CAMPOS Research Colloquium

"Causes and consequences of genome instability in B lymphocytes"

Jacqueline Barlow
Assistant Professor
Microbiology and Molecular Genetics

Wednesday
JANUARY
26

3:10-4:30 pm
Zoom

B cells are highly prone to DNA damage arising from two distinct sources: base modifications made by the enzyme AID (Activation-induced cytidine deaminase) during immunoglobulin gene rearrangement, and replication stress due to their high rate of proliferation in response to antigen stimulus. Thus, primary lymphocytes provide an ideal system to study causes and consequences of planned and unplanned chromosome rearrangements and their role in driving tumorigenesis.

In this talk, I will present multiple projects investigating the types of events that arise during normal replication to create damage, as well as the molecular mechanisms driving how “planned” antibody-associated and “unplanned” replication-associated chromosome rearrangements are formed. I will discuss the potential impact of chromosome rearrangements on adaptive immunity and tumorigenesis.

UCDAVIS
Diversity, Equity and Inclusion

CAMPOS

diversity.ucdavis.edu/research-colloquium
rdeniz@ucdavis.edu