

8 August 2014

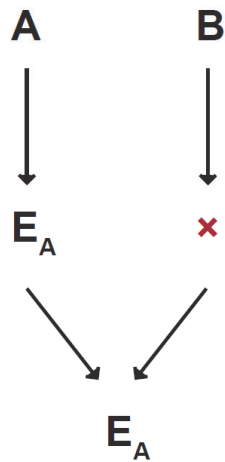
Fluorescence-to-OD Ratio Assay (FLORA) for the quantitation of genetic and chemical modification of proteotoxicity in yeast

Sepehr Ehsani

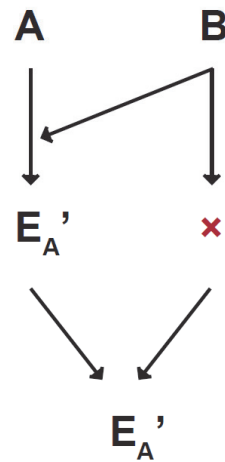
Combined growth effects of two variables



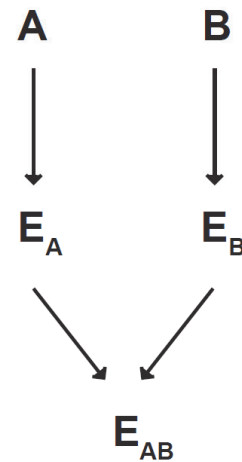
No Effect



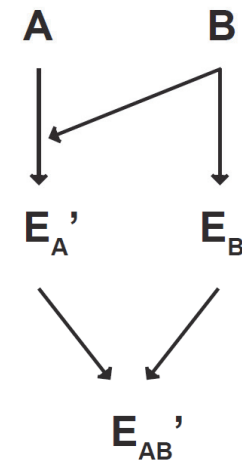
Specific



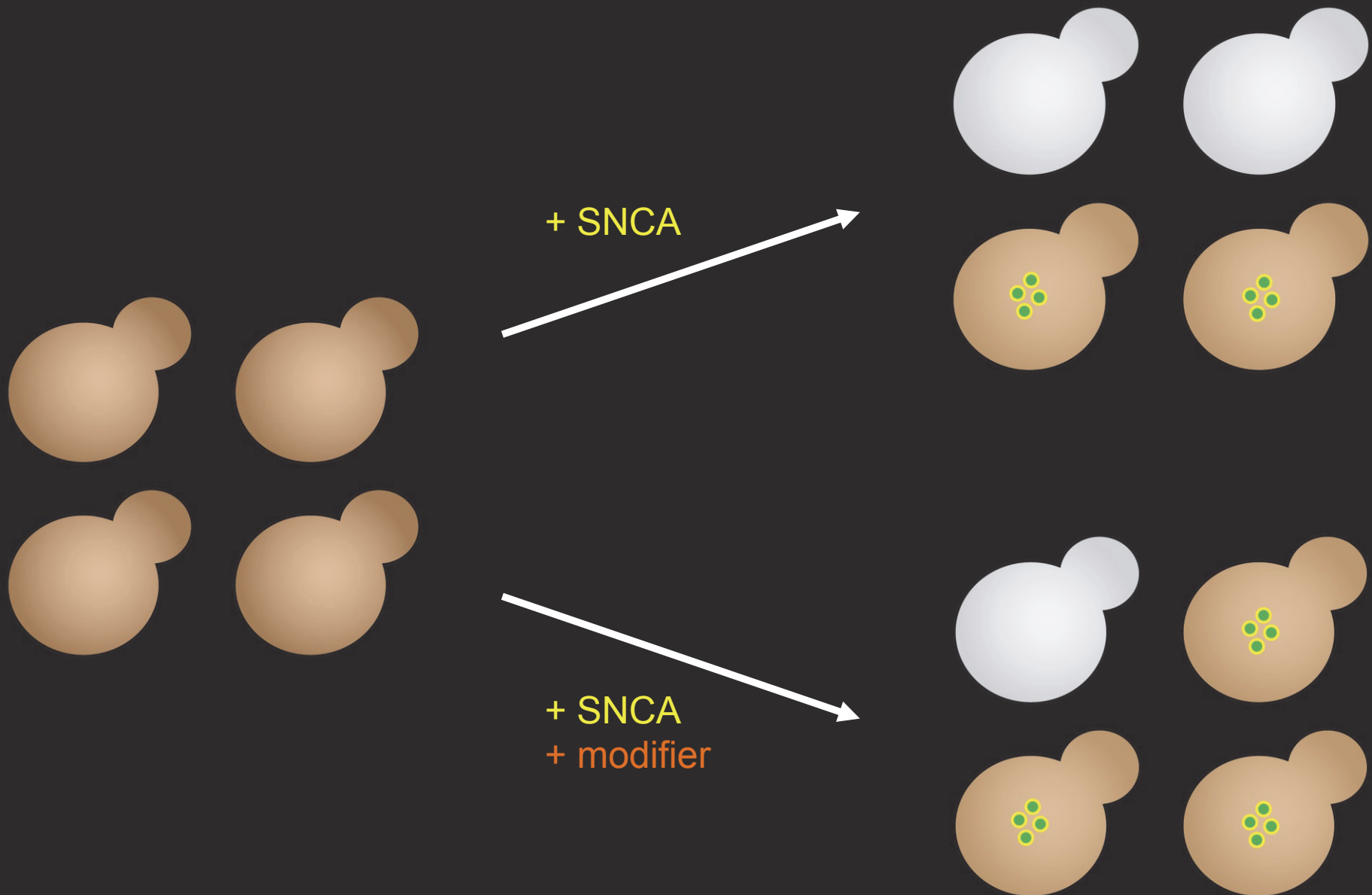
Additive



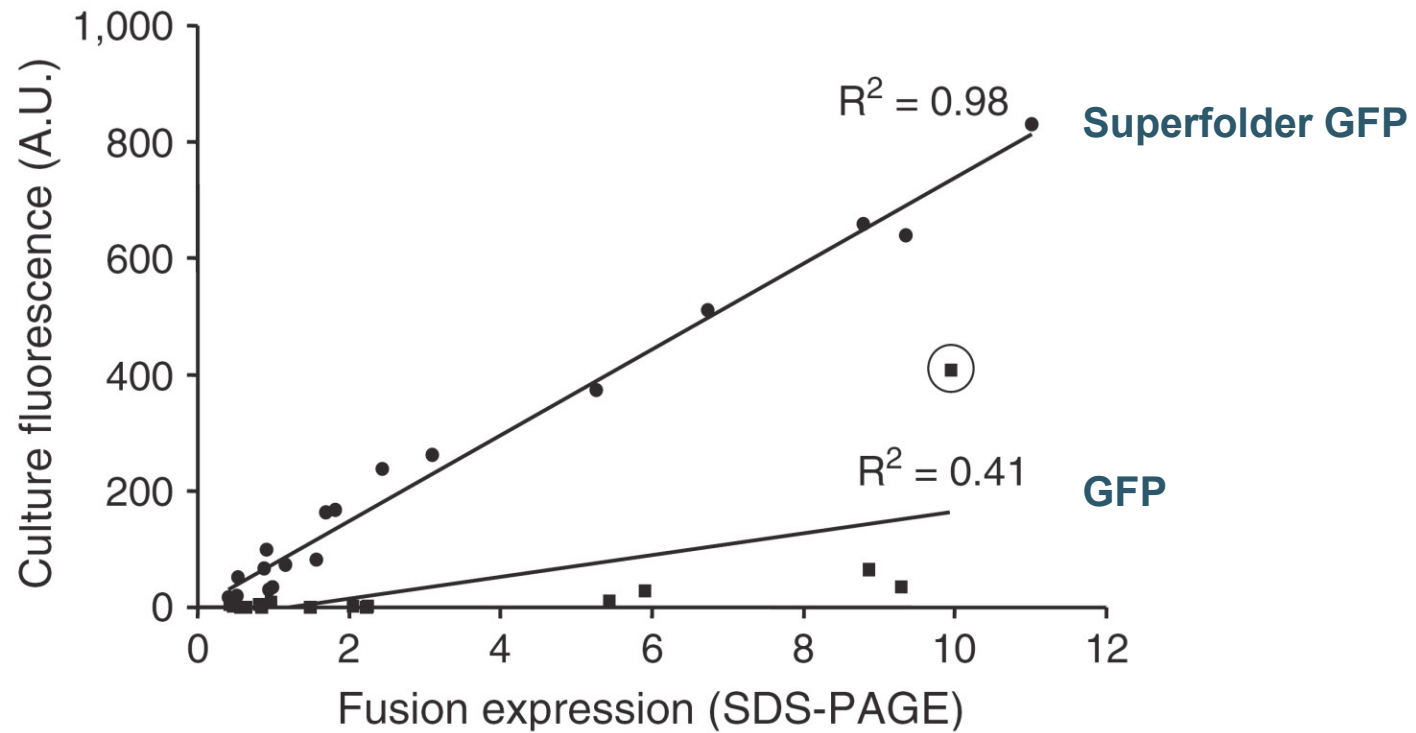
Specific + Additive



Fluorescence-to-OD ratio assay (FLORA)

