

**12<sup>TH</sup> ANNUAL UNDERGRADUATE RESEARCH,  
SCHOLARSHIP, AND CREATIVE ACTIVITY  
SYMPOSIUM**



**MAY 7 & 8, 2018**

**3<sup>RD</sup> FLOOR HUB**

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## **SCHEDULE OF EVENTS: MAY 8, 2018**

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# 12<sup>TH</sup> ANNUAL UNDERGRADUATE RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY SYMPOSIUM

## SCHEDULE OF EVENTS

### ORAL PRESENTATIONS

**MONDAY, MAY 7, 2018**

**7:30 – 8:45**      **Presenter Registration; Oral & Poster Presentation Setup**  
HUB Lobby 3<sup>rd</sup> Floor

**8:30**              **Registration Officially Opens**  
HUB Lobby 3<sup>rd</sup> Floor

### ORAL PRESENTATIONS

**9:00 - 10:00**      **Session 1**              **HUB 355**                      **Moderator:** Dr. Rebekah Richert, Psychology

- 1a      Just Like Her: When a Role Model Isn't a Role Model - An Analysis of Female Characters in Young Adult Mega-Blockbuster Literary/Film Hybrids  
Kristen Lee, English/Education  
Faculty Mentor: Dr. Stephen Sohn, English
- 1b      The Queer Confessional: Locating the Discordant Energies of Language and Queer Form in Henri Cole's Poetics  
Jan Maramot Rodil, English  
Faculty Mentor: Dr. Steven Gould Axelrod, English
- 1c      Heroic Virtue: Moral Testings in the English Renaissance  
Amy Ayotte, English and Art History  
Faculty Mentor: Dr. Heidi Brayman, English

**9:00 - 10:00    Session 2    HUB 379    Moderator:** Dr. Jim Burnette, Botany & Plant Sciences

- 2a    Quantitative Assessment of Schooling and Aggression in Trinidadian Guppies, *Poecilia Reticulata*  
Sarah Ruckman, Biology  
Faculty Mentor: Dr. David Reznick, Biology
- 2b    Using Binary Choice Assays to Investigate the Evolution of Bitter Taste Tolerance in *Drosophila sechellia*  
Bindi Hira, Biology  
Faculty Mentor: Dr. Anupama Dahanukar, Entomology
- 2c    Barred Owl (*Strix varia*) Feather Pennulae and Their Role in Reducing Structural Noise in Flight  
Lori Liu, Biology  
Faculty Mentor: Dr. Christopher Clark, Biology

**9:00 - 10:00    Session 3    HUB 367    Moderator:** Dr. Victor Rodgers, Bioengineering

- 3a    Expression and Purification of Fluorescent PIAS1 Protein from Inclusion Bodies for FRET Assay  
Kate An, Bioengineering  
Faculty Mentor: Dr. Jiayu Liao, Bioengineering
- 3b    Antibacterial Studies Of ZnO Nanoparticle Coating On Nanocrystalline-YSZ Irradiated With Femtosecond Laser Light  
Crysthal Alvarez, Mechanical Engineering  
Faculty Mentor: Dr. Guillermo Aguilar, Mechanical Engineering
- 3c    Synthesis of Anacardic Acid Derivatives for treatment of SUMO Dependent Cancers  
Phartha Paul, Chemical Engineering  
Faculty Mentor: Dr. David Martin, Chemistry

**10:10 - 11:00    Session 4    HUB 355    Moderator:** Dr. Denver Graninger, History

- 4a    Academic Counselors and their Relationship to Graduation Rates in LAUSD Public High Schools  
Kimberly Gonzalez Arce, Sociology  
Faculty Mentor: Dr. Tanya Nieri, Sociology
- 4b    Analyzing Objectophilia: An Examination of the Possible Limits of Love  
Lissa Dechakul, Philosophy  
Faculty Mentor: Dr. Georgia Warnke, Political Science
- 4c    The Functional and the Phenomenal: On Looking for Consciousness in Artificial Intelligences  
David Udell, Philosophy/Political Science  
Faculty Mentor: Dr. Eric Schwitzgebel, Philosophy

**10:10 - 11:00 Session 5 HUB 379**

**Moderator:** Dr. Gregor Blaha, Biochemistry

- 5a Twelve Clay Butterflies  
Amulya Kunduru, Biology  
Faculty Mentor: Dr. Anthony Macias, Ethnic Studies
- 5b The afferent connectivity of the medial preoptic area in the California mouse, *Peromyscus californicus*  
Anastasia Shakhbazova, Nathan Horrell, Amanda Le, Brian Hogan, Oanh Nguyen/Biology, Neuroscience, Biochemistry  
Faculty Mentor: Dr. Wendy Saltzman, Biology
- 5c Correlation between photoluminescence quenching and proximity-induced spin-orbit coupling in graphene-WSe<sub>2</sub> Heterostructures  
Everardo Molina, Physics  
Faculty Mentor: Dr. Jing Shi, Physics

**10:10 - 11:00 Session 6 HUB 367**

**Moderator:** Dr. Craig Schroeder, Computer Science

- 6a Directed Placement and Routing for mVLSI Devices  
Karen Kong, Computer Science  
Faculty Mentor: Dr. Philip Brisk, Computer Science & Engineering
- 6b Investigating Intrinsic Spectral Features of High Redshift Quasars  
Nicholas Pham, Chemical Engineering and Physics  
Faculty Mentor: Dr. George Becker, Physics and Astronomy
- 6c Identification of targetable surfaces of Cks1 for development of new cancer therapeutics  
Nolan Winicki, Bioengineering  
Faculty Mentor: Dr. Dimitrios Morikis, Dr. Jefferson Perry, Bioengineering, Biochemistry

**11:00 - 11:25 Session 7 HUB 367**

**Moderator:** Dr. Thomas Dickson, Assistant Vice Provost, Undergraduate Education

- 7a Transposing The "Other:" Subverting Stereotypes In the Work of Confessional Poets  
Cristian Guerrero, Computer Science  
Faculty Mentor: Dr. Steven Axelrod, English
- 7b Embracing a Liberatory Pedagogy: A Proposal for Ethnic Studies in K-6 Curriculum  
Nhung Ha, Chemical Engineering and Physics  
Faculty Mentor: Dr. Rita Kohli, Graduate School of Education

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**11:30 – 12:00 Symposium Opening Ceremony**

**Welcome – Dr. Richard Cardullo, Interim Vice Provost Undergraduate Education**  
**Opening Remarks – Dr. Kim Wilcox, Chancellor**

*Theatre Performance:*

*“The Power of the Female Voice in Shakespeare: A montage of monologues”*

- *This performance will feature a conversation among women, expressing truth in grief, love, anger, and fear through the female voices in Shakespeare.*

