

International School on Biological Crystallization

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

LABORATORIO DE ESTUDIOS CRISTALOGRAFICOS, 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 Preparation of protein samples for crystallization experiments P. Řezáčová
11:15 – 12:00 Physicochemical properties of crystallizing protein solutions B. Rupp
12:00 – 12:45 Nucleation of Macromolecular Crystals J.M. García-Ruiz
12:45 – 13:30 Crystal Growth Kinetics and Mechanisms F. Otálora
13:30 – 15:00 Lunch
15:00 – 15:45 Standard Crystallization Techniques: How do they work? 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 to do if everything has failed T. Bergfors
18:00 – 18:30 Coffee break
18:30 – 19:30 Poster Session

Tuesday, May 28th TINY CRYSTALS, COMPLEXES AND MEMBRANE PROTEINS

- 09:00 – 09:30 Seeds of Success: An Overview of MMS Technique M. Marsh
09:30 – 10:00 In microchip crystallization & crystallography C. Sauter
10:00 – 10:30 Bach crystallization, what else can you do? 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 Membrane protein crystallization H. Luecke
13:30 – 15:00 Lunch
15:00 – 15:45 *Analysing, scoring and optimizing in vitro and in vivo Crystallization Conditions for XFEL and serial Diffraction Data Collection* C. Betzel
15:45 – 16:30 Crystallization of Protein-Nucleic Acid Complexes C. Biertümfel
16:30 – 17:15 Manipulation of Tiny Crystals for Serial Crystallography J.M. Martin-G.
17:15 – 18:00 Electric and magnetic influence on protein crystallization A. Moreno
18:00 – 18:15 Coffee break
18:15 – 19:15 Poster Session

Wednesday, May 29st LARGE CRYSTALS, SAXS, EM, ...

09:00 – 09:30	Maximizing Crystallization Screening Results	M. Pusey
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	The growth of large crystals for neutron diffraction	J.D. Ng
11:45 – 12:30	Novel Developments in Structural Biology	G. Calero
12:30 – 13:30	SAX 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. Mizumo
15:45 – 16:30	Putting things into protein crystals	T. Peat
16:30 – 17:15	Crystallization under microgravity conditions	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!!!