# Biology Department Student Scholarly Work

#### Master's Student Internships

Wendy Berube, Pacific Marine Mammal Center, Laguna Beach, CA Karim Dahdouh, Point Loma Nazarene University Biology Department Ezra Dass, Point Loma Nazarene University Biology Department Luis Gallardo, San Diego City College Biology Department Jesus Garcia, CSU Stanislaus Biology Department Eileen Huffer-Ege, San Diego City College Biology Department Cindy Woo, Point Loma Nazarene University Biology Department

#### Master's Student Thesis

Richard Peterson: "Creationist-Believing Students' Scientific Knowledge and Reasoning about Evolution"

#### **Undergraduate Honors Projects**

Audrianna Alonso: "Navigating macrophage polarization by tumors"

Verushqa Andrade: "The Role of the Human Microbiome in Health"

Joseph Bravo: "Genotypic and Phenotypic Characterization of a set of Vancomycin Resistance Plasmids Captured from a WWTP"

Rachel Culver and Ashley Julio: "In Vitro Assembly of Bacteriophage Lambda Procapsid to Enable Payload Encapsulation for Targeted Drug Delivery"

Sebastian Elsenbroek: "Studies at Hannibal Bank, Panama: A Study of Evolutionary History of Mollusks and Developing a Program to Review Dive Track Data"

Amy Eppert: "Predator-prey relationships for coyote (*Canis latrans*), ocelot (*Leopardus pardalis*), and puma (*Puma concolor*) in Costa Rican ecosystems."

Hannah Lee: "A Study of Pencil Urchin Population Genetics at Hannibal Bank"

Shelby Kenney: "Mating Frequencies of Conjugative Resistance Plasmids in Liquid and Biofilm Cultures"

Mariele Lensink: "Computational Analysis of the Relationships between Antibiotic Resistance and Plasmid Backbone Genes"

Rebecca Salgado: "The role of tumor necrosis factor receptor superfamily members on regulation of T cell response to Zika virus"

#### <u>Undergraduate Student Presentations</u>

Audrianna Alonso\*, Bridget Fortin, Jeffrey Snowbarger (Mentors: Michael I. Dorrell and Heidi Woelbern): "Understanding macrophage polarization by tumors," WCBSURC, 2019.

Daniela Avila\*, Gavin Banning\*, Tom Roser, Ashley Julio (Mentor: Kristopher J. Koudelka): "Assembly and Surface Modification of Viral Nanoparticles for Chemotherapeutic Drug Delivery," WCBSURC, 2019.

Steven Blankenship\*, Amy Eppert, Abner Rodriguez, Timothy Wiegman (Mentors: Mike Mooring and Ryan Botts): "New camera trap survey reveals rare and elusive mammals at La Amistad International Park, Costa Rica," WCBSURC, 2019

Lacey Culpepper\*, Connor Lowey\*, Amy Rausch (Mentors: Heidi Woelbern, Michael I. Dorrell, and Arianne Jansma): "Studying the oncogenic effects of hpv viral proteins on retinoblastoma activity and degradation," WCBSURC, 2019.

Rachel Culver\*, Ashley Julio (Mentor: Kristopher J. Koudelka): "In Vitro Assembly of Bacteriophage Lambda Procapsid to Enable Payload Encapsulation for Targeted Drug Delivery," WCBSURC, 2019.

Sebastian Elsenbroek\* (Mentor: Walter Cho): "A Study of the Evolutionary History of Mollusks at Hannibal Bank," WCBSURC, 2019.

Amy Eppert\*, Abner Rodriguez, Steven Blankenship, Timothy Wiegman (Mentors: Ryan Botts and Mike Mooring): "Predator-prey relationships in high elevation Costa Rican ecosystems," WCBSURC, 2019

Bridget Fortin\*, Allison Hale\*, Connor Lowey, Amy Rausch, Jeffrey Snowbarger (Mentors: Michael I. Dorrell and Heidi Woelbern): "Identification of avastin and torisel as a synergistic angiostatic combination to treat cancer," WCBSURC, 2019.

Yuendie Guridi\*, Victoria Chavez\*, Courtney Rundio\*, Alexander Earle, and Taylor Steele (Mentors: Michael McConnell and Ryan Botts): Characterization of a Bacteriophage that can Infect Four of the Five Major Disease-causing Salmonella Serogroups, "WCBSURC, 2019.

