SCHEDULE OF EVENTS

9:00am – 11:00am  ORAL COMPETITION  HPNP G307

Junior Division

9:00am  Fatma Al-Awadhi
9:15am  Weijing Cai
9:30am  Justin Smith

Levitt Division

9:45am  YoonYoung Choi
10:00am  Yan Li

Senior Division

10:15am  Mohammad Akbar
10:30am  Nihal El-Rouby
10:45am  Lei Wang

11:45am - 12:45pm  Luncheon – Sponsors and Judges  HPNP 4307

12:00pm – 12:45pm  Students set-up Poster Presentations  HPNP Reception Hall

12:30pm  Refreshments available  HPNP Reception Hall

1:00pm – 3:00pm  POSTER COMPETITION

4:00pm – 5:00pm  Keynote Address  HPNP Auditorium
Rashmi Barbhaiya, Ph.D.
“Precision Medicine, R&D Productivity & Affordability of Medicines – Key Drivers of Pharma R&D”

5:00pm - 7:00pm  Awards Reception  HPNP Reception Hall
Refreshments and Announcement of Winners
JUDGES

ORAL COMPETITION

Rashmi Barbhaiya, Ph.D.
Clinical Pharmacologist
CEO, Dynametics, LLC

Mohan K. Raizada, Ph.D.
Distinguished Professor
Department of Physiology and Functional Genomics
University of Florida

William J. Millard, Ph.D.
Former Associate Dean and Professor
Pharmacodynamics
College of Pharmacy
University of Florida

Amy Rosenberg, PharmD, BCPS
Residency Director
Shands Hospital
UF Health

Laura Peterson, Ph.D.
Adjunct Instructor
Department of Chemistry
University of Florida

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Class of 1961

Debbie Klapp
Memorial Endowment

SILVER SPONSOR

PK-P’Dyne, Inc.
Dr. Kerry S. Estes
Gainesville, FL
Class of 1982
54. **GSTZ1 Expression is Variable in Breast and Liver Cancer and Modulates the Potency of Dicholoacetate**  
Presenter: Stephan Jahn (PharmD)  
Authors: S. Jahn, M. Solayman, L. Gay, R. Lorenzo, T. Langaee, P. Stacpoole, M. James

55. **Application of Pharmacokinetic/Pharmacodynamic Modelling to Simulate Potential Differences in Bioequivalence Between Generic and Brand Name Anti-Epileptic Products**  
Presenter: Zhaoyu Meng (Amy) (PharmD)  
Authors: Z. Meng, L. Fang, L. Lesko, M. Trame, S. Schmidt

56. **Evaluation of the Appropriateness of Target Specific Oral Anticoagulant Selection and Monitoring in the Outpatient Setting**  
Presenter: Kristin Rieser (PharmD)  
Authors: K. Rieser, K. Vogel Anderson

57. **Integrating Genomics with Metabolomics Reveal Novel Genetic Signals Associated with Variability in the Blood Pressure Response to Thiazide Diuretics Treated Patients**  
Presenter: Mohamed Shahin (PharmD)  

58. **Therapeutic Target Validation of Cytarabine Response Genes in Acute Myeloid Leukemia**  
Presenter: Miyoung Shin (PharmD)  
Authors: M. Shin, L. Chauhan, X. Cao, K. Crews, S. Pounds, J. Lamba

59. **Nitroxoline: A Broad-Spectrum Bacterial Biofilm-Eradicating Agent that Demonstrates Efficacy in an Ex Vivo Skin Wound Infection Model**  
Presenter: Minh Thu Nguyen (Undergraduate Student)  
Authors: M. Nguyen, Y. Abouelhassan, Q. Yang, G. Schultz, R. Huigens

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**JUDGES**

**POSTER COMPETITION**

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**Jane V. Aldrich, Ph.D.**  
Professor  
Medicinal Chemistry  
College of Pharmacy  
University of Florida

