ARCHIVE 2012 to 2022

RCNR Fall 2022 Honors Participants

Rausser College of Natural Resources Honors Symposium

Isaac Natanael Aguilar, MEB/EMF

RCNR Faculty Mentor: Arthur Middleton, ESPM
Monitoring Biodiversity with eDNA and Camera Traps in the Sierra de Manantlán, Jalisco-Colima, México

Courtney Chau, NST

Faculty Mentor: Dr. Alix Lutnick | RCNR Faculty Sponsor: Mary Lesser, ESPM
Assessing Physician Responses to Suspicion or Patient Disclosure of Domestic Violence in the United States

Sonali Pfile, MB | Faculty Mentor: Dr. Ronald Krauss | RCNR Faculty Sponsor: Dr. Kathleen Ryan, PMB The Effect of Weight Loss on HDL-associated Complement C3: A Potential Inflammatory Risk Marker

Jack Weaver, EEP/Political Science | RCNR Faculty Mentor: Sofia Villas-Boas, ARE
The Crisis at the Salton Sea: An Econometric Analysis of Property Values and Demographic Disparities in the Coachella and Imperial Valleys with Sociological Applications

RCNR Spring 2022 Honors Participants

Rausser College of Natural Resources Honors Symposium

Day 1

Henrique Carneiro Zhu, EMF | RCNR Faculty Mentor: Nina Pak, ESPM
Coastal Dune Fencing Effects on Insect Diversity and Trophic Ecology in Northern Portugal

Yizi Li, CRS | RCNR Faculty Mentor: Ignacio Chapela, ESPM The Functional Ecomorphology of Claws in New World Sciuridae

Benjamin Levin, CRS | RCNR Faculty Mentor: Justin Brashares, ESPM
Factors Influencing the Occupancy of Red Foxes (Vulpes vulpes) in a Restored San Francisco Bay Wetland

Emma Campbell, CRS | RCNR Faculty Mentor: Arthur Middleton, ESPM Comparing Migrant and Resident Elk Behavioral Responses to Fences

Joseph Toman, CRS/MEB | RCNR Faculty Mentor: Ian Wang, ESPM
The Effect of Land Use History on Metapopulations: How Grazing and Roads Impact Taricha Torosa Migration and Breeding in the San Francisco Bay Area

Lexi Caruthers, CRS/SED | RCNR Faculty Mentor: Roxanna Marie Cruz, ESPM Remediation of Soil Utilizing Hyperaccumulating Plants

Lia Keener, MEB | RCNR Faculty Mentor: Laura Gigliotti, ESPM | RCNR Faculty Sponsor: Arthur Middleton, ESPM
Analyzing Changes in Greenness Over Time in Relation to Herbivore Recolonization in the Bayala Game Reserve

Dan Willett, MEB | RCNR Faculty Mentor: Whendee Silver, ESPM
Feasibility of Detecting Grassland Soil Management Effects Using Remote Sensing

Anna Pi, MEB/Data Science | RCNR Faculty Mentor: Sona Kang, NST
Investigating the Role of AIFM2 in Skeletal Muscle During High Intensity Aerobic Exercise

Maya Akkaraju, MEB | Faculty Mentor: Ashley Wolf, Public Health | RCNR Faculty Sponsor: Kim Seed, PMB
Investigating the Impact of an Altered Immune System on Gut Microbiome Communities

Heidi Yang, MEB | RCNR Faculty Mentor: Rosemary Gillespie, ESPM
Investigating the Role of Transposable Elements in the Adaptive Radiation of Hawaiian Tetragnatha Spiders

Xuehao Ma, MEB | RCNR Faculty Mentor: George Bentley, Integrative Biology | RCNR Faculty Sponsor: Damian Elias, ESPM
Rapid Effects of Acute Stress on the HPG Axis of Big Brown Bats

Aiden Keller, MEB | RCNR Faculty Mentor: Lynn Huntsinger, ESPM
Spatial Diversity Mapping and Morphometric Analyses of Haliotis Along the Northern California Coastline

Athena Lee, NST/MEB | RCNR Faculty Mentor: Andreas Stahl, NST
Modeling Metabolic and Immuno Competent White Adipose Tissue in Microphysiological System Using Single Induced Pluripotent Stem Cells Source

Wonsik Woo, NST | RCNR Faculty Mentor: Joseph Napoli, NST
Regulation of 9-cis-retonic Acid Biosynthesis and its Effects on Autophagy in Pancreatic β-cells

Kellan Kim, NST | Faculty Mentor: Christian Vaisse, UCSF | RCNR Faculty Sponsor: Jen-Chywan Wang, NST
Antennas in the Brain: A Closer Look at How We Control Appetite **Melis Medalist**

Annie Gallivan, NST | Faculty Mentor: Angela Rivers, UCSF | RCNR Faculty Sponsor: Sabeecha Merchant, PMB
Evaluating Erythrocyte Mitochondrial Retention in Mouse Models of Stress Erythropoiesis, **Melis Medalist**

Ava Joseph, GPB | RCNR Faculty Mentor: Raphaela Floreani, ESPM
Soil Seed Banks of Native and Non-native Plants in California's Vernal Pools

Connor Tumelty, GPB | RCNR Faculty Mentor: Ben Williams, PMB
Engineering Novel Epialleles via Directed de novo DNA Methylation in Arabidopsis thaliana

Kyralai Duppel, S&E | RCNR Faculty Mentor: Kate O'Neill, ESPM

The Intersection of Labor Abuses and Environmental Degradation in the Global Fishing Industry: The Extent and Potential Solutions

Emily Woods, S&E | Faculty Mentor: Nell Green Nylen, Berkeley Law | Elias, ESPM
Climate Change Mitigation and Constitutional Environmental Rights

Annie Mitchell, S&E | Faculty Mentor: James Eckhouse, Geography |
O'Neill, ESPM
When Climate Change and Poverty Intersect: Food Insecurity and Sex Work Amongst East African Women

Zoe Fairlie, CRS/EEP | RCNR Faculty Mentor: Arthur Middleton, ESPM The Effects of Highways on Guanaco Movement in Patagonia

Kelly Rice, CRS/SED | Faculty Mentor: Kristina Hill, Landscape Architecture | RCNR Faculty Sponsor: Kate O'Neill, ESPM
Analysing Current and Future Contaminant Release with Predicted Groundwater Rise at the AstraZeneca Site in Richmond , **Melis Medalist**

Day 2

Jeanne Peabody, CRS | RCNR Faculty Mentor: Sunaura Taylor, ESPM Access Intimacy in the East Bay Regional Parks District

Kendall Archie, CRS | RCNR Faculty Mentor: Kurt Spreyer, ESPM
'Ike Kupana and Loko I'a: The Role of Ancestral Knowledge in the Revitalization of Hawaiian Fishponds

Elena Nim, CRS | Faculty Mentor: Sara Mameni, Ethnic Studies **|** RCNR Faculty Sponsor: Sunaura Taylor, ESPM
In Tagalog, There is No Word for Garden: Notes on the (In)ability of Colonial Languages to Comprehend Indigenous Relationships with Land in Times of COVID-19

Victoria Osanyinpeju, CRS | Faculty Mentor: Edwin Lin, Sociology **|** RCNR Faculty Sponsor: Kurt Spreyer, ESPM
Africa is for Sale! How are Large-Scale Land Acquisitions in Nigeria Contributing to Change in Land Markets in the Peri-Urban Regions Near the Lagos Metropolitan Area?

Fischer Heimburger, CRS | RCNR Faculty Mentor: Kurt Spreyer, ESPM Urban Food Sovereignty: A Case Study of San Francisco's Mission District

Karly Ortega, CRS | RCNR Faculty Mentor: Ignacio Chapela, ESPM Art & Ecology: Cultivating Ecological Indentities

Cassandra Cardoza, CRS | Faculty Mentor: Elisa Stone, CalTeach **|** RCNR Faculty Sponsor: Bree Rosenblum, ESPM
Mindful Self-Compassion as a Tool for Adolescent Processing of Human Environmental Impact

Carrie Guerriero, CRS | RCNR Faculty Mentor: Kurt Spreyer, ESPM Barriers to Effective Forest Management in Mono County, California

Simone Stevens, CRS | RCNR Faculty Mentor: Brandon Collins, ESPM
Chasing the Green: Promoting Proactive Municipal Fire Management in California's Wildland-Urban Interface

Judah Marsden, CRS | RCNR Faculty Mentor: Claudia Carr, ESPM
Community Evaluation of Socio-Ecological Aid in the Deforesting Soylands of Bolivia's Chiquitania

Helen Guo, CRS | RCNR Faculty Mentor: Kurt Spreyer, ESPM
Doing Justice at the Food-Culture-Education Nexus: A Survey Exploration of UC Berkeley Student Epistemologies and Experiences

Wilson Sherman, CRS | RCNR Faculty Mentor: Christine Wilkinson, ESPM
The Wildlife Nextdoor: Understanding Human-Carnivore Interactions Using Citizen Reports on Social Media

Ananya Subramanian, MEB | Faculty Mentor: Nell Green Nylen, Berkeley Law **|** RCNR Faculty Sponsor: Bree Rosenblum, ESPM
The Weight of Water: Tracing Impacts of Drought Monitoring and Managment on Indigenous Communities in the Klamath Basin

Hayley Slusser, MEB | Faculty Mentor: Kelly Ziemar, Social Welfare **|** RCNR Faculty

Sponsor: N. Louise Glass, PMB
A Content Analysis of How Eating Disorder Recovery is Discussed in the Context of #Self-Love on Social Media

Kayla Hidayat, EEP | Faculty Mentor: Isabella Todaro, Climate Neutral **|** RCNR Faculty Sponsor: Sofia Villas-Boas, ARE
Evaluating the Impact of COVID-19 on Sustainable Supply Chain Practices and Coporate Climate Action

Ellie Kroskrity, EEP | RCNR Faculty Mentor: Sofia Villas-Boas, ARE
Examining the Impact of Native American Welfare Policies on Socioeconomic Well-Being: Evidence from the Indian Reorganization Act of 1934

Tilak Misner, EEP | RCNR Faculty Mentor: Katherine Wagner, ARE The Impact of Corporate Emission Disclosures on Emission Reductions

Mark Braun, EEP | RCNR Faculty Mentor: Sofia Villas-Boas, ARE Pollution and Fatal Traffic Accidents in California from 1999-2019 , **Melis Medalist**

