ccbtp cancer cell biology training program

PITM Program in Translational Medicine

13th Annual Translational Medicine Symposium

April 19, 2022

Sponsored by:

The Program in Translational Medicine (PITM, NIGMS T32) and the Cancer Cell Biology Training Program (CCBTP, NCI T32)

Agenda

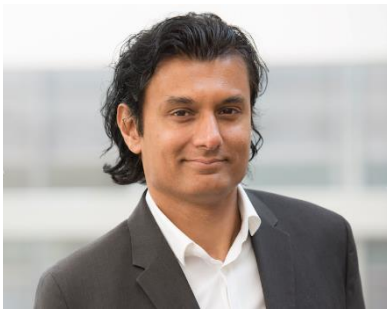
ORDER OF EVENTS

9:00-10:00a	**Welcome and Keynote Address** **Dr. Karen Corbin,** Accelerating Translation: Lessons Learned through the Lens of the Gut Microbiome	**Koury Kirkland Auditorium**
10:15-11:45a	**Trainee Talks: Morning**	Koury 3615 Koury 4615 Koury 5401 Koury 5615
12:00-12:50p	**Lunch Break.** Pick up food in Koury Atrium.	Tents outside Gillings School of Global Public Health and Koury Building
1:00-2:00p	**Alumni Career Panel** • Dr. Eugene Gibbs, Field Application Scientist at Berkeley Lights, Inc. • Dr. Jessica Sorrentino, Vice President, Translational Medicine, Istari Oncology • Dr. Devon Blake, Scientist II at Ribometrix Inc. • Dr. Lee Mullin, 3D Communications – Medical Writer • Dr. Jeran Stratford, Bioinformatics Data Analyst at RTI International • Dr. Emilia Zywot, Product Development Scientist at United Therapeutics Corporation	Brauer 464
2:15-3:30p	**Trainee Talks: Afternoon**	Koury 3615 Koury 4615 Koury 5401 Koury 5615
3:45-4:45p	**Closing Keynote Address** **Dr. Navdeep Chandel,** Mitochondria control of physiology and disease	**Koury Kirkland Auditorium**
4:45-5:00	**Student Awards & Closing Remarks**	**Koury Kirkland Auditorium**

About Our Keynote Speakers

Karen Corbin, PhD

Dr. Corbin is a Faculty Investigator at the Translational Research Institute for Metabolism and Diabetes. Her program of research focuses on nutrition, enterohepatic metabolism and the mechanisms that drive individual susceptibility to metabolic diseases. Dr. Corbin is also CEO of the science communication company Geeks that Speak. After 20 years of traversing the worlds of healthcare and science, she realized that a fundamental barrier exists for translating ideas into solutions. Geeks that Speak exists to inspire and empower scientists to become impactful storytellers.



Navdeep Chandel, PhD

Navdeep S. Chandel received his BA in mathematics (1991) followed by a Ph.D. in Cell Physiology (1996) at the University of Chicago with Dr. Paul Schumacker and did his post-doctoral fellowship jointly with Dr. Paul Schumacker and Dr. Craig Thompson (1999). Dr. Chandel started his lab in 2000 at Northwestern University Feinberg School of Medicine. His lab has made contributions to understanding the function of mitochondria. For decades, the mitochondria have been primarily viewed as biosynthetic and bioenergetic organelles generating metabolites for the production of macromolecules and ATP, respectively. His lab contributed to our understanding that mitochondria have a third distinct role whereby they participate in cellular signaling processes through the release of reactive oxygen species (ROS) and TCA cycle metabolites in cancer, immunity, and stem cell function. He has published a book entitled “Navigating Metabolism” (Cold Spring Harbor Press, 2015). He is on the editorial board of Molecular Cell and Cell Metabolism as well as a Deputy Editor of Science Advances. He is a recipient of NCI Outstanding Investigator Award and Web of Science highly cited researcher.

