

## Biological and Clinical Frontiers in Epigenetics

Nov 2-7 | Grand Fiesta Americana Coral Beach | Cancún, MX



## **Organizers:**

Mark Bedford | MD Anderson
Or Gozani | Stanford University Stanford
Brian Strahl | University of North Carolina Chapel Hill
Michael-Christopher Keogh | EpiCypher

Sunday, Nov 2	Speakers & Event	Location	
12:00pm – 7:00pm	Poster Boards Available for Set Up Poster Numbers TBD	Grand Coral Ballroom	
2:00pm – 5:00pm	Conference Check-in If you arrive later, please see the marketing table outside the Grand Coral Ballroom.	Main Lobby	
2:00pm – 4:00pm	Session # 1 – 4 Speakers: Presentation Practice Please give your presentation materials to AV desk on a USB/USB-C. AV will have access to Mac and PC computers with Microsoft PowerPoint.	Grand Coral Ballroom	
4:00pm – 4:50pm	Coffee Bar Available	Grand Coral Foyer	
4:50pm – 5:00pm	Welcome & Opening Remarks from Organizers Or Gozani, Brian Strahl, Mark Bedford & Michael-Christopher Keogh	Grand Coral Ballroom	
5:00pm – 7:00pm	Session #1   Grand Coral Ballro	oom	
	Chair: <b>Liling Wan</b> , University of Pen	nsylvania	
5:00pm – 5:20pm	Speaker 1: <b>Johnathan Whetstine</b> , Fox Chase Cancer Center "The Face-off: Epigenetics and Genetics Talk to One another"		
5:20pm – 5:40pm	Speaker 2: <b>Greg Wang</b> , Duke University "Chromatin dysregulation driving oncogenesis"		
5:40pm – 6:00pm	Speaker 3: <b>Scott Rothbart</b> , Van Andel Research Institute "Revealing novel cancer therapeutic strategies through molecular studies of chromatin modification crosstalk"		
6:00pm – 6:20pm	Speaker 4: <b>Alexander Ruthenburg</b> , University of Chicago "Promiscuous RNA binding by WDR5 remodels the KMT2A (MLL1) histone methyltransferase complex to an inactive state"		
6:20pm – 6:40pm	Speaker 5: <b>Karim-Jean Armache</b> , New York University "Visualizing the Mechanisms of Epigenetic Inheritance and Regulation"		
6:40pm – 7:00pm	Speaker 6: Lucas Farnung, Harvard Medical School "Mechanisms of Transcription and Replication Through Chromatin"		
7:30pm – 10:00pm	Welcome Reception (Dinner Included)	Sunset Terrace	

Monday, Nov 3	Speakers and Events	Location
9:00am – 11:00am	Session # 2   Grand Coral Ballroom	
	Chair: Erin Green, University of Maryland, Baltimore County	
9:00am – 9:20am	Speaker 7: <b>Haitao Li</b> , Tsinghua University "A CMiDAC Deacylation Complex Pillars an Epigenetic Landscape to Prevent Heart Failure"	
9:20am – 9:40am	Speaker 8: <b>Pawel Mazur</b> , MD Anderson Cancer Center "Mouse models to investigate the targetable protein methylome in cancer pathogenesis"	
9:40am – 10:00am	Speaker 9: <b>Marc Timmers</b> , Albert-Ludwigs-Universität Freiburg "TGF-β activated transcription is controlled by a MLL4-JUNB feed-forward loop"	
10:00am – 10:20am	Speaker 10: <b>Kunal Rai</b> , MD Anderson Cancer Center "Precision epigenetic engineering to improve T cell therapy"	
10:20am – 10:40am	Speaker 11: <b>Andrew Stergachis</b> , University of Washington "A single-cell and haplotype-resolved view of normal and pathogenic gene regulation"	
10:40am – 11:00am	Speaker 12: <b>Ari Melnick</b> , Josep Carreras Leukemia Research Institute "Epigenetic and architectural mechanisms driving immune neoplasms"	
11:00am – 11:20am	Coffee Break	Grand Coral Foyer
	Session # 3   Grand Coral Ballroom	
11:20am – 1:00pm	Chair: Isaac Hilton, Rice University	
11:20am – 11:40am	Speaker 13: <b>Danesh Moazed</b> , Harvard Medical School "Regulation of Suv39h read-write activity by H3K14 ubiquitination"	
11:40am – 12:00pm	Speaker 14: <b>Serena Sanulli</b> , Stanford School of Medicine "Allosteric regulation of the nucleosome core biases cell state"	
12:00pm – 12:20pm	Speaker 15: <b>Gregory Young</b> , PacBio "Multiomics with HiFi sequencing: new methylation callers, new insights"	
12:20pm – 12:40pm	Speaker 16: <b>Jessica Downs</b> , The Institute of Cancer Research "Functional profiling of SWI/SNF chromatin remodeling complexes through base editing screens"	
12:40pm – 1:00pm	Speaker 17: <b>Capucine Van Rechem</b> , Stanford School of Medicine "Replication stress and cholesterol biosynthesis as therapeutic vulnerabilities in Diffuse Midline Glioma"	

