



Undergraduate Student Research Support Program
AY 2014-15 Report

COAST launched the Undergraduate Student Research Support Program in AY 2014-15 in order to support more undergraduate students throughout the system than had been previously accomplished through other programs.

In AY 2014-15 COAST provided \$50,000 that resulted in a total of 74 awards across 20 campuses. COAST relied upon officially appointed Campus Representatives to implement the program on their campuses.

AY 2014-2015 Undergraduate Student Research Support Awards

Table with 6 columns: Campus, Recipient, Program/Major, Advisor, Project Title, Award Amount. Rows include Channel Islands, Chico, and Dominguez Hills campuses with their respective award recipients and details.

**AY 2014-2015 Undergraduate Student Research Support Awards**

<b>Campus</b>	<b>Recipient</b>	<b>Program/ Major</b>	<b>Advisor</b>	<b>Project Title</b>	<b>Award Amount</b>
Dominguez Hills	Ashley Potter	Biology	Dr. Jacqueline Padilla-Gamino	Bleaching and its affects on the cnidocyte production of <i>Anthopleura elegantissima</i>	\$1,245
	Maria Salazar	Biology	Dr. Jacqueline Padilla-Gamino	Effects of temperature on barnacle development	\$281
	Jacqueline Silva	Biology	Dr. Jacqueline Padilla-Gamino	Effects of temperature on juvenile barnacles: a study using reciprocal transplants	\$281
East Bay	Chelsea Henderson*	Biology	Dr. James Murray	Effects of geomagnetic field on navigation in the sea slug <i>Tritonia tetraquetra</i>	\$1,000
	Katrina-Mari Mayol*	Biology	Dr. James Murray	Determining water flow direction during short distance navigation of the sea slug <i>Tritonia tetraquetra</i>	\$1,000
	Daniel Nguyen*	Biology	Dr. Tyler Evans	Common and stressor-specific responses to temperature, hypoxia and salinity in the estuarine fish <i>Gillichthys mirabilis</i>	\$500
Fresno	Robert Loyd	Mechanical Engineering	Dr. Ulrike Muller	Hydrophone for studying plankton predator-prey interaction	\$1,250
	Jason Thomas	Biology	Dr. Mamta Rawat	Analysis of gene expression in <i>Synechococcus elongatus</i> and mutants disrupted in glutathione metabolism	\$1,250
Fullerton	Lilian Bui*	Biological Science	Dr. Jennifer Burnaford	Evaluating the consequences of feather boa limpet ( <i>Lottia insessa</i> ) infection on the feather boa kelp ( <i>Egregia menziesii</i> )	\$250
	Brittany Garces*	Biological Science	Dr. Jennifer Burnaford	The effect of low tide exposure on the susceptibility of kelp to herbivory	\$1,125
	Prarthana Shankar*	Biological Science	Dr. Kristy Forsgren	An assessment of the reproductive physiology of the California mussel ( <i>Mytilus californianus</i> ) in southern California	\$1,125
Humboldt	William Fairchild*	Oceanography	Dr. Jeffrey Abell	Marine boundary layers are distinct atmospheric phenomena observed at the boundary of land-sea and mediate local temperature, humidity, and cloudiness	\$500
	Samantha Gonzalez-Gold*	Biology	Dr. Tim Mulligan	The effect of temperature on the development and growth of dwarf cuttlefish ( <i>Sepia bandensis</i> )	\$250

