

AgTech Innovation Hub Brainstorming Session

Hosted by
**Sonoma Mendocino Economic
Development District (SMEDD)**

May 30, 2023



Today's Objectives

- Share concept of AgTech Innovation Hub
- Highlight alignment with statewide initiatives and the unique Sonoma Mendocino value proposition
- Discuss opportunities & challenges
- Answer questions, establish coalition of interested stakeholders
- Align on next steps towards feasibility study



Today's Agenda

10 am	Welcome & Opening
10:30	Presentation: Concept of AgTech Innovation Hub Time for Q&A
10:50	Small group discussion: Opportunities & concerns with Hub idea Report back & large group discussion to follow
12:00	Lunch
12:45	Breakout groups (choose your own adventure) <ul style="list-style-type: none">● Group 1: Infrastructure & programs discussion● Group 2: Funding needs & opportunities discussion Report back & large group discussion to follow
1:45	Recap, Next Steps, & Feedback
2 pm	Close (you're welcome to stay for informal discussion)



Overview

Introducing SMEDD

Introducing CEDS

Introduction of AgTech Innovation Hub

Discussion + Q&A

Sonoma Mendocino Economic Development District (SMEDD)

- **Economic Development Administration (EDA) designated special district** established in 2015 to serve regional interests of Sonoma and Mendocino
- **Charged with supporting progress on Comprehensive Economic Development Strategy (CEDS) projects** and providing other economic development support services
- **SMEDD contracted with RGS** to provide Administrative and Professional services in furtherance of its mission

SMEDD.org



Monthly Board meetings:
1-3pm, each 3rd Friday of
the month

Learn more at **SMEDD.org**



CEDS Goals

Goal 1: Develop Innovative and Value-Added Economic Sectors

Goal 2: Increase Equitable Community-Wide Prosperity

Goal 3: Support People

Goal 4: Resiliency Strategy

Innovation Hub Vision

- Convening, connecting, facilitating climate-smart ag and natural resources focused tech innovation
- Yielding locally valuable, scalable, exportable products and services, new venture formation, and jobs growth
- Cross-sector engagement



Key Terms & Facts

- **Agriculture** spans food, fiber, forest products, and other commodities being grown, produced, and processes in the Sonoma and Mendocino County.
- **AgTech** is any innovation used across the value chain, including growing, processing, distribution, and retail, to improve efficiency, profitability and/or sustainability. It includes hardware and software, business models, new technologies and new applications.



Crops grown in Sonoma and Mendocino Counties in 2021

(Sonoma County Crop Report, 2021 and Mendocino Crop Report, 2021)

Feasibility Study

- **Potential Components:**
 - Overview and Context
 - Market Opportunity
 - Hub Features and Benefits
 - Regional SWOT
 - Existing Relevant Programs
 - Regional Partners & Stakeholders
 - Development Phasing
 - Site Considerations
 - Financing/Funding Options
- **Ideal Timeframe:**
 - Secure funding ~3-6 months
 - Implementation : ~6-12 months



Call to Action

- Ideas, refinements, examples
- Grant application support letters
- Community of interest
 - Multi-stage process (virtual >> brick & mortar)
 - Networking (ensuring connection with other relevant regional initiatives)
 - Advocacy (sharing concept with influencers)





