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OFFICE OF THE VICE-PRESIDENT —
AGRICULTURE AND NATURAL RESOURCES

OFFICE OF THE PRESIDENT
1111 Franklin Street, 5th Floor
Oakland, California 94607-5200

December 10, 2021

The Honorable Alex Padilla
United States Senate
112 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Padilla:

On behalf of the University of California Agriculture and Natural Resources (UC ANR) and the agricultural and natural resources colleges at the UC Berkeley, UC Davis, and UC Riverside campuses, we urge you to support robust funding for critical agriculture research and infrastructure investments in the Build Back Better Act Reconciliation package as it moves through the legislative process. UC is the largest public research university system in the world, and as the designated land-grant university in California, it has advanced food and agricultural research for more than a century. With federal funding, the University offers essential support to the $50 billion agricultural industry in California.

The University greatly appreciates that the Build Back Better Act, as passed in the House, includes strong funding to support agriculture related needs that provide gains in equity and maintain a strong focus on climate change resiliency, as these issues are critical in California. The University supports the critical investments made in the legislation to address agriculture research facilities improvement needs, including $1 billion for covered entities to address infrastructure needs. Yet, we believe California's and the nation's needs would be best met by the $3.65 billion dollar funding and allocation provisions contained in the House Agriculture Committee's original Reconciliation Package, as passed in the House Agriculture Committee on Sept 13, to support grants under the Research Facilities Act for construction, alteration, acquisition, modernization, renovation, or remodeling of agriculture research facilities.

Below are some of UC's agriculture research infrastructure projects that would benefit from federal funding:

- A new controlled environment agriculture (CEA) research facility at UC ANR's South Coast Research and Extension Center in Southern California is critical to demonstrate agriculture in an urban area as a strategy to address urban food deserts and mitigate climate change;
- The UC Berkeley Oxford Tract Facility, which provides critical infrastructure support for more than 50 principal investigators and provides growing space for CRISPR-based research on climate-resilient crops, requires significant

improvements to maintain biosafety, temperature control, and other modern infrastructure capabilities;

- UC Davis' Center for Aquatic Biology and Aquaculture, which provides the basic infrastructure that allows researchers to develop the scientific data to combat the effects of climate change and sustain California's natural populations of aquatic species, is at the end of its useful life and is in desperate need of an extensive renovation or replacement in order to remain viable;
- A high-throughput phenotyping facility at UC Davis, which would provide a rapid, non-destructive method to exploring plant traits under precise environmental control and can help scientists modify desirable plant traits that improve climate adaptation, enhance crop yield and nutritional characteristics, and optimize management technologies for weed and pest control, all of which enable enhanced long-term sustainable agriculture;
- At UC Riverside, the addition of a new plant research building with modern laboratories would provide the critical infrastructure needed to support climate change research. For example, a new building would enhance capabilities for growing crops under hostile conditions, and would provide data on sustainable food systems, while assessing climate change influences (water, air, soil, temperature) with a multitude of harmful organisms (pathogens, nematodes, pests, and invasive weeds, etc.). Specifically, this building would be used to house dozens of growth chambers that provide complete climate control at a small scale so the research can be advanced to greenhouses and ultimately conducted outdoors to measure real-world applications. The building would also house state-of-the-art grow-pod units to support hydroponic systems, as well as house other highly technical equipment necessary for climate change research;
- A number of UC ANR's nine UC Research and Extension Centers (RECs), which are located in remote, rural areas to provide research and education for agricultural commodities in their respective climate regions across the state, are in need of infrastructure improvements. These improvements would provide capacity for precision agriculture, remote sensing on long-term climate parameters, would improve geographical information systems, and would ensure that cutting edge agriculture research can continue to be conducted to meet the agricultural and natural resources needs of California and the nation.

In addition to facility investments, the University is also grateful for and supports investments in the legislation to address agriculture research funding needs, including significant funding for research and extension programs within the National Institute of Food and Agriculture (NIFA), such as the Agriculture Food and Research Initiative (AFRI); the Specialty Crop Research Initiative (SCRI); capacity funds including under the Smith-Lever Act; Urban Agriculture programs; the Agriculture Advanced Research and Development Authority (AGARDA) initiative; and for other agriculture research programs.

Given the significant agriculture research infrastructure needs faced by UC ANR and UC campus-based facilities, and by facilities across the nation, the University strongly supports the agricultural research funding levels, but encourages the Senate to adopt the House Agriculture Committee's original higher level of agriculture research infrastructure investments.

Thank you for your continued strong support for agriculture research and agriculture investments. Please let me know if you have any questions or if we can be of assistance.

Sincerely,

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