Laurentia Tjang, MB | Faculty Mentor: Eva Harris, Public Health **|** RCNR Faculty Sponsor: Britt Glaunsinger, PMB
Comparative Investigation of Endothelial Dysfunction Mediated by Dengue Virus NS1 and SARS-CoV-2 Spike Glycoproteins

Chyna Robeson, GPB | RCNR Faculty Mentor: Ben Blackman, PMB
Examining the Effects of Novel Competition and Rising Temperatures Associated with Climate Change in M. nasutus and M. laciniatus

Fernanda Rodriguez-Torres, MB | RCNR Faculty Mentor: Britt Koskella, IB **|** RCNR Faculty Sponsor: Steven Lindow, PMB
Evaluating the Effects of Acquired Phage Resistance in Copper Resistant Pseudomonas Syringae pv. Syringae Through Experimental Evolution

Rachel Ong, MB | RCNR Faculty Mentor: Kim Seed, PMB
Bacteriophage Counter-Defenses Against Restriction-Modification Systems in Vibrio Cholerae Host

Jena Shiblak, CRS | RCNR Faculty Mentor: Andreas Stahl, NST Pathway Analysis and Visual Representation of the HCC and ICC Lipidome

Lisa Saxton, MEB/CRS | RCNR Faculty Mentor: Patina Mendez, ESPM California Trichoptera Taxonomy: Examining Species Descriptions and Illustrations

Jason To, MEB | RCNR Faculty Mentor: Mickey Boakye, ESPM Investigating the Hydraulic and Mechanical Properties of Ferns Across Clades

Symposium Judges:

Laureano Gherardi, ESPM Lynn Huntsinger, ESPM Sofia Villas-Boas, ARE Brian Wright, ARE

Thanks & special acknowledgement to Sofia Villas-Boas and Meaghan DeRespini for their organization and contributions to the RCNR Honors Research Program.

RCNR Fall 2021 Honors Participants

Rausser College of Natural Resources Honors Symposium, Fall 2021

Emily Xie (MB), Investigating the Likelihood of Seed and Plant Interactions in Relation to Seed Functional Traits and Adult Plant Growth Forms" *Mentored by Ben Blonder*, **Melis Medal**

Lucy Tian (MB), Phylogenomic Cut for Proteins Specific to Sugar Consuming Algae: SugarCu, *Mentored by Tim Jeffers, and Krishna Niyogi*, **Melis Medal**

Amy Li (EEP) How well can we estimate soil organic carbon in California's forest, *mentored by John Battles*

Sadia Khan (MEB/MCB) Female Mating Receptivity in the Wing Dimorphic Cricket, Gryllus lineaticeps, as a Function of Age and Morph and Ovarian Synthesis, *mentored by Caroline Williams, Damian Elias*

Juliette Liu (CRS) Linking the Impact that Wildfire has on the Spread of Lyme Disease through Wildlife, *mentored by Justin Brashares*

Tyler Robert Clark (S&E) Narrating the Social Costs: a Discourse analysis of CCS Frames in California, *mentored by Kurt Spreyer*

Julia Chen (ES) Factors Determining the Effectiveness of Curbside Recycling Through Recycling Bins on UC Berkeley Campus, *mentored by Patina Mendez*

Cristian Casillas Licona (CRS) Envisioning Educational Equity for Marginalized Students Attending For-Profit Colleges, *mentored by Mark Tonouye*

Yijun (Sophia) Yan (EEP) The Effects of COVID-19 on Employment in the United States , mentored by Jeffrey M. Perloff

Kaylei Nilson-Pierce (CRS) Time Series Forecasting Model: Land Management Practices and Associated Emissions, *mentored by Carl Boettiger*

Jun Bin Lee (S&E) Flood Adaptation in Jakarta: History, Megaproject, and Spectacle in the Sinking City, *mentored by Michael Watts, Nancy Peluso*

Kenneth Trang (MB) Succession of C. elegans gut microbiome during larval development, *mentored by Michael Shapira, Matthew Traxler*

Vanya Srivastava (S&E) Parkspace Access , *mentored by C.N.E. Corbin, Michael Mascarenhas*

Will Brinkerhoff (MEB) Turning Back the Clock: Restoring Soil Health in Southeast Michigan, *mentored by Paige Stanley, Tim Bowles*

Adrien Stroumza (MB) Bioinformatic Navigation of Orthologues Associated with Photosynthesis across Plants and Algae , *mentored by Tim Jeffers, Krishna Niyogi*

Congratulations our 15 RCNR Fall 2021 Honors Students!

RCNR Spring 2021 Honors Program Participants

Rausser College of Natural Resources Honors Symposium, Spring 2021

Melis Medal Winners

Yeeun Moon (EEP), Has Drug Production in Mexico Contributed to Deforestation?, *Mentored by James Sayre and Sofia Villas-Boas,* **Melis Medal Social Sciences.**
Blake Stoner-Osborne (MEB, MS), Modern day Jurassic Park: Using DNA metabarcoding to reconstruct mosquito feeding networks across California, *Mentored by George Roderick,* **Melis Medal Biological Sciences.**
Jennifer Symonds (ES), Remote sensing of Winter Cover Crops in the Central Coast Region of California, *Mentored by Timothy Bowles and Jennifer Thompson,* **Melis Medal Environmental Sciences.**

Congratulations to the 63 Spring 2021 Honors Students!

Social Sciences

Sarah Xu (EEP), COVID-19 Consumption Changes: Analysis of PG&E Residential and Commercial Customers Energy Use During the COVID-19 Pandemic, *Mentored by Brian Wright*

Michael Quiroz (EEP), Evaluating the Efficiency and Distributional Effects of Net Metering Policies and Alternatives in California, *Mentored by Sofia Villas-Boas*

Alejandra Marquez (ESPM), Information Disclosure and Climate-Friendly Consumption: Assessing the Impact of Carbon Labelling at a University Dining Hall, *Mentored by Timothy Bowles and Ricardo San Martin*

Selena Weng (EEP), A comparison on environmental and health risks associated with replacing PFOA with Gen X compounds, *Mentored by Matthew Small and David Wells Roland-Holst*

Jackie Copfer (EEP), Measuring the Impact of COVID-19 on Consumer Choice & Preference for Essential Worker Conditions at US Meatpacking Plants, *Mentored by Sofia Villas-Boas*

Nica Campbell (EEP)I, The Covid-19 pandemic: impact on consumer's environmental consciousness and food choices in California, *Mentored by Sofia Villas-Boas*

Yeeun Moon (EEP), Has Drug Production in Mexico Contributed to Deforestation?, *Mentored by James Sayre and Sofia Villas-Boas,* **Melis Medalist**

Wesley Tam (ESPM), Access to Street Greenery During COVID-19 Pandemic in Oakland, CA, *Mentored by William Stewart and Matthew Potts*

Renee Serota (EEP), Low-Income Solar in California: An Analysis of Incentive Programs, *Mentored by Sofia Villas-Boas*

Eva Manjarrez (ESPM), Neoliberalism and the Environment: A Historical Perspective of Mexico for Climate Change Mitigation*, Mentored by Nain Martinez and Kate O'Neill*

Selena Melgoza (SE), Analyzing Intersectional Policy through Milwaukee's Declaration of Racism as a Public Health Crisis, *Mentored by Alastair Iles*

Mari Wilson (PMB), River Basin Development: The Turkwel Dam*, Mentored by Claudia Carr*

Ariel Hoage (CRS), When Nature Talks Back: Science, Fantasy, and Rationalism in the Alice Books of Lewis Carroll and Margret Boysen, *Mentored by James Grantham Turner and Ignacio Chapela*

Cam Kees (CRS), Analyzing Uneven Vulnerability to Urban Heat Islands Using GIS-Based Techniques: A Case Study in Oakland, CA, *Mentored by Charisma Acey and Maggi Kelly*

Catherine Stanton (ESPM), Slow Fashion: Extending the Life of Apparel Products & Encouraging Circularity Through Textile Choice, *Mentored by Dara O'Rourke and Ignacio Chapela*

Matt Arena (EEP), How Cobalt Mining in the DRC is Neo-Colonialism in the Name of Decarbonization & Digitalization and How Western/Chinese Policy Interventions will Exacerbate the Situation, *Mentored by Ted Miguel and Sofia Villas-Boas*

Environmental Sciences:

Haylee Oyler, It's not just for the Birds: Citizen Science Participation during COVID-19, *Mentored by Patina Mendez*

Brian Price, Low Impact Development for Stormwater Management on the University of California, Berkeley Campus, *Mentored by Patina Mendez*

Ngoc Thao Nguyen (Sarah) Bui, Co-Benefits of Bridges Construction in the Mekong Delta, *Mentored by David Wells Roland-Holst*

Chunyao Huang, Urban Creek Plastic Pollution in the Bay Area, California: Protections, Litter Compositions and Sources, *Mentored by Patina Mendez*

Gloria-Alexandra Gueorguieva, Cya-no-more! Engineering Reduced Cyanogenic Glucoside Accumulation in Cassava Roots, *Mentored by Brian Staskawicz; and Nicholas Karavolias*

Matthew French, Long and Short-Term Antibiotic Exposure Impacts on Fitness in *Arabidopsis thaliana, Mentored by Céline Pallud*

Phoebe Goulden, Neoliberalism, Protest, and Environmentalism in Chile: The Role of Environmental Concerns in the 2019 "Social Outburst", *Mentored by Javiera Barandiarán and Patina Mendez*

Savannah Sturla, Air Quality Disparities and Youth Asthma in the San Francisco Bay Area: Spatial Analysis and Youth Environmental Justice Narratives, *Mentored by Rachel Morello-Frosch and Ronald C. Cohen*

Annika Levaggi, Berkeley Student Farms: A Community-Informed Model for Urban Agriculture Education, *Mentored by Timothy Bowles*

Natalie Coy, Fires in Mixed Conifer Forests in California: Does the Method for Estimating Fine Woody Debris Matter?, *Mentored by Daniel Foster and John Battles*

Jennifer Symonds, Remote Sensing of Winter Cover Crops in California's Central Coast Region, *Mentored by Timothy Bowles and Jennifer Thompson,* **Melis Medalist**

Anna Ramji, Cryptic Behavior Strategies of *Octopus chierchiae, Mentored by Patina Mendez*

