



# Julia Tanquary

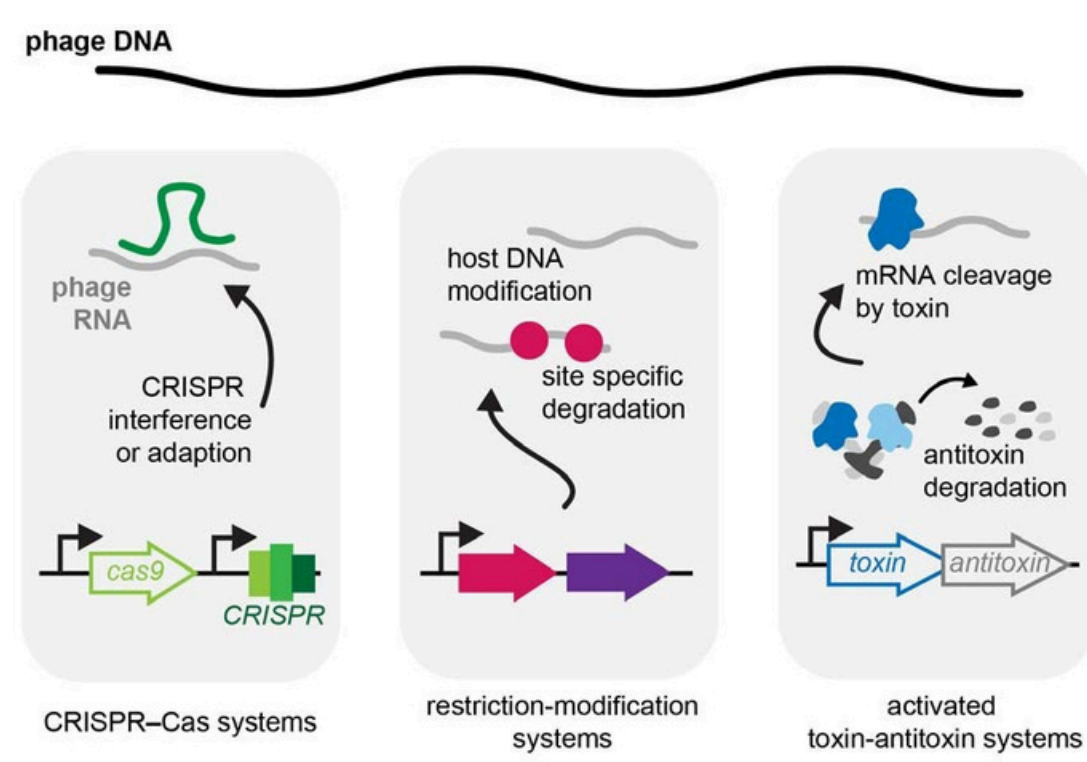
Ph.D. Candidate, Biochemistry, Cell and Developmental Biology Second Year ARCS Scholar McGonigle/Goodhew Award



