



Undergraduate Student Research Support Program
AY 2016-17 Report

The COAST Undergraduate Student Research Support Program provides \$2,500 annually to every campus to stimulate undergraduate student engagement in faculty-mentored marine, coastal and coastal watershed related research.

In AY 2016-17, a total of 71 students throughout the system were supported. COAST relied upon officially appointed Campus Representatives to implement the program on their campuses.

Table with 6 columns: Campus, Recipient, Program/Major, Advisor, Project Title, Award Amount (Campus Match). Rows include Bakersfield and Channel Islands campuses with details on recipients, advisors, and project titles.

AY 2016-2017 Undergraduate Student Research Support Awards

Campus	Recipient	Program/ Major	Advisor	Project Title	Award Amount (Campus Match)
Chico	Linda Drobotz	Biological Sciences	Dr. Amanda Banet	The effects of incubation temperature on salmonid egg and alevin survival and growth	\$1,250
	Sophia Phillips	Microbiology	Dr. Emily Fleming Nuester	Determining the relationship between biological iron oxidation and mercury mobility in an estuarine salt marsh	\$1,250
Dominguez Hills	Ashley Arambula	Human Services	Dr. Karin Kram	Aquaculture threatened by global climate change: microbiome responses of purple-hinge rock scallop (<i>Crassadoma gigantea</i>) to decreased pH and increased temperature	\$1,124
	Keyley Norton	Biology	Dr. Brynne Bryan	Evaluation of urban runoff effects on the diversity and density of marine diatoms in the littoral zone surrounding Palos Verdes Peninsula	\$688
	Monica Warner	Biology	Dr. Brynne Bryan	Evaluation of urban runoff effects on the diversity and density of marine diatoms in the littoral zone surrounding Palos Verdes Peninsula	\$688
East Bay*	Gerardo Plascencia	Biochemistry	Dr. James Murray	Are sea slugs immune to chemical weapons?	\$1,000 (\$893)
	Robert Wilt	Biological Science	Dr. James Murray	Active sniffing by sea slug rhinophores is enhanced by brain neurons	\$1,500 (\$500)
Fresno	Francisco Barajas	Biology	Dr. Joshua Reece	A phylogenetic perspective on the evolution of body shape in hagfish	\$625
	Huyen Nguyen	Earth & Environmental Science	Dr. Steve Blumenshine	Adjustments of temperature – specific growth rates for juvenile Chinook Salmon in the San Joaquin Watershed	\$625
	Emily Ramirez	Biology	Dr. Steve Blumenshine	The role of disturbance on San Joaquin River macroinvertebrate assemblages; implications for Chinook Salmon survival and growth	\$625
	Nathan Sayavong	Biology	Dr. Brian Tsukimura	Effects of thermal stress and population density on Vitellogenin (Vg) levels in the hemolymph of the anomuran crab <i>Petrolisthes cinctipes</i>	\$625
Fullerton*	Antonio Carmona	Biological Science	Dr. Jennifer Burnaford	Hydrodynamic forces on the surfgrass <i>Phyllospadix</i> and the role that epiphytes play in breakage	\$325
	Tania Eulogia	Biological Science	Dr. Kathryn Dickson	Ocean acidification effects on calcified structures of California grunion larvae at hatching	\$500

