Environmental Sciences
Senior Thesis Symposium
Saturday, April 23rd, 2011 - 9am-4:30pm

9:00-9:15 - WELCOME
145 Dwinelle
Kurt Spreyer, ES Lecturer
Steve Welter, ES Co-Director
Patina Mendez, ES Lecturer

Lara Roman & Seth Shonkoff, GSIs

SESSION AM1: 9:15-10:45
145 Dwinelle

ENERGY & THE BUILT ENVIRONMENT

Hayden Wong
Comparative Spatial Analysis of Feeder Bus Networks
in San Francisco & Hong Kong

Kellye Larsen
Energy Bill Breakdown: The Influence of Regional
Temperature Variations & Construction Age on
Energy Consumption

Ana Loera
The Prevalence of Energy Efficiency and PG&E
Rebate Programs in Fruitvale, CA

Ryan McCarter
Building a Solar Water Heater Cost & Sizing
Calculator: An Innovation Based on Hot-water
Consumption Models

Katharine Guan
The Heat Island Effect: Surface & Ambient Air
Temperatures Associated with Different Land Cover
Types

Jim Gao
Spatial Optimization of Wind Turbines

HABITAT & WILDLIFE

Maybellene Gamboa
Home Range of Secretive Marsh Birds: California
Black Rail & Virginia Rail

Stephanie Panlasigui
Choosy Crustaceans: Habitat Preferences of the
Terrestrial Isopod, Armadillidium vulgare

Carmen Mosqueda
The Effects of Seasonal Drought on Fish Ecology in
San Antonio Creek, CA

Clinton Cleveland
Using Stable Isotope Chemistry to Compare the Diets
of Two Reclusive Rails

Bryson Marks
Presence of Ambystoma californiense within Pools of
Varying Benthic Macroinvertebrate Diversity

Caroline Jablonicky
Temporal Partitioning of Carcasses by
Mammalian Scavengers in Etosha National Park,
Namibia

10:45-11:00 - MORNING COFFEE BREAK

SESSION AM2: 11:00-12:15
155 Dwinelle

CRADLE TO GRAVE: SUPPLY,
CONSUMPTION, & WASTE

Yolonda Wright
Relating Recycling: Demographics, Attitudes,
Knowledge and Recycling Behavior among UC
Berkeley Undergraduates

Punal Bhavsar
Is it Worth Being Green? Green Business Transitions

Nicholas Garcia
Wireless Waste: Cell Phone Recycling Behavior of SF
Bay Area Residents & Students

Jennifer Shen
Comparative Assessment of PLA & PET disposable
plastics

Meghan Butler
Sustainable Composting Systems: An Organic Waste
Management Solution

AQUATIC & MARINE SYSTEMS

Nagi Suzuki
Arsenic in Aquifers: Bicarbonate Ions & the
Adsorption of Inorganic Arsenic on Iron Oxide
Minerals

Rose Whitson
The Importance of Being Gravely: Lagunitas Creek
Stream Bed Sediment in 1988 & 2011

Andrea Irons
Conserving Surface Water: Trees & Drying Patterns in
Alameda Creek, CA

Daphne Szutu
Seasonal Wind-driven Upwelling & Phytoplankton
Biomass in Central San Francisco Bay: 1990-2010

Jayhee Chung
The Life History of the Invasive Green Crab (Carcinus
maenas) in San Francisco Bay
ENVIRONMENT & HUMAN HEALTH

**Jimmy Lam**  
Traditional Medicines Can't Harm You: Medicament Use and Awareness of Health Risks Among Vietnamese Immigrants in San Jose.

**Xi Yang**  
Asthma Summer Camp Education Program Effectiveness in Teaching Children to Prevent & Control Asthma Symptoms

**Jimmy Dileo**  
Port of Oakland Particulate Matter Emissions & Incidence of Asthma in Bay Area Communities

**Tanya Wenzel**  
Western and Traditional Medicine Use Practices in Shirati, Tanzania

**Sarah Jarjour**  
Healthy Commute? Traffic Conditions, Ambient Air Pollution, and Cyclists

**Michael Young**  
Disparities in Birth Weight: The Interaction between Air Pollution and Poverty

AGRICULTURAL SYSTEMS

**Isabelle Chow**  
Effects of Floral Resource Availability on Anagyrus pseudococci, a California Vineyard Parasitoid

**Jabari Brown**  
Growing Roses from Concrete: A Geochemical Survey of Oakland Soils to Determine Urban Garden Suitability

**Johnny Sanvichith**  
Do Gardens Make You Green? Home Gardens, Identity, & Pro-Environmental Behavior Among Southeast Asian American College Students

**Artin Laleian**  
Phytoremediation of Heavy Metals in Dredged Material from San Pablo Bay, CA

**Breanna Baraff**  
Genetic Diversity & Distribution of Grapevine Leafroll-Associated Virus in California

**Erica Fong**  
Application of Low-Temperature Produced Biochar on Plant Growth in Californian Alfisol Soil

2:30-2:45 - AFTERNOON COFFEE BREAK

POLICY, ORGANIZATIONS, & MANAGEMENT

**Priscilla Yung**  
Expanding the Realm of Food Security: Electronic Benefit Transfer use in Farmers' Markets in the East Bay, CA

**Christina Cheng**  
Cleaning up the Oil: Organizations’ Rationales for Dispersant Usage in the Gulf Coast Oil Spill

**Robin Katz**  
Who Speaks for the Bees? Narratives of Pollinator Protection in Public Policy

**Jose Lopez**  
Community Organizers Not Activists: Responding to the Social & Environmental Justice Movement

**Sylvia Chang**  
Institutional Discourses on Plastic Pollution in the North Pacific Gyre

**Emma Tome**  
Managing Maps, Making Territory: GIS & Karuk Eco-Cultural Resource Sovereignty

PLANT ECOLOGY

**Ya-Ting Chen**  
From Vanilla to Chocolate: Contributions of Prevalent Tropical Crops to an Ozone Depleting Gas

**Sophie You**  
Assessing Sampling Plot Shape and Size on Measures of Tropical Forest Diversity: A Simulation Study

**Lev Stefanovich**  
Effects of Floral Resource Quality on Bombus vosnesenski Foraging Behavior

**Evan Portier**  
The Curious Case of Perennial Pepperweed: Nitrogen Dynamics in a Pepperweed Invaded Pasture

**Melanie Montes**  
Protein-protein Interactions of ULTRAPETALA1, a Trithorax Group Protein in Arabidopsis thaliana

**Amanda Carlson**  
Effects of Grazing on Native Plant Abundance and Diversity in a California Grassland Invaded by Phalaris aquatica

CLOSING COMMENTS: 4:15

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