



ASILOMAR

chromatin

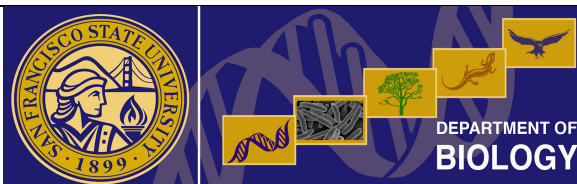
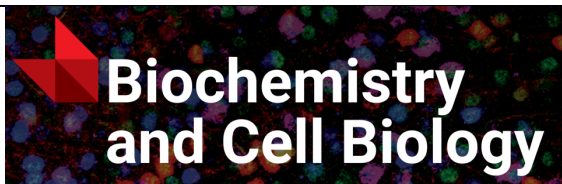
SCIENTIFIC PROGRAM

45th Annual International

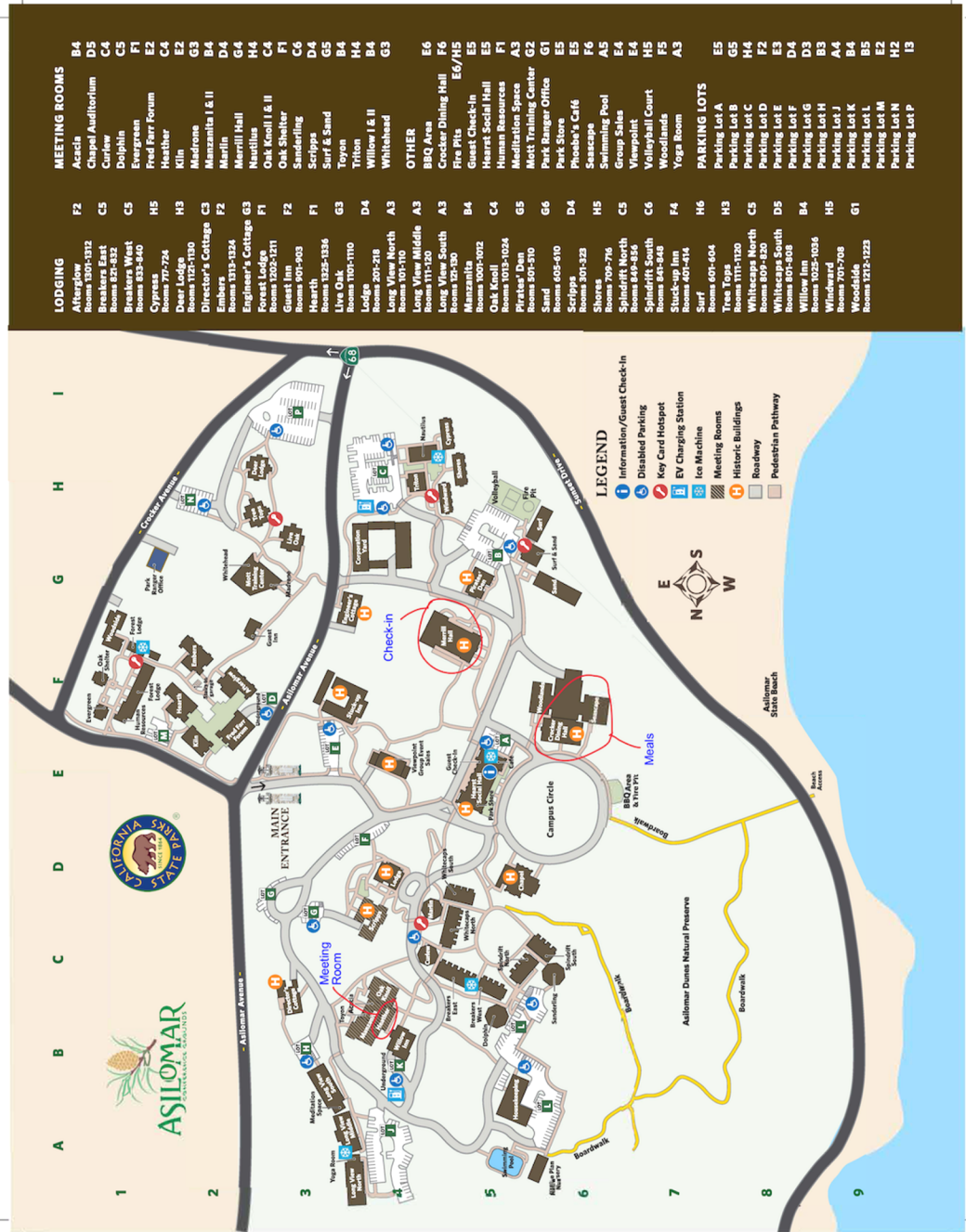
Asilomar Chromatin, Chromosomes and Epigenetics Conference

December 7th-10th, 2023, Pacific Grove CA

asilomarchromatin.com | Asilomar Chromatin Conference, Inc.