**Performers:**

*Cynthia Navarro (Lady Constance and Portia)*

*Aryana Santos (Lady Macbeth and Katherina)*

*Chelsea Ramirez (Juliet and Cleopatra)*

*Folasadé Ayodele (Juliet and Queen Margaret) [director of the piece]*

**Faculty Mentor:** *Dr. Bella Merlin, Theatre, Film, and Digital Production*

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**12:00 – 1:00**

**Poster Sessions**

**HUB 302**

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**ORAL PRESENTATIONS**

**1:10 - 2:00**

**Session 8**

**HUB 355**

**Moderator:** Dr. Freya Schiwy, Media and Cultural Studies

- 8a Challenging Stereotypes that Confine Women in Film and Television  
Chrystal Kim, Theatre, Film, and Digital Production  
Faculty Mentor: Dr. Stu Krieger, Theatre, Film, and Digital Production
- 8b The Value of Actor Training in Enacting Social Change  
Sade Ayodele, Theatre, Film, and Digital Production  
Faculty Mentor: Dr. Bella Merlin, Theatre, Film, and Digital Production
- 8c PBS: Publicly Biased Society  
Alice Cho, Media and Cultural Studies  
Faculty Mentor: Dr. Keun Pyo Park, Theatre, Film, and Digital Production
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**1:10 - 2:00      Session 9      HUB 379      Moderator:** Dr. Kurt Anderson, Evolution, Ecology & Organismal Biology

- 9a      Functional Characterization of a Novel Human Phosphatase  
Amrik Kang, Biology; Taylor Dennis, Biochemistry  
Faculty Mentor: Dr. Jeff Perry, Biochemistry
- 9b      The Genetics of Type 1 Diabetes and the Extent of Effect to Incidence of the Disorder  
Kevin Lee, Biology  
Faculty Mentor: Dr. David Lo, Biomedical Sciences
- 9c      UC Neuro: Neuroscience Workshops for 6th Graders  
Maximiliano Abundez Toledo, Lauren Lopez, Astha Gupta, Nahleh Koochak/Neuroscience  
Faculty Mentor: Dr. Margarita Curras-Collazo, Molecular, Cell and Systems Biology; Dr. Tanya Nieri, Sociology

**1:10 - 2:00      Session 10      HUB 367      Moderator:** Dr. Jose Gonzalez, Mathematics

- 10a      Image Processing on Flow Visualization of Fire  
Nataly Rosales Espitia, Mechanical Engineering  
Faculty Mentor: Dr. Marko Princevac, Mechanical Engineering
- 10b      Structural Analysis of MIDAS site interactions in the C3d-CR3 complex  
Sharon Gupta, Rohith Mohan/Bioengineering  
Faculty Mentor: Dr. Dimitrios Morikis, Bioengineering
- 10c      Electrostatic Analysis of the Complex between Immune System Protein C5 and Therapeutic Antibody Eculizumab  
Vivian Luong, Nehemiah Zewde/Bioengineering  
Faculty Mentor: Dr. Dimitrios Morikis, Bioengineering

**2:10 - 3:00      Session 11      HUB 355      Moderator:** Dr. Liz Davis, Psychology

- 11a      We See Not the Spring: Watchmen, Rebirth, and the Disruption of DC's Monomyth  
Andrew McCarrell, English  
Faculty Mentor: Dr. Richard Rodriguez, English; Dr. Emma Stapely, Media and Cultural Studies
- 11b      Hags: Queering the Postmenopausal Woman Through Myth  
Elayne Bentley, English  
Faculty Mentor: Dr. Richard Rodriguez, English, Media and Cultural Studies
- 11c      The Catacombs of Life and Other Romantic Thoughts  
Angela Williams, English  
Faculty Mentor: Dr. Ann Cheney, Social Medicine, Population and Public Health

- 2:10 - 3:00      Session 12      HUB 367      Moderator: Dr. Weiwei Zhang, Psychology**
- 12a    Black Queerness, Police Brutality, and Activism in Performing Art: Analyzing Todrick Halls' Forbidden Album  
 Jessica Delgado, English/ Chicano Studies  
 Faculty Mentor: Dr. Mzilikazi Kone, Ethnic Studies
- 12b    Variability in Self-Rated and Informant Rated Personality with Personality Disorders  
 Kayleigh Cousar, Psychology  
 Faculty Mentor: Dr. David Funder, Psychology
- 12c    A Study of Group Portraiture: The Anatomy Lesson of Dr. Nicolaes Tulp  
 Debora Handojo, Psychology  
 Faculty Mentor: Dr. Jeanette Kohl, Art History
- 2:10 - 3:00      Session 13      HUB 379      Moderator: Dr. Dimitrios Morikis, Bioengineering**
- 13a    The Effects of Neuregulin-1 on Microglial Cell State  
 Michael Kasbar, Entomology  
 Faculty Mentor: Dr. Byron Ford, Biomedical Sciences
- 13b    Use of Printed Circuit Board and Piezoelectric Technologies in Microfluidics  
 Mathew Schaffrath, Computer Science; Samantha Robinson, Bioengineering; Brian Crites, Entomology  
 Faculty Mentor: Dr. Philip Brisk, Computer Science and Engineering
- 13c    The Development of a Novel Osmometer for the Study of Macromolecular Crowded Environments  
 Ramsey Batarseh, Bioengineering; Christopher Hale, Bioengineering  
 Faculty Mentor: Dr. Victor G. J. Rodgers, Bioengineering
- 3:10 - 4:00      Session 14      HUB 355      Moderator: Dr. Christina Soto Van Der Pas, Hispanic Studies**
- 14a    How individual difference measures inform event processing in monolingual and early and late bilingual speakers  
 Cloe Zeidan, English  
 Faculty Mentor: Dr. Judith Kroll, Dr. Eleonora Ross, Psychology
- 14b    Letters from Austrian immigrants in their departure to North and South America  
 Sara Ceballos, Spanish concentration in Linguistics  
 Faculty Mentor: Dr. Covadonga Lamar Prieto, Hispanic Studies
- 14c    The rise of the Movimiento al Socialismo in post-neoliberal Bolivia; a model for decolonization, land redistribution, and granting rights to indigenous populations in Latin America  
 Christian Lugo, Spanish  
 Faculty Mentor: Dr. Freya Schiwy, Media and Cultural studies



**3:10 - 4:00      Session 15      HUB 367      Moderator:** Dr. Kate Sweeny, Psychology

15a      A Literature Review of Female Serial Killers: Examining Gendered Features of the Crime.

