Yale SCHOOL OF MEDICINE
GENETICS DEPARTMENT SEMINAR SERIES

Leaving a mark: How histone methylation shapes meiotic recombination

Meiotic recombination not only assures the proper alignment and segregation of homologous chromosomes during the production of gametes, but also plays an important role in generating genetic diversity in sexually reproducing organisms. I will discuss the mechanisms that regulate the selection of sites for meiotic DNA double strand breaks (DSBs), including our identification of a pair of dual histone methylation reader proteins that co-evolved with the histone methyltransferase PRDM9 to specify the location of DSBs and facilitate their repair, and how this histone writer/reader system impacts recombination over evolutionary time scales.

Dr. Todd Macfarlan, PhD

Earl Stadtman Investigator
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Host: Dr. Bluma Lesch, MD, PhD
Assistant Professor
YSM Department of Genetics

Tuesday, December 14, 2021

11:30am - 12:30pm

Zoom Link

pw: 473124

The Genetics Calendar of Events can be viewed on-line at
https://medicine.yale.edu/genetics/events/seminars.aspx