

**10TH ANNUAL UNDERGRADUATE RESEARCH,
SCHOLARSHIP, AND CREATIVE ACTIVITY
SYMPOSIUM**



APRIL 19 & 20, 2016

3RD FLOOR HUB

Table of Contents

SCHEDULE OF EVENTS: APRIL 19, 2016

ORAL PRESENTATIONS	PGS. 1 - 4
POSTER PRESENTATIONS	PGS. 9 - 13
OPENING CEREMONY	PGS. 2
RESOURCE FAIR	PGS. 2

SCHEDULE OF EVENTS: APRIL 20, 2016

ORAL PRESENTATIONS	PGS. 5 - 8
POSTER PRESENTATIONS	PGS. 14 - 18
RESOURCE FAIR	PGS. 6
CLOSING CEREMONY	PGS. 8

10TH ANNUAL UNDERGRADUATE RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY SYMPOSIUM

SCHEDULE OF EVENTS

ORAL PRESENTATIONS

TUESDAY, APRIL 19, 2016

7:45 – 8:55 **Presenter Registration & Poster Setup**

HUB Lobby 3rd Floor

8:30 **Registration Officially Opens**

HUB Lobby 3rd Floor

ORAL PRESENTATIONS

9:00-10:00 **Session 1** **HUB 355** Moderator: Heidi Waltz, Comp Lit. & Foreign Language

1a Caribbean Myth and History in the Poetry of Anne Sexton
Jill Hoo, English
Faculty Mentor: Steven Axelrod, English

1b Feeling Disobedient: Affective Resistance and Performance and Performative Pranks in Harriet Wilson's
"Our Nig"
Kiersten King, English
Faculty Mentor: Emma Stapely, English

1c The Power of Disguise: Removing the Veil of Idealism
Ricky St. Claire, English
Faculty Mentor: John Briggs, English

9:10 – 10:00 **Session 2** **HUB 367** Moderator: Ellen Reese, Sociology

2a The Evaluation of Ancient Egyptian Agricultural Practices and their Implementation in Modern Egyptian Society
Giosiana Turchetti, Anthropology / Middle East and Islamic Studies
Faculty Mentor: Eugene Anderson, Anthropology

2b The Second Amendment: A New Beginning
Macy Wilens, History Law / Society
Faculty Mentors: Robert Parker, Sociology; Richard McFarlane, History

10:10-11:00 Session 3 HUB 355

Moderator: Michael McKibben, Geology and
Divisional Dean of Student Affairs, CNAS

- 3a A Study of the Multijet Background for Inclusive, Hardronic Searches for Supersymmetry in the CMS Detector
Connor Richards, Physics
Faculty Mentor: Owen Long, Physics and Astronomy
- 3b Perceptions of Non-Verbal Communication Style
Pamela Osborn, Biology
Faculty Mentor: Howard Friedman, Psychology
- 3c Examining Adult Defects in Gut Specification Mutants
Christian Turner, CMDDB
Faculty Mentor: Morris Maduro, Biology

10:10 – 11:00 Session 4 HUB 367

Moderator: Dr. Curt Burgess, Psychology

- 4a The Anti-Rape / Anti-Sexual Movement on College Campuses
Kristina Moisa, Political Science / International Relations
Faculty Mentor: Alicia Arrizon, Gender and Sexuality Studies
- 4c Correlates of Medical Jargon Use by Physicians and Patients During Surgical Consultations
Brandon Tran, Psychology
Faculty Mentor: Kate Sweeny, Psychology

11:30 – 12:00 Symposium Opening Ceremony

Welcome – Steven Brint, Vice Provost Undergraduate Education

Kennedy Center American College Theatre Festival Performances by:

Monologue from *Sylvia* by A.R. Gurney

Victoria Ringo, Political Science

Faculty Mentor: Robin Russin, Theatre, Film & Digital Production

Scene from *The Elephant Man*

Ephraim Eshete, Sociology, Theatre Minor and Fernando Echeverria, Political Science/Theatre

Faculty Mentor: Robin Russin, Theatre, Film & Digital Production

12:00 – 1:00

Poster Sessions

HUB 302

12:00 – 1:00

Resource Fair

HUB 302

ORAL PRESENTATIONS

1:10 – 2:00 Session 5 HUB 355-H302 Moderator: Paulo Chagas, Music

- 5a Hearing Colors
Adrienne Blackwood, Creative Writing
Faculty Mentor: Michael Jayme, Creative Writing
- 5b Latina Theatre for Young Audiences: MARIACHI GRIL
Melanie Queponds, Theatre and English
Faculty Mentor: Tiffany Lopez, Theatre, Film & Digital Production
- 5c Two Road Converged
Harrison Moulton, Business Administration Marketing
Faculty Mentor: Erith Jeffe-Berg, Theatre, Film & Digital Production