1:00pm – 4:00pm	Free Time	
2:00pm – 4:00pm	Session # 5 – 7 Speakers: Presentation Practice Please give your presentation materials to AV desk on a USB/USB-C. AV will have access to Mac and PC computers with Microsoft PowerPoint.	Grand Coral Ballroom
4.00	Session #4   Grand Coral Ballro	oom
4:00pm – 6:00pm	Chair: Mitchell Vollger, University of Utah	
4:00pm – 4:20pm	Speaker 18: <b>Nick Young</b> , Baylor College of Medicine "A Needed Nomenclature for Nucleosomes and Histone Proteoform Mechanisms"	
4:20pm – 4:40pm	Speaker 19: <b>Neil Kelleher</b> , Northwestern University "Targeted enrichment of endogenous nucleosomes for characterization by tri-level"	
4:40pm – 5:00pm	Speaker 20: <b>Sriharsa Pradhan</b> , New England Biolabs, Inc. "RNA pol I inhibition remodels chromatin and alters nuclear architecture in mammalian cells"	
5:00pm – 5:20pm	Speaker 21: <b>Hong Wen</b> , Van Andel Research Institute "The histone acetylation reader ENL in development and cancer"	
5:20pm – 5:40pm	Speaker 22: <b>Yadira Soto-Feliciano</b> , MIT "Mechanisms of Transcriptional Regulation by Chromatin Adaptors in Cancer"	
5:40pm – 6:00pm	Speaker 23: <b>Liling Wan</b> , University of Pennsylvania "Chromatin-associated oncogenic condensates"	
6:00pm – 8:00pm	Free Time	
8:00pm — 10:00pm	Poster Session 1 – Even Numbers Drinks & Snacks will be provided. Please enjoy dinner beforehand.	Grand Coral Ballroom/ Foyer

Tuesday, Nov 4	Speakers & Event	Location
9:00am – 11:00am	Session #5   Grand Coral Ballroom	
	Chair: <b>Kanishk Jain</b> , University of Minnes	sota
9:00am – 9:20am	Speaker 24: <b>Jian Jin</b> , Icahn School of Medicine at Mount Sinai "Novel Degraders and Stabilizers of Epigenetic Targets"	
9:20am – 9:40am	Speaker 25: <b>Ryan Kruger</b> , SK Life Science Labs "Selective Degradation of p300 Results in a Potent Antitumor Effect in Prostate and CBP Loss of Function Cell Lines"	
9:40am – 10:00am	Speaker 26: <b>Yael David</b> , Memorial Sloan Kettering Cancer Center "Targeting a new metabolism-epigenetic axis towards improved CAR T therapy in Multiple Myeloma"	
10:00am – 10:20am	Speaker 27: <b>Irfan Asangani</b> , University of Pennsylvania "NSD2-Driven Enhancer Reprogramming as a Therapeutic Target in Prostate Cancer"	
10:20am – 10:40am	Speaker 28: <b>Ho Man Chan</b> , AstraZeneca "Epigenetic Drug Development: PRMT5 Inhibitor AZD3470 for MTAP-deficient cancers"	
10:40am – 11:00am	Speaker 29: <b>Karen Maegley</b> , Pfizer "Targeting the SETDB1 Methyltransferase with Covalent Inhibitors"	
11:00am – 11:20am	Coffee Break	Grand Coral Foyer
11:20am – 1:00pm	Session #6   Grand Coral Ballroom	
	Chair: Steve Josefowicz, Weill Cornell Medicine	
11:20am –11:40am	Speaker 30: <b>Stephane Richard</b> , McGill University "Understanding arginine methylation and RNA processes to design new treatments for cancer."	
11:40am –12:00pm	Speaker 31: <b>David Shechter</b> , Albert Einstein College of Medicine "PRMT5 as a Central Regulator of both RNA Processing and Histone Homeostasis"	
12:00pm –12:20pm	Speaker 32: <b>Yanzhong</b> ( <b>Frankie</b> ) <b>Yang</b> , City of Hope Cancer Center "Arginine Methylation Facilitates the Recruitment of FACT complex to Chromatin to Maintain Active Transcription"	
12:20pm –12:40pm	Speaker 33: <b>Y. George Zheng</b> , University of Georgia "Discovery of a non-catalytic function of PRMT1"	