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Humboldt	Angela Jones*	Biology	Dr. Paul Bourdeau	Wasting effects on different life stages of <i>Leptasterias hexactis</i>	\$500
	Eloy Lopez*	Biology	Dr. Tim Mulligan	The effect of temperature on the development and growth of dwarf cuttlefish ( <i>Sepia bandensis</i> )	\$250
	Johnny Roche*	Biology	Dr. Paul Bourdeau	Cancriid crab prey selection: a question of size or species identity ( <i>Decapoda: Brachyura: Cancridae</i> )?	\$500
	Marke Sinclair*	Biology	Dr. Sean Craig	Larval settlement patterns of a new species of invasive bryozoan, <i>Watersipora</i> spp.	\$500
Long Beach	Andrea Danihel	Marine Biology	Dr. Bruno Pernet	Do marine larvae feed better in simple or complex feeding environments?	\$625
	Priscilla Figueroa	Biology	Dr. Doug Pace	Assessing biochemical growth efficiency in <i>Dendraster excentricus</i> larvae grown at different nutrient conditions	\$625
	Caitlin Sojka	Marine Biology	Dr. Bruno Pernet	Effects of feeding on the growth of the larvae of polyclad flatworms	\$625
	Vivian Ton	Marine Biology	Dr. Kelly Young	Determining fecundity in the kelp bass, <i>Paralabrax clathratus</i>	\$625
Los Angeles	Juliana Lawrence	Biology	Dr. Patrick Krug	Do non-dispersive larvae decrease genetic diversity? A test using microsatellites	\$938
	Alissa Magaña	Geology	Dr. M. Hassan Rezaie-Boroon	Heavy metals and trace elements in water, sediment, pore water, and biomass of Ballona Creek Wetland, CA	\$1,000
	Ariel Sherman	Biochemistry	Dr. Patrick Krug	Is <i>Elysia clarki</i> a distinct species, or an ecotype of <i>E. crispata</i> ? A test using microsatellites	\$560
Maritime	Hannah Foster*	Marine Transportation	Dr. Alexander Parker	Not available	\$625
	Austin Gearty*	Marine Transportation	Dr. Alexander Parker	Effects of inorganic nutrients on primary production	\$625
	Rose Hendrix*	Mechanical Engineering	Dr. Michael Holden	A student-run autonomous oceanographic research vessel	\$750
	William Lindsay*	Global Studies and Maritime Affairs	Dr. Ryan Dudley	Not available	\$250

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Monterey	April Makhukov	Biology	Dr. Cheryl Logan	Investigating the effects of ocean acidification on juvenile rockfish ( <i>Sebastes</i> spp.) gene expression	\$1,500
	Serena Thurston	Marine Science	Dr. Kerry Nickols	Examination of crustacean larval diversity within the zooplankton communities of moving water parcels off the central California coast – a study in population connectivity	\$914
Northridge	Malek Al-Marayati	Marine Biology	Dr. Steven Dudgeon	Population genetic structure of <i>Mastocarpus</i> spp.	\$500
	Corensa Eisenlord	Marine Biology	Dr. Gretchen Boria Perez	<i>Vibrio cholerae</i> and copepods in coastal waters of southern California	\$500
	Alexis Estrada	Biology	Dr. Mark Steele	The effects of an invasive alga, <i>Sargassum horneri</i> , on kelp forest fishes and habitat at Santa Catalina Island, California	\$500
	Jayslen Serrano	Biology	Dr. Robert Carpenter	The effects of increased carbon dioxide levels and temperature on photosynthetic and calcification rates of <i>Montipora aequituberulata</i> and <i>Lithophyllum inspidum</i> in Moorea, French Polynesia	\$500
	Cameron Winbush	Biology	Dr. Casey terHorst	Genotypic variation in temperature tolerance of symbiotic algae	\$500
Pomona	Eric Breslau	Biology	Dr. Angel Valdes	Newly discovered diversity and cryptic invasion(s) of <i>Melanochlamys</i> sea slugs ( <i>Gastropoda, Aglajidae</i> ) in the North Pacific	\$825
	Adrianna Elihu	Biology	Dr. Angel Valdes	Possible invasive species of <i>Haminoea ovalis</i> on Catalina Island	\$825
	Alycia Uyeoka	Biology	Dr. Jayson Smith	Consumption rates and diet selectivity by the kelp snail ( <i>Norrisia norrisi</i> ) for native and non-native <i>Sargassum</i> seaweeds	\$850
San Bernardino	Lowell Iporac	Biology	Dr. John Skillman	Assessing abiotic factors and algal communities of eelgrass ( <i>Zostera marina</i> ) beds across California	\$1,681
	Madison Morris	Geology	Dr. Britt Leatham	On the biometric analysis of scaphopods of the Pleistocene Palos Verdes Formation and their indications of environmental change and sediment petrology	\$819
San Diego	Shay Hengen	Biology	Dr. Kevin Hovel	The feeding habits of <i>Alia carinata</i> using feeding assay, behavior analysis, and stable isotope analysis	\$378

