



DETAILED AGENDA

8:15 – 9:00 a.m. – Breakfast Provided

9:00 – 9:05 a.m. - Introduction

**9:05 – 9:30 a.m. Gregg Kelley
(ARI Board of Governors, former CEO of California Olive Ranch)
Data-driven agriculture**

9:30-11:05 a.m. - Research Presentations

Time	Presenter, Affiliation, and Presentation Title	Page #
9:30 – 9:37	Rich Rosecrance , Chico State: “Canopy management, tree hedging, and topping to optimize yield in table olive orchards.”	1
9:38 – 9:45	Erin Questad , Cal Poly Pomona: “Novel methods for post-fire restoration and management in California wildlands.”	3
9:46 – 9:53	Nate Jue , Monterey Bay: “Establishing a genetic understanding for the bioremediation of pesticides.”	5
9:54 – 10:01	Viral Shukla* , Cal Poly Pomona, Labs of Gabriel Davidov Pardo and Olive Li, Cal Poly Pomona: “Optimization of the formulation of a gluten-free pasta enriched with protein using pulse protein isolates.”	7
10:02 – 10:09	Qun (Kristy) Sun , Fresno State: “Impact of deficit irrigation and mechanical leafing on yield and berry/wine composition of cabernet sauvignon in the San Joaquin valley.”	9
10:10 – 10:17	Subodh Bhandari , Cal Poly Pomona: “Effectiveness of UAV-based remote sensing and machine learning techniques in determining plant nitrogen and water stresses.”	11
10:18 – 10:25	Gabriel Goff* , Lab of Lucy Kerhoulas, Humboldt State: “Conifer encroachment and removal in a northern California woodland: Influences on ecosystem physiology and biodiversity.”	13
10:26 – 10:33	Katy Tarrant , Fresno State: “A journey through space and time: Assessing broiler enhancements.”	15
10:34 – 10:41	Garrett Morales* , Labs of Stephan Sommer and Sonet Van Zyl, Fresno State: “Calibration of microbial spoilage indicators via mycobiota levels in wine grapes.”	17
10:42 – 10:49	Dave Goorahoo , Fresno State: “Quantifying the benefits of on-farm best management practices: Managing nitrate leaching using evapotranspiration-based irrigation scheduling.”	19
10:50 -10:57	Matt Johnson , Humboldt State: “Relations between winegrape vineyards and barn owls.”	21
10:58 – 11:05	Maria Giovanni , Chico State: “More than good taste: Understanding the consumer perspective of differences in the quality of fruit and vegetable varieties.”	23
	<i>*denotes student presenter</i>	

11:10 – 11:30 a.m. – Coffee Break

**11:30 – 12:00 p.m. Karen Ross, California Secretary of Agriculture
Issues in California Agriculture and Natural Resources**

12:00 – 1:00 p.m. - Lunch



DETAILED AGENDA

1:00 – 2:30 p.m. Industry, Agency & Commodity Board Research Opportunities
Panel discussion – working with industry – opportunities and challenges
Gregg Kelley, moderator

Panel Members:

- Jennifer Clarke, Executive Director, California Leafy Greens Research Board
- Joe Grant, Research Director, California Walnut Board
- Rob Neenan, President/CEO of California League of Food Processors
- Gary Obenauf, Director of Production Research, California Prune Board
- Sebastian Saa, Senior Manager, Agricultural Research, Almond Board of California

2:30 – 3:10 p.m. Research Opportunities / Invite-a-Colleague

Time	Presenter, Affiliation, and Presentation Title	Page #
2:30 – 2:40	Satoshi Okuno , Solicitation Manager, Specialty Crop Block Grant Program, CDFA Title: “The Specialty Crop Grant Program.”	25
2:41 – 2:49	Elizabeth Mosqueda , Assistant Professor, Bob and Sue Johnson Professor of Crop Management, CSU Monterey Bay Title “Crop and weed management: Integration is key.”	27
2:50 – 3:00	Chris Hohn , Director of Research and Development, Kayazma Title: “The rising hemp industry: A perspective on opportunity and challenges.”	29
3:01 – 3:09	Elizabeth Scordato , Assistant Professor, Biology Department, Cal Poly Pomona Title: “Assessing the effects of diverse agricultural landscapes on biodiversity: An evolutionary perspective.”	31
3:10– 3:30 p.m. – Coffee Break		
3:30 – 4:00 p.m. – New Initiatives and Faculty Feedback		
4:00 – 6:00 p.m. – Networking, Posters and Strategy Session		



