

## Scripps/UCSF Conference 2022, May 7–10

All sessions in Los Arcos Room (please note this is a new room this year one level below)

### Saturday Evening, May 7, 2022

17:30 – 17:40	<b>Introduction and Welcome</b>		Ian Wilson and Andrej Sali
17:40 – 17:45	<b>Self-Introductions</b>	Colin Deniston Anil Gupta	Novartis Calibr at TSRI
<b>17:45 – 20:45 Short Presentations (4 + 1 min.) by TSRI, UCSF, and Stanford Graduate Students and Postdocs (Chair: Mia Huang, TSRI)</b>			
	Batuujin Burendei	TSRI	Structural determination of otopetrins
	Che Chun Tsui	TSRI	Sensational ion channels: structure and simulation
	Caroline Cuoco	TSRI	A8: At the intersection of stress signaling and lipid metabolism
	Chika Kikuchi	TSRI	Evolution of H3N2 influenza virus for recognition of human airway receptors
	Nina Moore	TSRI	Structural characterization of broad neutralizing antibodies to influenza A
	Hailee Perrett	TSRI	Cryo-EM structures of arenaviral fusion glycoproteins reveal conserved sites of vulnerability
	Tanwee Alkutkar	TSRI	Mapping epitopes for anti-EBOV monoclonal antibodies elicited by vaccination during the ChAOX1 Oxford vaccine trial
	Reem Moskovitz	TSRI	Structural insights into novel epitopes in <i>Plasmodium falciparum</i> circumsporozoite protein
	Nelson Wu	TSRI	Structure-based malaria immunogen design
	Payal Pratap	TSRI	Using electron microscopy polyclonal epitope mapping to guide iterative structure-based HIV vaccine design
	Christina Garza	TSRI	Molecular dynamics studies of HIV capsid disassembly
	Michaela Medina	TSRI	Cryo-electron tomography reveals drastic mitochondrial membrane remodeling in response to endoplasmic reticulum stress
	Sarah Mosure	TSRI/UF	Mechanisms of REV-ERB-dependent heme signaling
	Zoe Adams	TSRI	Alkynomycins: Leveraging the Glaser coupling to rigidify peptide macrocycles and develop novel therapeutics
	<b>Short Break</b>		
	Andrew Ambrose	UCSF	Discovery of a specific caspase-6 inhibitor and its use in tauopathy
	Bieke Vanslebrouck	UCSF	Structural differences of chromatin across different cell types
	Daniel Conrad	UCSF	Using lipid-conjugated DNA barcodes for multiplexed single-cell sequencing
	Hyun Jun Yang	UCSF	FLAMES multi-dimensional spectra microscopy enables the quantitative determination of distinct amyloid strains

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Janice Goh (Jia Ni Goh)	UCSF	An integrative framework of preclinical models for novel TB drug regimen development
Jie Zhou	UCSF	Targeting and blocking proteolytic neo-epitopes
Laura Keller	Stanford	Chemoproteomics identifies proline-specific serine proteases involved in membrane integrity in gut commensal bacteria
Nicole Wenzell	UCSF	Defining Sec61 client sensitivity using substrate-selective cotransins
Sandra Zakrzewska	UCSF	Structural insights into toxin recognition
Sergei Pourmal	UCSF	Structures of multidrug resistance protein MRP4 reveal basis of substrate specificity
Matthew Hancock	UCSF	Bayesian multi-state modeling from X-ray crystallography
Berliza Soriano	UCSF	Builders and breakers: Enzymes involved in peptidoglycan homeostasis
Zhen (Annie) Lin	UCSF	Molecular mechanisms underlying ligand-specific activation of engineered Notch

**21:00 – 23:00 Reception with Buffet**

**Poolside**

### Sunday Morning, May 8, 2022

#### Keynote Lecture

08:30	Robert Stroud	UCSF	Introduction
08:45	Jim Wells	UCSF	Plundering biology for new treasure