Asilomar Conference Center Map



CONFERENCE GUIDELINES

Check-in/out: Please check with the Asilomar staff in the **Merrill Hall** (see E5 in attached map, page 2) to get/return your room keys, meal tickets and lodging information. Check-out time from the Asilomar rooms is **11:00 am on Sunday, Dec 10**.

All **meeting sessions**, including coffee breaks, socials and refreshments, will take place in the **Heather** in the Asilomar Conference Grounds (see B4 in attached map, page 2).

SPEAKERS: Please plan your talks to be 15-minute length (we are allowing for a 12-minute presentation + 3 additional minutes for questions). Keynote talks are 30 min + 10 min for questions.

Breakfast, Lunch and Dinner will take place in the Seascapes Room accessed via the **Crocker Dining Hall** (see F6 in attached map, page 2) in the Asilomar Conference Grounds.
Breakfast 7:30 am - 9:00 am | Lunch 12:00 pm - 1:00 pm | Dinner 6:00 pm - 7:00 pm

Soft drinks, beer, wine, and snacks will be served in the meeting room (**Heather**) by Asilomar personnel from **8 pm to 11 pm on Thursday, Friday, and Saturday nights**.

Reminder of policies stated on the online participation form:

1) Conference Photo Release Form: ACCEC organizers frequently take photos for publications, news releases, and social media. By filling out his participation form and attending the conference, you grant permission to ACCEC to use photographs and/or video of your likeness in such media.

2) Conference Code of Conduct: At ACCEC, we are committed to providing a harassment-free conference experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion (or lack thereof), political affiliation, or technology choices. We do not tolerate harassment of conference participants in any form. Sexual language and imagery is not appropriate for any conference venue, including talks, social gatherings, and social/online media. Conference participants violating these rules may be sanctioned or expelled from the conference without a refund at the discretion of the conference organizers.

2023 ACCEC Organizing Committee

Juan Ausió	University of Victoria
Jim Davie	University of Manitoba
Philippe Georgel	Marshall University
Mike Goldman	San Francisco State University
LeAnn Howe	University of British Columbia
Jennifer Mitchell	University of Toronto
Sally Pasion	San Francisco State University

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San Francisco State University, Dept. of Biology	biology.sfsu.edu

OPENING DINNER

6:00 pm – 7:00 pm Seascape Room (access via Crocker Dining Hall)

EVENING SESSION

7:00 pm – 7:10 pm Welcome & Conference Reminders

SESSION 1: Chromatin and Regulation of Transcription

Chairperson: Sally Pasion, San Francisco State University

- 7:10 pm – 7:50 pm** **KEYNOTE**
Epigenome actuation: engineered protein regulators that translate the epigenetic code
Karmella Haynes, *Emory University*
- 7:50 pm – 8:05 pm** **Enhancement of Hia5 activity to improve DiMeLo-seq**
Nathan Gamarra, *Stanford University*
- 8:05 pm – 8:20 pm** **Swi-Snf represses sulfur metabolism gene transcription by promoting cysteine biosynthesis**
Michael Church, *Stowers Institute for Medical Research*
- 8:20 pm – 8:35 pm** **Euchromatin hopping; active enhancers can drive chromatin modifications to non-regulatory transcription factor bound chromatin through a loop mechanism**
Shanelle Mullany, *University of Toronto*
- 8:35 pm – 8:50 pm** **Break**
- 8:50 pm – 9:05 pm** **Differential modulation of Polycomb-associated histone marks by cBAF, pBAF, and gBAF Complexes**
Jacob Kirkland, *Oklahoma Medical Research Foundation*
- 9:05 pm – 9:20 pm** **Enhancer-promoter interactome drives neuronal cell differentiation and contextualizes Alzheimer's associated polymorphisms**
Cory C. Padilla, *Dovetail Genomics*
- 9:20 pm – 9:35 pm** **Works like a CURE – the search for Satb2's missing nuclear localization sequence**
Brett Schofield, *Wingate University*
- 9:35 pm – 11:00 pm** **Evening Mixer (refreshments will be served)**

