

AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR
American Association
for Cancer Research

221001E

**as of March 16, 2023*

Conference Cochairs:

Cory Abate-Shen, Columbia University Irving Medical Center, New York, New York

Felix Y. Feng, University of California, San Francisco, San Francisco, California

Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

[R] = Remote

Wednesday, March 15, 2023

Welcome and Opening Keynote Lecture [CME]

5:30-6:30 p.m. | Colorado A-E

Welcoming Remarks

Felix Y. Feng, University of California, San Francisco, San Francisco, California

Introduction of the Keynote Speaker

Cory Abate-Shen, Columbia University Irving Medical Center, New York, New York

Prostate cancer genetics and immunity

Ronald A. DePinho, UT MD Anderson Cancer Center, Houston, Texas

Opening Reception

6:30-8:00 p.m. | Colorado F-J

Thursday, March 16, 2023

Continental Breakfast

7:00-8:00 a.m. | Colorado Foyer

Plenary Session 1: Mechanisms of Disease Progression [CME]

8:00-10:00 a.m. | Colorado A-E

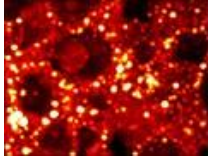
Session Chairs:

Andrew S. Goldstein, University of California, Los Angeles, Los Angeles, California

Marcus Ruscetti, University of Massachusetts Chan Medical School, Worcester, Massachusetts

Genomic and epigenomic regulation during prostate cancer progression

Jindan Yu, Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, Illinois



AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR
American Association
for Cancer Research

221001E

An endogenous molecular brake preventing APOBEC-driven tumor mutational burden, heterogeneity and AR therapy resistance*

Ping Mu, UT Southwestern Medical Center, Dallas, Texas

Evolution of AR gene structure during prostate cancer progression

Scott M. Dehm, Masonic Cancer Center, Minneapolis, Minnesota

Loss of protein phosphatase PP2A activity drive AR addiction in prostate cancer*

Irfan A. Asangani, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

Metabolic mechanisms of prostate cancer progression that feed nuclear receptors

Nima Sharifi, Cleveland Clinic Lerner Research Institute, Cleveland, Ohio

Break

10:00-10:30 a.m. | Colorado Foyer

Plenary Session 2: Genomic Heterogeneity [CME]

10:30 a.m.-12:45 p.m. | Colorado A-E

Session Chairs:

Anne E. Cress, University of Arizona Cancer Center, Tucson, Arizona

Adam G. Sowalsky, National Cancer Institute, Bethesda, Maryland

The genetic underpinnings of prostate cancer genomic heterogeneity

Francesca Demichelis, University of Trento, Trentino, Italy

Overcoming complex polyclonality for accurate clinical genotyping in metastatic prostate cancer

Alexander W. Wyatt, University of British Columbia, Vancouver, British Columbia, Canada

Convergent evolution in DNA repair-deficient mCRPC in response to targeted therapy*

David A. Quigley, University of California San Francisco, San Francisco, California

Science of prostate cancer care and survivorship in black men: Structural, social and biological determinants

Folakemi T. Odedina, Mayo Clinic Comprehensive Cancer Center, Jacksonville, Florida

Integrative analysis of the genomic, transcriptomic, and chromatin landscape of PCa in Black men identifies actionable therapeutic vulnerabilities

Salma Kaochar, Baylor College of Medicine, Houston, Texas

Lunch Break (lunch on your own)

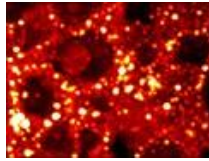
Advances in Prostate Cancer Research

March 15-18, 2023

Hilton Denver City Center | Denver, CO

Program as of 3/16/2023 5:17 PM

Page 2 of 8



AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR
American Association
for Cancer Research

221001E

12:45-2:30 p.m.