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Fullerton*	Alejandra Garcia	Biological Science	Drs. Ryan Walter and Danielle Zacherl	Outcompeted or outbred? Localized extirpation of a native mussel via interspecific hybridization with a highly invasive congener	\$925 (\$350)
	Blake Miyamoto	Biological Science	Dr. Jennifer Burnaford	Effect of intra-individual variability in chemical composition in the kelp <i>Egregia menziesii</i> on the feeding preference of intertidal herbivores	\$750
Humboldt*	Thomas Anderson	Biology	Dr. Rafael Cuevas Uribe	Investigating the viability of triploidy in <i>Haliotis rufescens</i> utilizing caffeine	\$250 (\$250)
	Jessica Gravelle	Biology	Dr. Paul Bourdeau	How stressors influence the lytic activity in <i>Anthopleura elegantissima</i>	\$350
	Daniel Ladd	Wildlife	Dr. Tim Bean	Recolonization rate of purple urchins	\$100 (\$400)
	Chase Macherzak	Fisheries Biology	Dr. Rafael Cuevas Uribe	Land-based marine integrated multi-trophic aquaculture system	\$350 (\$150)
	Amezcu Marcos	Chemistry	Dr. Matthew Hurst	Determination of the copper speciation in Humboldt Bay	\$200 (\$190)
	Aris Ownsbey	Biology	Dr. Paul Bourdeau	Ocean acidification acclimation potential of coralline algae when exposed to tidally driven variation	\$200 (\$163)
	Jordan Paulsen	Biology	Dr. Paul Bourdeau	Effects of shell shape and shell thickness on <i>Nucella lamellosa</i> shell strength	\$350
	Aria Peavy	Biology	Dr. Paul Bourdeau	The effects of caffeine in marine systems on zooxanthellae symbionts	\$350 (\$150)
	Dustin Price	Biology	Dr. Jacob Varkey	Determination of genotype influence on sea star associated densovirus load and sea star wasting disease symptoms	\$350 (\$150)
Long Beach	Cynthia Coria	Biology	Dr. Christine Whitcraft	Relation of food source availability at Huntington State Beach to the California Least Tern (<i>Sternula antillarum browni</i>) diet	\$625
	Haley Gause	Microbiology	Dr. Douglas Pace	Assessing the dissemination potential of tachyzoite stages of <i>Toxoplasma gondii</i> parasites during exposure to coastal California seawater conditions: exploring a new pathway to marine mammal infections	\$625
	Richer Laporte	Microbiology	Dr. Jesse Dillon	The effect of restoration on extreme hypersaline viruses in a solar saltern	\$625

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Long Beach	Alec Ohanian	Molecular Cell Biology and Physiology	Dr. Douglas Pace	Determining temperature- performance of the aerobic enzyme, citrate synthase, as a way of predicting thermal habitat range in the three species of California echinoderms	\$625
Los Angeles	Benson Truong	Biology	Dr. Andres Aguilar	DNA barcoding and cryptic differentiation of mesopelagic fishes	\$1,152
	Andrew Wong	Biology	Dr. Patrick Krug	Interspecific competition and multivariate natural selection set range limits for a coastal sea slug	\$1,050
Maritime*	Kevin Prochnow	International Business & Logistics	Dr. Alexander Parker	Potential micro-plastic collection in the San Francisco Bay estuarine fronts	\$900
	Shaun Teter	Marine Transportation	Dr. Alexander Parker	The seasonal and spatial variation of light attenuation in the northern San Francisco Estuary, California	\$1,600 (\$1,000)
Monterey Bay	Jordan Healy	Marine Science	Drs. Gerick Bergsma and Alison Haupt	Effects of human visitation on rocky intertidal communities at Point Lobos	\$300
	Madison Heard	Marine Science	Dr. Cheryl Logan	Changes in metabolic enzyme activity of larval gopher rockfish (<i>Sebastes carnatus</i>) as an indicator of acclimation to seasonal upwelling events	\$1,100
	Skylar Kensigner	Biology	Dr. Eric Crandall	Is Cape Mendocino a barrier to marine larval dispersal?	\$1,100
Northridge*	Corensa Eisenlord	Environmental & Occupational Health	Dr. Gretchen Boria Perez	Vibrio Cholerae 01 in coastal waters of Southern California and its ecological relationships with planktonic copepods	\$1,000
	Lindsey Stockton	Biology	Dr. Mark Steele	Effects of exploitation on targeted fishes in marine protected areas	\$500 (\$475)
	Adam Wiryadimejo	Biology	Dr. Robert Carpenter	The effects of ocean acidification and temperature change on the growth rates of tropical infaunal bivalves	\$1,000
Pomona	Morgan Bottomley	Biology	Dr. Ángel Valdés	Additional nuclear gene for taxonomic revision of Juliidae	\$672
	Stephanie Franck	Biology	Dr. Jeremy Claisse	Effects of body size, age, and seasonality on gonadal development in Garibaldi, <i>Hypsypops rubicindus</i>	\$697