12:40pm – 1:00pm	Speaker 34: <b>Sung Hee Baek</b> , Seoul National University "Epigenetic Code in Health and Disease"	
1:00pm – 8:00pm	Free time Please enjoy dinner before Trainee Session.	
2:00pm – 3:30pm	Session # 8 – 9 Speakers: Presentation Practice Please give your presentation materials to AV desk on a USB/USB- C. AV will have access to Mac and PC computers with Microsoft PowerPoint.	Grand Coral Ballroom
8:00pm – 10:00pm	Session #7: C. David Allis Trainee Session   Grand Coral Ballroom  Session Introduction: Brian Strahl, UNC Chapel Hill Chair: Emily Bernstein, Icahn School of Medicine at Mount Sinai	
8:00pm – 8:15pm	Speaker 35: <b>Abid Khan</b> , UNC Chapel Hill "Epigenetic Moonlighting by SETD2: From Chromatin to Cell Cycle"	
8:15pm – 8:30pm	Speaker 36: <b>Jaemin Kim</b> , Seoul National University "Regulation of HIF transcriptional programs promoting tumor progression in clear cell renal cell carcinoma"	
8:30pm – 8:45pm	Speaker 37: <b>Ben Mallory</b> , University of Washington "Principles and functional consequences of plasmid chromatinization in mammalian cells"	
8:45pm – 9:00pm	Speaker 38: <b>Alexia Martinez de Paz</b> , Weill Cornell Medicine "Signaling induced biophysical disruption of repressed chromatin domains drives immune cell fate"	
9:00pm – 9:15pm	Speaker 39: Claudia Negrón-Lomas, McGill University "The oncohistone H3.3 G34W impairs differentiation programs in development and cancer through epigenetic remodeling"	
9:15pm – 9:30pm	Speaker 40: <b>Deepak Saini</b> , McGill University "Divergent roles of DNA methylation, TRIM28, and p53 Surveillance in human embryonic and trophoblast stem cells"	
9:30pm – 9:45pm	Speaker 41: <b>Rebecca Smith</b> , Fox Chase Cancer Center "Histone Acetylation Differentially Modulates CTCF-CTCF Loops and Intra-TAD Interactions"	
9:45pm – 10:00pm	Speaker 42: <b>Adrienne Stampley</b> , The University of Alabama at Birmingham "The epigenome fine tunes transcriptional pause release across developmental potential"	

