

WMEN CABO XXV, May 3-6, 2015

Sunday Evening, May 3

17:15-17:30	Introduction and Welcome Ian Wilson and Andrej Sali			
17:30-18:15	Keynote Lecture Sasha Kamb	Amgen	Alzheimer's disease: The confluence of genetics, molecular structure and new medicines	
18:15-18:25	Self-Introductions	<p>Daniel J. Cipriano Merck Research Labs Jakob Loven Third Rock Ventures Jaume Pons UCSF/Rinat-Pfizer</p>		

18:30-20:45 Short Presentations (5+1 min.) by TSRI and UCSF Graduate Students, Postdocs and Researchers (Chair: Dennis Wolan)

Jessica Bruhn	TSRI	Insights into the molecular and structural properties governing RNA virus transcription and replication
Sandip Chatterjee	TSRI	A comprehensive database and search method for microbiome metaproteomics
Jonathan Hulce	TSRI	Extended N-hydroxyhydantoin carbamate inhibitors of mammalian lipases
Jennifer Kefauver	TSRI	Compositional heterogeneity of Swell1, the volume-regulated anion channel
Bryan Martin	TSRI	The Octamer Repeat motif, a novel molecular architecture involved in splicing regulation
Charles Murin	TSRI	Structures of protective antibodies reveal sites of vulnerability on Ebola virus
Erika Olson	TSRI	Structure-guided optimization of a peptide antagonist of EphA4 activation
Nicole Schirle Oakdale	TSRI	The crystal structure of human argonaute2
Jessica Sheu-Gruttaduria	TSRI	Structural studies of higher-order miRNA-induced silencing complexes
Peter Thuy-Boun	TSRI	The development of tools for profiling gut microbial sulfatases
Yuh Ana Wang	TSRI	Chemical metaproteomics of the human distal gut microbiota

Break

Elena Sablin	UCSF	Regulation of NR5A receptors by PIP3 hormone.
Courtney French	UC Berkeley	Transcriptome analysis reveals thousands of targets of nonsense-mediated mRNA decay that offer clues to the mechanism in different species
Geoffrey Smith	UCSF	Exploring the kinetics of cell signaling with small molecules: a unique temporal requirement for JAK3 activity in IL-2 signaling
Alex Vecchio	UCSF	Piece by piece: putting together the tight junction three-dimensional puzzle
Benjamin Barad	UCSF	Side-chain directed model and map analysis for 3D electron cryomicroscopy
Peter Cimermancic	UCSF	Finding small-molecule modulators of large macromolecular assemblies
Marco Lolicato	UCSF	Activation of a human ion channel by physical forces
Nicolas Strauli	UCSF	Deconvolution of selection pressures in overlapped genes: The story of Tat and Rev