Sarah Hettema, How Do Fuels Influence California's Fire Regimes?, *Mentored by Polly Buotte and Lara Kueppers*

Anna Kate Stephenson, Totally Buggin! How Education on Entomophagy Influences Customer Willingness To Purchase Edible Insects, *Mentored by Jessica Heiges*

Genna Fudin, Community Composting in the East Bay, CA: A Dynamic Educational Research Approach with Berkeley Student Farms, *Mentored by Patina Mendez*

Katie Wimsatt, Climate, Congress, and Conflict: Environmental Priorities in the National Defense Authorization Act, *Mentored by Patina Mendez*

Cole Westwood, *Minidiscus trioculatus* Growth in Response to Climate Change, *Mentored by Patina Mendez*

Biological Sciences

Claire Perrin (MCB), Identifying Drought Resistance Genes in CRISPR/Cas9 Transformed Tomato Plants*, Mentored by Richard Dodd*

Catriona Black (MCB), Self Incompatibility in the hexaploid *Prunus domestica, Mentored by Richard Dodd*

Olivia Hemond (ESPM), Exploring spatio-temporal patterns of fire connectivity using percolation metrics, *Mentored by Van Butsic*

Lily Leveque-Eichhorn (PMB), A Genetic Analysis of Endosymbiosis in a Novel Algal-Ciliate System, *Mentored by Krishna Niyogi*

Elizabeth Ordeman (PMB), Disentangling the Effects of Bottom-Up and Top-Down Selection on Cardenolide-Resistant Na^+/K^+ATPases in the Milkweed Butterfly Lineage, *Mentored by Noah Whiteman and Ben Blackman*

Defne Yigci (MEB), Conditionally Active CRISPR/ Cas Enzymes and Their Role in Genome and Transcriptome Editing, *Mentored by Jennifer Doudna and Britt Glaunsinger*

Lily Klinek (ESPM), Analyzing Green-Up Phenology of North American Forests with AmeriFlux and PhenoCam Data, *Mentored by Dennis Baldocchi*

Rachel Rovinsky (MB), Evaluating the role of motility genes in the tomato leaf phyllosphere & methods development for further study, *Mentored by Britt Koskella and Steven Lindow*

Niklas Blanadet (ESPM), Manzanita Drinking Habits: The Change in Water Use of Manzanita Resprouts Post-Fire, *Mentored by Todd Dawson*

Nicole Chew (MEB), Evaluating The Tarsometatarsus As A Metric For Species Identification: A 2D Geometric Morphometrics Comparison Of Extant Birds And Hesperornithiformes, *Mentored by Raurie Bowie and Rosemary Gillespie*

Sarah Ampalloor (MEB), Investigating the Role of DNMT3A on Intramuscular Insulin Resistance, *Mentored by Sona Kang*

Sam Rosenbaum (ESPM), Quantifying Variation in Juvenile Size of Endangered Coho Salmon and Threatened Steelhead Trout Across a Diverse Watershed, *Mentored by Stephanie Carlson*

Jett Liu (ESPM), Using CRISPR-Cas Systems to Identify and Characterize Phage Infecting Ultra-Small Bacteria, *Mentored by Jill Banfield*

Anvita Kulshrestha (NST), Short Sequence Motifs control sorting of MicroRNAs into Exosomes in Cells, *Mentored by Randy Schekman and Sabeeha Merchant*

Alexis Brown, The metabolic effects of synthetic glucocorticoid dexamethasone following arsenic exposure in vivo, *Mentored by Martyn Smith*

Kannon Pearson (ESPM), Holy toxic toads, Batman! A review of chemical defense in harlequin frogs (Bufonidae; *Atelopus*), *Mentored by Rebecca Tarvin and Erica Bree Rosenblum*

Blake Stoner-Osborne (MEB, MS), Modern day Jurassic Park: Using DNA metabarcoding to reconstruct mosquito feeding networks across California, *Mentored by George Roderick,* **Melis Medalist**

Shreeya Garg (PMB), Varied susceptibility to proteasome inhibitors and genotypic associations in Plasmodium falciparum isolates from Uganda, *Mentored by Philip Rosenthal and Rodrigo Almeida*

Nikita Chigullapally (NSPM), Modeling Bacterial Plant Pathogens Across Temperature with a Focus on *Pseudomonas syringae*, *Mentored by Britt Koskella and Hei Sook Sul*

Sneha Agrawal (IB), Gut microbiota of herbivorous flies possess plant toxin degradation capabilities, *Mentored by Noah Whiteman and Matthew Traxler*

Jessica Ma (PMB), Understanding the mechanism of ERAAP downregulation during MCMV infection, *Mentored by Laurent Coscoy and Britt Glaunsinger*

Jason Chang (IBS, ESPM), Assessing the performance of supervised machine learning in spike-in bias correction for eDNA metabarcoding, *Mentored by Rasmus Nielsen and Rosemary Gillespie*

Cassandra Gendron (PMB, ESPM), Investigating the effects of *Batrachochytrium dendrobatidis* on anuran populations in the Cordillera Vilcanota, *Mentored by Emma Steigerwald and Rosemary Gillespie*

Andreana Chou (ESPM), The effect of short term daily exposure to blue light on ocular growth and myopia in young chicks, *Mentored by Christine Wildsoet and Frank Harmon*

Silverdew Shi (PMB), Spray-Induced Silencing of Grape Powdery Mildew Genes to Reduce Powdery Mildew Growth, *Mentored by Mary Wildermuth*

Chloe Cho (ESPM), Agroecology and Traditional Farming Knowledge as an Alternative to Pesticides, *Mentored by Timothy Bowles*

Metta Nicholson (ESPM), Analyzing Methane Emissions from a Restored Bay Area Wetland, *Mentored by Robert Rhew*

Yuxuan(Alexys)Wang (MEB),Social Anxiety in Relation to Body Mass in Juvenile Female Colonial Tuco-tucos,*Mentored by Eileen Lacey& Damian Elias*

Alexandra Tien-Smith, Air Quality and Pulmonary Function in San Francisco Bay Area Women with and at Risk of HIV, *Mentored by James Balmes and Erica Bree Rosenblum*

CNR Fall 2020 Honors Program Participants

Elizabeth Ordeman, GPB, Hormonal Regulation of Petal Senescence in Ipomoea purpurea , Advisers: Noah Whiteman, IB; Ben Blackman, PMB

Lauren Simonian, NST, Identification of amino acid transporters sensing protein availability in hunger neurons , Advisers: Qili Liu, UCSF; James Olzmann, NST

Katrina "Kat" Cone, CRS, VOC emissions from agricultural burning vary with crop type as a function of MCE , Advisers: Dennis Baldocci, ESPM

Chris McCarron, CRS, Population Genetics of the Serpentine Endemic Leather Oak (*Quercus durata*) , Advisers: Research Mentor: Richard Dodd, ESPM

Sonnet Phelps, CRS, Accommodating the Anthropocene:Conceptual Metaphor in Ecopoetics , Advisers: Eve Sweetser, Linguistics; Bree Rosenblum, ESPM

Ariana Jessa, EEP, Exploring Climate Change Adaptation Pathways for the Guna Yala in San Blas, Panama , Advisers: Sofia Villas-Boas, ARE

Zhaolong "Jerry" Zhu, EEP, A State on Fire: Effect of California Wildfire on Perceived Risks and Home Values , Advisers: Sofia Villas-Boas, ARE, **Melis Medalist**

Yanling Liu, EEP, Bioplastic(Petrochemical Plastic Substitutes): Price Burden and Path to Cost Reduction , Advisers: Brian Wright, ARE

CNR Spring 2020 Honors Program Participants

Conservation and Resource Studies

Dominic Daniels, Conservation & Resource Studied, Current versus future fitness: avian communication and immune response in varied social contexts, Adviser(s):, George Bentley, Damian Elias

Stavi Tennenbaum, Conservation & Resource Studies, Exploring relationships between social competence and acoustic exposure in North American red squirrels, Adviser(s):, Steve Beissinger

Skye Michel , Conservation & resource studies , Poepatetics: Mapping Memory on the UC Berkeley Campus , Adviser(s):, Ignacio Chapela

Jenna Lingan-Anderson, Conservation and Resource Studies, Bioplastics: Zero Waste or Greenwashing?, Adviser(s):, Kate O'Neill

Rowan Peterson, Conservation and Resource Studies, Cattle Grazing and Plant Community Composition at Sunol Regional Wilderness, Adviser(s):, Luke Macaulay and Lynn Huntsinger

Sage Kurnie, Conservation and Resource Studies, Grazing behavior of a caddisfly larva on benthic Microcoleus-dominated mats and diatom-dominated biofilms in a Northern Californian River, Adviser(s):, Albert Ruhi

Bryce Hutchins, Conservation resource Studies, Conserving or Commodifying the Chilean Forest?: Contextualizing the Dynamics of Emerging Carbon Markets within Chile's Agrarian Forest Landscape, Adviser(s):, Claudia Carr

Hannah Lopez, Ecosystem Management and Forestry, Conifer Responses to Changing Fire Histories in the Illilouette Creek Basin of Yosemite National Park, Adviser(s):, Scott Stephens; Brandon Collins

Kane Russell, Ecosystem Management and Forestry, Effects of prescribed fire versus alternative treatments on tree growth in young Sierra Nevada mixed conifer stands, Adviser(s):, Robert York

Environmental Economics and Policy

Julia Hedelman, Environmental Economics & Policy + Society & Environment , The Hidden Costs of Low Wages: Poor Health Outcomes for US and Foreign-Born Restaurant Workers , Adviser(s):, Teófilo Reyes and Kathryn DeMaster

David Coats, Environmental Economics and Policy, The effects of Bans on Plastic Bags Found During Shoreline Cleanups, Adviser(s):, Sofia Villas-Boas

Michael Chien, Environmental Economics and Policy, Dynamics of Clean Technology Adoption: Solar Photovoltaics and Electric Vehicles in California, Adviser(s):, James Sallee

Ryan Andresen, Environmental Economics and Policy, Does Drought Surcharge Pricing Induce Water Conservation?, Adviser(s):, Sofia Villas-Boas

Christopher Berven, Environmental Economics and Policy/Environmental Sciences, Econometric Analysis of California's Sustainable Groundwater Management Act, Adviser(s):, Sofia Villas Boas and Ellen Bruno

