion for the Ryan White HIV/AID Program including \$85 million for Part D and \$107.4 million for Part F.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$2.942 billion	\$2.495 billion	\$2.655 billion

UC supports \$2.942 billion for the HRSA Ryan White HIV/AIDS Program including \$85 million for Part D and \$107.4 million for Part F. The Ryan White program provides a critical safety net for HIV/AIDS patients across the country by funding outpatient and ambulatory settings for those in need. Ryan White Part F AIDS Education and Training Centers (AETCs) and Special Projects of National Significance (SPNSs) are nationwide networks of centers dedicated to training, technical assistance and innovation in HIV/AIDS care for patients. Part D provides family-centered care to low-income women, infant, children, and youth with HIV. UC academic health centers are leaders in utilizing Ryan White Act funds to innovate and provide care for patients with HIV/AIDS.

Department of Health and Human Services, Centers for Disease Control and Prevention (CDC)

<u>CDC</u>

• Recommendation: UC supports \$11 billion for CDC.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$11 billion	\$8.402 billion	\$10.675 billion

UC supports \$11 billion in program level support for the CDC. UC's campuses are at the forefront of public health, and robust investment is needed to ensure that UC can continue to train the next generation of clinicians (including experts in public health), innovate biomedical discoveries and deliver high-quality patient care. With six academic health centers that are serving on the frontlines of emerging global threats like COVID-19 (coronavirus), additional investment in the CDC to provide cutting-edge diagnostic tools and other resources to our institutions is critical for achieving national preparedness. In addition to funds received directly from CDC, the university also receives sub-awards from non-federal sponsors with CDC contracts.

UC supports \$15 million for the Vector-Borne Disease Centers of Excellence. These centers, made possible through the supplemental Zika Act in 2016, address the urgent public health challenges presented by ongoing spread of invasive vectors, exotic pathogens such as Zika virus, and several endemic pathogens transmitted by mosquitos and ticks. UC Davis is home to the Pacific Southwest Center of Excellence and serves a region with a diverse ecological landscape, ranging from cool temperate forest to dry, hot deserts, making the region highly susceptible to invasive vectors.

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

Advanced Research Projects Agency-Health (ARPA-H)

• **Recommendation:** UC supports \$5 billion for ARPA-H.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$5 billion	\$1 billion	\$5 billion

UC supports \$5 billion for ARPA-H, which will be modeled after the Defense Advanced Research Projects Agency (DARPA) and tasked with developing high-risk, high reward capabilities to drive biomedical breakthroughs. These efforts have the potential to radically transform the medical sector but are too early in development to attract private-sector investments. As a world leader in biosciences innovation, UC researchers will be highly competitive for these awards.

National Institute for Occupational Safety and Health (NIOSH)

• **Recommendation:** UC supports \$375.3 million for NIOSH.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$375.3 million	\$351.8 million	\$345.3 million

UC supports \$375.3 million for NIOSH, which is the primary federal agency dedicated to occupational injury prevention and control. 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.

NIOSH Education and Research Centers (ERCs)

• Recommendation: UC supports \$34 million for NIOSH ERCs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$34 million	\$31 million	\$30.0 million

UC supports \$34 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.

NIOSH Agriculture, Forestry and Fishing (AFF) Program

• **Recommendation:** UC supports \$30.5 million for NIOSH AFF.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$30.5 million	\$27.5 million	\$26.5 million

UC supports \$30.5 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.

UC also supports robust funding for the NIOSH Total Worker Health (TWH) program, which funds several TWH Centers of Excellence throughout the United States, including the California Labor Laboratory, a recently established TWH Center of Excellence, located at UCSF and UC Berkeley. The TWH program focuses on conducting research into occupational diseases and the prevention of workplace injuries. Additional funding provided to the TWH program would allow for greater research to be conducted to address workplace safety and injury prevention needs.

Department of Health and Human Services, Agency for Healthcare Research and Quality (AHRQ)

<u>AHRQ</u>

• **Recommendation:** UC supports \$500 million for AHRQ.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$500 million	\$350.4 million	\$376.1 million

UC supports \$500 million in discretionary funding for AHRQ, the singular federally-funded agency charged with improving the safety and quality of the U.S. health care delivery system. UC is a strong supporter of AHRQ funding along with the mandatorily funded Patient Centered Outcomes Research Institute's (PCORI) Patient Centered Outcomes Research (PCOR) Trust Fund. UC faculty receive AHRQ and PCORI grants for critical work that advances health care safety and quality. 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.

SUBCOMMITTEE ON STATE, FOREIGN OPERATIONS AND RELATED PROGRAMS

U.S. Agency for International Development (USAID)

Global Health Security Program

• **Recommendation:** UC supports \$1 billion for the Global Health Security Program.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget
		Request

\$1 billion \$TBD	\$TBD
-------------------	-------

Higher Education Institutional Capacity Development Partnerships

• **Recommendation:** UC supports \$50 million for Higher Education Institutional Capacity Development Partnerships.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$50 million	\$35 million	\$TBD

Feed the Future Food Security Innovation Labs

• **Recommendation:** UC supports \$70 million for the Feed the Future Food Security Innovation Labs.

UC FY 2023 Request	FY 2022 Enacted	FY 2023 President's Budget Request
\$70 million	\$58 million	\$TBD

UC supports \$1 billion for Global Health Security Programs; \$50 million for Higher Education Institutional Capacity Development Partnerships; and \$70 million for the Feed the Future Food Security Innovation Labs. UC also supports reinstating the PREDICT virus discovery and zoonotic disease surveillance and forecasting program, which since 2009, has led to the discovery of over 1000 new viruses, including coronaviruses similar to the COVID-19 virus. 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

Advanced Research Projects Agency for Infrastructure (ARPA-I)

• **Recommendation:** UC supports robust funding for ARPA-I.

UC supports robust funding in FY 2023 for the U.S. Department of Transportation (DOT) to establish and operationalize ARPA-I, which was authorized to be created by the DOT in the Infrastructure Investment and Jobs Act (IIJA), enacted in 2021 but was not funded. Like DARPA and ARPA-E, ARPA-I has the potential to transform transportation research, including funding early-stage transportation and infrastructure research conducted by academic institutions.