

## Research!Louisville 2019 Winners

### **Master's Basic Science Graduate Student Award**

#### 2<sup>nd</sup> place:

Sean Raph

*"Kvβ2 mediates vasodilation in response to redox changes of the NADH:NAD<sup>+</sup> ratio."*

Mentor: Matthew Nystoriak.

#### 2<sup>nd</sup> place:

Angeliki Lykoudi

*"Overexpression of has-miR-186 induces anchorage-independent growth and chromosomal alterations in arsenic exposed human keratinocytes: A preliminary study"*

Mentor: J. Christopher States

#### 1<sup>st</sup> place:

Jeffrey Warner

*"Soluble epoxide hydrolase inhibition: a novel therapeutic strategy in alcoholic liver disease"*

Mentor: Irina Kirpich

### **Doctoral Basic Science Graduate Student Award**

#### 3<sup>rd</sup> place:

Adrienne Bashau-Sprinkle

*"Mechanistic insight for increased susceptibility to cisplatin nephrotoxicity with NHERF1 loss".*

Mentor: Eleanor Lederer

#### 2<sup>nd</sup> place:

Samantha Morrissey

*"Tumor-derived exosomes polarize macrophages to upregulate PD-L1 through metabolic reprogramming in a pre-metastatic niche"*

Mentor: Jun Yan

#### 1<sup>st</sup> place:

Autumn LaPointe

*"Increasing the production of capped alphaviral RNAs negatively impacts viral pathogenicity"*

Mentor: Kevin Sokoloski

### **Engineering Student Award**

#### 3<sup>rd</sup> place:

Alexa Melvin

*"A 3D Printed Microfluidic Manifold to Prepare Plasma from Whole Blood"* Mentor:

Nichola Garbett

2<sup>nd</sup> place:

Connor Centner

*“Acoustofluidic Devices for Enhanced Intracellular Molecular Delivery”* Mentor: Michael Menze

1<sup>st</sup> place:

Farnaz Minooei

*“Synergistic Activity of Antiretroviral and Biologic Nanoparticles against HIV-1 Infection”*  
Mentor: Jill Steinbach-Rankins

**School of Dentistry Basic Science Student Award**

2<sup>nd</sup> place:

Hetal Desai

*Functionalizing nanoparticles with CafA protein to target BAR peptide for oral delivery applications.*

Mentor: Jill Steinbach-Rankins

1<sup>st</sup> place:

Peter Thai

*Molecular Mechanism of Latency and Substrate Specificity in Pappalysin-like Metallopeptidases*

Mentor: Jan Potempa

**School of Dentistry Clinical Science Student Award**

2<sup>nd</sup> place:

Christopher Rollins

*Local oral anesthesia in emergency medicine: an inter-professional approach to assessing knowledge and strengthening skills in medical students and residents.*

Mentor: Martin Huecker

1<sup>st</sup> place:

Rohit Vadlamani

*Application of Machine Learning Technologies for Detection of Dental Caries in Intraoral Digital Images: In vitro Study.*

Mentor: William Scarfe

**Rhonda A. Hoffman Medical Student Award**

2<sup>nd</sup> place:

Brooke Barrow

*Design and Evaluation of a 3D Printed Multifunctional Surgical Device for Earth and Space-Based Applications.*

Mentor: Thomas Roussel

2<sup>nd</sup> place:

Gene Porter

*Maximizing human islet yield through pancreas donor selection*

Mentor: Balamurugan Appakalai

2<sup>nd</sup> place:

Gordon Whitt

*Knockdown of HNRNPA2B1 restores Tamoxifen's and Fulvestrant's inhibition of cell proliferation in Endocrine-Resistant Breast Cancer Cells.* Mentor: Carolyn M. Klinge

1<sup>st</sup> place:

Ankur Patel

*ZEB mRNA Expression is Affected by Long Non-coding RNA ZFAS1* Mentor: Susan Galandiuk

### **Postdoctoral Fellow Award**

2<sup>nd</sup> place:

