

## PHARMACEUTICAL RESEARCH AND DRUG DEVELOPMENT - VIRTUAL

*Theme: "Innovations in Pharmaceutical Research and Imaging for the New Decade"*

**September 20-22, 2021 (EDT TIME ZONE)**

### Tentative Program\*

**Day 1**

**Monday**

**September 20, 2021**

Keynote Presentations	25 Minutes Talk   5 Minutes Q & A
09:00 - 09:30	<b>Kenneth A. Jacobson</b> , National Institutes of Health, Bethesda, MD Discovery of Drugs Acting through Purinergic Signaling Pathways
09:30 - 10:00	<b>Paul A. Insel</b> , University of California San Diego, CA "Old" and "New" GPCRs in Cancer: New Therapeutic Opportunities Revealed by GPCRomics
10:00 - 10:30	<b>Philip S. Low</b> , Purdue University, West Lafayette, IN Ligand-targeted Drugs for Reprogramming of the Immune System
10:30 - 10:40	<b>Coffee Break and Networking</b>
10:40 - 11:10	<b>Raphael Mechoulam</b> , The Hebrew University of Jerusalem, Israel The Endocannabinoid System – Looking Back and Ahead
11:10 - 11:40	<b>Barbara Slusher</b> , Johns Hopkins University, Baltimore, MD Academic Story of "BENCH to BEDSIDE": Discovery of Targeted Glutamine Antagonist Prodrugs
11:40 - 12:10	<b>Ruben Abagyan</b> , University of California, San Diego, CA Discovering Complex Pharmacology of Drugs and Finding Leads with Desired Multi-target Pharmacology
12:10 - 12:40	<b>Michael P. Lisanti</b> , University of Salford, Manchester, United Kingdom Metastasis Prophylaxis with Doxycycline & its Derivatives that Lack Antibiotic Activity
12:40 - 13:10	<b>Shuji Ogino</b> , Harvard Medical School, Longwood Ave., Boston Integrative Analyses of Environment (e.g., Drugs), Microbiota, and Tumor Immunity Give Insight into Future Medical Targets
13:10 - 13:40	<b>Lunch and Refreshments</b>
13:40 - 14:10	<b>Robert Kreitman</b> , National Cancer Institute, NIH, Bethesda, MD Development of Anti-CD22 Recombinant Immunotoxin Moxetumomab Pasudotox for Relapsed/Refractory Hairy Cell Leukemia
14:10 - 14:40	<b>Michelle Arkin</b> , University of California San Francisco, CA Site-directed Discovery Of Inhibitors and Stabilizers of Protein-protein Interactions

14:40 - 15:10	<b>Mark T. Hamann</b> , Medical University of South Carolina, Charleston, SC The Application of Contemporary Natural Products Discovery Approaches to the Identification of Promising Leads for COVID19
15:10 - 15:40	<b>Thomas J. Webster</b> , Northeastern University, Boston, MA 4D Nano Printing: Intelligent External Control of Implantable Devices
15:40 - 15:50	<b>Coffee Break and Networking</b>
15:50 - 16:20	<b>Michael S. Wolfe</b> , University of Kansas, Lawrence, KS Dark Amyloid: The Missing Piece in the Puzzle of Alzheimer's Disease?
16:20 - 16:50	<b>Phillip Gerk</b> , Virginia Commonwealth University, Richmond, VA Enhancing Oral Bioavailability of Natural Products
16:50 - 17:20	<b>Kattesh V. Katti</b> , University of Missouri, Columbia, MO New Generation of Silver Nanoparticles as Effective Anti COVID-19 Nanomedicine Agents

