

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

With special thanks to

MCNEIL PHARMACEUTICAL CORP.

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

ADVANCED METHODS OF
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May 19--20, 1995
Marina del Rey, California

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