Environmental Sciences

Johanna Laraway, Environmental Science, "How Statistical modeling can assist in identifying Areas of Lead exposure Risk", Adviser(s):, Patina Mendez and Samuel Evans

Kylie Murdock, Environmental Science, The Relationship between Socioeconomic Factors and Climate Change Denial, Adviser(s):, Sam Evans

Yifei Liu, Environmental Science, Farming the Sun and the Crops at Once: A Cost-Benefit-Analysis of Implementing an Agrivoltaic System in China, Adviser(s):, Ellen Bruno

Erin Cain , Environmental science , Pesticide Application and Water Quality in the Central Valley: Calculating Sensitivity of CSCI scores to Pesticide Toxic Units and Visualizing Applied Pesticide and Ecosystem Health Data, Adviser(s):, Patina Mendez

Ursula Harwood, Environmental Science , Assessing Strategies for Decreasing Severe Fire Hazard in Young Plantation Forests in the Sierra Nevada, Adviser(s):, Patina Mendez, Brandon Collins, Rob York

Joshua Lin, Environmental Sciences, In Search of Food Justice: Analyzing Variation across Californian Asian American Food Security in 2017, Adviser(s):, Samuel Evans, Kathryn De Master

Genetics & Plant Biology

Armen Kelikian, Genetics & Plant Biology, in planta characterization of CbbY, a selective sugar phosphatase conserved across photosynthetic lineages, Adviser(s):, Krishna Niyogi

Cameron Yuki, Genetics and Plant Biology, Temperature and Ethylene Modulate Growth and Defense in Mimulus, Adviser(s):, Ben Blackman

Gabrielle Meza, Genetics and Plant Biology, Improving transformation methods and efficiency of model plant Setaria viridis, for use in tandem with agriculturally important crop, Sorghum bicolor., Adviser(s):, Peggy G. Lemaux

Microbial Biology

Alexa Gomberg, Microbial Biology, The Lineages of Dissimilatory Phosphite Oxidizing Bacteria Indicate an Ancient, Vertically Transferred Metabolism , Adviser(s):, John Coates

Jacob Sinkowitz, Microbial Biology, Maize mutant Wab2 causes abnormal leaf growth, Adviser(s):, Samuel Leiboff, Sarah Hake

Matin Bikaran, Microbial Biology, Investigating the Effects of the Interferon-Induced Proteins IFI44 and IFI44L on Human Cytomegalovirus Replication, Adviser(s):, Dr. Laura Hertel, Dr. Arash Komeili

Jordan Hoff, Microbiology, Characterizing anti-phage activity of a novel genomic island in Vibrio cholerae, Adviser(s):, Kim Seed

Molecular Environmental Biology

Amanda Xu, Molecular Environmental Biology, Characterization of the interaction between SOS and EGFR proteins through nucleotide exchange assay, Adviser(s):, Research Faculty: John Kuriyan, CNR Faculty Sponsor: Rosemary Gillespie

Ashley Chrisman, Molecular Environmental Biology, DICER-LIKE Enzyme 4 (DCL4) Regulatory Hub in Plant Innate Immunity in Solanaceae, Adviser(s):, Barbara Baker

Bridget Gustafson, Molecular Environmental Biology, Herbicide Resistance: A Historical and Toxicological Interrogation of the Regulation of Glyphosate-Containing Herbicides and a Proposed Alternative Way Forward, Adviser(s):, Ignacio Chapela

Elise Rio, Molecular Environmental Biology, A study on Listeria Monocytogenes resistance to phagosome mediated killing, Adviser(s):, Dr. Daniel Portnoy

Gregory Gladkov, Molecular Environmental Biology, Parasite-host interactions and biogeography of avian malaria in five host species of northern Central American cloud forest birds , Adviser(s):, Rauri Bowie (CNR Sponsor: Rosemary Gillespie)

Kristina Chan, Molecular Environmental Biology, Guided Microfluidic Flow for Cell Capture, Indexing, and Directed Release, Adviser(s):, Lydia Sohn & James Olzmann

Phillip de Lorimier, Molecular Environmental Biology, Characterizing Soil Microbial Community Response to Prescribed Fire Along a High-Resolution Soil Depth Profile, Adviser(s):, Matt Traxler

Rose Curley, Molecular Environmental Biology, Soil Health to Human Health: The Effects of Sustainable Agriculture Systems on Nitrogen and Micronutrient Cycling, Adviser(s):, Assistant Professor Timothy Bowles and PhD Candidate Yvonne Socolar

Sally Dowd, Molecular Environmental Biology, An Examination of the Economic Tradeoffs and Ecological Impacts Associated with a Potential Mesopelagic Fishery in the California Current System, Adviser(s):, Faculty mentors: Carl Boettiger at UC Berkeley and Porter Hoagland at Woods Hole Oceanographic Institution, Graduate student mentor: Melissa Chapman

Shannon Prendergast, Molecular Environmental Biology, Investigating Arsenic Uptake in Setaria italica , Adviser(s):, Sarah Hake

Chandler Sutherland, Molecular Environmental Biology , Initial Characterization of an Early-Light Inducible Protein in Chlamydomonas reinhardtii, Adviser(s):, Professor Krishna Niyogi

Nutritional Sciences

Lucy Peng, NST - P & M, Exploring the impact of unmitigated ER stress on metabolic flux of the unfolded protein response in vivo, Adviser(s):, Dr. Marc Hellerstein, MD, PhD

Tomas Herrero, NST - Physiology and Metabolism , Role of AGO2 in Plant Innate Immunity, Adviser(s):, Barbara Baker

Stephanie Wong, Nutritional Science and Toxicology, Iridal macrophages in development and inflammation, Adviser(s):, Lu Chen

Alina Lee, Nutritional Sciences - Toxicology, WHAT TIME IS IT? The study of coevolution of bacteria and bacteriophages observed in both fire-blight infected pear tree phyllosphere and horse chestnut tree phyllosphere using time-shift experiments., Adviser(s):, Dan Nomura

Sarah Fung, Nutritional Sciences, Physiology and Metabolism, Identifying the role of a JmjC-containing protein in insulin signal transduction in metabolic tissues, Adviser(s):, Sona Kang

Society and Environment

Shehla Chowdhury, Society & Environment, The North/South Divide: Challenges to Achieving Equity in International NGO Partnerships for Climate Resilience in Bangladesh, Adviser(s):, Kate O'Neill

Christian Fong, Society and Environment, Designing Carbon Pricing Policies that Mitigate Climate Change and Enhance Environmental Justice, Adviser(s):, Luke Macaulay

Theo Snow, Society and Environment, Gendering Asbestos in Australia, Adviser(s):, Professor Kate O'Neill

Kyle Bilorusky , Society and Environment , Evaluating Environmental Justice in K-12 Schools, Adviser(s):, Michael Mascarenhas

CNR Fall 2019 Honors Program Participants

Biological Science:

Jairui Wang, MEB / MCB * Melis Medalist
Host Race Formation in Ligurotettix coquilletti CNR Faculty Mentor: Noah Whiteman (IB)

Yuju Shin
Gene Expression Analyses of Photoperiod-mediated Flowering Time in Wild Sunflowers
CNR Faculty Mentor: Benjamin Blackman (PMB)

Social Science

Felix Pan, NST
Metabolic Syndrome Related Diseases (MSRD) and Food Deserts in Urban Environments: New Insights
CNR Faculty Mentor: Andreas Stahl (NST)

Josh Dibble, EEP * Melis Medalist
A Hedonic Analysis of the Effects of Micro Grid Energy Systems on Home Values in the United States
CNR Faculty Mentor: Sofia Villas-Boas (ARE/EEP)

CNR Spring 2019 Honors Program Participants

Biological Science, Day 1

Lara Volski CRS,
Ecological and Social Approaches to Human-Carnivore Coexistence, Justin Brashares ESPM

Catherine Jung MEB
The Effects of Volcanic Activity on the Phylogeographic History of the Plymouth Anole, Anolis lividus, on Montserrat Ian Wang ESPM

Eavan Barbieux MEB
To Weed or Not to Weed: Evaluating the effects of Weeds on Insect Biocontrol with a Landscape Perspective Claire Kremen ESPM

Shannon Buttimer MEB
Local Salamander Microbiomes - A Metacommunity Analysis Bree (Erica) Rosenblum ESPM

Guillermina Michel MEB
The Role of ASB4 in the Regulation of Appetite and Energy Homeostasis Allison Xu UCSF Diabetes Center Kathryn De Master ESPM

Yayla Sezginer MEB, Marine Science
Does Water Motion Explain Intertidal, Sessile Invertebrate Distributions in the Central San Francisco Bay?Wayne Sousa IB Wayne M. Getz ESPM

Alexander Bang MEB
Elucidating the Relationship Between Maternal Anemia and Childhood Leukemia Etiology Catherine Metayer SPH Patricia Zambryski PMB

Annika Williams MEB
Imitation Inhibition and the Finger Task: a Window into the Cognitive Symptoms of Schizophrenia Josh WoolleyUCSF Psychiatry Britt Glaunsinger PMB

Linnea Norton MEB
Phenotypic Plasticity in Eriogonum fasciculatum in Response to Climate Change in California Wayne Sousa IB Benjamin Blackman PMB

Jack Kim MEB
Microbial Volatile Organic Compound (mVOC) Production in Soils: Impacts of Climate Disturbance and Feedbacks to Plant Growth Eoin Brodie ESPM

Natalia Mushegian MEB
Assessing Belowground Impacts of Thin-Layer Sediment Deposition in a Tidal Salt Marsh Dennis Baldocchi ESPM

Sara Suhl MEB
Effect of Blood Brain Barrier Defects on Drug Efficacy in Seizure-susceptible Drosophila Mutants Mark Tanouye ESPM

Monica Wilkinson MEB
Impacts of Invasive Ginger Gradient in Hawaii on Soil Chemistry and Stable Isotopes Rosemary Gillespie ESPM

Pouya Amin NST, MCB, Psych
Physiological Role of Methylcytosine Dioxygenase in Adipocyte Plasticity and Whole-body Metabolism Sona Kang NST

Lauren Choy NST
A Functional Study of JMJD8 for Insulin Resistance Regulation in Adipocytes Sona Kang NST

Tu Le NST
Effect of SNP 2068888 on CYP26A1 Gene Expression in HepG2 Cells Joseph Napoli NST

