#### **Poster Award Winners**

# 2024 Meeting, San Diego

#### Brain and behavior

- 1. Spaulding, Josh and Tavares, Maria (University of San Diego): *The Role of the Medial Prefrontal Cortex in Memory and Spatial Navigation in the Traveling Salesperson Problem*
- 2. Morakabati, Neda (UC Irvine): *EEG-based classification algorithms reveal differential neural processing of words and images*

## **Environment and Ecology**

- 1. Jack, PeaceIbisia (San Diego State University): Deep Learning for UAV-Based Trash Detection: Achieving Accuracy and Generalizability
- 2. Phan, Kayla (University of San Diego): The Effects of Beneficial and Pathogenic Marine Bacteria on the Sea Anemone Exaiptasia diaphana
- 3. Matthews, Lisa (Central Washington University): Effects of Tillage on Soil Health in Dryland Triticum Aestivum Fields of Mold, Washington

### **Medicine and Public Health**

- 1. Morán, José (UC Irvine): Investigating novel PKC modulators for use in "kick and kill" HIV cure strategies
- 2. Wang, Ryan (Westview High School, San Diego): Low Cost Wearable Kit And Algorithms To Predict And Prevent Muscle Overuse Injuries

## Social Sciences, Science in society, and humanities and sciences

- 1. Fenger, Alexis (UC Riverside): GAME ON! An analysis on the relations between video gaming, spatial skills, and STEM engagement
- 2. Garrison, Kalila (Central Washington University): The Auricular surface of chimpanzees as an indicator of age

# **Physical Sciences**

- 1. Khalil, Sherry (University of San Diego): *C-H Borylation and Oxidative Homocoupling of Aryl Phosphonates*
- 2. McKinnion, Shannon (Central Washington University): *Using LIDAR to study tsunami traces at selected sites in Alaska*

3. Roozitalab, Saeideh (Marshall B. Ketchum University): *Strategy for the synthesis of the natural product totarol in search of novel agents to treat tuberculosis* 

## Cell and Developmental Biology

- 1. Perez, Ivett (UCLA): Smooth muscle cell (SMC) Piezol supports intestinal epithelial growth and adaptation in a murine model
- 2. Pou, Maria (Boise State University): *Inflammation promotes breast cancer progression differently in different breast cancer subtypes*

## Engineering, tech, CS, and math

- 1. Hernandez, Bryant (Cal Poly Pomona): Effect of Austenite Stability on Pack Aluminizing of Stainless Steels
- 2. Jimenez, Ezequiel (Cal Poly Pomona): Effectiveness Of Argon In Reducing Oxidative Effects In Corrosion Experiments
- 3. Rouzaud, Zoe (Cal Poly Pomona): Corrosion Behavior of Additively Manufactured Aluminum Alloy 6061
- 4. Rajabi, Faranak (UC Santa Barbara): A Level-Set-Method Approach to Optimally Control Stochastic Neural Oscillators

## Biochemistry and molecular biology

- 1) Rodriguez, Adriana (CSU Fullerton): Design and synthesis of 4phenylthiazole-based dual soluble epoxy hydrolase/fatty acid amide hydrolase inhibitors as potential therapeutics for the chronic pain treatment
- 2) Calvert, Nicki (CSU Northridge): *HLA-Engineering of Pluripotent stem cells for therapeutic T cell receptor Discovery*

**AAAS: Robert I. Larus Award:** Established: 1985, Unrestricted. Basically, this is our top poster – and it comes with \$1500 to help defray the costs to travel to, attend, and present their work at the AAAS National meeting: Fenger, Alexis (and many co-authors) (UC Riverside): *GAME ON! An analysis on the relations between video gaming, spatial skills, and STEM engagement* 

**Laurence M. Klauber Award:** Established: 1984, Unrestricted: to recognize outstanding student contributions. Hernandez, Bryant (and many co-authors) (Cal Poly Pomona): *Effect of Austenite Stability on Pack Aluminizing of Stainless Steels* 

**Presidents Award:** Established: 1995, Unrestricted: to recognize outstanding student contributions: Perez, Ivett (and many, many co-authors) (UCLA): *Smooth muscle cell (SMC) Piezo1 supports intestinal epithelial growth and adaptation in a murine model* 

Geraldine K. Lindsay Award: Established: 1985, Natural Sciences: Fikermariam, Leah (University of San Diego): Variability in Bat Communities Across Various Sites within Costa Rica's Tropical Premontane Forest Belt

**J. Thomas Dutro, Jr. Award:** Established: 1997, Geosciences and Allied Fields: Cagnon-Hoiland, Max, Moore, Shane; Vasilev, Isabella (San Diego Mesa College): *How Area Urbanization Has Affected Tecolote Creek: A Reconnaissance Study* 

**Rita W. Peterson Award**: Established: 2002, Science Education Research: Wilson, Jodi (University of San Diego): *Improving Obesity and Related Chronic Disease Outcomes: Developing Nurse Practitioner Competence in Motivational Interviewing* 

Coming Full Circle Award – This is an unrestricted award given at the discretion of the judges in celebration of the last PD meeting: Yin, Erica (MLK High School, Riverside): Destruction of Per- and Polyfluoroalkyl Substances (PFASs) in Wastewater with Photochemical Treatment