1:10 – 2:00 Session 6 HUB 367 Moderator: Dr. Hill Harman, Chemistry

- 6a Synthesis of Neuoprotective Limonoid Natural Products
Johny Nguyen, Chemical Engineering
Faculty Mentor: David Martin, Chemistry
- 6b Investigation of the Cobalt Distribution in the Room Temperature Ferromagnetic Nanocomposite
TiO₂-Co Thin Films
Cody Gonzalez, Mechanical Engineering
Faculty Mentor: Sandeep Kumar, Mechanical Engineering
- 6c Effects of Air Lubrication on Hydrokinetic Turbines
Chirawat Sanpakit, Mechanical Engineering and Timothy Lam, Mechanical Engineering
Faculty Mentor: Marko Princevac, Mechanical Engineering

1:10-2:00 Session 7 HUB 379 Moderator: Thomas Morton, Chemistry

- 7a An Exploratory Study of the Geographic Distribution of Asthma Hospitalization Rates in Inland Empire,
California
Yuna Kwon, Biology
Faculty Mentor: Tanya Nieri, Sociology
- 7b The Synthesis and Biological Testing of Cupric Polypyridyl Complexes: An Alternative to Cisplatin?
Noah Angel, Chemistry
Faculty Mentor: Jack Eichler, Chemistry
- 7c Copper(II) Complexes as Potential Anticancer Drugs
Michelle Smith, Chemistry, Julia Jenkins, Biochemistry, Youssef Daoudi, Biochemistry
Faculty Mentor: Jack Eichler, Chemistry

2:10 – 3:00 Session 8 HUB 355 Moderator: Marko Princevac, Mechanical Engineering

- 8a Fabrication of Siolica Nanofibers for Nucleic Acid Extraction
Marissa Gonet-Gonzales, Bioengineering
Faculty Mentor: Wenwan Zhong, Chemistry
- 8b Biomimetic Impact Resistant Nanofiber Reinforced Composites
Brian Macdonald, Chemical Engineering
Faculty Mentor: David Kisailus, Chemical and Environmental Engineering
- 8c Conductive Reverse Osmosis-Polyamide Membranes for Silica-Containing Wastewater Treatment
Julianne Rolf, Environmental Engineering
Faculty Mentor: David Jassby, Chemical and Environmental Engineering

2:10-3:00 Session 9 HUB 367 Moderator: Joel Sachs, Biology

- 9a Captopril Suppresses Toxicant-induced Pressor Responses and Upregulation of RAAS Gene Markers NR3C2 and SGK1 in Acutely Salt-loaded Rats
Alicia Ramirez, Biology and John Lindner, Biochemistry
Faculty Mentors: Margarita Curras-Collazo, Department of Cell Biology & Neuroscience; Frances Sladek, Department of Cell Biology & Neuroscience
- 9b Hydraulic Characteristics as a Survival Trait in Woody Plant Species Found in California's Chaparral Region
Luis Torres, Biology
Faculty Mentor: Louis Santiago, Botany and Plant Sciences
- 9c Increased Neuronal Activity in the Stress Center of the Brian in Response to Acute Ozone Exposure May Indicate Why Ozone Leads to Metabolic Disorder
Damon Platt, Biology
Faculty Mentor: Margarita Curras-Collazo, Department of Cell Biology & Neuroscience

SCHEDULE OF EVENTS

ORAL PRESENTATIONS

WEDNESDAY, APRIL 20, 2016

7:45 – 8:55 **Presenter Registration & Poster Setup**
HUB Lobby 3rd Floor

8:30 **Registration Officially Opens**
HUB Lobby 3rd Floor

ORAL PRESENTATIONS

9:10 – 10:00 **Session 10** **HUB 355** Moderator: Paulo Chagas, Music

10a Constructing an Albertine Legacy: Sculptural Monuments in Saxon Court Chapels and Freiburger Dom, 1554-1594

Russel Altamirano, Art History

Faculty Mentor: Kristoffer Neville, Art History

10b The Dynamic Social Agency of the Kālacakra Sand Mandala

Sierra LaPoint, Art History / Religious; Philosophy

Faculty Mentor: Matthew King, Religious Studies, Gender and Sexuality Studies

10:10 – 11:00 **Session 11** **HUB 355** Moderator: Alicia Arrizon, Gender & Sexuality Studies

11a Why is Google So Successful?

Yvette Villalobs, Business Administration

Faculty Mentor: Sean Jasso, Business Administration

11b Semantic Weight and How Language Helps Children Understand Religion

Eva M. Perez Cecenas, Business Administration and Linguistics

Faculty Mentor: Rebekah Richert, Psychology

11c The Role of Online Social Network Support in New Users Continued Interactions

Juan Sanabria, Neuroscience

Faculty Mentor: Megan Robbins, Psychology

10:10 – 11:00 Session 12 HUB 367

Moderator: Morris Maduro, Biology

- 12a Microsatellite Characterization of *Penicillium Digitatum*, Casual Agent of Green Mold of Citrus
Erika Varady, Biology
Faculty Mentor: George Vidalakis, Plant Pathology and Microbiology
- 12b Effect of Material Properties on Bacterial Attachment to Thin Film Photocatalytic Titanium Dioxide
Madeline Luth, Microbiology
Faculty Mentor: Sharon Walker, Chemical and Environmental Engineering
- 12c The Effects of Climate and Forest Disturbances on the Growth of *Calocedrus Decurrens* at the
Southern and Northern Portion of Its California Range
Alina Geangu, Plant Biology
Faculty Mentor: Jeffrey Diez, Botany and Plant Sciences