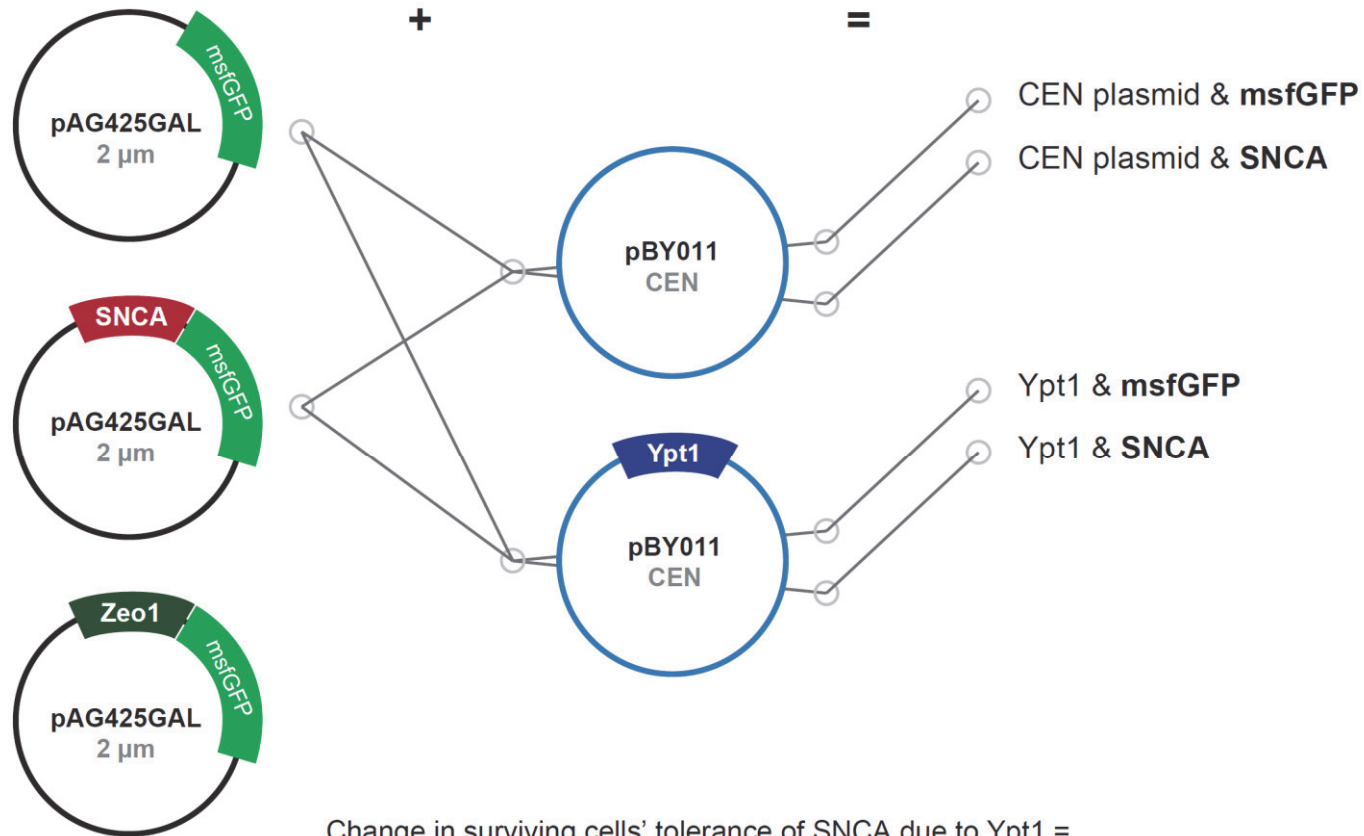


Fluorescence quenching



Pédelaçq et al., *Nat Biotechnol* 2006

FLORA: genetic modifiers



Change in surviving cells' tolerance of SNCA due to Ypt1 =

$$(Ypt1 \ \& \ \mathbf{SNCA} - Ypt1 \ \& \ \mathbf{msfGFP}) - (\mathbf{CEN \ plasmid} \ \& \ \mathbf{SNCA} - \mathbf{CEN \ plasmid} \ \& \ \mathbf{msfGFP})$$