

4th SW P450 Meeting

May 17-19, 2004

Welcome! Our fourth SW P450 Meeting at Camp Allen was intended to be a casual "retreat-like" meeting where we exchanged ideas both scientific and social, as well as enjoyed the surroundings. Our *Evening Speaker* was David Nelson from The University of Tennessee Health Sciences Center.

MEETING SCHEDULE

Monday Evening May 17, 2004

6:00 – 7:00 Dinner

Regulation and Physiology Chair:

7:00 – 7:10 Welcome

7:10-7:40 Jorge Capedevila
Vanderbilt
Physiological and
Pathophysiological Significance
of the P450 Fatty Acid
Monooxygenases

7:40 – 8:10 Sayeepriyadarshini Anakk
UT Houston
CAR/PXR provide directives
for CYP3a41 gene regulation
differently from
CYP3a11

8:10 – 8:40 Puneet Chowdhary
U.T. Dallas
CYP102A1 (P450BM3): a
Probable Quorum
Quencher

8:40 -| 9:10 Richard Okita
Program Director, NIGMS, NIH,
DHHS
Recent Events at NIH and How
They Affect the Drug
Disposition/Toxicology
Research Communities

9:10 Refreshments

Tuesday May 18, 2004

7:30 – 9:00 Breakfast

9:00 – 9:05 Good Morning

Biophysical Aspects of P450s Chair:

9:05 – 9:35 John Dawson
Univ of South Carolina
Oxygen Activation by
Cytochrome P450. Evidence
for a Second Active Oxidant
from Studies Using P450-CAM
as a Model System

9:35 – 10:05 Valdimir Berka
UTHSC Houston
Three Different Oxygen-
Induced Radical Species in
eNOS Oxygenase Under
Regulation by L-Arginine and
Tetrahydrobiopterin

10:05 – 10:35 Tatsuya Kitazume
UT Southwestern
P450 BM-3 Functions as an
Obligate Dimer

10:35 – 10:50 Break

Understanding P450 Structures Chair:

10:50 – 11:20 Jason Yano
Scripps
The Crystal Structure of Human
Microsomal Cytochrome P450
2A6 (CYP2A6): The Principle
Nicotine Oxidase

11:20 – 11:50 Emily Scott
UTMB
The Crystal Structure of 2B4
with a Phenylimidazole
Inhibitor: Insights into Enzyme
Flexibility

11:50 – 12:20 David Goodin
Scripps
Conformational States of
Cytochrome P450cam
Revealed by Trapping of
Sensitizer-linked Substrates

12:10 – 5:00 picnic lunch
Fun and Games

5:00 – 6:00 Meeting

Evening Presentation

7:00 – 8:00 David Nelson
University of Tennessee
Life After 3000 Cytochrome
P450s

8:00 tillrefreshments and posters

Wednesday May 19, 2004

7:30 – 9:00 Breakfast

9:00 – 9:05 Good Morning

Genes and more Genes Chair:

9:05 – 9:35 Susan Hoffman
Miami Univ of Ohio
Perils and Pitfalls of the
Database: Interpreting P450
Genomic Information

9:35 – 10:05 Mary Schuler
Univ of Illinois
Arabidopsis P450s

10:05 – 10:35 Mike Waterman
Vanderbilt
Structure and Function of CYPs
in Streptomyces

10:35 – 10:50 Break

*Drug Metabolism and Substrate Interactions
Chair:*

10:50 – 11:20 Manju Shet
Purdue
Pharma, L.P.
Role of Drug Metabolism in
Drug Development Process

11:20 – 11:50 Santosh Kumar
UTMB
Analysis of H₂O₂-Supported
7-Benzyloxyquinoline
Debenzylation by CYP3A4:
Effect of the ?-Naphthoflavone
and Cytochrome b5

11:50 – 12:20 Dongmei Cheng
LSU
The Use of the Mechanism
Based Inhibitor 2-
Ethynylnaohthalene (2EN) to
Probe the Active Site of
Cyp2B4

12:20 lunch and departure