BREAKFAST

7:30 am – 9:00 am Seascape Room (access via Crocker Dining Hall)

MORNING SESSION

SESSION 2: Epigenetics of Cell Differentiation and Disease

Chairperson: Jim Davie, University of Manitoba

- 9:00 am – 9:15 am **Cysteine Rich Protein 2 (CRIP2) is a Cu⁺-responsive negative regulator of myogenesis**
Teresita Padilla-Benavides, *Wesleyan University*
- 9:15 am- 9:30 am **Unravelling the mechanism responsible for degrading the Rett Protein**
Ladan Kalani, *University of Victoria*
- 9:30 am - 10:00 am **Targeting lysine acetyltransferases p300/CBP for neuro disorders: Implications in therapeutics (Invited Talk)**
Tapas Kundu, *Jawaharlal Nehru Centre for Advanced Scientific Research*
- 10:00 am - 10:15 am **Break**
- 10:15 am - 10:30 am **Analyses of the DUX4 transcriptional network in facioscapulohumeral muscular dystrophy**
Sungjun Beck, *University of California, Irvine*
- 10:30 am - 10:45 am **Role of TIP60 in neuronal fate specification during reprogramming and development**
Justyna Janas, *Stanford University*
- 10:45 am - 11:00 am **Transcriptional regulators of preterm labour in the mouse myometrium**
Zoe Gillespie, *University of Toronto*
- 11:00 am - 11:15 am **Break**
- 11:15 am - 11:30 am **Investigating the Role of Baf53b in mouse neuronal gene expression and autism behaviours**
Megan Rowland, *University Of British Columbia*
- 11:30 am - 11:45 am **Wnt- β -catenin signaling drives tumor chromatin bivalency resolution in cancer progression**
Yatian Yang, *University of California, Davis*

11:45 am - 12:00 pm **TEM-seq: an ultrasensitive multiomic platform for epitope-targeted DNA methylation mapping**
Emily Madden, *EpiCypher, Inc.*

LUNCH

12:00 pm – 1:00 pm Seascape Room (access via Crocker Dining Hall)

FREE TIME ON YOUR OWN

1:00 pm - 6:00 pm Discover Carmel, Point Lobos, and its surroundings.

DINNER

6:00 pm – 7:00 pm Seascape Room (access via Crocker Dining Hall)

EVENING SESSION

SESSION 3a: Epigenetics of Aging and Metabolism
Chairperson: Jennifer Mitchell, University of Toronto

7:00 pm – 7:40 pm **KEYNOTE**
SetD2 and SWI/SNF connect chromatin to RNA processing
Jerry Workman, *Stowers Institute for Medical Research*

7:40 pm – 7:55 pm **Decoding muscle stem cells in an accelerated aging model of Hutchinson Gilford Progeria Syndrome**
Atreyi Ghatak, *University of North Dakota*

7:55 pm – 8:10 pm **A quantitative histone proteoform atlas of the mouse brain & proteoform mechanisms of aging and gene (dys)regulation**
Nicolas Young, *Baylor College of Medicine*

8:10 pm – 8:25 pm **Development and screening of a yeast model of Hutchinson-Gilford Progeria Syndrome**
Troy Harkness, *University of Alberta*

8:25 pm – 8:40 pm **Break**

SESSION 3b: Chromatin and Regulation of Transcription

- 8:40 pm – 8:55 pm **The yeast genome is globally accessible in living cells**
Hemant Prajapati, *National Institutes of Health (National Institute of Child Health and Human Development)*
- 8:55 pm – 9:10 pm **Linking beer flavors with yeast gene expression and genetic variation**
Christopher Eskiw, *University of Saskatchewan*
- 9:10 pm – 9:25 pm **Organization of centromeric chromatin and pericentric heterochromatin on DNA satellite arrays in house mouse**
Jitendra Thakur, *Emory University*
- 9:25 pm – 11:00 pm **Evening Mixer (refreshments will be served)**

