

This Socrates Intensive Program focuses on the specific aspects of innovative therapeutics, including new molecules, new technologies and alternative administration routes. The program is coordinated by the University of Parma and involves 12 European Universities. The public of the course are primarily students and researchers coming from Universities participating to the network. The teachers are coming from the same Universities, plus invited well-known speakers.

This Socrates Network was centered on a program proposed by Prof. Francis Puisieux on Novel Delivery Systems. The present program is coordinated by the University of Parma and is focusing on the delivery of innovative molecules.

The official site of the program is:

<http://www.unipr.it/arpa/dipfarm/didatt/SocratesIP.htm>

The organizer of 2006 Program is the National and Kapodistrian University of Athens www.pharm.uoa.gr

Credits

Attendees of this course will receive certificate of attendance. Students may use this certificate for earning credits by their Universities and/or they may include it in relevant documents for obtaining a Euro-Ph.D in Advance Drug Delivery (www.galenos.net)

Location of the Course

The Course will take place at the National and Kapodistrian University of Athens, Panepistimiopolis, Zographou 157 71, Athens, Greece

Course fees

- **Members of the socrates Network:** free of charge .
- **Ph.D. students and academic attendees from the other universities:** the attendance is free of charge. Course book, meals, social dinner and lodging are not included.
- **Industry attendees:** the fee is 300 Euro, comprehensive of admission to scientific sessions, social dinner and course book. Meals and lodging are not included.

Registration

Please contact: Mrs Betty Papathanassiou at papathan@pharm.uoa.gr

Deadline for registration: May 15, 2006

Scientific contributions

- Members of the Socrates Network: the students are requested to give an oral presentation in the Student Symposium. One A4 page abstract is required.
- Ph.D. students: participants can present an oral presentation in the Student Symposium. One A4 page abstract is required.

Deadline for submission of abstracts: May 31, 2006

Housing in Athens

All speakers and students can be accommodated at the University Campus. For information please contact Mrs Betty Papathanassiou at papathan@pharm.uoa.gr

Deadline for housing : May 15, 2006



Socrates Intensive Programme
29240-IC-1-2002-1-IT-ERASMUS-IPUC-1
3rd edition

**Innovative therapeutics:
from molecules
to medicines**

Athens – GREECE



National and Kapodistrian
University of Athens
Faculty of Pharmacy
GREECE

July 3 – July 13, 2006

PROGRAM

Sunday July 2nd, 2006

14:00-19:00 Student's arrival and registration

19:00 Welcome reception

Monday July 3rd, 2006

08:45-09:15 Registration/Opening Session

Pharmacokinetics & Pharmacodynamics

09:15-10:15 **Panos Macheras** (Univ. of Athens, GR)
Concepts of Nonlinear Dynamics and Fractals Applied to Biopharmaceutics, Pharmacokinetics and Pharmacodynamics

Protein Delivery

10:15-11:15 **Wim Jiskoot** (Univ. of Utrecht, NL)
Physicochemical Characterisation of Biotech Products

11:45-12:45 **Wim Jiskoot** (Univ. of Utrecht, NL)
Unwanted Immunogenicity of Therapeutic Proteins

14:00-15:00 **Marios Marselos** (Univ. of Ioannina, GR)
Use of monoclonal antibodies in therapeutics (principles, products, applications)

Liposomes

15:00-16:00 **Elias Fattal** (Univ. of Paris sud, F)
Liposomes for Biotech Products

16:30-17:30 **Sophia Antimisiaris** (Univ. of Patras, GR)
Development of Arsenic-Containing Liposomes: Possible Applications in Therapeutics

Tuesday July 4th, 2006

Liposomes

09:00-10:00 **Sophia Antimisiaris** (Univ. of Patras, GR)
Liposome Coated-stents: Drug eluting stents with Improved Blood Compatibility?