Innovation Shaping the Future of Food and Agriculture @ California

The University of California System



- Land Grant Innovation Powerhouse

9
Field Research
Centers (RECs)

60+
Field Offices
Statewide

1200+
Annual
Research
Projects

12k+
Active
Inventions in
the UC System

5k+
Startups across
verticals &
funding stages

\$8B
Annual
research
funding

3
National
Labs

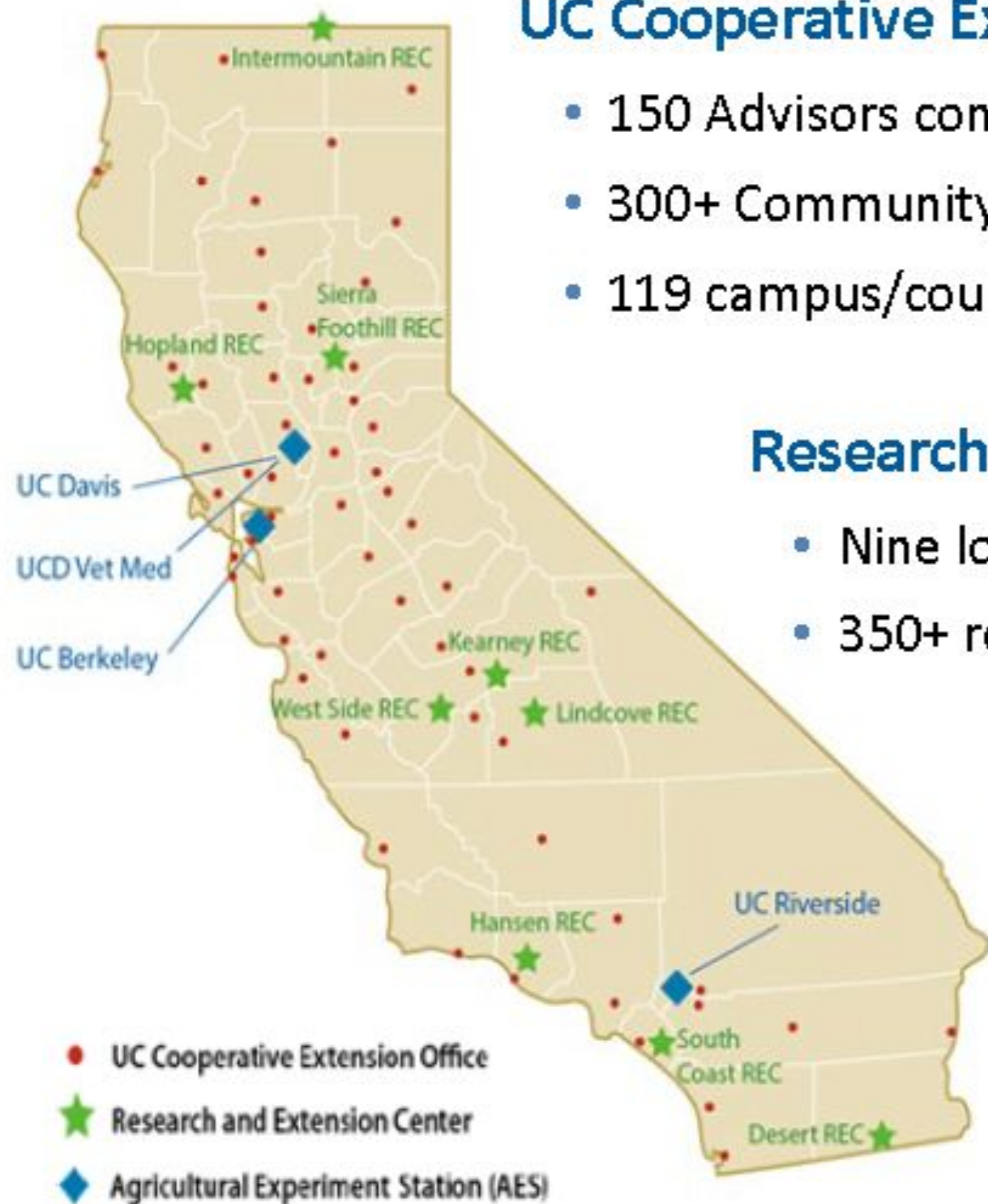
10
Campuses

5
Medical
Centers

230K
Faculty /
Staff

280k
Students

2M
Living
Alumni



UC Cooperative Extension

- 150 Advisors conduct research in local communities
- 300+ Community Educators delivering programs
- 119 campus/county-based Specialists