Faye Lax, Sociology

Faculty Mentor: Dr. Tanya Nieri, Sociology

15b      SheHeroes: Promoting Positive STEM Identities in Young Women of Color

Navleen Naru, Psychology

Faculty Mentor: Dr. Kendrick Davis, School of Medicine

15C      Social Influence on Human Memory

Rachael Karp, Psychology

Faculty Mentor: Dr. Steven Clark, Psychology

**3:10 - 4:00      Session 16      HUB 379      Moderator:** Dr. Roya Bahreini, Environmental Sciences

16a      Effects of Adverse Childhood Experiences and Acute Negative Emotion on Visual Working Memory

JC Lynne Lu Sing, Neuroscience

Faculty Mentor: Dr. Weiwei Zhang, Psychology

16b      Ultra-diffuse galaxy evolution in simulations

Louis Penafiel, Physics

Faculty Mentor: Dr. Laura Sales, Physics and Astronomy

16C      Integrating Novel Functional Annotations and Enrichment Methods for Gene Sets into NGS Analysis Workflows

Gordon Mosher, Statistics

Faculty Mentor: Dr. Thomas Girke, Botany and Plant Sciences

# SCHEDULE OF EVENTS

## POSTER PRESENTATIONS

**MONDAY, MAY 7, 2018**

**HUB 302**

### BCOE

- A 1 IFN- $\gamma$  Activates the JAK-STAT Signaling Pathway, Increasing Expression of the Inflammatory Bowel Disease Candidate Gene, PTPN2  
Peter Abdou, Bioengineering  
Faculty Mentor: Dr. Declan McCole, Biomedical Sciences
- A 2 Fabrication of an Edema Reducing Osmotic Pressure Device  
Roman Chaar, Bioengineering  
Faculty Mentor: Dr. Victor Rodger, Bioengineering
- A 3 Application of an Inclusion Body Tag ssTorA to Circumvent Degradation and Increase Quality of UBA2 Protein  
Niloy Chakma, Bioengineering  
Faculty Mentor: Dr. Jiayu Liao, Bioengineering
- A 4 Effects of Weather Data on Fuel Moisture Modeling for a Fire Behavior Application  
Matthew Choi, Mechanical Engineering  
Faculty Mentor: Dr. Marko Princevac, Mechanical Engineering
- A 5 Application and Characterization of Metal-Graphite Sponges  
Evan Jauregui, Chemical Engineering  
Faculty Mentor: Dr. Cengiz Ozkan, Mechanical Engineering  
Faculty Mentor: Dr. Mihri Ozkan, Electrical and Computer Engineering
- A 6 Engineering Lipid Droplets in *Yarrowia Lipolytica* as a Novel Synthetic Biological Tool  
Joshua Misa, Chemical Engineering  
Faculty Mentor: Dr. Ian Wheeldon, Chemical and Environmental Engineering
- A 7 Determine the Immune signal-receptor, PD1 and PDL1, interactions in solution using qFRET technology  
Mary Nwangwu, Bioengineering  
Faculty Mentor: Dr. Jiayu Liao, Bioengineering
- A 8 International Research Experience for Students (IRES) Program—Process and Device Simulation of Semiconductor Devices by TCAD  
Rachel Wiggins, Mechanical Engineering  
Faculty Mentor: Dr. Albert Wang, Electrical and Computer Engineering

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## CHASS

- A 9 Does religiosity relate to cognitive functioning? An exploration with parent-child dyads  
Brianna Cabrera, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 10 Relationship is key: Examining the effects of leadership schemas on follower outcomes  
Daniel Choi, Psychology  
Faculty Mentor: Dr. Thomas Sy, Psychology
- A 11 Leaders who coach: An examination of Implicit Leadership Theories and Leadership Effectiveness  
Justin Etheredge, Psychology  
Faculty Mentor: Dr. Thomas Sy, Psychology
- A 12 Psychological Experience Associated with Women Awaiting Breast Diagnosis  
Lyshsae Otarola-Evans, Psychology  
Faculty Mentor: Dr. Kate Sweeny, Psychology
- A 13 Catching the Cognitive Consequences of Bilingual Language Processing on the Fly  
Dalia Garcia, Linguistics  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 14 Mindfulness Predicts Lower RSA During a Negative Emotional Film, Suggesting Emotional Engagement  
Israel Garcia Jr., Neuroscience; Safi Bajwa, Biology  
Faculty Mentor: Dr. Elizabeth L. Davis, Psychology
- A 15 Would you Rather go to the Library or a Party? Differences Between Bicultural and Monocultural Individuals in Empathy, Communication skills, and Socio-emotional skills  
Lydia Ghabour, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 16 Emotional Intensity Predicts the Elaborative Details in Adults' Emotional Narratives, But Not for All Emotion Contexts  
Kyna Hernando, Psychology  
Faculty Mentor: Dr. Elizabeth Davis, Psychology
- A 17 The French Café Effect: Auditory Immersion and Second Language Reading Comprehension  
Karen Jaranilla, Neuroscience  
Faculty Mentor: Dr. Judith F. Kroll, Psychology
- A 18 Do Adults Practice Effectively when Adjusting to Altered Motor Abilities?  
Eli Labinger, Psychology  
Faculty Mentor: Dr. John Franchak, Psychology

- A 19 The Disappointing Day  
Stephanie Lim, Psychology  
Faculty Mentor: Dr. Daniel Ozer, Psychology
- A 20 Zolpidem, administered at night, facilitates sleep-dependent consolidation of previous day learning  
Rainita Narender, Psychology  
Faculty Mentor: Dr. Sara Mednick, Psychology
- A 21 The Relationship Between Adult Theory of Mind, Religiosity, and Belief in God  
Emily Nelson & Megan Weimer, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 22 Foreign Direct Investment and Innovation: Heterogeneous International Evidence  
Pete Pridanonda, Economics  
Faculty Mentor: Dr. Dongwon Lee, Economics
- A23 Daytime psychostimulant administration may alter nighttime sleep architecture  
Joana Leung, Biology  
Faculty Mentor: Dr. Sara Mednick, Psychology
- A 24 “Pistahan’: Stories of Filipino Americans”  
Erin Rempola, Psychology Major and Ethnic Studies Minor  
Faculty Mentor: Dr. Anthony Macias, Ethnic Studies
- A 25 Developmental Dyslexia: A holistic approach towards diagnosing and rehabilitating  
David Saenz, Psychology and Education  
Faculty Mentor: Dr. Aaron Seitz, Psychology
- A 26 Naming and Cognitive Control: Observing Cognitive Performance During Word Retrieval Across Monolinguals and Bilinguals  
Nawaal Saeed, Biology  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 27 Digital Humanities and Paleographic Editions: A Methodology for California Historical Documents  
Natalie Saffi, Hispanic Linguistics  
Faculty Mentor: Dr. Covadonga Lamar Prieto, Hispanic Studies
- A 28 Mixed Emotions Predict Less Negative Recall of Negative Emotional Situations and Better Memory  
Erika Delos Santos, Psychology  
Faculty Mentor: Dr. Elizabeth L. Davis, Psychology
- A 29 Effects of Aging on Proactive Interference and Forgetting  
Sydney Schabacker, Psychology  
Faculty Mentor: Dr. Ilana Bennett, Psychology

