# 2022-2023 DEPARTMENT OF PHARMACOLOGY
## RESEARCH DISCUSSIONS

**Zoom Link:** https://uchealth.zoom.us/j/84014318042  
**TIME SLOT A – 9:00 - 9:30 AM**  
**TIME SLOT B – 9:30 - 10:00 AM**  
**20 min. presentation, 10 min. question/answer period**  
For other AV needs, contact the Pharmacology Education Office at least one week prior to your presentation.  
**ABSOLUTELY NO CHANGES WITHOUT PHARMACOLOGY EDUCATION OFFICE APPROVAL**

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### 23-Sep
- **A. Tukey, Andre Alberto Weber**: Lactational delivery of Triclosan promotes non-alcoholic fatty liver disease in newborn mice
- **B. Handel, Cheyenne Shum**: Exploiting CACH3-chemokines for improved cancer immunotherapy through cytolytic cell recruitment

### 30-Sep
- **A. beneito, Lunita Orduña-Castro**: endothelial cell-protection driven by PAK1-beta-arrestin transducer bias
- **B. Zhang, Shawn Mingyuan Chen**: A Highly Sensitive Fluorescent Akt Biosensor Reveals Lysosome-Selective Regulation of Lipid Second Messengers and Kinase Activity

### 7-Oct
- **A. Yang, Guangwen Kim**: A membrane-associated mechano-transduction signaling network in tumor invasion
- **B. S. Taylor/Newton, Alexandr Kornev**: Graph-theoretical analysis of two PKGs spinocerebellar ataxia mutants

### 14-Oct
- **A. Karim, Laura Antonacci**: Oxidative stress Converts RAS Initiated Neoplasia to Cancer Via a Self-Amplifying NHP2-EZH2 Loop
- **B. McCammon, Christian Seitz**: Computer-aided Drug Discovery for Tuberculosis

### 21-Oct
- **A. McCammon, Christian Seitz**: Quantification of the 4D mitochondrial network
- **B. G. Furnari, Helen Wexberger**: GPCR regulation of alpha-6integrin ARBD3C function

### 28-Oct
- **A. Chun, Limnea Ransom**: Transcriptomic assessment of brain-derived extracellular vesicles (EVs) identifies cell-type specific packaging of intact mRNAs
- **B. Gonzalez, Carlos Gonzalez**: Location-Specific Signatures of Crohn’s Disease at a Multi-omics Scale.

### 11-Nov (Veterans’ Day)

### 18-Nov
- **A. Karin, Ji Youn Kim**: How Diet Regulates NASH Development
- **B. Daneman, Ricardo Lozoya**: Understanding the Blood-Nerve Barrier in Health and Disease

### 25-Nov (Thanksgiving Holiday)

### 2-Dec
- **A. Gutkind, Sendi Astaime Garcia**: GliA links PKA activity to the mRNA stabilization of COX2 and the amplification of PDGβ signals
- **B. Chun, Joa Cifkova**: C2δ regulation by casein kinase

### 9-Dec
- **A. Zhang, Michelle Frei**: Chemical genetic biosensors to investigate kinase activity architecture at the nanoscale
- **B. S. Taylor, Palavi Kalsi Sharma**: Understanding the role of LRRK2 Tail in the crosstalk between kinases and the N-terminal domains

### 23-Dec - 2-Jan (Winter Break)

### 6-Jan
- **A. Gustafsson, Wenjing Liang**: Extracellular Vesicles Function As An Alternative Disposal Pathway For Mitochondria In The Heart
- **B. Neuho, Alex Jones**: Single Residue Mutation in Protein Kinase C Targets Between Cancer and Neurodegeneration

### 13-Jan
- **A. S. Taylor, Evan Korbolle**: Characterization of the activation mechanism of p60 Ribosomin B5Kase (R5K)
- **B. Yang, Rosa Fontana**: Invadopodia regulation in cancer invasion and metastasis

### 20-Jan
- **A. Godd, Pham Vo**: The role of PKA in regulating mitochondrial quality control
- **B. Tkacz, Xiqing Yang**: Neuronal axonal exposure induces lipids driven epithelial cell maturation, resulting in dysplasia and NALFD.