Josiah Hardesty

*Genetic ablation of Fpr2 in mice increased susceptibility to alcohol-mediated liver injury due to enhanced inflammation and impaired antimicrobial defense*

Mentor: Irina Kirpich

1<sup>st</sup> place:

Banrida Wahlang

*Hepatic injury caused by the environmental toxicant vinyl chloride is sex-dependent*

Mentor: Matthew Cave

### **Research Associate Award**

2<sup>nd</sup> place:

Mayukh Banerjee

*Arsenite can displace zinc from the zinc finger domains of alternative splicing regulator ZRANB2*

Mentor: J. Christopher States

1<sup>st</sup> place:

Rodolfo Garza Morales

*A DNA vaccine encoding SA-4-1BBL fused to HPV-16 E7 antigen has prophylactic and therapeutic efficacy in a cervical cancer mouse model* Mentor: Jorge Gomez-Gutierrez

### **Research Staff Award**

Winner:

Parag Shah

*Ubiquilin proteins are novel tumor suppressors in breast cancer.*

Mentor: Alex Vega

### **School of Medicine Medical Resident Award**

Winner

Samarpit Rai

*Trends in Utilization of Neoadjuvant Chemotherapy for Locally Advanced Upper Tract Urothelial Carcinoma: an Analysis of the National Cancer Database*  
Mentor: Ahmed Haddad

### **School of Medicine Clinical Research Fellow Award**

Winner

M. Brittany Woodall

*Improving Family Resources with Children Newly Diagnosed with Autism Spectrum Disorder.*

Mentor: Jeanie Hammond

### **Public Health & Information Sciences**

Master's Student Award

Meredith Cahill

*The association between polycystic ovarian syndrome and the probability of conception in women undergoing fertility counseling.*

Mentor: Kira Taylor

### **Doctoral Student Award**

Victory Osezua

*Experiences of social inclusion and exclusion among refugee youths from the African Great Lakes Region: A Constructivist Grounded Theory Study* Mentor: Lesley Harris

### **Basic Research in Public Health Award**

Yiqun Mo

*The role of miR-21 in nickel nanoparticles - induced lung injury and fibrosis* Mentor: Qunwei Zhang

### **Research & Practice in Public Health Award**

Jack Pfeiffer

*Coal fly ash, aluminum, and short-term memory among children 6-14 years old*

Mentors: Lonnie Sears and Kristina Zierold

### **Nursing Graduate Student**

Winner

Susan Winebrenner

*Exploring scan-related anxiety in pancreatic cancer: a qualitative study.* Mentor: Robert Martin

### **Pharm D Award**

Winner:

Bailey Bolten

*HIV pre-exposure prophylaxis (PrEP): clinical experience at the University of Louisville 550 Clinic.*

Mentor: Andrea Reyes Vega

### **Faculty Award in Basic Science**

Winner

Ming Song

*Dietary Fructose Induces Intestinal Oxygenation Likely Contributing to Gut Microbiota Dysbiosis*

### **Faculty Award in Clinical Science**

Winner:

Ruchita Agrawal

*Measuring the effectiveness of Benzodiazepine prescriptions control in community setting using KASPER*

### **Ruth Greenberg Award for Excellence in Medical Education Research Medical Student**

3rd place:

Audrey Summers

*The humanities side of anatomy lab: reflecting on and creating works of art*

Mentor: Jennifer Brueckner-Collins

2nd place:

Mohammed Nuru

*'Our First Patients': Reflecting on Death and Dying. A Novel Approach to Integrating Humanities into Clinical Anatomy Curriculum using Music & Narrative Medicine.*

Mentor: Jennifer Brueckner Collins

1st place:

Michael Eizyk

*My Brother's and Sister's Keeper: A Case for Peer Support Among M3 and M4 Medical Students*

Mentor: Pradip Patel

### **Ruth Greenberg Award for Excellence in Medical Education Research**

3<sup>rd</sup> place:

Barbara Head

*Does faculty training and development improve skills and competencies that lead to interprofessional educational programs in palliative care? the iPEX Program*

2<sup>nd</sup> place:

