BIOMEDICAL SIMULATIONS RESOURCE
UNIVERSITY OF SOUTHERN CALIFORNIA

1991 Workshop On

MODELS OF COMPLEX RESPIRATORY DYNAMICS
IN SLEEP AND WAKEFULNESS

May 11, 1991

Anaheim Holiday Inn
1850 S. Harbor Blvd.
Anaheim, California

Sponsored by

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

Chairman and Organizer:
Michael C.K. Khoo, Ph.D.
Associate Professor, Biomedical Engineering
Models of Complex Respiratory Dynamics in Sleep and Wakefulness

Saturday, May 11, 1991

7:30 Registration

8:00 Introduction
Michael Khoo
University of Southern California

Morning Session:

8:15 Spectral Analysis of Ventilation
Frederick Bennett
Worcester Polytechnic Institute

8:45 Analysis of Ventilation from Nonlinear Dynamics
Jacob DeGoede
Leiden University

9:15 Nonlinear Dynamics of Cardio-Pulmonary Responses
Stanley Yamashiro
University of Southern California

9:45 Coffee Break

10:15 Entropy as a Complexity Measure of Deterministic Respiratory Patterns
Charles Webber, Jr.
Loyola University of Chicago

10:45 Rescaled Range Analysis of Resting Respiration
Bernard Hoop
Massachusetts General Hospital

11:15 The Limit Cycle Oscillator: A Model for the Respiratory Oscillator
Frederic Eldridge
Univ. of North Carolina at Chapel Hill

11:45 Models of Respiratory Variability
Eugene Bruce
Case Western Reserve University

12:15 Lunch Break
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