

Biochemistry and Structural Biology (BSB)

Please note: Attendance restricted to 2008 PhD students for the sessions involving group activities

31 March (Mon)	1 April (Tues)	2 April (Wed)	3 April (Thur)	4 April (Fri)	7 April (Mon)
<p><i>Opening</i> Artur Martinho Simões (9.30-9.40)</p> <p><i>Presentation of the program by the coordinators</i> (9.40-10.30)</p> <p>Break (10.30-10.40)</p> <p><i>Metals in Biology</i> Miguel Teixeira (10.40-11.40)</p> <p>Break (11.40-11.50)</p> <p><i>Introduction to spectroscopy</i> Eurico Melo (11.50-12.50)</p>	<p><i>Electron paramagnetic resonance in Biology</i> Miguel Teixeira (9.30-10.30)</p> <p>Break (10.30-10.40)</p> <p><i>Raman spectroscopy: theoretical basis and applications</i> Smilja Todorovic (10.40-11.40)</p> <p>Break (11.40-11.50)</p> <p><i>Mössbauer Spectroscopy</i> Filipe Oliveira (11.50-12.50)</p>	<p><i>Protein structure</i> Margarida Archer (9.30-10.30)</p> <p>Break (10.30-10.40)</p> <p><i>Protein and small molecule crystallography</i> Daniele de Sanctis (10.40-11.40)</p> <p>Break (11.40-11.50)</p> <p><i>Crystallography (cont.)</i> Daniela de Sanctis (11.50-12.50)</p>	<p><i>Protein folding</i> Cláudio Gomes (9.30-10.30)</p> <p>Break (10.30-10.40)</p> <p><i>Protein folding</i> Cláudio Gomes (10.40-13.00)</p> <p>Afternoon free</p>	<p><i>Nuclear Magnetic Resonance in Structural Biology</i> David Turner/Pedro Lamosa (9.30-10.30)</p> <p>Break (10.30-10.50)</p> <p><i>NMR (cont.)</i> David Turner/Pedro Lamosa (10.50-12.30)</p> <p><i>Case studies in structural biology</i>* Group activities Presentation of papers Ricardo Louro Patrick Groves Manolis Matzapetakis Catarina Paquete (14.30-17.30)</p>	<p><i>Molecular mechanics/ dynamics of biomolecules</i> Cláudio M. Soares (9.30-10.30)</p> <p>Break (10.30-10.40)</p> <p><i>Protein electrostatics</i> António M. Baptista (10.40-11.40)</p> <p>Break (11.40-11.50)</p> <p><i>Protein structure prediction</i> Cláudio M. Soares (11.50-12.50)</p> <p><i>Molecular visualisation</i>* Cláudio M. Soares António M. Baptista (14.30-17.30)</p>
<p><i>Presentation of the Ph.D. projects by the students</i>* (4+1min) Coordinators (14.30-17.30)</p>	<p><i>Energy transduction in respiratory systems</i>* Group activities Paper discussion Manuela Pereira Inês Pereira Andreia Fernandes (15.30-17.30)</p>	<p><i>How to interpret X-ray Crystallographic Data</i>* Group activities Paper discussion Pedro Matias Carlos Frazão (14.30-17.30)</p>			

Biomolecular Chemistry (BC)

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8 April (Tue)	9 April (Wed)	10 April (Thu)	11 April (Fri)	14 April (Mon)
<p><i>Natural products isolation and asymmetric catalysis</i> Christopher Maycock (9.30-11.00)</p> <p>Break (11.00-11.20)</p> <p><i>Organocatalysis: synthesis of novel catalysts</i> Rita Ventura (11:20-12:50)</p>	<p><i>Potentiometry with ion-selective electrodes and cyclic voltametry</i> Margarida Santos (IST) (9.30-11.00)</p> <p>Break (11.00-11.20)</p> <p><i>Radioisotopes and biomedical applications</i> Isabel Santos, António Paulo (ITN) (11.20-13.30)</p>	<p><i>Supramolecular chemistry: an overview</i> Rita Delgado (9.30-11.00)</p> <p>Break (11.00-11.20)</p> <p><i>Metal based drugs</i> Carlos C. Romão (11.20-12.50)</p>	<p><i>UV-Vis Spectroscopy</i> Eurico Melo (9.30-11.30)</p> <p>Break (11.30-11.50)</p> <p><i>Atomic force microscopy</i> Miguel Castanho (FC/UL) (11.50-12.50)</p>	<p><i>Hyperthermophiles as a source of new protein stabilizers</i> Helena Santos (9.30-11.00)</p> <p>Break (11.00-11.20)</p> <p><i>Nutraceuticals</i> Catarina Duarte (11.20-12.20)</p>
<p><i>Homology - detection and functional inference</i> José Leal (IGC) (14.30-17.30)</p>	<p><i>Philosophy of Science</i> <i>Rigor as an ideal. A discussion of the philosophical presuppositions of the modern scientific project</i> Marta Mendonça (FCSH/UNL) (14:30- 15.30)</p>	<p><i>Organometallic Compounds in Medicine and in Structural Biology*</i> Group activities Paper presentation and discussion Beatriz Royo Patrícia Reis (14.30-17.30)</p>	<p><i>Equipment and methods in UV-Vis spectroscopy*</i> Eurico Melo Visit to the lab (14.30-17.30)</p>	<p><i>Mass spectrometry*</i> Ana Coelho Visit to the lab (14.30-17.30)</p>