**09:45 Break**

#### Structure and Biology of Cellular Processes (Chair: Andrew Ward, TSRI)

10:00	Carolyn Larabell	UCSF	Imaging membraneless organelles and aggregates with soft x-ray tomography
10:20	Valentina Loconte	UCSF	Quantitative mapping of cellular structural properties using soft X-ray tomography
10:40	Danielle Grotjahn	TSRI	Structure among the chaos: using cellular tomography to study mitochondrial behavior
11:00	Keren Lasker	TSRI	Structure and function of the bacterial condensate PopZ
<b>11:20</b>	<b>Break</b>		
11:40	Ahmet Yildez	UC Berkeley	The regulation of motors by microtubule associated proteins
12:00	Young-Wook Jun	UCSF	Biophysical mechanisms of cis- and trans-activation of endogenous and engineered Notch
12:20	Jacob Brink	JEOL	Workflows with the CRYO ARM
12:40	Cary Bauer	Bruker	The Bruker D8 VENTURE – Advances in biological crystallography

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### Sunday Afternoon, May 8, 2022

### Chemical Biology (Chair: Jim Wells, UCSF)

16:00	Michelle Arkin	UCSF	Site-directed drug discovery for challenging targets
16:20	Michael Erb	TSRI	Chemical modulation of tumorigenic transcriptional control
16:40	Luke Lairson	TSRI	Metabolically stable small molecule STING agonists
17:00	Matthew Bogyo	Stanford	Identification of covalent binding ligands using phage display
<b>17:20</b>	<b>Group photo</b>		Main lobby steps to pools
17:40	Christian Cunningham	Genentech	Cracking the code of macrocycle drug discovery
18:00	Chris Parker	TSRI	Proteome-wide ligand and target discovery in cells
18:20	Philip Dawson	TSRI	Stretching peptides: beta-strand mimics and antibiotics
18:40	Dillon Flood	Elsie Biotechnologies	Harnessing the full potential of chemical gene silencing therapeutics through complete exploration of chemical space
19:00	Daniel Santi	ProLynx	PLX038 in the DNA damage response

20:00 – 22:30 *Sponsor Dinner, by invitation only – El Agave*

### Monday Morning, May 9, 2022

### Immunology , Microbial Pathogens, Glycans (Chair: Danielle Grojahn, TSRI)

08:30	Ian Wilson	TSRI	Immune response to SARS-CoV-2 and variants of concern
08:50	Andrew Ward	TSRI	Sequence from structure
09:10	Mark Yeager	U Miami	CryoEM structures of the human HIV-1 restriction factor SERINC3 and function as a lipid transporter
09:30	Travis Young	Calibr at TSRI	Controllable CAR-T cells: clinical progress
09:50	<b>Break</b>		
10:20	James Paulson	TSRI	Exploiting inhibitory Siglecs to suppress unwanted immune responses
10:50	Mia Huang	TSRI	Taming glycoconjugate structure and interactions in development and disease
11:10	Allison Williams	UCSF	Cracking the code for protein-peptidoglycan recognition
11:30	John Gross	UCSF	Order from chaos: how mRNA stability is regulated by an intrinsically disordered protein