Plenary Session 3: Epigenomic Mechanisms [CME]

2:30-4:30 p.m. | Colorado A-E

Session Chairs:

Jelani Zarif, Johns Hopkins, Baltimore, Maryland

Amina Zoubeidi, University of British Columbia, Vancouver, BC, Canada

Prostate cancer transcriptomic regulation by germline risk alleles, somatic mutations and 3D-genomic architecture

Ram S. Mani, UT Southwestern Medical Center, Dallas, Texas

Exploring the role of ASCL1 in neuroendocrine prostate cancer*

Kathia E. Rodarte, UT Southwestern Medical Center, Dallas, Texas

Interrogating the three-dimensional genome architecture in metastatic prostate cancer

Felix Y. Feng, University of California San Francisco, San Francisco, California

Multi-level functional genomics reveals molecular and cellular oncogenicity of patient-based 3' untranslated region mutations*

Samantha L. Schuster, Fred Hutchinson Cancer Center, Seattle, Washington

Prostate stromal microenvironment: A scRNASeq map of mice and men

Massimo Loda, Weill Cornell Medicine, New York, New York

Lightning Lectures 1 [CME]

4:30-5:00 p.m. | Colorado A-E

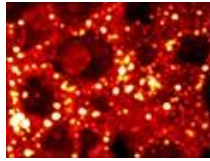
Session Chairs:

Cory Abate-Shen, Columbia University Irving Medical Center, New York, New York

Felix Y. Feng, University of California, San Francisco, California

Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

- 1. NSD2 is a requisite and targetable subunit of the AR/FOXA1 neo-enhanceosome complex in prostate cancer cells**
Abhijit Parolia, University of Michigan, Ann Arbor, Michigan
- 2. Alternative promoter usage is linked to transcriptional and epigenetic alterations during prostate cancer progression**
Meng Zhang, University of California, San Francisco, San Francisco, California
- 3. Differential alternative RNA splicing and transcription events between Black and White prostate cancer patients involve genes promoting cancer aggressiveness and associate with patient survival**



Muthana Al Abo, Duke University, Durham, North Carolina

4. Minor intron splicing is critical for survival of lethal prostate cancer

Anke Augspach, University of Bern-DBMR, Bern, Switzerland

5. Enzalutamide resistance is driven by adaptations that enhance AR splice variant and FOXA1 activities

Betul Ersoy-Fazlioglu, Harvard University Beth Israel Deaconess Medical Center, Boston, Massachusetts

6. Distinct activity of androgen receptor splice variants in promoting prostate cancer metastasis

Maryam Labaf, University of Massachusetts Boston, Boston, Massachusetts

7. BMX inhibition reverses HSD3B1-driven resistance in prostate cancer

Xiuxiu Li, Cleveland Clinic, Shaker Heights, Ohio

8. Cellular cartography reveals transcriptional specificity and spatial organization of diverse luminal epithelial cells in the murine prostate

Hanbyul Cho, University of Michigan, Ann Arbor, Michigan

9. Human Prostate-on-Chip models to define stromal and epithelial interactions in normal and cancerous prostate

Cindy K. Miranti, University of Arizona Cancer Center, University of Arizona, Tucson, Arizona

10. Identifying and targeting the genetic determinants of immune suppression and immunotherapy failure in prostate cancer

Katherine C. Murphy, UMass Chan Medical School, Worcester, Massachusetts

Poster Session A (with light refreshments)

5:00-7:30 p.m. | Colorado F-J

Friday, March 17, 2023

Continental Breakfast

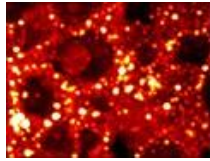
7:00-8:00 a.m. | Colorado Foyer

Plenary Session 4: Modeling Prostate Cancer [CME]

8:00-10:00 a.m. | Colorado A-E

Session Chair:

Di Zhao, UT MD Anderson Cancer Center, Houston, Texas



Modeling prostate cancer metastasis in genetically engineered mouse models

Cory Abate-Shen, Columbia University Irving Medical Center, New York, New York

PMR-116, a novel inhibitor of ribosome biogenesis with antitumor activity in preclinical models of prostate cancer*