Hannah Lee\* (Mentor: Walter Cho): "A Study of Pencil Urchin Population Genetics at Hannibal Bank," WCBSURC, 2019.

Ashley Julio\*, Tom Roser, Justin Morin, Madison Ziegler (Mentor: Kristopher J. Koudelka): "Assembly and Surface Modification of Viral Nanoparticles for Chemotherapeutic Drug Delivery," WCBSURC, 2018.

Rebecca Salgado\* (Mentors: Kristopher Koudelka and Sujan Shresta): "Regulation of T Cell Responses to Zika Virus Infection Through the Tumor Necrosis Factor Superfamily Memmbers OX40 and GITR," WCBSURC, 2019.

## Undergraduate Student Summer Research

Erin Armstrong

Daniela Avila

David Avila

Gavin Banning

Dakota Betz

Steven Blankenship

Savannah Bolock

Joe Bravo

Madelaine Brown

Victoria Chavez

Carley Coopwood

Alex Earle

Sebastian Elsenbroek

Amy Eppert

**Bridget Fortin** 

Yuendie Guridi

Allison Hale

Ashley Hernandez

Gabrielle Hovis

Ashley Julio

Quaid Kawana

Shelby Kenney

Hannah Lee

Mariele Lensink

Connor Lowey

Malia Lozano

Megan McFadden

Megan Paternoster

Andrew Pecora

Amy Rausch

Abner Rodriguez

Thomas Roser

Courtney Rundio

Isabella Simmons

TJ Wiegman

Gillian Yap

## Undergraduate Student BIO499 Research

Gavin Banning

Steven Blankenship

Dakota Bow-Graham

Madelaine Brown Lacey Culpepper

Esmeralda Elia

Nathan Ellison

Amy Eppert

Arianna Gutierrez

Mackenzie Marsh

Daniella Parra

Gillian Yap

#### **Undergraduate Student Internships**

Sarah Bushrow, Center for Research on Addiction and Brain Health

Johanna DeGraf, San Diego River Park Foundation

Hannah Dinsdale, US Navy Marine Mammal Program

Esmeralda Elia, Kaiser Permanente

Amy Eppert, Volcan Mountain Foundation

Nathaniel Errez, Crown Bioscience

Sarah Gorman, Solana Center

Emily Jenkins, Plant with Purpose

Megan McFadden, Project Wildlife

Mariele Lensink, J. Craig Venter Institute

Heather Parsons, Hawaii Institute for Marine Biology

Hoa Vu, San Diego Miramar College

Kendall Walwick, Crown Biosciences

Tessera Warholic, Zoo Boise

TJ Wiegman, Volcan Mountain Foundation

#### <u>Undergraduate Off-Campus Field Programs</u>

Erin Armstrong - QERC Semester, Costa Rica (Spring 2019)

Victoria Bewley - Au Sable Pacific Rim, USA (Summer 2019)

Steven Blankenship - SFS Bhutan (Fall 2018)

Andrew Burwell - SAI Sorrento, Italy (Spring 2019)

Sheldon Compton - SFS Tanzania (Summer 2018)

Emily Jenkins - Au Sable Pacific Rim, USA (Summer 2019)

Dane Brizzolara - Au Sable Costa Rica (Summer 2019)

Ashley Hernandez - Au Sable Great Lakes, USA (Summer 2019)

Elizabeth Deer - Au Sable Pacific Rim, USA (Summer 2019)

Johanna De Graaf - Au Sable Great Lakes, USA (Summer 2019)

Colman McVaney - Au Sable Pacific Rim, USA (Summer 2019)

Daniel Nauert - Au Sable Great Lakes, USA (Summer 2019)

Sierra Ullrich - CCSP New Zealand (Fall 2019)

## <u>Undergraduate Fellowship Awards</u>

Emily Jenkins - \$2500 Cal DeWitt Fellowship Honorable Mention

Dane Brizzolara - \$2000 Creation Care Outreach Fellowship

Ashley Hernandez - \$1500 Au Sable Fellowship Elizabeth Deer - \$1500 Au Sable Fellowship Johanna De Graaf - \$1500 Au Sable Fellowship Victoria Bewley - \$1500 Au Sable Fellowship