11:10-12:00 Session 13 HUB 355

Moderator: Rebekah Richert, Psychology

- 13a The Effects of Gaming Exposure on Metacognitive Experience
Cynthia Ibarra, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- 13b Prayer's Perceived Efficacy in Health Contexts
Albert Ly, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- 13c Ideas about Health and Medicine
Rachel Nemeth, Psychology
Faculty Mentor: Rebekah Richert, Psychology

12:00 – 1:00 Poster Sessions HUB 302

12:00 – 1:00 Resource Fair HUB 302

ORAL PRESENTATIONS

1:10-2:00 **Session 14** **HUB 355**

Moderator: Matthew King, Religious Studies

- 14a The Effect of Sibling Relationships on Resiliency Against Childhood Bullying
Nina Caudill, Sociology
Faculty Mentor: Robert Parker, Sociology
- 14b Technocultural Citizenship and Counterpublicity: Player Agency and Worldmaking in Queer Videogame Spaces
Mary Michael, Sociology / Law and Society
Faculty Mentor: James Tobias, English
- 14c Assessing the Knowledge, Beliefs, and Attitudes of HIV/AIDS Among Undergraduate and Medical Students
Jason Tran, Public Policy
Faculty Mentor: Emma Simmons, School of Medicine

1:10-2:00 **Session 15** **HUB 367**

Moderator: Barry Mishra, Religious Studies

- 15a Why Marriage? The Incompatibility of Marital Expectations with Individuation and Exhaustion
Samantha St. Claire, English
Faculty Mentor: Vorris Nunley, English
- 15b Determining the Extent That a High Dimensional Memory Model Can Categorize Verbs Based on Fine Granularity
Kimberly Miller, Linguistics
Faculty Mentor: Curt Burgess, Psychology

2:10-3:00 **Session 16** **HUB 355**

Moderator: Kurt Anderson, Biology

- 16a Involvement of VPAC2 Receptors in Adrenal Mineralocorticoid and Glucocorticoid Gene Expression and Hormone Responses to Acute Stress in Mice
John Lindner, Biochemistry and Neuroscience
Faculty Mentor: Margarita Curras-Collazo, Cell Biology and Neuroscience
- 16b Promoting Mindfulness and Acceptance: How a Week-long Mediation Training Program Influenced Youths Coping Self-Efficacy
Akhila Nekkanti, Neuroscience
Faculty Mentor: Michael Jayme, Creative Writing
- 16c Relative Expression of Ecdysis Triggering Hormone Signaling Genes in Adult *Drosophila Melanogaster*
Raymond Tran, Neuroscience
Faculty Mentor: Michael Adams, Entomology, Cell Biology and Neuroscience

2:10-3:00 Session 17 HUB 367 Moderator: Dimitrios Morikis, Bioengineering
17a Preparation, Degradation, and Cytocompatibility of Electrophoretically Deposited MgO Nanoparticle Coatings for Orthopedic Applications
Mayra Celene and Cortez Alcaraz, Bioengineering
Faculty Mentor: Huinan Liu, Bioengineering

17b Stage-Specific Induction of Cardiomyogenic Differentiation in Dynamic Suspension
Joshua Karam and Daniel Nampe, Bioengineering
Faculty Mentor: Hideaki Tsutsui, Mechanical Engineering

2:10-3:00 Session 18 HUB 355 Moderator: Denver Graninger, History
18a Linguistic Analysis of Gender-Inclusive Language in English
Honeiah Karimi, Linguistics
Faculty Mentor: Heidi Waltz, Comparative Literature and Foreign Languages

18b Situational Experience Through the Lens of Relationships Around the World
Shazia Parekh, Psychology
Faculty Mentor: David Funder, Psychology

18c Student Explanations for their Attitudes Toward Cognitive Enhancement Drugs
Nicole Perez, Psychology and Music Performance
Faculty Mentor: Kate Sweeny, Psychology

3:10-4:00 Session 19 HUB 337 Moderator: Jingsong Zhang, Chemistry
19a Adult *C. Elegans* Exhibit Physiological Abnormalities When Early Gut Development is Partially Compromised
Kollan Doan, Cell, Molecular and Development Biology
Faculty Mentor: Morris Maduro, Biology

19b CVD Growth and Characterization of TMD Materials on Patterned and Non-Patterned Substrates
Sahar Naghibi, Chemistry
Faculty Mentor: Ludwig Bartels, Chemistry

19c Investigating the Systematics of the *Pseudochalcura* (Hymenoptera: Eucharitidae) Populations of North America
Scott Heacox, Entomology
Faculty Mentor: John M. Heraty, Entomology

