

40 Years of Cancer Epigenetics

October 20, 2023

Ruth Kirschstein Auditorium, Natcher Conference Center
NIH Main Campus, Bethesda

8:00 am – 8:45 am **Registration** *All times EST*
Natcher Conference Center
Building 45, NIH Main Campus, Bethesda MD-20892

8:45 am – 9:00 am **Introduction to the meeting**
Dan Gallahan, Ph.D.
Director, NCI Division of Cancer Biology

9:00 am – 10:40 am **Session 1: Epigenetic Landscapes and Dynamics in Cancer**
Moderators: Andrew Feinberg, M.D., MPH

9:00 am – 9:25 am **Cancer Is a Disease of Epigenetic Plasticity**
Andrew Feinberg, M.D., MPH
Johns Hopkins University

9:25 am – 9:50 am **Spatial Epigenome Sequencing to Map Tissue Development, Aging, and Malignancies**
Rong Fan, Ph.D.
Yale University

9:50 am – 10:15 am **Epigenetic states of tumor parent cells and how epigenetic abnormalities can drive pre-malignant tumor progression**
Stephen Baylin MD
Johns Hopkins University

10:15 am – 10:40 am **Probing the Epigenome for Therapeutic Opportunities**
Cheryl Arrowsmith, Ph.D.
University of Toronto

10:40 am – 11:00 am **Break**

11:00 am – 12:40 pm **Session 2: Translational Epigenetics**
Moderator: Xue (Sean) Li Ph.D.

11:00 am – 11:25 am **5-Azacytidine: from Myogenesis to MDS**
Peter A. Jones, Ph.D.
Van Andel Research Institute

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| 11:25 am – 11:50 am | Decoding the cancer epigenome for research and diagnostics Efrat Shema, Ph.D. Weizmann Institute |
| 11:50 am – 12:15 pm | NSD2 and histone methylation: A molecular journey from discovery to therapeutics Or Gozani, M.D., Ph.D. Stanford University |
| 12:15 pm – 12:40 pm | Gaining insights into cancer epigenomics through cfDNA fragmentomics (pre-recorded) Dennis Lo, M.D. Ph.D. MUHK |
| 12:40 pm – 1:45 pm | Lunch |
| 1:45 pm – 3:25 pm | Session 3: Systemic Impacts of Epigenetics <i>Moderator: Yvonne Fondufe-Mittendorf, Ph.D.</i> |
| 1:45 pm – 2:10 pm | Homeodomain factors in melanoma: (EN)abling immune evasion Eva Hernando-Monge Ph.D. NYU |
| 2:10 pm – 2:35 pm | Cancer epigenetics in 3D Christina Leslie Ph.D. Memorial Sloan Kettering |
| 2:35 pm – 3:00 pm | The interface of metabolism and epigenetics Jason Locasale Ph.D. Duke University |
| 3:00 pm – 3:25 pm | Break |
| 3:25 pm – 5:20 pm | Session 4: New Frontiers in Epigenetics <i>Moderators: Stephen Baylin, M.D.</i> |
| 3:45 pm – 4:05 pm | 3D chromatin structure at the intersection of toxicology and disease Yvonne Fondufe-Mittendorf Ph.D. Van Andel Institute |
| 4:05 pm – 4:30 pm | Epigenetic sex in bladder tumorigenesis Xue (Sean) Li, Ph.D. Cedars Sinai |

4:30 pm – 4:55 pm

RNA polymerase I fueling tumor cell plasticity

Theresa Vincent Ph.D.

NYU

4:55 pm – 5:20 pm

Extrachromosomal DNA, Transcriptional Enhancers and Cancer Evolution

Chia-Lin Wei Ph.D.

University of Washington

5:20 pm – 5:30 pm

Closing Remarks