Trainee Oral Presentations

At a glance:

		Koury 3615	Koury 4615	Koury 5401	Koury 5615
Morning Session	10:15	Becky Hirsch	Jack Sanford	Rachel Cooke	Aditi Kothari
	10:30	Johnny Castillo	Brandon Mouery	Aiman Abzhanova	Meagan Bridges
	10:45	Colleen Steward	Yogitha Chareddy	Lauren Kass	Arianna Cascone
	11:00	Emma Bouck	Macy Osborne	Breanna Mann	Minna McFarland
	11:15	Ryan Mouery	Chelsea Smith	Maddy Jenner	Carli Opland
	11:30		Alex Woodall		
		Koury 3615	**Koury 4615**	**Koury 5401**	**Koury 5615**
Afternoon Session	2:15	Stephen Serafin	Tamara Vital	Taylor Tibbs	Sara Wasserman
	2:30	Priya Hibshman	Markia Smith	Michelle Mac	Sophie Mendell
	2:45	Whitney Bell	Dina O'Connell	Carmen Marable	Michael Sturdivant
	3:00	Cassandra Phillips	Cherise Glodowski	Syed Masood	Coral del Mar Alicea Pauneto
	3:15	Rhianna Lee	Anna Goddard	Ryan Robb	Mariaelena Nabors

Titles and additional information:

Morning Session

Room	Time	Trainee Name	Program	Presentation Title	Lab of
3615	10:15am	Becky Hirsch	PITM	Defining the role of CD73 in β-catenin mutant endometrial cancer for precision medicine	Jessica Bowser
3615	10:30am	Johnny Castillo	PITM	SGK3 controls the expression of innate immunity regulators by inhibiting NDRG1 in macrophages	Al Baldwin
3615	10:45am	Colleen Steward	CCBTP	Unraveling B cell differentiation in pancreatic cancer using engineered neoantigens	Yuliya Pylayeva-Gupta
3615	11:00am	Emma Bouck	PITM	Oral contraceptives do not alter endothelial cell procoagulant activity	Alisa Wolberg
3615	11:15am	Ryan Mouery	CCBTP	Investigating Cross-Talk Between Kinase and Ubiquitin Signaling in the Cancer Cell Cycle	Mike Emanuele
4615	10:15am	Jack Sanford	CCBTP	Cytoplasmic p53 binds lactate dehydrogenase (LDH) B and regulates LDH activity in a transcription-independent manner	Yanping Zhang
4615	10:30am	Brandon Mouery	CCBTP	CDK4/6 inhibition induces an RB-dependent downregulation of the minichromosome maintenance (MCM) complex	Jeanette Cook
4615	10:45am	Yogitha Chareddy	PITM	Determining the therapeutic potential of dual suppression of c-Myc and KRAS	Chad Pecot

4615	11:00am	Macy Osborne	PITM	Investigating the Role of RPL22 in MSI-high Endometrial Cancer	Russell Broaddus/ Andrew Gladden
4615	11:15am	Chelsea Smith	PITM	The Role of Polymerase Theta in DSB Repair and Resistance to Breast Cancer Therapies	Gaorav Gupta
4615	11:30am	Alex Woodell	PITM	Engineered human induced-neurospheres enhance CAR-T therapy for glioblastoma	Shawn Hingtgen
5401	10:15am	Rachel Cooke	PITM	Synthesis and Assembly of Biohybrid Polymer Libraries	Abigail Knight
5401	10:30am	Aiman Abzhanova	PITM	Novel whole wood smoke exposure and imaging system for human bronchial epithelial cells cultured at the air-liquid interface.	Jim Samet
5401	10:45am	Lauren Kass	PITM	Leveraging Continuous Liquid Interface Production (CLIP) to Design Scaffolds for Controlled Stem Cell Delivery	Shawn Hingtgen
5401	11:00am	Breanna Mann	PITM	An organotypic tissue platform to bridge in vitro and in vivo assays for brain cancer treatment	Shawn Hingtgen
5401	11:15am	Maddy Jenner	CCBTP	Establishing a co-culture system of pancreatic tumor-stroma cells	Jen Jen Yeh
5615	10:15am	Aditi Kothari	PITM	NF-κB and NRF2 pathways dysregulation is associated with improved outcomes in HPV-associated head and neck cancer	Natalia Isaeva
5615	10:30am	Meagan Bridges	PITM	Tobacco Product Use Results in Nasal Immune Mediator Production Most Consistent with M1-like Macrophage Phenotype	Meghan Rebuli
5615	10:45am	Arianna Dame Cascone	PITM	Data analysis plan: Brain-iron neurophysiology and its relationship to the effects of dopaminergic modulation on response inhibition in children with and without ADHD	Jessica Cohen
5615	11:00am	Minna McFarland	PITM	Sex and acute, but not chronic, cocaine administration alters allopregnanolone levels in specific regions of rat brain	Donita Robinson
5615	11:15am	Carli Opland	PITM	Caspase-dependent tau cleavage as a pathogenic mechanism in Alzheimer's Disease	Todd Cohen