Research and Extension Center System

- Nine locations statewide; 13,000 acres
- 350+ research projects annually

Agricultural Experiment Station

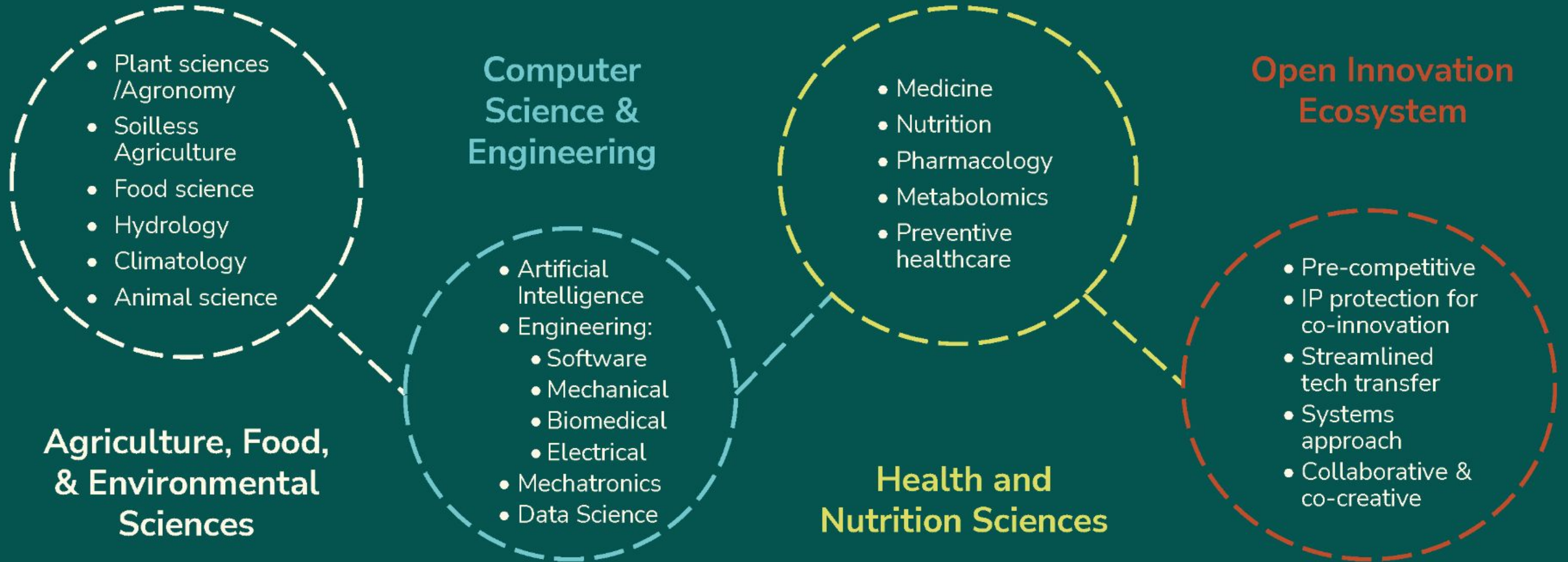
- 550+ researchers on 3 campuses
- 1,300+ research projects annually

13 Statewide Programs and Institutes



Over 19,200 volunteers contribute 960 FTE — the equivalent of \$62.7 million in donated public service each year

