

ABC Workshop 2008 Program

September 24, 2008

9:00 –10:00 **Registration**

10AM-12 PM

10AM **Welcome** **Michael Dean**

10:30 **Session 1** **P-Glycoprotein in Disease and Drug Resistance**
Chair- Bjorn Bauer

10:30 Talk 1 Bjorn Bauer
P-glycoprotein and the “Sacred Disease” – Unraveling Drug-Resistant Epilepsy

11:00 Talk 2 Mathew Hall
The development of the MDR1-selective agent NSC73306

11:20 Talk 3 Rupeng Zhuo
Targeting the catalytic cycle to screen ABC transporter P-glycoprotein mediated multidrug resistance reversers

11:40 Talk 4 Hua Zhu
Roles of MicroRNA miR-27a and miR-451 in the Regulation of MDR1/P-glycoprotein Expression in Human Cancer Cells

12-1:30 Lunch Break in the Café and Posters

1:30-3:10 **Session 2** **Pseudoxanthoma elasticum, ABCC6, and Vitamin K**
Chair- Jouni Uitto

1:30 Talk 5 Jouni Uitto
Overview of PXE research in mouse and man

1:50 Talk 6 Patrick Terry
Update on PXE Research & Clinical Trials

2:10 Talk 7 Tamas Aranyi
How segmental duplications shape our genome: recent evolution of ABCC6 and PKD1 Mendelian disease genes

2:30 Talk 8 Olivier Le Saux
New Insights into the pathologic mechanism of pseudoxanthoma elasticum

2:50 Talk 9 Qiujie Jiang
Cell-based Therapy for Pseudoxanthoma Elasticum: Reduction of Connective Tissue Mineralization in a Mouse Model (Abcc6-/-) by Transplantation of Wild-type Hepatocytes

3:10-4:10 Break and Posters

4:10-5:50 **Session 3** **Drug Resistance and Drug Transport**
Chair Zuben Sauna

4:10 Talk 10 Zuben Sauna
Understanding the catalytic cycle of ABC transporters: The devil is in the details

4:30 Talk 11 Anika Hartz
It's the Environment: Diesel Exhaust Particles induce P-glycoprotein at the Blood-Brain Barrier through Oxidative Stress and Proinflammatory Signaling

4:50 Talk 12 Sylvia Notenboon
cPLA2 Is Critical For P-glycoprotein Upregulation in Drug-Resistant Epilepsy

5:10 Talk 13 Dana Emmert
Modulating P-glycoprotein to Enhance Neurodegenerative and Cancer Drug Penetration to the Brain

5:30 Talk 14 Jody Mack
Increased sensitivity of ABCA2 KO mice to estramustine phosphate treatment

Transportation to Hotel/Dinner – Hampton Inn Frederick

5:00-6:00 **Session 6** **TAP**
Chair Malini Raghavan

5:00 Talk 25 Malini Raghavan
Functions of the TAP complex in immune responses against infections

5:20 Talk 26 Syed Rizvi
Beyond Transport: Oxidoreductase interactions with the TAP complex

5:40 Talk 27 Nina Kressig
The D-Loop – the forgotten hallmark of ABC transporters

Transportation to Hotel/Dinner – Danielle's Restaurant
6 N East St. Frederick

September 26, 2008

9-12:00 **Session 7** **ABCG**

9:00 **Introduction and Chair Andras Varadi**

9:20 Talk 28 Liwu Fu
Reversal of multidrug resistance by lapatinib

9:40 Talk 29 Eric Lee
Oligomers and Single-Particle Analysis of the Sterol Transporter ABCG5/G8

10:00 Talk 30 John Golin
Mutations Define Cross Talk between the N-Terminal Nucleotide Binding Domain and Transmembrane Helix-2 of the Yeast Multidrug Transporter Pdr5

10:20 Talk 31 Suneet Shukla
In vivo inhibition of activity of P-glycoprotein and ABCG2, multidrug resistance-linked ABC drug transporters in mice by a nutraceutical agent curcumin

10:40 Talk 32 Curt Henrich
Natural product inhibitors of ABCG2

Session 8 **Stem Cells, PGP and Drug Resistance**
Chair Saibal Dey

11:00 Talk 33 Anna Calcagno
Putative stem cell surface marker expression is modulated by drug selection regimen

11:20 Talk 34 King Fung
The Effect of ABCB1 Haplotype on Substrate Specificity in Recombinant LLC-PK1 Cells

11:40 Talk 35 Saibal Dey
Human P-glycoprotein: Searching for Molecular Switches

12:00-1:30 Lunch

1:30 **Conference Ends**