

THE JOHN LAWRENCE SEMINARS



"GENOMES AS INDICATORS OF ENVIRONMENTAL STRESS"

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In this talk, we draw from recent environmental genomic studies to explore how environmental stress contributes to genome variability, influences the fate of genetic variation in populations, and over micro-evolutionary time scales determines the fate of phenotypes. These studies contribute to and make use of maturing genomic tool kits for the killifish, *Fundulus heteroclitus*, and the water flea, *Daphnia pulex*. Using these animal models, we explore how functional variation in gene expression and gene regulatory networks contributes to phenotypic plasticity in response to environmental stress, and how exposure-induced alterations in the magnitude and distribution of gene copy number (CNV) in natural populations contributes to adaptations to extreme environments. We will discuss the regulatory importance of understanding genome variation and the evolutionary forces that shape it.

TUES., MAY 17TH
4:00 P.M.

(new date)

BERKELEY LAB
AQUATIC PARK
717 POTTER STREET
ROOM 141

HOST:
SUSAN CELNIKER

Schedule of Seminars: <http://johnlawrenceseminars.lbl.gov/>
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