Kjel Johnson GPB
Developmental Characterization of the Maize Mutant TruffulaSarah Hake PMB

Max Harris GPB
Efficient, Genotype-independent Mesocotyl Transformation of Sorghum Bicolor Peggy Lemaux PMB

Shuanger Li ES, MB
Impacts of Invasive Ginger on Native Arthropod Communities in Hawaiian Islands Patina Mendez ESPM Rosemary Gillespie ESPM

Isaac Vendig ES
Daikon Cover Crops and No-Till Agriculture Patina Mendez ESPM Timothy Bowles ESPM

Alicia Sadowski ES
Short-term Response to Hurricane Disturbance: Impacts of Hurricane Maria on Biogeochemistry in Puerto Rico Patina Mendez ESPM Whendee Silver ESPM

Hannah Marsh ES
Climate Change Mitigation Potential of Food Waste Compost Application to Grassland Soils Patina Mendez ESPM Whendee Silver ESPM

Shuhan Song ES
To Be or Not to Be: The Fate of Ten Amphibians in Sierra Nevada Under a Warming Climate Patina Mendez ESPM

Kavya Niranjan ES
As the Bee Flies: Modeling Native Bee Diversity in Brentwood, CA Gordon Frankie ESPM Patina Mendez ESPM

Sophia Bagshaw ES
Coast Redwoods and Climate Change: Age-based Differences in Hydraulic Traits Patina Mendez ESPM

Hans Singh ES, MCB
A Comparison of Winter and Summer Microbial Culture Libraries From an Alpine Soil E Eoin Brodie ESPM Patina Mendez ESPM

Yujing Wu ES
Impacts of Urbanization on Birds at San Francisco East Bay Ian Wang ESPM Patina Mendez ESPM

Claudia Ruslim ES
Into the Spider-verse of Sulawesi: Changes in Spider Community along Gradients of Elevation and Loss of Forest Cover Patina Mendez ESPM

Benjamin Kopania ES, Geography
A Comparison of Methods for Obtaining Aboveground Biomass Estimates Using Terrestrial LiDAR Data Patina Mendez ESPM

Yu Guan Leong ES
Buried Alive? The Effects of Sediment on White Abalone Larvae Settlement Patina Mendez ESPM

Christopher Orner ES, EEP
Occupancy of Riparian Birds in the Southern Central Valley James Bartolome ESPM

Nika Hoffman ES
Water Quality and Autonomous Surface Vessel Technology in the Ala Wai Canal Thomas Azwell ESPM Patina Mendez ESPM

Victoria Glynn ES
Keeping Healthy in California's Central Coast: Interactions between Land Use and Avian Life History Claire Kremen ESPM

Madeleine Zuercher ES, IB * MELIS MEDAL RECIPIENT
Bat Conservation: Species Presence and Activity across Landscapes in Iowa
Steven Beissinger ESPM Patina Mendez ESPM

Biological Science, cont. Day 2

Katelyn Yu ES,
Atmospheric Science Looking from Space: Water Use Efficiency of California Evergreen Species from OCO-2 Satellite Data Inez Fung ESPM

Adam Sawicky EMF
Retrospective Analysis of Wood Decay Rates by Species in Sierran Mixed Conifer Forests John Battles ESPM

Kea Rutherford EMF
Prehistoric Grassland Distributions in Tilden Regional Park: A Phytolith Study Peter Hopkinson ESPM

Julie Lake MB
Converting Fatty Acids to Alkanes with Blue Light Sam Curarn Comparative Biochemistry Arash Komeili PMB

Camille Chen MB
Intracellular Pseudomonas aeruginosa: A Significant Contributor of Cell Intoxication in Corneal Infection? Suzanne Fleiszig Optometry Arash Komeili PMB

Joy Geng MB
Biosynthesis of Triacsins with an N-hydroxytriazene Moiety Wenjun Zhang
Chemical Engineering Krishna Niyogi PMB

Pablo Meza MB
The Impact of Varying Light and Substrate Conditions On Schizocosa floridana Prey Capture Success Rates Damian Elias ESPM

Andrew Hendrickson MB, Chemical Biology
Identification of Microbial Consortia with Enhanced Abilities for Plant Growth Promotion and Hydrocarbon Biodegradation from a Solid Waste Management Site Norman Terry PMB

Rachel Bosnyak GPB, Scandinavian Studies
Drought-Induced Monoderm Enrichment in the Rhizosphere of Sorghum bicolor Devin Coleman-Derr PMB

Nicole Smoot GPB
Establishing Systems to Study Resistance Gene Regulation and Receptor Protein Interactions in Plant Innate Immunity Barbara Baker PMB

Social Science

Ali Coopersmith MB
Determining the Minimal and Optimal Requirements for a New, Scalable Rapid Diagnostic Tool to Identify the Causative Rrganism of Bacterial Meningitis in Low- and Middle-income Countries Peter Dailey SPH - Infectious Disease & Vaccinology Daniel Portnoy PMB

Sara Zaat MEB
Drivers of Food Storage Behaviors Among College Students: Demographics, Awareness, and Household Characteristics Matthew Potts ESPM

Le (Tim) Lu ES
Assessing Gross Primary Production of Cropland – An Index and Instrument Perspective Dennis Baldocchi ESPM

Martin Zhou ES, EEP
The Future of Hydropower in Sichuan Province, China: Effects of Expanding the Grid System on Installed Capacity Kurt Spreyer ESPM

Helena Chang ES
Escape the Gap: Escape Rooms as an Environment Education Tool Kurt Spreyer ESPM

Sky Lee ES, Business Administration
Capitalizing on Social Media Addiction in South Korea: Green Marketing Opportunities for Cosmetics Industry Kurt Spreyer ESPM

Sophie Babka ES
A Breakdown of Compostable Plastic Recovery in California Ellen Pane DCRP/LAEP Patina Mendez ESPM

Ariel Gans S&E
Evicted and Displaced: An Investigation into the Redevelopment of Treasure Island Kurt Spreyer ESPM

Sarah Manthorpe S&E, Legal Studies
Measuring and Comparing Threat Classifications and Trends of Migratory Species across State Lines Kate O'Neill ESPM

Savannah Blide CRS
Public Lands in Public Hands: A Discursive Analysis of Stakeholder Participation and Public Lands Policy-making in Bear's Ears National Monument Kurt Spreyer ESPM

Daniela Morales CRS, Public Health
Invisibility of Waste and People: Illegal Waste Dumping and it's Relationship to Homeless Encampments in Oakland, California Charlotte Smith Public Health; Environmental Health Sciences Kurt Spreyer ESPM

Kate Pittel CRS
Analysis of the Intensification of Climate Change and the Impacts it Has On Environmental Integrity and Rohingya Refugee Populations in Bangladesh and a Revision of Solutions to the Refugee Crisis Kenneth Worthy ESPM

Hannah Haugenes CRS
An Analysis of the Financial Relationship Between 'Big Food' Industries and the University of California, Berkeley Khalid Kadir ISSP Ignacio Chapela ESPM

Emily Wagner CRS
Socio-ecological Implications of Drought on Small-scale Diversified Farms: A Case Study from California's San Joaquin Valley Timothy Bowles ESPM

Brianna Boone CRS
The Role of Collaborative Consumption and Food Recovery Technologies in Addressing Urban Hunger Jennifer Sowerwine ESPM Timothy Bowles ESPM

Madison Erdall CRS, German, Spanish
Solar PV as a Poverty Alleviation Mechanism: A Critical Analysis of Rural Gujarat, India and Nyanza Province, Kenya Claudia Carr ESPM

Maggie Li CRS, Geography
Impacts of Saharan Dust on Respiratory Health across Senegal Gregory Jenkins Meteorology & Atmospheric Science, Penn State Van Butsic ESPM

Mark McGuire EEP
Effects of Land Cover Change in Orange County on Fire Risk in the Wild-land Urban Interface Van Butsic ESPM

Anna Mazur EEP
Carbon Capture, Storage and Utilization Under the Expanded 45Q Tax Credit Sofia Villas-Boas EEP

Maggie Deng EEP
Evaluating the Outcomes of California's Proposition 39 K-12 School Energy Efficiency Investments Sofia Villas-Boas EEP

Maria Otero EEP
Solar Home Systems as a Way to Provide Reliable Electricity to Households with Low or No Electricity Access in Developing Countries Duncan Callaway ERG Sofia Villas-Boas EEP

Tyler Jacobson EEP * MELIS MEDAL RECIPIENT
What's in My Backyard? Using Coal Power Plant Conversions to Measure the Willingness to Pay for Cleaner Air David Card Economics Sofia Villas-Boas EEP

Julian Pelzner EEP
A Comparative Analysis of Municipal Electric Utilities in the San Francisco Bay Area Charisma Acey City & Regional Planning Dan Kammen ERG (ESPM)

Ryan Saraie EEP * MELIS MEDAL RECIPIENT
Impacts of the California Solar Initiative on Solar Energy Adoption Meredith Fowlie EEP

CNR Fall 2018 Honors Program Participants

Shuanger Li, MB

Shortening Start-up Time of Anammox Process for Ammonium-rich Wastewater Treatment

CNR Faculty Mentor: Kathleen Ryan (PMB)

Tanya Kumar, MB

Temporally Spaced Co-Infections of Plodia interpunctella

CNR Faculty Mentor: Britt Glaunsinger (PMB)

Madeleine Levy, CRS

The Effects of Wild Horses on Native Wildlife in Riparian and Spring Vegetation Zones on the Devil's Garden

CNR Faculty Mentor: Arthur Middleton (ESPM)

Kaitlyn Lund, CRS

Strengths & Weaknesses of the Strategies Pursued by Global "Green Cities"
CNR Faculty Mentor: Kate O'Neill (ESPM)

Jacob Levine, FNR * Melis Medal Recipient

A Generalized Additive Model for Tree Allometry in Northern New Hampshire

CNR Faculty Mentor: Perry de Valpine (ESPM)

Keshav Kumar, MEB

A High-Throughput Automated Detector for Quantifying Fungal Biomass

CNR Faculty Mentor: Mary Wildermuth (PMB)

Sarah Chen, MEB

Association Between Low Bone Mineral Density and Osteonecrosis of the Femoral Head in Individuals with Sickle Cell Disease

CNR Faculty Mentor: Rachel Morello-Frosch (ESPM)

Thank you to Sheila McCormick, Hai Nguyen, and Chihiro Tabuchi for being Judges and for Meaghan DeRespini for the organization of the Symposium.