Pascale Alard

*Using IF-AT strategy in the dental immunology curriculum has a beneficial impact on performance and long term retrieval*

1<sup>st</sup> place:

Emily Noonan

*Engaging people with intellectual/developmental disabilities to improve medical student attitudes: The National Curriculum Initiative in Developmental Medicine at ULSOM*

1<sup>st</sup> place:

Ryan Combs

*Gender Minority Patients in Standardized Patient Encounters for Health Professionals*

**Louisville Chapter-Women in Medicine and Science**

3<sup>rd</sup> place

Lilibeth Lanceta

*Oncolytic Virotherapy for the treatment of ER+ palbociclib-resistant breast cancer*

Mentor: Yoannis Imbert-Fernandez

2<sup>nd</sup> place:

Smita Ghare

*Tributyryn attenuates alcohol-induced chemokine up-regulation via epigenetic mechanisms - Relevance to hepatic inflammation and Injury in ALD*

Mentor: Shirish Barve

1<sup>st</sup> place:

Nadiia Lypova

*PFKFB3 as a compensatory survival mechanism in NSCLCs in response to EGFR inhibition*

**Excellence in Health Disparities Research Award**

3<sup>rd</sup> place:

Brittney Corniel

*Improving Patient Satisfaction with Group Prenatal Care: An Integrative Review*

2<sup>nd</sup> place:

Ariel Washington

*Knowledge and attitudes related to accessing cervical cancer preventative services among African American Women in West Louisville*

Mentor: Scott LaJoie

1<sup>st</sup> place:

Ryan Combs

*Gender Minority Patients in Standardized Patient Encounters for Health Professionals.*

**Excellence in Quality Improvement in Patient Care**

3<sup>rd</sup> place:

Courtney Eaves

*The creation of a dashboard within the electronic medical record to provide quality metrics to psychiatric residents and assist with evaluating patient length of stay in Emergency Psychiatric Services*

2<sup>nd</sup> place:

Khalda Ibrahim

*Improving Communication About New Medications Prior to Discharge: A Project of the University of Louisville Hospital Resident Quality and Safety Leadership Council, 2018–2019*

Mentor: Hugh Shoff

1<sup>st</sup> place:

Jiapeng Huang

*A wearable sensor system to improve infection control among healthcare providers*

**Prodigy Award for High School Translational Research**

2<sup>nd</sup> Place:

Maxwell Martin

*Automation of DNA-ligand MD simulations with free energy calculations for enrichment of high affinity ligands in virtual screening*

Mentor: John Trent

1<sup>st</sup> Place:

Bhavana Pavuluri

*Understanding the Impact of PSAT1 on the  $\beta$ -catenin Transactivation in EGFR-mutant PC9 Lung Cancer Cells*

Mentor: Brian Clem

**NCI Cancer Education Program Norbert J. Burzynski Award Undergraduate Student Category**

3<sup>rd</sup> place:

Destine Ede

*A Potential Novel Treatment for Neurofibromatosis Type 1 via RAS Inhibition*

Mentor: Geoffrey Clark

2<sup>nd</sup> place:

Kate Tarvestad

*Low-Level Chronic Arsenic Exposure and its Effect on the ErbB Family Receptor Tyrosine Kinases.*

Mentor: Brian Ceresa

1<sup>st</sup> place:

Grace Lian

*Investigating molecules that confer sensitivity to AS1411 in lung adenocarcinoma cells*

Mentor: Paula Bates

**NCI Cancer Education Program Norbert J. Burzynski Award Professional Student Category**

3<sup>rd</sup> place:

Daniel Hodge

*The effects of arylamine N-acetyltransferase 1 on tumor immune response* Mentor:

David Hein

2<sup>nd</sup> place:

James Burton

*Effect of Long Non-Coding RNA ZFAS1 on Epithelial-To-Mesenchymal Transition Protein Expression in Colorectal Cancer Cell Lines*

Mentor: Susan Galandiuk

1<sup>st</sup> place:

Ankur Patel

*ZEB mRNA Expression is Affected by Long Non-coding RNA ZFAS1* Mentor: Susan

Galandiuk