- A 30 The Productive Day  
Janene Soto, Psychology  
Faculty Mentor: Dr. Dan Ozer, Psychology
- A 31 The Effect of the Great Recession on Economic Voting: A Factor of Education and Income  
Katrina Uyehara, Economics, Law and Society  
Faculty Mentor: Dr. Bree Lang, Economics
- A 32 An Examination of the Links Between Affect-Biased Attention and Subsequent Processing of Negative Emotional Experiences  
Vivian Voong, Psychology  
Faculty Mentor: Dr. Elizabeth Davis, Psychology
- A 33 The Scope of Attention Processing Influences The Breadth of Details In How People Describe A Sad Situation  
Guan Ling Yeh, Psychology  
Faculty Mentor: Dr. Elizabeth Davis, Psychology
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## CNAS

- A 34 A subset of brain neurons controls a sexually dimorphic proboscis holding behavior in adult *Drosophila melanogaster*  
Sameera Ahmad, Kush Amin, Biology  
Faculty Mentor: Dr. Anupama Dahanukar, Molecular, Cell, and Systems Biology
- A 35 Nanoparticle enhanced detection of cholera toxin using surface plasmon resonance  
Vani Bhardwaj, Biology  
Faculty Mentor: Dr. Quan Cheng, Chemistry
- A 36 Early-life exposure to brominated flame retardants impairs biological mechanisms associated with glucose homeostasis in mice  
Joseph Borenstein, Neuroscience  
Faculty Mentor: Dr. Margarita Curras-Collazo, Molecular, Cell and Systems Biology  
Faculty Mentor: Dr. Bhuvana Chinthirla, Molecular, Cell and Systems Biology
- A 37 Utilization of Deep Cavitands to Bind Variable Guests and Elucidation of Their Interaction with Metals  
Samantha Byers, Biochemistry  
Faculty Mentor: Dr. Richard Hooley, Chemistry
- A 38 Testing the Efficacy of Lutein and Zeaxanthin on Training of Vision and Cognitive Function  
Kevin Bui, Neuroscience  
Faculty Mentor: Dr. Aaron Seitz, Psychology
- A 39 Understanding complex effects of climate on tree growth using ARIMA Modeling  
Edward Cabusora, Statistics  
Faculty Mentor: Dr. Jeffrey Diez, Department of Botany and Plant Sciences
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- A 40 The Development of a Sensitive Assay to Detect the Plant Hormone Strigolactone  
Mei Cai, Microbiology  
Faculty Mentor: Dr. David Nelson, Botany and Plant Sciences
- A 41 Calibration of a Rapid-Response Ammonia Measurement System for Ambient Air Monitoring  
Michelle Carr, Environmental Science  
Faculty Mentor: Dr. Francesca Hopkins, Environmental Science
- A 42 Using CRISPR to explore dry fruit development in desert tobacco  
Eric Chang, Biology  
Faculty Mentor: Dr. Amy Litt, Botany and Plant Sciences
- A 43 Diversity and Structure of Meiofaunal and Microbial Communities in the Colville and Mackenzie River Plumes  
Alejandro De Santiago, Microbiology  
Faculty Mentor: Dr. Holly Bik, Nematology
- A 44 The stable transformation of *Datura stramonium* using GFP  
Kevan Elkins, Plant Biology  
Faculty Mentor: Dr. Amy Litt, Botany and Plant Sciences
- A 45 Using Fruit Flies to Discover What Controls Hatching Behavior in Insects  
Lisa Faraee, Biology  
Faculty Mentor: Dr. Naoki Yamanaka, Entomology
- A 46 Utilizing the ops Elements and Transcriptional Antiterminator RfaH of Eukaryotic Genes in *Escherichia coli*  
Victor Garcia, Biochemistry  
Faculty Mentor: Dr. Gregor Blaha, Biochemistry
- A 47 Impact of Western diet-induced obesity on ABHD-6 in mice pancreas and jejunum mucosa  
Vishal Gupta, Biology  
Faculty Mentor: Dr. Nicholas V. DiPatrizio, Biomedical Sciences
- A 48 Developing *Agrobacterium tumefaciens*-Mediated Transient Expression for Cowpea  
Katherine Hamrick, Cell, Molecular, and Development Biology  
Faculty Mentor: Dr. Isgouhi Kaloshian, Nematology
- A 49 Impaired PV and PNN Expression in CA1 Hippocampus May Underlie Contextual Recall Deficits After Auditory Fear Conditioning In FMR1 Knockout Mice  
Yasmien Hanania, Neuroscience  
Faculty Mentor: Dr. Iryna Ethell, Biomedical Sciences, School of Medicine
- A 50 An Anomalously Large Protein Provides Possible Insights in Mosquito Sperm  
Korbin Kleczko, Biochemistry  
Faculty Mentor: Dr. Richard Cardullo, Evolution, Ecology, and Organismal Biology  
Faculty Mentor: Dr. Catherine Thaler, Evolution, Ecology, and Organismal Biology

- A 51 Cloning of CRISPR/Cas9 plasmid to induce knockout of FRUITFULL homologue MBP20  
Jessica Le, Biology  
Faculty Mentor: Dr. Amy Lit, Botany and Plant Sciences
- A 52 The Role of Endonuclease PolyU-specific Enzyme in Thymocytes  
Megan Lee, Biology  
Faculty Mentor: Dr. Fedor Karginov, Cell Biology and Neuroscience
- A 53 A Test of the M06-2X Functional for Alkane Conformations  
Michael McClellan, Biochemistry  
Faculty Mentor: Dr. Thomas Morton, Chemistry
- A 54 *Ex vivo* Peyer's patch imaging by confocal microscopy in the study of occludin's role in M cell endocytosis  
Sarah Miller, Cell, Molecular, and Developmental Biology  
Faculty Mentor: Dr. David Lo, Biomedical Sciences. School of Medicine
- A 55 In-vivo study of TANGLED1 and AIR9 in Arabidopsis thaliana using Microtubule Disrupting Drugs  
Victoria Morris, Plant Biology  
Faculty Mentor: Dr. Carolyn Rasmussen, Botany and Plant Sciences
- A 56 Role of HOTAIRM1 in Clear Cell Renal Cell Carcinoma  
Vanessa Neang, Biochemistry  
Faculty Mentor: Dr. Ernest Martinez, Biochemistry
- A 57 Kähler-Einstein Metrics on Compact Cohomogeneity One Fano Manifolds via Effective Approximations  
Pilar Orellana, Mathematics  
Faculty Mentor: Dr. Daniel Guan, Mathematics
- A 58 Developing the Broad Adult Learning Questionnaire Short Form (BLAQ-S)  
Samantha Peralta, Cellular, Molecular Developmental Biology  
Faculty Mentor: Dr. Rachel Wu, Psychology
- A 59 Immobilization of the Photoactive Protein Bacteriorhodopsin on Zinc Oxide for Bio-Sensitized Solar Cells  
Duyen Pham, David Rangel, Claudia Villareal, Biology  
Faculty Mentor: Dr. Ashok Mulchandani, Chemical and Environmental Engineering
- A 60 Formica francoeuri Responses to Bee Pheromones and Cues  
Phi Phan, Biology  
Faculty Mentor: Dr. Erin Rankin, Entomology  
Faculty Mentor: Dr. Jessica Purcell, Entomology
- A 61 The Chemistry of Fluorinated High Spin Iron Complexes  
Anser Qazi, Biochemistry  
Faculty Mentor: Dr. Hill Harman, Chemical Sciences
- A 62 Effects of Spatial Structure and Network Connectivity on Metapopulation Dynamics  
Marilee Robbins, Biology  
Faculty Mentor: Dr. Kurt Anderson, Evolution, Ecology, and Organismal Biology