<b>Day 2</b>	<b>Tuesday</b>	<b>September 21, 2021</b>
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<b>Featured Talks</b>	20 Minutes Talk   5 Minutes Q & A
<b>Chair:</b>	<b>Xiaodong Cheng</b> , University of Texas Health Science Center, Houston, TX
08:00 - 08:25	<b>Juan Jose Marugan</b> , National Institutes of Health, Rockville, MD Neurotinib, a New Allosteric Inhibitor of c-Abl Kinase with High CNS Penetration for the Treatment of Epilepsy
08:25 - 08:50	<b>Adam Renslo</b> , University of California, CA Tumor Targeting Based on Oncogenic Changes to Iron Speciation and Homeostasis
08:50 - 09:15	<b>Agnieszka Sulima</b> , National Institute on Drug Abuse, NIH, Rockville, MD Syntheses of Haptens for Effective Heroin and Fentanyl Vaccines as Treatment Medications
09:15 - 09:40	<b>James Hickman</b> , University of Central Florida, Orlando, FL Advanced Human on a Chip Systems for Drug Discovery
09:40 - 10:05	<b>Patrick Woster</b> , Medical University of South Carolina, Charleston, SC Small Molecule Inhibitors of CD38 for Use in Cancer Immunotherapy
10:05 - 10:15	<b>Coffee Break and Networking</b>
10:15 - 10:40	<b>John Imig</b> , Medical College of Wisconsin, Milwaukee, WI Multi-Target Drugs for Kidney and Metabolic Diseases
10:40 - 11:05	<b>Umesh Desai</b> , Virginia Commonwealth University School of Pharmacy, VA Discovering Glycosaminoglycan Sequences that Recognize Proteins with High Selectivity
11:05 - 11:30	<b>Gabor Somlyai</b> , HYD LLC for Cancer Research and Drug Development, Hungary Hydrogen/Deuterium Ratio is a Key Regulator of Cell Proliferation and Metabolism – Submolecular Dimensions of Drug Development

11:30 - 11:55	<b>Brian S. J. Blagg</b> , The University of Notre Dame, Notre Dame, IN
	Isoform-selective Inhibitors of Hsp90 to Treat Cancer, Glaucoma, and Neurodegenerative Diseases
11:55 - 12:20	<b>Rong Huang</b> , Purdue University College of Pharmacy, West Lafayette, Indiana
	Rational Development of Potent and Selective Inhibitors for Methyltransferases
12:20 - 12:45	<b>Arthur M. Edelman</b> , Jacobs School of Medicine and Biomedical Sciences, NY
	Pleiotropic Actions of CaMKK2 in Cancer Cells
12:45 - 13:15	<b>Lunch and Refreshments</b>
13:15 - 13:40	<b>Martin Schnermann</b> , National Cancer Institute, Frederick, MD
	Harnessing Cyanine Chemistry for Dynamic & Multicolor In Vivo Imaging
13:40 - 14:05	<b>Xiaodong Cheng</b> , University of Texas Health Science Center, Houston, TX
	Developing Small Molecule Therapeutics Targeting Exchange Protein Directly Activated By Cyclic AMP
14:05 - 14:30	<b>Takashi Tsukamoto</b> , Johns Hopkins University, Baltimore, MD
	Small Molecule Modulators of mas-related G Protein-coupled Receptors-X1 (MRGPRX1) for the Treatment of Pain
14:30 - 14:55	<b>Yan Zhang</b> , Virginia Commonwealth University, Richmond, VA
	TBA
14:55 - 15:20	<b>Bin Ma</b> , Biogen, Cambridge, MA
	Discovery and Development of BIIB068: A Selective, Potent, Reversible Inhibitor of Bruton's Tyrosine Kinase
15:20 - 15:30	<b>Coffee Break and Networking</b>
15:30 - 15:55	<b>Megan Matthews</b> , University of Pennsylvania School of Arts & Sciences, PA
	Activity-Based Hydrazine Probes for Protein Profiling of Electrophilic Functionality in Therapeutic Targets
15:55 - 16:20	<b>Shahzad Movafagh</b> , Bernard J. Dunn School of Pharmacy, Fairfax, VA
	New Considerations in Hypoxia Inducible Factor 1 Enhancing Therapy in Renal Disease
16:20 - 16:45	<b>Thomas Prisinzano</b> , University of Kentucky, Lexington, KY
	Design and Synthesis of a New Synthetic Opioid Rescue Agent
16:45 - 17:10	<b>William C. K. Pomerantz</b> , University of Minnesota, Minneapolis, MN
	Chemical Epigenetics Approaches for Developing Selective BRD4 Inhibitors as Novel Anti-Cancer and Anti-Inflammatory Agents
17:10 - 17:35	<b>Rock Mancini</b> , Washington State University, Pullman, WA
	Exploiting Cancer Chemoresistance with Stimuli-Responsive Toll-Like Receptor
17:35 - 18:00	<b>Shyam Sathyamoorthi</b> , University of Kansas, Lawrence, KS
	Tethered Olefin Functionalization Technology for Complex Molecule Assembly

