

ICCBM-18 2024 at Arizona State University (updated October 31, 2024)

Contact Information: Dr. Petra Fromme (480) 326-7840; Christopher LaMay (480) 338-7326

Sunday, November 03, 2024

6:00-8:00 pm	Welcome Reception	Biodesign C Patio

Monday, November 04, 2024

7:30 am	Registration/check-in, coffee and light breakfast	Memorial Union Ventana C (241C)
8:30-10:00 am	Session 1: Advances in crystallization techniques including High Throughput Crystallization - Chaired by Abel Moreno, Co-Chair Manashi Sonowal 8:30- 9:05 Keynote Speaker: Sarah Bowman HWI, USA 9:05- 9:30 Invited Speaker: Vivian Stojanoff NSLS II, USA	Memorial Union Ventana C (241C)



	9:30- 9:45 The nature of the molecular interactions at high resolution of the <i>Streptococcus pneumoniae</i> topo IV-DNA complex with the novel fluoroquinolone Delafloxacin: Beijia (Jessica) Wang (Imperial College London) 9:45-10:00 Convection-free environments for protein crystallization: a competition between physical and chemical interactions: Fiora Artusio (Politecnico di Torino, Italy)	
10:00-10:30 am	Coffee break	Memorial Union Ventana C (241C)
10:30 am - 12:00 pm	Session 2: Crystallization and X-ray structure analysis of membrane proteins - chaired by Vadim Cherezov, co-chair Jay-How Yang 10:30-11.00 Keynote Speaker: Martin Caffrey Trinity college, Ireland 11:00-11:30 Invited speaker: Christopher J. Gisriel UW-Madison, USA 11:30-11:45 Structural study of human neurotrophin receptor complex implicated in neuronal apoptosis and neurodegeneration: Kira DeVore (ASU) 11:45-12:00 Christopher Turner	Memorial Union Ventana C (241C)
12:00-1:30 pm	Lunch on your own	
1:30-2:00 pm	Poster Blitz of poster presenters - Chaired by Petra Fromme	Memorial Union Ventana C (241C)



2:00-2:30 pm	Coffee break	Memorial Union Ventana C (241C)
2:30-4:30 pm	Poster Presentations	Memorial Union Cochise (228)
4:30-6:00 pm	Dinner on your own	
6:00-8:00 pm	Session 3 Crystal Delivery - chaired by Alexandra Ros, co-chair Diandra Doppler 6:00-6:30 Keynote Speaker: Sarah Perry U of Massachusetts Amherst, USA 6:30-7:00 Invited speaker: Katrina Doerner European XFEL, Germany 7:00-7:30 Invited speaker: Matthias Frank Lawrence Livermore NL, USA 7:30-7:45 Optimization of Fixed-Target Sample Delivery for Serial Femtosecond Crystallography of Membrane Proteins Crystallized in Lipidic Cubic Phase: Xuanrui Ge (USC) 7:45-8:00 Fixed-target sample delivery device for protein X-ray crystallography at the Compact X-ray Light Source: Abhik Manna (ASU)	Memorial Union Ventana C (241C)



Tuesday, November 05, 2024

7:30 am	Registration/check-in, coffee and light breakfast	Memorial Union Ventana C (241C)
8:30 - 9:30 am	Plenary Lecture: Larry DeLukas Scientific Astronaut, Soluble Biotech Inc	Memorial Union Ventana C (241C)
9:30 - 10:00 am	Coffee break	Memorial Union Ventana C (241C)
10:00 am - 12:00 pm	Session 4 Crystallography Studies at X-Ray Free Electron Lasers and Time-resolved Serial Crystallography - Chaired by Sarah Bowman (tentative), co-chair Peter Smyth (tentative) 10:00-10:30 Keynote speaker: Henry Chapman CFEL, DESY and U of Hamburg, Germany 10:30-11:00 Invited speaker: Valerie Panneels Paul Scherer Institute, Switzerland 11:00-11:30 Invited speaker: Marius Schmidt U of Wisconsin Milwaukee, USA 11:30-11:45 Time-Resolved Mix and Inject Macromolecular Crystallography Enabled with Droplet Injection: Diandra Doppler (ASU) 11:45-12:00 Polymer-based microfluidic chips for time-resolved serial crystallography: Baktha Kannadasan (UMass)	Memorial Union Ventana C



12:00-1:00 pm	Lunch on your own	
1:30 - 4:30 pm	Visit to Desert Botanical Garden	Desert Botanical Garden 1201 N Galvin Pkwy
5:00-7:00 pm	Conference Dinner	Gertrude's at Desert Botanical Garden



Wednesday, November 06, 2024

7:30 am	Coffee and light breakfast	Memorial Union Ventana C (241C)
8:00 - 10:00 am	Session 5 Technical Advances in beamlines and X-ray instrumentation including Compact X-Ray Sources for Crystallography - Chaired by Petra Fromme 8:00-8:30 Keynote Speaker: Robert Fischetti Advanced Photon Source, USA 8:30-9:00 Invited speaker: Shibom Basu EMBL, Grenoble, France 9:00-9:30 Invited speaker William "Bill" Graves Arizona State University, USA 9:30-9:45 Data Analysis tools for the Compact X-ray Light Source and Compact X-ray Free Electron Laser facilities at ASU: Sabine Botha (ASU) 9:45-10:00 Title tba Richard Bean (European XFEL)	Memorial Union Ventana C (241C)
10:00-10:30 am	Coffee break	Memorial Union Ventana C (241C)