- A 63 Leaf morphological variation of *Arctostaphylos glandulosa* subspecies  
Natalie Saavedra, Plant Biology  
Faculty Mentor: Dr. Amy Litt, Botany and Plant Sciences
- A 64 Analysis of Mouse Defensive Behaviors towards Predator Cues  
Sunaina Santhiveeran, Neuroscience  
Faculty Mentor: Dr. Sachiko Haga-Yamanaka, Molecular, Cell and Systems Biology
- A 65 FMR1 Loss in Astrocytes leads to abnormal development of inhibitory neurons and perineuronal nets in mouse auditory cortex  
Xinghao Steven Shuai, Neuroscience  
Faculty Mentor: Dr. Iryna Ethell, Biomedical Sciences Division, School of Medicine
- A 66 Blepharisma Plasticity and Trophic Interactions and Their Effect on Morphology  
Justin Suh, Biology  
Faculty Mentor: Dr. Kurt Anderson, Evolution, Ecology, and Organismal Biology
- A 67 Analyzing c-Fos expression in the Accessory Olfactory Bulb of *Mus Musculus* in Response to Predator Cues  
Aliza Tan, Biology  
Faculty Mentor: Dr. Sachiko Haga-Yamanaka, Molecular, Cell and Systems Biology
- A 68 Identification of Misfolded Proteins in a Stroke Model  
Diana Torres, Biology  
Faculty Mentor: Dr. Joseph Genereux, Chemistry
- A 69 Astrocytes engulf synapses through the activation of reverse ephrin-B1 signaling *in vitro*  
Simone Woodruff, Neuroscience  
Faculty Mentor: Dr. Iryna Ethell, Biomedical Sciences
- A 70 2D Transition Metal Dichalcogenide Alloys and Heterostructures Via Single-Step Growth With In-Situ Modification  
Quinten Yurek, Physics  
Faculty Mentor: Dr. Ludwig Bartels, Chemistry
- A 71 The Genetic Basis for Inheritance of Life History Traits in Trinidadian Guppies  
Simon Zhu, Biology  
Faculty Mentor: Dr. David Reznick, Evolution, Ecology, and Organismal Biology



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## R'Courses

- A 72 Harry Potter: The Literary Phenomenon of the 21st Century  
Emilie De La Fuente, Psychology  
Faculty Mentor: Dr. John Briggs, English
- A 73 Introduction to Africana Philosophy  
Jo Gbujama, Philosophy  
Faculty Mentor: Dr. Dylan Rodriguez, Ethnic Studies
- A74 The Art of Problem Solving: From Basics to Putnam  
Neima Ghandian, Mathematics, Pure  
Faculty Mentor: Dr. Xin Dong, Mathematics
- A75 Critical Refugee Studies  
Zehra Qazi, Public Policy  
Faculty Mentor: Dr. Bronwyn Leebaw, Political Science
- A76 Analysis of The Black Panther Comic: (Re) Imagining Black Identities and Futures  
William Roberts, Creative Writing  
Faculty Mentor: Dr. John Jennings, Creative Writing
- A 77 Animal Ethics  
Jaqueline Zavala, Philosophy/Psychology  
Faculty Mentor: Dr. Agnieszka Jaworska, Philosophy

# SCHEDULE OF EVENTS

## ORAL PRESENTATIONS

**TUESDAY, MAY 8, 2018**

**7:30 - 8:45**      **Presenter Registration & Poster Setup**  
HUB Lobby 3<sup>rd</sup> Floor

**8:30**              **Registration Officially Opens**  
HUB Lobby 3<sup>rd</sup> Floor

### ORAL PRESENTATIONS

**9:10 - 10:00**      **Session 17**      **HUB 355**                      **Moderator:** Dr. Alejandra Dubcovsky, History

17a      Science Suppressed: Aristarchus and the Effect of Authority  
Jordan Cohen, History  
Faculty Mentor: Dr. Denver Graninger, History

17b      Livia and Agrippina: Women in Politics in the Julio-Claudian Principate  
Erin Jenne, History  
Faculty Mentor: Dr. Michele Salzman, History

17c      The Vagrancy of Race Suicide Through the Early Twentieth Century: Fear Reimagined  
Debbie Arce, History  
Faculty Mentor: Dr. Dana Simmons, History

**9:10 - 10:00**      **Session 18**      **HUB 367**                      **Moderator:** Dr. Perry Link, Comparative Literature

18a      Resolving Factors that Lead to the Misappropriation of Foreign Aid in Afghanistan  
Ihsan Hamid, Business  
Faculty Mentor: Dr. Raj Singh, School of Business

18b      A Family of Unequals: The Lived Experiences and Consciousness of Farmworkers in the Coachella Valley  
Mirella Deniz-Zaragoza, Sociology  
Faculty Mentor: Dr. Ellen Reese, Sociology

**9:10 - 10:00    Session 19    HUB 379    Moderator:** Dr. Rebeka Richert, Psychology

19a    The Differences in STEM Feelings and Interest Between Boys and Girls  
Brandon Ngo, Biology  
Faculty Mentor: Dr. Rebekah Richert, Psychology

19b    Imaging brain activity using head-mounted microscopes  
Justin Pastore, Neuroscience  
Faculty Mentor: Dr. Edward Korzus, Psychology

19c    Functional Production of catalytic domain of MMP-12 using PROSS  
Zachary Dunn, Chemical Engineering  
Faculty Mentor: Dr. Xin Ge, Chemical and Environmental Engineering

**10:10 - 11:00    Session 20    HUB 355    Moderator:** Dr. Steven Brint, Sociology

20a    Personality and GPA: The Predictive Roles of Academic Identity and College-Going Culture  
Alysia Burbidge, Psychology  
Faculty Mentor: Dr. Carolyn Murray, Psychology

20b    Religious and Nonreligious Dating: Who's More Satisfied?  
Randle Aaron Villanueva, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology

20c    A Look into Mixed Race Experiences from Childhood Through College  
Megan Weimer, Psychology  
Faculty Mentor: Dr. Jennifer Najera, Ethnic Studies

