



11th Annual  
**RESEARCH  
SYMPOSIUM**

APRIL 1, 2022

DEPARTMENT OF  
**INTERNAL  
MEDICINE**

Building the “**NEXT**”  
Generation of Researchers

[med.uc.edu/depart/intmed/research](http://med.uc.edu/depart/intmed/research)

Image: Mouse Gastric Glands  
Kristen Engvik, BS  
Pharmacology & System Biology

# Agenda

**Friday, April 1, 2022**

**8:30 am - 9:30 am**  
Kresge Auditorium  
and Zoom

## **TRAINEE ROUND TABLE**

**Featuring: James Herman, PhD**

Flor van Maanen Professor, Chair, University of Cincinnati, College of Medicine  
Department of Pharmacology and Systems Physiology  
Director, UC Neurobiology Research Center and Director, Stress Neurobiology Laboratory

**9:30 am - 11:30 am**  
CARE Crawley  
Atrium

## **Trainee and Staff Poster Presentations and Judging**

*Clinical, Basic and Clinical Case Report Track Posters*  
!No scheduled general audience viewing of posters

**12:00 pm - 12:10 pm**  
Kresge Auditorium  
and Zoom

## **Grand Rounds INTRODUCTION AND WELCOME**

**John Byrd, MD**, Chair, Department of Internal Medicine  
**Carl Fichtenbaum, MD**, Vice Chair of Clinical Research  
**Sakthivel Sadayappan, PhD, MBA** Vice Chair of Basic Research

**12:10 pm - 1:10 pm**  
Kresge Auditorium  
and Zoom

## **Grand Rounds Speaker:**

**James Herman, PhD**

Topic: **"Stress, Adaptation and Disease"**

**1:30 pm - 2:00 pm**  
Virtual only Zoom

## **Awards Ceremony**

Trainee Poster Awards  
Staff Poster Awards

### **Facilitators:**

**Khurram Bari, MD**, Associate Professor of Clinical, Department of  
Internal Medicine, Division of Digestive Diseases  
**Carl Fichtenbaum, MD and Sakthivel Sadayappan, PhD, MBA**

**Zoom link:**

**Go to:** <https://med.uc.edu/landing-pages/research-symposium-2022>  
Meeting ID: 968 0761 2256, Passcode: 671471

# Trainee Research Poster Session

Trainee and Department/Division	Mentor	Title	Clinical, Basic or Clinical Case Report	Poster
<b>Abdulaziz Alshwimi, MSc</b> Nephrology	Dr. Laura Conforti	The importance of K <sup>+</sup> ion channels in NK cells	B	<b>1</b>
<b>Abigail Samuels, DO, MS</b> General Internal Medicine	Dr. Phil Minar	Predictive performance of different population pharmacokinetic models in a real-world cohort of Crohn's Disease patients	C	<b>2</b>
<b>Abby Baumgartle, MD</b> General Internal Medicine	Dr. Misoor Goueli	Amyloidosis: An Uncommon Culprit of Cirrhosis	CCR	<b>3</b>
<b>Caris Lee, PhD</b> Pathobiology Molecular Medicine	Dr. Philip Owens	Protease activated receptor 2 is critical for vascular smooth muscle cell transition to a macrophage-like state	B	<b>4</b>
<b>Caterina Bartolacci, PhD</b> Hematology/Oncology	Dr. Pier Paolo Scaglioni	FASN and the Lands Cycle are a vulnerability of Mutant KRAS Lung Cancer	B	<b>5</b>
<b>Christina Andreani, PhD</b> Hematology/Oncology	Dr. Pier Paolo Scaglioni	Evaluation of TrxR inhibitors in KRAS-WT lung cancer: the golden path to ferroptosis	B	<b>6</b>
<b>Christina Cox, BS</b> Pathobiology Molecular Medicine	Dr. Margaret-Powers Fletcher	The Low Sensitivity of Direct Smears Limit the Utility of Intraoperative Gram Stains for Predicting Culture-Positivity in Acute Surgical Settings	C	<b>7</b>
<b>Clayton Lewis, PhD</b> Hematology/Oncology	Dr. Vladimir Bogdanov	Potential utility of a multi- component coagulation factor panel to detect portal vein thrombosis and assess hemostasis in chronic liver disease	C	<b>8</b>
<b>Clayton Lewis, PhD</b> Hematology/Oncology	Dr. Vladimir Bogdanov	Non-parenchymal origin of alternatively spliced tissue factor in chronic liver disease	B	<b>9</b>
<b>Darshini Desai, PhD</b> Cardiology candidate	Dr. Sakthivel Sadayappan	Modelling hypertrophic cardiomyopathy using human iPSC derived cardiac organoids	B	<b>10</b>
<b>Elizabeth Odegard, BS</b> Pathobiology and Molecular Medicine	Dr. Jason Blackard	Genetic Diversity of BK Polyomavirus in Association with Hemorrhagic Cystitis	B	<b>11</b>
<b>Estefany Yanqui, PharmD</b> Nephrology	Dr. Rita Alloway	Renal Function At Five Years From A Randomized Multicenter Trial Of Belatacept-based CNI Free And Early Steroid Withdrawal Immunosuppression	C	<b>12</b>

