

2013 Minority Science Programs (MSP) Research Symposium
School of Biological Sciences, University of California, Irvine
September 23-24, 2013

Monday September 23, 2013
4201 Natural Sciences II

- 9:30** Welcome: Dr. Luis Mota-Bravo, Director, Outreach, Research Training and Minority Science Programs (MSP), UCI
- 9:40** Title: The role of drebrin in stem cell derived neuroblast migration
Presenter: **Michelle Oberoi**
Principal Investigator: Dr. Giovanna Lalli, Kings College United Kingdom
- 9:50** Title: Second generation antipsychotic Asenapine as a potential adjuvant to Ciprofloxacin through binding of efflux pump NorA, in *Staphylococcus aureus*
Presenter: **Stephan Kudlacek**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 10:00** Title: Targeted excision of VCP R155H mutation in VCP Disease
Presenter: **Arianna Gomez**
Principal Investigator: Dr. Virginia Kimonis, UC Irvine
- 10:10** Title: Choroid Plexus Epithelial Cells (CPECs) differentiated from Embryonic Stem Cells (ESCs)
Presenter: **Emily Hernandez**
Principal Investigator: Dr. Edwin Monuki, UC Irvine
- 10:20** Title: Characterization of tetracycline antibiotic resistance genes in environmental *Staphylococcus*
Presenter: **Rebeca Flores**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 10:30** Title: The emerging role of PIG3 and ARHGAP5 as potential biomarkers for *Mesenchymal melanoma*
Presenter: **Cecilia Osorio**
Principal Investigator: Dr. Vicky Sanz-Moreno, Kings College United Kingdom
- 10:40-10:50** **BREAK**
- 10:50** Title: Comparative analysis of antibiotic resistance genes, *blaZ* and *mecA*, in *Staphylococci*
Presenter: **Michael Emami**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 11:00** Title: The behavioral effects of prefrontal 5-HT_{2A}, 1A and 2C receptor modulation
Presenter: **Felicia Davatolhagh**
Principal Investigator: Dr. Vikaas S. Sohal, UC San Francisco

- 11:10** Title: Secondary cells in male drosophila accessory glands are essential for mating
 Presenter: **Chidiebere Okpara**
 Principal Investigator: Dr. Rahul Warrior, UC Irvine
- 11:20** Title: Detection, characterization, and genetic variation of *erm* genes in environmental *Staphylococcus*
 Presenter: **Marie Gomez**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 11:30** Title: Comprehensive development of MALDI imaging for analysis of peptides and small molecules in SIV Spleen
 Presenter: **Mary Soliman**
 Principal Investigator: Dr. David Graham, John Hopkins University
- 11:40-12:50** **LUNCH**
- 12:50** Title: Plasmids from Escherichia coli are reservoirs of antibiotic resistance genes
 Presenter: **Leovi Espitia**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 1:00** Title: Regulation of Mitochondrial release from microtubules during cell division
 Presenter: **Fernando Avila**
 Principal Investigator: Dr. Joseph Bateman, Kings College United Kingdom
- 1:10** Title: Dispersal at the chromosomal level of the NK gene family in Drosophila
 Presenter: **Moises Paramo**
 Principal Investigator: Dr. Jose M. Ranz, UC Irvine
- 1:20** Title: Purifying the extracellular domain of mCD200 for the purpose of developing immunomodulating biomaterials
 Presenter: **Ernesto Sosa**
 Principal Investigator: Dr. Wendy Liu, UC Irvine
- 1:30** Title: Antibiotic produced by *Bacillus amyloliquefaciens* inhibits growth of Ciprofloxacin and Methicillin-Resistant *Staphylococcus aureus* Strains
 Presenter: **Erick Maglalang**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 1:40** Title: Elucidating the relationship between Arabidopsis thaliana LARP1a family and exoribonuclease XRN4 during mRNA decay
 Presenter: **Sigal Kofman**
 Principal Investigator: Dr. Maria Sasi Conte, Kings College United Kingdom
- 1:50-2:00** **BREAK**
- 2:00** Title: Frequency, variation, and distribution of ATP-Binding transporter genes, conferring resistance to MLS Antibiotics, in environmental *Staphylococcus*
 Presenter: **Jesus Magallon**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine

- 2:10** Title: Regulation of mitochondrial release from microtubules during cell division
 Presenter: **Nicole Hernandez**
 Principal Investigator: Dr. Thomas L. Schwarz, Harvard University
- 2:20** Title: Quantifying stiffness of extra-cellular matrix fibers with high speed confocal microscopy and space time image correlation spectroscopy
 Presenter: **Horacio Estabridis**
 Principal Investigator: Dr. Elliot Botvinick, UC Irvine
- 2:30** Title: Evolution, distribution, and variation of macrolide, lincosamide, and streptogramin_B resistance genes encoding for antibiotic-inactivating enzymes in *Staphylococcus*
 Presenter: **Marisol Zuniga**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 2:40** Title: Role of D2 receptors on cocaine reward after adolescent drug exposure
 Presenter: **Peter Hanna**
 Principal Investigator: Dr. Frances M. Leslie, UC Irvine
- 2:50** Title: Investigating induction of complex I activity by Nicotinamide N-methyltransferase via *Sirtuin 3*
 Presenter: **Carlos Aguirre**
 Principal Investigator: Dr. Richard Parsons, Kings College United Kingdom
- 3:00** Title: The absence of BAX might explain resistance to Bcl-2 inhibitors in DLBCLs
 Presenter: **Veronica Ortiz**
 Principal Investigator: Dr. David Fruman, UC Irvine
- 3:10** Title: Isolation and purification of active compound produced by *Streptomyces bacillaris* against *Staphylococcus aureus*
 Presenter: **Melisa Fuentes**
 Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine

