

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

Sponsored by

and

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

With special thanks to

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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

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

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