We present the theory and applications of pharmacodynamics. On the basis of diverse pharmacokinetic-pharmacodynamic modeling concepts it is possible to describe and predict the time course of drug effects under various physiological and pathological conditions. The study of PK/PD and Disease Progression relationships can be of considerable value in understanding drug action, summarizing extensive data, building a knowledge repository, finding optimal dosing regimens, and in making predictions under new circumstances.

Subjects that will be presented include:

- Basic pharmacodynamic theory
- Pharmacodynamic complexities
- Biophase compartment modeling
- Physiological pharmacodynamic modeling
- Pharmacodynamic drug-drug interactions
- Functional tolerance development
- Population pharmacodynamics
- Specific drug applications
- Animal scaling
- Regulatory insights

Special Note: We are offering new course and hotel venues adjacent to Niagara Falls and a large array of vacation activities including casinos. Bring your family!

William J. Jusko, PhD
Dr. Jusko is SUNY 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, anticancer agents, and anti-diabetic drugs, and holds two NIH grants in the areas of corticosteroid PK/PD and mathematical modeling. He has authored over 550 publications, consults for the FDA, NIH, and the pharmaceutical industry, and is listed in ISI Most Highly Cited in Pharmacology.

Ancillary Course
May 17-19, 2012
Population PK/PD Modeling: Introduction to NONMEM®
A “hands on” computer tutorial.

Ancillary Course
May 24-25, 2012
Monoclonal Antibody PK/PD
Dr. Joseph Balthasar
UB Center for Protein Therapeutics

University at Buffalo
The State University of New York at Buffalo
School of Pharmacy and Pharmaceutical Sciences
May 20     Sunday
6:30-7:00  Registration/Reception
08:30-9:30  Continental Breakfast
08:45-09:45  Dr. D. Mager:  Basic Pharmacology & Simple Effects
10:45-11:00  Coffee
11:00-12:00  Dr. W.J. Jusko:  Modeling Biophase Distribution
12:00-1:00  Lunch
01:00-2:00  Dr. W.J. Jusko:  Basic Indirect Response Models
02:00-3:00  Dr. W. Krzyzanski:  Cell Lifespan Models
03:00-3:30  Break
03:30-4:30  Dr. W.J. Jusko:  Complexities of Indirect Responses
May 21  Monday
08:00  Continental Breakfast
08:30-08:45  Dr. W.J. Jusko:  Introductions
08:45-09:45  Dr. D. Mager:  Theory, Art, Practice of Modeling
09:45-10:45  Dr. D. Mager:  Basic Pharmacology & Simple Effects
10:45-11:00  Coffee
11:00-12:00  Dr. W.J. Jusko:  Modeling Biophase Distribution
12:00-1:00  Lunch
01:00-2:00  Dr. W.J. Jusko:  Basic Indirect Response Models
02:00-3:00  Dr. W. Krzyzanski:  Cell Lifespan Models
03:00-3:30  Break
03:30-4:30  Dr. W.J. Jusko:  Complexities of Indirect Responses

May 22  Tuesday
08:00  Continental Breakfast
08:30-09:45  Dr. D. Mager:  Review & Exercises I
09:45-10:00  Coffee
10:00-11:00  Dr. D. Mager:  Modeling Transduction Processes
12:00-1:00  Lunch
01:00-2:00  Dr. W.J. Jusko:  Complexities of Indirect Responses
02:00-3:00  Dr. W. Krzyzanski:  Cell Lifespan Models
03:00-3:15  Refreshments
03:15-04:15  Dr. W.J. Jusko:  Disease Progression Models
04:15-05:15  Dr. W.J. Jusko:  Final Discussion and Summary

May 23  Wednesday
08:00  Continental Breakfast
08:00-08:30  Dr. W.J. Jusko:  Disease Progression Models
08:30-09:45  Dr. W.J. Jusko:  Modeling Irreversible Effects
09:45-10:00  Coffee
10:00-11:00  Dr. D. Mager:  Target-Mediated PK/PD Models
12:00-1:00  Lunch
01:00-2:00  Pf. J. Fiedler-Kelly:  Population PK/PD Models
02:00-3:00  Dr. P. Jadhav:  FDA & Pharmacometrics
03:00-3:15  Refreshments
03:15-04:15  Dr. W.J. Jusko:  Computational Issues in PK/PD
04:15-05:15  Dr. W.J. Jusko:  Final Discussion and Summary

REGISTRATION INFORMATION

Course location: The course will be held at The Conference Center Niagara Falls, 101 Old Falls Street, Niagara Falls, NY 14303. USA. Phone: (716) 278-2100. Fax: (716) 278-0008. The Conference Center is 28 min. from Buffalo International Airport. Website: http://www.conferencecenterniagarafalls.com

Hotel location: Sheraton at the Falls, 300 Third Street, Niagara Falls, NY 14303. USA. Phone: (716) 285-3361. The price is $109/night. Hotel Deadline: April 9, 2012. Website: http://sheratonatthefalls.com

Fee: Individual fee: $2400. This includes course documentation, mid-session refreshments, lunches and opening dinner. Up to 5 graduate students may enroll at a fee of $1200. US Government rate: $1800.

Registration: Please register ASAP in view of the limited course capacity of 40 participants. 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 March 24, 2012. No refund is possible on cancellations received after this date. Substitutions may be made at any time.

Payment: University at Buffalo Foundation Inc. Bank transfers and credit card payments are accepted as well as checks. Course secretary: Rita Urben, (716) 645-4834.

Ancillary Antibody PK/PD Workshop: This course will be a separate 2-day workshop on Monoclonal Antibody PK/PD by Dr. Joseph Balthasar. This course will utilize the facilities at The Conference Center Niagara Falls. The fee is $1600 (Govt. $1200, Students $800).

Ancillary NONMEM® Course: A separate 3-day hands-on tutorial course in “Population PK Data Analysis using NONMEM®” will be provided by Prof. Jill Fiedler-Kelly and colleagues from Cognigen. Laptops with minimal configuration required. See separate flyer for details. The fee is $2200. (Govt. $1600, Students $1100).

Monday Night Excursion: Cognigen Corporation will sponsor a bus tour of the Niagara River and Lake Erie shores and views of the classic architecture of Buffalo, “Queen City of the Great Lakes”. Dinner will be provided at the Anchor Bar, home of the Buffalo Chicken Wings.


Name_________________________Title_________________________Organization_________________________

City_________________________State/Country________________Postal Code_________________________

Telephone_____________________Fax_________________________Email_____________________________

Opening Reception/Dinner, Sunday, May 20, 6:30 PM: ______ Will Attend  ______ Will Not Attend  Vegetarian Meal Requested_____

Monday Night Excursion, Monday, May 21, 5:30 PM: ______ Will Attend  ______ Will Not Attend

Population PK (NONMEM®) Course: ______ Will Attend  ______ Will Not Attend

Antibody PK/PD Workshop: ______ Will Attend  ______ Will Not Attend

For credit card payment: Please circle: Visa  Mastercard  American Express  Discover

Credit card number:_________________________Expiration Date:_________________________

Signature:__________________________

Please return to: PK/PD MODELING, Department of Pharmaceutical Sciences, School of Pharmacy, State University of New York at Buffalo, 519 Hochstetter Hall, Buffalo, NY 14260; phone: (716) 645-4834; fax: (716) 645-3693; Email: rrruben@buffalo.edu