Tuesday September 24, 2013
4201 Natural Sciences II

- 9:30** Title: Identification of poliovirus ribonucleoprotein complexes using negative sense RNA affinity tags
Presenter: **Casey Cruz**
Principal Investigator: Dr. Bert L. Semler, UC Irvine
- 9:40** Title: Pharmacogenetic Dissection of the mTOR Pathway in Mature B-cells
Presenter: **Michael Diaz**
Principal Investigator: Dr. David Fruman, UC Irvine
- 9:50** Title: TBA
Presenter: **Naomi Lomeli**
Principal Investigator: Dr. Emiliana Borrelli, UC Irvine
- 10:00** Title: Using machine learning to detect cardiac toxicity of human induced pluripotent stem cell-derived cardiomyocytes
Presenter: **Nicole Mendoza**
Principal Investigator: Dr. Michelle Khine, UC Irvine
- 10:10** Title: Expression, purification, and crystallization of human cytochrome P450 Aromatase
Presenter: **Bryan Boubion**
Principal Investigator: Dr. Thomas Poulos, UC Irvine
- 10:20** Title: Non-Antibiotic Droperidol reverses resistance of *Staphylococcus aureus* to the antibiotic ciprofloxacin
Presenter: **Sandy Alvarez**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 10:30** **BREAK**
- 10:40** Title: Identifying genes required for axon guidance in the central nervous system of *Drosophila*
Presenter: **Andreina Coronel**
Principal Investigator: Dr. Guy Tear, Kings College United Kingdom
- 10:50** Title: AT-1001, AT1009, and AT-1011T effects on the reinstatement of self-administration of nicotine in adult male rats
Presenter: **Adriana Etcheverry**
Principal Investigator: Dr. Frances M. Leslie, UC Irvine
- 11:00** Title: Investigating the role of the PCP pathway in contact inhibition during *Drosophila* embryonic macrophage dispersal
Presenter: **Jesus Ayala**
Principal Investigator: Dr. Brian Stramer, Kings College United Kingdom
- 11:10** Title: MicroRNA 92/310 family targets affect regulation of lifespan in

- Drosophila*
- Presenter: **Eden Barragan**
Principal Investigator: Dr. Manolis Fanto, Kings College United Kingdom
- 11:20** Title: Papaverine is an efflux pump inhibitor of ciprofloxacin-resistant *Staphylococcus aureus*
Presenter: **David Saldana**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 11:30** Title: The influence of newly evolved gene, Sdic, in sperm competence is independent to different competing males in *Drosophila melanogaster*
Presenter: **Rene Rivera**
Principal Investigator: Dr. Jose M. Ranz, UC Irvine
- 11:40** Title: Characterization and elucidation of DNA compaction in the developing embryo
Presenter: **Kirollos Abdel Shahied**
Principal Investigator: Dr. Susan Mango, Harvard University
- 11:50** Title: Antibiotics produced from rare actinobacteria *Nocardia* spp. against *Staphylococcus aureus*
Presenter: **Yesenia Keller**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 12:00-1:00** **LUNCH**
- 1:00** Title: Transcriptional regulation of environmentally responsive genes in a sensory mutant background
Presenter: **Eden Gutierrez**
Principal Investigator: Dr. Queelim Ch'ng, Kings College United Kingdom
- 1:10** Title: The SitABCD manganese transporter promotes the growth of *E. coli* nissle 1917 under metal limiting conditions
Presenter: **Erika Ramos**
Principal Investigator: Dr. Manuela Raffatellu, UC Irvine
- 1:20** Title: Integron Composition and Distribution among Environmental Gram-negative Bacteria
Presenter: **Andrew Lopez**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 1:30** Title: Laser adjuvants-based herpes vaccines
Presenter: **Lucas Gutierrez**
Principal Investigator: Dr. Lbachir Benmohamed, , UC Irvine
- 1:40** Title: Propranolol inhibits NorA efflux pump and restores susceptibility of ciprofloxacin resistant *Staphylococcus aureus*
Presenter: **Manuel Sagarnaga**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine
- 1:50** Title: Synthesis of Conjugated Molecular Wires to Optimize Carrier Mobility in

PbSe Quantum Dot Films

Presenter: **Jonathan Ruiz**
Principal Investigator: Dr. Zhibin Guan, UC Irvine

2:00-2:10

BREAK

2:10 Title: Turmeric, *Curcuma longa*, increases the efficacy of ciprofloxacin against *Staphylococcus aureus*
Presenter: **Christina Owens**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine

2:20 Title: Discovery of a new class of benzisothiazolinones as potent inhibitors of monoacylglycerol lipase
Presenter: **Annee Wildgoose**
Principal Investigator: Dr. Daniele Piomelli, UC Irvine

2:30 Title: Does the Presence of *Sdic* Multigene Family Have a Sexually Antagonistic Effect on Female Fecundity?
Presenter: **Daphne Real**
Principal Investigator: Dr. Jose M. Ranz, UC Irvine

2:40 Title: Cross resistance to fluoroquinolones in ciprofloxacin mutants of methicillin-resistant *Staphylococcus aureus*
Presenter: **Arijh Elzein**
Principal Investigator: Dr. Luis Mota-Bravo, UC Irvine

2:50 Title: Neuroglial interactions in the glioma microenvironment
Presenter: **Cherie Scurrah**
Principal Investigator: Dr. Michelle Monje, Stanford University