Microbial Physiology and Pathogenesis (MPP)

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15 April (Tue)	16 April (Wed)	17 April (Thur)	18 April (Fri)	21 April (Mon)
<p><i>Partitioning of the transcriptional space I</i> Adriano Henriques (9.30-10.30)</p> <p><i>Partitioning of the transcriptional space II</i> Adriano Henriques (10.40-11.40)</p> <p><i>Transcriptional regulation: protein-DNA interactions</i> Isabel Sá-Nogueira (11.50-12.50)</p>	<p><i>Control of gene expression: the central role of RNA</i> Cecilia Arraiano (9.30-11.00)</p> <p><i>Surviving antibiotics: extensive changes in transcription profile induced by antibiotics</i> Rita Sobral (11.20-12.50)</p>	<p><i>Quorum-sensing and bacterial host relationship</i> Karina Xavier (9.30-10.30)</p> <p><i>Evolution of the microbial physiology - from food to disease</i> Maria Fátima Lopes (10.40-11.40)</p> <p><i>Enterococci from commensal to pathogenic bacteria</i> Rosário Mato (11.50-12.50)</p>	<p><i>Metabolic networks and integration of metabolism</i> Ana Rute Neves (9.30-11.00)</p> <p><i>Bacterial cell surface – composition, metabolic pathways and role in microbial pathogenesis</i> Sérgio Filipe (11.20-12.50)</p>	<p><i>Microbial Survival To Nitrosative And Oxidative Stress Imposed By The Immune System</i> Lígia Saraiva (9.30-11.00)</p> <p>Listeria infection: adaptation to host environment and subversion of host cellular functions Didier Cabanes (11.20-12.50)</p>
<p><i>Introduction to Bacterial Strategies for Coping with Stress*</i></p> <p>Group activities Karina Xavier Rita Sobral (14.30-17.30)</p>	<p><i>Bacterial Strategies for Coping with Stress*</i></p> <p>Presentation of papers Group activities Karina Xavier Rita Sobral (14.30-17.30)</p>	<p><i>Introduction to Proteolysis of the Bacterial Proteome*</i></p> <p>Group activities Sergio Filipe James Yates (14.30-17.30)</p>	<p><i>Proteolysis of the Bacterial Proteome*</i></p> <p>Presentation of papers Group activities Sergio Filipe James Yates (14.30-17.30)</p>	<p>Afternoon free</p>

Cell and Developmental Biology (CDB)

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22 April (Tue)	23 April (Wed)	24 April (Thur)	28 April (Mon)	29 April (Tue)
<p><i>Cellular Organization of Genome Function</i> Rita Abranches (9.30-10.30)</p> <p><i>Light Microscopy in Cell Biology</i> Nuno Moreno, IGC (10.40-11.40)</p> <p><i>3D Live Cell Imaging</i> Gabriel Martins, IGC/FCUL (11.50-12.50)</p>	<p><i>Plant Secondary Metabolites</i> C. Pinto Ricardo (9.30-10.30)</p> <p><i>Growth and morphogenesis at the cellular level: ion dynamics and pollen tube growth</i> Jose Feijó, IGC/FCUL (10.40-11.40)</p> <p><i>Limits and Applications of Electron Microscopy in the age of live imaging and molecular constructs</i> Rui Malho, FCUL (11.50-12.50)</p>	<p><i>Bacterial Cell Division</i> Mariana Pinho (9.30-10.30)</p> <p><i>Cell Cycle and Cell Division Mechanisms</i> Alvaro Tavares, IGC (10.40-11.40)</p> <p><i>Centrosomes, Cilia and Cancer</i> Mónica Dias, IGC (11.50-12.50)</p>	<p><i>A View at specific processes essential for vertebrate Development</i> Moises Mallo, IGC (9.30-11.00)</p> <p><i>Prokaryotic Development</i> Adriano Henriques (11.20-12.50)</p>	<p><i>The endocytic pathway</i> Miguel Seabra, IGC (9.30-10.30)</p> <p><i>Protein secretion and glycosylation in animal cells</i> Júlia Costa (10.40-11.40)</p> <p><i>Signalling in Yeast under stress response</i> Claudina R. Pousada (11.50-12.50)</p>
<p><i>Microscopy – Viewing samples under the fluorescence microscope. Overview of different techniques to visualize genes and genomes</i> *</p> <p>Nuno Geraldo Liliana Marum (14.30-17.30)</p>	<p><i>Philosophy of Science</i></p> <p><i>Sociology of Science</i> (15.30-17.20)</p>	<p>CDB Journal Club*</p> <p>Nuno Geraldo Rita Abranches (14.30-17.30)</p>	<p>CDB Paper Presentations – part I *</p> <p>(14.30-17.30)</p>	<p>CDB Paper presentations – part II *</p> <p>(14.30-17.30)</p>

