

# 22<sup>nd</sup> ANNUAL RESEARCH SHOWCASE AND AWARDS RECOGNITION DAY

THURSDAY, FEBRUARY 19<sup>th</sup>, 2009



UNIVERSITY OF FLORIDA  
COLLEGE OF PHARMACY

## A SPECIAL THANKS TO THIS YEAR'S SPONSORS

### PLATINUM SPONSOR

**Drug & Biotechnology Development, LLC**  
Clearwater, FL  
Dr. Robert G. and Maria Bell; Class of 1988

### GOLD SPONSORS

**DENALI BioTechnologies, LLC**  
Soldotna, AK  
Dr. Maureen McKenzie

**Dr. Robert A. and Phyllis Levitt**  
Gainesville, FL; Class of 1961

### SILVER SPONSORS

**Dr. Gwen (Victoria) De Leon**  
Orange Park, FL; Class of 1994  
with matching gift from Publix

**Dr. Tobias Gerhard**  
New Brunswick, NJ; Class of 2007

**Dr. Teresa Kauf**  
Gainesville, FL; Faculty

**Dr. David R. Wallace**  
Tulsa, OK; Class of 1990

### SPONSORS

**Dr. Brian Sauer**  
Salt Lake City, UT; Class of 2004

**Dr. David W. Newton**  
Orange Park, FL; Class of 1984

**Dr. James Sacco**  
Madison, WI; Class of 2006

**Dr. Sasiporn Sarawek**  
Spring, TX; Class of 2007

## SCHEDULE OF EVENTS

8:00am - 9:00am Set-up Poster Presentations (Reception Hall, HPNP Building)

### **POSTER COMPETITION**

9:00am - 11:30am **Poster Competition** – Students Present for Judging (Reception Hall, HPNP Building)

### **ORAL COMPETITION**

1:00pm - 1:10pm **Introduction** – Dr. William Millard, Executive Associate Dean (Room G-301, HPNP Building)

**Levitt Division** (20 minute presentations)

1:10pm - 1:30pm Pranav Gandhi  
1:30pm - 1:50pm Christian Hampp

**Junior Division** (15 minute presentations)

1:55pm - 2:10pm William M. Dismuke  
2:10pm - 2:25pm Wenjun Li  
2:25pm - 2:40pm Jay Schaub

2:40pm - 2:50pm **BREAK**

**Senior Division** (20 minute presentations)

2:50pm - 3:10pm Navin Goyal  
3:10pm - 3:30pm Hong Li  
3:30pm - 3:50pm Yanfei Qi  
3:50pm - 4:10pm Vinayak Shenoy

4:15pm - 5:15pm **Keynote Address** – Robert R. Ruffolo, Jr., Ph.D., Retired President, Research & Development, Wyeth Pharmaceuticals and Senior Vice President, Wyeth Corporation. *“The Trials and Tribulations of a Medical Breakthrough: The Discovery and Development of Coreg (Carvedilol) for the Treatment of Congestive Heart Failure”* (Room G-101, HPNP Building)

5:30pm - 7:00pm **Awards Reception** – Refreshments and Announcement of Winners (Reception Hall, HPNP Building)

## ORAL COMPETITION

### **LEVITT DIVISION**

#1 Presenter: **Pranav Gandhi**  
Department: Pharmaceutical Outcomes and Policy  
Research Title: Predictors of Health Status Change Among Patients Treated with a Calcium Antagonist- or an Atenolol-led Hypertension Strategy in the International Verapamil SR-Trandolapril Study (INVEST)

#2 Presenter: **Christian Hampp**  
Dept/Center: Pharmaceutical Outcomes and Policy  
Research Title: Cost-effectiveness of Respiratory Syncytial Virus Prophylaxis with Palivizumab from the Perspective of Florida Medicaid

### **JUNIOR DIVISION**

#1 Presenter: **William M. Dismuke**  
Department: Pharmacodynamics  
Research Title: Activation of Soluble Guanylate Cyclase and the BK<sub>Ca</sub> Ion Channel Decrease Trabecular Meshwork Cell Volume and Increase Outflow Facility: Potential Targets for New Ocular Hypotensives

#2 Presenter: **Wenjun Li**  
Department: Medicinal Chemistry  
Research Title: Mitochondria as a Novel Site of Biotransformation of Dichloroacetate by Glutathione Transferase Zeta

#3 Presenter: **Jay Schaub**  
Department: Pharmacodynamics  
Research Title: Obesity Syndrome Associated with Melanocortin-4 Receptor Knockout Genotype in Mice and its Mediation by Voluntary Exercise Appears to be Sex Dependant