10:30 am - 12:15 pm	Session 6: Challenges in structure determination techniques: Micro-ED, CryoEM, SAXS/WAXS, Radiation damage - Chaired by Henry Chapman (tentative), co-chair Kira DeVore (tentative) 10:30-11:00 Keynote speaker: Elspeth Garman U of Oxford, UK 11:00-11:30 Invited speaker: Brent Nannenga Arizona State University, USA 11:30 -11:45 Sample preparation for routine and advanced structural biology, including serial data collection and microED: Patrick Shaw Stewart (Douglas Instruments) 11:45-12:00 Macromolecular cryo-crystallography on the XtaLAB Synergy-ED: Mark Del Campo (Rigaku) 12:00-12:15 Avoiding Common Pitfalls in cryo-EM Sample Preparation: Lynn Shrag (ASU)	Memorial Union Ventana C (241C)
12:15-1:00 pm	Lunch on your own	Memorial Union
1:00-3:00 pm	Session 7: From small to big: Crystallization for powder X-ray diffraction, Neutron Diffraction, CryoEM and Crystallization under Microgravity - Chaired by Larry DeLucas (tentative), co-chair Nikolas Capra 1:00-1:30 Keynote Speaker: Irene Margiolakis University of Patras, Greece 1:30-2:00 Invited speaker: Sarah Kessans University of Canterbury, New Zealand 2:00-2:30 Invited speaker: Flora Meilleur Oak Ridge NL, USA 2:30-2:45 Structural studies of bacterial lipases ExoU and VipD: Noopur Dubey (Gratz)	Memorial Union Ventana C (241C)



	2:45-3:00 How much can imaging help us detect micro- and nanocrystals for advanced structure determination methods? Quantifying the capabilities: Miranda Lynch (HWI)	
3.00-3:30 pm	Coffee break	Memorial Union Ventana C (241C)
3:30-5:00 pm	Poster presentation session	Memorial Union Alumni Lounge (202)
5:00-6:00 pm	Dinner on your own	Memorial Union
6:00 - 8:00 pm	Session 8: Crystals for Advances in Medicine - Chaired by Sarah Perry (tentative) 6:00-6:30 Keynote Speaker: Graciela Diaz de Delgado University of the Andes, Venezuela 6:30-7:00 Invited speaker: Lata Govada Imperial College London, UK 7:00-7:15 Crystallization versus precipitation states in full-length monoclonal antibodies solutions: Joana Ferreira (MIT, USA) 7:15-7:30 Structure of an LGR dimer - an evolutionary predecessor of glycoprotein hormone receptors: Zhen Gong (CUIMC, Columbia) 7:30-7:45 Serpin —Serpin Protein Interactions - A Previously Unreported Regulatory Mechanism for the Serpin Networks: Alexandra Lucas (ASU) 7:45-8:00 Poster and short talk awards	Memorial Union Ventana C (241C)



Thursday, November 07, 2024

Participants will sign up to the following rotating practical sessions, which take place in parallel during each of the 5 practical session blocks.

LCP crystallization - Hosted by Martin Caffrey (Trinity College); BDC room tbd

Microcrystallization for serial crystallography at XFELs - Hosted by Petra Fromme (ASU); BDC C328

Bio-Imagine IQ800 and FPLC Workshop - Hosted by An Lam Cytiva and Bao (Cytiva); BDC Crystal Characterization by Dynamic Light Scattering - Hosted by Karsten Dirks (XTAL); BDC C328

Sample delivery: jets and fixed targets - Hosted by Alexandra Ros' group (ASU); BDC C398

Micro-ED - Hosted by Brent Nannenga (ASU); BDC or Eyring Center (location tbd)

X-ray data collection - Hosted by Raimund Fromme (ASU); BDC C320/C320A

X-ray Data evaluation - Hosted by Sabine Botha; BDA A250 (Thursday), BDC C355 (Friday)

Phase Diagrams and Microseeding - Patrick Shaw (Douglas Instruments); location tbd

Crystal Characterization SONICC - Hosted by Eranjalee Ranaweera (ASU); BDC, C328A

8:30 am	Light breakfast on Biodesign C Patio	Biodesign C Patio
9:00 am-11:45 am	Lab tours of CXFEL labs, Biodesign C labs, and Physical Sciences labs	Biodesign C and Physical Sciences



12:00-1:00 pm	Provided lunch on Biodesign C Patio	Biodesign C Patio walk to next practical session
1:15-3:00 pm	Practical Sessions Talks (sign up Monday but can change)	BDC/BDA/PSC/Ey ring Center
3:00-3:30 pm	Coffee Break	Biodesign C
3:30-5:30 pm	Practical Session 1	BDC/PSC/Eyring Center
5:30 pm	Dinner on your own	



Friday, November 08, 2024

8:30 am	Light breakfast on Biodesign C Patio	Biodesign C Patio
9:00 -10:45 am	Rotating Practical Session 2	BDC/BDA/PSC/Ey ring Center
11:00 am -12:00 pm	Provided lunch on Biodesign C Patio	Biodesign C Patio
12:15-2:00 pm	Rotating Practical Session 3	BDC/BDA/PSC/Ey ring Center
2:00-2:30 pm	Coffee Break	Biodesign C Room TBA Or CL 1-21 lobby
2:30-4:30 pm	Rotating Practical Sessions 4	BDC/BDA/PSC/Ey ring Center
4:30-5:00 pm	Closing of the ICCBM-18 conference	BDC/BDA/PSC/Ey ring Center