

Theoretical Lectures

Practical Activities

Time	Wednesday, 10/11/2010	Thursday, 11/11/2010	Friday, 12/11/2010	Week 15-19/11/2010
9.00 – 10.15	Basic aspects of animal cell cultivation <i>Leda Castilho</i>	Apoptosis and Glycosylational Processing <i>Michael Betenbaugh</i>	HEK-293 cells a well established platform for manufacturing gene delivery vectors for cell and gene therapy <i>Amine Kamen</i>	Comparison of different culture mode using a model cell line: maximal cell density achieved, cell viability, substrates consumption and products formation. Cell death evaluation by microscopy and flow cytometry.
10.15 – 11.00	Proliferation, metabolism and cell death in animal cell cultures <i>Francesc Godia</i>	Bioreactors and operation modes <i>Ricardo Kratje</i>	Viral vaccines production <i>Héla Kallel</i>	
Break				
11.30 – 12.45	Culture media for animal cells <i>Maria Angela Moraes</i>	Bioprocess development for recombinant protein production in mammalian cell cultures <i>Martin Gawlitzek</i>	Bioengineering stem cell cultivation: 3D approaches for pre-clinical research and cell therapy. <i>Paula Alves</i>	Cell-based assays for in vitro biological activity determination.
Lunch				
14.30 – 15.15	Gene expression in animal cells <i>Hansjörg Hauser</i>	Quality control in the production of therapeutic products <i>Marina Etcheverrigaray</i>	Adult (differentiated) cells for therapy and drug evaluation <i>Marc Barthold</i>	Generation of a recombinant cell line: comparison between different transfection methods using reporter plasmids. Cloning and selection methods: limit dilution vs. cell sorting.
Break				
15.45 – 17	Recombinant protein and antibody production. Proteomics/Genomics <i>Adolfo Castillo</i>	Cell-based assays: drug discovery screening, toxicity studies, automated systems <i>Jean-Michel Garcia</i>	Challenges to place biotechnological pharmaceutical products on the market <i>Lucia Muxi</i>	
17 – 18.15	Antibody production: as research tools, diagnosis or therapy purpose <i>Farida Nato</i>			



INTERNATIONAL TRAINING COURSE
"ANIMAL CELL BIOTECHNOLOGY:
PRODUCTS FROM CELLS – CELLS AS PRODUCTS"
Montevideo, November 10th-19th, 2010



United Nations
University
UNU-BIOLAC
Biotechnology for Latin America and The Caribbean
Programa de Biotecnología para América Latina y el Caribe



CONFIRMED LECTURERS

- 1- Paula Marques Alves, PhD, *Animal Cell Technology Unit, ITQB-UNL/IBET, Portugal*
- 2- Dr. Marc Barthold, *Miltenyi Biotec GmbH, Germany*
- 3- Mike Betenbaugh, PhD, *Johns Hopkins University – JHU, USA*
- 4- Dra. Mariela Bollati, *Cell Biology Unit, Institut Pasteur de Montevideo, Uruguay*
- 5- Adolfo J. Castillo Vitloch, PhD, *Director of Product Development, Institute of Molecular Immunology, Cuba*
- 6- Leda R. Castilho, Professor, *Federal University of Rio de Janeiro (COPPE-UFRJ), Brazil*
- 7- Dra. Marina Etcheverrigaray, *Laboratorio de Cultivos Celulares, Universidad Nacional de Litoral, Argentina*
- 8- Garcia Jean-Michel, Ph.D, *Translational Research Team Leader, HKU-Pasteur Research Centre, China*
- 9- Martin Gawlitzek, Ph.D, *Senior Group Leader, Late Stage Cell Culture, Genentech, USA*
- 10- Prof. Francesc Gòdia, *Universitat Autònoma de Barcelona, Spain*
- 11- Dr. Hansjörg Hauser, *Head of Division Molecular Biotechnology, Helmholtz Centre for Infection Research, Germany*
- 12- Hèla Kallel, PhD, *Institut Pasteur de Tunis, Tunisia*
- 13- Amine Kamen, PhD, *Group Leader Animal Cell Technology- Bioprocess Centre, Biotechnology Research Institute, NRC, Canada*
- 14- Prof. Dr. Ricardo Kratje, *Laboratorio de Cultivos Celulares, Universidad Nacional de Litoral, Argentina*
- 15- Profa. Dra. Ângela Maria Moraes, *Departamento de Processos Biotecnológicos, Universidade Estadual de Campinas, Brazil*
- 16- Q.F. Lucía Muxí, *Technical Director Laboratorios Clausen SA, Uruguay*
- 17- Dr. Farida Nato, *Plate-Forme 5-Departement de Biologie Structurale et Chimie - Institut Pasteur Paris, France*