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San Diego	Jennifer Joseph	Biology	Dr. Kevin Hovel	The effects of a predator cue on grass shrimp grazing on seagrass	\$493
	Chyna Lee	Anthropology	Dr. Todd Braje	Human impacts on California mussels ( <i>Mytilus californianus</i> ): a 9,500 year old record from San Miguel Island, California	\$423
	Jaimie Savoie	Biology	Dr. Brian Hentschel	Effects of tidal current speed of feeding activity and prey selection of California killifish, <i>Fundulus parvipinnis</i>	\$643
San Francisco	Jaymee Chaides	Ecology	Dr. Karen Crow	Phylogeny based on Hox A11, A13, D11, D12, and D13 of cartilaginous fishes	\$500
	Alice Dore	Biology	Dr. C. Sarah Cohen	The distribution of <i>Proflicollis altmani</i> – a marine parasite relevant to seabird and otter health	\$500
	Bridget Hansen	Microbiology	Dr. Edward Carpenter	The effects of temperature on the domoic acid producing diatom: <i>Pseudo-nitzschia</i>	\$500
	Liam O'Malley	Biology	Dr. Karen Crow	Multiple paternity in dwarf surfperch, <i>Micrometrus minimus</i>	\$500
	Cristina Provencio	Biology	Dr. Karen Crow	Discovering bay pipefish: an analysis of sexual dimorphism and growth variation	\$500
San Luis Obispo	Yareli Alvarez*	Biological Sciences	Dr. Nikki Adams	Use of Phos-tag™ labeling to identify effects of UV radiation on phosphorylation of Chk1 in the purple sea urchin, <i>Strongylocentrotus purpuratus</i>	\$250
	Alice Bourgeon*	Biological Sciences	Dr. Kristin Hardy	The effect of tidal position on skeletal muscle structure and metabolism in the giant acorn barnacle, <i>Balanus nubilus</i>	\$250
	Megan Durham*	Biological Sciences	Dr. Elena Keeling	Quantification of telomerase activity in colonial ascidians	\$383
	Mary Gamboa*	Biological Sciences	Dr. Elena Keeling	Characterization and quantification of blood cell types in colonial ascidians	\$234
	Jennifer Greene*	Biological Sciences	Dr. Lisa Needles	Spawning, settlement, and larval biology of Pismo clams, <i>Tivela stultorum</i>	\$250

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San Luis Obispo	Maritza Luquin*	Biological Sciences	Dr. Lars Tomanek	Antioxidant capacity and oxidative damage in two mussel species, <i>Mytilus galloprovincialis</i> and <i>Mytilus trossulus</i> , under natural field conditions in San Francisco Bay	\$250
	Daniela Martinez*	Biological Sciences	Dr. Lars Tomanek	Effect of multiple environmental stressors on antioxidant capacity of two mussel congeners <i>Mytilus galloprovincialis</i> and <i>Mytilus trossulus</i>	\$250
	Emily Resner*	Biological Sciences	Dr. Kristin Hardy	Establishment of a working protocol for measuring citrate synthase activity in marine invertebrate muscle tissue	\$250
	Alex Westman	Biological Sciences	Dr. Kristin Hardy	Establishing a working protocol for measuring LDH activity in marine invertebrate muscle tissues	\$383
San Marcos	Eduardo Castillo	Biological Sciences	Dr. Robert Sheath	Isolation of messenger RNA from <i>Zygnema irregulare</i>	\$824
	Daniel Cuggedge	Biological Sciences	Dr. Betsy Read	Design of experiment: optimizing electroporation parameters for <i>Emiliana huxleyi</i>	\$853
	Nicole Salas	Biological Sciences	Dr. Robert Sheath	Isolation of messenger RNA from <i>Zygnema irregulare</i>	\$824
Sonoma	Nicholas Barron	Biology	Dr. Daniel Crocker	Impacts of the novel stress hormone aldosterone on electrolyte balance in elephant seals	\$625
	Jordan Lankford	Biology	Dr. Sean Place	Do global methylation patterns change with exposure to sewage effluent?	\$625
	Orlando Martinez	Biology	Dr. Sean Place	MDR1 expression as a bioindicator of xenobiotic exposure in <i>Mytilus californianus</i>	\$625
	Andrea Reategui	Biology	Dr. Daniel Crocker	Impacts of stress on reproduction in elephant seals	\$625
Stanislaus	Mark Hilgers	Biology	Dr. Ritin Bhaduri	A comparative analysis of larval helminths associated with their intermediate host, the sand crab <i>Emerita analoga</i>	\$1,250
	Rajvir Singh	Biology	Dr. Ritin Bhaduri	A comparative analysis of larval helminths associated with their intermediate host, the sand crab <i>Emerita analoga</i>	\$1,250