How UC ANR Thinks About Innovation



CA's Food and Ag Critical Infrastructure is Threatened

1,000-year drought due to climate change

Water shortages and wildfire cause massive loss

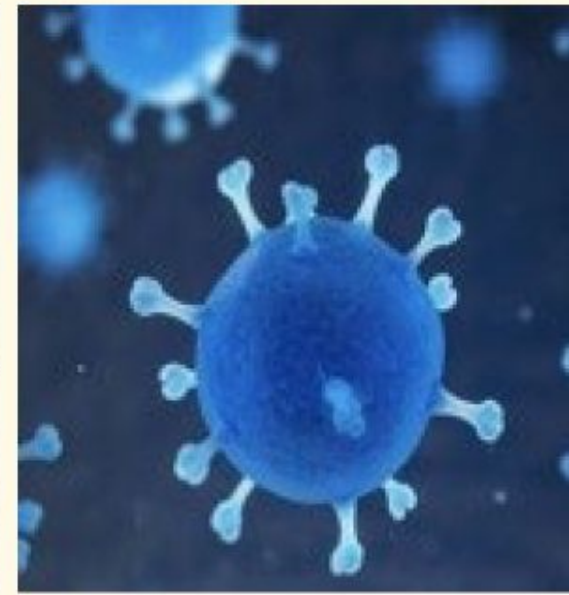
Farmland is shrinking and expensive

Small farms are nearly impossible to start & profit

Ag and Food labor workforce is shrinking

Increase of major agricultural pests and diseases

Soils are depleted and less productive



Agrifood Technology Needs Public Investment

- New solutions in AI, cloud computing, robotics, genomics, biotech
- Disconnect between CA's food valleys and Silicon Valley and coastal tech centers
- Top-tier agricultural universities struggle with agrifood tech transfer
- Small farmers, food producers, and farmworkers are left out
- Testing and validating tech in the market is critical but hard
- CA food-producing regions have nascent agrifood tech initiatives
- Need a statewide "engine" that connects CA's food-producing regions to drive regional innovation economies where food grows