CNR Honors Program Spring 2018 Participants

Rachel Bian. NS-PM *

Pref-1+ adipocyte precursors, expressing early cell markers, precede Pdgfra+ cells **CNR Faculty Mentor: Hei Sook Sul, Melis Medal Award Recipient**

Callie Cuff, NS-PM

Host Range Analysis of Bacteriophage in Pear Tree Phyllosphere **CNR Faculty Mentor: Hei Sook Sul**

Haley Lehtola, NS-PM

Mapping Druggable Hotspots Targeted by Anti-Cancer Natural Product Parthenolide **CNR Faculty Mentor: Daniel Nomura**

Deviana Burhan, NS-PM

in vivo Study of Vitamin A Metabolism on the Function of Brown Adipose Tissue in Retinol Dehydrogenase (RDH) 10 Heterozygous KO Mice **CNR Faculty Mentor: Joseph Napoli**

David Ruvalcaba, NS-T

Ceramide and Glucocorticoid Induced Lipid Disorders **CNR Faculty Mentor: Jen Chywan (Wally) Wang**

Jennifer Chang, NS-PM

The Effects of Elevating Circulating Angiopoietin- like 4 Fibrinogen-like Domain Levels on Glucose Homeostasis and Insulin Sensitivity **CNR Faculty Mentor: Jen Chywan (Wally) Wang**

Leanne Jarvis, NS-PM, MCB

Vitamin A Metabolism in Brown Adipocyte Differentiation **CNR Faculty Mentor: Joseph Napoli**

Shannon Wong-Michalak, NS-PM, MB

Exploring the Role of MYCN as Master Regulator of Tumorigenesis in Proneural Gliomas **CNR Faculty Mentor: James Olzmann**

Clare Yue Lou, MB

Investigating Vitamin-Sharing In a Synthetic Coculture **CNR Faculty Mentor: Michi Taga**

Amber De Neve, GPB

Vascular patterning and auxin flow in the maize mutant feminized alternating midrib-1 **CNR Faculty Mentor: Sarah Hake**

Hannah Belle Spinner, GPB

Characterization of Novel CRISPR Systems **CNR Faculty Mentor: Lewis Feldman**

Weihan Zhang, ES

Rate of Phytoremediation and Distribution of Arsenic Within Pteris vittate **CNR Faculty Mentors: Patina Mendez**

Sara Catherine Brown, ES

Transmission Pathways of Pathogenic E. Coli at the Household Level in Rural Bangladesh **CNR Faculty Mentor: Patina Mendez**

Linqian Sheng, ES

Impact of Landscape Elements on Bird Diversity in Urban Parks in East Bay Area **CNR Faculty Mentor: Patina Mendez**

Mary McDonnell, CRS

What explains the dispersed spatial pattern of Peritoma arborea var. globosa, a California native and endemic shrub? **CNR Faculty Mentor: James Bartolome**

Andre Kushnir, CRS

Biological Control of Harlequin Bugs in East Bay Urban Garden **CNR Faculty Mentor: Miguel Altieri**

Brittani Gallagher, S&E

An Examination Into the Effects of Growing Broccoli in Different Types of Peat-FreeGrowing Mediums **CNR Faculty Mentor: Paul Roge**

Anna Grimaldo, MB

Genomic analysis of the folate biosynthesis pathway and nutrient sharing in the Drosophila melanogaster gut microbiome **CNR Faculty Mentor: Michi Taga**

Zora Frederika Franicevic, S&E Geoengineering our Climate: A Critical Ethical Analysis of the Stratospheric Sulfur Aerosol Injection Option **CNR Faculty Mentor: Alastair Iles**

Eder Hernandez, S&E A Tale of Two Global Cities: A Comparative Case Study of Alternative Transportation Policy Diffusion in Los Angeles and Mexico City **CNR Faculty Mentor: Kate O'Neill**

Emily Mason, S&E Yellow Powder Politics: Resource Governance Among Uranium Mining Tribes in the U.S. and Canada **CNR Faculty Mentor: Nancy Peluso**

Amanina Shofry, S&E The Case of Bakun and Baram Dam: The Role of Global Resistance, Local Social Movements, and Political Structure in Determining the Outcome of Anti-Dam Resistance **CNR Faculty Mentor: Nancy Peluso**

Katherine Hill, S&E Cannabis Gentrification: real-estate bubbles, short- term social impacts and future speculation **CNR Faculty Mentor: Van Butsic**

Whitney Witthaus, S&E Catalyst Constrained: The Good Food Purchasing Program **CNR Faculty Mentor: Kathryn De Master**

Tammy Gu, S&E Water Sanitation, Agriculture, and Empowerment: Can agricultural reform reduce the disproportionate impact of water sanitation issues on women's empowerment in Ghana? **CNR Faculty Mentors: Michael Mascarenhas**

Sarah Emerson, S&E Public Opinion and Willingness to Pay for Invasive Species Removal: A Case Study of Berkeley's Purple Leaf Plums **CNR Faculty Mentors: Joe McBride**

Jared O'Shaughnessy. CRS ** Melis Medal Award Winner, Analyzing ecological tax reform: The case of British Columbia **CNR Faculty Mentor: Jonas Meckling and Sofia Villas-Boas**

Marley Benshalom, CRS The Ecology of Community **CNR Faculty Mentor: Kurt Spreyer**

Nina Djukic, CRS We make art out of our loss: Environmentalist and Feminist Intersectionalities in Poetry by Native American Women **CNR Faculty Mentor: Lynn Huntsinger**

Jody Strait, ES Hard Science, Harder Conversations: Agricultural Perspectives on Climate Change in Rural Stanislaus County, CA **CNR Faculty Mentor: Daniel Kammen**

Yuhan Zhang, ES Post Occupancy Evaluation for Air Conditioned and Mixed-mode Ventilated Office Buildings in India **CNR Faculty Mentor: Patina Mendez**

Sarah Nordahl, ES Life-cycle assessment of anaerobic digestion of municipal waste at Zero Waste Energy Development Company in San Jose, California **CNR Mentor: Patina Mendez**

Daniel Ahrens, ES **Melis Medal Award Recipient, What is "Clean Water?" Sovereignty and Epistemology under the Clean Water Act's Tribal Treatment As a State Program **CNR Faculty Mentor: Kurt Spreyer**

Hannah Schoolmeester, ES "If We Try, It Will Change": How Berkeley 4th and 5th Graders Understand Climate Change **CNR Faculty Mentor: Kurt Spreyer**

Sophie Andrews. EEP **Melis Medal Award Recipient, Temperature Response in U.S. Electricity Demand, an Investigation into Adaptive Preferences **CNR Faculty Mentor: James Sallee**

Katherine Lee, ES Battered, Flattened and Devastated: Media Discourse on Climate and Displacement in Hurricane Irma **CNR Faculty Mentor: Kate O'Neill**

CNR Honors Program 2017 Participants

SPRING 2017

Carolyn Smullin, NS-T

The Significance of Retinol Dehydrogenase 10 in Regulating Hepatic Lipid Metabolism **CNR Faculty Mentor: Joseph Napoli**

Kenneth Wu, MT

Endocrine Disruptive Effect of Arsenic on Steroid Hormone Glucocorticoids

CNR Faculty Mentor: Wally Wang

Terry Lou, NS-PM

D1 Is Required for Normal Brown Adipose Tissue Function in Mice **CNR Faculty Mentor: Hei Sook Sul**

Kimberly Yan, NS-PM

Regulation of Glucose Homeostasis by Angiopoietin-like 4 Fibrinogen-like Domain **CNR Faculty Mentor: Allison McQueen**

Alison Ke, FNR & Statistics

Contrasting Avian Taxonomic, Functional, and Phylogenetic Diversity Betwe en IUCN Protection Levels in a Savanna Ecosystem **CNR Faculty Mentor : Justin Brashares**

Jackson Tonnies, GPB

Analysis of T1 generation of Transgenic Sorghum with Inserted SUSIBA G ene **CNR Faculty Mentor: Peggy Lemaux**

Benjamin Nyman, MEB

Mounds on the mind: deconstructing the navigational mechanism of the m ason spider (Castianeira teewinoticus) **CNR Faculty Mentor: Damian Elias**

Margot Barker, MEB

Anthropogenic Food Subsidies and Scavenger Communities: Discovering th e Major Beneficiaries in a Northern California Ecosystem **CNR Faculty Men tor: Justin Brashares**

Emily Nash, MEB

Agrobacterium Tumefaciens-
mediated Transformation of Setaria Viridis with the WRKY Transcription Fa ctor, SUSIBA2 **CNR Faculty Mentor: Peggy Lemaux**

Jaewon (Evelyn) Lee, MEB

The Effect of All-Trans-
Retinoic Acid on the Phosphorylation of Akt1 and Akt2 in Human Liver Ca ncer Cells **CNR Faculty Mentor:Joseph Napoli**

Terrance Wang, MEB

Thermal Tolerance Plasticity in Lottia Limatula Populations Ranging From Open Ocean to Estuarine Waters **CNR Faculty Mentor: Jonathan Stillman**

Henry Carter, MB

Protective Efficacies of a Bispecific Human Monoclonal Antibody for the Tr eatment and Prevention of P. aeruginosa Acute Pneumonia and Blood Str eam Infection in Preclinical Models **CNR Faculty Mentor: Louise Glass**

Daniel Menza, ES

Linking Air Pollution and Emergency Department Visits in Contra Costa an d Solano County, CA **CNR Faculty Mentors: Kyle Ferrar and Patina Mendez**

Kana Yamamoto, ES

Decomposition Rates of Leaf Litter Along a Topographic Gradient in Luquill o Experimental Forest, Puerto Rico**CNR Faculty Mentors: Whendee Silver a nd Patina Mendez**

Kendall Frey, ES

Sustainable Seafood Campaigns: The Seafood Watch as an Influential Con sumer Program **CNR Faculty Mentor: Kurt Spreyer**

Samantha Rosa, S&E

Illegal Wildlife Trade in the Greater Mekong Region: The Need for Internat ional Criminal Courts in Common Pool Resource Management,**CNR Faculty Mentor: Matthew Potts**