## Trainee Research Poster Session (*continued*)

<b>Trainee and Department/Division</b>	<b>Mentor</b>	<b>Title</b>	<b>Clinical, Basic or Clinical Case Report</b>	<b>Poster</b>
<b>Hani Alrefai, PhD</b> Infectious Diseases	Dr. George S. Deepe	Metallothioneins reprograms adaptive immunity through IL-27 Signaling	B	<b>13</b>
<b>Heather Hames, PharmD</b> Nephrology	Dr. Rita Alloway	Five-year Follow-up From A Prospective, Randomized Trial Of Belatacept-based, CNI Free/Early Steroid Withdrawal Regimens	C	<b>14</b>
<b>Janani M. Krishnan, PhD</b> Digestive Diseases	Dr. Jason Blackard	Synthetic opioids, HIV, and SARS-COV-2 in vitro interactions	B	<b>15</b>
<b>Kateryna Stone, BS</b> Pathobiology and Molecular Medicine	Dr. Kevin Haworth	Ex vivo studies of acoustic droplet vaporization to scavenge oxygen from whole blood to facilitate pre-clinical studies for the prevention of cardiac reperfusion injury	B	<b>16</b>
<b>Kyle VanDommelen, MD</b> General Internal Medicine	Dr. Bryan Hambley	Reversal of Life-Threatening Bleeding with Protamine Sulfate in a Patient with Plasma Cell Leukemia	CCR	<b>17</b>
<b>Matthew Genco, MD</b> Endocrinology	Dr. Yufei Dai	An Unusual Case of Abnormal Thyroid Function	CCR	<b>18</b>
<b>Martina Chirra, MD</b> Nephrology	Dr. Laura Conforti	Alterations of the Kidney Immune Landscape in Patients with Diabetic Nephropathy	B	<b>19</b>
<b>McKenzie Crist, BS</b> Pathobiology and Molecular Medicine	Dr. Trisha Wise-Draper	The effects of metformin on Head and Neck Cancer NK cells	B	<b>20</b>
<b>Najeeb U. Khan, MD</b> Immunology	Dr. David Bernstein	Effectiveness of Hydroxychloroquine and Omalizumab in Refractory Chronic Spontaneous Urticaria: A Real-World Study.	C	<b>21</b>
<b>Noella Cortinas, MD</b> Pulmonary	Dr. Nishant Gupta	Impact of Age, Menopause and Sirolimus on Spontaneous Pneumothoraces in Lymphangioliomyomatosis	C	<b>22</b>
<b>Omama Siddiqui, MD</b> Endocrinology	Dr. Abid Yaqub	Common interferences with thyroid immunoassays	CCR	<b>23</b>
<b>Rabindra Lamichhane, MD</b> Endocrinology	<b>Withdrawn</b>	Significant Elevation in LDL cholesterol on ketogenic diet	CCR	<b>24</b>

**- Trainee Research Poster Session (continued)**

<b>Trainee and Department/Division</b>	<b>Mentor</b>	<b>Title</b>	<b>Clinical, Basic or Clinical Case Report</b>	<b>Poster</b>
<b>Rithika Thirumal, MD</b> Cardiology	Dr. Deeptankar DeMazumder	Cincinnati Atrial Fibrillation Score	C	<b>25</b>
<b>Robert Shondel, BA</b> Nephrology	Drs. Charuhas V Thakar and Begoña Campos-Naciff	MP released from RPTEC under inflammatory conditions present CD10 expression and induce endothelial cell activation	B	<b>26</b>
<b>Simin Zhang, MD</b> Immunology	Dr. Jonathan Bernstein	The mast cell pain connection in eosinophilic esophagitis	C	<b>27</b>
<b>Shinsmon Jose, PhD</b> Infectious Diseases	Dr. Rajat Madan	Olfactomedin-4 exacerbates clostridioides difficile infection-induced mortality in mice	B	<b>28</b>
<b>Steven Sayson, PhD</b> Pathobiology and Molecular Medicine	Dr. Melanie Cushion	Uptake of Extracellular Vesicles by Pneumocystis carinii from Bronchial Alveolar Lavage Fluid	B	<b>29</b>
<b>Tasnim Olatoke, BS</b> Pulmonary	Dr. Jane Yu	Pre-B-cell leukemia homeobox 1 (PBX1) promotes survival and lung colonization of TSC2-null cells in lymphangioleiomyomatosis	B	<b>30</b>
<b>Tyler Benson, PhD</b> Cardiology	Dr. Phillip Owens	Gut microbiota-derived trimethylamine N-oxide contributes to abdominal aortic aneurysm through inflammatory and apoptotic mechanisms	B	<b>31</b>
<b>Yashu Dhamija, MD</b> Immunology	Dr. David Bernstein	Idiopathic Post-Prandial Diarrhea and Dermatographism: A Case Series	CCR	<b>32</b>

