WMEN CABO XXVII, May 6-10, 2017

Saturday Evening, May 6

17:00-17:15 **Introduction and Welcome**
Ian Wilson and Andrej Sali

17:15-18:00 **Keynote Lecture**

Peter Walter	UCSF	From protein folding to cognition: a serendipitous path of discovery

18:00-18:10 **Self-Introductions**

Jeanne Baker	Merck
Jonathan Moore	Vertex Pharmaceuticals

18:10-20:45 Short Presentations (5+1 min.) by TSRI and UCSF Graduate Students, Postdocs and Other Researchers (Chair: Gabe Lander)

Cristina Puchades Garcia	TSRI	Mitochondrial inner membrane AAA proteases
Alexander Krois	TSRI	Versatility through flexibility-p53 and intrinsic disorder
Jennifer Kefauver	TSRI	Architecture of the volume-regulated anion channel
Christopher Cottrell	TSRI	Modeling glycans into EM density
Ke Yang	TSRI	Structural basis of cooperativity in a hematopoietic transcription factor: Coactivator ternary complex
Danielle Grotjahn	TSRI	Three-dimensional snapshots of the dynein-dynactin complex
Sergey Shnitkind	TSRI	Regulation of a transcription factor
Emily Roncase	TSRI	Insights into activation and substrate selectivity of a clostripain-like protease from *B. thetaiotaomicron*
Sasha Moola	TSRI	Crystallographic characterization of a novel family of broadly neutralizing anti-HIV antibodies
Break		
Louise Heinrich	UCSF	ORACL 2.0: Casting a Wider Net
Ruth Huttenhain	UCSF	An approach to spatiotemporally resolve protein interaction networks in living cells
Chien-Hsiang Hsu	UCSF	Want early retirement? Check your p21.
Matthew Ravalin	UCSF	Linking caspases & proteostasis networks through TPR domains
Brooke Gardner	UCSF	Molecular motors involved in peroxisome biogenesis
Natalia Sevillano	UCSF	Identification of inhibitory antibodies for active urokinase plasminogen activator (uPA)
Bryan Thurtle-Schmidt	UCSF	The elevator mechanism: a model for transport by SLC4 anion exchangers
Jordan Carelli	UCSF	Anti-cancer cyclic peptides trap distinct conformational states of ribosome-bound elongation factor 1A
Lina Leon	UCSF	Defining Cas3 recruitment in a minimal system
Krisna Van Dyke	UCSF	Characterizing the structural basis of bacterial cell wall recognition
Aditya Anand	UCSF	Structural insights into the activity of a memory-enhancing compound
Ilan Chemmama	UCSF	Towards modeling multiple states of biomolecules satisfying spatial restraints from single-particle EM
Jain-Hua Chen	UCSF	Imaging and characterizing the relationship between cell size and nuclear shape
Allison Roberts	UC Berkeley	Utilizing chemoproteomic profiling to discover anti-cancer covalent ligands and druggable hotspots
Assen Rougev	UCSF	Genetic interactions mapping in mammalian cells using CRISPRi
Nicholas Polizzi	UCSF	A core principle of ligand-binding protein design

21:00– 22:00 Reception with Buffet **Poolside**

WMEN CABO XXVII, May 6-10, 2017

Sunday Morning, May 7			Integrative Structural Biology (Chair:Robert Stroud)
08:40	**Andrej Sali**	UCSF	Integrative structural biology
09:00	**Jeff Lengyel**	FEI	In situ structural biology - Advances in cryo-electron tomography
09:20	**Gabriel Lander**	TSRI	Electron microscopy of molecular motors in motion
09:40	**Mark Yeagar**	TSRI	MicroED structure of a CTD-SP1 construct of HIV-1 Gag with maturation inhibitor Bevirimat
10:00	**Bo Huang**	UCSF	Watching the inner life of a cell: CRISPR, GFP and Imagenomics
10:20	**Break**		
10:40	**Kendall Nettles**	TSRI	Super-resolution X-ray crystallography for deciphering ligand-induced allostery
11:00	**Peter Wright**	TSRI	Allosteric regulation of the hypoxic response by an intrinsically disordered protein switch
11:20	**Jane Dyson**	TSRI	Intrinsically disordered viral proteins and cancer
11:40	**Patrick Griffin**	TSRI	Chemical biology and differential HDX to probe ligand mediated receptor signaling
12:00	**Takanori Otomo**	TSRI	Structural insight into the membrane associations required for autophagosome biogenesis

Sunday Afternoon			Antibodies. Viruses, Epitopes and Vaccines (Chair: Ian Wilson)
16:00	**Dennis Burton**	TSRI	Evaluating HIV vaccine immunogens
16:20	**Andrew Ward**	TSRI	Structure-guided immunogen design
16:40	**Andy Deng**	BMS	V gene germiline encoded binding
17:00	**Charly Craik**	UCSF	Targeting dynamic protein targets with antibodies for structural and functional insight
17:20	**Jack Johnson**	TSRI	Archeal virus structure
17:40	**Break**		