21:00– 22:00 Reception with Buffet

Poolside

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Monday Morning, May 4		Structural Biology (Chair: Kathleen Aertgeerts)	
09:00	Andrej Sali	UCSF	Integrative structure determination based on EMAP data
09:20	John Tainer	TSRI	Better design of proteins and protein cages by X-ray scattering
09:40	James Fraser	UCSF	BBC PUBS: Results from our first year graduate students!
10:00	Jeff Lengyel	FEI	Beyond the frontiers of the Cell - unveiling the wonders of Nature at the molecular level
10:20	Break		
10:40	Elizabeth Getzoff	TSRI	Switching protein conformations and assemblies: light and ligands, redox and radicals
11:00	Otomo Takanori	TSRI	Structural insights into the functions of the autophagic ubiquitin-like proteins
11:20	Peter Wright	TSRI	Intrinsically disordered proteins in cellular regulation
11:40	Ashok Deniz	TSRI	Biophysics of a disordered protein, from single molecules to droplets
Monday Afternoon		Virology and Immunology (Chair: Jim Paulson)	
16:30	Andrew Ward	TSRI	High resolution cryoEM of viral glycoproteins
16:50	Ian Wilson	TSRI	Recognition of influenza virus by broadly neutralizing antibodies
17:10	Jim Paulson	TSRI	Targeting immune cells
17:30	Pedro Paz	Bayer Healthcare	Modeling MHCII-peptide-TCR interactions for prediction of immunogenicity
17:50	Break		
Membrane Proteins (Chair: Andrew Ward)			
18:10	Robert Stroud	UCSF	Membrane transporters in action: how do they work?
18:30	Dan Minor	UCSF	How ion channels respond to temperature and pressure
18:50	Mark Yeager	UVA	Allosteric enhancers of adenosine receptors for treatment of a disease that has increased 300% in last 20 years
19:10	Kathleen Aertgeerts	Dart NeuroScience	Integrative methods to facilitate structure-based GPCR drug discovery
20:00-22:30	Sponsor Dinner, by invitation only - Oceana Garden		
Tuesday Morning, May 5		SPONSORS (Chair: Daniel Santi)	
9:00	Daniel Santi	UCSF/ProLynx	A chemical approach to half-life extension of therapeutics
9:20	Mathias Rickert	Rinat Laboratories Pfizer, Inc.	Production of soluble and active microbial transglutaminase for site-specific antibody drug conjugation in <i>Escherichia coli</i>
9:40	Craig Muir	Third Rock Ventures	Cytomx, Global Blood, Myokardia, allostery and FibroCO; innovation, patient focus and assiduousity since 2010
10:00	Christian Cunningham	Genentech, Inc.	USP30 and Parkin homeostatically regulate atypical ubiquitin chains on mitochondria

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10:20	Break		
10:40	Wayne Fairbrother	Genentech, Inc.	Targeting Bcl-2-family proteins
11:00	Ute Hoch	Nektar Therapeutics	Etirinotecan pegol: Teaching an old dog new tricks
11:20	Joshua Salafsky	Biodesy, Inc.	Detecting and distinguishing conformations sensitively by second-harmonic generation (SHG) for drug discovery and basic research
11:40	Glen Spraggon	GNF	The structure and design of LDK378 (Ceritinib): A potent anaplastic lymphoma kinase inhibitor
Tuesday Afternoon		Nucleic Acids, Nucleic Acid Binding Proteins & Evolution (Chair: Peter Wright)	
16:30	David Millar	TSRI	Functional coordination during DNA polymerase activity
16:50	Ian MacRae	TSRI	Structural mechanisms in RNA silencing
17:10	Jamie Williamson	TSRI	Combined EM and MS studies of ribosome assembly
17:30	Floyd Romesberg	TSRI	A semi-synthetic organism with an expanded genetic alphabet
17:50	Break		
Chemical Biology (Chair: Jack Taunton)			
18:10	Phil Dawson	TSRI	Chemical ligation and bioconjugation, addressing large protein targets.
18:30	Dennis Wolan	TSRI	Chemical-based interrogation of the human gut microbiome
18:50	Jack Kirsch	UCB	Can the effect of an arbitrary mutation on the catalytic activity of an enzyme be predicted?
19:10	Jack Taunton	UCSF	Substrate-selective modulators of protein secretion
Wednesday Morning, May 6		Computation, Health and Disease (Chair: Andrej Sali)	
8:50	Ryan Hernandez	UCSF	Population genomics of health and disease
9:10	Steven Brenner	UC Berkeley	Diagnostic role of exome sequencing in immune deficiency disorders
9:30	Robert Fletterick	UCSF	Inhibiting androgen receptor
9:50	Break		
10:10	Gabriel Lander	TSRI	Investigating the machinery of cellular homeostasis by multiscale imaging
10:30	Graham Johnson	UCSF	Towards whole cells modeled in 3D molecular detail and community curated with cellPACK
10:50	Arthur Olson	TSRI	What's up with docking?
11:15	Ian Wilson and Andrej Sali	Closing Remarks	

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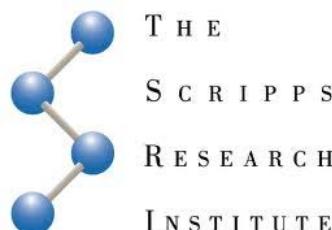
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