



UNIVERSITY OF
SOUTHERN CALIFORNIA

*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**

**THE
BMSR**

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Workshop Schedule

Friday, June 25, 1999

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| 8:30 | Introductory Remarks | David D'Argenio
University of Southern California |
| 8:45 | <i>Transvascular Transport In Tumors</i> | Lance L. Munn
Harvard Medical School |
| 9:25 | <i>Organ Clearance Concepts: Influence of Metabolism on Excretory Clearance Estimates</i> | K. Sandy Pang
University of Toronto |
| 10:05 | Break | |
| 10:35 | <i>Use of Microdialysis in Pharmacokinetics</i> | Ronald J. Sawchuk
University of Minnesota |
| 11:15 | <i>Microchip Drug Delivery</i> | John T. Santini, Jr.
Massachusetts Institute of Technology |
| 12:00 | Lunch | |
| 1:30 | <i>A Novel Model for Warfarin Pharmacokinetics and Pharmacodynamics</i> | Alan Forrest
Millard Filmore Hospital |
| 2:10 | <i>Population PK/PD Modeling and Computer Assisted Trial Design (CATD) in Clinical Drug Development – A Case Example</i> | Rene Braeckman
CEPTYR, Inc. |
| 2:50 | <i>Logit Models for Ordinal Data with Application To Allergic Rhinitis Severity Scores</i> | Jon C. Wakefield
Imperial College |
| 3:30 | Break | |
| 4:00 | <i>A Population PK/PD Analysis of Repeated Measures Time-to-Event Pharmacodynamic Responses: The Anti-emetic Effect of Ondansetron</i> | Lewis B. Sheiner
University of California, San Francisco |
| 4:40 | <i>Simulation-Based Methods of Determining Optimal Sampling Times</i> | Gary L. Rosner
Duke University |
| 5:30 | Reception | |

Workshop Schedule

Saturday, June 26, 1999

8:30	<i>Some Recent Approaches in Nonparametric PK/PD Systems Analysis</i>	Peter Veng-Pedersen University of Iowa
9:10	<i>Effect of Cellular Pharmacokinetics in Organ Transit Time Modeling</i>	Michael Weiss Martin Luther University
9:50	Break	
10:30	<i>Elaboration of Properties of Indirect Response Models</i>	Wojciech Krzyzanski State University of New York at Buffalo
11:10	<i>Semi-Empirical Models Characterizing the Nonlinear Dynamics of Viral Load During Anti-HIV-1 Therapy</i>	Davide Verotta University of California, San Francisco
12:00	Lunch	
1:30	<i>Relative Efficacy of Treatment in HIV-1 Infection</i>	John Mittler Los Alamos National Laboratory
2:10	<i>Quantifying Non-Standard Evidence for Drug Approval</i>	E. Niclas Jonsson Uppsala University
2:50	Break	
3:30	<i>OK, We've Fit a Pharmacokinetic Model. Now How Can We Understand It?</i>	Andrew Gelman Columbia University
4:10	<i>Bayesian Estimation Using Regenerative Sampling-Based Methods</i>	David Z. D'Argenio University of Southern California
4:50	Closing Remarks	David Z. D'Argenio University of Southern California

BIOMEDICAL SIMULATIONS RESOURCE
UNIVERSITY OF SOUTHERN CALIFORNIA

1999 Workshop

**Advanced Methods of Pharmacokinetic & Pharmacodynamic
System Analysis**

June 25-26, 1999
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