			Membrane Proteins (Chair: Andrew Ward)
18:00	**Dan Minor**	UCSF	Insights into ion channel mechanism and structure
18:20	**Dennis Wolan**	TSRI	Inhibitors of bacterial lipoprotein signal peptidase as novel antibiotics
18:40	**Robert Stroud**	UCSF	Integrating cell health into endolysosomal targeting and delivery, QED!!
19:00	**David Millar**	TSRI	Conformational dynamics of GPCRs
19:20	**Matthew Francis**	UC Berkeley	Targeting the N-terminus for site-selective protein bioconjugation
20:00-22:30	**Sponsor Dinner, by invitation only – Plaza Mexicana**		

Monday Morning, May 8			SPONSORS (Chair: Andrej Sali)
09:00	**Steve Doberstein**	Nektar	NKTR-181: Separating analgesia from abuse liability of opioids
09:20	**Jeremy Murray**	Genentech	Breaking down barriers: Structural biology of lipoprotein biosynthesis in bacteria
09:35	**Paola Di Lello**	Genentech	Discovery and characterization of small molecule fragments that bind and inhibit the USP7
09:50	**Jeff Finer/ Jeff Tong**	3rd Rock Ventures	Third Rock Ventures: Company building strategy and examples of current projects
10:20	**Glen Spraggon**	GNF	Proteasome inhibitors for the treatment of Leishmaniasis, Chagas Disease and Sleeping Sickness
10:40	**Paul Marinec**	Reflexion	Development of a potent D-protein Inhibitor of VEGF-A with reduced immunogenicity and a longer half-life
11:00	**James Partridge**	GBT	Structures of full-length plasma kallikrein bound to highly specific inhibitors illustrate a new mode of targeted inhibition

11:20	**Break**		
11:40	**Cornelia Bellamacina**	Novartis	Discovery of chemical biology probes inhibiting activation of SGK3 kinase in cancer cells
12:00	**James Love**	Atum	Optimization of protein production in human cells
12:20	**Kathleen Aertgeerts**	DART Neuroscience	Rapid optimization of recombinant GPCR protein expression and stability using virus-like particles

Monday Afternoon — Nucleic Acids, Nucleic Acid Binding Proteins & Evolution (Chair: David Millar)

16:00	**Jamie Williamson**	TSRI	Quantitative analysis of ribosomal RNA modifications in human cells
16:20	**Carolyn Larabell**	UCSF	Chromatin structure, from stem cell to tumor cell
16:40	**Floyd Romesberg**	TSRI	A semi-synthetic organism that stores and retrieves increased genetic information
17:00	**Larry Gerace**	TSRI	Signaling control at the nuclear periphery
17:20	**Libby Getzoff**	TSRI	Deciphering functional insights from related protein structures and sequences
17:40	**Break**		

Chemical Biology (Chair: Kathleen Aertgeerts)

18:00	**Jack Taunton**	UCSF	How to be selectively promiscuous
18:20	**Qinghai Zhang**	TSRI	Novel amphiphiles for membrane protein studies
18:40	**Daniel Nomura**	UC Berkeley	Mapping disease-relevant druggable hotspots using chemoproteomic platforms
19:00	**Jason Gestwicki**	UCSF	Control of tau homeostasis by chaperone networks
19:20	**Lani Wu**	UCSF	The prophesies of ORACLs

Tuesday Morning, May 9 — Computation, Health and Disease (Chair: Carolyn Larabell)

08:30	**William DeGrado**	UCSF	Structure and function of amyloid- and prion-forming proteins
08:50	**Steven Altschuler**	UCSF	GSK3 - The center of the universe
09:10	**Stefano Forli**	TSRI	Design of virtual large focused libraries of HIV-1 Integrase inhibitors
09:30	**Nevan Krogan**	UCSF	Using systems approaches to studying disease
09:50	**Ahmet Yildiz**	UC Berkeley	The mechanism of dynein motility
10:10	**Joseph Bondy-Denomy**	UCSF	Bacterial viruses thwart CRISPR-Cas bacterial immune systems
10:30	**Seemay Chou**	UCSF	From bacteria to ticks: lessons in antimicrobial defense
10:50	**Arthur Olson**	TSRI	Envisioning the molecular cell

11:15 Ian Wilson and Andrej Sali — Closing Remarks

In order to protect individual rights and promote discussion, it is a requirement of the Scripps-UCSF Cabo WMEN Annual Meeting that no information presented is to be used or disclosed without the specific approval of the disclosing party. Each attendee of the Conference agrees that any information presented, whether in a formal talk or discussion, is a private communication from the individual making the contribution and is presented with the restriction that such information is not for public use. Each member of a Conference acknowledges and agrees to these restrictions as a condition of attending the Conference.

Thank You to our Sponsors: