International School on Biological Crystallization

Granada (SPAIN), May 26th – 31st, 2019

LABORATORIO DE ESTUDIOS CRISTALOGRÁFICOS, IACT (CSIC – UGR)

Sunday, May 26th — WELCOME

18:00 – 20:00	Registration	
20:00	Welcome Cocktail at *Gran Hotel Luna de Granada*	

Monday, May 27th — FROM SOLUTION TO PROTEIN CRYSTALS

08:00 – 09:00	Registration	
09:00 – 09:15	Overview of the School	J.A.G. & J.M.G-R
09:15 – 10:00	Protein purification strategies intended for crystallization	S. Martínez-R
10:00 – 10:30	Coffee Break	
10:30 – 11:15	Nucleation of Macromolecular Crystals	J.M. García-Ruíz
11:15 – 12:00	Preparation of protein samples for crystallization experiments	P. Řezáčová
12:00 – 12:45	From protein solution to crystals: Nature and formation of protein crystals	B. Rupp
12:45 – 13:30	Crystal Growth Kinetics and Mechanisms	F. Otálora
13:30 – 15:00	Lunch	
15:00 – 15:45	Hofmeister ion series and the protein phase diagram: consequences for solubilization and crystallization	J. Mesters
15:45 – 16:30	Protein Crystallization by capillary Counter-diffusion technique	J.A. Gavira
16:30 – 17:15	Rationalizing high throughput, is that possible?	J. Newman
17:15 – 18:00	What's this in my drop? Interpreting crystallization results	T. Bergfors
18:00 – 18:30	Coffee break	
18:30 – 19:30	Poster Session	

Tuesday, May 28th — TINY & LARGE CRYSTALS, MEMBRANE PROTEINS, COMPLEXES, SAXS, EM...

09:00 – 09:30	Seeds of success: An overview of the Microseed Matrix Screening technique	M. Marsh
09:30 – 10:00	Microfluidics in action: crystallization and crystallography in microchips	C. Sauter
10:00 – 10:30	A guide to choosing your method for crystallization	L. Govada
10:30 – 11:00	Coffee Break	
11:00 – 12:00	Femtosecond Crystallography, a New Era in Structural Biology	P. Fromme
12:00 – 12:45	Crystallization of Membrane Proteins in Lipid Mesophases	M. Caffrey
12:45 – 13:30	*Helicobacter pylori* Acid Acclimation: The Evil Duo of a pH-Gated Urea Channel and a Cytoplasmic Urease	H. Luecke
13:30 – 15:00	Lunch	
15:00 – 15:45	Crystallization of Protein-Nucleic Acid Complexes	C. Biertümpfel
15:45 – 16:30	Manipulation of Tiny Crystals for Serial Crystallography	J.M. Martin-G.
16:30 – 17:15	How to grow high-quality protein crystals in batch method using electromagnetic fields	A. Moreno
17:15 – 18:00	How to grow protein crystals for neutron diffraction	J.D. Ng
18:00 – 18:15	Coffee break	
18:15 – 19:15	Poster Session	

Wednesday, May 29st TINY & LARGE CRYSTALS, MEMBRANE PROTEINS, COMPLEXES, SAXS, EM…

09:00 – 09:30	Differences in crystallization of various haloalkane dehalogenases	I.K. Smatanova
09:30 – 10:00	Optimisation of Crystal Growth for Neutron MX	M. Budayova-Spano
10:00 – 10:30	The use of Microfluidics for Fundamental Studies	N. Candoni
10:30 – 11:00	Coffee Break	
11:00 – 11:45	Analysing, scoring and optimizing *in vitro* and *in vivo* Crystallization Conditions for XFEL and serial Diffraction Data Collection	C. Betzel
11:45 – 12:30	Novel Developments in Structural Biology	G. Calero
12:30 – 13:30	Small Angle Solution Scattering as a complementary technique in structural biology studies	E. Snell
13:30 – 15:00	Lunch	
15:00 – 15:45	Visualization of macromolecular complexes under cryo-EM	N. Mizuno
15:45 – 16:30	Putting things into protein crystals	T. Peat
16:30 – 17:15	The Surface Morphology of Space Grown Crystals	K. Tsukamoto
17:15 – 18:00	The Symmetry of the Alhambra	J.M. García-Ruíz
18:00 – 18:15	Coffee break	
18:15 – 19:15	Poster Session	
22:00	**NIGHT VISIT TO THE ALHAMBRA**	

Thursday, May 30th DEMONSTRATION FAIR

09:00 – 10:30	Practical Demonstration *"a la carte"*
10:30 – 11:00	Coffee Break
11:00 – 13:30	Practical Demonstration *"a la carte"*
13:30 – 15:00	Lunch
15:00 – 16:30	Practical Demonstration *"a la carte"*
16:30 – 17:00	Coffee break
17:00 – 17:45	Practical Demonstration *"a la carte"*
20:00	**DINNER/FIESTA FLAMENCA**

Friday, May 31st CLOSING LECTURES & STUDENTS PRESENTATIONS

09:15 – 10:15	Round Table on convergent techniques: Diffraction, XFEL, Micro-ED, SAS, NMR, Cryo-EM and the Future of Protein Crystallization
10:15 – 11:00	Round Table on Publishing your results with the Journals Editors
11:00 – 11:30	Coffee Break
11:30 – 12:30	Oral Presentation of finalist posters
12:30 – 13:30	Poster Prizes and Closing of the School
13:30 – 15:00	Lunch

Come to Granada and enjoy learning about

***Protein Crystallization* including Large Crystals, Tiny Crystals, Complexes and Membrane Proteins.**

More than 20 live practical demonstrations on crystal growth techniques!

Get the most out of it within a friendly atmosphere by interacting with other students and 25 outstanding lecturers.

Take the opportunity to present and discuss your work and if selected to present it during last day with your new friends!!!