Saturday, December 9th, 2023

BREAKFAST

- 7:30 am – 9:00 am Seascape Room (access via Crocker Dining Hall)

MORNING SESSION

SESSION 4: Genome Integrity and Cancer

Chairperson: Philippe Georgel, Marshall University

- 9:00 am – 9:15 am **Molecular insights on the extracellular matrix remodeling by UBR7 in concert with PRC2 complex in triple negative breast cancer**
Chandrima Das, *Saha Institute of Nuclear Physics*
- 9:15 am- 9:30 am **Dissecting the role of Senataxin in innate immune activation**
Judith Fishburn, *University of California, Davis*
- 9:30 am - 9:45 am **Compounding V(D)J recombination reveals novel end joining functional determinants**
Richard Frock, *Stanford University*
- 9:45 am - 10:00 am Break
- 10:00 am - 10:15 am **Analyses of the DUX4 transcriptional network in facioscapulohumeral muscular dystrophy**
Sakuntha Gunarathna, *University of North Dakota*
- 10:15 am - 10:30 am **Role of TIP60 in neuronal fate specification during reprogramming and development**
Justin Leung, *University of Texas Health Science Center at San Antonio*

- 10:30 am - 10:45 am **Biochemical and genomic approaches for high throughput drug discovery in chromatin remodeling research**
Kelsey Noll, *EpiCypher, Inc.*
- 10:45 am - 11:00 am Break
- 11:00 am - 11:15 am **G-quadruplex structures stabilization causes genome instability in mouse B cells**
Irina Vaystretreyger, *University of California, Davis*
- 11:15 am - 11:30 am **Investigating how a “selfish” B chromosome to avoid genome elimination in the jewel wasp, *Nasonia vitripennis***
Patrick Ferree, *Claremont McKenna College*
- 11:30 am - 11:45 am **Examining the dynamics of a “selfish” B chromosome by manipulating its genetic background**
Jayla Cummings & Ellie Novogradac, *Keck Science, Pomona College and Claremont McKenna College*

LUNCH

12:00 pm – 1:00 pm Seascape Room (access via Crocker Dining Hall)

FREE TIME ON YOUR OWN

1:00 pm - 6:00 pm Discover Carmel, Point Lobos, and its surroundings.

DINNER

6:00 pm - 7:00 pm Seascape Room (access via Crocker Dining Hall)

Saturday, December 9th, 2023

EVENING SESSION

SESSION 5: Chromosome Dysregulation/Chromosomes and Nuclear Organization

Chairperson: Juan Ausió, University of Victoria

7:00 pm – 7:40 pm **KEYNOTE**
Identifying epigenetic drivers of childhood brain cancer
Carol Chen, *University of British Columbia*

7:40 pm – 7:55 pm	Breaks in repetitive DNA and aneuploidy are prevalent in the <i>Drosophila</i> model of Bloom Syndrome Jullien Flynn, <i>Whitehead Institute for Biomedical Research, Howard Hughes Medical Institute</i>
7:55 pm – 8:10 pm	DNA binding strength of GATA3 influences its aggregation at condensed chromatin locations during cellular reprogramming Mika Saotome, <i>University of North Dakota</i>
8:10 pm – 8:25 pm	MeCP2 protein regulation through direct and indirect RNA binding to an uncharacterized RNA binding domain Katrina Good, <i>University of Victoria</i>
8:25 pm – 8:40 pm	Break
8:40 pm – 8:55 pm	Nuclear MTHFD2 secures mitosis progression by preserving centromere integrity Natalia Pardo-Lorente, <i>Centre for Genomic Regulation</i>
8:55 pm – 9:10 pm	Regulation of chromatin and transcription during early mammalian development Miguel Ramalho-Santos, <i>Lunenfeld-Tanenbaum Research Institute and University of Toronto</i>
9:10 pm – 9:25 pm	Preferential binding of MeCP2 to histone tails and chromatin folding Philippe Georgel, <i>Marshall University</i>
9:25 pm – 11:00 pm	Evening Mixer (refreshments will be served)

Sunday, December 10th, 2023

BREAKFAST

7:30 am - 9:00 am Seascape Room (access via Crocker Dining Hall)

LUNCH

12:00 pm – 1:00 pm Seascape Room (access via Crocker Dining Hall)

DEPARTURE (check-out time is 11 am)