

MCIB-V CALENDAR M1 (22nd Sept 2020).

Most classes will be at the **CIB** (Assembly Hall) unless indicated otherwise.

The dates marked by **IQFR** lecturing will be at the IQFR - Rocasolano Institute (Serrano 119; metro República Argentina), Dorotea Barnés Library.

Lecture/Practical session

Text in **black**: research topics lectures

Text in **blue**: advanced methods and practical sessions

Text in **grey**: Journal club sessions

Text in **red**: holidays

***Note: 1h time slot duration.**

3DBIOCHEM – Structural and Chemical Biology			
Mon 5-10	11:00-12:00	Welcome at Assembly Hall (UIMP)	G. Rivas
	17:00-19:00 Zoom meeting	The cell as a collection of protein machines. Preparing the next generation of molecular cell biologists	Prof. Bruce Alberts
1. Basic concepts: Molecular Interactions			
Tue 6-10 (CIB)	09:30-10:30	Machineries of life	J.M. Valpuesta
	10:40-11:40	Journal Club introduction	G. Rivas
	12:00-13:00	Interactions in biology	S.M. Santamaría
2. Methods: Nuclear Magnetic Resonance			
Wed 7-10 (CIB)	09:30-10:30	NMR- Principles	F.J. Cañada
	10:40-11:40	NMR- Practical Session	F.J. Cañada
1. Basic concepts: Molecular Interactions			
Thu 8-10 (CIB)	09:30-10:30	Biomembranes/protein-lipid complexes	D. Lietha
	10:40-11:40	Carbohydrates	F.J. Cañada
Fri 9-10 (IQFR)	09:30-10:30	Folding & unfolding/ Intrinsically disordered proteins	D. Laurents
	10:40-11:40	RNA/ Nucleic acids	J.M. Cañadillas
	12:00-13:00	Protein structure and dynamics	J. Oroz

2. Methods: X-Ray Crystallography			
Mon 12-10	Holidays		
Tue 13-10 (IQFR)	09:30-10:30	XRC- Principles	A. Albert
	10:40-13:30	XRC- Practical session	A. Albert/L. Infantes/B. González
Wed 14-10 (CIB)	09:30-10:30	Analytical ultracentrifugation & Light scattering	J.R. Luque
	10:40-11:40	Fluorescence	S. Zorrilla
	12:00-13:00	XRC- Practical session	C. Vega

Thu 15-10 (CIB)	09:30-11:30	Journal Club
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1. Basic concepts: Macromolecular function			
Fri 16-10 (IQFR)	09:30-10:30	Protein sugar complexes	J.M. Mancheño
	10:40-11:40	Enzymatic systems	J.M. Mancheño

1. Basic concepts: Macromolecular function			
Mon 19-10 (CIB)	09:30-10:30	Biomolecules of life	R. Giraldo (CNB)
	10:40-11:40	Regulation	C. Vega
	12:00-13:00	Crowding and liquid phase condensation	G. Rivas

2. Methods: Electron Microscopy			
Tue 20-10 (CIB)	09:30-10:30	Cryo-EM- Principles	C. F. Tornero
	10:40-13:40	Cryo-EM- Practical session	R. Núñez / F. Escolar

2. Methods: Molecular Modelling			
Wed 21-10 (CIB)	09:30-10:30	Molecular Modelling	S.M. Santamaría
	10:40-11:40	Simulations	S.M. Santamaría
	12:00-13:00	Macromolecular fitting/Multiscale dynamics/Modelling	P. Chacón

1. Basic concepts: Chemical Biology			
Thu 22-10 (CIB)	09:30-10:30	Chemical Biology 1	R. Pérez
	10:40-11:40	Chemical Biology 2	S.M. Santamaría
	12:00-13:00	Practical session	R. Pérez/S.M. Santamaría

Mon 26-10 (CIB)	09:30-11:30	Journal Club
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Mon 02-11		Holidays	
Tue 03-11 (CIB)	09:30-11:30	EXAM	