#### Poster Presentations (\*student researcher)

1. Almond Waste for Textile Coloration with Potential Antimicrobial Performance

Myunggyo (Emily) Yu<sup>3</sup>\*, Anna Marfori<sup>2</sup>\*, Jonathan Dannenberg<sup>2</sup>\*, Xu Yang<sup>1</sup>, Yan Liu<sup>2</sup>, and Jiangning Che<sup>3</sup>

<sup>1</sup>Department of Nutrition and Food Science Department, <sup>2</sup>Department of Chemistry and Biochemistry and <sup>3</sup>Department of Apparel Merchandising and Management, Cal Poly Pomona

2. Climate-Driven Shifts in California's Avocado Crop Landscape Between 2008-2041

Joshua Pool<sup>1\*</sup>, Sara Snyder<sup>1\*</sup>, Emilee A. Acosta<sup>2\*</sup>, Jacquelyn Robles<sup>3\*</sup>, Namie Takatsuka Costa<sup>4\*</sup>, Jaya Kurade<sup>5\*</sup>, Parnian Shirdast<sup>5\*</sup>, and Gabriel Granco<sup>1\*</sup>
<sup>1</sup>Department of Geography and Anthropology, <sup>2</sup>Department of Political Science, <sup>3</sup>Department of

<sup>1</sup>Department of Geography and Anthropology, <sup>2</sup>Department of Political Science, <sup>3</sup>Department of Geological Sciences, <sup>4</sup>Department of Lyle Center for Regenerative Studies, and <sup>5</sup>Department of Computer Science, Cal Poly Pomona

3. Climate-Driven Shifts in California's Citrus Crop Landscape

Sara Snyder<sup>1\*</sup>, Joshua Pool<sup>1\*</sup>, Emilee A. Acosta<sup>2\*</sup>, Jacquelyn Robles<sup>3\*</sup>, Namie Takatsuka Costa<sup>4\*</sup>, Jaya Kurade<sup>5\*</sup>, Parnian Shirdast<sup>5\*</sup>, and Gabriel Granco<sup>1\*</sup>
<sup>1</sup>Department of Geography and Anthropology, <sup>2</sup>Department of Political Science, <sup>3</sup>Department of Geological Sciences, <sup>4</sup>Department of Lyle Center for Regenerative Studies, and <sup>5</sup>Department of Computer Science, Cal Poly Pomona

4. Development and Optimization of a Novel Water Disinfection System

Arnel S. Mariano<sup>1\*</sup>, Žiyu Zhang<sup>1\*</sup>, Victor Ornelas<sup>1\*</sup>, Y. Olive Li<sup>1</sup>, Mingheng Li<sup>2</sup>, Wei-Jen Lin<sup>3</sup>, and Xu Yang<sup>1</sup>

<sup>1</sup>Department of Nutrition and Food Science, <sup>2</sup>Department of Chemical and Materials Engineering, and <sup>3</sup>Department of Biological Sciences, Cal Poly Pomona

5. Effect of Enzyme Treatment on Structural and Functional properties of Almond Proteins Yutian Li\*, Abhijit Kamath\*, Belal Hasan, and Harmit Singh Department of Nutrition and Food Science, Cal Poly Pomona

6. Effects of Repellent Treatment on Physiological Responses of Cattle to Biting Flies Jane Rumpak<sup>1\*</sup>, Caleb Hubbard<sup>2</sup>, Alec Gerry<sup>2</sup>, Amy Murillo<sup>2</sup>, and Juanita Jellyman<sup>1</sup> Department of Biological Sciences, Cal Poly Pomona and <sup>2</sup>Department of Entomology,

7. Focus Group Insights: Exploring SNAP-Ed Recipe App Usage & Acceptability Among Parents in Pomona. CA

Maria Ambriz\*, Maria Calderon\*, and Emily J. Kiresich Department of Nutrition and Food Science, Cal Poly Pomona

University of California, Riverside.

8. Heritability of Key Tomato Fruit Quality Traits in a Controlled Cross

Priti Saxena, Erwing Castillo\*, Kailan Kidder\*, and James Weeks Department of Plant Science, Cal Poly Pomona.

#### 9. Improving Water and Nitrogen Use Efficiency in Lettuce by Selecting for Root Characteristics

Connor Soderstrom<sup>1\*</sup>, Erica Fontanez<sup>2\*</sup>, Samuel Morales<sup>1\*</sup>, Justin Medina<sup>2\*</sup>, Youngsook You<sup>3</sup>, and David W Still<sup>3</sup>

<sup>1</sup>Department of Plant Sciences, <sup>2</sup>Department of Biological Sciences, Cal Poly Pomona; and <sup>3</sup>CSU Agricultural Research Institute

#### 10. Integrating Mediterranean Dietary Principles to Improve Diet Quality and Diabetes Management in Ethnic Minorities in Pomona

Fatheema Begum Subhan, Bonny Burns Whitmore, Erik Froyen, and Sangeeta Shrivastava Department of Nutrition and Food Science, Cal Poly Pomona

## 11. Is It Eco-Friendly and Safe? Investigation of Consumers' Perceived Ecological Benefits, Contagion Beliefs, and Safety Concerns of Hydroponic, Aquaponic, and Organic Produce Yi Xie, Steven Archambault, and Jon Phillips

Department of Agribusiness & Food Industry Management and Agricultural Science, Cal Poly Pomona

