



# Yale SCHOOL OF MEDICINE

## GENETICS DEPARTMENT SEMINAR SERIES

### 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.



**Dr. Ekta Khurana, PhD**

Associate Professor  
Weill Cornell

**Host: Dr. Steven Reilly, PhD**

Assistant Professor  
YSM Department of Genetics

**Tuesday, September 27<sup>th</sup>, 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/>