



## *Sustainable farming for the future...*

### **IMAGINE**

Eliminating food insecurity while sustaining our planet is one of humanity's greatest challenges. As the nation's top-ranked agricultural university, UC Davis is poised to address this challenge. Imagine a world with food production systems capable of nourishing 10 billion people. A world where farmers and ranchers employ smart machines to learn the needs of each plant and animal and provide them with superior, individualized care. Imagine, too, a future transformed by research and innovations yielding more resilient crops, more humane livestock production and more responsible resource use. SmartFarm at UC Davis will lead the way into this new era of agriculture.

### **THE VISION**

SmartFarm is our vision to create the farm of the future—a showcase of modern farming in harmony with nature. We will create cutting-edge solutions to rapidly interpret plant and animal responses to their environment, accelerate crop improvement, enhance livestock welfare and advance smart farming practices. SmartFarm will prepare a new generation of technically trained workers and develop technologies that facilitate the capture of big data, optimize nutrient and water-use efficiency, minimize agriculture's environmental footprint, and increase productivity and prosperity across the industry.

### **THE PHILANTHROPIC OPPORTUNITY**

- Endow seven faculty positions to lead education and innovation in smart farming methods and technologies
- Establish a fleet of smart machines such as phenotyping robots, systems for real-time delivery of care and nutrients to plants and animals, and autonomous robots for labor-intensive tasks
- Create an agricultural droneport, dedicated laboratories and state-of-the-art plant and animal research facilities to study real-world challenges at scale

**UC Davis is committed to creating a future when everyone has access to safe and nutritious food. We invite the philanthropic partnership of our alumni and friends to ensure lasting food security for all.**

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