**Staff Research Poster Session**

<b>Investigator and Department/Division</b>	<b>PI or Research Manager</b>	<b>Title</b>	<b>Clinical, Basic, or Clinical Case Report</b>	<b>Poster</b>
<b>Ameet Chimote, PhD</b> Nephrology	Dr. Laura Conforti	Molecular mechanisms of dexamethasone-mediated modulation of inflammatory and interferon responses in severe COVID-19 patients.	B	<b>1</b>
<b>Taylor Coughlin, BS</b> Cardiology	Dr. Phillip Owens	Transcranial Disruption of the Blood Brain Barrier using Focused Ultrasound Insonation of Microbubbles	B	<b>2</b>
<b>Salma Fleifil, BA</b> Cardiology	Dr. Phil Owens	MicroRNA-33a/b Inhibition Attenuates Tissue Factor Activity and the Activation of Coagulation in Mice and Nonhuman Primates	B	<b>3</b>

# Judges

<b>Name</b>	<b>Division</b>	<b>Department Position</b>
<b>Hira Saikh, MD</b>	Hematology/Oncology	Post-doctoral member
<b>Wenhai Shao, PhD</b>	Immunology, Allergy and Rheumatology	Faculty
<b>Marie de Perio, MD</b>	Infectious Diseases	Faculty
<b>Logan Blancett, PhD</b>	Infectious Diseases	Post-doctoral member
<b>Dan Schauer, MD, MSc</b>	General Internal Medicine	Faculty
<b>Niralee Patel, MD</b>	Nephrology, Kidney CARE Program	Faculty
<b>Laura Conforti, PhD</b>	Nephrology, Kidney CARE Program	Faculty
<b>Allison Stickle, PhD, MD</b>	General Internal Medicine	Faculty
<b>Megan Johnstone, PhD</b>	Hematology/Oncology	Faculty
<b>Phillip Owens, PhD</b>	Cardiovascular Health and Disease	Faculty
<b>Begona Campos-Naciff, PhD</b>	Nephrology, Kidney CARE Program	Post-doctoral member
<b>Silvi Shah, MD</b>	Nephrology, Kidney CARE Program	Faculty
<b>David Askew, PhD</b>	Infectious Diseases	Faculty
<b>Heather Evans, PhD</b>	Infectious Diseases	Faculty
<b>George Smulian, MD</b>	Infectious Diseases	Faculty
<b>Jagadish Khanagavi, MD</b>	Cardiovascular Health and Disease	Faculty
<b>Kristin Hudock, MD, MSTR</b>	Pulmonary, Critical Care and Sleep Medicine	Faculty
<b>Umama Gorski, MD</b>	Cardiovascular Health and Disease	Faculty
<b>John Byrd, MD</b>	Hematology/Oncology	Faculty
<b>Robert Cohen, MD</b>	Endocrinology, Diabetes and Metabolism	Faculty
<b>Richard Becker, MD</b>	Cardiovascular Health and Disease	Faculty
<b>Michael Borchers, PhD</b>	Pulmonary, Critical Care and Sleep Medicine	Faculty
<b>Malina Ivey, PhD</b>	Pathology and Laboratory Medicine	Post-doctoral member
<b>Kohta Ikegami, PhD</b>	Molecular Cardiovascular Biology (CCHMC)	Faculty
<b>Abid Yaqub, MD</b>	Endocrinology, Diabetes and Metabolism	Faculty
<b>Jason Gardner, PhD</b>	Pulmonary, Critical Care and Sleep Medicine	Faculty
<b>Perwez Alam, PhD</b>	Regenerative Medicine	Post-doctoral member
<b>Karthickeyan Chella Krishnan, PhD</b>	Medicine/Pharmacology & Systems Physiology	Faculty
<b>Guo-Chang Fan, PhD</b>	Medicine/Pharmacology & Systems Physiology	Faculty
<b>Yi-Gang Wang, PhD, MD</b>	Pathology and Laboratory Medicine	Faculty
<b>Cat Makarewich, PhD</b>	Molecular Cardiovascular Biology (CCHMC)	Faculty
<b>Mingxia Gu, MD, PhD</b>	Molecular Cardiovascular Biology, CCHMC	Faculty
<b>Chen Gao, PhD</b>	Pharmacology and Systems Physiology	Faculty

# Thank You!

We acknowledge the time and effort provided by many  
in planning and organizing this event.  
Without the support of others, this symposium could not occur.

*Special thanks:*

- **Research Governance Committee (RGC) Symposium Subcommittee:**  
RGC SUBCOMMITTEE LEADS: Khurram Bari, MD and Heather Duncan, PhD
- **Academic Research Services (ARS) Team:** Yolanda Wess, RN, M.Ed,  
Eric Smith, MD and Angela Duke, BS
- **Administrative Team and its Members:**  
COMMITTEE LEAD: Angela Duke  
TEAM LEADS: Justina Dunigan and Jillian Nolte  
MEMBERS: Rhea Castrucci, Annalee Cochran, Dawn Orth, Gayle Pollack  
and Max Weed  
VOLUNTEERS: Mark Ericksen and Judy Bohnert

SAVE THE DATE:  
**Research Symposium 2023**  
“Research and Innovation Week”