**10:10 - 11:00    Session 21    HUB 367    Moderator:** Dr. Perry Link, Comparative Literature

21a    The Disorientation of History in Rafa Esparza's Work  
Hugo Cervantes, English, Art History  
Faculty Mentor: Dr. Jennifer Doyle, English

21b    Towards a Ministry of Pleasure: The Use of Sexual Storytelling as a Sexual Education Tool as Heard on The Bawdy Storytelling Podcast  
Stephanie Orozco, Anthropology  
Faculty Mentor: Dr. Tamara Ho, Gender and Sexuality Studies

21c    Effects of Language Learning on Domain General Cognitive Functions  
Megan Nakamura, Psychology  
Faculty Mentor: Dr. Judith Kroll, Dr. Eleonora Rossi, Psychology

**10:10 - 11:00 Session 22 HUB 379**

**Moderator:** Dr. Kelley Barsanti, Chemical & Environmental Engineering

- 22a Exploring Neuromodulatory Effects of Adenosine Deaminase from Emerald Jewel Wasp Venom  
Cebrina Nolan, Entomology  
Faculty Mentor: Dr. Michael Adams, Entomology
- 22b Eigenvalue Distributions of Random Matrices  
Shannon Sweitzer, Mathematics  
Faculty Mentor: Dr. Michael Hartglass, Mathematics and Computer Science
- 22c Academic Success Factors in K-12 Education: A Quantitative Analysis  
Brianna Chew, Mathematics  
Faculty Mentor: Dr. Asish Satpathy, Dr. Elaine Wong, Business Administration

**11:10 - 12:00 Session 23 HUB 355**

**Moderator:** Dr. Matthew King, Religious Studies

- 23a The Cuauhxicalli of the Aguirres: Stories  
Stephanie Shatkin, Creative Writing  
Faculty Mentor: Dr. Michael Jayme, Creative Writing
- 23b The Distortion of Feminism and Erasure of Non-Western Voices  
Danielle Kennelly, Middle East and Islamic Studies  
Faculty Mentor: Dr. Sherine Hafez, Gender and Sexuality Studies

**11:10 - 12:00 Session 24 HUB 379**

**Moderator:** Dr. Jingsong Zhang, Chemistry

- 24a Muscle Contractions in the Male Reproductive Tract of Culex Mosquitoes  
Emily Harris, Cell, Molecular, and Developmental Biology  
Faculty Mentor: Dr. Richard Cardullo, Evolution, Ecology, and Organismal Biology
- 24b White matter integrity and subclinical depression: A diffusion tensor imaging study  
Nicole Huffman, Neuroscience  
Faculty Mentor: Dr. Ilana Bennett, Psychology
- 24c In Silico Structural, Physicochemical, and Molecular Dynamics Analysis of the Complex between C-Reactive Protein and Phosphocholine  
Siddharth Sai, Bioengineering; Rohith Mohan, Bioengineering  
Faculty Mentor: Dr. Dimitrios Morikis, Bioengineering

**ORAL PRESENTATIONS**

**1:00 – 2:30 Session 25 HUB 355 Moderator:** Dr. Anika Speer, Theatre

- 25a From Barrios to Bars: The School-to-Prison Pipeline and Its Impact on Four-Year College Enrollment Rates for Latino Youth  
Maritza Salazar, Sociology  
Faculty Mentor: Dr. Adalberto Aguirre, Sociology
- 25b An Analysis of US President Donald Trump’s Administration Compared to Previous Autocratic Regimes  
Karina Tapia, Political Science/International Affairs  
Faculty Mentor: Dr. David Pion-Berlin, Political Science
- 25c Criminalization of Poverty in Los Angeles  
Deja Aggrey, Political science  
Faculty Mentor: Dr. Marissa Brookes, Political Science
- 25d UN Protection of Human Rights  
Jasmin Chicas, Political Science and Philosophy  
Faculty Mentor: Dr. Yasemin Irepoglu Carreras, Political Science

**2:30 SYMPOSIUM ENDS**

# SCHEDULE OF EVENTS

## POSTER PRESENTATIONS

**TUESDAY, MAY 8, 2018**  
**HUB 302**

### BCOE

- A 1 Polycaprolactone with Citric Acid Coated Iron Oxide Composite for Biomedical Applications  
Cole Azevedo, Materials Science and Engineering  
Faculty Mentor: Dr. Huinan Liu, Bioengineering
- A 2 Improvement of Air Filtration Systems Through Carbon Nanotube Applications  
Robert Espinoza, Chemical Engineering  
Faculty Mentor: Dr. Joshua Morgan, Bioengineering
- A 3 Dynamics of Actino-Myosin Cytoskeleton and Nucleus Rearrangement During Flow in Endothelial Cells  
Mher Garibyan, Bioengineering  
Faculty Mentor: Dr. Joshua Morgan, Bioengineering
- A 4 Silicon Nanoparticle Sensitizers for Photon Upconversion in Biological Systems  
Carter Gerke, Chemical Engineering  
Faculty Mentor: Dr. Ming Lee Tang, Chemistry
- A 5 Southern California Chaparral Crown Fire Transition Behavior  
Alejandro Gonzalez, Mechanical Engineering  
Faculty Mentor: Dr. Marko Princevac, Mechanical Engineering
- A 6 Effects of Mg Surface Roughness on BMSCs Response  
Alexandra Ha, Bioengineering  
Faculty Mentor: Dr. Huinan Liu, Bioengineering
- A 7 Investigation into the effect of pVIII and pIII protein modifications during M13 bacteriophage transformation  
Michelle Lai, Chemical Engineering  
Faculty Mentor: Dr. Elaine Haberer, Electrical and Computer Engineering
- A 8 Biosynthetic Pathway of Abscisic Acid  
Yosuf Mansour, Chemical Engineering  
Faculty Mentor: Dr. Yanran Li, Chemical and Environmental Engineering

- A 9 Energy Absorptive Bio-mineralized Seed Coatings: The Final Defense Against Forest Fires  
Sarah McElligott, Chemical Engineering  
Faculty Mentor: Dr. David Kisailus, Chemical and Environmental Engineering
- A 10 A Facile, pH-Tuned, Aqueous Synthesis of Copper Nanowires and Related Applications  
Austin Mok, Environmental Engineering  
Faculty Mentor: Dr. Ruoxue Yan, Chemical and Environmental Engineering
- A 11 Improving the performance of a GPU based computational implementation of the mathematical model to study epithelial cells  
Phillip Park, Computer Science  
Faculty Mentor: Dr. Mark Alber, Mathematics
- A 12 Low Cost “Microfluidic Thermometers” for Measuring Freezing Point  
Jessica Robles-Najar, Bioengineering  
Faculty Mentor: Dr. William H. Grover, Bioengineering

