

## University of California 2024 Farm Bill Priorities

In 1862, Congress passed the Morrill Act, which granted federally controlled land to the states to create a “land-grant” college. Each state has a land-grant institution of higher education (sometimes referred to as an “1862”); in California, the University of California (UC) system fulfills that role. And within the UC system, UC Berkeley, UC Davis, UC Merced, UC Riverside and UC Santa Cruz are the Agricultural Experiment Station campuses that work in conjunction with UC Agriculture and Natural Resources (UC ANR) to conduct agricultural, forestry and nutrition research and extension.

UC is proud to be part of the land grant partnership that was developed between states and the federal government with the 1862 Morrill Act, 1887 Hatch Act and the 1914 Smith-Lever Act. That enterprise has, for 160 years, advanced scientific knowledge in all aspects of food production, and improved production capacity, profitability, and safety of the nation’s food system.

A vital component of federal support for agricultural research is the capacity funding specifically dedicated to supporting research and Cooperative Extension programs at America’s land-grant universities. These capacity funds are available annually on a non-competitive basis and require a match at the state and local levels; they include Hatch, Smith-Lever, Evans-Allen, McIntire-Stennis, Animal Health and Disease Research, Expanded Food and Nutrition Education Program, 4-H Youth Development, Renewable Resources Extension Act, and 1890 and 1994 Extension.

The University of California strongly supports investments in agricultural research, development, and extension. Funding for these activities has chronically been held at a low, stagnant level to the point where now most programs are massively underfunded.

With an increasingly global economy and demand for healthy, abundant, and affordable food, it is critical that our food systems are able to respond to and overcome challenges, such as prolonged drought, new invasive pests and diseases, and the lack of access to basic technology and adequate infrastructure.

Each Farm Bill provides an opportunity for critical federal investment into the research, extension and infrastructure of our nation’s land-grant institutions that will allow us to produce the food we need to nurture and sustain a growing population in a sustainable and environmentally responsible way. In turn, this strengthens the United States and California’s agricultural industry in an increasingly competitive global marketplace and improves the health, safety, and abundance of food for all consumers. As Congress considers the 2024 Farm Bill, UC has a vested interest in the programs listed in this document, which are described below.

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## TITLE IV – NUTRITION

### 1. Supplemental Nutrition Assistance Program Education (SNAP); Eligibility for College Students; 7 USC §2036a

The current SNAP Program should be amended to allow qualifying attendance at an institution of higher education to count as meeting the work requirements of determining eligibility for SNAP. Under current eligibility rules, it can be difficult for college students to prove they are eligible for SNAP benefits, which can greatly assist college students in meeting food security and basic needs. In order to help address the eligibility needs of college students for SNAP benefits, UC supports the inclusion in the 2025 Farm Bill of the text of H.R. 3183/S. 1488, the Enhance Access to SNAP Act of 2023, or the EATS Act of 2023, which are pending in the House and Senate in the 118<sup>th</sup> Congress.

Specifically, H.R. 3183/S. 1488 would amend the Food and Nutrition Act of 2008 (7 U.S.C. 2011), to “remove certain eligibility disqualifications that restrict otherwise eligible students” from participating in SNAP. These bills would amend the definition of household in 7 U.S.C. 2012(m)(5) of the Food and Nutrition Act of 2008, to expand eligibility for college students by adding language to specify that “individuals who are bona fide students enrolled at least half time in any recognized school, training program, or institution of higher education,” can be eligible to participate in the SNAP program who meet other requirements. The bills would also strike existing language that states “any such person enrolled in an institution of higher education shall be ineligible to participate in the supplemental nutrition assistance program unless he or she meets the requirements of subsection (e),” which deals with eligibility for students related to work requirements.

#### Recommendation

- UC supports the inclusion of H.R. 3183/S. 1488 in the 2024 Farm Bill, which would help to address eligibility challenges faced by college students under SNAP to ensure that college students are better able to access benefits to address food insecurity while attending college.

## TITLE VII – RESEARCH, EXTENSION, AND RELATED MATTERS

### 1. Smith-Lever Act of 1914; Sections 3(b) and 3(c) Capacity Grants; 7 U.S.C. §341 et seq.

The Smith-Lever Act established the Cooperative Extension System at land-grant colleges and universities in partnership with USDA and local governments. UC Cooperative Extension develops and extends science-based information and programming, bringing the power of UC research into the hands of local communities on topics regarding agriculture, natural resources, nutrition, economic and youth development.

#### Recommendation

- Protect Smith-Lever Act programs as currently written.

### 2. Smith-Lever Section 3(d); EFNEP Expanded Food and Nutrition Education Program (EFNEP); 7 U.S.C. §3175

The Expanded Food and Nutrition Education Program (EFNEP) is a federally funded program that helps families establish and maintain healthy eating habits and physically active lifestyles. In California, EFNEP is administered by the UC Cooperative Extension in 24 of the 58 counties. Through EFNEP, our Cooperative Extension advisors assist limited-resource clients gain the knowledge, skills and changed behavior necessary to choose nutritious diets and improve physical well-being. In federal fiscal year (FY) 2022, UC ANR received \$3.8 million in grants from the Smith-Lever Act to support EFNEP activities. For

every dollar invested in EFNEP, more than \$10 is saved in current and future healthcare costs.<sup>1</sup>

Recommendation

- Reauthorize the EFNEP program and increase funding to \$95 million per FY.