Kelsey Foster, ES

A Delta without Wetlands: Assessing Wetland Habitat Loss in the Sacrame nto-San Joaquin Delta,**CNR Faculty Mentor: Patina Mendez**

Alison Haddad, ES

Ground-Making Research: Storing Atmospheric Carbon in the Soil, **CNR Faculty Mentor: Whendee Silver**

Elliot Kuskulis, ES & FNR

Pruning to Reduce Blister Rust Infection: Does Making Cuts Help Sugar Pi nes Make the Cut? **CNR Faculty Mentors: John Battles and Kurt Spreyer**

Natalie Zhang, ES

Microbial Mediation of Iron and Sulfate Biogeochemistry in Subalpine Wetla nd Soils, **CNR Faculty Mentor: Celine Pallud and Patina Mendez**

Quinton Brail, GPB

CRISPR-mediated Mutagenisis to Develop Disease Resistant, Non-transgenic Tomatoes **CNR Faculty Mentor: Brian Staskawicz**

Chase Garcia, NS-PM

Short Term Calorie Restriction in Mice and its Effects on the Renal Proteo me, **CNR Faculty Mentor: Marc Hellerstein**

Morgan Morales, ES ** Melis Medal Award Recipient

Captured on Camera: Why Humans and Dogs are More Photogenic than Coyotes **CNR Faculty Mentor: James Bartolome**

Eva Malis, ES

Evaluating Effectiveness of Wetland Restoration in the San Francisco Bay

CNR Faculty Mentor: Patina Mendez

Saba Saberi, ES

Exploring the relationship between satellite derived surface temperature observations and modeled lake metabolism **CNR Faculty Mentor: Patina Mendez, Faculty Supervisor: Kathleen Weathers**

Savraj Sekhon, MB

Characterizing the Phylogenetic Placement of a Candidate Subspecies of Staphylococcus Saprophyticus, **CNR Faculty Mentor: Steve Lindow**

Diana Wahl, GPB

Decomposition and Nutrient Cycling in Post-Fire Chaparral

CNR Faculty Mentor: Celine Pallud

Monica Sheffer, MEB

Kleptoparasitism and Araneophagy in Hawaiian Spiders

CNR Faculty Mentor: Rosemary Gillespie

Russell Huang, ES & S&E

Why Do College Students Recycle? Exploring the Relationship Between College-Specific and College-Independent Factors, **CNR Faculty Mentors: Kate O'Neill and Kurt Spreyer**

Shannon Chang, ES

Development of a low-cost black carbon sensor network in West Oakland

CNR Faculty Mentor: Patina Mendez, Faculty Supervisor: Thomas Kirschstetter

Alexandra Lalor, ES

Multi-Scale Analysis of Grazing Impacts on Biodiversity at Point Reyes National Seashore, **CNR Faculty Mentor: Patina Mendez**

Mathilda Farrell, ES

Zika Discourse in American Media: Language and Framing of a Public Health Crisis, **CNR Faculty Mentor: Kurt Spreyer**

Myung Eun (Lucy) Shim, ES & EEP

Mitigating Urban Heat Island Effect with Reflective Roof Surfaces in San Francisco, CA, **CNR Faculty Mentor: Patina Mendez**

Claudia Herbert, CRS & S&E

The Fragmented Process of Developing Regulatory Policy on Hydraulic Fracturing in the United States, **CNR Faculty Mentor: Ignacio Chapela**

Elena Ricciardi, CRS

Understanding Food Insecurity inMarin's Canal Neighborhood

CNR Faculty Mentor: Miguel Altieri

Winnie Itago, EEP

Divergent Policies, Divergent Trajectories? The Impact of Established Political Systems on Oil and Gas Institutions in Ghana and Uganda

CNR Faculty Mentor: Kate O'Neill

Natalie Mezaki, EEP

Using Econometrics to Test the Effects of Environmental Injustice on Performance in School, **CNR Faculty Mentor: Brian Wright**

Helia Bidad, S&E

Shifting Traditions: Perspectives ofSaffron Farmers in the Khorasan Province of Iran to Climate Change and Technological Development

CNR Faculty Mentor: Kate O'Neill

Jacob Elsanadi, S&E

Desert Development in Egypt: Land Acquisition and the Formation of the State

CNR Faculty Mentor: Nancy Peluso

Sasan Saadat, S&E

Multi-stakeholder Governance of Sustainable Development in Carbon Offset Markets: Comparing Accountability and Equity Among Certification Schemes

CNR Faculty Mentor: Kate O'Neill

Clara Murphy, S&E

Market Match: Bridging the Gap Between Traditional Food Security Programs and the Local Food Movement

CNR Faculty Mentor: Kathryn DeMaster

Kelly Nabaglo, ES & EEP ** Melis Medal Award Recipient

Effects of air pollution on biomarkers of obesity and oxidative stress in children from the San Joaquin Valley, CA

CNR Faculty Mentor: Patina Mendez

Fall 2017

Yein Ra, MB
Bacterial Interspecies Interactions: Characterizing Antibiotic-Producing Relationships
CNR Faculty Mentor: Matt Traxler (PMB)

Yeon Mi Hwang, GPB
Heterologous Production of Isoprene Hydrocarbons in cyanobacteria
CNR Faculty Mentor: Tasios Melis (PMB)

Taylor Tam, GPB
The GREAT Assay: A high-throughput method for studying the root microbiome
CNR Faculty Mentors: Sarah Hake (PMB), Adam Arkin (BioE)

Seth LaRosa, CRS *** Melis Medal Award Recipient
Patterns of Agricultural Land Use on Cannabis Cultivation Sites in Humboldt County
CNR Faculty Mentor: Van Butsic (ESPM)

Thank you to the 2017 Symposium Judges

Mark Tanouye (ESPM), Andreas Stahl (NST), Hei Sook Suhl (NST), and Marc Hellerstein (NST), Nina Pak (ESPM), Lynn Huntsinger (ESPM), Itai Trilnick (ARE). A Special Thank you to Sheila McCormick !

CNR Honors Program 2013 Participants

** Melis Medal Award Recipent

Michael Appel, MB
Distinct Mechanisms Mediate Immune Protection in C. elegans Conferred by Two Soil Bacteria
CNR Faculty Mentor: Kathleen Ryan

Nathan Bickart, CRS
Managing the Weed-Shaped Hole: Enhancing Nitrogen Uptake at Strawberry Creek
CNR Faculty Mentor: Katharine Suding

Jessica Channick, MEB
Using in vivo Methods to Investigate Protein Interactions Between Factors Known to Regulate Ligule and Auricle Development in Zea mays
CNR Faculty Mentor: Sarah Hake

Michael Chung, NS-PM
Development and Cold-Induced Activation of Brown Adipose Tissue
CNR Faculty Mentor: Hei Sook Sul

Alyssa Cozzo, NS-PM
AGPS Shifts the Balance of the Cancer Lipidome to Allow Generation of Oncogenic Signaling Lipids
CNR Faculty Mentor: Daniel Nomura

Annie E. Davis, MEB
Toward the Function of a Secretin Homolog in Cell-Contact Dependent Predation in Myxococcus xanthus
CNR Faculty Mentor: Steven Lindow

Charlie Diamond, EEP
Climate Change and Integrated Flood Risk Management in the Sacramento- San Joaquin Delta: Lessons from the Netherlands
CNR Faculty Mentor: David Zilberman

Ashley Ellis, CRS
Lepidoptera Visit, but Do Not Contribute to Pollination of Hybrid Sunflower (Helianthus annus)
CNR Faculty Mentor: Claire Kremen

Lawrence Fernandez, CRS
Resistance and Regeneration: Using Trait-Filtering Analysis to Select Species for Urban Creek Restoration
CNR Faculty Mentor: Katharine Suding

Amy Foo, CRS/English
Persistence for Annual Plants in Serpentine Grassland: A Seed Bank Study
CNR Faculty Mentor: Katharine Suding

Gabriel Fregoso, MEB
Understanding Workers' Perceptions of Education Materials About Occupational Lead Poisoning: Barriers for Implementing Safety Strategies
CNR Faculty Mentor: Neil Tsutsui

Mariah Gonzalez, CRS
Theorizing Alternative Food Systems in Age of Postcolonialism: The Case of Gentrification and Food Praxis in the Mission District of San Francisco
CNR Faculty Mentor: Alastair Iles

Katie Hoffman, SE/History
Climate Forward: Litigation, Divestment and the Vision for Climate Justice
CNR Faculty Mentor: David Winickoff

Marisa Hom, MT
The Role of Transcriptional Coregulator CCAR1 in Glucocorticoid-Regulated Gene Expression in Adipocytes
CNR Faculty Mentor: Jen-Chywan (Wally) Wang

Katherine Hunt, CRS
Microfinance's Viability in Sustaining Agricultural Livelihoods
CNR Faculty Mentor: Garrison Sposito

Ayane Itamura, MEB
Relationship Between Auditory Brain Stem Response and Gap Detection Behavior of Mice Affected by Noise Induced Hearing Lesion
CNR Faculty Mentor: Rosemary Gillespie

Megumi Ito, NS-PM
Enzymatic Synthesis of UDP-GalN Toward a Panel of UDP-GalNAc Analogues
CNR Faculty Mentor: Daniel Nomura

Sammy Kayed, CRS/SE
Phase Progression of Diurnal Oscillations in Streamflow and Transpiration During the Summer Dry Period: Observations from a Geologically Unstable and Densely Forested Watershed
CNR Faculty Mentor: Garrison Sposito

Rochelle Kelly, CRS
**Melis Medal Award Recipient, Outstanding Research Presentation
Assessing Bat Activity in North Coast Vineyards
CNR Faculty Mentor: Adina Merenlender

Chika Kondo, SE/Political Science
The People's Department vs. The Last Plantation: An Analysis of the USDA's History of Discriminatory Lending Practices Against Minority Farmers
CNR Faculty Mentor: Rachel Morello-Frosch

Ellen Yun Jeong Lee, MEB
Early Experience Alters Sensory Organization and Leads to Biased Perception
CNR Faculty Mentor: Rosemary Gillespie

Jeremy Lee, MB
**Melis Medal Award Recipient, Outstanding Research Presentation
Characterizing TMEM55b and its Regulation of the Low Density Lipoprotein Receptor
CNR Faculty Mentor: Arash Komeili

Christina Lin, NS-PM
The Role of CD36 in CoQ Uptake in Muscle During Exercise
CNR Faculty Mentor: Andreas Stahl

