Chromosome biology in the 21st century focuses on genome function in the context of the intact eukaryotic cell nucleus. Its goals are a comprehensive understanding of the mechanisms involved in chromosome function, and the correction of aberrations in these processes that lead to disease.

The Center of Excellence in Chromosome Biology (CECB), open to all NCI intramural investigators, brings together experts from fields such as dynamics of chromatin structure and function; epigenetics and gene expression; chromosome segregation and cell division; DNA replication, repair, and recombination; chromosome organization and gene localization; and nuclear protein interaction dynamics. The CECB integrates the intellectual and physical resources within NCI's Intramural Research Program to support outstanding research in chromosome biology. Download our brochure

Objectives

- Promote interaction and collaboration among researchers within the NCI, NIH, and beyond
- Promote advances and opportunities for research in chromosome biology
- Leverage cutting-edge tools, approaches, and resources to advance chromosome biology as it applies to cancer research
- Train young investigators to address complex scientific questions through collaboration and multi-disciplinary approaches
Awards

Shiv Grewal elected to Indian National Science Academy as Foreign Fellow
Michael Lichten was elected to the American Academy of Arts and Sciences
Sheue-yann Cheng received the John B. Stanbury Thyroid Pathophysiology Medal Award from the American Thyroid Association
Tom Misteli to receive the 2016 Herman Beerman Award by the Society for Investigative Dermatology

CECB in the Press

Dynamic Regulation of FoxA1 by Steroid Receptors In the Journals
Histone Variant H2A.X Regulates Colon Cancer EMT In the Journals
Cellular factors that shape the 3D landscape of the genome identified NCI press release
Gene Positioning as a Diagnostic Marker in Prostate Cancer In the Journals
Noncoding RNA Shows Context-Dependent Function In the Journals
Regulatory RNA Key Player in p53-Mediated Apoptosis in Embryonic Stem Cells In the Journals
Paradigm Shift in Thyroid Hormone Mechanism of Action In the Journals
Splicing Modulation as a Potential Treatment for Vemurafenib-Resistant Melanoma In the Journals
Stop Stalling: Mus81 Required for Efficient Replication In the Journals

Upcoming Symposia/Seminars of Interest

Symposium: Chromatin & Cell Fate Decisions in Development, Aging & Cancer (Bldg 45, Nov 14-15)

Workshop on Chromosome Biology (bldg 35 room 640, 9:00-12:30)
• March 6, 2019 Keynote Speaker Lestyn Whitehouse from Memorial Sloan Kettering Cancer Center (workshop announcement)