### **SENIOR DIVISION**

#1 Presenter: **Navin Goyal**  
Department: Pharmaceutics  
Research Title: Bioequivalence of Inhaled Corticosteroids: A Promising Solution

#2 Presenter: **Hong Li**  
Department: Pharmaceutics  
Research Title: Adult Stem Cell Gene Therapy for Alpha 1-Antitrypsin Deficiency

#3 Presenter: **Yanfei Qi**  
Department: Pharmacodynamics  
Research Title: AAV9 Mediates a more Specific Cardiac Gene Transfer in the Rat than AAV2, AAV5, AAV7, and AAV8

#4 Presenter: **Vinayak Shenoy**  
Department: Pharmacodynamics  
Research Title: Prevention of Monocrotaline-induced Pulmonary Hypertension by Lenti-viral Mediated Gene Delivery of Angiotensin-(1-7)

## POSTER COMPETITION

- # 1 Investigating Alternative Signaling Pathways for the Melanocortin-4 Receptor**  
Presenter: Sarah Carey (Pharmacodynamics/Pharmacy Student)  
Authors: S Carey, J Schaub, M Dirain, Z Xiang, C Haskell-Luevano
- # 2 HIV Testing in the Emergency Department: A Survey of Florida Acute Care Hospitals**  
Presenter: Stacy Chao (Pharmaceutical Outcomes and Policy/Pharmacy Student)  
Authors: S Chao, T Kauf, S Linden
- # 3 Consumer Comprehension of Consumer Medication Information Leaflets**  
Presenter: Erica Fernandez (Pharmaceutical Outcomes and Policy/Pharmacy Student)  
Authors: E Fernandez, A Winterstein, S Linden, A Lee, C Kimberlin
- # 4 Inclusion of Off-label Indications in Consumer Medication Information Leaflets**  
Presenter: Abigail Lee (Pharmaceutical Outcomes and Policy/Pharmacy Student)  
Authors: A Lee, C Kimberlin, E Fernandez, A Winterstein
- # 5 The Effects of Atorvastatin on MCP-1 Levels in Healthy Adults**  
Presenter: Michael Meldrum (Pharmacy Practice/Pharmacy Student)  
Authors: M Meldrum, J Shuster, D Theriaque, G Welder, M Haller, R Schofield, I Zineh
- # 6 Modifications of the Melanocortin Tetrapeptide Ac-His-DPhe-Arg-Trp-NH<sub>2</sub> at the DPhe and Arg Positions and their Interactions with Mouse Melanocortin Receptors**  
Presenter: Marie Morrow (Pharmacodynamics/Pharmacy Student)  
Authors: M Morrow, E Haslach, A Singh, M Dirain, C Haskell-Luevano
- # 7 Effect of Maternal Cortisol on Expression of Placental Genes Related to Fetal and Placental Growth**  
Presenter: Marjorie Rochette (Pharmacodynamics/Pharmacy Student)  
Authors: M Rochette, M Keller-Wood
- # 8 Medication Errors in Otolaryngology Surgery**  
Presenter: Rebecca Rosenwasser (Pharmaceutical Outcomes and Policy/Pharmacy Student)  
Authors: R Rosenwasser, A Winterstein, P Antonelli, A Rosenberg, E Rosenberg

## POSTER COMPETITION (cont.)

- # 9 The Role of the Poison Control Center: A Community Pharmacist Prospective**  
Presenter: Shelby Troendle (Pharmacy Practice/Pharmacy Student)  
Authors: S Troendle, S Normann
- # 10 Atorvastatin Reduces ENA-78 Chemokine Concentrations Independent of LDL-C Changes in a Cardiovascular Disease Free Population**  
Presenter: Greg Welder (Pharmacy Practice/Pharmacy Student)  
Authors: G Welder, R Schofield, I Zineh
- # 11 Alpha-1 Antitrypsin Ameliorates Development of Rheumatoid Arthritis in Mouse Model**  
Presenter: Christian Grimstein (Pharmaceutics/Post-doctoral Fellow)  
Authors: C Grimstein, Y-K Choi, S Song
- # 12 In Vivo Anti-tumor Effect of Fusion Plasmid hp19ART-TAT using FGF2-targeted Cationic Lipid System**  
Presenter: Guoqin Niu (Pharmaceutics/Post-doctoral Fellow)  
Authors: G Niu, S Sullivan, J Hughes
- # 13 Population Pharmacodynamic Modeling of Ordered Categorical Data from Patients with Plaque Psoriasis**  
Presenter: Sreedharan Sabarinath (Pharmaceutics/Post-doctoral Fellow)  
Authors: S Sabarinath, N Goyal, G Schmith, H Derendorf
- # 14 Incorporation of Reverse Turn Mimetic into Chimeric Melanocortin-AGRP Peptide Template: Design, Synthesis and Pharmacology**  
Presenter: Anamika Singh (Pharmacodynamics/Post-doctoral Fellow)  
Authors: A Singh, J Holder, A Wilczynski, R Witek, C Haskell-Luevano
- # 15 Soft Tissue Penetration of Cefuroxime Determined by Clinical Microdialysis in Morbidly Obese Patients Undergoing Abdominal Surgery**  
Presenter: April Barbour (Pharmaceutics/Graduate Student)  
Authors: A Barbour, S Schmidt, W Rout, K Ben-David, O Burkhardt, H Derendorf
- # 16 Cannabinoid Receptor Agonists Potentiate Action Potential Independent Release of GABA in the Dentate Gyrus Through a CBI Receptor Independent Mechanism**  
Presenter: Chinki Bhatia (Pharmacodynamics/Graduate Student)  
Authors: C Bhatia, M Hofmann, C Frazier