**Kenneth P. Klinker, Pharm.D.**  
Clinical Associate Professor  
Pharmacotherapy & Translational Research  
College of Pharmacy  
University of Florida

**Jürgen Bulitta, Ph.D.**  
Associate Professor  
Pharmaceutics  
College of Pharmacy  
University of Florida

**Larry Lopez, Pharm.D., FCCP, BCPS**  
Professor Emeritus of Pharmacy and Medicine  
Pharmaceutical Outcomes and Policy  
University of Florida

**John Gums, Pharm.D.**  
Associate Dean for Clinical Affairs  
College of Pharmacy  
University of Florida

**John Markowitz, Pharm.D., BCPP**  
Professor  
Pharmaceutical Outcomes and Policy  
University of Florida

**Alexander J. Grenning, Ph.D.**  
Assistant Professor  
Director of Experiential Programs  
Department of Chemistry  
University of Florida

**Jay McLaughlin, Ph.D.**  
Associate Professor  
Pharmacodynamics  
College of Pharmacy  
University of Florida

**Leslie Hendeles, Pharm.D.**  
Professor  
College of Pharmacy  
University of Florida

**Thomas Schmittgen, Ph.D.**  
Professor  
Pharmaceutics  
College of Pharmacy  
University of Florida

**Yu-Jung "Jenny" Wei, Ph.D.**  
Assistant Professor  
Pharmaceutical Outcomes and Policy  
University of Florida

**William Cary Mobley, Ph.D.**  
Clinical Associate Professor  
Pharmaceutics  
College of Pharmacy  
University of Florida
## ORAL COMPETITION

### LEVITT DIVISION

**#1**
- **Presenter:** YoonYoung Choi  
- **Department:** Pharmaceutical Outcomes and Policy  
- **Research Title:** A Dynamic Risk Model for Inpatient Falls: Are They Predictable?

**#2**
- **Presenter:** Yan Li  
- **Department:** Pharmaceutical Outcomes and Policy  
- **Research Title:** A Dynamic Risk Prediction Model for Hospital Associated Hyperkalemia: Model Development and Performance Evaluation

### JUNIOR DIVISION

**#1**
- **Presenter:** Fatma Al-Awadhi  
- **Department:** Medicinal Chemistry  
- **Research Title:** Underwater Treasures: Chemical and Biological Characterization of Cathepsin Inhibitors from Marine Cyanobacteria

**#2**
- **Presenter:** Xinyue Liu  
- **Department:** Pharmaceutical Outcomes and Policy  
- **Research Title:** Discovery, Synthesis, and Biological Evaluation of Apratyramide, a Marine-derived Transcriptional Stimulator of VEGF-A

**#3**
- **Presenter:** Justin Smith  
- **Department:** Pharmacodynamics  
- **Research Title:** A Novel Look at the Role of AT1A Receptors in the PVN of the Hypothalamus in Neuroendocrine and Cardiovascular Regulation

### SENIOR DIVISION

**#1**
- **Presenter:** Mohammad Akbar  
- **Department:** Pharmaceutics  
- **Research Title:** Alpha-1 Antitrypsin (AAT) Gene and Stem Cell Based Therapies for the Treatment of Osteoporosis

**#2**
- **Presenter:** Nihal El-Rouby  
- **Department:** Pharmacotherapy & Translational Research  
- **Research Title:** Using Genome-Wide Association Analysis Couples with Induced Pluripotent Stem Cells (iPSC) to Identify Genetic Markers of Resistant Hypertension

**#3**
- **Presenter:** Lei Wang  
- **Department:** Pharmacodynamics  
- **Research Title:** Brain Angiotensin Converting Enzyme 2 as a Novel Therapeutic Target for Anxiety Disorders

## POSTER COMPETITION

### LEVITT DIVISION

44. **Proinflammatory Effects of Increased Maternal Cortisol During Late Gestation on Fetal Epicardial Adipose Tissue in an Ovine Model**  
**Presenter:** Adrian Mottley (PharmD)  
**Authors:** A. Mottley, N. Dedaj

