GBSBC

Genetics, Bioinformatics, & Systems Biology Colloquium

presents

Mikko Taipale, PhD

Associate Professor

University of Toronto

THURSDAY MAY 4

12PM
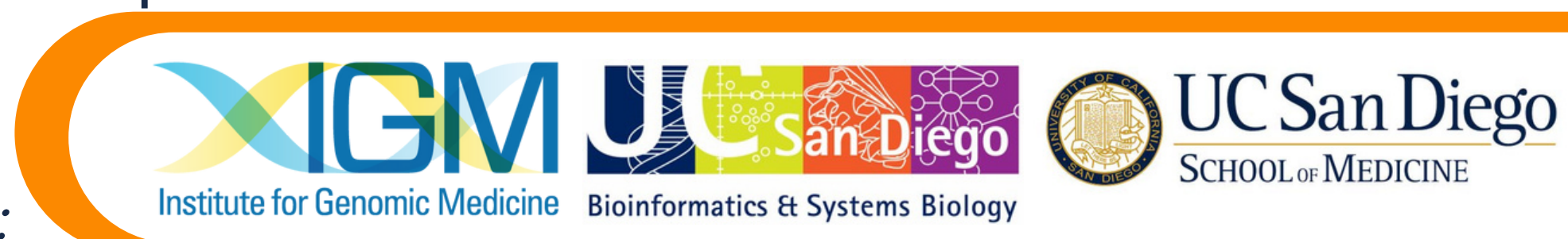
LEICHTAG AUDITORIUM

ZOOM

JOIN

JOIN US ON ZOOM!

Functional Proteomics by Induced Proximity

Targeted protein degradation and stabilization are promising therapeutic modalities due to their potency, versatility, and potential to expand the druggable target space. However, only few E3 ligases and DUBs have been harnessed for this purpose, significantly limiting the potential of the approach. Moreover, there may be other protein classes that could be exploited for this purpose. We established a synthetic proteome-scale platform to functionally identify human proteins that can promote the degradation or stabilization of a target in a proximity-dependent manner. Our results reveal that the human proteome contains a large cache of effectors of protein stability, many of which are more potent than proteins currently exploited for targeted protein degradation and stabilization. More generally, our study highlights proteome-scale induced proximity screens as a powerful platform for functional proteomics.

PRESENTED BY:

IGM Institute for Genomic Medicine

UC San Diego Bioinformatics & Systems Biology

UC San Diego SCHOOL of MEDICINE