Luc Furic, Peter MacCallum Cancer Centre, Melbourne, Australia

Using patient derived models to define epigenetic subtypes of castration-resistant prostate cancer

Yu Chen, Memorial Sloan Kettering Cancer Center, New York, New York

ERG-driven luminal prostate cancers emerge from Ck5+/Nkx3.1+ basal cells*

Weiran Feng, Memorial Sloan Kettering Cancer Center, New York, New York

Drug sensitivity of multifocal primary prostate cancer

Marianna Kruithof-de Julio, University of Bern, Bern, Switzerland

Break

10:00-10:30 a.m. | Colorado Foyer

Plenary Session 5: Lineage Plasticity and Treatment Resistance [CME]

10:30 a.m.-12:30 p.m. | Colorado A-E

Session Chairs:

Himisha Beltran, Dana-Farber Cancer Institute, Boston, Massachusetts

Lawrence True, University of Washington, Seattle, Washington

Lineage fidelity and plasticity in prostate development and cancer

Michael M. Shen, Columbia University Irving Medical Center, New York, New York

Molecular determinants of prostate cancer lineage plasticity*

David W. Goodrich, Roswell Park Comprehensive Cancer Center, Buffalo, New York

Epigenetic crosstalk associated with prostate cancer lineage plasticity

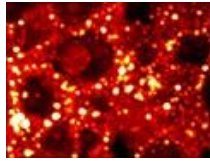
David S. Rickman, Weill Cornell Medicine, New York, New York

Basal cell lineage plasticity in prostate homeostasis, repair and tumor initiation*

Dong Gao, Shanghai Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences, Shanghai, China (Mainland)

Anticipating, tracking, and targeting new prostate cancer lineages driven by treatment pressures

Peter S. Nelson, Fred Hutchinson Cancer Center, Seattle, Washington



AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR
American Association
for Cancer Research

221001E

Lunch Break (lunch on your own)

12:30-2:30 p.m.

Plenary Session 6: The Tumor Microenvironment and Immunotherapy [CME]

2:30-4:30 p.m. | Colorado A-E

Session Chairs:

Cindy K. Miranti, University of Arizona Cancer Center, University of Arizona, Tucson, Arizona

Ayesha Shafi, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Uniformed Services University of the Health Sciences, Bethesda, Maryland

Exploiting androgen blockade to improve anti-tumor immunity

Amy Moran, Oregon Health & Science University, Portland, Oregon

First-in-class TRPV6 inhibitors for the treatment of prostate cancer*

Kimberley Beaumont, Uniquest, St. Lucia, QLD, Australia

Tumor microenvironment modulation is critical for cellular immunotherapy efficacy

Tanya Dorff, City of Hope Comprehensive Cancer Center, Duarte, California

The carcinoma of prostate sequencing of tumor and clinical endpoints (CAPSTONE) project: a clinico-genomic resource to enable patient-centric genomic research and improve the actionability of genetic testing in metastatic prostate cancer*

Marcin P. Cieslik, University of Michigan, Ann Arbor, Michigan

Senescence in cancer and myeloid cells control prostate cancer progression

Andrea Alimonti, IOR - Institute of Oncology Research, Bellinzona, Switzerland

Lightning Lectures 2 [CME]

4:30-5:00 p.m. | Colorado A-E

Session Chairs:

Cory Abate-Shen, Columbia University Irving Medical Center, New York, New York

Felix Y. Feng, University of California, San Francisco, California

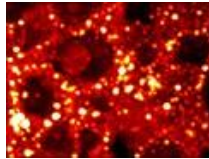
Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

1. Lactate metabolism regulates chromatin accessibility and prostate luminal differentiation

Andrew S. Goldstein, University of California, Los Angeles, Los Angeles, California

2. Lineage-specific PRC2 targets and response to EZH2 inhibition in neuroendocrine prostate cancer

Varadha Balaji Venkadakrishnan, Dana-Farber Cancer Institute, Boston, Massachusetts