**12:00 – 13:00 UCSF COVID Group Testing**

**Location: Sports Bar Terrace**

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Monday Afternoon, May 9, 2022			Non-ribosomal and ribosomal synthesis (Chair: Carolyn Larabell, UCSF)
16:00	Robert Stroud	UCSF	Caught in the act! The naked truth
16:20	Raktim Roy	TSRI/UF	Allosteric regulations in non-ribosomal peptide synthetases
16:40	Jamie Williamson	TSRI	Visualizing early events in 50S ribosome assembly
17:00	Katrin Karbstein	TSRI/UF	Quality control in ribosome maturation
17:20	Jack Taunton	UCSF	Trapped on the ribosome
17:40	<b>Break</b>		
			Membranes and Membrane Proteins (Chair: Robert Stroud, UCSF)
18:00	Daniel Minor Jr	UCSF	A through the looking glass view of ion channel structure
18:20	Jonathan Moore	Rectify Pharma	Targeting ABC transporters in rare disease
18:40	Evan Miller	UC Berkeley	Electrophysiology, unplugged: Molecules to visualize biological membrane potentials
Tuesday Morning, May 10, 2022			Integrative Computational and Structure Biology etc. (Chair: Keren Lasker, TSRI)
08:30	Andrej Sali	UCSF	Model integration
08:50	William DeGrado	UCSF	Protein design
09:10	Stefano Forli	TSRI	Proteome-wide covalent virtual screenings: milliseconds to nanomolar
<b>09:30</b>	<b>Break</b>		
09:50	David Millar	TSRI	Conformational dynamics of DNA polymerases revealed at the single-molecule level
10:10	Art Olson	TSRI	Building and visualizing the molecular nature of cellular landscape
<b>10:30</b>	<b>Ian Wilson and Andrej Sali</b>		<b>Closing Remarks</b>
<b>12:00 – 13:00</b>	<b>Scripps COVID Group Testing</b>		<b>Location: Sports Bar Terrace</b>

*In order to protect individual rights and promote discussion, it is a requirement of the Scripps/UCSF CABO 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 the Conference acknowledges and agrees to these restrictions as a condition of attending the Conference.*

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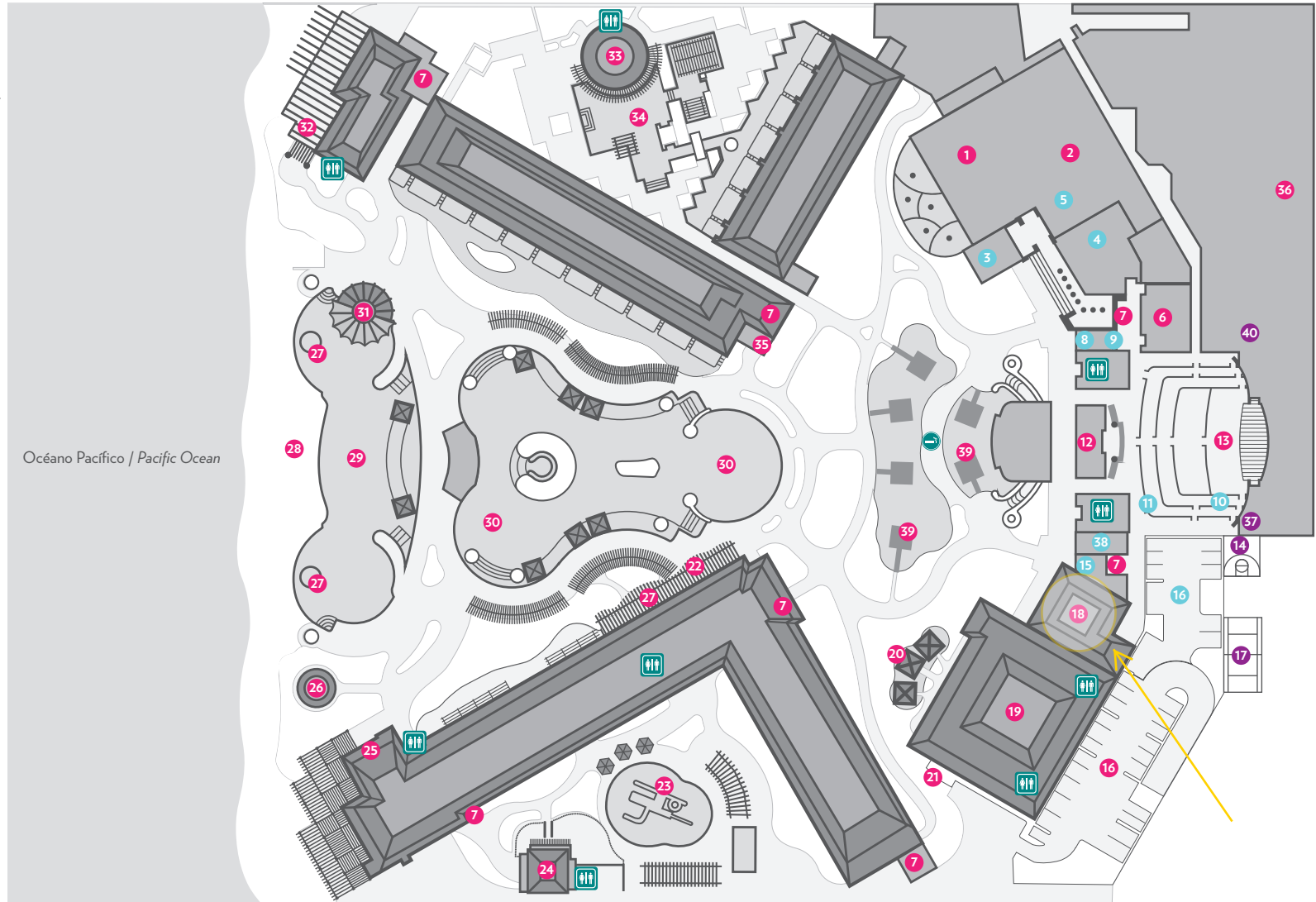


