

BIOMEDICAL SIMULATIONS RESOURCE
UNIVERSITY OF SOUTHERN CALIFORNIA

Workshop On

ADVANCED METHODS OF
PHARMACOKINETIC AND PHARMACODYNAMIC
SYSTEMS ANALYSIS

May 19-20, 1989

Marina International Hotel
4200 Admiralty Way
Marina del Rey, California

Sponsored by

BIOMEDICAL RESEARCH TECHNOLOGY PROGRAM
DIVISION OF RESEARCH RESOURCES
NATIONAL INSTITUTES OF HEALTH

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Chairman and Organizer:

David Z. D'Argenio
Associate Director, Biomedical Simulations Resource

Day 1: Friday, May 19, 1989

8:30	Introductory Remarks	David Z. D'Argenio University of Southern California
8:45	Physiological Models of Tissues and Organs	Robert L. Dedrick National Institutes of Health
9:15	Drug and Metabolite Processing in Liver	K. Sandy Pang University of Toronto
9:45	Effect of Organ Perfusion on Renal Drug Transport	David E. Smith University of Michigan
10:15	Discussion	
10:30	Break	
10:45	Regional Pharmacokinetics: Insight from Inside	Laurence E. Mather Flinders University
11:15	Choosing Monoclonal Antibodies Based on Pharmacokinetic Analysis	David G. Covell National Cancer Institute
11:45	Discussion	
12:00	Lunch Break	
1:30	Modeling Physiological Systems with Gamma Retention Times: Theory and Application	James H. Matis Texas A & M University
2:00	Physiological Flow Models: A Semi-Parametric Approach	Davide Verotta University of California, San Francisco
2:30	Parametric Model-Free Approach to Families of Similar Curves: Algorithms and Statistical Properties	Peter J. Munson National Institutes of Health
3:00	Discussion	
3:15	Break	
3:30	Heteroscedastic Nonlinear Regression	Stuart L. Beal University of California, San Francisco
4:00	Estimation of Pharmacokinetic Parameters from Bounded-Error Data	Eric Walter CNRS - Ecole Supérieure d'Electricité
4:30	Discussion	
5:00	Reception	

Day 2: Saturday, May 20, 1989

8:30	Drug Targeting in the Eye	Vincent H.L. Lee University of Southern California
9:00	Perspectives of System Analysis in Pharmacokinetic and Pharmacodynamic Research	Peter Veng-Pederson University of Iowa
9:30	Semi-Parametric Approach to Non-Steady State Pharmacokinetic/dynamic Data	Lewis B. Sheiner University of California, San Francisco
10:00	Discussion	
10:15	Break	
10:30	Modeling Extreme Pharmacodynamic Hysteresis: Control of Myelosuppression due to Anti-Cancer Agents	Alan Forrest University of Maryland
11:00	Modeling Pharmacokinetics and Pharmacodynamics of Methylprednisolone	Carl M. Metzler The Upjohn Company
11:30	Discussion	
11:45	Lunch Break	
1:30	Incorporating Physiology into Pharmacokinetics and Pharmacodynamics	William F. Ebling Stanford University
2:00	Pharmacokinetic and Pharmacodynamic Modeling of Anesthetic Drug Effect in Man	Donald R. Stanski Stanford University
2:30	Measurement and Kinetics of Drug Effects on the Central Nervous System	Meindert Danhof State University at Leiden
3:00	Discussion	
3:15	Break	
3:30	Pharmacokinetic and Pharmacodynamic Modeling in Drug Development and Therapeutics	Panel Discussion Leslie Z. Benet, UCSF Carl M. Metzler, The Upjohn Co. Lewis B. Sheiner, UCSF Donald R. Stanski, Stanford
4:15	Summary	F. Eugene Yates University of California, Los Angeles
4:30	Closing Remarks	David Z. D'Argenio University of Southern California
5:00	Reception	

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