Day 3

Wednesday

September 22, 2021

Featured Talks		20 Minutes Talk   5 Minutes Q & A
<b>Chairs</b>	<b>Hongwu Chen</b> , UC Davis Health and School of Medicine, Sacramento, CA	
	<b>Reem Al Olaby</b> , California Northstate University, Rancho Cordova, CA	
08:00 - 08:25	<b>Jetze Tepe</b> , Michigan State University, East Lansing, MI Tackling the Undruggable	
08:25 - 08:50	<b>Evrpidis Gavathiotis</b> , Albert Einstein College of Medicine, Bronx, NY Rational Development of Selective BRAF Kinase Dimer Inhibitors	
08:50 - 09:15	<b>Roman Manetsch</b> , Northeastern University, Boston, MA Transforming Bricklike 4(1H)-Quinolones into Orally Bioavailable Antimalarials Targeting Liver, Blood, and Transmitting Stages of the Parasite	
09:15 - 09:40	<b>Hongwu Chen</b> , UC Davis Health and School of Medicine, Sacramento, CA Context-specific Potency of RORgamma Antagonists in Tumor and Immune Cells	
09:40 - 10:05	<b>Jed N. Lampe</b> , Skaggs School of Pharmacy and Pharmaceutical Sciences, CO 12-d3-Nevirapine Demonstrates Similar Efficacy for HIV Reverse Transcriptase Inhibition with a Reduced Toxicological Burden for the Neonate and Developing Infant	
10:05 - 10:15	<b>Coffee Break and Networking</b>	
10:15 - 10:40	<b>Hasan Uludag</b> , RJH Biosciences Inc., Edmonton, Canada Synthetic Lipopolymers to Deliver Gene-Based Medicines	
10:40 - 11:05	<b>Edmond J. Feris</b> , Geisel School of Medicine at Dartmouth College, Hanover, NH Drugging the Undruggable: Solving the MYC Problem in Cancer	
11:05 - 11:30	<b>Reem Al Olaby</b> , California Northstate University, Rancho Cordova, CA Elucidating the Role of HSPs in FXTAS	
11:30 - 11:55	<b>Sharma S B</b> , University college of Medical Sciences, Delhi, India Photochemicals: A Possible Herbal Drug for the Treatment of Post Prandial Hyperglycemia	
11:55 - 12:20	<b>Rheem A Totah</b> , University of Washington, Seattle, Washington Cardioprotective Role and Potential Druggability of CYP2J2	
12:20 - 12:45	<b>David Lapinsky</b> , Duquesne University School of Pharmacy, Pittsburgh, PA Appendage- and Scaffold-Diverse Electrophilic and Photoreactive Fully Functionalized Small-Molecule Probes for Integrated Phenotypic Screening-Target Identification Campaigns Via Minimalist Trifunctional Building Blocks	
12:45 - 13:15	<b>Lunch and Refreshments</b>	
13:15 - 13:40	<b>John Lewis</b> , University of Alberta, Edmonton, Canada Ushering in a New Era of Genetic Medicines	

13:40 - 14:05	<b>Arupratan Das</b> , Indiana University School of Medicine, Indianapolis, IN Human Stem Cell Differentiated Retinal Ganglion Cells: Model for studying RGC Degeneration Mechanism and Developing Neuroprotection Therapy for Optic Neuropathies
14:05 - 14:30	<b>Yana Cen</b> , Virginia Commonwealth University, Richmond, VA Unlock the Secrets of Longevity Genes, SIRTainly!
14:30 - 14:55	<b>Upraj Singh and Sumer Sandhu</b> , California Northstate University, Rancho Cordova, Identifying drug leads against COVID19
14:55 - 15:20	<b>Joshua Gross</b> , Duke University Medical Center, Durham, NC A Novel, Functionally Selective Ligand for the Ghrelin Receptor
15:20 - 15:30	<b>Coffee Break and Networking</b>
15:30 - 15:55	<b>Carolyn Tallon</b> , Johns Hopkins University, Baltimore, MD Using Neutral Sphingomyelinase 2 Inhibitors to Target Extracellular Vesicle-Mediated Tau Propagation in Alzheimer's Disease
15:55 - 16:20	<b>Diane Peters</b> , Johns Hopkins University School of Medicine, Baltimore, MD Discovery of IBD3540: A Novel Treatment for Inflammatory Bowel Disease
16:20 - 16:45	<b>Kathleen Hefferon</b> , Cornell University, Ithaca, New York Plant based solutions to COVID-19
17:45 - 17:00	Closing Remarks











