Cancer evolution through the lens of the non-coding genome

After decades of research on understanding cancer growth and treatment resistance, numerous unanswered questions remain that constitute some of the biggest challenges in cancer research. I will discuss our approach to addressing these questions through the lens of the non-coding regulatory regions. I will discuss the novel computational methods we have developed to analyze whole-genome sequencing data and identify drivers of tumor growth. I will also discuss how generating a map of the regulatory regions in castration-resistant metastatic prostate cancer revealed dependencies that can be therapeutically targeted. Thus, the evolution of non-coding regions can reveal basic and translational insights about initial cancer growth and emergence of lineage plasticity in treatment resistant tumors.

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Associate Professor
Computational Genomics
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Host: Dr. Steven Reilly, PhD
Assistant Professor
YSM Department of Genetics

Tuesday, September 27th, 2022
11:30am - 12:30pm
TAC N107- 300 Cedar Street

Zoom link
PW: 080122

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