45. **Novel Antibiotic Combinations to Target Resistant Klebsiella pneumoniae and Escherichia coli**  
**Presenter:** Emily McElhaney (PharmD)  
**Authors:** E. McElhaney, E. Richards, M. Keller-Wood

46. **Deciphering the Molecular Pathways Through Biomarkers Identification for Trastuzumab Resistance and Cardiotoxicity in HER2-positive Breast Cancer**  
**Presenter:** Marianela Robainas (PharmD)  
**Authors:** M. Robainas, D. Ivasechko, K. Thomas, L. Lawrence, S. Ait-Oudhia

47. **Integrated Data Mining Approach and Systems Pharmacology to explore the Mechanism and the Prevention of Cisplatin-Induced Nephrotoxicity**  
**Presenter:** Tyler Spink (PharmD)  
**Authors:** T. Spink, C. Finnell, J. Giannantonio, S. Tu, D. Hawkins, J. John, F. Sanchez, M. Trame

48. **CD33 SNPs as markers for identifying patients likely to be benefit from gemtuzumab, ozagomicin-a report from the Children's Oncology Group**  
**Presenter:** Lata Chauhan (PharmD)  
**Authors:** L. Chauhan, M. Shin, R. Aplenc, J. Pollard, J. Wang, T. Alonzo, A. Gamis, S. Meshinchi, J. Lamba

49. **Insight into Opioid-Opioid Receptor Binding Through Analysis of Structural Data, Mutagenesis Studies, and SAR of Opioid Peptides**  
**Presenter:** Michael Ferracane (PharmD)  
**Authors:** M. Ferracane, J. Aldrich

50. **Identifying Quality Gaps in ePrescribing through INCIPRE; Incorporating Community Pharmacy Quality Improvement and Meaningful Feedback into the ePrescribing Process**  
**Presenter:** Jessica Gonzalez (PharmD)  
**Authors:** J. Gonzalez

51. **Development of a Systems Pharmacology Model to Predict the Effects of Warfarin and Rivaroxaban on the Human Coagulation Network**  
**Presenter:** Sonja Hartmann (PharmD)  
**Authors:** S. Hartmann, K. Biliouris, L. Lesko, U. Nowak-Gottl, M. Trame

52. **Anticoagulation-related Quality of Life Associated with Extended-Interval Monitoring: A Pre-Specified Analysis of the FADE-OUT Study**  
**Presenter:** Andrew Hwang (PharmD)  
**Authors:** N. Carris, S. Smith, J. Taylor, K. Sando, J. Powell, A. Hwang, J. Gums, E. Dietrich, K. Vogel Anderson

53. **Exposure to Social Defeat Stress Increases Morphine Consumption and Depression-like Behavior Mediated by the Endogenous Kappa Opioid System**  
**Presenter:** Kristen Hymel (PharmD)  
**Authors:** K. Hymel, J. Medina, S. Eans, M. Ganno, H. Stacy, J. McLaughlin
33. Trends in the Utilization of Warfarin and Non-Vitamin K Oral Anticoagulants in Elderly Patients with Atrial Fibrillation
Presenter: Abdullah Alalwan (Pharmaceutical Outcomes and Policy/Graduate Student)
Authors: A. Alalwan, S. Voils, A. Hartzema

34. Impact of Work and Activity Limitations Attributable to Arthritis on Health Related Quality of Life of United States Veterans
Presenter: Ghadeer Dawwas (Pharmaceutical Outcomes and Policy/Graduate Student)
Authors: G. Dawwas, H. Park

35. The Impact of Chronic Bronchitis on Depressive Tendencies in USA Adults: MEPS 2011
Presenter: Xinyi Jiang (Pharmaceutical Outcomes and Policy/Graduate Student)
Authors: X. Jiang, H. Park

