

**Program for the 8<sup>th</sup> Annual**

**Pacific  
Undergraduate  
Research &  
Creativity  
Conference**

**PURCC-2008**

May 3, 2008

# **Program**

## **Oral Presentations**

**9:00 AM – 12:30 PM**

**Wendell Phillips Center, Room 140**

## **Poster Presentations**

**1:00 – 3:00 PM**

**Wendell Phillips Center, 1<sup>st</sup> floor hallways**

## **Engineering Senior Project Demonstrations**

**2:00 – 3:30 PM**

**School of Engineering & Computer Science**

## **Senior Art & Design Exhibition**

**1:00 – 5:00 PM**

**Reynolds Gallery**

## **Junior Art Exhibition**

**1:00 – 5:00 PM**

**Studio Art Building**

**Oral Presentations**  
**Moderator: Dr. Lydia Fox**  
**WPC 140**

<b>Time</b>	<b>Presenter</b>	<b>Title</b>
9:00	Andrea Lake	The Loss of the Individual, or How Japan Learned a Nationalist, Collectivist Identity Through Education
9:15	Lois Steele	Balance: The Depiction of Women in the Photomontages of Hannah Hoch
9:30	Cassie Peters	Sex as Sin: The Legacy of St. Augustine of Hippo
9:45	Vietnam Nguyen	A Different Look at the First Amendment and Speech Codes
10:00	Madalyn Friedrich	Millet's <i>The Gleaners</i> : Rural Laborers Taken for Granted
10:15	Natalie Sue	The Romantic Ballerinas: What are Guillotines Compared to Tutus and Pointe Shoes?
10:30	Break	
10:45	Eliana Cetto	Marie-Antoinette and the Construction of Royal Feminine Identity in the Portraits of Élisabeth-Louise Vigée-Le Brun
11:00	Morgan McSweeney, Zach Gottlieb	The Public Perspective On Athletes Who Holdout From Sport Organizations
11:15	Brett Hirsch, Cody Neftin, Terence Quinn	Influence of Public Relations, Media, and Scandals on Fan Interest
11:30	Anderw Padovani	Modeling the Housing Market's Decline: How Much, How Fast, and What People Value
11:45	Amy Huang	Characterization of the 5' Untranslated Region (5' UTR) of the Alcohol Oxidase I (AOXI) Gene in <i>Pichia pastoris</i>
12:15	Logan S. Ahlstrom	Folding of Proteins of Proteins that Cannot be Folded

**Poster Presentations****Moderator: Dr. Lisa Wrischnik****1:00 – 3:00 PM, 1<sup>st</sup> Floor WPC**

<b>Poster#</b>	<b>Author(s)</b>	<b>Title</b>
1	Kristie Akamine,	Biochemical Characterization of a Cysteine Protease from <i>Trichomonas vaginalis</i>
2	Padraick Dornbush, Elizabeth Chang, Jessica Cicone	3,4-Dichloroaniline Amides as Anti-trichomonal Agents: Structure Activity Analysis of a Compound Library in vitro
3	Van Le, Soaly Nguyen, Katherine Grutas	Antiviral Nucleoside Analogs as Potential Chemotherapy for <i>Trichomonas vaginalis</i> Infections
4	Cherie Musgrove	Studies of the interactions between the <i>Drosophila</i> Rad51 paralog proteins
5	Daniel Sassoon	Vesicle-Associated Membrane Proteins in <i>Trichomonas vaginalis</i>
6	Priya Gandhi, Anisha Karnik	Protein expression studies of the Rad51 homolog in <i>Trichomonas vaginalis</i>
7	Will Smith	Microarray analysis of colon cancer cells treated with the pro-apoptotic drug lucanthone
8	Katelin Kehoe	A microarray experiment to determine the biological activity of metronidazole in <i>Trichomonas</i>
9	Dustin Dovala	Functional analysis of the purified Rad51 protein from <i>Trichomonas vaginalis</i>
10	Chirag Vaid, Huy Cao, Justine Fong	HSP-70 ATPase Chaperon Protein
11	Thien Thao Ngo, Vinhyen Nguyen, Jiten Sidhu, Fatima Ahmed	Isolation of the SEC6 cDNA Sequence from the Black Widow Spider

12	Kelley Hoang, Christina Hsieh, Amanda Nguyen, Christopher Tishner	Identification of Promoter Region of MaSp2 Protein
13	Titus Hou, Phillip Kieu, James Lee, Vi Nguyen, Jason Quach	Detangling the Web: Isolation of the MaSp1 Promoter from the Black Widow spider
14	Mary Cathy Tran, Davittin Tran, Anabelle Visperas	Hanging off the Wall: Spider Protein Expression
15	Sean Cualoping, Matt Klein, Kristen Mueller, Ryan John Pacheco, Parin Patel	Hunting For Novel Spider Silk Genes in the Black Widow Spider: Exploration of <i>L. hesperus</i> cDNA sequences
16	Taryn Fong, Veena Vaidyanathan, Purvi Shah	Characterization of a new egg case protein from the black widow spider, <i>Latrodectus hesperus</i> .
17	Robert Ginther	Investigations into Applications of Nickel Complexes for Future Breast Cancer Treatment
18	Logan S. Ahlstrom	Conjugated Dye in Charged Environments
19	Matthew Galon, Shawn Kerns	STRAIN3D: A New Computer Program for Graphical and Statistical 3D Strain Analyses
20	Win McLaughlin, Anne Fisher, Kaitlen Colafrancesco, Kyle R. Womack	Effects of Northern Sierra Fire Management Strategies on Post-Fire Soil Properties
21	Anne M. Fisher Jessica R. Bean (UC Davis), Chris M. Myrvold (UC Davis)	Establishing a long-term record of coastal erosion along Sonoma Coast State Beaches, California
22	Steven Giovannoni	Sources and Timing of Water Quality Impairments to the Lower Calaveras River
23	Matthew Lundy	Toricelli's playground: draining inclined cylinders and other variations on the theme
24	Colin King	Going with the flow: the correct mathematical model for a tank with a vertical slit