### POSTER COMPETITION (cont.)

- # 17 **Persistent of Stimulant Treatment among Youths Newly Diagnosed with Attention Deficit/Hyperactivity Disorders (ADHD)**  
Presenter: Chih-Ying Chen (Pharmaceutical Outcomes and Policy/Graduate Student)  
Authors: C-Y Chen, A Winterstein
- # 18 **Design, Synthesis and Pharmacology of a Peptide Library Modeling the Melanocortin Tetrapeptide, Ac-His-DPhe-Arg-Trp-NH<sub>2</sub>, to Function as Selective MC4R Antagonists**  
Presenter: Erica Haslach (Pharmacodynamics/Graduate Student)  
Authors: E Haslach, M Dirain, C Haskell-Luevano
- # 19 **Hydrochlorothiazide Modulates Cardiometabolic Gene Expression in Human Endothelial Cells**  
Presenter: Julio Duarte (Pharmacy Practice/Graduate Student)  
Authors: J Duarte, J Johnson, B Kone, I Zineh
- # 20 **The Effect of Hydrochlorothiazide on Endothelial Expression of Sirtuin-1, a Diabetes-associated Gene**  
Presenter: Julio Duarte (Pharmacy Practice/Graduate Student)  
Authors: J Duarte, J Johnson, B Kone, I Zineh
- # 21 **Effects of PAT, a Novel 5HT<sub>2</sub> Modulator, on Extracellular Neurotransmitter Levels in the Striatum and Nucleus Accumbens**  
Presenter: James Kasper (Pharmacodynamics/Graduate Student)  
Authors: J Kasper, R Booth, J Peris
- # 22 **Novel PLA<sub>2</sub>-conjugated Polymeric Nanoparticles for Non-viral Gene Delivery**  
Presenter: Huong Le (Pharmaceutics/Graduate Student)  
Authors: H Le, A Hirko, J Hughes
- # 23 **Patient Counseling Efforts in U.S. Community Pharmacies: Associations to Pharmacy and Personnel Attributes**  
Presenter: Stephan Linden (Pharmaceutical Outcomes and Policy/Graduate Student)  
Authors: S Linden, C Kimberlin, A Winterstein
- # 24 **PK/PD Studies Focusing on Physical Dependence and Analgesic Tolerance of Fentanyl in Rats**  
Presenter: Jiang Liu (Pharmaceutics/Graduate Student)  
Authors: J Liu, H Pan, A Bruijnzeel, F Wong, M Gold, A Mauderli, H Derendorf

### POSTER COMPETITION (cont.)

- # 25 **Role of Mitochondria in Manganese-stimulated Reactive Oxygen Species Production in Microglia**  
Presenter: Yue Liu (Pharmacodynamics/Graduate Student)  
Authors: Y Liu, K Lokuta, G Dutta, P Zhang, D Barber, B Liu
- # 26 **Effect of a Lysolipid on the Efficiency of pH Sensitive Liposomes**  
Presenter: Ryan Mesaros (Pharmaceutics/Graduate Student)  
Authors: R Mesaros, J Hughes
- # 27 **Inhalable Corticosteroid Nanoparticles for Asthma Management**  
Presenter: Gina Patel (Pharmaceutics/Graduate Student)  
Authors: G Patel, G Hochhaus
- # 28 **Is Protein Binding Important for Drugs with High Receptor Affinities?**  
Presenter: Gina Patel (Pharmaceutics/Graduate Student)  
Authors: G Patel, G Hochhaus
- # 29 **New Digitization Methods for the Analysis of Synergistic Dopaminergic Interactions with Apomorphine**  
Presenter: Stephen Phipps (Pharmaceutics/Graduate Student)  
Authors: S Phipps, V Butterweck
- # 30 **Population Pharmacokinetic Model of Regular Human Insulin Following Different Routes of Administration**  
Presenter: Elizabeth Potocka (Pharmaceutics/Graduate Student)  
Authors: E Potocka, R Baughman, H Derendorf
- # 31 **OATP1B1 Polymorphic Effects on Inflammatory Mediators in Atorvastatin-treated Subjects**  
Presenter: Melonie Potvin (Pharmacy Practice/Graduate Student)  
Authors: M Potvin, G Welder, I Zineh, R Schofield, R Frye
- # 32 **Effects of  $\alpha 7$  Nicotinic Receptor Gene Delivery on Processes Underlying Cell Viability**  
Presenter: Yan Ren (Pharmaceutics/Graduate Student)  
Authors: Y Ren, E Meyer, J Hughes

