

PROGRAM

8:30 am – 9:00 am Check-In and Continental Breakfast, and poster set-up

Oral Session I: Senior Trainees and Junior Faculty, Leadership Hall

Chair: Mathew Eason

- 9:00 am **Elizabeth Thomas**
Molecular Mechanism of Action and Efficacy of novel AR/AR-V7 and Mnk1/2 Degradar, VNPP433-3 β in AR-Overexpressing Castration Resistant Prostate Cancer In Vitro and In Vivo Models (Abstract #38)
- 9:15 am Discussion
- 9:20 am **Tao Ma**
Glucose-responsive amphiregulin in oral dysplastic keratinocytes: a potential role in diabetes-associated oral carcinogenesis (Abstract #32)
- 9:35 am Discussion
- 9:50 am **Christina Ferrer**
The glutathione S-transferase, Gstt1 is a robust driver of survival and dissemination in metastasis (Abstract #24)
- 10:05 am Discussion

Poster Session I, Atrium

10:00 am – 10:50 am Poster presentations

Keynote Lecture, Leadership Hall

- 11:00 am – 11:15 am Activities and Updates from the University of Maryland Greenebaum Comprehensive Cancer Center (UMGCCC)
Kevin Cullen, M.D., UMGCCC Director
- 11:15 am – 11:30 pm Welcoming Remarks
Chris O'Donnell, Ph.D. Vice Dean, Research Development & Operations, Professor of Medicine and Physiology, University of Maryland School of Medicine

11:30 am - 11:45 am Cancer Biology Research Training
Toni Antalis, Ph.D., Associate Director for Training and Education,
UMGCC, Professor of Physiology

11:45 am - 12:45 pm Keynote Introduction
Michele Vitolo, Ph.D., Assistant Professor in Pharmacology and
Retreat Chair

Senthil K. Muthuswamy, Ph.D., Lab Chief and Senior Investigator,
Laboratory of Cancer Biology and Genetics, Center of Cancer
Research, National Cancer Institute

“Organoids and Cell Polarity Proteins in Translational and Mechanistic
Cancer Research”

Lunch, MSTF Atrium

1:00 - 2:00 pm Lunch

Poster Session II, Atrium

2:15 pm - 3:00 pm Poster presentations

Poster Session III, Atrium

3:00 pm - 3:45 pm Poster presentations

Oral Session II: Predoctoral and Other Students, Leadership Hall

Chairs: Jake Liu and Elizabeth Hill

3:45 pm **Makenzy Mull**
Metastatic breast cancer cells have altered calcium-actin response after
ATP-P2Y2 signaling (Abstract #17)

4:00 pm Discussion

4:05 pm **Emmanuel Asiedu**
Angiopoietin-like 4 increases HNSCC cell resistance to chemotherapy
through enhanced HR-mediated DNA damage repair (Abstract #2)

4:20 pm Discussion

- 4:25 pm **Kenneth Dietze**
Development of a novel CAR T cell product to minimize CAR-mediated immune escape via trogocytosis (Abstract #6)
- 4:40 pm Discussion
- 4:45 pm **Triet Nguyen**
Investigating the roles of EMT in small cell lung cancer tumorigenesis and therapy resistance (Abstract # 18)
- 5:00 pm Discussion

Awards Ceremony for the Cancer Biology Retreat, MSTF Atrium
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- 5:15 pm – 6:00 pm Awards Ceremony and Reception with light refreshments
Awards will be given for the best student oral presentation and the top predoctoral and postdoctoral poster presentations.

Keynote Speaker

Senthil K. Muthuswamy, Ph.D., received his Ph.D. from McMaster University, Canada, and did his postdoctoral fellowship with Joan Brugge at Harvard Medical School. In 2001, he began his independent faculty position at Cold Spring Harbor Laboratory in New York and subsequently moved to Princess Margaret Cancer Centre in Toronto. In 2015, he joined the Department of Medicine and Cancer Center at Beth Israel Deaconess Medical Center at Harvard Medical School, where he served as the Director of the Cell Biology Program.



Dr. Muthuswamy is a recipient of the Rita Allen Scholar Award, V Foundation Scholar Award, U.S. Army Era of Hope Scholar Award, Lee K. and Margaret Lau Chair in Breast Cancer Research, and the Canadian Society of Biochemistry and Molecular & Cellular Biology Young Scientist Award for research achievements.

Dr. Muthuswamy takes a “microscope-to-stethoscope” approach that combines basic cell biology with co-clinical studies that help tailor treatment for cancer patients. His laboratory was among the first to employ three-dimensional cell culture (organoids) to bridge the gap between growing cells as a flat monolayer and tumors growing *in vivo*. Organoids are mini-tumors that can be grown in the lab while also replicating the complexity of tissues in the body. His research uses patient tumor organoids for personalizing cancer treatment, investigating metastatic cancer progression, understanding how cell polarity proteins regulate development of drug resistance aiming to develop new immune-oncology treatments and identify new biomarkers.

To learn more about Dr. Muthuswamy and his research, visit <https://ccr.cancer.gov/staff-directory/senthil-k-muthuswamy>