25	Sombo Koo	Mathematics of titration
26	Joshua Jessel, Katie Kestner	An Evaluation of the High-P Instruction Sequence With and Without Extinction on Noncompliant Behavior of Children
27	Nicholas Granger	Towards a New Model: Appropriate Leadership Styles Depending on Individual's Participation Level and the Presence of Organizational Stressors
28	Sarah Cassese	“Look Like a Lady, Act Like a Man”: How Do News Media Portray Female Politicians?
29	Domenica Peterson	How do you Measure Saving the World?!
30	Dana Simas	American Idle- The Case for Dock Electrification

**Engineering Senior Project Demonstrations  
2:00 – 3:30 PM**

**Bioengineering  
Fluids Lounge**

<b>Author(s)</b>	<b>Title</b>
Bradley Dunham, Luke Pettross	Making Ethanol from Garbage: Genetically Modifying Yeast
Brandon Garbus, Kennedy Nguyen, Sophon Nhong, Robert Arauz	An Impedance Probe for Biodiesel Process Monitoring
Victoria Ong, Pheng Thao, Scott Zubrzycki	Apparatus for Automated Testing of Dental Files

**Civil Engineering  
Khoury Hall, Room 205**

<b>Author(s)</b>	<b>Title</b>
Stacy Costello, Jennifer Shore, Jason Balatti, Brad Ingels	Shisasari Community Fresh Water Protection Project
Gabriel Rivas, Randy Maroukel, Jose Torres, Emmanuel Salcedo	Lakeview Residential Design
Jose P. Hernandez, Allen King, Miguel Macias, Emily Byers	Jose Hernandez Park and Community Center
Tara Dougherty, Mary Kissinger, Michael Stanwick, Justin Peterson	Thornton Road Widening Project
Clay Slocum, Michelle Hawley, Sarah Maher, Scott Collins	WERC Engineering, Inc. Presents Windrun Development's Master Infrastructure Plan
Ryan Hansen, Chris Deorksen, Greg Felter, Travis Ford	Lone Tree Village: Develop from within
Alfonso Borja Jr., Vincent Ladio, Trong Huynh, Thoa Huynh	XYZ Tractor Company New Site Development and Administration Design
Kaben Kramer, Robert Hansen, Chad Parsons, Troy Tisthammer	Ruiru Bridge Design
Matt Vinson, Jaime Kamenicky, Ricardo Salcedo, Randolph Noriega	Land Rover Wonderland

**Computer & Electrical Engineering**  
**Baun Hall, Room 211**

<b>Author(s)</b>	<b>Title</b>
Kevin Petros, Richmond Hollen, Ben Pemberton, and Thomas Smith	Walk Hard: Designing a Pedometer
Sean Ceballos-McGee, Jason Ladio, Ravi Mohan, Urmil Dave	Pedometer Design: Not just a walk in the park
Blake Gentry, Leochris Ramos, Jason Giang, Hoan Cai	Medical-grade Digital Weight Scale
Haitham Alabdulali, Emmanuel Eckardt, David Pitzer, Bunhay Phy.	We Don't Ship Elephants

**Mechanical Engineering**  
**Mechatronics Lab and Khoury Lawn**

<b>Author(s)</b>	<b>Title</b>
Janick Corpuz, Kelsey Kam, Benjamin Kessel, John Torres	Automated Biodiesel Generator
Daniel Gowans, Chris Kerth, Alan Love, Russell Masuda	Hovercraft
Manuel Pelaez, Eller Torres, Daniel Vizcaino	Remotely Operated Underwater Vehicle
Adrian Hernandez, Ahmad Yateem	Soccer Ball Pitching Device



**Senior Art & Design Exhibition**  
**1:00 – 4:00 PM**  
**Reynolds Gallery**

<b>Artist</b>	<b>Title</b>
Christina Chinn	Send Your Love and Spread the Word
Diana M DeLoach	Before Your Time; Your Mother Should Have Known
Jessica Erickson	A Lifetime
Andrea Gutierrez	Wait One Cotton Pick'n Minute
Kellyn Loehr	Time to Wonder: Ethical Design Crimes
Shali Nguyen	“Time to Discover” the Stockton Miracle Mile
John J. Pratt	Biomorphographs
John J. Pratt	How to Paint a Pot
John J. Pratt	Internship at Vinothéque Wine Cellars
Rachael Rajala	Once Upon a Time
Arlie Righos	Mass Media Mirage
Alexandra Youngblood	Boob Tube Cops
Amanda Zobel	Going Green for Selfish Reasons

**Junior Art & Design Exhibition**  
**1:00 – 4:00 PM**  
**Studio Art Building**

<b>Artist</b>	<b>Title</b>
Lauren Carter	The Collective Condition
Eliana Cetto	Nightmares and Dreamscapes: A Journey to Self Realization
Katherine Draeger	Ocean Environmental Degradation
Susannah Pilcher	Studio Apartment Series: Student Edition
Gina Polana	Unforgettable, Undeniable
Brandi Young	Stereotypes and Subversions