



2017 Program

Thursday, September 21, 2017

Mitchell Building

Floor 3, Elevator J

Onstead Auditorium (S3.8012)

University of Texas MD Anderson Cancer Center

7:00 a.m. - 8:00 a.m.

**Registration
Continental Breakfast**

8:00 a.m. - 8:05 a.m.

Introduction

Pratip Bhattacharya, Ph.D.
University of Texas MD Anderson Cancer Center
Symposium Chair

Welcome

David Piwnica-Worms, M.D., Ph.D., Chair
Department of Cancer Systems Imaging
University of Texas MD Anderson Cancer Center

8:05 a.m. - 8:10 a.m.

Welcome by Gulf Coast Consortia

Suzanne M. Tomlinson, Ph.D. Director, Research Programs
Gulf Coast Consortia for Quantitative Biomedical Sciences

8:10 a.m. - 9:00 a.m.

Featured Speaker

William G. Kaelin, M.D., Professor of Medicine
Dana-Farber Cancer Institute, Harvard Medical School
“The VHL Tumor Suppressor: Insights into Oxygen Sensing, Cancer
Metabolism, and Drugging the Undruggable”

9:00 a.m. - 10:00 a.m.

Techniques of Interrogating Metabolism

(12 mins plus 3 mins Q&A – total 15 mins)

Moderator: Daniel Frigo, Ph.D., University of Houston

Natasha Kirienco, Ph.D., Rice University

“Harnessing Mitochondrial Dysfunction as Target for Cancer Therapy”

James Bankson, Ph.D., University of Texas MD Anderson Cancer Center

“Quantitative Metabolic MRI: Managing Noise and Bias”

Nagireddy Putluri, Ph.D., Baylor College of Medicine

“Tobacco-specific Carcinogens Induce Hypermethylation, DNA Adducts
and DNA Damage in Bladder Cancer”

Giannicola Genovese, Ph.D.,

University of Texas MD Anderson Cancer Center

“Perturbation of Proteostasis in SMARCB1 Deficient Tumors”

10:00 a.m. - 10:30 a.m. **Perspective Talk: Metabolic Therapy in Cancer Systems**
Giulio Draetta, Ph.D., Director, Institute for Applied Cancer Science and
Professor of Genomic Medicine
University of Texas MD Anderson Cancer Center
“Targeting Metabolic Feeders in Glioblastoma”

10:30 a.m. - 11:00 a.m. **Break**

11:00 a.m. - 12:00 p.m. **Metabolic Therapy in Cancer Systems** (12 mins plus 3 mins Q&A – total 15 mins)

Moderator: Arun Sreekumar, Ph.D., Baylor College of Medicine

Marina Konopleva, M.D., University of Texas MD Anderson Cancer Center
“Targeting Mitochondrial Metabolism in AML with Complex I Inhibitor
IACS-010759”

Seth Gammon, Ph.D., University of Texas MD Anderson Cancer Center
“Mitochondrial OxPhos Inhibitor IACS-010759 and [¹⁸F]FAZA PET Imaging:
Non-invasive Monitoring of Target Engagement”

Karl-Dimiter Bissig, M.D., Ph.D., Baylor College of Medicine
“Metabolic Pathway Reprogramming: A Novel Therapeutic approach for
Liver Disease and Cancer”

Florian Muller, Ph.D., University of Texas MD Anderson Cancer Center
“Tumor Eradication by the Enolase Inhibitor POMHEX through T-cell
Activation”

12:00 p.m. - 12:30 p.m. **Perspective Talk: Ageing, Metabolism and Cancer**

Meng Wang, Ph.D., Associate Professor of Molecular and Human
Genetics, Huffington Center On Aging, Baylor College of Medicine
“Seeing Unseen, Knowing Unknown - Application of Stimulated Raman
Scattering Microscopy in Revealing Lipid Metabolic Regulation”

12:30 p.m. - 1:30 p.m. **Lunch**

1:30 p.m. - 2:30 p.m. **Cancer Biology and Metabolism** (12 mins plus 3 mins Q&A – total 15 mins)

Moderator: Florencia McAllister, M.D.,
University of Texas MD Anderson Cancer Center

Zhang (John) Weihua, Ph.D., University of Houston
“The Kinase Independent Functions of EGFR in Regulating Cancer
Metabolism”

Guangwei Du, Ph.D., UT Health Science Center
“Phospholipid Synthesis Maintains Endoplasmic Reticulum Homeostasis
and is Critical for Triple-negative Breast Cancer Cell Survival”

Cullen Taniguchi, M.D., Ph.D.,

University of Texas MD Anderson Cancer Center
"Mitochondrial Dynamics and Pancreatic Cancer"

Benny Kaiparettu, Ph.D., Baylor College of Medicine
"Role of Mitochondrial Metabolic Reprogramming in the Regulation of Oncopathways"

2:30p.m. - 3:00 p.m.

Perspective Talk: Cancer Biology and Metabolism

Deborah Johnson, Ph.D., Professor of Molecular and Cellular Biology
Baylor College of Medicine

"Maf1: A New Molecular Link between Cancer, Metabolism, and Development"

3:00 p.m. - 3:30 p.m.

Break

3:30 p.m. - 4:30 p.m.

Emerging Areas of Metabolic Interrogation in Cancer (12 mins plus 3 mins Q&A – total 15 mins)

Moderator: Daniel Carson, Ph.D., Rice University

Romi Ghose, Ph.D., University of Houston
"Chemotherapy Safety: The Story of Irinotecan"

Nikki Delk, Ph.D., University of Texas, Dallas
"Is p62 a Rationale Target for Hormone Receptor-Independent Cancers?"

Weston Porter, Ph.D., Texas A&M University
"Metabolic Adaptation in Lactation: A Model for Breast Cancer Progression?"

David Reiner, Ph.D., IBT, Texas A&M University
"Ral and Rheb in *C. elegans* Development and Metabolism"

4:30 p.m. - 5:00 p.m.

Perspective Talk: Genomics Metabolomics Axis in Cancer

Ronald DePinho, M.D., Professor of Cancer Biology
Past President, University of Texas MD Anderson Cancer Center
"Targeting Cancer-Specific Vulnerabilities"

5:05 p.m. - 5:10 p.m.

Closing

David Piwnicka-Worms, M.D., Ph.D., Chair
Department of Cancer Systems Imaging
University of Texas MD Anderson Cancer Center

5:10 p.m. - 7:00 p.m.

Poster Session with Refreshments