3:10-4:00 Session 20 HUB 379 Moderator: Perry Link, Comp. Lit. & Foreign Languages
20a The Evolution of Revolution – A Comparative Analysis of World Revolutions from 1789 to 2011
Sandor Nagy, Global Studies
Faculty Mentor: Christopher Chase-Dunn, Sociology

20b Does the Inclusion of Latin Culture Affect Latina Women’s Subjective Experience of Zumba
Christine Munoz, Sociology
Faculty Mentor: Tanya Nieri, Sociology

4:00 – 5:00 CLOSING CEREMONY HUB 302

Presentation of Best Oral and Poster Presentation Awards and Closing Remarks

SCHEDULE OF EVENTS

POSTER PRESENTATIONS

TUESDAY, APRIL 19, 2016
HUB 302

BCOE

- A 01 Polydiacetylene-Coated Polyvinylidene Fluoride Strip Aptasensor for Colorimetric Detection of Zinc(II)
Karen Bohorquez, Mechanical Engineering
Faculty Mentor: Hideaki Tusutsui, Mechanical Engineering
- A 02 Photocatalytic Oxidation of Nitrogen Oxides Using TiO₂-incorporated Coatings
Eric Lin, Chemical Engineering
Faculty Mentors: Kawai Tam, Chemical/Environ. Engineering; David Cocker, Chemical and Environmental Engineering
- A 03 Environmental Impacts of Titanium Dioxide Through A Model Colon and Septic Tank System
Diego Novoa, Chemical and Environmental Engineering
Faculty Mentor: Sharon Walker, Chemical/Environ. Engineering
- A 04 Controlled BaTiO₃ Nanofibers for Enhanced Piezoelectric Properties
Paymon Shirazi, Chemical Engineering
Faculty Mentor: Nosang Myung, Chemical and Environmental Engineering
- A 05 A study of Poly (Glycerol Sebacate) on Magnesium as Bioresorbable Materials
Larry Tran, Chemical Engineering
Faculty Mentor: Huinan Liu, Mechanical Engineering
-

CHASS

- A 06 1980 Iran-Iraq War: Impact of Illegal Use of Chemical Weapons
Arvanoush Boudaghians, Linguistics
Faculty Mentor: Denver Graninger, History
- A 07 Support from Friends and the Academic Self-Efficacy and School Connectedness of First-Year College Students
Francine Can, Psychology
Faculty Mentor: Mary Gauvain, Psychology
- A 08 Music as a Form of Migration
Alondra Clemente, Anthropology
Faculty Mentor: Susan Ossman, Anthropology
- A09 Reimagining Interdisciplinary Disciplines: A Case for Subjectivity in Knowledge Construction in Public Policy and the Social Sciences
Ariana Elizalde, English and Public Policy
Faculty Mentor: Fred Moten, English
- A 10 Editing California: Félix Buelna
Evelyn Gamez, Linguistics and Spanish
Faculty Mentor: Covadonga Lamar Prieto, Hispanic Studies
- A 11 Emotions and Cognitive Development in Early Childhood
Haydi Gerges, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- A 12 The Effect of Music on the Perception of Emotionally Neutral Faces
Jessica Grier, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- A 13 Children's Analogical Connections and Physical Realism
Jennifer Hernandez, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- A 14 He Said/She Said: Boys and Girls Differ in Emotional Coherence
Thong Huynh, Anthropology
Faculty Mentor: Elizabeth Davis, Psychology
- A 15 Audeamus Multidisciplinary Journal
Julia Krum, Neuroscience, Raymond-Tan Tran, Neuroscience, and Adrienne Blackwood, Creative Writing
Faculty Mentor: Richard Cardullo, Biology

- A 16 Connections Between Task-irrelevant Perceptual Learning and the Attention Network Task
Jennie Linck, Psychology
Faculty Mentor: Aaron Seitz, Psychology
- A 17 Effect of Emotional Arousal on Visual Working Memory Consolidation
Ana Martinez Flores, Psychology
Faculty Mentor: Weiwei Zhang, Psychology
- A 18 Anthropomorphic Views of God and Religious Affiliation
Marisa Montoya, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- A 19 What's in a Name? Using the Hyperspace Analogue to Language Model of Semantic Memory to find Associations between Adjectives and Names
Derrick Tien, Statistics
Faculty Mentor: Curt Burgess, Psychology

SoBA

- A 20 Can Yogurt Lids Cure Cancer? A closer understanding of the driving force behind philanthropic actions and the results of those actions.
Alyssa Stump, Business Administration
Faculty Mentor: Sean Jasso, Business Administration

