## PRISE 2013 -- FINAL PRESENTATION SCHEDULING MATRIX

## Monday, August 12, 2013

Date/Location in Science Center	2:40pm-2:58pm	3:00pm-3:18pm	3:20pm-3:38pm	3:40pm-3:58pm	4:00pm-4:18pm	4:20pm-4:38pm	4:40pm-4:58pm	5:00pm-5:18pm	5:20pm-5:38pm
Monday, 8/12 Room 109 Introducer: Brandon Gerberich	does dyein walk like it's drunk (Andres Leschziener)	Alex Morgan, EPS/Env. Engineering, Biogeochemical reconstruction of the Ediacaran-Cambrian transition: Using field geology in Namibia to decipher the disappearance of the Ediacaran biota (David Johnston)	Ronit Malka, Engineering Sciences, Keeping the RoboBee flying: Design of microscale flexure hinges for endurance life (Robert Wood)	David Su, Chemical and Physical Biology, Escherichia coli chromosome organization: In vivo analysis using super resolution fluorescence microscopy (Xiaowei Zhuang)	Ishan Chatterjee, Engineering, Development of a robust, low-profile tension sensor for webbing (Conor Walsh)	(Naomi Pierce)	Neurobiology, The impact of sleep and spindle activity	Zoey Bergstrom, Astrophysics and Physics, High mass star formation in infrared dark clouds (Qizhou Zhang)	Marcus Comiter, Computer Science and Statistics, Numerical techniques and applications of machine learning through a sparse coding framework (H.T. Kung)
Monday, 8/12 Room 110 Introducer: Jennifer Guidera	Gita Battacharya, Applied Math, Mathematically modeling Notch, Delta, Hes1 and Atoh1 expression levels in the mammalian utricle (Zheng-Yi Chen and John Hall)	Jillian Lee, Engineering Sciences (S.B.) Bioengineering, Mechanical properties and drug release kinetics of electrically conductive hydrogels (Sujata Bhatia)		Carew Giberson-Chen, Chemistry, Determining the structure of LptD to better understand Gram- negative outer membrane biogenesis (Dan Kahne)	Liz Strong, Mechanical Engineering, Designing dynamic materials for controlled microscale mechanical stimulation of live cells (Joanna Aizenberg)		Ruby Almanza, Astrophysics and Neurobioloy, Building an atmospheric model for KOI 1686.01 (Dimitar Sasselov)	Angela Frankel, HDRB, Characterizing Ltbp3 requirement for second heart field maintenance (Caroline and Geoff Burns)	Michael Sayegh, Physics, Observing the restructuring of the bacterial flagellar rotary motor <i>in vivo</i> , (Howard Berg)
Monday, 8/12 Room 111 Introducer: Chris Hernandez	Jasmine Yan, Computer Science, A neurobiologically inspired dynamic computational model (Gabriel Kreiman)	Kathy Lin, Chemical and Physical Biology, Getting to the other side: Measuring diffusion through inverse opals (Joanna Aizenberg)	Xin Wei, Chemical and Physical Biology, Regulation of cardiac exercise phenotypes by miR-222 (Anthony Rosenzweig)	lan Ochs, Physics, Evolving complexity: Fitness valleys and population size (Michael Desai)	John Sheridan, Mathematics, Schubert calculus (Joe Harris)	Kwan-Keat Ang, HDRB, Towards targeted cellular differentiation as a therapy for acute myeloid leukemia (David Scadden)	Aida Rocci Ruiz, Psychology, How Mona Lisa is helping us understand co-experience (Daniel Gilbert)		Anthony Liu, Mathematics, Statistical methods for detecting damage in structures (Luke Bornn)
Monday, 8/12 Room 112 Introducer: Jolie Berg	Emily Burke, Organismic and Evolutionary Biology, Phylogeography of Bdellouridae (Gonzalo Giribet)	Martin Reindl, MCB, SecY- YidC interaction in membrane proteogenesis (Marcia B. Goldberg)	Linda Xu, Neurobiology, Tracing synaptic connectivity in the mouse thalamus (Jeff Lichtman)	Jenifer Brown, Chemistry, Co-crystallization/ scFvs/NRAMP (Rachelle Gaudet)	Jenny Shih, Human Developmental and Regenerative Biology, Probing the interaction of hOGG1 repair enzyme with DNA (Gregory Verdine)	David Shin, MCB, Regulating metastasis: An analysis of SIRT3's inhibitory role in the Src/FAK pathway (Marcia Haigis)		Arvind Narayanan, Undeclared, Investigating holding of tail-anchored proteins (Vladimir Denic)	Hannah Rasmussen, HDRB, Oncostatin-M: A novel drug target within the hematopoleitic niche for bone marrow transplant therapies (David Scadden)
Monday, 8/12 Room 113 Introducer: Matt Condakes	Shakkaura Kemet, HDRB, The role of TIF1 (gamma) in erythroid differentiation (Leonard Zon)		Jonathan Marks, CPB, Study of novel oxidative coupling in lomaiviticin and actinorhodin biosyntheses (Emily Balskus)	Tiana Raphel, Biomedical Engineering, Characterization and optimization of alginate microspheres (Sujata Bhatia)	Zarmeena Dawood, Biomedical Engineering, Investigating mechanosensitivity in breast cancer progression (Donald Ingber)	Elissa Lin, Chemistry, Finding the cure to aging (William Mair)	adult zebra fish (Robert Handin)	Nicole Bassoff, Undeclared, Evaluating therapeutic EGFR-specific nanobody-TRAIL immunoconjugates in a variety of cancer types (Khalid Shah)	

