

**Academic Senate Committee on Research Faculty Grant Recipients 2022**

<b>PI</b>	<b>Co-PI(s)</b>	<b>Project Title</b>	<b>School(s)</b>	<b>Amount Funded</b>
Adeyemi Adebisi	-	Investigating the overlooked impacts of longwave dust-cloud interactions on the Earth's climate system	SNS	\$5,000.00
Chris Amemiya	-	Towards a paradigm shift: Monoclonal antibodies for the masses	SNS	\$5,000.00
Harish S. Bhat	Boaz Ilan, Christine M. Isborn	Dynamic Learning of Potentials for More Accurate Simulations of Electron Dynamics	SNS	\$15,000.00
François Blanchette	-	Simulating deep-sea mining's impact on benthic (deep ocean) systems	SNS	\$5,000.00
Carolin Frank	-	Microbiome of the drought tolerant blue oak	SNS	\$5,000.00
Marcos E. García-Ojeda	-	The learning environment, affective factors and academic performance	SNS	\$5,000.00
Linda Hirst	-	Effect of e-cigarette additives on lung surfactant	SNS	\$5,000.00

Shilpa Khatri	Roummel Marcia, Kevin Mitchell	Machine Learning for Predictions of Pulsing Soft Corals	SNS	\$15,000.00
Sora Kim	Claire Lukens, Asmeret Asefaw Berhe	Geochemical tracing of California wildfire: implications for pyrogenic carbon distribution and paleofire reconstruction	SNS	\$14,999.00
Jennifer O. Manilay	-	Pesticides and Bone Marrow Failure	SNS	\$5,000.00
Michele K. Nishiguchi	Stefan C. Materna	Evolution and developmental origins of light organ lens in a squid bioluminescent bacterium mutualism	SNS	\$10,000.00
Erica Rutter	Suzanne Sindi	Learning & analyzing differential equations from multiscale agent based models in mathematical biology	SNS	\$10,000.00
Liang Shi	-	Understanding the Structure and Thermodynamics of Anti-Freeze Protein via Molecular Simulation and Computational Spectroscopy	SNS	\$5,000.00
Mark Sstrom	-	Using <i>Klebsiella pneumoniae</i> phage to treat drug resistant ventilator associated pneumonia in the age of COVID19	SNS	\$4,964.00
Emilia Sogin	Clarissa J. Nobile, Aaron Hernday, Juris Grasis	Microbial communities associated with the seagrass <i>Zostera marina</i>	SNS	\$20,000.00

Justin D. Yeakel	-	Exploring the relationships between morphological variation, dietary breadth, and patterns of extinction among Hawaiian Honeycreepers (Drepanididae)	SNS	\$5,000.00
Roberto C. Andresen Eguiluz	Michael Findlater	Synthesis and characterization of novel ionic liquids for low viscosity lubrication	SOE, SNS	\$10,000.00
Ahmed Sabbir Arif	Shijia Pan	Smart Kiosk for Raising Awareness of Recycling in the UC Merced Community	SOE	\$10,000.00
Wei-Chun Chin	Changqing Li	Rapid automatic point of care system using functional nanomaterials for COVID-19 antibody detection	SOE	\$10,000.00
Po-Ya Abel Chuang	-	Development of a New Rheo-Impedance Method to Characterize Catalyst Structure for Energy Conversion or Hydrogen Generation	SOE	\$5,000.00
Jeanette Cobian	Ricardo Cisneros	Wildfire Emissions in the age of COVID-19: insights from indoor and outdoor air quality in a university campus	SOE, SSHA	\$8,778.00
Jennifer Lu	-	Suppressing ion shuttling for high performance aqueous Zn-I2 batteries for integration renewable energies into electric grid	SOE	\$5,000.00

Alexander Petersen	Jeffrey Jenkins	Empirical method for evaluating knowledge supply-demand alignment in the US National Parks to inform both management and sustainability science	SOE	\$10,000.00
Pengfei Su	-	Towards Efficient Big-data Software Stacks	SOE	\$5,000.00
Anand Bala Subramaniam	-	Giant liposomes for sustainable, cost-effective lateral flow Covid-19 antigen tests	SOE	\$5,000.00
Camila Alvarez	Charlie Eaton, Whitney Pirtle	Missing Pictures and Stories in STEM Education: W.E.B. Du Bois and Inclusive Curriculum for Quantitative Methods and Data Science Instruction	SSHA	\$15,000.00
Justin Cook	-	Potatoes, Milk, and Old World Conflict	SSHA	\$4,227.00
Sarah Depaoli	-	Observing the Unobservable: How to Statistically Identify Unobserved Groups	SSHA	\$5,000.00
Christian Fons-Rosen	-	Novelty in Entrepreneurial Innovation	SSHA	\$4,800.00
Rowena Gray	-	Police Jobs, Mobility, and Race in American Urban History	SSHA	\$5,000.00

Haiyan Liu	-	A Novel Double Latent Space Modeling of Social Networks	SSHA	\$5,000.00
Haifeng Huang	-	The Effects of American Public Diplomacy in China	SSHA	\$2,500.00
Jayson Beaster-Jones	David Torres-Rouff, Anne Zanzucchi	Livingston Centennial Project	SSHA	\$15,000.00
Holley Moyes	-	3D Mapping of Ancient Maya Cave Sites: A Revolution in Cave Archaeology	SSHA	\$5,000.00
Ren Liu	-	Uncover the Meaning Behind Nonresponses: The Development of Three Novel Statistical Methods	SSHA	\$5,000.00
Tesalia Rizzo	-	The Social Impact of Participatory Financial Inclusion Programs in Rural Mexico	SSHA	\$5,000.00
Yehuda Sharim	-	Y Escalar: Documenting Prison Communities in Rural California	SSHA	\$5,000.00
Yiran Xu	Paul Gibbons	A translingual approach to writing: Developing translingual dispositions and writing competence among students in upper division writing courses	SSHA	\$9,564.00