CNAS

- A 21 Mapping the m5C modification on small RNAs in *C. elegans*
Phillip Adilukito, Neuroscience
Faculty Mentor: Weifeng Gu, Cell Biology and Neuroscience
- A 22 Identifying a Division Plane Orientation Mutant in *Arabidopsis thaliana*
Leslie Aranda, Biochemistry
Faculty Mentor: Carolyn Rasmussen, Botany and Plant Sciences
- A 23 Synthesis of Copper(II) Complexes with Potential for Antitumor Activity
Michael Baird, Chemistry
Faculty Mentor: Jack Eichler, Chemistry
- A 24 Overexpression of MiR-361 Promotes Osteogenesis From the Neural Crest
Linh Blackney, Biology
Faculty Mentor: Nicole zur Nieden, Cell Biology and Neuroscience
- A 25 The Effects Of Electronic Cigarette Exhaled Aerosol Residue On Human Cell Morphology As An Indicator Of Cell Stress
Jessica Bustamante, Cell, Molecular Development Biology
Faculty Mentor: Prue Talbot, Cell Biology and Neuroscience

- A 26 Effects of Electronic Cigarette Aerosol on Human Embryonic Stem Cell Health
Iliana Cordova, Psychology
Faculty Mentor: Prue Talbot, Cell Biology and Neuroscience
- A 27 Cytotoxic Effects of Varying Humectant Concentrations and Voltage in Electronic Cigarettes
Eriel Datuin, Biology
Faculty Mentor: Prue Talbot, Cell Biology and Neuroscience
- A 28 The Effect of Variable Connectivity on Richness in Spatially Fragmented Pond Microcosms
Heather David, Microbiology
Faculty Mentor: Kurt Anderson, Biology
- A 29 Effect of Genetically Modified Soybean Oil (Plenish) on Pain Threshold through Diet-Induced Obesity
Dave Enriquez, Neuroscience
Faculty Mentor: Margarita Curras-Collazo, Cell Biology and Neuroscience
- A 30 Investigating Associational Susceptibility of a Native Plant Mediated by an Invasive Plant and an Invasive Herbivore
Seth Freitas, Entomology
Faculty Mentor: Matt Daugherty, Entomology
- A 31 Investigating the impact of fluidic agitation on human pluripotent stem cells in dynamic suspension
Ronak Joshi, Neuroscience
Faculty Mentor: Hideaki Tsutsui, Mechanical Engineering
- A 32 The Role of HOTAIR M1 and HOX genes in Breast Cancer Development
Alexia King, Biochemistry
Faculty Mentor: Ernest Martinez, Biochemistry
- A 33 Exploring Brain Gene Markers for Neurobehavioral Deficits Produced by Developmental Exposure to Indoor Flame Retardants
Elena Kozlova, Neuroscience
Faculty Mentor: Margarita Curras-Collazo, Cell Biology and Neuroscience
- A 34 Morphological Variation in Natural and Synthetic *Nicotiana tabacum* Polyploids
Amelda Kurti, Microbiology
Faculty Mentor: Amy Litt, Botany and Plant Services
- A 35 Effects of Fatherhood on Neuronal Morphology in the MPOA in Male California Mice
Diane Luu, Cell, Molecular and Developmental Biology
Faculty Mentor: Peter Hickmott, Psychology, and Wendy Saltzman, Biology
- A 36 Analysis of the function of FRUITFULL paralogs in tomato using CRISPR
Jenna Macon, Cell, Molecular and Developmental Biology
Faculty Mentor: Amy Litt, Botany and Plant Sciences

- A 37 Characterization of a Plant Hormone Receptor: ABA-PYR1
Robert Mannatt, Biochemistry
Faculty Mentor: Sean Cutler, Botany and Plant Sciences
- A 38 Assessing the dynamics of a generalist predator/prey model across different spatial configurations
Rosa McGuire, Biology
Faculty Mentor: Kurt Anderson, Biology
- A 39 Replication of a honey bee virus in alfalfa leafcutter bees
Sarah Miller, Biology,
Faculty Mentor: Quinn McFrederick, Entomology
- A 40 Analysis of Reproductive Mode (Placental and Nonplacental) on Genetic Variation Across Geographically Isolated Populations of *P. prolifica* and *P. infans*
Anthony Nguyen, Biochemistry
Faculty Mentor: David Reznick, Biology
- A 41 Role of Microtubule Dynamics in Cell Division using Maize tangled-1 Mutant
McKenzie Pickle, Biology
Faculty Mentor: Carolyn Rasmussen, Botany and Plant Sciences
- A 42 Investigation of HOTAIRM1 in Hindbrain Tumors
Shawn Poag, Biochemistry
Faculty Mentor: Ernest Martinez, Biochemistry
- A 43 Data Mining the 2010 National Health Interview Survey: What Characteristics are Common Among Those with Multiple Cancers?
Gabriel Ruiz, Statistics
Faculty Mentor: Subir Ghosh, Statistics
- A 44 Disruption of Neurological Circuits Controlling Blood Pressure by Indoor Flame Retardants
Gissell Sanchez, Neuroscience
Faculty Mentor: Margarita Curras-Collazo, Cell Biology and Neuroscience
- A 45 Synthesis of Flavalin Natural Products
Lauren Sangster, Biochemistry
Faculty Mentor: David Martin, Chemistry
- A 46 Solid-State Upconversion with CdSe Nanocrystals and Anthracene
Gabriela Tablas, Chemistry
Faculty Mentor: Ming Lee Tang, Chemistry