**3. Hatch Act – Agricultural Experiment Stations; 7 U.S.C. §361a et seq.**

The Hatch Act of 1887 provides funding for agricultural research at State Agricultural Experiment Stations (AES). In California, our AES facilities include UC Berkeley, UC Davis, UC Merced, UC Riverside, and UC Santa Cruz. Hatch Act funding has been used to conduct research on emerging issues and allows us to work directly with producers. One example is direct work with local vineyards and evaluating the impact of wildfire smoke on wine flavor profiles and consumer preferences.

Recommendation

- Protect the Hatch Act program as it is currently written.

**4. McIntire-Stennis Cooperative Forestry Act; 16 U.S.C. §582a-1 et seq.; §7604 of the 2018 Farm Bill**

The McIntire-Stennis Cooperative Forestry Act funds research associated with the production, utilization and protection of forest lands. At UC Berkeley, seven faculty groups are conducting research supported with McIntire-Stennis funds. With this funding, UC Berkeley faculty draw on a wide range of techniques to assess social and ecological factors affecting forest conservation and management. Research topics include reduction of fire risk, with benefits for human well-being, restoring fire regimes on the landscape to better manage forests, and assessing the linkages between fire, carbon storage, and water supplies in montane forest ecosystems.

Recommendation

- Protect the McIntire-Stennis program as it is currently written.

**5. Research Facilities Act; §7503 of the 2018 Farm Bill**

The Research Facilities Act was reauthorized by the 2018 Farm Bill to create an agriculture and food-focused research infrastructure program for facility construction, alteration, acquisition, modernization, renovation, or remodeling. The need to reauthorize and fund the Research Facilities Act is clear: infrastructure in most land-grant universities is aging, inadequate, and, in many cases, obsolete.

A 2021 Gordian Report<sup>2</sup> documented the magnitude of the infrastructure needs by studying the age of buildings, lack of capital investment over time, and levels of deferred maintenance. The needs are sobering – the total deferred maintenance cost is at least \$11.5 billion. For the United States to remain a world leader in food and agricultural research, this aging infrastructure problem must be addressed.

For UC specifically, many of our agricultural research buildings and facilities were built in the 1950's and 60's and are in need of replacement or significant improvement. In fact, 70 percent of the research facilities at U.S. public colleges of agriculture are at the end of their useful life. Bringing our facilities up to modern standards would provide capacity for precision agriculture, remote sensing, growing space for CRISPR-based research, and would ensure that cutting-edge research can continue to be conducted to meet the agricultural and natural resources needs of California and the nation.

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<sup>1</sup> Dollahite, Jamie, Donald Kenkel, and C. Scott Thompson. An economic evaluation of the expanded food and nutrition education program. *Journal of Nutrition Education and Behavior* 40.3 (2008): 134-143.

<sup>2</sup> A National Study of Capital Infrastructure at Colleges and Schools of Agriculture. Gordian. March 2021. <https://www.aplu.org/library/a-national-study-of-capital-infrastructure-at-colleges-and-schools-of-agriculture-an-update/file>

### Recommendation

- Reauthorize the Research Facilities Act and remove the matching funds requirement.
- UC supports the inclusion of S. 2589, the AG RESEARCH Act, in the 2024 Farm Bill, which would expand funding for grants under the Research Facilities Act.
- Consider providing significant funding for the Research Facilities Act over the five-year Farm Bill.

### **6. Increase cap on retirement contributions from capacity grants; 7 U.S.C. §331**

Employer contributions from capacity grants (Hatch Act, Smith-Lever Act, and animal health and disease research funds provided to veterinary schools and AES) to land-grant college retirement systems are limited to 5 percent of that portion of the salaries paid. In contrast, this limitation is not placed on competitive grants or other capacity grants not listed above (McIntire Stennis, 1890 Facilities, Renewable Resources Extension Act, EFNEP and Tribal College Endowment). Competitive grants are subject to the federally negotiated indirect cost rate and composite benefit rate in determining retirement contributions. This provision unfairly places limitations only on retirement accounts for land-grant college employees funded with capacity grants, which results in inequitable retirement savings options for employees, due to the restrictions placed on employer retirement plan contributions.

### Recommendation

- Remove the cap on employer contributions to land-grant college retirement systems and allow capacity grant funds to use the federally negotiated indirect cost rate and composite benefit rate in setting employer retirement contributions.
- UC recommends addressing this inequality in the Farm Bill, by striking the language in 7 U.S.C. §331 as follows: “~~Provided, That there shall not be deducted from Federal funds and deposited to the credit of retirement accounts as employer contributions, amounts in excess of 5 per centum of that portion of the salaries of employees paid from such Federal funds:--~~”

### **7. Agriculture and Food Research Initiative (AFRI); 7 U.S.C. §3157; §7504 of the 2018 Farm Bill**

UC strongly supports AFRI, which was established in its current form in the 2008 Farm Bill and provides critical funding for competitively-awarded agricultural research grants that seek to advance technologies and develop a workforce that will improve our food security, national security, energy self-sufficiency and the health of Americans. In FYs 2016-21, UC received over \$135 million in AFRI funding.<sup>3</sup> These awards have focused on addressing critical issues such as, invasive pests, citrus research, STEM workforce development, agricultural technology, clean water, food safety, water use and irrigation, and providing UC labs with much-needed research equipment.