Paris Marler, MEB
Are Kenyan Fish Part Hippo: Stable Isotope Analysis of 'Labeo mzima' Vertebrae
CNR Faculty Mentor: Justin Brashares

Kelly McCarter, MEB
Protection of Cell Culture from Fungal Contamination by Amphotericin B Nanodisk
CNR Faculty Mentor: Robert Ryan

Jacob Moe-Lange, GPB
Root Growth Rates in Salt Stressed Arabidopsis thaliana Seedlings Parallel Observed Quantitative Changes in Root Redox Potentials
CNR Faculty Mentor: Lewis Feldman

Janice Oh, MEB
Host Choice and Consequences for a Pupal Parasitoid, Pediobius ni, on its Sexually Dimorphic Host, the Invasive Light Brown Apple Moth
CNR Faculty Mentor: Nick Mills

Mercede Ramjerdi, SE
Community-Based Salmon Conservation in the Lagunitas Watershed, Marin County: A Survey of Public Involvement
CNR Faculty Mentor: Peter Hopkinson

Lisa Rosenthal, MEB
Resupinate Fungi of North America: A Novel Group
CNR Faculty Mentor: Tom Bruns

Dominique Sirgy, CRS
The Struggle for Land is a Struggle for Survival
CNR Faculty Mentor: Ignacio Chapela

Fanglin Sun, EEP
Solar PV Policy In China: Challenges & Opportunities
CNR Faculty Mentor: Maximillian Auffhammer

Erlin Sweeney, CRS
Improving Ecological Literacy Through Food Systems Education
CNR Faculty Mentor: Gordon Frankie

Lindsay Walter, SE/Political Economy
UNFCCC Conferences of the Parties: The Value of Participation
CNR Faculty Mentor: David Winickoff

Allen Yu, NS-PM
In Vivo Imaging of Cardiac Fatty Acid Uptake
CNR Faculty Mentor: Andreas Stahl

CNR Honors Program 2012 Participants

**Melis Medal Award Recipients

Aya Abounasr, NS-P&M
"Regulation of Lipid Metabolism by Angiopoietin-like Proteins"
CNR Faculty Mentor: Jen-Chywan Wang, NST

Mason French, EEP
"Re-Inventing the Windmill"
CNR Faculty Mentor: Brian Wright, ARE

Eric George, S&E, CRS
"Narrating a National Cultivar: NB-6 and Maize Resistance Breeding After 1970"
CNR Faculty Mentor: Ignacio Chapela, ESPM

Jannika Sjostrand Ilievska Kremer, S&E
"Implementation of EU Waste Recycling Regulation in the Republic of Macedonia"
CNR Faculty Mentor: Jeff Romm, ESPM

Joycerine Lee, EEP
"Transmission Congestion Contracts in the New York Wholesale Power Market: 2000 to Present"
CNR Faculty Mentor: Meredith Fowlie, ARE

Elaina Marshalek, CRS
**Melis Medal Award Recipient, Outstanding Research Presentation
"Strategies for Species Conservation in Tropical Production Forest Landscapes"
CNR Faculty Mentor: Matthew Potts, ESPM

Rebecca Peters, S&E
"The NGOization of Water Provision: The Weakening of the State and the Rise of "Civil Society" in Cochabamba, Bolivia"
CNR Faculty Mentor: Nancy Peluso, ESPM

Cavelle, Jenna, CRS
A Political Ecology of the Citarum River Basin: Exploring Social Dimensions of 'Integrated Water Resources Management' in West Java, Indonesia
CNR Faculty Mentor: Nancy Lee Peluso

Chan, Elizabeth, EEP
The Short- and Long-Term Effects of Energy Savings Competition on Energy Savings Behavior
CNR Faculty Mentor: Sofia Villas-Boas

Colwell, Kaela Margaret, EEP
Is it Still “Green”? The Impacts of Corporate Takeovers on Business Sustainability
CNR Faculty Mentor: Brian Wright

Ereiqat, Farah, EEP
Causation or Correlation? An Empirical Study of High Line Park
CNR Faculty Mentors : Daniel Kammen

Guy, Jonathan, EEP
**Melis Medal Award Recipient, Outstanding Research Presentation

Disparities in Food Access among Districts in San Francisco
CNR Faculty Mentor: Sofia Villas-Boas

Heaslip, Meldan, S&E
Toward community wind in the City of Richmond, California
CNR Faculty Mentor: Duncan Callaway

Karmi, Michal, CRS
In the Path of the Three Sisters: A Critical Study of Sustainable Food Systems in a Globalized World
CNR Faculty Mentor: Claudia Carr

Lewis, Elyssa, CRS
**Melis Medal Award Winner, Outstanding Research Presentation
Yes or No to GMOs: What Cal Students Really Think
CNR Faculty Mentor: Peggy Lemaux

Livingston, Corliss, EEP
Heterogeneous Outcomes of the UN Law of the Sea in the Pacific Region: The Effect of the EEZ on Fisheries Development
CNR Faculty Mentors: Alain de Janvry

Thomson, Ariel, FNR
Aging of Giant Sequoia in the Southern Sierra
CNR Faculty Mentor: Robert York

Wang, Ke, EEP
Urban Housing in China: Patterns and Implications for the Social Landscape
CNR Faculty Mentor: David Zilberman

Vollering, Julien, MEB
Addition of Copper (II) Sulfate to SoilSstimulates Abiotic Production of Methyl Halides
CNR Faculty Mentor: Robert Rhew

Wong, Wesley, MB
**Melis Medal Award Winner, Outstanding Research Presentation

Identification of Potential Host Factors Needed for SOX-mediated mRNA Degradation
CNR Faculty Mentor: Britt Glaunsinger

Yang, Karen, NS-P&M
Mechanism of Angptl4-induced Lipolysis
CNR Faculty Mentor: Jen-Chywan Wang

Zeidler, Lauren, MEB
Historical Biogeography of Amazonian and Atlantic Forest Gladiator Frogs (Hypsiboas)
CNR Faculty Mentor: George Roderick

Zhang, Siming, MEB
Vine Mealybug Transmission of Grapevine Leafroll-Associated Virus-3 and Grapevine Virus A
CNR Faculty Mentor: Rodrogo Almeida

Yan, Stephanie, NS-P&M
The Mechanism of Hormonal Regulation of Angiopoietin-like 4 Gene Transcription
CNR Faculty Mentor: Jen-Chywan Wang

Felker, Mary, S&E, CRS
Situating Carbon Forestry: REDD as Means of Dispossession
CNR Faculty Mentor: Nancy Peluso

Amidi, Omid, MEB
Investigation of Edema Factor Unfolding and Stability through Alanine-Scanning Site-Directed Mutagenesis Using UVCD Spectroscopy
CNR Faculty Mentor: Richard Dodd

Amber-Johnson, Katie, MB
Use of Molecular Tweezers to Study the Effect of Applied Force on s54 Core-Binding Domain
CNR Faculty Mentor: Andy Jackson

Chan, Karen, NST
In Vivo Imaging of Brown Adipose Tissue Transplants
CNR Faculty Mentor: Andreas Stahl

Chanana, Anita Morena, MT
Pre-Clinical Study of Itraconazole Cream in Mice for the Chemotherapy of Basal Cell Carcinomas
CNR Faculty Mentors : Leonard Bjeldanes

Goncalves, Anna Ruth, MT
Methyl Cumarate, a Melanin Formation Inhibitor in Cultured Murine B16 Melanoma Cells
CNR Faculty Mentor: Isao Kubo

Iizulca, Yuki, MT
Role of 3,3'-Diindolylmethane in FOXP3 Regulation
through Aryl Hydrocarbon Receptor Mediated Pathway
CNR Faculty Mentor: Leonard Bjeldanes

Kao, Emily, MEB
Engineering Sorghum to Improve Digestibility
CNR Faculty Mentor: Peggy Lemaux

Lachenauer, Erica, MT
**Melis Medal Award Winner, Outstanding Research Presentation
Investigating Hair Loss in Hephaestin Knock Out Mice
CNR Faculty Mentor: Chris Vulpe

Lau, Lena, MEB
Characterization of an Essential Tyrosine Phosphatase in Caulobacter Crescentus
CNR Faculty Mentors: Kathleen Ryan

Libove, Eileen, MEB
Having Both Copies of Functional Ptch1 at the Time of Environmental Insult (ionizing radiation), with Subsequent Deactivation of Ptch1, Does Not Offer

Protection from Basal Cell Carcinoma Carcinogenesis.
CNR Faculty Mentor: Neil Tsutsui

Liew, Qi, MEB
Does Variation in Nectar Production Affect the Floral Preferences of Native Bees?
CNR Faculty Mentor: Gordon Frankie

Lopez, Daniel, MEB
Linking Paleo- and Modern Species-Area Assessments As a Tool for Understanding Biodiversity Response to Global Change in the Western USA
CNR Faculty Mentor: Steve Lindow

Lowell, Natalie, MEB
Elevational Patterns in Leaf-associated Fungi Community Composition of the Highly Invasive Plant Miconia calvescens: Toward an Understanding of Proximal Mechanisms Affecting the Success of Biocontrol Efforts
CNR Faculty Mentor: Matteo Garbelotto

Maloney, Courtney Cyril, MEB
Searching for a Novel Type III Secretion System Effector Protein and Understanding the Regulation of Known Effectors in Pseudomonas aeruginosa
CNR Faculty Mentor: Dennis Baldocchi

Moritsch, Monica , MEB
Drivers of anchialine biodiversity in remipedes and atyid shrimp
CNR Faculty Mentor: Stephanie Carlson

Pan, Shawn, MT
Crosstalk between HER2- and Estrogen Receptor Alpha-Mediated Proliferative Pathways in BT-474 Breast Cancer Cells.
CNR Faculty Mentor: Chris Vulpe

Petriello, Annalise, MB
Assessing the Role of Globally Conserved Type III Effectors in the Cassava-Xam Pathosystem
CNR Faculty Mentor: Brian Staskawicz

Salzman, Shayla , GPB
Temporal Gene Expression during Macrozamia lucida Thermogenesis
CNR Faculty Mentor: Chelsea Specht

Teng, Crystal, MT
A Molecular Phylogeny of the Endemic Hawaiian Scatella (Diptera: Ephydridae)
CNR Faculty Mentor: Patrick O'Grady