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## CHASS

- A 13 The Evolutionary and Modern-Day Analysis of Parkinson’s Disease from Sources Old and New  
Kishore Athreya, English  
Faculty Mentor: Dr. Richard Rodriguez, English  
Faculty Mentor: Dr. David Song, School of Medicine  
Faculty Mentor: Dr. Richard Cardullo, Evolution, Ecology, and Organismal Biology
- A 14 Do Kids Really Know What it Means to be Heartless?  
Kassandra Avila, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 15 Temporal Variability as a Predictor in Cognitive Decision Making  
Bill Vu Bui, Psychology  
Faculty Mentor: Dr. David Rosenbaum, Psychology
- A 17 Individual Differences in Local-Global Processing Predict Delayed Recall of Negative Emotional Words  
Stephen Campbell, Psychology  
Faculty Mentor: Dr. Elizabeth Davis, Psychology
- A 18 UCDC Metropolitan Police Department  
Yulissa Cardoza, Sociology and Spanish  
Mentor: Jessica Medvec, Undergraduate Education
- A 19 Measuring abnormal activity in the auditory system of wildtype and fragile X mice using c-Fos protein expression  
Victoria Gutierrez, Biology  
Faculty Mentor: Dr. Khaleel Abdul Razak, Psychology

- A20    Adaptation to Interference in a Naming Task  
Jeneane Hamideh, Neuroscience  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 21    UCDC: Voto Latino and the impact it has on millennial voters  
Karla Hernandez, Sociology  
Mentor: Jessica Medvec, Undergraduate Education
- A 22    The Role of Language Dominance in Emotion Processing in Bilinguals  
Samreen Kazi, Biology  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 24    Parental Intrusiveness Relates to Children’s Physiological Recovery from Frustration  
Melina Romo Loera, Emily W. Shih, Psychology  
Faculty Mentor: Dr. Elizabeth L. Davis, Psychology
- A 25    The Biosemiotics of Acupoint Biophoton Emissions Testing  
Montserrat Llosa, Anthropology  
Faculty Mentor: Dr. Sally Ness, Anthropology
- A 26    Foreigners and Fascism: Collective Identities and Social Movements  
Mariela Villalba Madrid, Sociology  
Faculty Mentor: Dr. Christopher Chase-Dunn, Sociology
- A 27    Parent-Child Correspondence in Concepts of God and Germs  
Katharine Munning, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 28    Individual Differences in Children’s Emotion Regulation Capacity Moderate the Relation between Parental  
Intrusiveness and Children’s Physiological Regulation  
Nancy N. Nguyen, Psychology  
Faculty Mentor: Dr. Elizabeth L. Davis, Psychology
- A 29    Dreams Attained: The impact of Undocumented Student Resources at UC Campuses  
Rubyd Olvera, Sociology  
Faculty Mentor: Dr. Jennifer Najera, Ethnic Studies
- A 30    Does language immersion benefit new language learning?  
Mildred Rangel, Psychology  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 31    Public Health Intervention Assessing Health Needs of Afghan Refugee Women in Riverside through  
Community-based Research  
Maria Razo, Public Policy and Political Science  
Faculty Mentor: Dr. Andrew Subica, School of Medicine



- A 32 Academic Achievement and Coping  
Rachel Richardson, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 33 Age and Gender Differences in STEM Performance in Preschoolers  
Kelsey Rocha, Psychology  
Faculty Mentor: Dr. Rebekah Richert, Psychology
- A 34 Implicit Leadership Theory: Subordinate Job Satisfaction as it relates to Conceptions of Leaders  
Janene Soto, Psychology  
Faculty Mentor: Dr. Thomas Sy, Psychology
- A 35 The effects of second language learning on cognitive control  
Sanna Tahir, Psychology  
Faculty Mentor: Dr. Christine Chiarello, Psychology
- A 36 The Effect of Societal Language on Sentence Comprehension in Early Bilinguals  
Nelson Tian, Statistics  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 37 Confronting the Possibility of Cancer: A Qualitative Analysis of Distress at a Biopsy Appointment  
Hannah Tamez, Psychology  
Faculty Mentor: Dr. Kate Sweeny, Psychology
- A 38 Psychostimulant's disruption of sleep has minimal impact on post-sleep working memory performance  
Tina Vo, Psychology  
Faculty Mentor: Dr. Sara Mednick, Psychology
- A 39 Does the Dominance Switch in Bilinguals Influence How They Use Their Two Languages?  
Dennis Wu, Psychology  
Faculty Mentor: Dr. Judith Kroll, Psychology
- A 40 Applications of Video Game Design to Working Memory Training  
Anni Yao, Business Administration - Information Systems  
Faculty Mentor: Dr. Aaron Seitz, Psychology
- A 41 Determinants of the First Job Match  
Kenneth Zalke, Business Economics  
Faculty Mentor: Dr. Carolyn Sloane, Economics

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## CNAS

- A 42 Disruption of social behavior but not olfactory discrimination in adult male and female mice offspring exposed to indoor flame retardants during perinatal development  
Valeria Carrillo, Biology  
Faculty Mentor: Dr. Margarita Curras-Collazo, Molecular, Cell, and Systems Biology
- A 43 Visualizing Plant Water Stress Through a New Optical Method  
Manika Choudhary, Biology  
Faculty Mentor: Dr. Louis Santiago, Botany and Plant Sciences
- A 44 Investigation of the effect of extremes in water availability on suberin accumulation in rice  
Christine Duvenjian, Biology  
Faculty Mentor: Dr. Julia Bailey-Serres, Botany and Plant Sciences  
Faculty Mentor: Dr. Mauricio Reynoso, Botany and Plant Sciences
- A 45 Skin Regeneration Promoted by Hydroxyamino Acid-rich Matrikine Lipopeptides  
Andrew Encinas, Biochemistry  
Faculty Mentor: Dr. Michael Pirrung, Organic Chemistry
- A 46 Selective Breeding and Exercise Affect Midbrain and PAG Volume in Mice  
Raymond Ezzat, Biochemistry  
Faculty Mentor: Dr. Theodore Garland Jr., Biology
- A 47 Synthesis of Unique Spirocyclic Alpha-tetrasubstituted Amines as Potential Drugs  
Sumbul Haider, Biology  
Faculty Mentor: Dr. Catharine Larsen, Chemistry
- A 48 Polydopamine-Lipid Interface for SPR Sensing  
Chathu Keerthisinghe, Microbiology  
Faculty Mentor: Dr. Quan Jason Cheng, Chemistry
- A 49 The Use of Motivational Interviewing to Enhance Smoking Cessation for the Underserved in a Free Clinic Setting  
Hyemin Kim, Biology  
Faculty Mentor: Dr. Brandon Brown, School of Medicine
- A 50 Kappa and Delta Opioid Receptors in the Lateral Septum in the Control of Feeding  
Esther Kuan, Biochemistry  
Faculty Mentor: Dr. Glenn Stanley, Neuroscience
- A 51 Molecular barcoding and pathogenicity of unknown Phasmarhabditis (Nematoda) species from Earthworms  
Nicole Leung, Biology  
Faculty Mentor: Dr. Irma De Ley, Nematology  
Faculty Mentor: Dr. Timothy Paine, Entomology