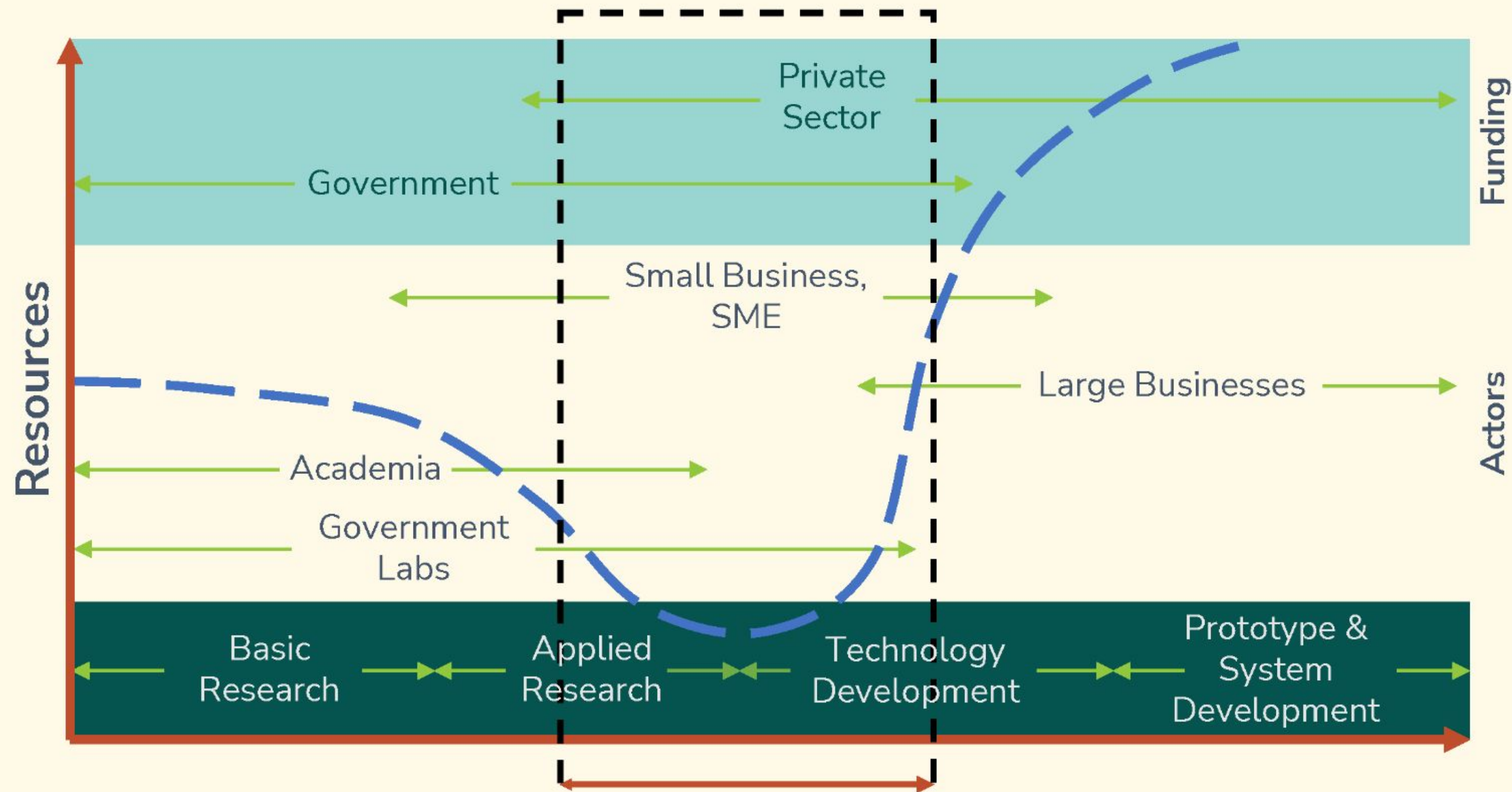


The VINE is ANR's Innovation & Entrepreneurship Program

We identify,
commercialize, and scale
science and technology
breakthroughs that drive
the sustainable future of
our health and our planet

The VINE's Place in the Market