3. Characterization of DNA repair defects in CDK12 mutant prostate cancer and the identification of differential vulnerabilities [R]

Sander Frank, Fred Hutchinson Cancer Center, Seattle, Washington

4. Genome-wide CRISPR screens identify PTGES3 as a druggable AR modulator

Haolong Li, University of California, San Francisco, San Francisco, California

5. Targeting CBP/p300 and its downstream transcriptional machinery in advanced PCa

Ayesha A. Shafi, Center for Prostate Disease Research, Murtha Cancer Center Research Program, Uniformed Services University of the Health Sciences, Bethesda, Maryland

6. Elevated mitochondrial reactive oxygen species dysregulate the tumor microenvironment in prostate cancer of African American Men

Asmaa El-Kenawi, Moffitt Cancer Center, Tampa, Florida

7. Leveraging therapy-induced senescence for prostate cancer immunotherapy

Marcus Ruscetti, University of Massachusetts Chan Medical School, Worcester, Massachusetts

Poster Session B (with light refreshments)

5:00-7:30 p.m. | Colorado F-J

Saturday, March 18, 2023

Continental Breakfast

7:00-8:00 a.m. | Colorado Foyer

Plenary Session 7: Recent Advances in Detection and Diagnosis [CME]

8:00-10:00 a.m. | Colorado A-E

Session Chairs:

Lisa M. Butler, University of Adelaide, Adelaide, Australia

Lisa F. Newcomb, Fred Hutchinson Cancer Center, Seattle, Washington

From a single to million cell view of prostate cancer

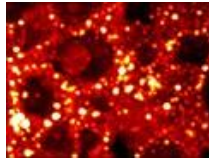
Franklin W. Huang, University of California, San Francisco, California

Ultra-sensitive detection of circulating tumour DNA enriches for patients with higher risk disease in clinically localised prostate cancer*

Bernard J. Pope, The University of Melbourne, Melbourne, VIC, Australia

Risk stratification of localized prostate cancer: NRG oncology digital pathology initiatives to improve precision medicine radiation management

Phuoc T. Tran, University of Maryland, Baltimore, Baltimore, Maryland



AACR Special Conference

Advances in Prostate Cancer Research

March 15-18, 2023 | Denver, CO

AACR
American Association
for Cancer Research

221001E

Unlocking the proteome of metastatic prostate cancer circulating tumor cells*

Justin M. Drake, University of Minnesota, Minneapolis, Minnesota

Prostate cancer diagnosis: Where we are and where are we going?

Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

Break

10:00-10:30 a.m. | Colorado Foyer

Plenary Session 8: The Next Generation of Targeting Prostate Cancer [CME]

10:30 a.m.-12:30 p.m. | Colorado A-E

Session Chair: Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

Investigating myeloid cells and epigenetic pathways that drive resistance to immune checkpoint therapy

Padmanee Sharma, UT MD Anderson Cancer Center, Houston, Texas

Genetic determinants of PARP inhibitor sensitivity and resistance in prostate cancer*

Li Jia, Brigham and Women's Hospital, Boston, Massachusetts

Targeting the lipid kinase PIKfyve in neuroendocrine prostate cancer

Arul M. Chinnaiyan, University of Michigan, Ann Arbor, Michigan

Inhibition of androgen receptor signaling in castrate resistant prostate cancer in association with inhibition of glycolysis by targeting hexokinase 2 activity with pyrrolopyrimidine-based small molecules*

Takuma Uo, University of Washington, Seattle, Washington

Pursuing novel treatment strategies for advanced prostate cancer

Johann S. de Bono, The Institute of Cancer Research, London, London, United Kingdom

Closing Remarks

12:30-12:45 p.m. | Colorado A-E

Scott A. Tomlins, University of Michigan Medical School and Strata Oncology, Ann Arbor, Michigan

**Proffered talk from highly rated abstracts*