



1st SUMMER SCHOOL

Nanomaterials for bio-applications: focus on antimicrobial research

September 30 - October 2, 2014

National Center for Scientific Research "Demokritos" (NCSR-D) -Hellenic Pasteur Institute (HPI)
Athens, Greece



Time	Tuesday, Sept. 30 th NCSR, Building #26 - 1 st floor	Wednesday, Oct. 1 st HPI, Building # 8 - ground floor	Thursday, Oct. 2 nd NCSR Building #26 - 1 st floor
09:00 - 10:00	Introduction to general bacteriology Loukia Zerva, Assoc. Professor Clinical Microbiology Laboratory, "Attikon" University Hospital,, Medical School, University of Athens, Greece	Imaging of infectious agents by Light Microscopy techniques" Haralabia Boleti, Researcher B, Dept. of Microbiology/Light Microscopy Unit, Hellenic Pasteur Institute, Greece	Devices and Microsystems for diagnostic purposes Dr. K. Misiakos, NCSR-D
15 min	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
10:15 - 11:00	Antibiotics and antibiotic resistance mechanisms Leonidas Tzouvelekis, Assoc. Professor Dept. of Microbiology, Medical School, University of Athens, Greece	Animal models: legislation, 3Rs and training Dr. Eirini Fragkiadaki, Dept. of Animal Models for Biomedical Research,Hellenic Pasteur Institute, Greece	Bioanalytical microsystems for pathogen detection based on "smart" nanotextured surfaces-Part I (lab 4) Dr. A. Tserepi, NCSR-D
11:00 - 12:00	Antibiotics: Pharmacokinetics/Pharmacodynamics Dr. Antonios Markogiannakis Dept. of Pharmacy, "Laikon" General Hospital, Greece	Antibiograms (lab 1) Vivi Miriagou, Researcher B, Dept. of Microbiology, Hellenic Pasteur Institute, Greece	Bioanalytical microsystems for pathogen detection based on "smart" nanotextured surfaces-Part II (lab 5) Dr. P. Petrou, NCSR-D
12:00 - 13:00	LUNCH	LUNCH	LUNCH
13:00 - 14:00	Nanoparticles as Drug Delivery Systems-an overview Dominique Dûchene, Prof. Emer. Univ. Paris-Sud, France	Confocal microscopy, live imaging (lab 2) Haralabia Boleti	Lab 4 & lab 5 cont.
14:00 -15:00	Drug delivery systems (DDS)-focus on cyclodextrins Thorsteinn Loftsson, Prof. Faculty of Pharmacy, U. Iceland	Confocal microscopy, live imaging (lab 2) Haralabia Boleti	Cyclodextrin derivatives as anti- infectives Dr. V. Karginov, Chief Scientific Officer, Innovative Biologics, USA
15 min	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
15:15 - 16:00	Cyclodextrin inclusion complexes- methods of characterization Dr. K. Yannakopoulou, Dr. I. M. Mavridis, NCSR-D	Animal handling (lab 3) Eirini Fragkiadaki	Starting a company Dr. V. Karginov, Chief Scientific Officer, Innovative Biologics, USA
16:00 - 17:00	Demonstration-labs (NMR, X-ray)	Visit to the Acropolis Museum	Closing Remarks