The VINE serves as a **BRIDGE** to aid entrepreneurs avoid the "valley of death" as they grow and scale their companies through its strong network and open innovation activities.



The VINE Open Innovation Engine

Connects

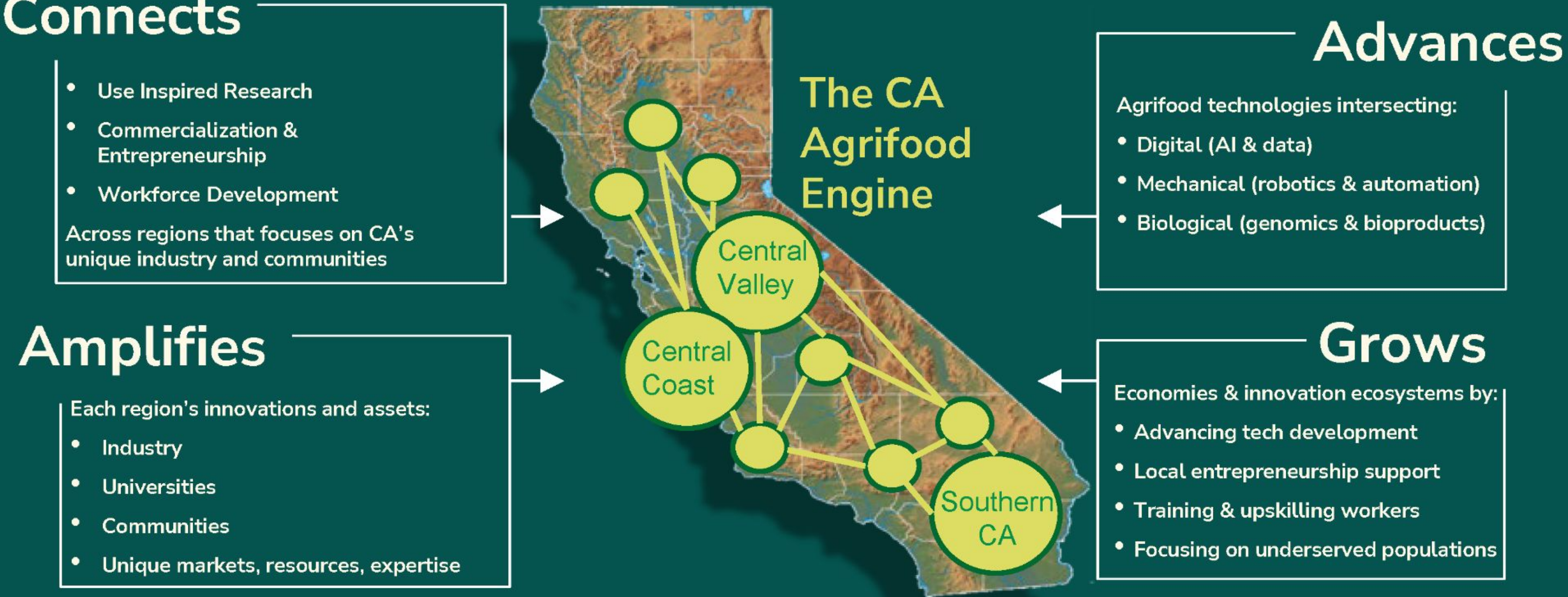
- Use Inspired Research
- Commercialization & Entrepreneurship
- Workforce Development