Furthermore, AFRI's Competitive, Special and Facilities Research Grant Act is another critical program, which is geared towards providing opportunities for new investigators. However, the stated criteria for how “new investigators” are defined is in some cases too restrictive and does not reflect future workforce related needs, such as the impact of pandemics or considering family leave needs. Currently, new investigators are defined as those who “do not have an extensive research publication record” and who are “within 5 years of the beginning of the initial career track position.” This definition does not exclude scientists who have worked outside of academia for many years but then, for example, take on an academic appointment. Language should be added specifying that applicants under the “new investigator” category should be within 12 years of their terminal degree, with an allowance for medical leave or other extenuating circumstances, and do not already have extensive publication records.

### Recommendation

- Reauthorize AFRI and increase or maintain the authorization level at \$700 million per FY.

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<sup>3</sup> NIFA. (Jun. 2022). *NIFA: Recent Awards*. Retrieved from [https://portal.nifa.usda.gov/lmd4/recent\\_awards?report\\_title=Recent%20Awards&from\\_site=NIFA&search\\_label=Awards%20Listing](https://portal.nifa.usda.gov/lmd4/recent_awards?report_title=Recent%20Awards&from_site=NIFA&search_label=Awards%20Listing).

- Avoid attempts to “earmark” AFRI for specific fields of research or to combine it with other programs.
- Change “new investigator” criteria to apply to individuals “who are within 12 years of their terminal degree, with an allowance of up to 2 years due to medical leave or other extenuating circumstances and have fewer than 25 peer-reviewed publications as first, or senior, author and fewer than 75 total peer-reviewed publications.”

#### **8. USDA-NIFA Crop Protection Pest Management Program (CPPM), Regional Integrated Pest Management Centers**

Since 2000, USDA-NIFA has funded the Regional Integrated Pest Management Centers (Regional IPM Centers), which serve a critical role in promoting smart, safe, and sustainable pest management practices. The four Regional IPM Centers serve as a hub of multi-state partnerships and communication networks linking researchers and educators from the public and private sectors to address pest management needs. These Centers, including the Western Regional IPM Center, operated by UC ANR, work to bring the right people together with the necessary resources to solve the region’s most pressing pest problems. As more pests and diseases enter the United States, and impact agricultural and natural spaces, additional resources are needed to address, mitigate, and treat pests and diseases.

##### Recommendation

- Maintain or increase support for USDA-NIFA Crop Protection Pest Management programs.

#### **9. Specialty Crop Research Initiative (SCRI); §7305 of the 2018 Farm Bill**

The SCRI program within USDA-NIFA traces its roots to the 1998 Farm Bill, but it was established in its current form in the 2008 Farm Bill and provides critical funding to support research. SCRI is important to California’s agricultural research enterprise as California grows over 400 agricultural commodities and produces over 50 percent of the nation’s supply of fruits, nuts, and vegetables. In fact, eight of California’s top 10 commodities are specialty crops: almonds, grapes, pistachios, lettuce, strawberries, tomatoes, flowers and walnuts.<sup>4</sup> Since SCRI’s inception in 2008, UC entities have received over \$94 million in funding.<sup>3</sup>

##### Recommendation

- Reauthorize SCRI and increase or maintain the mandatory funding at \$80 million per FY.
- Include H.R. 679 in the Farm Bill, to authorize the Secretary of Agriculture to waive the matching funds requirement under the specialty crop research initiative, and for other purposes.
- Eliminate the matching funds requirement for the SCRI program, and other programs, which were imposed under the 2018 Farm Bill.

#### **10. Emergency Citrus Disease Research and Extension (ECDRE) program; 7 U.S.C. 7632(j); §7306 of the 2014 Farm Bill**

UC campuses and UC ANR are at the forefront of conducting research to address citrus greening disease. The 1998 Farm Bill created the Citrus Disease Research and Extension (CDRE) program within SCRI to combat Huanglongbing (HLB; citrus greening), which is a bacterial disease spread by the Asian Citrus Psyllid. Citrus greening has been ravaging Florida’s citrus industry and has the potential to devastate Texas’ and California’s citrus industries as well. The 2014 Farm Bill re-created CDRE as the Emergency Citrus Disease Research and Extension program (ECDRE), and the 2018 Farm Bill funds the program through the Emergency Citrus Disease Research and Development Trust Fund ([see Title XII, Miscellaneous section for additional information](#)). Congress provided \$25 million per year for FYs 2019-23 for ECDRE, for a total of \$125 million. Since 2014, UC has received over \$52 million in funding to conduct

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<sup>4</sup> *California Agricultural Statistics Review 2020-2021*. California Department of Food and Agriculture. Retrieved from [https://www.cdffa.ca.gov/Statistics/PDFs/2021\\_Ag\\_Stats\\_Review.pdf](https://www.cdffa.ca.gov/Statistics/PDFs/2021_Ag_Stats_Review.pdf)

critical research to combat citrus greening from the CDRE/ECDRE program.<sup>5</sup>

Recommendation

- Reauthorize ECDRE and increase or maintain mandatory funding of \$25 million per FY.

