



Advancing Pharmaceutical Sciences, Careers, and Community

BEST ABSTRACT RECIPIENTS

2022 AWARDS PRESENTATION

OCT
16-19 | 2022

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#PharmSci360





MEMBERS & ATTENDEES— VIEW ABSTRACTS & POSTERS FROM 2022!

PharmSci 360 attendees and AAPS members have access to all poster abstracts and posters presented at the 2022 meeting, including the abstracts of winning posters listed in this document.

TO ACCESS THEM VISIT:

<https://www.aaps.org/pharmsci/recordings-and-posters>

HOW THE BEST ABSTRACTS WERE SELECTED

The Best Abstracts Awards bring attention to the most innovative and exciting research found in all the abstracts submitted and screened prior to the 2022 PharmSci 360 meeting. They represent the top 10% of abstracts as determined by screeners during AAPS' blind abstract screening process.

QUALIFICATIONS FOR NOMINATION:

Must be an AAPS member

Must be the single lead author of the abstract

Abstract must be ranked by screeners in the top 10% of abstracts for one of the following groups:

- Graduate students

- Postdoctoral candidates
- Young academic scientists with fewer than 3 years in academia
- Young industrial scientists with fewer than 3 years in industry
- AAPS member who does not meet the criteria for one of the above categories

AAPS will automatically identify candidates and verify their qualifications. Candidates do not complete an application form.

The award winners appear on the following pages.

RECIPIENT	TITLE
Aishwarya Saraswat	An Oral Lipid Nanocomplex Incorporating BRD4 PROTAC and Vemurafenib Overcomes BRAF Inhibitor Resistance in Malignant Melanoma In Vivo
Aishwarya Saraswat	Ultra-deformable Nanocarrier of BRD4 PROTAC and Aurora Kinase B Inhibitor to Target “Undruggable” c-Myc in BRAF Inhibitor-Resistant Melanoma
Akanksha Patel	Palmitoyl Carnitine-Anchored Nanoliposomes for Pancreatic Cancer and Neovasculature-Specific Delivery of Gemcitabine Elaidate
Alexandru Deac	A Physical Picture for the Dissolution Process of Copovidone ASDs
Da Hye Yang	The Size of the Unstirred Water Layer as a Function of Diffusion Coefficient
David Luedeker	Understanding the Stabilization Mechanism of Polyvinyl Alcohols (Parteck® MXP) in ASDs by Structure-Related Properties and PC-SAFT Modeling
Deepal Vora	Novel Formulation for Simultaneous Decontamination of Chemical Warfare and Delivery of Antidotes for Attenuating Cutaneous Damage Caused by Arsenicals
Deepal Vora	Development and Evaluation of a Drug-in-Adhesive Transdermal Delivery System for Delivery of Olanzapine for Treatment of Schizophrenia and Bipolar Disorder

RECIPIENT	TITLE
Fanfei Meng	A Single Local Delivery of Paclitaxel and Nucleic Acids via an Immunoactive Polymer for Cancer Immunotherapy
Farzana Zerín	Statins Constrict Resistance-Size Cerebral Arteries by Stimulating L-type Ca ²⁺ Channels
Fatima Dagher	Pharmacodynamic Assessments of Paclitaxel in Combination with Calcipotriol in Pancreatic Ductal Adenocarcinoma (PDAC)
Gaia Colombo	Anti-SARS-CoV-2 Nasal Powders: Manufacturing, Ex Vivo Drug Accumulation/Transport in Rabbit Nasal Mucosa and In Vitro Virus Inhibition
Gayathri Heenatigala Palliyage	Role of Cancer-Associated Fibroblasts in Lung Cancer Chemoresistance
Hanh Thuy Nguyen	Enteric Coating of an Amorphous Solid Dispersion: An Emerging Strategy to Enhance the Dissolution Performance in Stimulated Gastrointestinal Fluids
Hannah Beaven	Characterization of Aerosolized Droplets Using a 3D Printed Device for Small Animal Nose-to-Brain Drug Administration
Hao Lou	Developing an In Vitro System to Emulate the In Vivo Subcutaneous Environment and Predict the Fate of Drugs in Subcutaneous Delivery: Assessment of Biologics

RECIPIENT	TITLE
Hao Wei	Female Sex Hormones Alter GHB Toxicokinetics
HongMy Nguyen	A Listeria-Based Vaccine Targeting Interferon-Stimulated Gene 15 for Renal Cell Carcinoma
Husam Younes	Therapeutic Anticancer Efficacy of Intra-Tumoral Controlled Osmotic-Driven Delivery of Bioactive IL-2 Using Novel Visible-Light Photocured Biodegradable Injectable Elastomeric Implants
Irene Lozza	Development of Biodegradable Injectable In Situ Forming Implants for Controlled Release of Cannabinoids: In Ovo Assessment
Ishwor Poudel	Customized Fast-Dissolving Orodispersible Films Using Extrusion-Based 3D-Printing
Ishwor Poudel	Hispolon Cyclodextrin Complexes and Cyclodextrins-in-Liposomes for Enhanced In Vitro Anticancer Activity against Melanoma
Jia Liu	Exploring the Use of Kinetic pH Calculation to Correct the ACAT Model with a Single Stomach Compartment Setting: Impact of Stomach Setting on Food Effect Prediction for Basic Compounds
Jieqiang Zhou	Intracellular Accumulation and Washout Kinetics of Aminoglycosides (AGS) in Multidrug-Resistant (MDR) <i>Klebsiella pneumoniae</i>