#### 12. Machine-Learning Models for the Detection of Powderly Mildew in Vineyards using UAV-Based Hyperspectral/RGB Data and Ground-Based Measurements

Ardavan Sherafat<sup>1</sup>\*, Michael Acosta<sup>1</sup>\*, Mahakbhai Patel<sup>1</sup>\*, Cristobal Gonzalez<sup>2</sup>\*, Subodh Bhandari<sup>3</sup>, and Amar Raheja<sup>1</sup>

<sup>1</sup>Department of Computer Science, <sup>2</sup>Department of Plant Science, and <sup>3</sup>Department of Aerospace Engineering, Cal Poly Pomona

## 13. One- and Two-Step Oxidative Cleavage of Lignin to Produce Aromatic Platform Chemicals Using Molybdenum and Vanadium Complexes

Sean Tosti\*, Jasper Dang\*, Alex Cartolano\*, and Alex John Department of Chemistry and Biochemistry, Cal Poly Pomona.

#### 14. Optimizing Multilayer Emulsion-Based Delivery Systems by Identifying Ideal Protein-Polyphenol Layering Conditions

Catrina Jozsa\*, Jocelyne Argueta\*, and Gabriel Davidov-Pardo Department of Nutrition and Food Science, Cal Poly Pomona

#### 15. Pre- and Post-Fertilization Molecular Dynamics in Aquilegia Carpel Development

Ana Alcaraz<sup>1</sup>\*, Mankirat Pandher<sup>1</sup>\*, Marianellie Bravo<sup>1</sup>\*, Rene K Romo<sup>1</sup>\*, Christian Suarez<sup>1</sup>\*, <sup>2</sup>Rakesh Kaundal, and Bharti Sharma<sup>1</sup>

<sup>1</sup>Department of Biological Sciences, Cal Poly Pomona and <sup>2</sup>Utah State University, Logan

#### 16. Resilience of Lettuce in California Agriculture: Analyzing 15 Years of Crop Distribution Modeling Using USDA CDL and Bioclimatic Variables (2008-2023)

Jacquelyn Robles<sup>3\*</sup>, Sara Snyder<sup>1\*</sup>, Joshua Pool<sup>1\*</sup>, Emilee A. Acosta<sup>2\*</sup>, Namie Takatsuka Costa<sup>4\*</sup>, Jaya Kurade<sup>5\*</sup>, Parnian Shirdast<sup>5\*</sup>, and Gabriel Granco<sup>1\*</sup>

<sup>1</sup>Department of Geography and Anthropology, <sup>2</sup>Department of Political Science, <sup>3</sup>Department of Geological Sciences, <sup>4</sup>Department of Lyle Center for Regenerative Studies, and <sup>5</sup>Department of Computer Science, Cal Poly Pomona

#### 17. Studies towards Development of POC Devices for Detecting Citrus Fungicides and HLB using LFA and LAMP Platforms

Paula Truong<sup>1\*</sup>, Regis Dam<sup>1\*</sup>, Mason Woronets<sup>1\*</sup>, Hao Jie Mao<sup>1\*</sup>, Chandrika Ramadugu<sup>2</sup>, and Sean Liu<sup>1</sup>

<sup>1</sup>Department of Chemistry and Biochemistry, Cal Poly Pomona and <sup>2</sup>Agricultural Experiment Station and Cooperative Extension, UC Riverside

# 18. The Effects of Freeze-Dried Whole Grape Powder on Chronic Disease and Cardiovascular Risk Factors, Hunger, Satiety, and Body Composition in Free-Living People-a Pilot Study Bonny Burns-Whitmore<sup>1</sup>, Erik B. Froyen<sup>1</sup>, Hadis Rezaei<sup>1\*</sup>, Nghi Cao<sup>1\*</sup>, Jackson Young<sup>1\*</sup>, and Juan Fernandez<sup>2\*</sup>

<sup>1</sup>Department of Nutrition and Food Science and <sup>2</sup>Department of Animal and Veterinary Sciences, Cal Poly Pomona

#### 19. The Effects of Non-Crop Vegetation on Arthropod Pest and Natural Enemy Abundance in Lemon and Avocado Orchards

Ian Garcia<sup>1\*</sup>, Carson Loudermelt<sup>1\*</sup>, Elizabeth Scordato<sup>1</sup>, and Hamutahl Cohen<sup>2</sup>
<sup>1</sup>Department of Biological Sciences, Cal Poly Pomona and <sup>2</sup> University of California, Agricultural and Natural Resources Extension

### 20. The Utilization of Bacteriophage as a Biocontrol Agent for *Escherichia coli* Decontamination in Microgreens

Zhe Zhang\* and Xu Yang

Department of Nutrition and Food Science, Cal Poly Pomona

## 21. Utilizing Bioinformatic Analysis to Investigate the Dissemination of Carbapenem Resistant Enterobacterales (CRE) in California Vegetable Supply Chains

Nhu-Y Do\* and Xu Yang

Department of Nutrition and Food Science, Cal Poly Pomona

#### 22. Wearable Sensors to Record Fly-Repelling Behavior in Cattle

Jane Rumpak<sup>1\*</sup>, Caleb Hubbard<sup>2</sup>, Alec Gerry<sup>2</sup>, Amy Murillo<sup>2</sup>, and Juanita Jellyman<sup>1</sup> Department of Biological Sciences, Cal Poly Pomona and <sup>2</sup>Department of Entomology, University of California, Riverside