36. Factors Associated with Influenza Vaccination Uptake among Asthma Patients
Presenter: Sascha van Boemmel-Wegmann (Pharmaceutical Outcomes and Policy/Graduate Student)
Authors: S. van Boemmel-Wegmann, H. Park

37. Association of Interferon-Based Therapy and Cardiovascular Disease in Chronic Hepatitis C Patients in U.S.
Presenter: Wei Wang (Pharmaceutical Outcomes and Policy/Graduate Student)
Authors: W. Wang, H. Park

38. CFLAR Splicing SNP as Predictor of Chemo-sensitivity to Anticancer Drugs
Presenter: Emilie Bergsma (PharmD)
Authors: E. Bergsma, L. Chauhan, J. Lamba

39. Preclinical Evaluations of Two Vascular Endothelial Growth Factor (VEGF) Inhibitors in Combination
Presenter: Maher Chaar (PharmD)
Authors: M. Chaar, M. Ferraro, E. Johnson, M. Le Merdy, A. Brown, S. Ait-Oudhia

40. Daptomycin Medication Use Evaluation for Dosing and Administration Considerations
Presenter: Karen Fong (PharmD)
Authors: K. Fong, J. Pardo

41. Urgent Need for Effective Antibiotic Combinations to Target Multidrug-resistant Pseudomonas aeruginosa and Acinetobacter baumannii
Presenter: Jeff Kamta (PharmD)
Authors: J. Kamta, J. Tamayo

42. SNPs as Predictors of Chemo-sensitivity to Cytarabine
Presenter: Sally Kassem (PharmD)
Authors: S. Kassem, E. Bergsma, J. Lamba

43. Association between Beta-1 Adrenergic Receptor Polymorphisms and Arrhythmia in Post-Operative Patients with Congenital Heart Disease
Presenter: Brent Lovato (PharmD)
Authors: B. Lovato, B. Quang Duong, W. Stein, T. Langaee, M. Bleiweis, L. Cavallari
12. Evaluation of Metabolic Alteration Based on FLT3 Status in Pediatric Acute Myeloid Leukemia Patients by Serum Metabolomics
Presenter: Bradley Stockard (Pharmacotherapy & Translational Research/Graduate Student)
Authors: B. Stockard, E. Dhummakupt, T. Garrett, J. Lamba

13. A Novel Transcription Factor Increases Pancreatic Duct Formation During Experimental Acinar to Ductal Transdifferentiation
Presenter: Ola Elgamal (Pharmaceutics/Graduate Student)
Authors: O. Elgamal, A. Azevedo-Pouly, J. Jiang, M. Badwai, T. Schmittgen

14. Rates of Inactivation of Hepatic Cytosolic and Mitochondrial Glutathione Thrsferase Zeta 1 (GSTZ1) Following Oral Administration of Dichloroacetate Change with Age in a Rat Model
Presenter: Marci Smeltz (Medicinal Chemistry/Graduate Student)

15. Unidentified Protein(s) in Kidney Mitochondria Inhibit GSTZ1 Activity with Dichloroacetate
Presenter: Guo Zhong (Medicinal Chemistry/Graduate Student)

16. Discovery of Potent Halogenated Phenazine and Quinoline Small Molecule Biofilm-Eradicating Agents
Presenter: Yasmeen Abouelhassan (Medicinal Chemistry/Graduate Student)
Authors: Y. Abouelhassan, A. Garrison, A. Basak, R. Huigens

17. Peptide Ring Closing Metathesis: Minimizing Side Reactions in Arodyn Analogs
Presenter: Solomon Gisemba (Medicinal Chemistry/Graduate Student)
Authors: S. Gisemba, J. Aldrich

18. Discovery and Development of the Potent Marine-Derived Elastase Inhibitor Lyngbyastatin 7: Structure-Activity Relationship Studies, Total Synthesis and In Vitro Biological Evaluation in Model Systems
Presenter: Dameng Luo (Medicinal Chemistry/Graduate Student)
Authors: D. Luo, Q. Chen, H. Luesch