RECIPIENT	TITLE
Joseph Della Rocca	Extensive Characterization of Spray Dry Solution Atomization for HPMCAS Placebo Solutions by Optical Patternation, Phase Doppler Analysis, and Spray Velocity
Linglong Zou	A Generic Approach to Monkey Anti-drug Antibodies Assay Development for Antibody Therapeutic Preclinical Studies
Mustafa Bookwala	Coexistent API-Polymer Halogen and Hydrogen Bonds in Amorphous Solid Dispersions Affect Drug Solubility and Miscibility
Oshin Miranda	An Integrative Deep Learning Model to Identify Important Lab Tests from Electronic Medical Records for the Prediction of Suicide-Related Events Among Post-Traumatic Stress Disorder Patients
Paraskevi Papakyriakopoulou	Nose to Brain Delivery of Donepezil after the Administration of HPMC-Me- β -CD-PEG400 Based Nasal Films in C57BL/6J Mice
Patrick Ronaldson	Endogenous Blood-Brain Barrier Transporters are Critical Determinants of Neuroprotective Drug Efficacy in Ischemic Stroke
Priyal Bagwe	Investigational Vaccine Induces Immune Correlates of Protection and Resistance to Infection against <i>Neisseria gonorrhoeae</i> in Mice

RECIPIENT	TITLE
Rabin Neupane	Development of Novel Macropinocytosis Inducers to Enhance Cellular Uptake of Small and Large Molecules
Raja Reddy Kallem	A Targeted LC-MS/MS Method for Quantitative Tissue Distribution Analysis (QTDA) of Metabolomics in Tumors using Laser Microdissection
Rhashanda Haywood	Hit to Lead Optimization Studies of Meta Substituted Enaminone Derivatives as Potential Anti-Seizure Agents for Generalized and Drug-Resistant Epilepsy
Riddhi Trivedi	Functionalized PLGA Nanoparticles Encapsulating Emtricitabine and Bictegravir for Delivery Across the Blood Brain Barrier for the Management of HIV Associated Neurocognitive Disorders (HAND)
Riddhi Vichare	Design and Development of Folate Decorated Nanoemulsions as the New Pain Nanomedicines
Sabrina Banella	Cisplatin/Hyaluronan Complex: A Novel Loco-Regional Treatment in Tumors Over-Expressing CD44 Receptor
Sanyog Jain	Synthesizing Cisplatin Pt (IV) Derivatives for Reducing Systemic Toxicity and Enhancing Anticancer Efficacy in Triple-Negative Breast Cancer

RECIPIENT	TITLE
Sanyog Jain	Exploring Paclitaxel Loaded Adenosine Conjugated PEGylated PLGA Nanoparticles for Targeting Triple-Negative Breast Cancer
Sharon Vijayanand	Dual Immunization Against COVID-19 and Influenza Using Fast-Dissolving Buccal Films
Subhash Dwivedi	Oral Nano-curcumin Alone or In Combination with Insulin Alleviates Diabetic Neuropathy in Rats
Tibo Duran	Coarse-Grained Molecular Dynamics Simulations of ssDNA Loaded Adeno-Associated Virus
Tuo Meng	A Single Dose of Nanoparticle Provides 6 Months Efficacy for Preventing Rat Corneal Allograft Rejection
Vineet Kulkarni	A Comparison of Cocrystals of a Poorly Water-Soluble, Fast Recrystallizing Drug with Its Amorphous Solid Dispersions
Vrishali Salian	The Mechanisms Governing the Positive Feedback Loop between Cerebrovascular Inflammation and Amyloid Beta Accumulation
Yan Xu	Effect of In Situ Immunization with Vidutolimod in an Oral Leukoplakia Model
Yi-En Liao	Modulating Host Response to Sepsis via Pure Anti-inflammatory Heparin-Like Compounds

RECIPIENT	TITLE
Yihan Wang	Nanosuspension Organic Phase Instead of Solution Water Phase: A New Approach to Loading Hydrophilic Trivalent Arsenic Salt with Hydrophobic Polymer
Yogesh Sutar	Reformulation of Niclosamide into Biofilm Penetrating Nanoparticles to Improve Its Repurposing for the Treatment of Candidiasis
Yousuf Mohammed	In Vitro Assessment of Cooling Potential of the Topical Gel System and Influence of Inactive Ingredients

RECIPIENT	TITLE
Zachary Greenberg	An End-to-End Method for AI-Driven Peptide Vaccine Formulation and Translation through Deep Learned Exosome Precision Drug Delivery
Zahra Mahmoudi	Impact of Modulating HPMC Properties on Modified Released Matrix Formulation of a High Dose Drug