

Biomedical Simulations Resource

University of Southern California

ADVANCED METHODS OF PHARMACOKINETIC AND PHARMACODYNAMIC SYSTEMS ANALYSIS

May 16 - 17, 1997
Marina Beach Marriott Hotel
4100 Admiralty Way
Marina del Rey, California

Sponsored by

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

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Chairman and Organizer
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**THE
BMSR**

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Workshop Schedule

Friday, May 16, 1997

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|-------|---|--|
| 8:30 | Introductory Remarks | David Z. D'Argenio
University of Southern California |
| 8:45 | Structure and Function of Membrane-Bound Drug Receptors: Computer-Based Prediction Methods | Michael B. Bolger
University of Southern California |
| 9:30 | Protein Stabilization with Excipient in Biodegradable Microspheres | Karen Fu
Massachusetts Institute of Technology |
| 10:15 | Break | |
| 10:30 | Fluid and Macromolecular Transport in Solid Tumors | Paolo A. Netti
Harvard Medical School |
| 11:15 | Modeling of Vascular Regulation | James C. Liao
Texas A & M University |
| 12:00 | Lunch | |
| 1:30 | Incorporating Plasma Protein Binding, Tissue Binding and Receptor Binding in Pharmacokinetic/Pharmacodynamic Modeling | Johannes H. Proost
University of Groningen |
| 2:15 | Mechanism-Based Pharmacokinetic/Pharmacodynamic Modeling: Application in the Design of Selective Adenosine A ₁ Receptor Agonists | Meindert Danhof
Leiden University |
| 3:00 | Break | |
| 3:30 | Physiological-Based Pharmacokinetic Models in Anesthesia | D. Russell Wada
Stanford University |
| 4:15 | The Determination of Drug Metabolising Activity <i>In Vivo</i> : Pharmacokinetic, Pharmacogenetic and Statistical Issues | Geoffrey T. Tucker
University of Sheffield |
| 5:00 | Reception | |

Workshop Schedule

Saturday, May 17, 1997

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|-------|--|---|
| 8:30 | Placental Transfer of Anti-HIV Drugs: Mechanisms and
<i>In Vitro-In Vivo</i> Correlation | Jashvant D. Unadkat
University of Washington |
| 9:45 | Dynamics of Viral Turnover in HIV Disease | John Mittler
Los Alamos National Laboratory |
| 10:00 | Break | |
| 10:30 | Feasibility of Indirect Response Models to Characterize
the Time Course of Myelosuppression from Cancer
Chemotherapy | Paul B. Laub
Fox Chase Cancer Center |
| 11:15 | Chronopharmacokinetics of Nicotine: Modeling and
Relevance in Building a Therapeutic Delivery System | Jean-Michel Gries
University of California, San Francisco |
| 12:00 | Lunch | |
| 1:30 | Modeling and Analyzing Data from a Study of
Intrauterine Fetal Growth Retardation | Kathryn Hirst
Henry Ford Health Sciences Center |
| 2:15 | Building Population Pharmacokinetic-
Pharmacodynamic Models Using Trees | Davide Verotta
University of California, San Francisco |
| 3:00 | Break | |
| 3:15 | Some Properties of Measures Characterizing
Bioavailability and Bioequivalence | Laszlo Endrenyi
University of Toronto |
| 4:00 | Estimation and Control of Uncertain Pharmacokinetic/
Pharmacodynamic Systems | David Z. D'Argenio
University of Southern California |
| 4:45 | Closing Remarks | David Z. D'Argenio
University of Southern California |
| 5:00 | Reception | |

BIOMEDICAL SIMULATIONS RESOURCE
UNIVERSITY OF SOUTHERN CALIFORNIA

1997 Workshop

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

May 16-17, 1997
Marina del Rey, California

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