SCHEDULE OF EVENTS

POSTER PRESENTATIONS

WEDNESDAY, APRIL 20, 2016
HUB 302

BCOE

- B 01 Rice Husk: A Sustainable Building Material for the Philippines
Jacqueline Ortega, Chemical Engineering
Faculty Mentor: Kawai Tam, Chemical and Environmental Engineering
- B 02 Using DNA-hybridized microspheres in paper-based assays
Jenna Roper, Bioengineering
Faculty Mentor: Hideaki Tsutsui, Mechanical Engineering
- B 03 Free Fatty Acid Exposure Decreases Trans-epithelial Electrical Resistance of Caco-2 Cells
Aaron Tan, Bioengineering
Faculty Mentor: Victor Rodgers, Bioengineering

CHASS

- B 04 Disproportionate Representation of Latino and African American Students in Special Education:
An Auto-Ethnography
Erica Guzman, Linguistics
Faculty Mentor: Jennifer Najera, Ethnic Studies
- B 05 How do Attentional and Physiological Components of Emotion Regulation Contribute to Children's Risk for
Externalizing Symptoms?
Nikita D. Mahbubani, Psychology
Faculty Mentor: Elizabeth L. Davis, Psychology
- B 06 Reproducing Religious Icons: Our Lady of Guadalupe in Southern California
Gabriela Perez, Religious Studies
Faculty Mentor: Jennifer Hughes, History, and Matthew King, Religious Studies
- B 07 Prosocial Views of God and Gender
Styliani Petraki, Psychology
Faculty Mentor: Rebekah Richert, Psychology
- B 08 Intersecting Identities: The Experience of Coming Out as Undocuqueer
Liliana Ramirez, Anthropology
Faculty Mentor: Jennifer Najera, Ethnic Studies

- B 09 How Language Proficiency Could Increase Semantic Relationships in Memory
Melissa Saidak, Psychology
Faculty Mentor: Curt Burgess, Psychology
- B 10 Desire in Natsume Soseki's Kokoro
Yesenia Sanchez, Languages and Literature, Japanese
Faculty Mentor: Annmaria Shimabuku, Comparative Literature and Foreign Languages
- B 11 Children's Desensitization to Violence in Video Games and TV News
Nancy Tang, Psychology
Faculty Mentor: Rekekah Richert, Psychology
- B 12 Parents Overestimate Children's Behavioral and Cognitive Emotion Regulation Strategy Repertoires
Austen Trainer, Psychology
Faculty Mentor: Elizabeth Davis, Psychology
- B 13 Get Back Out There! Children's Participation in Sports and Parent Emotion Socialization
Angie Truong, Psychology
Faculty Mentor: Elizabeth Davis, Psychology
- B 14 Exploration of Memory and Language Function through the SCiL Application
Giselle Urquijo, Neuroscience
Faculty Mentor: Curt Burgess, Psychology
- B 15 Availability of Primary Care Resources, Social Disadvantage, and Diabetes Mortality in US Counties: A Multi-level Analysis
Katy Wang, Statistics
Faculty Mentor: Augustine Kposowa, Sociology
- B 16 Framing Kind Acts on Life Satisfaction in Two Cultures
Zizhong Xiao, Psychology
Faculty Mentor: Sonja Lyubomirsky, Psychology
- B 17 A Comedy of Migration: Commedia Dell'Arte and the Characterization of Migrant Workers
Natalia Zufferey, Theatre
Faculty Mentor: Erith Jaffe-Berg, Theater, Film and Digital Production

CNAS

- B 18 Identifying the Dust-Associated Core Microbiome of the Salton Sea Region
Taryn Barsotti, Microbiology
Faculty Mentor: Emma Aronson, Plant Pathology and Microbiology
- B 19 Screening Drosophila Melanogaster Sensory Neurons to Characterize an Entire Neural Circuit, Connecting Sensory Input to Hormonal Release
Riyan Bittar, Biology
Faculty Mentor: Naoki Yamanaka, Entomology

