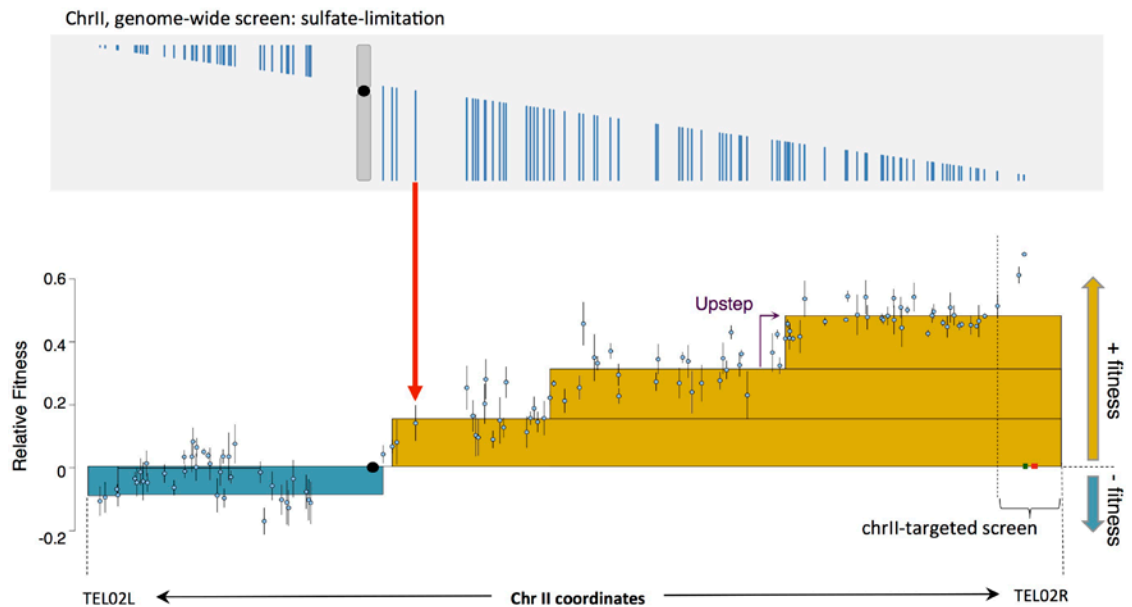




# Aneuploidy and Adaptation in Yeast



Having the wrong number of genes or chromosomes can cause profound effects for organisms. Many of these are problematic, which is why aneuploidy is associated with miscarriage and a variety of disorders. However, aneuploidy can also be an opportunity, driving adaptation in cancer cells and microbial pathogens. Furthermore, duplication of genes and even whole genomes serves as an important source of innovation in evolution over longer timescales. My lab uses experimental evolution of yeast as a platform for disentangling the costs and benefits of DNA copy number changes. In this talk I will discuss our new method for mapping driver genes contained within large amplicons, an approach which has given us new insights into the genetic basis of the fitness consequences of aneuploidy.

## Dr. Maitreya Dunham

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University of Washington

Host: Dr. Amy Caudy

**Date:** Monday November 2<sup>nd</sup>, 2015

**Time:** 4PM

**Place:** FitzGerald Building  
150 College Street  
Room 103