Gene Delivery and Nanoparticles

10:00-10:00 **Elias Fattal** (Univ. of Paris sud, F)
SiRNA and antisense Oligonucleotides. Ways to deliver

11:30-12:30 **Udo Bakowsky** (Univ. of Marburg, D)
Implementation of AFM in the Characterization of Pharmaceutically Relevant Nano-Systems

14:00-15:00 **Udo Bakowsky** (Univ. of Marburg, D)
Novel Non-viral Gene Delivery Systems

15:00-16:00 **Sergio Simoes** (Univ. of Coimbra, P)
Design of Nanolipid-based Carriers for Gene Therapy

16:30-17:30 **Sergio Simoes** (Univ. of Coimbra, P)
Applications of Intercellular Gene Delivery

Wednesday July 5th, 2006

Pulmonary Delivery

09:00-10:00 **Chris Marriott** (King's College, London, UK)
Peptide and Protein Delivery via the Airway

10:00-11:00 **Carsten Ehrhardt** (Trinity College, Dublin, IR)
In vitro Models of the Lung

11:30-12:30 **Carsten Ehrhardt** (Trinity College, Dublin, IR)
Prediction of Pulmonary PK using in vitro Models of the Lung

14:00-15:00 **Carmen Remunan** (Univ. of Santiago de Compostela, E)
Potential of Nano-and Microparticles for Pulmonary Drug Delivery

Oral Delivery

15:00-16:00 **Anna Tsantili** (Univ. of Athens, GR)
Physicochemical and Molecular Descriptors as a Tool to Evaluate ADME Properties

16:30-17:30 **Christos Reppas** (Univ. of Athens, GR)
The Biopharmaceutics Classification scheme as a Tool in Drug Product Development: Practical aspects

Thursday July 6th, 2006

Visit at VIANEX S.A. (Freeze Drying Unit)

Friday July 7th, 2006

Students day - Oral presentations

19:00 Visit at the Museum of the N&K Univ. of Athens

Saturday July 8th, 2006

10:00-11:00 **Constantin Efthymiopoulos** (Eurand S.p.A., I)
Drug Development of small molecules and biologicals: Opportunities to maximize success

11:30-13:30 **Round Table**
Missing Tools in the Development of Drug products

Sunday July 9th, 2006

Free

Monday July 10th, 2006

Oral Delivery

09:00-10:00 **Panos Macheras** (Univ. of Athens, GR)
Modeling and Simulation of Dissolution under in vitro and in vivo Conditions

10:00-11:00 **Ioannis Nikolakakis** (Univ. of Thessaloniki, GR)
Combination of Methods for the Preparation of Microcrystalline Cellulose Pellets with Controlled Micromeritic Properties

11:30-12:30 **Georgios Imanidis** (Univ. of Basel, CH)
Properties of the Phospholipid Bilayer Membrane Determining Passive Drug Permeability

14:00-15:00 **Georgios Imanidis** (Univ. of Basel, CH)
Passive Permeation and Carrier Mediated Apical Efflux in the Intestinal Absorption of Solubilized Poorly Water Soluble Drugs

15:00-16:00 **Maria Vertzoni** (Univ. of Athens, GR)
Sample preparation for drug analysis in biological fluids with liquid chromatography

16:30-17:30 **Moira Symillides** (Univ. of Athens, GR)
Bioequivalence Assessment of Highly Variable Drugs

Tuesday July 11th, 2006

Enhancement of Drug Solubility

09:00-10:00 **Jan Vertommen** (Univ. of Capsugel, B)
Development and preparation of lipid based formulations in hard gelatine capsules

10:00-11:00 **Georgia Valsami** (Univ. of Athens, GR)
Solubility Enhancement using Cyclodextrins

11:30-12:30 **Véronique Pr at** (Univ. of Louvain, B)
Polymeric Micelles

Transdermal Delivery

14:00-15:00 **Patrizia Santi** (Univ. of Parma, I)
Transdermal Drug Delivery Systems

15:00-16:00 **Patrizia Santi** (Univ. of Parma, I)
Introduction to Transdermal Drug Delivery

16:30-17:30 **V ronique Pr at** (Univ. of Louvain, B)
Cutaneous Microdialysis

Wednesday July 12th, 2006

Visit at LAVIPHARM S.A. (Transdermal Unit)

Thursday July 13th, 2006

Practical training on:

- Pelletization (**Dimitris Rekkas**, Univ of Athens, GR),
- In Vivo Canine Experiments (**Christos Reppas**, Univ. of Athens, GR),
- Differential Scanning Calorimetry (**Costas Demetzos**, Univ. of Athens, GR)