Presenter: Nikki Thiele (Medicinal Chemistry/Graduate Student)
Authors: N. Thiele, K. Sloan

20. Dihydroxy-acid Dehydratase, a Novel Target for Developing Antibiotics
Presenter: Peilan Zhang (Medicinal Chemistry/Graduate Student)
Authors: P. Zhang, B. MacTavish, J. Nina, S. Bruner, Y. Ding

21. Biochemical Characterization of Cryptic Microviridin Biosynthesis in Anabaena sp. PCC 7120
Presenter: Yi Zhang (Medicinal Chemistry/Graduate Student)
Authors: Y. Zhang, Y. Ding

22. Application of Microdialysis in Determination of Interstitial Concentration of Therapeutic Antibody Immunoglobulin
Presenter: Vipada Khaowroongrueng (Pharmaceutics/Graduate Student)
Authors: V. Khaowroongrueng, S. Jadhav, H. Derendorf

23. In Vitro Analysis of Trastuzumab Mechanism of Action in HER2-positive Breast Cancer alone or in Association with Paclitaxel in a Time Sequence Combination Chemotherapy
Presenter: Maxime Le Merdy (Pharmaceutics/Graduate Student)
Authors: M. Le Merdy, S. Ait-Oudhia

24. CRISPR CAS Generated microRNA 216/217 Knockout Mouse Model for Pancreas Tumorigenesis Study
Presenter: Dhruvikumar Sutaria (Pharmaceutics/Graduate Student)
Authors: D. Sutaria, A. Azevedo-Pouly, J. Jiang, X. Pu, V. Coppola, T. Schmittgen

25. Model Guided Dose Optimization of Dichloroacetate for the Treatment of Congenital Lactic Acidosis
Presenter: Naveen Mangal (Pharmaceutics/Graduate Student)
Authors: N. Mangal, A. Shroads, T. Langaee, P. Stacpoole, S. Schmidt

Presenter: Thomas Cirino, (Pharmacodynamics/Graduate Student)
Authors: T. Cirino, S. Eans, J. Medina, C. Mesangeau, C. McCurdy, J. McLaughlin

27. Pharmacokinetic and Pharmacodynamic Responses in Astronauts During International Space Station (ISS) Missions
Presenter: Yichao Yu (Pharmaceutics/Graduate Student)
Authors: Y. Yu, J. Kast, L. Barger, M. Basner, Y. Bokrand-Donatelli, S. Smith, V. Wotring, H. Derendorf

Presenter: Yi Ting Lien (Kayla) (Pharmaceutics/Graduate Student)
Authors: S. Jiang, T. Samant, C. Lagishetty, K. Madrasi, S. Schmidt

29. Effect of Sample Size on Modified Chi-square Ratio Test for Comparison of Cascade Impactor Profiles of Inhaled Corticosteroids
Presenter: Abhinav Kurumaddali (Pharmaceutics/Graduate Student)
Authors: A. Kurumaddali, L. Zhao, G. Hochhaus

30. Development of Mechanistic Physiological-Based Pharmacokinetic (PBPK) Model for Shed Antigens on Membrane Bound Targets Following mAb Treatment
Presenter: Yi Ting Lien (Kayla) (Pharmaceutics/Graduate Student)
Authors: Y. Lien, H. Yang, S. Basu, S. Ait-Oudhia, S. Schmidt

31. Pharmacokinetic and Pharmacodynamic Modeling of Peptide YY (3-36) in Mice
Presenter: Jie Shao (Pharmaceutics/Graduate Student)
Authors: J. Shao, G. Hochhaus

32. A Semi-Mechanistic Model for Predicting the Nasal and Plasma Pharmacokinetics of Intranasal Corticosteroids
Presenter: Uta Schilling (Pharmaceutics/Graduate Student)
Authors: U. Schilling, T. Miesler, B. Weber, G. Hochhaus