Afternoon Session

Room	Time	Trainee Name	Program	Presentation Title	Lab of
3615	2:15pm	Stephen Serafin	CCBTP	Elucidating the RAMP protein interactome that drives tumor lymphatic growth.	Kathleen Caron
3615	2:30pm	Priya Hibshman	CCBTP	Defining the role of MYC in KRAS-mutant pancreatic cancer	Channing Der
3615	2:45pm	Whitney Bell	CCBTP	Revealing the role of Gastrokine2 in pancreatic cancer development	Yuliya Pylayeva-Gupta
3615	3:00pm	Cassandra Phillips	PITM	Effects of Osmotic Stress on Intermediate Filament Dynamics and Regulation in Disease	Natasha Snider
3615	3:15pm	Rhianna Lee	PITM	Robust W1282X-CFTR rescue by a small molecule GSPT1 degrader	Scott Randell
4615	2:15pm	Tamara Vital	CCBTP/ PITM	Characterizing a small molecule inhibitor of chromatin accessibility in Ewing sarcoma	Ian Davis
4615	2:30pm	Markia Smith	PITM	DNA Damage repair classifier defines distinct groups in hepatocellular carcinoma	Melissa Troester/ Katie Hoadley
4615	2:45pm	Dina O'Connell	CCBTP	Role of MHC Class I Antigen Presentation in Triple-Negative Breast Tumor Metastasis	Chuck Perou
4615	3:00pm	Cherise Glodowski	CCBTP	Single cell RNA-sequencing identifies intra-tumoral cellular heterogeneity and drug-induced subpopulation shifts in TNBC Mouse Models	Chuck Perou
4615	3:15pm	Anna Goddard	CCBTP	Cross Talk: Triple Negative Breast Cancer Tumorigenesis and the Immune Response	Gaorav Gupta
5401	2:15pm	Taylor Tibbs	PITM	Genetics determine susceptibility to viral hemorrhagic fever	Jason Whitmire
5401	2:30pm	Michelle Mac	PITM	SETD2: Setting the the stage for H3K36 Trimethylation in Epigenetic Regulation of HPV Life Cycle	Cary Moody
5401	2:45pm	Carmen Amelia Marable	PITM	Placental Transcriptional Signatures Associated with Cerebral White Matter Damage in the Neonate	Rebecca Fry
5401	3:00pm	Syed Masood	PITM	Live Cell Imaging of Oxidative Stress in Human Airway Epithelial Cells Exposed to a Secondary Organic Aerosol	Jim Samet
5401	3:15pm	Ryan Robb	CCBTP	Elucidation of the interplay between autophagy and macropinocytosis in ERK MAPK inhibited pancreatic cancer	Kirsten Bryant
5615	2:15pm	Sara Wasserman	PITM	Chemical Epigenetic Modifier-Mediated Dose Control of Gene Therapy	Nate Hathaway
5615	2:30pm	Sophie Mendell	PITM	Development of CAR T Cells Targeting CD70	Gianpietro Dotti
5615	2:45pm	Michael Sturdivant	CCBTP	APOBEC3 Induced Mutagenesis in Urothelial Carcinoma	William Kim
5615	3:00pm	Coral del Mar Alicea Pauneto	CCBTP	Characterizing myeloid-directed immunotherapy effect in SHH-medulloblastoma	Tim Gershon
5615	3:15pm	Mariaelena Nabors	CCBTP	Growth Media Influences PDAC Subtype	Jen Jen Yeh