## Tuesday, August 13, 2013

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Tuesday, 8/13 Room 109 Introducer: Brandon Gerberich	Daniel Cooney, Mathematics, Tournament cynamics (Martin Nowak)	Tudor Giurgica-Tiron, Physics, Quantum scattering of a Bose- Einstein condensate off a charged nanotube (Lene Hau)	Perry Choi, Neurobiology, Developing peptide macrocycle catalysts for trans-esterification reaction (Eric Jacobsen)	Jessica Izhakoff, OEB, Is food allergy an infectious disease? (Dale Umetsu)	Danny Kramer, CPB, Whole blood and leukocyte separation by aqueous multiphase systems of polymers (George Whitesides)	Aftab Chitalwala, Physics and Math, Homogenous bubble nucleation in Si3N4 pores (Jene Golovchenko)	Derek Robins, Physics and Astrophysics, Ground loops: Detection and elimination (Gerald Gabrielse)	Aaron Markowitz, Physics and Math, Measuring the CMB dipolefor cheap! (John Kovac)	
Tuesday, 8/13 Room 110 Introducer: Jennifer Guidera	Alex Lombardi, Mathematics, The asymptotic behavior of the Fourier coefficients of fast- growing automorphic forms (Wilfried Schmid)	and Cellular Biology, Preparation and purification of Mullerian Inhibiting Substance for treatment of	Alice Berenson, Molecular and Cellular Biology, Component dynamics and interactions in the Type VII secretion system of <i>Bacillus</i> subtilis (Briana Burton)	Making waves: Using EEG to detect early predictors of autism spectrum disorders	Nina Shevzov-Zebrun, HEB, The role of miRNA in activity-mediated plasticity in the <i>Drosophila</i> neuromuscular junction (David Van Vactor)	Michelle Wang, Neurobiology, Longterm effects of social defeat in hyperaggressive <i>Drosophila</i> <i>melanogaster</i> (Edward Kravitz)	of plasticity in Lynx1- knockout mice,	Observing lipid droplets in	
Tuesday, 8/13 Room 111 Introducer: Chris Hernandez	Marissa Suchyta, HDRB, Identification of initiating factors of axolotl limb regeneration (Doug Melton)	Harnessing the power of co- inhibitory molecules: Protecting stem cell-derived	Socioeconomic status,	Tom Silver, Mathematics and Computer Science, A blind date with big data (Pardis Sabeti)	Andrew O'Rourke, Biomedical Engineering, Investigating invariant object recognition (David Cox)	Austin Lee, Undeclared, Optimizing a robust screen to assess actvation of BDNF-TrKB signaling pathways (Lee Rubin)	Octavio Viramontes, Neurobiology, Characterizing sensitization and pre-sensitization of TRPV1 (Clifford Woolf)	Nick Moore, MCB, Scanning bacterial genomes by systematic codon substitution (Roy Kishony)	
Tuesday, 8/13 Room 112 Introducer: Jolie Berg	Economics, Controlling antibiotic resistance in	Aaron Cheng, CPB, Understanding the role of BCL11A in the hemoglobin switch (Stu Orkin)	Connie Zhong, Neurobiology, Characterizing the role of cholinergic and GABAergic neurons in <i>C. elegans</i> gait control (Yun Zhang)	Valentina Lyau, Engineering Sciences, 3D printing of functional materials (Jennifer Lewis)	Meena Boppana, Mathematics, A Voronoi game (Michael Mitzenmacher)	Kevin Bu, Chemical and Physical Biology, Choline metabolism in gut microbes (Emily Balskus)	Bridget Gosis, Stem Cell and Regenerative Biology, Utilizing stem cell-based genome editing to investigate the effect of a common PPARv2 polymorphism on human adipogenesis and mature fat function (Chad Cowan)	Michael Wu, MCB, Cancer, collagen, and CAFs (Shannon Turley)	
Tuesday, 8/13 Room 113 Introducer: Matt Condakes	Ryan Chow, HDRB, Submucosal glands in airway repair and maintenance (Jayaraj Rajagopal)	Epigenetic regulation in the		Michael Hoffer-Hawlik, Biomedical Engineering, Single-cell nucleosome mapping using droplet- based microfluidics (David Weitz)	David Zhang, Applied Mathematics, NAD+ precursor as therapeutic for tumorigenesis (David Sinclair)	Nicholas Longenbaugh, Linguistics & Computer Science, Modeling complexity in language (Stuart Shieber)	Stephanie Threatt, Chemistry, Utilization of FDG for fluorine-18 radiolabeling of macromolecules (Jacob Hooker)	Jackson Steinkamp, Computer Science, Using 3D Vision to assist surgical robotics (Robert Howe)	