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Biotechnology

30 April(Wed)	2 May (Fri)	5 May (Mon)	6 May (Tue)	7 May (Wed)	8 May (Thu)
<p><i>Integrating protein science and technology: the laccase-study</i> Lígia Martins (9.30-10.30)</p> <p><i>Reporters of gene expression and protein localisation</i> Regina Menezes (10.40-11.40)</p> <p><i>Separation of biomolecules</i> Inês Pereira (11.50-12.50)</p>	<p><i>Main strategies and achievements in plant genetic engineering</i> Margarida Oliveira (9.30-10.30)</p> <p><i>Molecular pharming</i> Rita Abranches (10.40-11.40)</p> <p><i>Plant extracellular matrices: identifying matrix functions as targets for improved crop characteristics</i> Phil Jackson (11.50-12.50)</p>	<p><i>General introduction to animal cell technology</i> Manuel Carrondo (9.30-10.30)</p> <p><i>Animal cell cultures in biomedical research</i> Paula Alves (10.40-11.40)</p> <p><i>Vectors design and cell line engineering</i> Ana Sofia Coroadinha (11.50-12.50)</p>	<p><i>Bioethics – challenges and dilemmas for our times</i> Paula Martinho da Silva (CNEV) (09.30-10.30)</p> <p><i>Biosensors</i> Abel Oliva (10.40-11.40)</p> <p><i>Biological targets for prodrug strategy</i> Ana Luísa Simplicio (11.50-12.50)</p>	<p><i>Green solvents for separations</i> Luis Paulo Rebelo (9.30-10.30)</p> <p><i>Ionic liquids in silico: understanding their structure and properties</i> Agílio Pádua (Université Blaise Pascal) (10.40-11.40)</p> <p><i>Solvation in alternative reaction and extraction media</i> Margarida Costa Gomes (Université Blaise Pascal) (11.50-12.50)</p>	<p><i>Statistic analysis in Biology and Chemistry</i> António Ferreira (FCUL) (9.30-11.40)</p> <p><i>Good Laboratory Practices</i> Teresa Crespo (11.50-12.50)</p>
<p>Afternoon free</p>	<p><i>Biological issues, technologies and ethics in plant genetic engineering*</i> Demonstration. Group discussion. Célia Miguel Ana Sanchez (14.30-17.30)</p>	<p><i>Cell therapy and gene therapy: technologies and clinical applications*</i> Group activities. Short presentation and discussion of papers. Ana Sofia Coroadinha Pedro Cruz (14.30-17.30)</p>	<p><i>Fermentation and large-scale production*</i> Class+visit pilot plant António Cunha (14.30-17.30)</p>	<p><i>A Technological mix of Microbiology and Chemistry*</i> Group activities. Discussion of papers Luís Paulo Rebelo José Nuno Lopes (14.30-17.30)</p>	<p><i>Practising safe science</i> António Cunha Helena Matias (14.30-16.00)</p>

Philosophy and Sociology of Science

23 April (Wed)

Sociology of Science

Science for the 21st Century

João Caraça (FCG)

(15.30-16.20)

*The sociology of science:
theory and empirical research
(a brief overview and some
recent studies)*

António Firmino da Costa

(ISCTE)

(16.30-17.20)

Bioentrepreneurship

9 May (Fri)

*Recombinant human protein
therapeutics: quality, safety,
structural and approval
aspects*

Harald Conradt
(9.30-10.30)

Alfama

Nuno Arantes de Oliveira
(10.40-11.40)

GlycoThera

Harald Conradt
(11.50-12.50)

IAPMEI

Bráz Costa (IAPMEI)
(14.30-15.20)

Augusto Mateus (ISEG)
(15.30-16.20)

*Factors for Biomedical
Research at the University-
Industry Interface*

Manuel Carrondo
(16.30-17.20)