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Pomona	John Walls	Geography	Dr. Kristen Conway-Gómez	Death & taxa: monitoring seismic cycle ground deformation using rocky intertidal zone mortality, Nicoya Peninsula, Costa Rica	\$631
	Mikaela Wayne	Biology	Dr. Ángel Valdés	Pseudocryptic speciation of two Eastern Pacific sea slug species	\$500
Sacramento	David Bui	Biological Sciences	Dr. Ron Coleman	When do Bay Pipefish breed?	\$500
	Laura Givens	Biological Sciences	Dr. Ron Coleman	Invasive species in Tomales Bay	\$500
	Dakota Keene	Geology	Dr. Amy Wagner	Stable isotope analysis in corals from US Virgin Islands	\$500
	Margarita Kovalchuk	Civil Engineering	Dr. Cristina Poindexter	Influence of dissolved oxygen and flow rates on accretion in Delta wetlands	\$500
	Shael Rebol	Biological Sciences	Dr. Amy Wagner	Assessment of <i>Errina fissurata</i> utilizing nanoSIMS for growth pattern analysis	\$500
San Diego*	Christopher Long	Biology	Dr. Matthew Edwards	The potential of chicken-poop powered hydroponics: a creative method of utilizing nitrifying bacteria to convert chicken manure into useable nitrogen for crop plants	\$1,080 (\$250)
	Cynthia Martinson	Environmental Science	Dr. Walter Oechel	Climate change and blue carbon sinks	\$200
	Tate Van Duivenbode	Environmental Science	Dr. Kevin Hovel	Healthy seagrass habitats	\$734
San Francisco	Samantha Brophy	Biology	Dr. Robyn Crook	Effects of stress and tissue injury on behaviors of the coastal cephalopod, <i>Euprymna scolopes</i>	\$750
	Ryan Fergusson	Biology	Dr. C. Sarah Cohen	Characterizing the biodiversity of Botryllid Ascidians through CO1 barcoding	\$850
	Kayla Hall	Biology	Dr. Karen Crow-Sanchez	The morphological evolution of cephalic lobes in Myliobatids	\$900
San José	Lauren Cunningham	Biological Sciences	Dr. Luke Miller	Effects of low tide temperature on <i>Mytilus californianus</i> internal body temperatures	\$2,500

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San Luis Obispo	Samantha Bock	Biological Sciences	Dr. Sean Lema	Interactive effects of thermal environment and nonylphenol exposure on the reproductive performance of estuarine sheepshead minnow, <i>Cyprinodon variegatus</i>	\$500
	Maurice Goodman	Biological Sciences	Dr. Ben Ruttenberg	The relationship between geographic range extent and adult traits in coastal temperate fishes	\$467
	Andrew Hostler	Electrical Engineering	Dr. Bridget Benson	ROV workshop design for undergraduates	\$500
	Sawyer Randles	Biological Sciences	Dr. Crow White	Proteomic responses to physiological temperature stress in Kellet's whelk (<i>Kelletia kelletti</i>)	\$500
	Jackson Strobel	Biological Sciences	Dr. Sean Lema	Insulin-like growth factor 1 (IGF-1) as a physiological biomarker for growth rate and nutritional status of juvenile cabezon	\$500
San Marcos	Jaciel Hernandez	Biological Sciences	Dr. Diego Sustaita	A comparison of the feeding behavior between adult and juvenile San Clemente loggerhead shrikes (<i>Lanius ludovicianus mearnsi</i>)	\$1,250
	Morgan Rentschler	Biological Sciences	Dr. Casey Mueller	Effects of temperature on the metabolism of <i>Tigriopus californicus</i> , an intertidal copepod	\$1,250
Sonoma	Haley Sneiderman	Biology	Dr. Mackenzie Zippay	Measuring cardiac performance of invasive mussels	\$1,000
	Emily Sperou	Biology	Dr. Daniel Crocker	Growth efficiency in elephant seal pups	\$1,000
	Anthony Tercero	Biology	Dr. Sean Place	Identifying hypermethylated regions of DNA in immune genes of marine mussels	\$500
Stanislaus	John Hund	Geology	Dr. Horacio Ferriz	Effects of pumping out of Clifton Court Forebay on the discharge of select channels in the Sacramento-San Joaquin Rivers estuary	\$500