## Wednesday, August 14, 2013

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Wednesday, 8/14 Room 109 Introducer: Brandon Gerberich	Dylan Neel, Neurobiology, Evaluation of small molecule modulators of the max network (Angela Koehler)		James Bothwick, Chemistry & Physics, Polymerixation of ADP bound RecA on DSDNA (Mara Prentiss)		Vivian Hua, Neurobiology, Observation and quantification of the maternal behavior of mice in a semi-natural enclosure (Catherine Dulac)		Lukas Gemar, Bioengineering, Engineering arch: building a better voltage-sensitive protein (Adam E. Cohen)	Will Clerx, Molecular and Cellular Biology, Erratic light exposure and entrainment of circadian cellular oscillators: Effects on neuroendocrine rhythms in college undergraduates, (Charles Czeisler)	
Wednesday, 8/14 Room 110 Introducer: Jennifer Guidera	Brian Zhang, Physics, Pseudomagnetic fields in graphene via thermal strain engineering (Amir Yacoby)		May Yang, Chemical and Physical Biology, Parasites of parasites of parasites: Studying satellite dsRNAs in <i>Trichomonas vaginalis</i> (Max Nibert)	Olivier Simon, Physics, Toward a more precise measurement of the electron's magnetic dipole moment, or The fabulous story of Steve the Trapped Electron (Gerald Gabrielse)	Vera Say, Neurobiology, Neural correlates of visual long term memory (George A. Alvarez)	Mark Arildsen, Undeclared, The effect of addition of charge on the electrorheological behavior of silica particles in oil (David A. Weitz)	Nivanthika Wimalasena, GW8510: A potential therapeutic for Parkinson's? (Stuart Schreiber and Rakesh Karmacharya)	Chloe Li, Neurobiology, Investigating the misregulation of genes in the visual cortext of Mecp2 knockout mice (MIchela Fagiolini)	
Wednesday, 8/14 Room 111 Introducer: Chris Hernandez	Ryan Lindeborg, Human Developmental and Regenerative Biology, Identifying molecular controls over the development of corticostriatal projection neurons (Jeffrey Macklis)	Alexandra Haber, Neurobiology/MBB, The neural correlates of 'Set' expertise (George Alvarez)	Katherine Selwa, MCB, Regulation of retrotransposition in extra cellular vesicles in medulloblastoma (Scott Pomeroy)	Riley Kessler, Neurobniology, Cell surface receptors of the vagus nerve (Stephen Liberles)	Kewei Li, Computer Science and Physics, Changes in stellar color due to atmospheric water vapor (Christopher Stubbs)	Neurobiology, Diffusion tensor imaging of the stria	Zijian Wu, Molecular and Cellular Biology, miR29b and MCL-1 (Joan Brugge)	Cyndia Yu, Physics, Development and characterization of BICEP3 and Keck Array vacuum windows (John Kovac)	
Wednesday, 8/14 Room 112 Introducer: Jolie Berg	Raja Ghawi, Engineering Sciences: Biomedical Sciences (S.B.), Use of collagen mimetic peptides to modify decellularized rat lungs (Harald Ott)	Sidd Viswanathan, Statistics, Utilizing machine learning techniques for patient survival analysis and prediction (John Quackenbush)	Tejinder Gill, HDRB, Examine the effect of HOX overexpression on hematopoletic stem cells and progenitors during development (Leonard Zon)	Advik Shreekumar, Undeclared, The double- edged sword: Antimicrobial properties of the Alzheimer's amyloid beta peptide (Rudolph Tanzi)	Jordan Canedy, Applied Mathematics, A novel screen for targeting drug resistance in <i>Plasmodium</i> <i>falciparum</i> (Dyann Wirth)	Charles Du, Chemistry, Identifying putative families of rare driver mutations using mutation hotspots in consensus alignments (Matthew Meyerson)	Gaby Ruiz-Colon, HDRB, Localization of CITED4 in neonatal cardiomyocytes (Anthony Ronsenzweig)	Katherine Clements, Neurobiology, Spatial memory development in infants (Charles A. Nelson)	
Wednesday, 8/14 Room 113 Introducer: Matt Condakes	Taewhan Shin, Neurobiology, Evaluation of candidate ligands on amyloid precursor protein processing in human induced pluripotent stem cells (Dennis Selkoe)	Designing a user-interactive animation of star positions	Ian Dunn, Chemistry and Physics, A quantum chemical approach to the thermodynamics of metabolism (Alan Aspuru- Guzik)	Emma Dowd, Chemistry and Physics, Voltage imaging in zebrafish (Adam Cohen)	Viet Tran, Neurobiology, Determining the neurotoxicity of long amyloid betas in Alzheimer's disease (Michael Wolfe)	Ved Topkar, CPB, Computational analysis of ENCODE datasets to reduce promoter encoding complexity (Jeremy Gunawardena)	Daniel Henderson, HDRB, Identification of genotypic variants for the early diagnosis of amyotrophic lateral sclerosis (Kevin Eggan)	Zoe Hitzig, Mathematics and Philosophy, Memoryless language learning on graphs and compelx networks (Martin Nowak)	