

# 2018-19 Koret Undergraduate Research Scholars

## **Jasmine Aya Abdul-Karim (COWELL)**

Major: Anthropology BA

Mentor: Viktoria Oelze

Project: *Dietary Analysis of Sacsayhuyan and Kanamarka and Social Stratification Implications*

## **Joselyn Alanzon (MERRILL)**

Major: Molecular, Cellular and Developmental Biology BS

Mentor: Camilla Forsberg

Project: *Hormonal Regulation of Hematopoietic Stem Cell Trafficking*

## **Maria Fernanda Alcantara Ornelas (OAKES)**

Major: Latin American and Latino Studies BA

Mentor: Regina Langhout

Project: *The role of  $\gamma$ PAR with Latinx youth in healing community trauma inflicted by La Migra and police*

## **Diana C. Alvarado (MERRILL)**

Major: Marine Biology BS

Mentor: Roxanne Beltran

Project: *Aerial Photogrammetry to Assess Foraging Success in a Marine Mammal*

## **Alyssa Bercasio (CROWN)**

Major: Human Biology BS

Mentor: Camilla Forsberg

Project: *ROBO4-Mediated Hematopoietic Stem Cell Trafficking Between the Sinusoid and the Bone Marrow Niche*

## **Rita Yuriel Carbajal (COWELL)**

Major: Politics BA

Mentor: Kent Eaton

Project: *Politics of Alternative Living Solutions*

## **Janely Cárdenas Vargas (MERRILL)**

Majors: Psychology BA and Latin American and Latino Studies BA

Mentor: Rebecca Covarrubias

Project: *The Effects of Deficit Thinking on Struggling Students*

## **Juliette S. Carr (COWELL)**

Major: Art BA

Mentor: A. Laurie Palmer

Project: *Read Between the Lines*

## **Eimy Castellanos (NINE)**

Major: Biochemistry and Molecular Biology BS

Mentor: Jessie Lopez

Project: *Contributions of KIN17 3\_10 Helix Loop to Splice Site Choice*

## **Ma. Carmelle Catamura (NINE)**

Major: Bioengineering BS

Mentor: Angela Brooks

Project: *Aberrant Splicing as Biomarkers in Cancer Cell Lines Sensitized to Drugs that Target Splicing Regulators*

## **Matthew Cattle (COWELL)**

Major: Bioengineering BS

Mentor: Angela Brooks

Project: *Exploring Gene Expression Changes During the Innate Immune Response*

**Nirupama Chandrasekhar (COWELL)**

Major: History BA

Mentor: Alice Yang

Project: *Turtleback Tombs, Paper Cranes, Memorials and Eisa: Modern Contextualization of Death in Okinawa*

**Audel Contreras Jr. (TEN)**

Major: Psychology BA

Mentor: Rebecca Covarrubias

Project: *How is closeness to family and motivation to attend college linked to psychological outcomes, such as stress, for Latinx FGC?*

**Maria Cordova (TEN)**

Major: Pre-Film and Digital Media

Mentor: Rebecca Covarrubias

Project: *Examining the Attributions for Underrepresentation in STEM*

**Jordan Ford (CARSON)**

Major: Bioengineering BS

Mentor: Rebecca DuBois

Project: *Expression and Purification of Human Astrovirus Spikes 3-7, and Antibody Cross-Reactivity Tests*

**May A Freitas (KRESGE)**

Major: Literature BA

Mentor: Kirstin Wagner

Project: *Practices of Patriarchal Silencing and Cycles of Sexual Abuse in Mexican-American Families*

**Julieta Gomez (NINE)**

Major: Marine Biology BS

Mentor: Lauren Bell

Project: *Differences of Seasonal Growth Rate Between High-Latitude Coralline Algae*

**Gabriel Granado (MERRILL)**

Major: Anthropology BA

Mentor: Vicky Oelze

Project: *Trophic Predictions for fossil sabertooth cats and their influence on human evolution*

**Sydney Gutierrez (CARSON)**

Major: Human Biology BS

Mentor: Jeremy Lee

Project: *LL-37*

**Metzli Amaru Hamelius (OAKES)**

Major: Proposed Music

Mentor: Zac Zimmer

Project: *Queering Female Pachuquismo*

**Imon Islam (CARSON)**

Major: Molecular, Cellular and Developmental Biology BS

Mentor: Christopher Vollmers

Project: *Using New Long Read Low Error Method (R2C2) to Sequence Human B & T Cell Repertoires for Autoimmune Disease*

**Cheyenne N. Jarman (CROWN)**

Majors: Computer Science BA and Marine Biology BS

Mentor: Joshua Smith

Project: *Mechanisms for resiliency: how prey quality influences meso-predator preference in a kelp forest ecosystem*