Wednesday, Nov 5	Speakers and Events	Location
9:00am – 11:00am	Session #8   Grand Coral Ballroom	
	Chair: <b>Leah Gates</b> , Case Western Reserve University	
9:00am – 9:20am	Speaker 43: <b>Emily Bernstein</b> , Icahn School of Medicine at Mount Sinai "Mechanisms of chromatin remodeling mutations in cancer"	
9:20am – 9:40am	Speaker 44: <b>Chao Lu</b> , Columbia University "Genetic Dissection of Chromatin Regulatory Network"	
9:40am – 10:00am	Speaker 45: <b>Dan Levy</b> , Ben-Gurion University "Lysine Methylation Signaling at Chromatin"	
10:00am – 10:20am	Speaker 46: <b>Jacek Majewski</b> , McGill University "The Role of Histone 3 Lysine 36 Methyltransferases in Maintaining Epigenome Integrity"	
10:20am – 10:40am	Speaker 47: <b>Shehzad Z Sheikh</b> , UNC Chapel Hill "Chromatin Accessibility as a Predictors and Modifiers of Chronic Intestinal Inflammation"	
10:40am – 11:00am	Speaker 48: <b>Nicolas Reynoird</b> , Université Grenoble Alpes "RNF113A methylation dynamics controls Small Cell Lung Cancer sensitivity to alkylation damage"	
11:00am – 11:20am	Coffee Break	Grand Coral Foyer
11:20am – 1:00pm	Session #9   Grand Coral Ballroom Chair: Capucine Van Rechem, Stanford Schoo	
11:20am – 11:40am	Speaker 49: <b>Erin Green</b> , University of Maryland, Baltimo "Pathways of chromatin regulation in hypoxia"	re County
11:40am – 12:00pm	Speaker 50: <b>Jessica Tyler</b> , Weill Cornell Medicine "Harnessed or hurtful heterologous engagement with the nucleosome acidic patch"	
12:00pm – 12:20pm	Speaker 51: <b>Xiaobing Shi</b> , Van Andel Research Institute "Epigenetic regulation of drug resistance in cancer"	
12:20pm – 12:40pm	Speaker 52: <b>Leah Gates</b> , Case Western Reserve University "Microbial metabolites regulate the chromatin landscape and gene expression"	
12:40pm – 1:00pm	Speaker 53: <b>Gerry Brien</b> , University of Edinburgh "Therapeutic targeting of oncogenic transcriptional biolog sarcoma"	y in synovial

1:00pm – 4:00pm	Free Time		
2:00pm – 3:30pm	Session # 10 – 12 Speakers: Presentation Practice Please give your presentation materials to AV desk on a USB/USB- C. AV will have access to Mac and PC computers with Microsoft PowerPoint.	Grand Coral Ballroom	
2:00pm – 3:00pm	Workshop 1: Advance your chromatin insights with 0 Principles, Progress, and Possibilities Presenter: Tessa M. Firestone, <i>EpiCypher</i>   Kingdom 3	. , , , ,	
3:00pm – 4:00pm		Workshop 2: One assay, many insights: getting started with the amazingly capable long-read epigenomic assay, Fiber-seq Presenter: Bryan J. Venters, <i>EpiCypher</i>   Kingdom 3	
4:00pm – 6:00pm	Session #10   Grand Coral Ballroon	Session #10   Grand Coral Ballroom	
	Chair: <b>Nick Young</b> , Baylor College of Me	Chair: <b>Nick Young</b> , Baylor College of Medicine	
4:00pm – 4:20pm	Speaker 54: <b>David Lahr</b> , Foghorn Therapeutics, Inc. "Proposal to use serial correlation to eliminate need for peak calling from analysis of epigenomic data"		
4:20pm – 4:40pm	Speaker 55: <b>Andrew Farmer</b> , Takara Bio "Dissecting gene regulatory programs through single-cell mapping of histone modifications"		
4:40pm –5:00pm	Speaker 56: <b>Colin Ng</b> , AtlasXomics "Advancing Spatial Epigenomics: High-Resolution Mapping of Chromatin States in Intact Tissues"		
5:00pm – 5:20pm	Speaker 57: <b>Andres Blanco</b> , University of Pennsylvania "Targeting epigenetic regulators to induce therapeutic differentiation in acute myeloid leukemia."		
5:20pm – 5:40pm	Speaker 58: <b>Xiaodong Cheng</b> , MD Anderson Cancer Center "Updated understanding of the protein–DNA recognition code used by C2H2 zinc finger proteins"		
5:40pm – 6:00pm	Speaker 59: <b>Makiko Iwafuchi</b> , Cincinnati Children's Hospital Medical Center "PRDM1 establishes super-poised enhancers in a pioneer factor dose-dependent manner to safeguard cell identity"		
6:00pm – 8:00pm	Free Time		
8:00pm –10:00pm	Poster Session 2- Odd Numbers Drinks & Snacks will be provided. Please enjoy dinner beforehand.	Grand Coral Ballroom/ Foyer	

