



Cell and Molecular Biology Department Retreat  
Monday - September 29, 2014  
From 8 to 6:00 pm  
Rancho Bernardo Inn  
17550 Bernardo Oaks Drive, San Diego, California

## POSTER SESSION

Location: Courtyard (please set up upon arrival)  
Poster board (size 4 ft Height x 6 ft Width)

Poster No.	Lab	Poster
1.	Balch	<ul style="list-style-type: none"><li>A Roadmap for Drug Development for Niemann-Pick disease</li></ul> <u>Kanagaraj Subramanian</u> , Shu Mao, Fred Maxfield, Jason Gestwicki, and William E. Balch
2.	Dawson	<ul style="list-style-type: none"><li>Optimizing Thioester Exchange in Native Chemical Ligation: New Methods Using Reverse-Phase Silica</li></ul> <u>Philip Cistrone</u> , William Wey, and Philip Dawson
3.	Dawson	<ul style="list-style-type: none"><li>Towards the Design and Synthesis of Antiviral Proteins</li></ul> <u>Naila Assem</u> and Philip E. Dawson
4.	Dawson	<ul style="list-style-type: none"><li>Quantum-dot/Dopa bioconjugates as powerful tools for peptidase activity sensors</li></ul> <u>Valle Palomo</u> , Igor L. Medintz, Philip Dawson
5.	Dawson	<ul style="list-style-type: none"><li>Structure-Guided Optimization of an EphA4 Peptide Antagonist</li></ul> <u>Erika Olson</u> , Ilaria Lamberto, Bernhard C. Lechtenberg, Peter D. Mace, Stefan J. Riedl, Elena B. Pasquale, Philip Dawson
6.	Encalada	<ul style="list-style-type: none"><li>Ultrastructural Analysis of Motor Protein Conformations and Regulation in Neurons</li></ul> <u>Danielle Grotjahn</u> , Sandra Encalada
7.	Encalada	<ul style="list-style-type: none"><li>Coordination of Molecular Motors in Axonal Transport</li></ul> <u>George E Campbell</u> , Sandra E Encalada
8.	Fowler	<ul style="list-style-type: none"><li>Control of thin filament lengths by sarcomeric tropomodulin isoforms: insights from mouse models</li></ul> <u>David S. Gokhin</u> & Velia M. Fowler

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9.	Fowler	<ul style="list-style-type: none"> <li>The spectrin-actin network and beaded filaments cooperate to assemble large connexin 46 and 50 plaques and facilitate normal ion homeostasis in mouse lens fiber cells</li> </ul> <p>Roberta B. Nowak, <u>Catherine Cheng</u>, Junyuan Gao, Richard T. Mathias, Sondip Biswas, Woo-Kuen Lo, Velia M. Fowler</p>
10.	Friedlander	<ul style="list-style-type: none"> <li>Vascular endothelial growth factor regulates expression of protective complement factor H in the retina.</li> </ul> <p><u>Keir LS</u>, Feitelberg D, Wittgrove C, Usi Y, Kurihara T, Richards A, Saleem MA, Westenskow P, Friedlander M.</p>
11.	Friedlander	<ul style="list-style-type: none"> <li>Cone Photoreceptors Generate the Fatty Acid Amide Erucamide for Maintenance of the Ocular Vasculature</li> </ul> <p><u>Peter D Westenskow</u>, Toshihide Kurihara, Yoshihiko Usui, Stephen Bravo, Junhua Wang, Leah Bryne, John Flannery, Michael Sailor, Gary Suizdak, Martin Friedlander</p>
12.	Gerace	<ul style="list-style-type: none"> <li>Role of RNA helicase DDX1 in Rev-mediated HIV-1 mRNA trafficking and stability</li> </ul> <p><u>Hui-Yi Chu</u>, John Hammond, Souad Naji, James R. Williamson, Larry Gerace</p>
13.	Gerace	<ul style="list-style-type: none"> <li>Nuclear envelope protein Lem2 is required for mouse development and regulates MAP and AKT kinases</li> </ul> <p><u>Olga Tapia</u>, Loren.G. Fong, Steve G. Young and Larry Gerace</p>
14.	Gerace	<ul style="list-style-type: none"> <li>Net37, a novel component of the machinery for ER folding and regulated secretion of myogenic factors</li> </ul> <p><u>Sara Carbajo-Pescador</u>, Kaustuv Datta, Paul Vasely, Larry Gerace</p>
15.	Joyce	<ul style="list-style-type: none"> <li>In Vitro Evolution of Cross-Chiral RNAs</li> </ul> <p><u>Jonathan T. Sczepanski</u> and Gerald F. Joyce</p>
16.	Kralli	<ul style="list-style-type: none"> <li>PGC-1 and ERR-induced Regulator in Muscle 1 (Perm1) Regulates Oxidative Metabolism in Skeletal Muscle</li> </ul> <p><u>Yoshitake Cho</u>, Bethany C. Hazen, James Moresco, John Yates III, Aaron P. Russell, and Anastasia Kralli</p>
17.	Makarenkova	<ul style="list-style-type: none"> <li>Analysis of the role of extracellular matrix in the development of lacrimal gland disease in mouse models of Sjogrens syndrome</li> </ul> <p><u>Takeshi Umazume</u>, Driss Zoukhri and Helen p. Makarenkova</p>

