



## Friday, May 9, 2025 4000 Scale VIRTUAL DAY

## **BROUGHT TO YOU BY:**

Element Biosciences

## The Center for Epigenomics at UC San Diego is back with its second in a series of virtual symposia, this time on the 4D Nucleome.

Join us via zoom May 9 for a deeper look not only at how the genome is organized, but how it changes over time. Multiple talks will showcase work from the 4D Nucleome consortium, with an emphasis on 3D genome organization at single-cell resolution.

All Time in PST

8:00 - 8:15 am C4E Introduction: Bing Ren and Christopher Glass

8:15 - 8:45 am Christina Leslie – Sloan Kettering HiC2Self: Self-Supervised Denoising for Bulk and Single-Cell Hi-C Contact Maps

8:45 - 9:15 am Jingtian Zhou – Arc Institute Human Body Single-Cell Atlas of 3D Genome Organization and DNA Methylation

9:15 - 9:45 am Keerthivasan Raanin Chandradoss – University Of Pennsylvania Single-neuron persistence of chromatin loops in fear memory engrams

9:45 - 10:00 am Jing Wang – UC San Francisco Cell Type- and Temporal-specific 3D Epigenome and RNA Splicing During Human Cortical Development

10:00 - 10:30 am Break

**10:30 - 11:00 am Yu Luan** – UT Health San Antonio Single-cell 3D Genome Structure Analysis Reveals Clonal Evolution and Heterogeneity in Acute Myeloid Leukemia

11:00 - 11:15 am Weston Elison – UC San Diego Single Cell Multi-omics and 3D Genome Architecture Reveals Novel Pathways and Targets of Metabolic

Dysfunction-associated Steatohepatitis

**11:15 - 11:30 am Yang Zhang** – Carnegie Mellon University Mapping the Multiscale Single-cell Spatial Epigenome Dynamics in Alzheimer's Disease

**11:30 – 11:45 am Yang Xie** – UC San Diego Single Cell Multiomics and 3D Genome Architecture Reveals Novel Pathways of Human Heart Failure

11:45 - 12:00 am Zoe Grant – Gladstone Institutes Dose-dependent sensitivity of human 3D chromatin to a heart disease-linked transcription factor

12:00 - 12:30 pm Break | Afternoon session

12:30 - 12:45 pm Matthew Kellinger – Element Biosciences AVITI24: Unlocking Biology with Multi-omic Profiling

12:45 - 1:00 pm Nathan Zemke – UC San Diego Epigenetic and 3D Genome Reprogramming During the Aging of Human Hippocampus

1:00 - 1:15 pm Abraham Waldman - University Of Pennsylvania Persistent Chromatin Loops in Single Cells after Stimulation of Human Neurons

1:15 - 1:30 pm Yubao Cheng – Yale University A genome-wide Single-cell 3D Genome Atlas of B Cell Maturation and Malignancy



1:30 - 1:45 pm Bo Liu – Illumina The Future of Multiomics: Combining Modalities for a Complete Picture of Biology

1:45 - 2:00 pm **Guan Zhu** – UC San Diego Spatiotemporal Dynamics of Human Brain Development Revealed by Multi-omic Analyses

2:00 - 2:15 pm Nathan Zemke – UC San Diego Closing Remarks



## #4DNsc4All FOR MORE INFO AND TO REGISTER | SCAN HERE