



## **Exploring Phytobiomes**

14 January 2025



Plant & Animal Genome Conference San Diego, CA, USA



## **International Alliance for Phytobiomes Research**

- Nonprofit, precompetitive research consortium
- Industry, academia, and government
- Paradigm shift in agricultural research & production

**Vision:** By 2050, all farmers have the ability to use predictive and prescriptive analytics based on geophysical and biological conditions for determining the best combination of plants, management practices, and inputs for a specific site in any given year.

**Strategy:** Identify gaps in research, tools, and technologies and develop projects to address them.



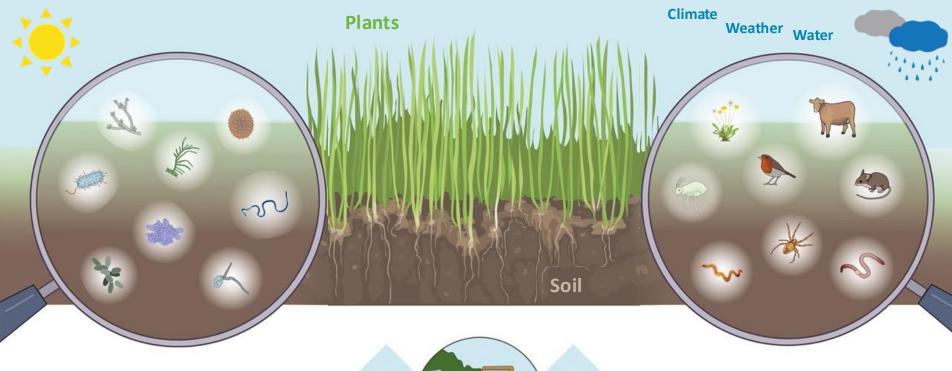








## Phytobiomes: Complex Systems of Plant-based Agriculture



Microbiomes and macroorganisms/macrofauna

Arthropods, other animals and plants

All influenced by management practices



## **Workshop Speakers and Topics**

Federico Martin Colorado State University, USA	Plant-Microbiome Interactions for Enhanced Plant Disease Resistance
Esteban Veliz University of California, Davis, USA	Microbial Inoculants and Biostimulants in the Age of Molecular and Computational Biology
Betsy Alford BioConsortia, USA	AMS and GenePro Deliver Superior Nitrogen Fixation Bacteria for Agriculture
Caroline Roper University of California, Riverside, USA	Xylella fastidiosa, a Bacterial Pathogen at the Nexus of Parasitism and Commensalism
<b>Tingting Xiang</b> University of California, Riverside, USA	Leveraging Algal Mutants to Elucidate Mechanisms of Coral-Algal Symbiosis
Christopher Drozd University of California, Riverside, USA	High-Throughput Bioprospecting the Phytobiome for Tools to Fight Against a Deadly Plant Pathogen