**Chloe Jot (NINE)**

Major: Literature BA

Mentor: Wlad Godzich

Project: *An Inquiry into the Power of Fiction*

**Lyubov Kaplanskaya (PORTER)**

Majors: Psychology BA and Ecology and Evolutionary Biology BS

Mentor: Heather Bullock

Project: *Addressing Self-Care Needs and Public Health Concerns of the Skid Row Population*

**Glorianna Klyce (STEVENSON)**

Major: Sociology BA

Mentor: Theresa Johnson

Project: *Empowering young women to pursue higher education by promoting college readiness through summer camps.*

**Eric Lahaye (CROWN)**

Major: Psychology BA

Mentor: Nicolas Davidenko

Project: *Efficiency of the detection of ambiguous images and faces in the peripheral visual field.*

**Thao Le (OAKES)**

Major: Sociology BA

Mentor: Steve McKay

Project: *Trends and Characteristics of Property Ownership in the City of Santa Cruz*

**Lesly Martinez Ibanez (Porter)**

Major: Legal Studies BA

Mentor: Karina Ruiz

Project: *The Multi-Generational Impact on the Upward Mobility of DACAmented Students in Mixed-Status Families*

**Adam Lentz (CROWN)**

Major: Biology BS

Mentor: Victoria Auerbuch

Project: *Effect of the Cyclic Peptomer 4-EpD-1,2N on Bacterial Type III Secretion System Assembly*

**Joyce Lin (PORTER)**

Major: Art and Design: Games and Playable Media BA

Mentor: Marcelo Viana Neto

Project: *Queering Spacetime: A Card Game about Positive Representation, Liminality, and Intimacy*

**Xochitl Liliana Lopez (PORTER)**

Major: Mathematics BA

Mentor: Alison Galloway

Project: *A Comparison of Human Decomposition Sequences in Arizona and Colorado Desert Environments*

**Daniel A. Lopez-Adame (PORTER)**

Major: Mathematics (Education) BA

Mentor: Judit Moschkovich

Project: *Exploring how mathematical writing and discussions support mathematical arguments*

**Gozong Zina Lor (CARSON)**

Major: Ecology and Evolutionary Biology BS

Mentor: Laurel Fox

Project: *Resource partitioning conserves biodiversity in a maritime chaparral habitat*

**Flor Vanessa Maciel (CROWN)**

Majors: Earth Sciences BS and Environmental Studies BA

Mentor: Nicole Feldl

Project: *The Influence of Stratospheric Aerosol Geoengineering on Earth's Climate System*

**Cynthia Manzo (STEVENSON)**

Major: Psychology BA

Mentor: Rebecca Covarrubias

Project: *Evaluating the Impact of UCSC First-Generation Faculty Role Models for FG Students*

**Lleymi J. Martinez Arango (MERRILL)**

Majors: Neuroscience BS and Psychology BA

Mentor: Steve McKay

Project: *Thriving Immigrant Communities Across Disciplinary Studies: Community Initiated, Student-Led Research (CISL) Done Together-Apart*

**Bernarda Martinez Martinez (MERRILL)**

Major: Cognitive Science BS

Mentor: Steve McKay

Project: *Thriving Immigrant Communities Across Disciplinary Studies: Community Initiated, Student-Led Research (CISL) Done Together-Apart*

**Eric Medina (KRESGE)**

Major: Latin American and Latino Studies BA

Mentor: Carlos Garza

Project: *Genetic Determination of Connectivity and Reproductive Success in a California Coho Salmon Stronghold*

**Natalie Dawn Miller (NINE)**

Major: Psychology BA

Mentor: Daniel Rodriguez Ramirez

Project: *Exploring Institutional Barriers: The Ending of an 11 Year Relationship Between a yPAR Project and a School District*

**Angel Jesus Mora (OAKES)**

Major: Sociology BA

Mentor: Rebecca London

Project: *The Incarceration Effect: Barriers Students with Incarceration Experience Deal with in Higher Education*

**Ana Moreland (KRESGE)**

Major: Ecology and Evolution BS

Mentor: Barry Sinervo

Project: *Measuring the physical performance of southern alligator lizards in a changing climate*

**Alexis Danielle Munoz (MERRILL)**

Major: Neurobiology BS

Mentor: Phillip Crews

Project: *Identification of the Biosynthetic Gene Clusters Responsible for the Production of Jasplakinolide*

