

32nd Annual Undergraduate Research Colloquium in Biology

Friday, May 2, 2014

Torrey Life Sciences, Rm 111



8:30am: Welcome and opening remarks

Ali Andalibi (Associate Vice President for Research)

8:45am: Ragini Phansalkar, BIO/Computer Sciences

Title: *Exploring Applications of Motif Prediction in Viral Post-Translational Modification and Centromere Formation*

Research Advisor: Dr. Barbara Mellone and Dr. Daniel Schwartz

9:00am: Erin Good, PNB

Title: *Regulation of Synaptic Localization of BRAG1, a Protein Associated with Intellectual Disability*

Research Advisor: Randall Walikonis

9:15am: Savas Tsikis, MCB

Title: *Mutagenesis of 8-Oxoguanine Adjacent to an Abasic Site in Escherichia coli Cells Proficient or Deficient in DNA Polymerase IV*

Research Advisor: Ashis K. Basu

9:30am: Ye Sun, PNB/MCB

Title: *Characterization of the Ependymal Layer in Aging and Injury*

Research Advisor: Joanne Conover

9:45am: Christopher Cheng, MCB

Title: *Silica-Induced Uptake and Toxicity in Alveolar Macrophages*

Research Advisor: David Knecht

10:00am: Christopher Fekete, PNB

Title: *The Effects of Overexpression of Neuroligin in Rat Cortical Neurons by In Utero Electroporation*

Research Advisor: Angel de Blas

10:15am: Jessie Scott, BIO

Title: *Characterization of a Putative Cephalotoxin in the Hemocytes of Euprymna scolopes*

Research Advisor: Spencer Nyholm

10:30 – 10:45am: Break

10:45am: Nandan Pandit, MCB

Title: *Quantifying the pH Gradient Produced by a Bacteriorhodopsin Based Retinal Implant*

Research Advisor: Robert R. Birge

11:00am Emily Blank, EEB

Title: *Pelargonium (Geraniaceae) and the Long-tongued Fly Guild: Coevolution and Polymorphism in a Specialized Pollination System*

Research Advisor: John Silander

11:15am: Elizabeth Knapp, BIO

Title: *Ovulation Defects of HC44 Mutants in Drosophila melanogaster*

Research Advisor: Jianjun Sun

11:30am: Sarah Banker, MCB

Title: *Gene Trees and Species Trees: Piecing Together the Evolutionary History of the New Zealand Cicada Genus Kikihia*

Research Advisor: Chris Simon

11:45am: Rory Geyer, MCB

Title: *Modeling the Adaptive Immune Response to Mutation-Generated Antigens*

Research Advisor: Pramod Srivastava

12:00pm: Beata Kaminska, Individualized Major

Title: *Knockdown of the Candidate Dyslexia Susceptibility Gene Homolog Dyx1c1 in Male and Female Rodents: Effects on Thalamic Anatomy*

Research Advisor: Roslyn H. Fitch

12:15pm: Thomas Dannehy, Environmental Sciences

Title: *Modelling Successional Changes in Tree Size Distribution*

Research Advisor: Robin Chazdon

12:30pm: Matthew Morris, PNB/MCB

Title: *Predicting Kinase Phosphorylation Patterns with Bioinformatics and Bacteria*

Research Advisor: Daniel Schwartz

12:45-1:15 pm: Lunch Break

1:15pm: Christine Conte, BIO

Title: *Effects of Visitors on Zebras and Mexican Wolves in Zoos*

Research Advisor: Chris Elphick

1:30pm: Lillian Talbot, PNB/MCB

Title: *The Effect of Repeated Mild Traumatic Brain Injury on Microglial Activation*

Research Advisor: Joanne Conover

1:45pm: Laura Jackson, BIO

Title: *Restriction Modification and its Effects on the Methylation of Genomic DNA in the Archaeon Haloferax volcanii*

Research Advisor: Thane Papke

2:00pm William Ollayos, BIO/ENGLISH

Title: *Detection Methods for Small Analytes: Improvement of Novel SPR Technology Detection of Toxins and Toxicants*

Research Advisor: Micheal Lynes

2:15pm: Samantha Beynor, BIO

Title: *Changes in Salinity Preference of Threespine Stickleback over Development*

Research Advisor: Eric Schultz

2:30pm: Meredith Milligan, BIO

Title: *Parkinsonism Induced by the VMAT-2 Inhibitor Tetrabenazine is Exacerbated by Coadministration of the SSRI Fluoxetine in Rodents*

Research Advisor: John Salamone

2:45pm: Taylor Brown, PNB

Title: *Gender Differences in Choroid Plexus Expression of ABC Family Transporters*

Research Advisor: Larry Renfro

3:00-3:30pm: Break and Refreshments

3:30pm: Awaad Khan, BIO

Title: *Improving Colon Cancer Prevention by Vitamin D: Regulation of VDR Expression with Panobinostat and Bexarotene in a Mouse Colon Cancer Model*

Research Advisor: Charles Giardina

3:45pm: Lyubina Yankova, MCB

Title: *Chemical Profiling and Biological Activity of Two Tunicate-Associated Marine Bacteria*

Research Advisor: Marcy Balunas

4:00pm: Stephanie Ha, MCB

Title: *Virulence Phenotype in Animal Models and Genome Comparisons of Environmental and Veterinary Aeromonas veronii Isolates*

Research Advisor: Joerg Graf

4:15pm: Kevin Boyd, MCB/CHEM

Title: *Nanoindentation Simulations of Norwalk Virus Capsids*

Research Advisor: Eric May

4:30pm: Prisma Erika Lopez, MCB

Title: *Developing Crosslinking Constructs of the Protein Kinase R*

Research Advisor: James L. Cole

4:45pm: Kevin Duignan, PNB

Title: *The Phospholipid PIP2 Regulates the Pharmacological Properties of KCNQ Channels*

Research Advisor: Anastasios Tzingsounis

5:00pm: Kylie Martinod, EEB

Title: *A Comparison of Traits in Native Alternatives to Invasive Plant Species*

Research Advisor: John Silander

5:15pm: Nicholas Biron Gallo, PNB

Title: *A Persistent Role for EphA4 in Adult Neurogenesis*

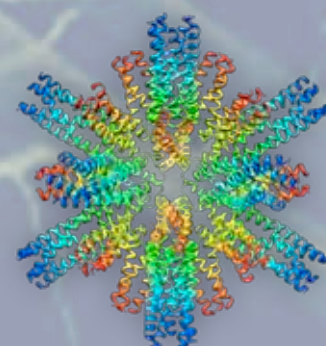
Research Advisor: Joanne Conover

5:30pm: Katherine Han, MCB/ENGINEERING

Title: *Immune Modulation by a Novel Danger Signal in T Helper Lymphocyte Activation*

Research Advisor: Michael Lynes

5:45pm: Closing Remarks



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