**11. Support for Honeybee Research and a Genetics and Breeding Health Center**

Honeybees are responsible for the pollination of more than 80 agricultural crops, making them a pivotable player in the production of a stable food supply. U.S. beekeepers are facing increasing threats to colony health; as much as 40 percent of the honeybee stock has been lost each year over the past decade to issues such as parasites and pathogens, pesticides, environmental changes, and ineffective management tools for bee health management. UC supports additional funding for honeybee research, which is critical to support the shrinking U.S. honeybee population. UC also supports the establishment of a new honeybee genetics and breeding health center, which could serve as a hub for a multi-state partnership to engage in efforts to address the honeybee crisis with a focus on the development and delivery of novel science-based honeybee health management tools.

Recommendation

- Support funding for honeybee research in the Farm Bill and the creation of a honeybee genetics and breeding health center.

**12. Foundation for Food and Agriculture Research (FFAR); §7603 of the 2018 Farm Bill**

FFAR was created in the 2014 Farm Bill with the hope of filling in the research gaps that are currently unfunded by other programs. The 2014 Farm Bill provided one-time mandatory funding for FFAR of \$200 million and all research projects require a 1:1 match—the majority of which are raised by the individual researcher. The 2018 Farm Bill provided FFAR with \$185 million. Thus far, UC campuses and spin-offs have received over \$10 million in FFAR grant awards.

Recommendation

- Reauthorize the FFAR program.

**13. Education Grants Program for Hispanic-Serving Institutions (HSI); 7 U.S.C. §3241**

The HSI Program is a critical USDA-NIFA competitive grants program. These grants support STEM education programs in the food and agricultural sciences at institutions with at least 25 percent Hispanic enrollment. UC Irvine, UC Merced, UC Riverside, UC Santa Barbara, and UC Santa Cruz (with UC Davis pending designation) are designated HSIs and are eligible for these funds. Increasing funding for the HSI Education Grants Program would also provide critical funding to improve the agricultural sector's workplace pipeline in academic and non-academic settings. The Farm Bill authorizes the program at \$40 million per fiscal year, and historically it has received appropriations of \$11-14 million each fiscal year. Since 2016, UC has received \$6 million.<sup>6</sup>

Recommendation

- Reauthorize the Education Grants Program for HSIs program and increase the authorization to \$50 million per FY.

**14. Organic Agriculture Research and Extension Initiative (OREI); 7 U.S.C. §5925b; §7210 of the 2018 Farm Bill**

California has the largest number of organic farms in the country and generates the most revenue (farm

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<sup>5</sup> NIFA. (Jun. 2022). *NIFA: Recent Awards*. Retrieved from [https://portal.nifa.usda.gov/lmd4/recent\\_awards?report\\_title=Recent%20Awards&from\\_site=NIFA&search\\_label=Awards%20Listing](https://portal.nifa.usda.gov/lmd4/recent_awards?report_title=Recent%20Awards&from_site=NIFA&search_label=Awards%20Listing).

<sup>6</sup> NIFA. (Jun. 2022). *NIFA: Recent Awards*. Retrieved from [https://portal.nifa.usda.gov/lmd4/recent\\_awards?report\\_title=Recent%20Awards&from\\_site=NIFA&search\\_label=Awards%20Listing](https://portal.nifa.usda.gov/lmd4/recent_awards?report_title=Recent%20Awards&from_site=NIFA&search_label=Awards%20Listing).



gate value), totaling \$3.6 billion or 36 percent of the nation's organic agriculture industry.<sup>7</sup> In order to support this industry, NIFA's OREI program funds research projects designed to enhance the ability of producers who have already adopted organic standards to grow and market high quality agricultural products. The 2018 Farm Bill provided mandatory funding for OREI, ramping up from \$30 million per fiscal year to \$50 million by FY 2023 and for each year thereafter. Since 2018, UC has received nearly \$2 million in OREI grants to support organic agriculture research and extension.<sup>8</sup>

Recommendation

- Reauthorize OREI and increase or maintain the mandatory funding at \$50 million per FY.

**15. Higher Education Challenge Grants Program; Grants and Fellowships for Food and Agriculture Sciences Education; §7107 of the 2018 Farm Bill; 7 U.S.C. §3152**

The USDA Higher Education Challenge Grants program is designed to strengthen the capacity of universities to improve the quality of instruction to help meet current and future workforce needs in the food and agricultural sciences. This grant program also supports graduate students in the USDA mission areas of food, agriculture, and natural resources sciences. Universities with significant minority enrollments, like many UC campuses, may receive preferential consideration in the application process.