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18.	Makarenkova	<ul style="list-style-type: none"> <li>Homeobox factors Barx2 and Pax7 mediate a novel Wnt effector pathway in muscle satellite cells</li> </ul> <p>Anastasia Gromova, Julie-Ann Hulin, Michael Downes, Ronald M. Evans, Robin Meech, and <u>Helen P. Makarenkova</u></p>
19.	Paulson	<ul style="list-style-type: none"> <li>H7N9 and H6N1 influenza A virus hemagglutinins engineered to bind human type receptors reveal a novel layer of specificity beyond the a2-6 linkage of sialic acid</li> </ul> <p><u>Robert P. de Vries</u>, Wenjie Peng, Ryan McBride and James C. Paulson</p>
20.	Paulson	<ul style="list-style-type: none"> <li>Systemic blockade of sialylation in mice with a global inhibitor of sialyltransferases</li> </ul> <p><u>Britni M. Arlian</u>, Matthew S. Macauley, Cory D. Rillahan, Poh-Choo Pang, Nikki Bortell, Maria Cecilia G. Marcondes, Stuart M. Haslam, Anne Dell, and James C. Paulson</p>
21.	Russell	<ul style="list-style-type: none"> <li>Systematic genetic interaction screen reveals a non-canonical role for Ku DNA-end binding protein in preventing replication fork collapse in the absence of gamma-H2A binding protein Brc1</li> </ul> <p><u>Aranca Sánchez</u>, Sophie Rozenzhak, Assen Roguev, Nevan J. Krogan and Paul Russell</p>
22.	Russell	<ul style="list-style-type: none"> <li>Probing the mitotic function of Mus81-Eme1 with substrate-selective Holliday Junction resolvase mutants</li> </ul> <p><u>Sophie Wehrkamp-Richter</u>, Tamara Johnson, Oliver Limbo, Lauren Cassell and Paul Russell</p>
23.	Sauer	<ul style="list-style-type: none"> <li>IP3 3-Kinase B Controls Hematopoietic Stem Cell Homeostasis and Prevents Lethal Hematopoietic Failure in Mice</li> </ul> <p>Sabine Siegemund, Claire Conche, Blake Broaten, Lana Schaffer, Stephanie Rigaud, Luise Westernberg, Steven Robert Head and <u>Karsten Sauer</u></p>
24.	Schimmel	<ul style="list-style-type: none"> <li>Wnt/<math>\beta</math>-catenin signaling implicated as mechanistic link to inhibition of malignant melanoma growth by natural fragment of human TrpRS</li> </ul> <p><u>My-Nuong Vo</u>, Ryan Shapiro, Melanie Hanan, Raj Belani, Xiang-Lei Yang and Paul Schimmel</p>

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25.	Schimmel	<ul style="list-style-type: none"> <li>Opposing effects of the 'cis' and 'trans' isomers of resveratrol on TyrRS mediated PARP-1 activation</li> </ul> <p><u>Sajish Mathew</u> and Paul Schimmel</p>
26.	Schimmel	<ul style="list-style-type: none"> <li>Functional and structural studies on a natural fragment of alanyl-tRNA synthetase</li> </ul> <p><u>Youngzee Song</u>, Litao Sun, Leslie Nangle, Kyle Chiang, Paul Schimmel</p>
27.	Schneemann	<ul style="list-style-type: none"> <li>Differential Segregation of Nodaviral Coat Protein and RNA into Progeny Virions during Mixed Infection with FHV and NOV</li> </ul> <p><u>Radhika Gopal</u>, P. Arno Venter, and Anette Schneemann</p>
28.	Schneemann	<ul style="list-style-type: none"> <li>Towards Understanding the Structural Basis of Outer Mitochondrial Membrane Modifications Induced During Flock House Virus Replication</li> </ul> <p><u>J. R. Short</u>, J. Lanman, J. A. Speir, J. E. Johnson and A. Schneemann</p>
29.	Yang	<ul style="list-style-type: none"> <li>Nuclear functions of tyrosyl-tRNA synthetase</li> </ul> <p><u>David Blocquel</u>, Na Wei, Guangsen Fu, Yi Shi, Xiang-Lei Yang</p>
30.	Yang	<ul style="list-style-type: none"> <li>Charcot-Marie-Tooth disease is linked to the antagonism of neuropilin-1 by the secreted neomorphic glycyl-tRNA synthetase.</li> </ul> <p>Weiwei He<sup>1*</sup>, Ge Bai<sup>2*</sup>, Huihao Zhou, Nicholas M. White, Jeni Lauer, Huaqing Liu, Yi Shi, <u>Nahia Ezkurdia</u>, Calin Dan Dumitru, Karen Lettieri, Veronica Shubayev, Patrick Griffin, Robert W. Burgess, Samuel L. Pfaff and Xiang-Lei Yang</p>
31.	Yang	<ul style="list-style-type: none"> <li>HDAC6 is a promising therapeutic target for peripheral neuropathy linked to mutant tRNA synthetase</li> </ul> <p><u>Zhongying Mo</u>, Veronick Benoy, Ge Bai, Constantin d'Ydewalle, Weiwei He, Na Wei, Samuel L. Pfaff, Ludo Van Den Bosch and Xiang-Lei Yang</p>