Thursday, Nov 6	Speakers and Events	Location	
9:00am – 11:00am	Session #11   Grand Coral Ballroom		
	Chair: <b>Dan Levy</b> , Ben-Gurion University		
9:00am – 9:20am	Speaker 60: <b>Ernesto Guccione</b> , Icahn School of Medicine "Targeting solid tumors addiction to the WNT pathway"	Speaker 60: <b>Ernesto Guccione</b> , Icahn School of Medicine at Mount Sinai "Targeting solid tumors addiction to the WNT pathway"	
9:20am – 9:40am	Speaker 61: <b>Nada Jabado</b> , McGill University "The Fire Exit: Redirecting H3K27M-Stalled OPC States in Gliomas via ASCL1 Hijacking"		
9:40am – 10:00am	Speaker 62: <b>Christopher Hartl</b> , Epigenome Technologies "Practical Single-Cell CUT&Tag: Antibodies, Spike-Ins, and the 12x Rule"		
10:00am – 10:20am	Speaker 63: <b>Robert Schneider</b> , Helmholtz Munich "New modulators of chromatin and gene expression"		
10:20am – 10:40am	Speaker 64: <b>François Fuks</b> , Universite Libre de Bruxelles "RNA modifications in Health and Disease"		
10:40am – 11:00am	Speaker 65: <b>Winston Timp</b> , Johns Hopkins University "Increasing Versatility of Single Molecules Sequencing for Epigenetics"		
11:00am – 11:20am	Coffee Break	Grand Coral Foyer	
11:20am – 1:00pm	Session #12   Grand Coral Ballroom		
	Chair: Nicolas Reynoird, Université Grenobl	e Alpes	
11:20am – 11:40am	Speaker 66: <b>Chen Davidovich</b> , Monash University "H3K27me3 mimicry restricts the spread of Polycomb dom	nains"	
11:40am – 12:00pm	Speaker 67: <b>Isaac Hilton</b> , Rice University "Advanced epigenome editing technologies for probing and programming chromatin states and gene expression"		
12:00pm – 12:20pm	Speaker 68: <b>Matthew Easterday</b> , Dovetail Genomics "Structural variants drive enhancer hijacking and oncogene expression in an ovarian adenocarcinoma"		
12:20pm – 12:40pm	Speaker 69: <b>Kami Ahmad</b> , Fred Hutchinson Cancer Center "Histone gene control in cancer"		
12:40pm – 1:00pm	Speaker 70: <b>Nicolas Altemose</b> , Stanford University "Long-read, single-molecule sequencing methods for studying protein-DNA interactions"		
1:00pm – 5:00pm	Free Time		

4:00pm – 5:00pm	Workshop 3: From Bench to Browser: Unlocking CUT&RUN and CUT&Tag Analysis with CUTANA™ Cloud Presenter: Keith Maier, PhD, <i>EpiCypher</i>   Board of Directors Room	
5:00pm – 7:00pm	Session #13   Grand Coral Ballroom	
	Chair: Yanzhong (Frankie) Yang, City of Hope Ca	ancer Center
5:00pm – 5:20pm	Speaker 71: Maria Elena Torres-Padilla, Helmholtz Munich "Epigenetic mechanisms in early mammalian development"	
5:20pm – 5:40pm	Speaker 72: <b>Mo Chen</b> , Tsinghua University "Spatiotemporal control of SMARCA5 by a MAPK-RUNX1 axis distinguishes mutant KRAS-driven pancreatic malignancy from tissue regeneration"	
5:40pm – 6:00pm	Speaker 73: <b>Jacques Côté</b> , Laval University Cancer Research Center "Acetylation and incorporation of H2A.Z by NuA4/TIP60 in genome expression and stability"	
6:00pm – 6:20pm	Speaker 74: <b>Steve Josefowicz</b> , Weill Cornell Medicine "A histone code for stimulation induced chromatin activation and transcription"	
6:20pm – 6:40pm	Speaker 75: <b>Jake Kirkland</b> , Oklahoma Medical Research Foundation "A Repressive Role for PBRM1 in Balancing Pluripotency and Differentiation via Chromatin State Control"	
6:40pm – 7:00pm	Speaker 76: <b>Hiten Madhani</b> , University of California, San Francisco "Evolution of the 53BP1-RIF1-shieldin pathway"	
7:30pm – 10:00pm	Farewell Reception (Dinner Included)	Sunset Terrace