- A 52 Fragment-Based Structural Studies Targeting Age-Related Macular Degeneration  
Erica Li, Biology  
Faculty Mentor: Dr. Jeff Perry, Biochemistry
- A 53 The Role of NS5 in Zika Virus RNA Capping  
Eric Lin, Biochemistry  
Faculty Mentor: Dr. Sean O'Leary, Biochemistry  
Faculty Mentor: Dr. Rong Hai, Microbiology and Plant Pathology
- A 54 Litter decomposition rates in semi-arid ecosystems are driven by geographical aspect differences  
Andrew Loera, Biology  
Faculty Mentor: Dr. Darrel Jenerette, Botany and Plant Sciences
- A 55 Assigning putative functions to different regions of the RIC8 protein, an important regulator of G protein signaling  
Berenise Lopez-Lopez, Biology  
Faculty Mentor: Dr. Katherine Borkovich, Microbiology and Plant Pathology
- A 56 Computational Model of Stem Cell Mechanics and Maintenance in Plants  
Jamie Madrigal, Amber McKeough, Mikahl Banwarth-Kuhn, Computational Mathematics, Mathematics  
Faculty Mentor: Dr. Mark Alber, Mathematics
- A 57 The effect of harm reduced tobacco products on FOXOs  
Hannah Navarrete, Biochemistry  
Faculty Mentor: Dr. Nicole zur Nieden, Molecular, Cell and Systems Biology
- A 58 Particle Identification in Heavy Ion Collisions  
Jesus Negrete, Physics  
Faculty Mentor: Dr. Richard Seto, Physics and Astronomy
- A 59 Building a Farm-Scale Database of California Dairy Activity for Improved Methane Emission Inventories  
Julie Nguyen, Environmental Science  
Faculty Mentor: Dr. Francesca Hopkins, Environmental Science
- A 60 A novel data science approach for constraining supersymmetric mass value predictions  
Syrus Norelli, Physics  
Faculty Mentor: Dr. Flip Tanedo, Physics and Astronomy
- A 61 Hippocampal Neuropathology in Patients with Seizures Secondary to Multiple Sclerosis  
Karen Parra, Biology  
Faculty Mentor: Dr. Seema Tiwari-Woodruff, Biomedical Sciences
- A 62 The effects of host-feeding behavior of *Tamarixia radiata* on the dynamics of parasitoid-host interactions, and the implications for classical biological control in California  
Carly Pierce, Environmental Science  
Faculty Mentor: Dr. Mark Hoddle, Entomology

- A 63 Screening for potential NMD inhibitors within the FDA drug library  
Ruchira Puri, Biology  
Faculty Mentor: Dr. Sika Zheng, Biomedical Sciences
- A 64 Metal Concentrations in Electronic Cigarette Aerosols and Refill Fluid  
Dalia Rahmon, Neuroscience  
Faculty Mentor: Dr. Prudence Talbot, Molecular, Cell and Systems Biology
- A 65 Use of CRISPR to Study the Function of the MBP20 Gene in Transitions Between Dry and Fleshy Fruits  
Victoria Rios, Statistics  
Faculty Mentor: Dr. Amy Litt, Botany and Plant Sciences
- A 66 Effects of Reproduction on Morphology of Male California Mice  
Alexis Rodriguez, Neuroscience  
Faculty Mentor: Dr. Wendy Saltzman, Evolution, Ecology, and Organismal Biology
- A 67 Diphenylhexatriene and PbS Quantum Dot Hybrid Thin Film Transistors  
Beverly Ru, Chemistry  
Faculty Mentor: Dr. Ming Lee Tang, Chemistry
- A 68 Developing an effective approach of genetic editing within whiteflies using the CRISPR-Cas9 system  
Simran Sandhu, Biochemistry  
Faculty Mentor: Dr. Peter Atkinson, Entomology  
Faculty Mentor: Dr. Linda Walling, Botany and Plant Sciences
- A 69 Role of Cas adaptor proteins in cerebellar cortex development  
Alexander Taft, Neuroscience  
Faculty Mentor: Dr. Martin Riccomagno, Neuroscience
- A 70 Probing the connection between DNA replication and Telomere protection using saccharomyces  
Parth Upadhyay, Neuroscience  
Faculty Mentor: Dr. Constance Nugent, Molecular, Cell & Systems Biology
- A 71 Unravelling the Genetic Basis of Whitefly Resistance in Arabidopsis  
Natalie Urrea, Cell, Molecular, and Developmental Biology  
Faculty Mentor: Dr. Linda Walling, Botany and Plant Sciences
- A 72 The Effects of the Poly(A)-Binding Protein on mRNA Translation  
Chalissar Vasnarungruengkul, Biology  
Faculty Mentor: Dr. Sean O'Leary, Biochemistry
- A 73 Reducing the Combinatorics of High Jet Multiplicity Decays in RPV SUSY  
Thomas Waddleton, Physics  
Faculty Mentor: Dr. Owen Long, Physics and Astronomy

A 74 The relationship between climate change and tourism in the Coachella Valley, California  
Cindy Yanez, Physics  
Faculty Mentor: Dr. Francesca Hopkins, Environmental Science

A 75 Inhibition of endocannabinoid signaling in adipose tissue increases body heat generation  
Crystal Nguyen, Biology  
Faculty Mentor: Dr. Nicholas DiPatrizio, Biomedical Sciences

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## SoM

A 76 Interactions Between Endocannabinoids and Leptin Receptor in Diet Induced Obesity  
Rishi Nanda, Psychology  
Faculty Mentor: Dr. Nicholas DiPatrizio, Biomedical Sciences

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## R'Courses

A 77 Microexpressions: Glimpses of the truth or not?  
Brianna Cabrera, Psychology  
Faculty Mentor: Dr. Elizabeth Davis, Psychology

A78 Under the Electric Sky  
Ashley Lopez, Media and Cultural Studies  
Faculty Mentor: Dr. James Tobias, English

A79 Food Security and Food Justice?  
Audrey Lim, Neuroscience  
Faculty Mentor: Dr. Chikako Takeshita, Gender and Sexuality Studies  
Faculty Mentor: Dr. Dana Simmons, History

A 80 Indian Classical Music and Mental Health  
Harlove Singh, Psychology  
Faculty Mentor: Dr. Lawrence Rosenblum, Psychology

**3:30 SYMPOSIUM ENDS**

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

- FACULTY MODERATORS
- ORAL PRESENTATION EVALUATORS
- POSTER JUDGES
- COLLEGE DEANS
- UNDERGRADUATE EDUCATION TEAM
- UNDERGRADUATE EDUCATION FINANCE & ADMINISTRATION TEAM
- UE STUDENT AMBASSADORS