

2017-18 Koret Undergraduate Research Scholars:

Valeria Jacqueline Alonso Blanco (CROWN)

Major: Psychology BA

Mentor: Rebecca Covarrubias

Project: *The role of familismo on Latinx first-generation college students' academic motivation and resilience*

Gabriella Alvarez (TEN)

Major: Biochemistry & Molecular Bio BS

Mentor: Ansari Aleem

Project: *Investigating the Active Site of 12-Lipoxygenase and the Role of pi-pi Interactions*

Garrett Badano (PORTER)

Major: Environmental Studies BA

Mentor: Weixin Cheng

Project: *Alternative Approaches to pH & Nutrient Management in Hydroponic Blueberry Production*

Carmelle Bareket-Shavit (STEVENSON)

Major: Psychology BA

Mentor: Audun Dahl

Project: *The Role of Cognitive Biases in Identifying and Disciplining Plagiarism*

Aleya Caballero (KRESGE)

Major: Art BA

Mentor: Christie McCullen

Project: *Brown Girl Pissed*

Noe Castaneda (CARSON)

Major: Marine Biology BS

Mentor: Rita Mehta

Project: *Comparative feeding mechanics in a trophic generalist and a trophic specialist*

Jimmy Chan (CROWN)

Major: Bioengineering BS

Mentor: Manel Camps

Project: *Identification of temozolomide resistance markers using matched pairs of sensitive and resistant glioma cell lines.*

John Contreras (COWELL)

Major: Art BA

Mentor: Laurie Palmer

Project: *Art Therapy Ethnographic Study*

Fabiana De Lima (STEVENSON)

Major: Psychology BA

Mentor: Rebecca Covarrubias

Project: *Documenting the Facets of Family Achievement Guilt for Latinx First-Generation Students*

Sarah Deleon (COWELL)

Major: Biochemistry & Molecular Bio BS

Mentor: Fitnat Yildiz

Project: *Exploring the Role of the Vibrio exopolysaccharide (VPS) degradation enzyme, RbmB, in VPS production and biofilm formation in Vibrio Cholerae*

Joshua Dillen (COWELL)
Major: Biochemistry & Molecular Bio BS
Mentor: Rebecca DuBois
Project: *Development of a Respiratory Syncytial Virus Attachment Glycoprotein Subunit Vaccine*

Katherine Dunne (CROWN)
Major: Physics BS
Mentor: Jason Nielsen
Project: *ATLAS Pixel electronics and cable services for the High Luminosity LHC upgrade*

Eghosa Edogun (OAKES)
Major: Molec Cell Develop Biology BS
Mentor: Manuel Ares
Project: *Inducing Variable Expression of PRP5 gene in Saccharomyces Cerevisiae*

Gabriel Louis Embrey (PORTER)
Major: History BA
Mentor: Juned Shaikh
Project: *Caste Class and the Left, an Inquiry into the Ideological roots of leftist praxis pertaining to caste and class*

Alfred Freeberg (CARSON)
Major: Chemistry BS
Mentor: Peter Weiss
Project: *Characterizing the process of the conversion of dimethylmercury to monomethyl mercury in fog*

Natalie Friedman (COWELL)
Major: Cognitive Science BS
Mentor: Leila Takayama
Project: *Achieving a Feeling of Mobility and Exploration Through Telepresence*

Christopher Garcia (COWELL)
Major: Linguistics BA
Mentor: Maziar Toosarvandani
Project: *Multiple Questions In Santiago Laxopa Zapotec*

Matheson Gee (CARSON)
Major: Molec Cell Develop Biology BS
Mentor: Michael Stone
Project: *Understanding the effects of G-Quadruplex binding ligands on G-quadruplexes in Telomeric Displacement Loops*

Crystal Gomez (MERRILL)
Major: Sociology BA
Mentor: Rebecca London
Project: *Understanding the Role School Systems Play in the School-to-Prison Pipeline*

Wilfrido Hernandez Flores (CARSON)
Major: Community Studies BA
Mentor: Rebecca Covarrubias
Project: *Family Achievement Guilt and First Generation College Students*

Wynn Jacobson-Galan (CROWN)
Major: Physics (Astrophysics) BS
Mentor: Ryan Foley
Project: *A Spectroscopic Analysis of Type Iax Supernova*

Amy Leslie (NINE)
Major: Biochemistry & Molecular Bio BS

Mentor: Alan Zahler
Project: *Branchpoint Mapping in C. elegans*

Erik Li (NINE)
Major: Molec Cell Develop Biology BS
Mentor: Jeremy Sanford
Project: *Characterizing Splicing Sensitive Disease-Causing Mutation in Exon 6 of the Fabry Disease Gene, Galactosidase A.*

Wendy Lin (TEN)
Major: Biology BS
Mentor: Peter Weiss-Penzias
Project: *Testing coastal Lichen species as a bioindicator of atmospheric Total Mercury and Methylmercury in Central California*

