



T H E
S C R I P P S
R E S E A R C H
I N S T I T U T E

Cell and Molecular Biology Department Retreat
Wednesday, September 9, 2015
8AM – 6PM

Rancho Bernardo Inn
17550 Bernardo Oaks Drive
San Diego CA 92128

PROGRAM

8:00 - 9:00	Breakfast
9:00 - 9:05	Velia M. Fowler Welcome/Opening Remarks
Session I	Moderator: Paul Russell
9:10 - 9:35	Velia M. Fowler <i>Novel actin dynamics regulating red blood cell shape and physiology</i>
9:40 - 10:05	Corwin Nicholat <i>Glycan ligands for targeting Siglecs on immune cells</i>
10:10 - 10:35	Marty Fedor <i>RNA as a Global Metabolic Regulator</i>
10:40 - 11:05	AM Break
Session II	Moderator: Larry Gerace
11:10 - 11:35	Steve Reed <i>Dysregulation of cell cycle proteins and cancer: when good proteins go bad</i>
11:40 - 12:05	Elena Deryugina <i>MMP-mediated induction of the neovasculature capable of sustaining tumor cell intravasation and metastasis</i>
12:10 - 12:30	Poster Highlights Minghua Nie (Boddy) <i>Frenemies: unexpected auto-regulatory relationships among SUMO pathway factors for maintaining SUMO homeostasis</i> Mark Wallen (Gottesfeld) <i>Genetic correction for the common eye disease Fuchs corneal dystrophy</i> Peter Westenskow (Friedlander) <i>Neurovascular Crosstalk in the Retina</i> Romain Chassefeyre (Encalada) <i>Role of the axonal transport machinery in the propagation of pathogenic prion aggregates</i>

12:35 - 2:00	Lunch/Poster Session
Session III	Moderator: Sandra Encalada
2:00 - 2:25	Rajesh Grover <i>The Great Escape: Mycoplasma Vs Host Adaptive Immune System</i>
2:30 - 2:55	Anastasia Kralli <i>Enhancing muscle fitness: exercise and exercise-induced responses in skeletal muscle</i>
3:00 - 3:25	Celine DerMardirossian <i>Control of the cell leading edge by a new GAP for Rac and Cdc42</i>
3:30 - 3:55	PM Break
Session IV	Moderator: Velia Fowler
4:00 - 4:25	Paul Russell <i>Protecting Genome Integrity</i>
4:30 - 4:55	Helen Makarenkova <i>Fgf signaling in lacrimal gland development, homeostasis and disease</i>
5:00 - 5:05	Velia M. Fowler <i>Closing</i>
5:10 - 6:00	Reception/Poster Session



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POSTER SESSION

1. Frenemies: unexpected auto-regulatory relationships among SUMO pathway factors for maintaining SUMO homeostasis
Mingua Nie (Boddy)
2. Roles of GEF-H1/Sec5 interaction in cancer cell migration and metastasis
Violaine Delorme-Walker (DerMardirossian)
3. Ultrastructural Analysis of Motor Protein Conformations and Regulation in Neurons
Danielle Grotjahn (Encalada)
4. Role of the axonal transport machinery in the propagation of pathogenic prion aggregates
Romain Chassefeyre (Encalada)
5. Axonal Transport of Synaptophysin Vesicles through Coordination of Kinesin-1 and Kinesin-3
George Campbell (Encalada)
6. Nonmuscle Myosin-IIA Regulation in Red Blood Cells and Megakaryocytes
Alyson Smith (Fowler)
7. The role of croquemort in innate immunity and aging
Nathalie Franc (Franc)
8. Neurovascular Crosstalk in the Retina
Peter Westenskow (Friedlander)
9. Dissecting molecular mechanism of Lem2 in ERK signaling
Olga Tapia (Gerace)
10. Genetic correction for the common eye disease Fuchs corneal dystrophy
Mark Wallen (Gottesfeld)
11. The role of the Estrogen Related Receptors in adipose tissue thermogenesis and metabolism
Erin Brown (Kralli)
12. Perm1 (PGC-1 and ERR-induced Regulator, Muscle 1) enhances mitochondrial biogenesis, oxidative capacity and fatigue resistance in adult skeletal muscle
Yoshitake Cho (Kralli)
13. Lacrimal gland inflammation deregulates extracellular matrix remodeling and alters molecular signature of epithelial stem/progenitor cells
Takeshi Umazume (Makarenkova)

14. Targeting inflamed endothelium with selectin-binding liposomes
Mila Elich (Paulson)
15. Siglec-3 regulates FcεRI function on human mast cells and basophil
Shiteng Duan (Paulson)
16. Genetic Interaction Landscape Reveals Critical Requirements for *Schizosaccharomyces pombe* Brc1 in DNA Damage Response Mutants
Arancho Sanchez (Russell)
17. Human Tyrosyl-tRNA Synthetase Stimulates Megakaryocytopoiesis Via TLR/MyD88/NFκB Signaling Pathway
My Vo (Schimmel)
18. CMT2D neuropathy is linked to the neomorphic binding activity of glycyl-tRNA synthetase
Ge Bai (Yang)