**POSTER COMPETITION (cont.)**

**# 33 Effect of Stimulant Medication on Height and Weight in Children with Attention Deficit Hyperactivity Disorder**

Presenter: Jane Ritho (Pharmaceutical Outcomes and Policy/Graduate Student)  
Authors: J Ritho, C Garvan, R Bussing

**# 34 Initiation of Hydroxyurea Therapy Among Sickle Cell Disease Patients Enrolled in a Medicaid Program**

Presenter: Jane Ritho (Pharmaceutical Outcomes and Policy/Graduate Student)  
Authors: J Ritho, A Hartzema

**# 35 Oxidative Stress-mediated Cooperative Dopaminergic Neurotoxicity of Pesticides Dieldrin and Lindane**

Presenter: Heera Sharma (Pharmacodynamics/Graduate Student)  
Authors: H Sharma, P Zhang, D Barber, B Liu

**# 36 Retard Memory Loss in APP/PS1 Mice Model through AAV-8 Gelsolin Delivery**

Presenter: Zhaohua Wang (Pharmaceutics/Graduate Student)  
Authors: Z Wang, E Meyer, M King, J Hughes

**# 37 Utilizing Mechanism-based Pharmacokinetic/Pharmacodynamic Models to Understand and Prevent Antimicrobial Resistance**

Presenter: Benjamin Wu (Pharmaceutics/Graduate Student)  
Authors: B Wu, H Derendorf

**# 38 Herb-drug Interactions: Investigating the Effects of Herbal Supplements on Glucuronidation of Drugs**

Presenter: Mohamed-Eslam Mohamed (Pharmacy Practice/Graduate Student)  
Authors: M-E Mohamed, R Frye

**# 39 Discovery of Secondary Metabolites from Marine Cyanobacteria with Diverse Bioactivities**

Presenter: Jason Kwan (Medicinal Chemistry/Graduate Student)  
Authors: J Kwan, T Meickle, D Ladwa, M Teplitski, V Paul, H Luesch

**JUDGES**

**POSTER COMPETITION**

**Lisa Inge, PharmD.**  
Assistant Director  
College of Pharmacy, Jacksonville Campus  
University of Florida

**William C. Buhi, Ph.D.**  
Professor Emeritus  
Department of Obstetrics and Gynecology  
College of Medicine  
Chair of IACUC  
Office of Research and Graduate Programs  
University of Florida

**Peter Stacpoole, Ph.D., M.D.**  
Director, General Clinical Research Center  
Director, Clinical and Translational  
Science Institute  
Associate Dean, Clinical Research and  
Training  
College of Medicine  
University of Florida

**Bruce Stevens, Ph.D.**  
Professor  
Department of Physiology & Functional  
Genomics  
College of Medicine  
University of Florida

**Julie Zito, Ph.D.**  
Professor of Pharmacy and Psychiatry  
Pharmaceutical Health Services Research  
Department  
University of Maryland, Baltimore

**Sandy William Zito, Ph.D.**  
Professor  
Medicinal/Pharmaceutical  
Chemistry/Pharmacognosy  
College of Pharmacy and Allied Health  
Professions  
St. John's University

**ORAL COMPETITION**

**Robert R. Ruffolo, Jr., Ph.D.**  
Retired President, Research and  
Development  
Wyeth Corporation  
Spring City, PA

**Michael A. Schwartz, Ph.D.**  
Dean Emeritus  
Department of Pharmaceutical  
Outcomes and Policy  
College of Pharmacy  
University of Florida

**Erin St. Onge, PharmD.**  
Assistant Dean and Director  
College of Pharmacy, Orlando Campus  
University of Florida

**Jennifer Williams, PharmD.**  
Assistant Dean and Director  
College of Pharmacy, St. Petersburg Campus  
University of Florida