Ricardo Lopez (STEVENSON)
Major: Art BA
Mentor: Karolina Karlic
Project: *American Acculturation: A photography multimedia sculptural project*

Giovanni Magana (OAKES)
Major: Electrical Engineering BS
Mentor: Joel Kubby
Project: *Hyperspectral Imaging UAV for Thermal Energy Detection and Precision Agriculture*

Steffen Mahnke (PORTER)
Major: Chemistry BS
Mentor: William Hollingsworth
Project: *Fractionation and Characterization of poly[3-(potassium-4-butanolate) thiophene-2,5-diyl] in Conjugated Polyelectrolyte Complexes*

Josselyne Morales (PORTER)
Major: Art BA
Mentor: Karolina Karlic
Project: *American Acculturation: A photography multimedia sculptural project*

Tyler Myers (CARSON)
Major: Bioengineering BS
Mentor: Angela Brooks
Project: *High-throughput screen for oncogenic exon skipping events in immortalized tracheobronchial epithelial cells*

Jessica Ness (COWELL)
Major: Literature BA
Mentor: Wlad Godzich
Project: *Age and Agency: Translating Fanon and Poe*

Hermes Padilla (KRESGE)
Major: Community Studies BA
Mentor: Steve McKay
Project: *Crisis on a Hill: A Study of On-Campus Student Housing Experiences*

Rosanai Paniagua (MERRILL)
Major: Latin Amer & Latino Studies BA
Mentor: Roxanna Villalobos
Project: *Central Valley Youth and Civic Life*

Jessica Parra Moya (KRESGE)
Major: Literature BA

Mentor: Zac and Amanda Zimmer and Smith
Project: *The Reconciliation of Heterogeneity in the Conscious of the Mestiza/o*

Bradley Puckett (PORTER)
Major: Computer Science BS
Mentor: Chen Qian
Project: *Private Queries for Internet of Things*

Socorro Ramirez-Gamino (NINE)
Major: LALS/Sociology Comb BA
Mentor: Adrian Felix
Project: *(Re)membering Citizenship: Memories of Political Membership from 'Anchor Babies' & 'Derivative Citizens'*

Kyle Rocha (OAKES)
Major: Applied Physics BS
Mentor: Josiah Schwab
Project: *The Effect of Minor Isotopes on Accretion-Induced Collapse*

Gavin Rockwood (CARSON)
Major: Physics (Astrophysics) BS
Mentor: Adam Coogan
Project: *Distinguishing Between Pulsars and Dark Matter as a Source of Positron Excess*

Rosa Sanchez (CARSON)
Major: Spanish Studies BA
Mentor: Sylvanna Falcon
Project: *Youth Identity Formation Amongst Indigenous Oaxaqueños*

Megan Schnabel (COWELL)
Major: Psychology BA
Mentor: Sarah Harsey
Project: *The Female Gaze: Analyzing Queer Women's Objectification of Women*

James Severson (COWELL)
Major: Cognitive Science BS
Mentor: Edward [Ted] Warburton
Project: *Negotiating Bodily Difference: Cognition and Physically-Integrated Dance*

Ethan Slattery (CARSON)
Major: Computer Engineering BS
Mentor: Daniel Costa
Project: *Seal Heart and Activity Tracker (SealHAT)*

Adam Smith (CROWN)
Major: Physics (Astrophysics) BS
Mentor: Jonathan Fortney
Project: *Confusion in Understanding the Atmospheres of Giant Planets in Reflected Light in Color-Color Space*

Kavin Subramanyam (NINE)
Major: Mathematics BA
Mentor: Jordan Eizenga
Project: *Effective Markov Sampling in Pan-Genome Graphs for Genome Inference*

Sierra Surabian (KRESGE)
Major: Environmental Studies BA
Mentor: Michael Loik
Project: *Phytoremediation of Copper-Contaminated Soils Using Hemp*

Natalia Ubilla (MERRILL)
Major: Biochemistry & Molecular Bio BS
Mentor: Kevin Schilling
Project: *The Role of Glycosylation in the Prion Protein's Neuroprotective Self-Regulation*

Kateryna Voitiuk (KRESGE)
Major: Computer Engineering BS
Mentor: Mircea Teodorescu
Project: *Anatomically Inspired Bioreactor for Growing Brain Organoids*

Andy Wang (KRESGE)
Major: Art & Des: Games & Playable BA
Mentor: Joseph Osborn
Project: *Automated Game Design Learning*

Sarah Wikle (TEN)
Major: Community Studies BA
Mentor: Miriam Greenberg
Project: *Digital Stories Archive, No Place Like Home*

Natalie Wollenweber (MERRILL)
Major: Literature BA
Mentor: Deanna Shemek
Project: *Female Warriors: Connecting the 16th Century to the Now*

Kimberly Zuniga (OAKES)
Major: Psychology BA
Mentor: Rebecca Covarrubias
Project: *Understanding the Emotional Responses and Resilience of Youth of Color Who Confront Community Stressors*