PHARMACOKINETIC-PHARMACODYNAMIC MODELING

January 11-12-13, 2011

Course Direction:
William J. Jusko, Ph.D.
Donald E. Mager, PharmD, PhD

“Thank you for the excellent PK/PD course. I really enjoyed the lectures and the “Pearls of Wisdom”.

“The lectures were very educational, and fun too”.

REGISTRATION DETAILS
Fee: Individual fee: 2100 euros before December 1, 2010, which includes course documentation, mid-session refreshments, and lunches (2400 euros after this date).

Registration: Please register ASAP in view of the limited course capacity. Confirmation of registration will be returned upon receipt, together with an invoice for the course fee. Registration will not be final until payment is received.

Cancellations: Cancellations with a full refund may be made until December 14, 2010. No refund is possible on cancellations received after this date. Substitutions may be made at any time.

Payement:
- By check only (for french public) to l’Agent Comptable de l’université Paris Descartes
- Or by bank transfer only

IDENTIFIANT NATIONAL DE COMPTE BANCAIRE (RIB):
Code Banque Code Guichet N° Compte Cpte RIB
10071 75000 00010057971 70

IDENTIFIANT INTERNATIONAL DE COMPTE BANCAIRE (IBAN): Code BIC (Bank identifier Code)
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REGISTRATION FORM:
January 11-12-13, 2011 Pharmacokinetic - Pharmacodynamic Modeling

EMPLOYER DETAILS
- Employer Name
- Address
- City
- Postal Code
- State/Country
- Telephone
- Fax

PERSONAL DETAILS
- Title: Mr. Mrs.
- FIRST NAME
- LAST NAME
- Email
- Date, Signature

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**COURSE PROGRAM**

**January 11, Tuesday**

- **8:00 am** Continental breakfast
- **8:30 am** W. Jusko, Introductions:
  - Overview, History & Highlights
- **9:45 am** D. Mager, Theory, Art, & Practice of PK/PD Modeling
- **10:45 am** Break
- **11:00 am** D. Mager, Basic Pharmacology & Simple Direct Effects
- **12:00 pm** Lunch
- **1:30 pm** W. Jusko, Biophase Distribution
- **2:30 pm** D. Mager, Basic Indirect Response Models
- **3:30 pm** Break
- **3:45 pm** W. Jusko, Complexities of Indirect Responses
- **5:00 pm** End

**January 12, Wednesday**

- **8:00 am** Continental breakfast
- **8:30 am** D. Mager, Review and Exercises
- **9:30 am** D. Mager, Transduction Processes
- **10:30 am** Break
- **10:45 am** W. Jusko, Chemotherapeutic Effects
- **12:00 pm** Lunch
- **1:30 pm** W. Jusko, Functional Adaptation Models
- **2:30 pm** D. Mager, Target-Mediated PK/PD Models
- **3:30 pm** Break
- **3:45 pm** W. Jusko, Disease Progression Models
- **5:00 pm** End

**January 13, Thursday**

- **8:00 am** Continental breakfast
- **8:30 am** W. Jusko, Review and Exercises
- **9:30 am** W. Jusko, Modeling Drug Interactions
- **10:30 am** Break
- **10:45 am** D. Mager, Animal Scale-Up of PK/PD
- **12:00 pm** Lunch
- **1:30 pm** D. Mager, Antibody PK/PD
- **2:30 pm** W. Jusko, Computational Issues in Modeling
- **3:30 pm** Break
- **3:45 pm** D. Mager, Systems PK/PD Modeling
- **4:45 pm** W. Jusko, Summary
- **5:00 pm** End

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**COURSE OUTLINE**

**Purpose:**

The modern approach in the field of PK/PD is the development of models based on mechanisms of drug action and their alteration of physiologic processes. This course will provide a comprehensive overview of the principles, techniques, and applications of PK/PD modeling with a partial emphasis on modeling therapeutic proteins. Such modeling allows the optimal design and interpretation of pharmacologic experiments that range from molecular biology to human responses and can expedite the drug development process.

Lectures and examples from the recent literature will be provided with course notes for each participant. Selected models or examples will have a computer listing to show how to quantitate typical experimental data.

At the conclusion of this course, the pharmaceutical scientist with basic knowledge in pharmacokinetics will be able to understand the diverse array of available models and begin to apply them to experimental data and to simulate anticipated drug responses.

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**Donald E. Mager, PhD**

Dr. Mager is an Associate Professor of Pharmaceutical Sciences at the University at Buffalo, State University of New York. He has been a fellow of the American Foundation for Pharmaceutical Education and received the New Investigator Award in Pharmacokinetics, Pharmacodynamics, and Drug Metabolism from the American Association of Pharmaceutical Scientists in 2007. Dr. Mager has served as a Visiting Professor at the Université René Descartes – Paris V and on the Advisory Committee on Clinical Pharmacology to the FDA. His research involves PK/PD systems analysis to characterize drug effects, with particular interest in anti-platelet, anti-cancer, and immunomodulatory pharmacotherapy.

**William J. Jusko, PhD**

Dr. Jusko is Distinguished Professor and Chair of Pharmaceutical Sciences at the School of Pharmacy and Pharmaceutical Sciences at the University of Buffalo and Director of the Center of Excellence in Pharmacokinetics and Pharmacodynamics. Dr. Jusko supervises a research program on the pharmacokinetics and pharmacodynamics of immunosuppressive drugs such as corticosteroids, tacrolimus and sirolimus and holds two NIH grants in the areas of corticosteroid PK/PD and mathematical modeling. He has authored over 520 publications, consults for the FDA, NIH, and the pharmaceutical industry, and is listed in ISI Most Highly Cited in Pharmacology.