

National Cancer Institute (NCI)
Symposium on Mechanisms of Cancer Drug Resistance and Sensitivity
October 4-5, 2018

Shady Grove Campus: 9609 Medical Center Drive, Rockville, MD 20850, TE 406/408/410

AGENDA

Day 1: Thursday, October 4th; 1:00 p.m. – 5:35 p.m. Eastern Time

- 1:00 – 1:05 **Welcome** – *L. Austin Doyle, MD (NCI)*
- 1:05 – 1:15 **Goals of Symposium** – *James Doroshow, MD (NCI)*
- 1:15 – 1:20 **Introduction of Keynote Speaker** – *Charles Sawyers, MD (MSKCC)*
- 1:20 – 1:50 **Keynote Presentation:** Discovery of targetable mechanisms of endocrine resistance in ER+, HER2-negative breast cancer – *Carlos Arteaga, MD (UT Southwestern)*
- 1:50 – 2:00 **Q & A**

Session 1: Insights into Immunomodulatory Drug Resistance

- 2:00 – 2:10 Introduction – *Helen Chen, MD (NCI)*
- 2:10 – 2:30 Organoid modeling of the tumor immune microenvironment – *Calvin Kuo, MD, PhD (Stanford)*
- 2:30 – 2:50 Defining T cell states associated with response to checkpoint immunotherapy in melanoma – *Moshe Sade-Feldman, PhD (MGH)*
- 2:50 – 3:10 Genetic mechanisms of sensitivity and resistance to cancer immunotherapy – *Drew Pardoll, MD, PhD (JHMI)*
- 3:10 – 3:30 Unraveling the intrinsic and extrinsic resistance mechanisms to checkpoint blockade – *Siwen Hu-Lieskovan, MD, PhD (UCLA)*
- 3:30 – 3:50 Panel Discussion
- 3:50 – 4:05 **Coffee Break**

Session 2: The Tumor Microenvironment in Drug Resistance and Sensitivity

- 4:05 – 4:15 Introduction – *Trever Bivona, MD, PhD (UCSF)*
- 4:15 – 4:35 Cancer Treatment Resistance Mediated by Damage Responses in the Tumor Microenvironment – *Pete Nelson, MD (Fred Hutch)*
- 4:35 – 4:55 Tumor microenvironmental changes induced by TKI treatment in advanced NSCLC – *Collin Blakely, MD, PhD (UCSF)*
- 4:55 – 5:15 Tumor intrinsic and microenvironmental mechanisms driving drug combination efficacy and resistance in AML – *Jeffrey Tyner, PhD (OHSU)*
- 5:15 – 5:35 Panel Discussion

Day 2: Friday, October 5th; 8:00 a.m. – 5:15 p.m. Eastern Time

- 8:00 – 8:15 **NCI Initiatives to Fund Current and Future Drug Resistance & Sensitivity Research** – *L. Austin Doyle, MD (NCI)*
- 8:15 – 8:20 **Introduction of Keynote Speaker** – *L. Austin Doyle, MD (NCI)*
- 8:20 – 8:50 **Keynote Presentation: Lineage Plasticity in Cancer** – *Charles Sawyers, MD (MSKCC)*
- 8:50 – 9:00 **Q & A**

Session 3: Emerging Pre-clinical Models to study Drug Resistance and Sensitivity

- 9:00 – 9:10 Introduction – *Keith Stewart, MB, ChB (Mayo Clinic Arizona)*
- 9:10 – 9:30 Utilizing preclinical in vivo models to elucidate mechanisms of drug resistance – *Juliet Williams, PhD (Novartis)*
- 9:30 – 9:50 A systematic liquid biopsy platform to study drug resistance – *Ryan Corcoran, MD, PhD (MGH)*
- 9:50 – 10:10 3D models versus 2D exponentially growing models: Are they more “in vivo” like? – *Beverly Teicher, PhD (FLNRC, NCI)*
- 10:10 – 10:30 Transcriptional regulation of prostate cancer lineage specification and antiandrogen sensitivity – *Yu Chen, MD, PhD (MSK)*
- 10:30 – 10:50 Panel Discussion
- 10:50 – 12:15 **Poster Session and Networking Break**
- 12:15 – 1:00 **Lunch** (on your own)

Session 4: Resistance Biomarkers and Pathways

- 1:00 – 1:10 Introduction – *Jeffrey Tyner, PhD (OHSU)*
- 1:10 – 1:30 Imaging stem cell signals in cancer heterogeneity and therapy resistance – *Tannishtha Reya, PhD (UCSD)*
- 1:30 – 1:50 In vivo screens for enhancers of checkpoint blockage response – *Nick Haining, BCh, BM (DFCI)*
- 1:50 – 2:10 Identification of genetic alterations associated with poor treatment response in DLBCL patients treated with lenalidomide/RCHOP – *Thomas Witzig, MD (Mayo Clinic Minnesota)*
- 2:10 – 2:40 Non-genomic mechanisms of resistance to drugs targeting oncogenic drivers in lung cancer – *Christine Lovly, MD, PhD (Vanderbilt)*
- 2:40 – 3:00 Panel Discussion
- 3:00 – 3:30 **Networking Break**

Session 5: Large Dataset Analysis in Drug Resistance Research

- 3:30 – 3:40 Introduction – *Pete Nelson, MD* (Fred Hutch)
- 3:40 – 4:00 Data integration and functional interrogation to overcome drug resistance – *Kris Wood, PhD* (Duke)
- 4:00 – 4:20 Integrative analysis to identify resistance biomarkers – *Eliezer Van Allen, MD* (DFCI)
- 4:20 – 4:40 Genome-wide screens in AML – *Shannon McWeeney, PhD* (OHSU)
- 4:40 – 5:00 Panel Discussion

- 5:00 – 5:15 **Wrap-up** – *Jeff Moscow, MD* (NCI)