

BIOMEDICAL SIMULATIONS RESOURCE
UNIVERSITY OF SOUTHERN CALIFORNIA

**ADVANCED METHODS OF
PHARMACOKINETIC AND PHARMACODYNAMIC
SYSTEMS ANALYSIS**

May 19 – 20, 1995

Marina International Hotel
4200 Admiralty Way
Marina del Rey, California

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and

BIOMEDICAL RESEARCH TECHNOLOGY PROGRAM
NATIONAL CENTER FOR RESEARCH RESOURCES
NATIONAL INSTITUTES OF HEALTH

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Chairman and Organizer:
David Z. D'Argenio, Ph.D.
Co-Director, Biomedical Simulations Resource

Workshop Schedule
Friday, May 19, 1995

8:30	Introductory Remarks	David Z. D'Argenio University of Southern California
8:35	Delivery of Macromolecules to Tumors: Insights from Intravital Microscopy and Fluorescence Photobleaching	David Berk Harvard Medical School
9:15	Physiologic Basis of Macromolecular Pharmacokinetics	Robert L. Dedrick National Institutes of Health
9:55	Pharmacometrics in Drug Development: Experience in Preclinical and Clinical Drug Evaluation	Jean-Louis Steimer Sandoz Pharma Ltd., Switzerland
10:35	Break	
10:50	Pharmacokinetic/-Dynamic Modeling of a Bivariate Control System: Lutenizing Hormone and Testosterone Response to the GnRH Antagonist Antide	Lewis B. Sheiner University of California, San Francisco
11:30	Analysis of Demand Frequency/Opioid Concentration Relationships During PCA (Patient-Controlled Analgesia) Therapy	Thomas Kramer University of Pennsylvania
12:10	Lunch Break	
1:30	Modeling Physiologic Indirect Pharmacodynamic Responses	Hui C. Ko State University of New York at Buffalo
2:10	Issues in Pharmacodynamic Parameter Estimatability	William Ebling State University of New York at Buffalo
2:50	Model Building in nonlinear Mixed Effects Models	José Pinheiro University of Wisconsin at Madison
3:30	Break	
3:45	A New Method for the Nonparametric Estimation of Parameter Distributions in Pharmacokinetic Population Studies	Alan Schumitzky University of Southern California
4:25	Pharmacokinetics of IGF-I: A Case Study in Population Pharmacokinetic Modeling with Time-Dependent Covariates	David M. Giltinan Genentech, Inc.
5:30	Reception	

Workshop Schedule

Saturday, May 20, 1995

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|-------|---|---|
| 8:30 | Volterra Series Modeling of PK/PD Data | Davide Verotta
University of California, San Francisco |
| 9:10 | Generalized Modeling of Nonlinear Pharmacokinetics | William Gillespie
Food and Drug Administration |
| 9:50 | Pharmacokinetics of Multiple High-Dose Cancer Chemotherapeutic Agents | Gary Rosner
Duke University |
| 10:30 | Break | |
| 10:45 | Pharmacodynamic Models for the Combined Action of Multiple Agents | William Greco
Roswell Park Cancer Institute |
| 11:25 | Forecasting the Outcome of Clinical Trials | C. Anthony Hunt
University of California, San Francisco |
| 12:05 | Lunch Break | |
| 1:30 | Impact of Noncompliance on Survival in Clinical Trials | Mark Sale
Georgetown University |
| 2:10 | Modeling and Control in Anesthesia | Steven Shafer
Veteran's Administration Medical Center & Stanford University |
| 2:50 | Break | |
| 3:05 | Sampling Based Approaches to the Design of Dosage Regimens | Jon Wakefield
Imperial College of Science & Technology |
| 3:45 | Control of Uncertain Pharmacodynamic Processes | David Z. D'Argenio
University of Southern California |
| 4:25 | Closing Remarks | David Z. D'Argenio
University of Southern California |
| 4:45 | Reception | |

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1995 Workshop on

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May 19--20, 1995
Marina del Rey, California

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