- B 20 Characterization of DNA Transposable Elements from three Superfamilies in the Fairchild Mandarin Genome
Alberto Corona, Biology, Travis Wrightsman, Biochemistry, and Cameron Hatch, Biochemistry
Faculty Mentor: Susan Wessler, Botany and Plant Sciences
- B 21 Diel Patterns in Oviposition and Egg Hatching of *Ectomyelois ceratoniae* Zeller
James Hepler, Entomology, Plant Biology
Faculty Mentor: Thomas Perring, Entomology
- B 22 Soybean Oil High Fat Diet Reduces Hypothalamic Oxytocin Immunoreactivity
Catherine Ho, Neuroscience
Faculty Mentors: Margarita Curras-Collazo, Cell Biology and Neuroscience; Frances Sladek, Cell Biology and Neuroscience
- B 23 Big Head, Little Head: Tracing the evolution of exaggerated head shapes in *Nannocoris* Reuter (Hemiptera: Schizopteridae)
Christy Hoong, Neuroscience
Faculty Mentor: Christiane Weirauch, Entomology
- B 24 Expression of aquaporin 3 is a significant factor in outcomes of ascorbate treatment
Andrew Huang, Neuroscience
Faculty Mentor: Victor Rodgers, Bioengineering
- B 25 Plant Nutrition: Dynamics in gene regulation in response to phosphate starvation in *Arabidopsis*
James Koo, Biology
Faculty Mentor: Julia Bailey-Serres, Botany and Plant Sciences
- B 26 Floral Evolution in *Nicotiana*
Amber Lawhorn, Biology
Faculty Mentor: Amy Litt, Botany and Plant Sciences
- B 27 Drug Design to Prevent Cancer Cell Metastasis
Taylor Le, Biochemistry
Faculty Mentor: Thomas Morton, Chemistry
- B 28 Investigating the Role of EndoU in Developing T-cells
Megan Lee, Biology
Faculty Mentor: Fedor Karginov, Cell Biology and Neuroscience
- B 29 Structural study of the interaction between DNMT1 and histone modification H4K20me2
Linhui Li, Biochemistry
Faculty Mentor: Jikui Song, Biochemistry
- B 30 Testing for Heterodimerization of Moss Methyltransferases Through Genetic Crossing of Transgenic Tobacco Plants
Haley Masters, Biology
Faculty Mentor: Eugene Nothnagel, Botany and Plant Sciences; Martha Orozco-Cardenas, Botany and Plant Sciences

- B 31 Cloning, Purification and Crystallization of ETR1
Taylor Meyer, Biology
Paul Larsen, Biochemistry
- B 32 Impact of a Western Diet on Lipid Signaling Molecules in the Left Ventricle of Obese Mice
Kevin Mortazavi, Neuroscience
Faculty Mentor: Nicholas DiPatrizio, Biomedical Sciences
- B 33 Screening for RNAi mutants deficient in silencing virus
Sona Naik, Neuroscience, Stephanie Ngo, Biology, and Christian Agatep, Genetics
Faculty Mentor: Weifeng Gu, Cell Biology and Neuroscience
- B 34 Expression of glutamate aspartate transporter (GLAST) in the intrahippocampal kainic acid model of epileptogenesis
Andrew Nakla, Biology
Faculty Mentor: Devin Binder, Biomedical Sciences
- B 35 Induction of M cells by Cholera Toxin
Sophia Parks, Neuroscience
Faculty Mentor: David Lo, School of Medicine (Biomedical Sciences)
- B 36 Identification of Optimal Overexpression and Purification Conditions of Ribosomal Protein S1 from Escherichia coli (E.coli)
Yatna Patel, Biochemistry
Faculty Mentor: Gregor Blaha, Biochemistry
- B 37 Auditory Fear Conditioning and Extinction in fmr1 and mmp-9 Knockout Mice
Kasim Pendi, Biology, Neuroscience
Faculty Mentors: Iryna Ethell, Biomedical Sciences; Khaleel Razak, Psychology
- B 38 Assessing the Effect of Histone Methyltransferase Inhibitors on Plasmodium falciparum var Gene Expression and Genome Structure
Raphael Reyes, Biology
Faculty Mentor: Karine Le Roch, Cell Biology and Neuroscience
- B 39 Examination of Potential i-Motif Binding Candidates
Ranier Rivera, Biochemistry
Faculty Mentor: Thomas Morton, Chemistry
- B 40 Assessing the Knowledge, Beliefs, and Attitudes Toward Communities Affected By HIV/AIDS Among Undergraduate and Medical Students
Patrick Samones, Biochemistry
Faculty Mentor: Emma Simmons, School of Medicine
- B 41 Defining Interactions between RNA Polymerase, NusG, RfaH, and the Ribosome
Gabriela Sanchez, Biochemistry
Faculty Mentor: Gregor Blaha, Biochemistry

- B 42 The Role of Density Dependence on the Life History of the Trinidadian Guppy
Rajvee Sanghavi, Biological Sciences
Faculty Mentor: David Reznick, Biology
- B 43 Escape Behavior and Flight Initiation Distance of the Granite Spiny Lizard, *Sceloporus orcutti*
Jennifer Shedden, Biology
Faculty Mentor: Timothy Higham, Biology
- B 44 Morphological and functional consequences of hippocampal demyelination and remyelination-induced recovery
Joselyn Soto, Cell, Molecular, Development Biology
Faculty Mentor: Seema Tiwari-Woodruff, Biomedical Sciences
- B 45 Macrobrachium Prawn Effects on *Rivulus hartii* Eggs' Developmental Time
William Tedjo, Biochemistry
Faculty Mentor: David Reznick, Biology
- B 46 Glycosyl Composition of Polymeric Components of Gums Exuded from Uninfected and Neofusicoccum-Infected Almond Trees
Bassam Theordory, Biochemistry
Faculty Mentor: Eugene A. Nothnagel, Philippe E. Rolshausen, Sebastiaan Bol, Botany and Plant Sciences
- B 47 Functionalized Tetracene Organic Field Effect Transistors
Dominic Ventre, Bioengineering
Faculty Mentor: Ming Lee Tang, Chemistry
- B 48 Synthesis of Cobalt Containing Photocatalysts for Direct Alcohol Activation
I-Chieh (Jack) Wang, Biochemistry
Faculty Mentor: David Martin, Chemistry