### 27-Jan
- **A. P. Taylor, Xiaoying Huang**: Acquiring balanced antitodal activity to organophosphate pesticides and nerve agents in the central and peripheral nervous systems
- **B. Newton, Celeste Gauron**: Protease variants in Alzheimer’s Disease

### 3-Feb
- **A. Dennis, Maria Jorapeta**: Cellular Specificity of Phosphatase A2 Enzymes in Macrophages
- **B. Trejo, Monica Gonzalez Ramirez**: Identifying Key Determinants of GRK5 Function in Regulating Thrombin vs APC-activated PAR1 Biased Signaling in Endothelial Cells

### 10-Feb
- **A. X Chen/Lozeman, Lea/A. Nisotis**: Affecting the Molecular Mechanism of the Ketogenic Diet in Alzheimer’s Disease
- **B. S. Taylor, Jody Weng**: Domain dynamics of the ROC GTPase domain in LRRK2

### 17-Feb
- **A. Jones, Joydeep De**: A Neural Circuit for Sleep Homeostasis
- **B. Neuho, Alex Jones**: Single Residue Mutation in Protein Kinase C Targets Between Cancer and Neurodegeneration

### 24-Feb
- **A. Gonzalez, Consuelo Saucedo**: Gut Microbiome and proteolysis
- **B. Daneman, Ira Garcia-Pak**: What is the role of the blood-brain barrier in brain inflammation?

### 3-Mar
- **A. Trejo, Norton Cheng**: Regulation of GPCR-mediated mGlu5 MAPK pro-inflammatory signaling by deubiquitination
- **B. Yen, Jade Zhang**: Epithelial polarity in cancer invasion and metastasis

### 10-Mar
- **A. Daneman, Reid Larsen**: The Blood-Brain Barrier Glycocalyx in Health and Neuroinflammatory Disease
- **B. Newton, Jessica Brusten**: P2-P1 transitions in PKA

### 17-Mar
- **A. Daneman, Meghan Ross**: How Diet Affects the Blood-Brain Barrier
- **B. Newton, Stefanie Hodapp**: Regulation of PKC beta by Phosphorylation

### 24-Mar
- **A. O’Toole, Yuko Naito**: Understanding the Mechanism which regulates lipid scavenging by chemokine receptor CCRI
- **B. Gutkind, Lauren Claub**: Uncovering a Liquid Biomarker for Tumor Response to (C) in HNSCC

### 31-Mar (Cesar Chavez Holiday)

### 7-Apr
- **A. Hangauer, Brandon Mauch**: Cancer Periarterial Cells Mediate Immune Escape
- **B. Newton, Tiffany Kao**: Down regulation mechanisms of PKC

### 14-Apr
- **A. Gustafsson, Julian Williams**: Mitochondrial import of Mitofusin tyrosine kinases in Cardiac Myocytes
- **B. Gonzalez, Dominic McGrorose**: A Clinical ‘omics Perspective of Enterococcal Infections

### 21-Apr
- **A. Karin, Junli Liu**: IL-22 alleviates NAFLD by suppressing fat absorption
- **B. Trejo, Mike Lappin**: Regulation of tACC-induced Hippo pathway signaling by c-Src in breast carcinoma

### 28-Apr
- **A. Zhang, Jinlan Zhang**: An Ultrasensitive Fluorescent Biosensor for Multi-modal Kinase Activity Detection
- **B. Brown, Oga Charo**: Role of g12 signaling in glioblastoma tumor growth and invasion

### 5-May
- **A. Daneman, Sean Han**: Blood-brain barrier dysregulation in Alzheimer’s disease
- **B. Newton, Hannah Towell**: Regulation of PKC by the phosphorylated PH/PKII in PDAC

### 12-May
- **A. Yang, Calista Hota**: A novel phosphatase in matrix stiffness-driven tumor invasion and metastasis
- **B. Karin, Lili Liu**: EPF1 is a nonenzymatic safety valve that prevents insulin hypersensitiveness

### 19-May
- **A. Gutkind, Thomas Huang**: Mitochondrial precision therapy to prevent tobacco-related head and neck cancer
- **B. Gonzalez, Igor Weizsick**: Validation of S. pneumoniae S protein as a novel therapeutics target

### 26-May
- **A. Nitz, Daniel Sun**: TBA
- **B. Daneman, Charlie Boyne**: TBA

### 2-Jun
- **A. S. Taylor, Kyle Trowbridge**: TBA
- **B. Vashi, Ali Naeim**: TBA

### 9-Jun
- **A. Farman, Claire Wang**: Identifying ARH7 drug targets that overcome stalled differentiation
- **B. Newton, Anthony Rinnon**: Non-cassical EPHB2 signaling in mechanotransduction

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5/26, 6/2 & 6/9:  
A) 9:00a  
B) 9:30a  
C) 9:40a