

EuSysBio ERASMUS-MUNDUS MSc
Winter Course in Systems Biology

Lisbon, 9-14th January 2012
DETAILED PROGRAM

Monday, 9th

9:00 - “Walking around IST”, *NAPE* (Student Support Unit)

10:30 - “Welcome and Course Outline” (meeting room, Central Building), *José Santos Vítor* (*International Relations of IST*) and *Isabel Sá-Correia* (Coordinator of EuSysBio at IST)

11:30 – PORTUGUESE CLASS

12:30 LUNCH

14:00 – The BioEngineering Research Group lab tour (7th floor, South tower), *BERG*

15:00 – The Thin-film MEMS and BioMEMS group lab tour at INESC Microsistemas e Nanotecnologias (INESC building), *INESC-MN*

16:00 – Computational biology lab tour (INESC building), *KDBIO, INESC-ID*

Tuesday, 10th

9:00 – Functional Genomics Lab tour (6th floor, South tower), *BSRG*

11:30 – PORTUGUESE CLASS

12:30 LUNCH

14:00 WALKING TOUR – Original Lisbon walk.

Wednesday, 11th

9:00 – Stem Cell Bioengineering lab tour (TAGUS Park), *BERG*

11:30 – PORTUGUESE CLASS

12:30 LUNCH

Guest Lecturer Seminars (room QA02.2, South tower), Eugene Kolker,

14:00 – “Introduction into Fourth Paradigm of Science”

14:30 – “MOPED and Integrative Analysis of Omics Data”

15:30 COFFEE BREAK

15:45 – “Functional Annotation of Proteins”

16:15 – “Predictive Analytics”

15:45 – “Final Questions and Answers”

Thursday, 12th

Aalto Seminars (room QA1.3, South tower)

9:00 – “Making microarray and RNA-seq gene expression data comparable”, *Karolis Udziela*

9:25 – “Differential Gene Expression Analysis”, *Sitaraman Rajaraman*

9:50 – “Parameter estimation for the transmission model of *Streptococcus pneumoniae* from various simulated data”, *Jiang Xu*

10:20 BREAK

10: 40 – “Computational biology approaches to reveal molecular mechanisms and networks”, *Harri Landesmaki*, Aalto University, Finland

11:30 – PORTUGUESE CLASS

12:30 LUNCH

IST Seminars (room QA1.3, South tower)

14:00 – “2-DE-based quantitative proteomics revealed Human Mesenchymal Stem Cell expression program upon extended ex-vivo cultivation”, *Andreia Madeira*, IBB-BSRG, IST, Portugal

14:30 – “System-level insights into the molecular mechanisms of adaptation and tolerance to acetic acid in the food spoilage yeast *Zygosaccharomyces bailii*”, *Joana Guerreiro*, IBB-BSRG, IST, Portugal

15:00 COFFEE BREAK

15:30 – “Microarray Data Analysis of *Streptococcus pneumoniae* D39 Δ CCPA versus D39 Strain”, *Bimal Babu*

16:00 – “Defining the complex transcriptional regulation network of yeast drug-efflux pump encoding gene *TPO1* in response to weak acids”, *Kaur Alasoo*

16:30 – “Understanding adaptation to Microaerophilic Metabolism in *Burkholderia cenocepacia* Isolates retrieved from the Lung of a Cystic Fibrosis Patient”, *Mohamed Al Hadidi*

17:00 – INTERVIEWS FOR 2ND YEAR PLACEMENT

Friday, 13th

KTH Seminars (room QA1.3, South tower)

9:00 – “euSYSBIO Summer Projects and the second year of euSYSBIO as KTH”, *Erik Aurell*, DCB, KTH, Sweden

9:30 – “Analysis of microRNA expression”, *Maia Malonzo*

10:00 BREAK

10:30 – “Summer internship done at University of Alberta, Canada” and “Master thesis to be done at London research institute, London”, *Naveen Joshi*

11:00 – ““Data Driven Translational Modelling of Molecular Profiles and Drug Responses”, *Muhammad Ammad-ud-din*

11:30 – PORTUGUESE CLASS

12:30 LUNCH

14:00 - “Introduction to entrepreneurship” (room QA1.3, South tower), *Luísa Quintino*

16:00 COFFEE BREAK

16:30 - “Case study: can we patent genes?” (room QA1.3, South tower), *Miguel Prazeres*

Saturday, 14th

9:00 – **Guided tour to Sintra**

SOCIAL PROGRAMME & CULTURAL DIMENSION ACTIVITIES