The Eighth USC Biomedical Simulations Resource Workshop on

ADVANCED METHODS OF
PHARMACOKINETIC AND PHARMACODYNAMIC SYSTEMS ANALYSIS

June 25-26, 1999 • Marina Beach Marriott
4100 Admiralty Way • Marina del Rey, California • (310) 301-3000

This Workshop is intended for both basic and clinical research scientists involved with advanced experimental and modeling methodologies for studying drug kinetics and dynamics at the cellular through the whole body levels. The Workshop provides a high-level forum to facilitate the exchange of ideas between basic and clinical research scientists, experimentalists and modelers working on problems in pharmacokinetics and pharmacodynamics.

The meeting will feature presentations from internationally recognized researchers on topics including:

♦ Cellular and biochemical issues in pharmacokinetics
♦ Methods and models in kinetics and dynamics
♦ Advanced methods of pharmacometric analysis
♦ Clinical applications of kinetics and dynamics

Organized by
David Z. D’Argenio, Co-Director, BMSR

Sponsored by
Biomedical Technology Program
National Center for Research Resources
National Institutes of Health

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Workshop Schedule
Friday, June 25, 1999

8:30  Introductory Remarks

8:45  Transvascular Transport In Tumors


10:05 Break

10:35 Use of Microdialysis in Pharmacokinetics

11:15 Microchip Drug Delivery

12:00 Lunch

1:30  A Novel Model for Warfarin Pharmacokinetics and Pharmacodynamics


2:50  Logit Models for Ordinal Data with Application To Allergic Rhinitis Severity Scores

3:30 Break

4:00  A Population PK/PD Analysis of Repeated Measures Time-to-Event Pharmacodynamic Responses: The Anti-emetic Effect of Ondansetron

4:40  Simulation-Based Methods of Determining Optimal Sampling Times

5:30 Reception
Workshop Schedule
Saturday, June 26, 1999

8:30  Some Recent Approaches in Nonparametric PK/PD Systems Analysis
      Peter Veng-Pedersen
      University of Iowa

9:10  Effect of Cellular Pharmacokinetics in Organ Transit Time Modeling
      Michael Weiss
      Martin Luther University

9:50  Break

10:30 Elaboration of Properties of Indirect Response Models
      Wojciech Krzyzanski
      State University of New York at Buffalo

11:10 Semi-Empirical Models Characterizing the Nonlinear Dynamics of Viral Load During Anti-HIV-1 Therapy
      Davide Verotta
      University of California, San Francisco

12:00 Lunch

1:30  Relative Efficacy of Treatment in HIV-1 Infection
      John Mittler
      Los Alamos National Laboratory

2:10  Quantifying Non-Standard Evidence for Drug Approval
      E. Niclas Jonsson
      Uppsala University

2:50  Break

3:30  OK, We've Fit a Pharmacokinetic Model. Now How Can We Understand It?
      Andrew Gelman
      Columbia University

4:10  Bayesian Estimation Using Regenerative Sampling-Based Methods
      David Z. D'Argenio
      University of Southern California

4:50  Closing Remarks
      David Z. D'Argenio
      University of Southern California
1999 Workshop

Advanced Methods of Pharmacokinetic & Pharmacodynamic System Analysis

June 25-26, 1999
Marina Beach Marriott
Marina del Rey, California

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