Recommendation

- Reauthorize the Higher Education Challenge Grants program and return the program to its historic authorization level of \$60 million per FY. The 2014 Farm Bill lowered the authorization level to \$40 million per FY.

**16. Forestry Products Advanced Utilization Research; 7 U.S.C. §7655b(f)(1)); §7308 of the 2018 Farm Bill**

This program enables the U.S. Forestry Service to run wood innovation grant and demonstration programs, which support critical wood products innovation research in California, such as related to wood quality improvement, novel engineered lumber products and renewable energy from wood, and timberland management. Funding is also provided for demonstration and manufacturing projects.

Recommendation

- Reauthorize the Forestry Products Advanced Utilization Research program and maintain or increase the authorization level of \$7 million per FY.

**17. Food Animal Residue Avoidance Database Program; 7 U.S.C §7642; §7306 of the 2018 Farm Bill**

The Food Animal Residue Avoidance Database (FARAD) program provides critical scientifically based services to agriculture producers related to ensuring best practices are followed to avoid drug, environmental, toxin and pesticide contaminant residues in food, and animal stocks, and helps to avert animal health and food safety crises. Every year, the FARAD program handles more than 1,000 inquiries, with an estimated impact on more than 6 million animals per year. UC Davis' School of Veterinary Medicine operates one of the five FARAD centers across the U.S.

Recommendation

- Reauthorize the FARAD program and increase the authorization from \$2.5 million to \$5 million per FY.

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<sup>7</sup> USDA. (Oct 2020). *2017 Census of Agriculture, 2019 Organic Survey*. Retrieved from [https://www.nass.usda.gov/Publications/AgCensus/2017/Online\\_Resources/Organics/ORGANICS.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Organics/ORGANICS.pdf).

<sup>8</sup> NIFA. (Jun. 2022). *NIFA: Recent Awards*. Retrieved from [https://portal.nifa.usda.gov/lmd4/recent\\_awards?report\\_title=Recent%20Awards&from\\_site=NIFA&search\\_label=Awards%20Listing](https://portal.nifa.usda.gov/lmd4/recent_awards?report_title=Recent%20Awards&from_site=NIFA&search_label=Awards%20Listing).

### **18. Continuing Animal Health and Disease, Food Security, and Stewardship Research, Education, and Extension Programs; 7 U.S.C. § 3195; §7113 of the 2018 Farm Bill**

This program is critical for maintaining the veterinary medical component of the Agricultural Experimentation Stations. UC Davis runs the Center for Food Animal Health (CFAH) in California, which is the veterinary medical component of the California Agricultural Experiment Stations. The CFAH organizes resources for and conducts research on animal diseases, important to livestock industries, on important food borne and vector borne disease problems, zoonoses associated with diseases of livestock, and environmental health issues important to the state of California.

#### Recommendation

- Reauthorize the Continuing Animal Health and Disease, Food Security, and Stewardship Research, Education and Extension program and increase or maintain the authorization at \$25 million per FY.

### **19. Veterinary Services Grant Program (VSGP); §7106 of the 2018 Farm Bill**

The VSGP program is designed to address gaps in veterinary care services, by helping to address shortages in the number of veterinarians providing animal care, including helping to prepare them for practice in rural areas, facilitating the engagement of private veterinary practices in public health activities, and aiding the practices of veterinarians, who have completed service under the Veterinary Medicine Loan Repayment Program. More than 500 counties across the U.S. have shortages of food animal veterinarians and today, and only 3-4 percent of new veterinary school graduates pursue livestock or other food-animal practice areas, a stark decline from the 40 percent of graduates, who specialized in this area just 40 years ago. The decline in the number of food animal veterinarians heightens concerns related to food safety threats, animal disease outbreaks, and the potential for disease spillover from animals to humans.

#### Recommendation

- Reauthorize the VSGP program.

### **20. Renewable Resources Extension Act of 1978; 16 U.S.C. §1675; §7509 of the 2018 Farm Bill**

Landowners and managers face challenges associated with invasive species, increased risk of destructive wildfires and climate change. Extending science-based information is essential for addressing resource management concerns from forest health to local economies. UC ANR uses Renewable Resources Extension Act (RREA) funds to provide grants to academics to expand the capacity of natural resource extension educators to deliver current, relevant, research-based programs to help forest and rangeland owners, communities, policymakers, and the public make informed decisions in areas that are critical importance to the ecological, social and economic well-being of California. Projects include presenting workshops to counties interested in forming Prescribed Burn Associations, developing technical guides on hazardous fuel reduction and developing outreach materials.

#### Recommendation

- Reauthorize the RREA.

### **21. Rangeland research programs; §7134 of the 2018 Farm Bill**

Rangeland research programs funded by the USDA allow UC scientists to develop and advance science-based knowledge in partnership with diverse management and policy stakeholders, to promote agricultural and environmental sustainability practices on California's grazing lands.

#### Recommendation

- Reauthorize rangeland research programs.