University of California  
San Francisco



Mapa General del Resort  
*Resort's Location Map*

Océano Pacífico / *Pacific Ocean*



- **Planta Baja / Ground Floor**
- **Nivel del Lobby / Lobby Level**
- **Nivel 4 / Level 4**

- Área de Fumar / *Smoking Area*
- Baños / *Restrooms*

- |   |   |  |  |
|---|---|--|--|
| 01 La Plaza Buffet / <i>Restaurant</i>          | 12 Tequilería Agave (Bar)                         | 23 Parque Acuático / <i>Water Park</i>                 | 34 Piscina Solo para Adultos / <i>Adults-Only Pool</i>   |
| 02 El Molino Buffet / <i>Restaurant</i>         | 13 Teatro / <i>Theater</i>                        | 24 KidZ Club   | 35 Centro de Actividades / <i>Activities Center</i>  |
| 03 El Mirador (Bar)                             | 14 Cancha de Baloncesto / <i>Basketball Court</i> | 25 Restaurante Zaffiro / <i>Restaurant</i>             | 36 Centro de Convenciones / <i>Convention Center</i><br>(Grand Península - Salón / <i>Ballroom</i> ) |
| 04 Restaurante Bon Vivant / <i>Restaurant</i>   | 15 Spirit of 68 - Sports Bar                      | 26 Gazebo  | 37 Gimnasio / <i>Gym</i>   |
| 05 Restaurante Dozo / <i>Restaurant</i>         | 16 Estacionamiento / <i>Parking Lot</i>           | 27 Teens Club  | 38 Pier 27 (Tienda de Regalos / <i>Gift Shop</i> )   |
| 06 Restaurante El Cortijo / <i>Restaurant</i>   | 17 Cancha de Tenis / <i>Tennis Court</i>          | 28 Fogatas Frente al Mar / <i>Oceanfront Fire Pits</i> | 39 Fogatas / <i>Firepits</i>   |
| 07 Elevadores / <i>Elevators</i>                | 18 Los Arcos - Salones / <i>Meeting Rooms</i>     | 29 Piscina Infinity / <i>Infinity Pool</i>             | 40 Club Premium Lounge   |
| 08 24 Hours Coffee House                        | 19 Zen Spa  | 30 Piscina Principal / <i>Main Pool</i>                |  |
| 09 Tour Desk                                    | 20 Cabañas para Masajes / <i>Massage Cabanas</i>  | 31 Bar Azul (Bar de Piscina / <i>Pool Bar</i> )        |  |
| 10 Recepción Principal / <i>Main Front Desk</i> | 21 Consultorio Médico / <i>Medical Center</i>     | 32 La Hacienda Beach Grill / <i>Restaurant</i>         |  |
| 11 El Piano Lobby Bar                           | 22 Snack Bar Coco Loco                            | 33 Baja Bar (Solo Adultos / <i>Adults Only</i> )       |  |