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Poster Presentations		
	Presenter, Affiliation, and Presentation Title	Page #
CAL POLY POMONA		
	Katherine Garcia , Cal Poly Pomona: “Effect on physical and chemical characteristic of enzymatic treated tomatoes used for processing”	33
	Juanita Jellyman , Cal Poly Pomona: “Optimizing feeding efficiency of steers using time-restricted feeding”	35
	Shelton Murinda , Cal Poly Pomona: “Production of safe algae feeds from dairy wastewater”	37
CAL POLY SAN LUIS OBISPO		
	Omar Gonzalez-Benitez , Cal Poly San Luis Obispo: “Exploring strawberry cultivar resistance to verticillium wilt and its relationship to the root microbiome”	39
	Gregory Schwartz , Cal Poly San Luis Obispo: “Development and evaluation of algal and bacterial processes for biofuel production and wastewater treatment at dairies.”	41
	Kari Piolla , Cal Poly San Luis Obispo: “Strawberries and health in women: Is the way to the heart through the gut?”	43
	Morgan Wonderly , Cal Poly San Luis Obispo: “Effect of sub-zero saline chilling on chilling efficiency, meat quality and microbial safety of broiler carcasses.”	45
CHICO STATE		
	Anita Chaudhry , Chico State: “Turning crisis into opportunity: Organic conversion during droughts.”	47
	Kasey DeAtley , Chico State: “Livestock mortality composting: Protocol development, monitoring and management.”	49
	Maria Giovanni , Chico State: “More than good taste: Understanding the consumer perspective of differences in the quality of fruit and vegetable varieties.”	51
CSU MONTEREY BAY		
	Zane Polsan , CSU Monterey Bay: “Assessing the bacterial growth rates of pesticide-remediating strains through use of the Gompertz equation.”	53
	Rahil Ryder , CSU Monterey Bay: “Generating genome assemblies in order to understand the bioremediation of the pesticide imidacloprid.”	55
FRESNO STATE		
	Gurreet Brar , Fresno State: “Effect of salinity on leaf physiological parameters in pistachios.”	57
	Ramandeep Brar , Fresno State: “Comparing yield and water use efficiency of drip and deficit drip irrigated sorghum (<i>Sorghum bicolor</i>) and corn (<i>Zea mays</i>) subjected to varying nitrogen fertilizer rates.”	59
	Forence Cassel , Fresno State: “Developing crop coefficient (kc) for sub-surface drip irrigated onions (<i>Allium cepa</i>) using weighing lysimeter and fractional ground cover (fc).”	61



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	Takui Frnzyan , Fresno State: “Impact of fertigation practices on soil and petioles nitrate levels, and chlorophyll content of lettuce.”	63
	Aldo Garcia , Fresno State: “Assessing fertigation strategies for nitrogen use efficiency (NUE) and soil nitrate levels in processing tomatoes.”	65
	Analiese Goins , Fresno State: “Developing a nutritionally dense quiche crust using alternative flours to provide healthy convenience food for elderly adults.”	67
	Dave Goorahoo , Fresno State: “Evapotranspiration and soil sensor-based technology to improve irrigation and water use efficiency in vegetables.”	69
	Rodrigo Lopez , Fresno State: “Comparing platform enrichment usage between conventional Cobb 500 and Ross 708 broilers.”	71
	Chaitanya Muraka , Fresno State: “Quantifying oxidative stress in tomatoes subjected to Airjection® irrigation”	73
	Miguel Pedroza , Fresno State: “Autonomic nervous system responses as a new sensory tool to predict wine odorant valence	75
	Janet Robles , Fresno State: “Nitrogen use efficiency and water use efficiency of broccoli irrigated with evapotranspiration- and soil sensor-based scheduling technology.”	77
	Qun Sun , Fresno State: “The effects of gypsum and compost applications on soil properties, crop yield and grape quality in vineyard soils on the west side of the San Joaquin Valley.”	79
	Dilruba Yeasmin , Fresno State: “Mapping and evaluation of permanent crop root systems by ground penetrating radar.”	81
	Dilruba Yeasmin , Fresno State: “Smart data utilization in the ag field: A compare and contrast analysis.”	83
HUMBOLDT STATE		
	David Greene , Humboldt State: “Post-fire recruitment and management of the rare Baker cypress.”	85
	William Weinberg , Humboldt State: “Effects of ramorum leaf blight on tan oak (<i>Notholithocarpus densiflorus</i>) and California bay laurel (<i>Umbellularia californica</i>) leaves.”	87
SAN DIEGO STATE		
	Changqi Liu , San Diego State: “Extraction and solubility of rice bran proteins.”	89