

2024 SoCal Genome Stability Symposium

Meeting Program

The Scripps Research Institute

- 9:00 - 9:10 am** **Welcome Remarks (Xiaohua Wu, Scripps Research)**
- 9:10 - 10:25 am** **Talk Session 1: DNA Repair and Genome Stability (Session chair: Rémi Buisson, UCI)**
- 9:10 - 9:25 am **Tony Fernandez, Ph.D.** (Binghui Shen's lab, City of Hope)
DNA2 and MSH2 Activities Collectively Remove Chemically Stabilized G4 for Efficient Telomere Replication
- 9:25 - 9:40 am **Pedro Ortega, Ph.D.** (Rémi Buisson's lab, UCI)
Mechanism Of Fork Breakage During Replication Catastrophe
- 9:40 - 9:55 am **Christine Joyce** (Chris Richardson's lab, UCSB)
The FANCD2-FANCI heterodimer regulates DNA repair activity and cell cycle progression in response to double strand breaks
- 9:55 - 10:10 am **Ting Zhao** (Yinsheng Wang's lab, UCR)
Identification and Functional Characterizations of N2-Alkyl-Dg-Binding Proteins
- 10:10 - 10:25 am **Nadejda Butova** (Irene Chiolo's lab, USC)
Ulp1: a clock for heterochromatin repair
- 10:30 – 11:00 am** **Poster “Lightning Talks”**
- 11:10 – 12:45 pm** **Poster Session**
- 12:45 – 1:30 pm** **Lunch**
- 1:30 – 2:45 pm** **Talk Session 2: Genomics and gene editing (Session Chair: Shannon Miller, Scripps Research)**
- 1:30 – 1:45 pm **Peter Chovanec, Ph.D.** (Yi Yin's lab, UCLA)
Towards a single-cell atlas of spontaneous genome instability events in vivo
- 1:45 – 2:00 pm **Xiaoyu (Lydia) Chen** (Audrone Lapinaite's lab, UCI)
From Structure to Function: How Deaminase Domain Dimerization and Cas9 Interactions Drive Base Editing Efficiency in ABE8e
- 2:00 – 2:15 pm **Mallory Evanoff, Ph.D.** (Alexis Komor's lab, UCSD)
Directed Evolution Reversion Analysis Produces Minimally Mutated Adenine Base Editor Variants with Improved Efficiency and Precision.
- 2:15 – 2:30 pm **Seanmory Sothy** (Linlin Zhao's lab, UCR)
Mass Spectrometry-Based Quantification of Base Excision Repair Intermediates
- 2:30 – 2:45 pm **Shuvro P. Nandi, Ph.D.** (Ludmil B. Alexandrov's lab, UCSD)
UDSeq: A Universal Duplex Sequencing for Precise Genome-Wide Identification Somatic Mutation.
- 2:45 – 3:15 pm** **Coffee Break**
- 3:15 – 4:30 pm** **Talk Session 3: Chromosomal rearrangement and Cancer Treatment (Session Chair: Irene Chiolo, USC)**
- 3:15 – 3:30 pm **Sameer Shah, Ph.D.** (Xiaohua Wu's lab, Scripps Research)
53BP1 deficiency Leads to Hyperrecombination Using Break-Induced Replication (BIR)
- 3:30 – 3:45 pm **Kaela Makins** (Jeremy Stark's lab, City of Hope)
Defining The Interplay Between DNA-Pkcs and RIF1-53BP1 During Chromosomal Break Repair
- 3:45 – 4:00 pm **Megha Raghunathan** (Svasti Haricharan's lab, SDSU)
Mismatch Repair Gene-Specific Effects on Breast Tumor Formation, Progression and Genomic Instability
- 4:00 – 4:15 pm **Shuangshuang Xie, Ph.D.** (Dan Semlow's lab, Caltech)
The Microbiome-Derived Colibactin Genotoxin Activates cGAS-STING-Dependent Pro-Inflammatory Signaling
- 4:15 – 4:30 pm **Ya Allen Cui, Ph.D.** (Wei Li's lab, UCI)
Tandem Repeat Variation in Human Health and Diseases
- 4:30 – 4:45 pm** **Poster Awards Announcement/Closing Remarks**
- 5:00 – 6:30 pm** **Dinner (Meet Professors: Career Development)**
- 6:30 pm** **End of the Symposium**