### **22. Increase investment in integrated pest management programs and research**

Invasive pests and disease management is a critical area that requires more federal investment to address the increasing impact of invasive species on agricultural production, consumer horticulture, and natural lands. The eradication and immediate suppression of invasive pests is expensive. For example, California alone spends a total of \$45 million per year for the suppression of one citrus pest/disease,

citrus greening (ACP/HLB). Furthermore, as pesticide applications change, additional investment is required for research on pesticide replacement programs.

Recommendation

- Increase investments in integrated pest management programs and research funding.
- Identify invasive species and diseases research as a priority area within USDA programs.
- Increase funding for the Methyl Bromide pesticide replacement program to support research.

**23. Minor Crop Pest Management Program – Interregional Research Project 4 (IR-4)**

The IR-4 Program provides expert assistance for the development and registration of crop protection products needed for agricultural use and use on specialty crops. For the past 57 years, the IR-4 program has facilitated cooperation between producers, grower organizations, state Cooperative Extension Services, land-grant universities, and federal agencies to ensure the availability of safe, effective and economical pest management tools for specialty crops, minor crops and minor uses.

Recommendation

- Increase funding for the IR-4 project to \$50 million in mandatory funding annually.

**24. Supplemental Nutrition Assistance Program Education (SNAP-Ed); 7 U.S.C. §2036a**

The CalFresh Healthy Living, UC nutrition education program has served California's communities through UC Cooperative Extension. This statewide SNAP-Ed program inspires and empowers underserved Californians to improve their health and the health of their communities by promoting awareness, education, and community change through partnerships, resulting in healthy eating and active living improvements. With the passage of the Healthy Hunger Free Kids Act, programs now include the integration of policy, systems and environmental change initiatives designed to improve healthy lifestyles and reduce obesity and chronic diseases. In 2021, UC's SNAP-Ed program reached over 28,000 individuals through evidenced-based direct education to youth, adults and seniors in 32 counties.

Recommendation

- Reauthorize the SNAP-Ed program and increase the authorization level to \$900 million per FY.

**25. Sustainable Agriculture Research and Extension (SARE); 7 U.S.C. §5831**

SARE offers competitive grants to farmers, ranchers and other agricultural professionals and scientists for on-farm research, education, and professional development. Since 1988, SARE has invested over \$361 million in over 8,100 grants, of which nearly half were awarded to farmers and ranchers.<sup>9</sup> Over \$14.8 million has been awarded in California, funding innovative projects that improve farm production by employing conservation methods such as reduced tillage, crop rotations, use of cover crops and improving irrigation efficiency.

Recommendation

- Reauthorize the SARE program and increase or maintain funding at \$45 million per FY.

**26. Urban, Indoor and Other Emerging Agricultural Production Research, Education and Extension Initiative (UIE); §7212 of the 2018 Farm Bill**

The UIE was created in the 2018 Farm Bill to support research, education and extension activities that facilitate development of urban, indoor, and other emerging agricultural production, harvesting, transportation, aggregation, packaging, distribution and marketing systems. The UIE is administered by NIFA, and the competitive grant program was implemented in 2022. The 2022 UIE program priorities include: identifying and promoting the factors that contribute to successful emerging agricultural

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<sup>9</sup> SARE. (Nov. 2022). *Sustainable Agriculture Grants*. Retrieved from <http://www.sare.org/Grants>.

production systems, analyzing how new agricultural sites are determined and evaluated and developing new crop varieties and agricultural products to connect to new markets.

Recommendation

- Reauthorize the UIE initiative and increase or maintain funding at \$10 million per FY.

**27. Supplemental and Alternative Crops: Hemp; §7129 in the 2018 Farm Bill**

The 2018 Farm Bill extended the Supplemental and Alternative Crops program at the USDA and provides \$2 million per FY in funding through FY 2023. It also amended the program to expand eligibility to industrial hemp. UC supports the reauthorization of this program and continued funding for industrial hemp research.

Recommendation

- Reauthorize the Supplemental and Alternative Crops and Hemp program and increase or maintain funding at \$2 million per FY.

**28. Biomass Research and Development Initiative; 7 U.S.C. §8108; §7507 in the 2018 Farm Bill**

The Biomass Research and Development Initiative provides critical grant funding for projects addressing research, development and demonstration of biofuels and bio-based products and the methods, practices and technologies needed for their production.

Recommendation

- Reauthorize the Biomass Research and Development Initiative and increase or maintain funding at \$20 million per FY.

**29. Agriculture Advanced Research and Development (AGARDA); §7132 of the 2018 Farm Bill**

The 2018 Farm Bill authorized the creation of the AGARDA pilot program to assist with the development of agriculture related technologies. UC supports the reauthorization of the AGARDA program to support the commercialization of agriculture related technologies.

Recommendation

- Reauthorize the AGARDA program.

**In addition to reauthorizing AGARDA, UC also recommends creating the following new innovation programs to support the commercialization of agriculture-related technologies, modeled after existing successful programs operated by the National Science Foundation (NSF) and the National Institutes of Health (NIH).**

**30. USDA I-Corps Hub Program**

The USDA does not currently operate an I-Corps Hub program. Creating a USDA I-Corps Program, modeled after the NSF I-Corps Program, would help support the commercialization of agriculture related technologies.