**Issabella Nguyen (CARSON)**

Major: Feminist Studies BA

Mentor: Jessica Calvanico

Project: *Visual Economies of Racial Terror in Digital Media*

**Stephanie Perez (MERRILL)**

Major: Legal Studies BA

Mentor: Matt O'Hara

Project: *Law and the Early History of Bioprospecting in the Ecuadorian Amazon*

**Victoria M Power (KRESGE)**

Major: Art BA

Mentor: Enrique Leal

Project: *Uncanny Observations: The Aesthetic Power of Magnification*

**Megan Pryce (STEVENSON)**

Major: Molecular, Cellular and Developmental Biology BS

Mentor: Kevin Johnson

Project: *Determining how the Helicobacter pylori chemoreceptor TlpA modulates host inflammation*

**Alejandra Ramos (CARSON)**

Major: Latin American and Latino Studies BA

Mentor: Steve McKay

Project: *Thriving Immigrant Communities Across Disciplinary Studies: Community Initiated, Student-Led Research (CISL) Done Together-Apart*

**Caitlyn Rich (MERRILL)**

Major: Ecology and Evolution BS

Mentor: Barry Sinervo

Project: *Coloration Selection in Ensatinas at Fort Ord UC Reserve*

**Tiffani L Rojas (STEVENSON)**

Major: Latin American and Latino Studies BA

Mentor: Christine Rosales

Project: *Sueños y Resistencia: How Latina Women Dream for Social Change through Acts of Resistance*

**Samuel Rosloff (STEVENSON)**

Major: Intensive Psychology BA

Mentor: Brandon Balazar Carr

Project: *Diversity in the Baskin School of Engineering*

**Zafar Rustamkulov (CROWN)**

Major: Physics (Astrophysics) BS

Mentor: Jonathan Fortney

Project: *Assessing the Role of Clouds on Exoplanet Atmosphere Spectroscopy*

**Arvid Samuelson (PORTER)**

Major: Psychology BA

Mentor: Audun Dahl

Project: *On snitching, loyalty, and honesty: Students' reasoning about whether to report when others cheat.*

**Jared Semana (MERRILL)**

Major: Proposed Critical Race and Ethnic Studies

Mentor: Steve McKay

Project: *Thriving Immigrant Communities Across Disciplinary Studies: Community Initiated, Student-Led Research (CISL) Done Together-Apart*

**Maya Silverman (COWELL)**

Major: Physics BS

Mentor: Stefano Profumo

Project: *Angular Power Spectrum of Galactic Pulsar Wind Nebulae*

**Kylie Stiglmeier (OAKES)**

Major: Applied Physics BS

Mentor: Alexander Sher

Project: *Probing Molecular Mechanisms Involved in Retinal Plasticity*

**Samantha Stringer (MERRILL)**

Major: History BA

Mentor: Jennifer Derr

Project: *Education and Identity in Mandate Palestine*

**Joshua Teso (TEN)**

Major: Intensive Psychology BA

Mentor: Brandon Balazar Carr

Project: *Diversity in the School of Engineering*

**Alyssa Thompson (PORTER)**

Major: Proposed Marine Biology

Mentor: Erin McCauley

Project: *Building a Natural Product Pure Compound Library for the Advancement of Pharmaceutical Drug Leads*

**Claudia Torres (OAKES)**

Major: Proposed Sociology

Mentor: Steve McKay

Project: *Thriving Immigrant Communities Across Disciplinary Studies: Community Initiated, Student-Led Research (CISL) Done Together-Apart*

**Valeria Urrutia Hurtado (CARSON)**

Major: Physics BS

Mentor: Enrico Ramirez-Ruiz

Project: *What is the longest GRB that can be powered when a massive star collapses?*

**Joy Velasquez (CARSON)**

Major: Physics BS

Mentor: Constance Rockosi

Project: *The Formation of the Milky Way Stellar Halo*

**Carolin Wahl (CROWN)**

Major: Chemistry BS

Mentor: Rene Mercado

Project: *Yolk-shell nanostructures of metal nanoparticles encapsulated in hollow porous carbon spheres as catalyst for oxygen reduction.*

**Joey Wong (OAKES)**

Major: Biochemistry and Molecular Biology BS

Mentor: Jeremy Lee

Project: *Assessing the Role of the p3 Peptide in Alzheimer's Disease Pathogenesis Using a Drosophila Model*

**Tin Long Sunny Wong (CROWN)**

Major: Physics (Astrophysics) BS

Mentor: Josiah Schwab

Project: *Observable Signatures of Helium-Accreting White Dwarfs Interacting with their Environments*

**Brian Young (CARSON)**

Major: Molecular, Cellular and Developmental Biology BS

Mentor: Peter Weiss-Penzias

Project: *Mercury Methylation by *Desulfovibrio desulficans**

**Elizabeth Yunerman (CROWN)**

Major: Physics (Astrophysics) BS

Mentor: Ruth Murray-Clay

Project: *Overcoming the Meter-size Barrier in Planet Formation Models*