THANK YOU TO THE CAMPUS PARTNERS WHO MADE THE SYMPOSIUM A GREAT SUCCESS

FACULTY MODERATORS

- Dr. Kurt Anderson, Biology
- Dr. Alicia Arrizon, Gender & Sexuality Studies
- Dr. Paulo Chagas, Music
- Dr. Denver Graninger, History
- Dr. Hill Harman, Chemistry
- Dr. Matthew King, Religious Studies
- Dr. Perry Link, Comparative Literature & Foreign Languages
- Dr. Morris Maduro, Biology
- Dr. Michael McKibben, Geology and Divisional Dean of Student Affairs, CNAS
- Dr. Barry Mishra, Religious Studies
- Dr. Dimitrios Morikis, Bioengineering
- Dr. Thomas Morton, Chemistry
- Dr. Marko Princevac, Mechanical Engineering
- Dr. Ellen Reese, Sociology
- Dr. Rebekah Richert, Psychology
- Dr. Joel Sachs, Biology
- Dr. Heidi Waltz, Comparative Literature & Foreign Languages
- Dr. Jingsong Zhang, Chemistry

ORAL PRESENTATION EVALUATORS

- Dr. Emma Aronson, Plant Pathology and Microbiology
- Dr. Nicholas Barth, Earth Sciences
- Elizabeth Claassen Thrush, Educational Initiatives Coordinator
- Dr. Gary Coyne, Director of Evaluation and Assessment
- Jared Dobbins, Coordinator Special Programs
- Dr. Dimitrios Morikis, Bioengineering
- Kathleen Sawa, Academic Internships Coordinator
- Dr. Christine Victorino, Assistant Vice Provost, Undergraduate Education

POSTER JUDGES

- Dr. Kurt Anderson, Biology
- Dr. Nicolas Barth, Earth Sciences
- Dr. Sherryl Berg-Ridenour, School of Business Administration
- Dr. Steven Brint, Sociology and Vice Provost of Undergraduate Education
- Dr. Liz Davis, Psychology

- Dr. Subir Ghosh, Statistics
- Dr. Katja Guenther, Gender and Sexuality Studies
- Rickerby Hinds, Theatre, Film & Digital Production
- Dr. Darrell Jenerette, Botany
- Dr. Zhiyun Qian, Computer Science and Engineering
- Dr. Ming Lee Tang, Chemistry
- Dr. Michael McKibben, Geology and Divisional Dean of Student Affairs, CNAS
- Dr. Eugene A. Nothnagel, Botany and Plant Sciences
- Dr. Connie Nugent, Cell Biology & Neuroscience
- Dr. Jason Stajich, Plant Pathology and Microbiology
- Dr. Heidi Waltz, Comparative Literature and Foreign Languages
- Dr. Ruoxue Yan, Chemical and Environmental Engineering

RESOURCE FAIR PARTICIPANTS

BOURNS COLLEGE OF ENGINEERING

CAREER CENTER

CNAS SCIENCE AMBASSADOR PROGRAM

FIELDS

FLYING SAMARITANS AT UCR

GLOBAL ISSUES FORUM

HEATH PROFESSIONS ADVISING CENTER

KECK GRADUATE INSTITUTE

MARC U* PROGRAM

SUMMER SESSIONS

STUDENT SUCCESS PROGRAMS

STUDY ABROAD

R COURSES

UCDC

UNIVERSITY HONORS

UNDERGRADUATE EDUCATION TEAM

- Madina Brammer, Administrative Assistant, Undergraduate Education
- Kay Buell, Administrative Assistant, Student Success Programs
- Jeffrey Chang, Undergraduate Education Student Worker
- Elizabeth Claassen Thrush, Educational Initiatives Coordinator
- Dr. Gary Coyne, Director of Evaluation and Assessment
- Vincent Doan, Undergraduate Education Student Worker
- Jared Dobbins, Coordinator Special Programs
- Efren Gomez, Information Technology Director
- Gladis Herrera-Berkowitz, Director of Student Success Programs
- Justin Hoang, Undergraduate Education Student Worker
- Sierra LaPoint, Undergraduate Education Student Worker
- Rachel Law, Undergraduate Education Student Worker
- Shanshan Liao, Programmer Analyst
- Nicole Martin, Undergraduate Education Student Worker
- Kent Nguyen, Undergraduate Education Student Worker
- Julianne Rolf, Undergraduate Education Student Worker
- Kathleen Sawa, Academic Internships Coordinator
- Dr. Christine Victorino, Assistant Vice Provost, Undergraduate Education