Recommendation

- Authorize an I-Corps Program at USDA to improve opportunities for the commercialization of agriculture related research and technologies.

**31. USDA Small Business Innovation Research (SBIR) Phase (0) Commercialization Proof of Concept Program**

Universities are not eligible for USDA SBIR programs, which are reserved for small businesses. The creation of a Phase (0) Commercialization Proof of Concept Program at the USDA that universities are made eligible to apply for would support the commercialization of agriculture related technologies. A similar program had been established previously at the NIH.

Recommendation

- Authorize a SBIR Phase (0) Commercialization Proof of Concept Program at USDA.

### 32. USDA Artificial Intelligence (AI) Research Institutes

UC encourages the inclusion of language in the Farm Bill to provide ongoing funding and support for the USDA-NIFA/ NSF AI Research Institutes, and funding for USDA created AI-related competitive research grants. Of the 25 NSF AI Institutes, which were established in 2021, five are sponsored jointly by the NSF and USDA and are designed to utilize AI technologies to address key agriculture challenges facing the U.S., such as to address agricultural production, food supply and food security challenges.

UC Davis, UC ANR, and other academic partners were awarded one of the USDA-NIFA/NSF AI Research Institutes competitive grants, to establish the Artificial Intelligence Institute for Next Generation Food Systems (AIFS). UC Merced is a core member of the USDA-NIFA/NSF Agricultural AI for Transforming Workforce and Decision Support (AgAID) Institute led by Washington State University. Funding for the USDA-NIFA/NSF AI Research Institutes is set to expire in 2024.

UC supports the continuation of funding for the USDA-NIFA/NSF Artificial Intelligence (AI) Research Institutes, as well as the expansion of USDA competitively awarded AI research grant funding opportunities, to address the nation's agriculture challenges.

#### Recommendation

- UC supports the inclusion of language in the Farm Bill to support the establishment of the USDA-NIFA/NSF AI Research Institutes as an ongoing program and to ensure that agriculture-related AI applications are integrated into research at the USDA.
  - For reference, H. Rept. 118-xx, (p. 25), of the FY 2024 Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations bill, includes language that incorporates the AI Institutes: “Artificial Intelligence Institutes.—The Committee supports the collaboration between USDA and the National Science Foundation to pursue advances in precision agriculture and food system security. The ability to meet the critical needs of the future agricultural workforce and provide tools for agriculture and food security are within the mission of the agency in providing opportunity through innovation. The Committee encourages NIFA to continue supporting the work of the Artificial Intelligence Research Institutes funded through NIFA.” The Senate Appropriations Committee included similar language in S. Rept. 118-44 (p. 37).
- UC supports the inclusion of language in the Farm Bill to expand AI competitively awarded research funding opportunities to address agricultural challenges.

## TITLE VIII – FORESTRY

### 1. Wood Innovation Grant Program; §8643 in the 2018 Farm Bill

The Wood Innovation Grant program aims to expand traditional wood use projects, advance wood energy markets, and promote wood use in commercial building construction. The program also contains market development goals to reduce hazardous fuels and improve forest health on national forests and other forest lands, reduce the costs of forest management, and promote economically strong and environmentally healthy communities. As the primary source of forest-biomass technology demonstration funds, this program provides invaluable resources to scale up new, profitable uses for forest residues in California. This is critical funding as California and the U.S. Forest Service seek to reduce the risk of catastrophic wildfire.

#### Recommendation

- Reauthorize the Wood Innovation Grant program and increase or maintain funding at \$12.5 million per FY.

### 2. Community Wood Energy and Wood Innovation Program; 7 U.S.C. §8113; §8644 in the 2018 Farm Bill

The Community Wood Grant program funds critical shovel-ready projects, such as to support the installation of wood energy systems, or building innovative wood product manufacturing facilities, with a goal of supporting healthy forests and stimulating local economies. The program also helps to expand renewable wood energy and innovative wood products manufacturing capacity.

Recommendation

- Reauthorize the Community Wood Energy and Wood Innovation program and increase or maintain funding at \$25 million per FY.

**3. US Forest Service State and Private Forest Landscape-Scale Restoration Program 16 U.S.C. 2109a; §8102 in the 2018 Farm Bill**

The USFS State and Private Forest Landscape-Scale Restoration Program is a competitive grant program that provides financial and technical assistance to encourage collaborative, science-based restoration of priority forest landscapes. Landscape Scale Restoration projects cross multiple jurisdictions, including Tribal, state, and local government, and private forest land, to address large-scale issues such as wildfire risk reduction, watershed protection and restoration, and the spread of invasive species, insect infestation and disease.

Recommendation

- Reauthorize the State and Private Forest Landscape-Scale Restoration Program and increase or maintain funding at \$20 million per FY.

**4. Urban and Community Forestry Assistance Program, 16 U.S.C. §2105**

The Urban and Community Forestry Assistance Program was created to establish, manage, and protect trees, forests, green spaces, and related natural resources in and adjacent to cities and towns. The program works in partnership with State and local forestry agencies, non-profit and tribal organizations, and institutions of higher education to restore, sustain, and manage more than 140 million acres of urban and community forest lands. Among other provisions, this program seeks to expand existing research and educational efforts intended to improve understanding and benefits of urban and community forests.