Across regions that focuses on CA's unique industry and communities

Amplifies

Each region's innovations and assets:

- Industry
- Universities
- Communities
- Unique markets, resources, expertise



Target Technologies

Ag and Food
Robotics and
Automation



Dairy
Technologies



Controlled
environment
agriculture



Food processing
software, sensors,
systems



Bioproducts and
materials



Digital agriculture
software, sensors,
systems

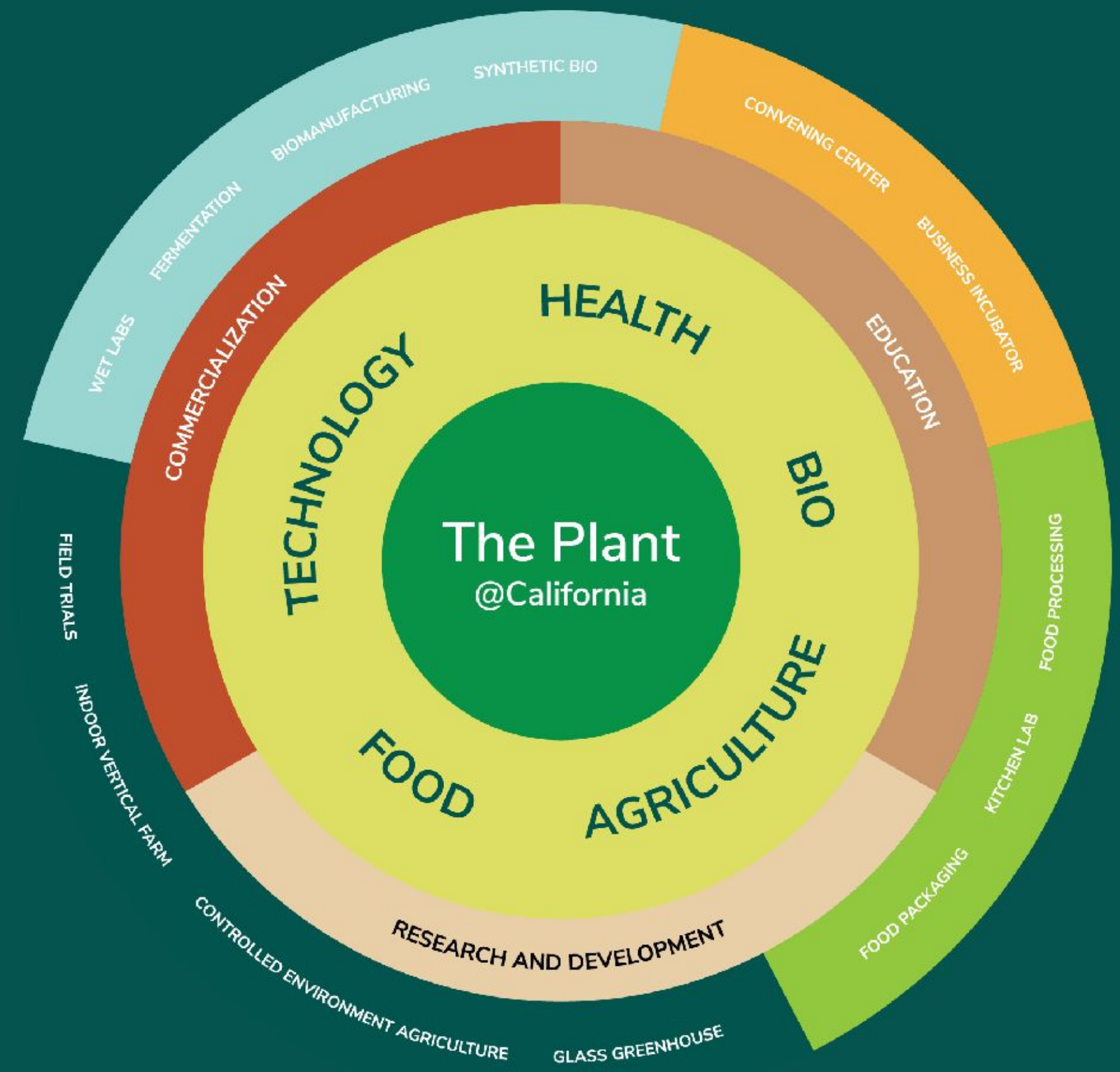


AI & Digital
Infrastructure



Introducing: The Plant

The Plant will serve as a catalytic innovation center for our world-class ag, food, health and tech industries together with our universities and regional partners to accelerate innovations into wide commercialization while equitably addressing climate change, human health, and economic recovery.



The Plant: An Innovation Center

INCUBATION

Incubator facility and regional programs to support startup commercialization in agrifoodtech and biomanufacturing.

INNOVATION

Laboratory and manufacturing facilities to support specialized agrifoodtech and Biomanufacturing research, development, commercialization, and scaling.

COLLABORATION

Industry-university collaboration, workforce development and networking events.



Key Takeaways

- 1. Future of CA agrifood leadership is tech + know-how**
- 2. Public-private and U.S.-global collaboration is critical**
- 3. UC ANR VINE is focused on industry-led priorities and needs for innovation**

Connect With Us:

Website: <https://thevine.io/> Twitter: [@VINE_io](https://twitter.com/VINE_io) LinkedIn: [The VINE](https://www.linkedin.com/company/thevine)



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THE VINE

University of California
Agriculture and Natural Resources

Q & A

Table Discussions (30 mins)

Please choose a scribe to take notes and someone to report back to the group.

Questions:

- 1. What are the primary opportunities you see for a center like this in Mendocino & Sonoma?**
 - a. How are these unique to this region?
 - b. How do you see a Hub like this serving your community / your work in ag / land management?
 - c. Are there additional needs this Hub could be filling that we haven't already identified?

- 2. Are there any projects or programs out there that this Hub could be partnering with? What are the gaps that this Hub could help to fill?**

- 3. What are your primary concerns or challenges you foresee with the Hub?**
 - a. What are potential solutions to address those challenges?



Continuing the Conversation

Infrastructure & Programs

- What physical and programmatic assets already exist? What may be needed?
- Who should be part of this conversation early on?

Funding

- Identify potential funding opportunities and pathways for success for the Hub (grants, partnerships, others)
- Explore private sector and potential philanthropic funding options
- Who should be part of this conversation early on?

Call to Action

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**THANK
YOU**

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