Recommendation

- Reauthorize the Urban and Community Forestry Assistance Program and increase or maintain funding at \$40 million per FY.

## **TITLE X – HORTICULTURE**

**1. Plant Pest and Disease Management and Disaster Prevention and National Clean Plant Network (NCPN); 7 U.S.C. §7721**

Sec. 10007 of the 2014 Farm Bill consolidated plant pest and disease management and disaster prevention programs and created the NCPN. These programs seek to prevent the introduction or spread of plant pests and diseases through the establishment of pest detection and surveillance, identification, and threat mitigation practices.

UC Riverside is home to the Citrus Clonal Protection Program (CCPP), which is part of NCPN. The CCPP provides a safe mechanism for the introduction into California of citrus varieties from any citrus-growing area of the world, for research, variety improvement, or for use by citrus enthusiasts and California citrus growers. CCPP plays a vital role in preventing the spread of HLB across California.

Similarly, UC Davis is home to Foundation Plant Services (FPS), which provides virus-tested, professionally identified grape, fruit, and nut tree propagation stock, and is home to the only dedicated grape importation facility in the United States. The FPS has received critical funding through the NCPN program.

Recommendation

- Increase mandatory funding levels for NCPN from \$5 to \$12 million per FY.
- Reauthorize Sec. 10007 of the 2014 Farm Bill and maintain mandatory funding levels of \$75 million per FY.

**2. Specialty Crop Block Grant Program (SCBGP) 7 U.S.C. §1621 note; §10107 of the 1028 Farm Bill**

The SCBGP, under Agricultural Marketing Service (AMS), is designed to enhance the competitiveness of

specialty crops. Each year, the California Department of Food and Agriculture (CDFA) submits a proposal to AMS to receive its allocated amount of pass-through funding under the SCBGP, for which California's universities are eligible to apply for funding under to conduct research.

Recommendation

- Reauthorize the SCBGP and maintain or increase mandatory funding of \$85 million per FY.
- Maintain the existing funding formula for states under 7 USC §1621 note (b).

## TITLE XII – MISCELLANEOUS

### 1. National Animal Health Laboratory Network (NAHLN); 7 USC § 8308a; §12101 of the 2018 Farm Bill

The NAHLN is part of a nationwide strategy that enhances the early detection of, and response, and recovery from animal health emergencies. This program addresses funding gaps in animal disease surveillance and response activities, which reduce the vulnerability of the U.S. food and agricultural system to accidental or intentional introduction of chemical or biological agents. The NAHLN allows UC Davis to run the California Animal Health and Food Safety Laboratory System (CAHFS), which is the backbone of state's animal health warning system that helps to protect the health of livestock and poultry. CAHFS serves the people of California by safeguarding public health through rapid and reliable diagnoses for animal diseases including those affecting humans.

Recommendation

- Reauthorize NAHLN and increase the authorized funding of \$45 million per FY.

### 2. National Animal Disease Preparedness and Response Program 7 USC § 8308b; §12101 of the 2018 Farm Bill

The National Animal Disease Preparedness and Response program was created in the 2018 Farm Bill to support efforts to keep animal diseases from entering and spreading in the United States. This program allows the Animal and Plant Health Inspection Service (APHIS) within the USDA to work with animal health partners to enhance prevention, preparedness, detection, and response to the most damaging foreign animal diseases to protect US agriculture.

Recommendation

- Reauthorize NADPRP and increase or maintain the authorized funding of \$30 million per FY.

### 3. Farming Opportunities Training and Outreach (FOTO) Program; Beginning Farmer and Rancher Development Program (BFRDP); §12301 of the 2018 Farm Bill

The 2018 Farm Bill merged the BFRDP program and the Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers program under the umbrella of the FOTO program. These programs have provided funding to UC researchers to partner with the farmers to produce ground-breaking research related to healthy soils, organic transitions, food safety and other areas. One of our partners, ALBA Farms, also has a program that helps to transition farm workers to farm owners and managers, many of whom are Latino immigrants.

Recommendation

- Reauthorize the FOTO program and increase or maintain mandatory funding of \$50 million per FY.
- Remove the matching funds requirement for BFRDP in part (b), paragraph 5.

### 4. Office of Urban Agriculture and Innovative Production (UAIP); §12302 of the 2018 Farm Bill

The USDA's UAIP competitive grants program was established in the 2018 Farm Bill and is designed to provide grant funding opportunities to expand urban agriculture opportunities for farmers, gardeners, citizens, government officials, schools and other stakeholders in urban areas and suburbs.

Recommendation

- Reauthorize the UAIP grant program and increase or maintain the authorized funding of \$25

million per FY.

**5. Reauthorize and fund the Emergency Citrus Disease Research and Development Trust Fund; §12605 of the 2018 Farm Bill**

The ECDRE Trust Fund provides critical funding support for citrus disease research. [For further information, please see the section above under, Title VII, ECDRE program.](#)

*Recommendation*

- Reauthorize ECDRE Trust Fund and increase or maintain the authorized funding of \$25 million per FY.