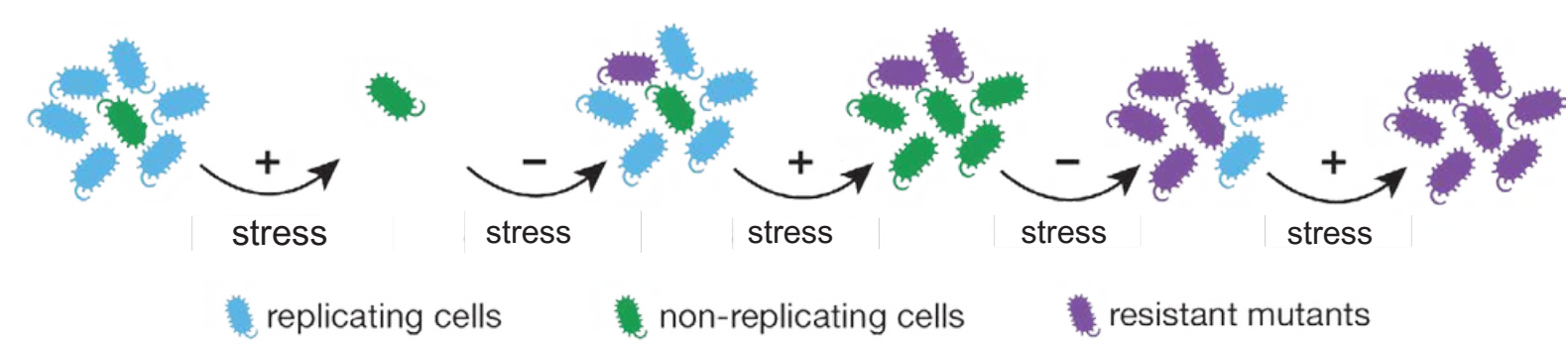
EMORY UNIVERSITY

## Endogenous activation of a bacterial toxin

### Bacteria exhibit diverse responses to foreign pathogens

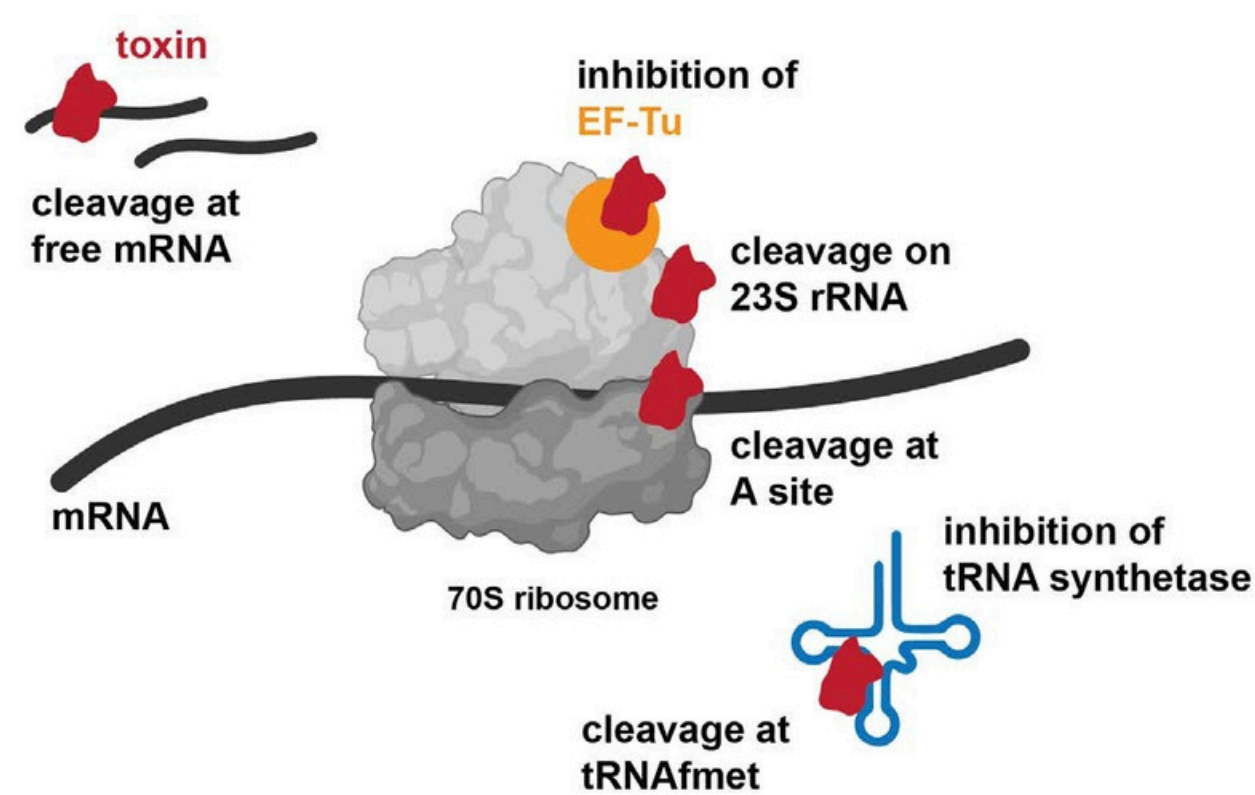


### How do bacterial toxins confer survival in the presence of stressors?

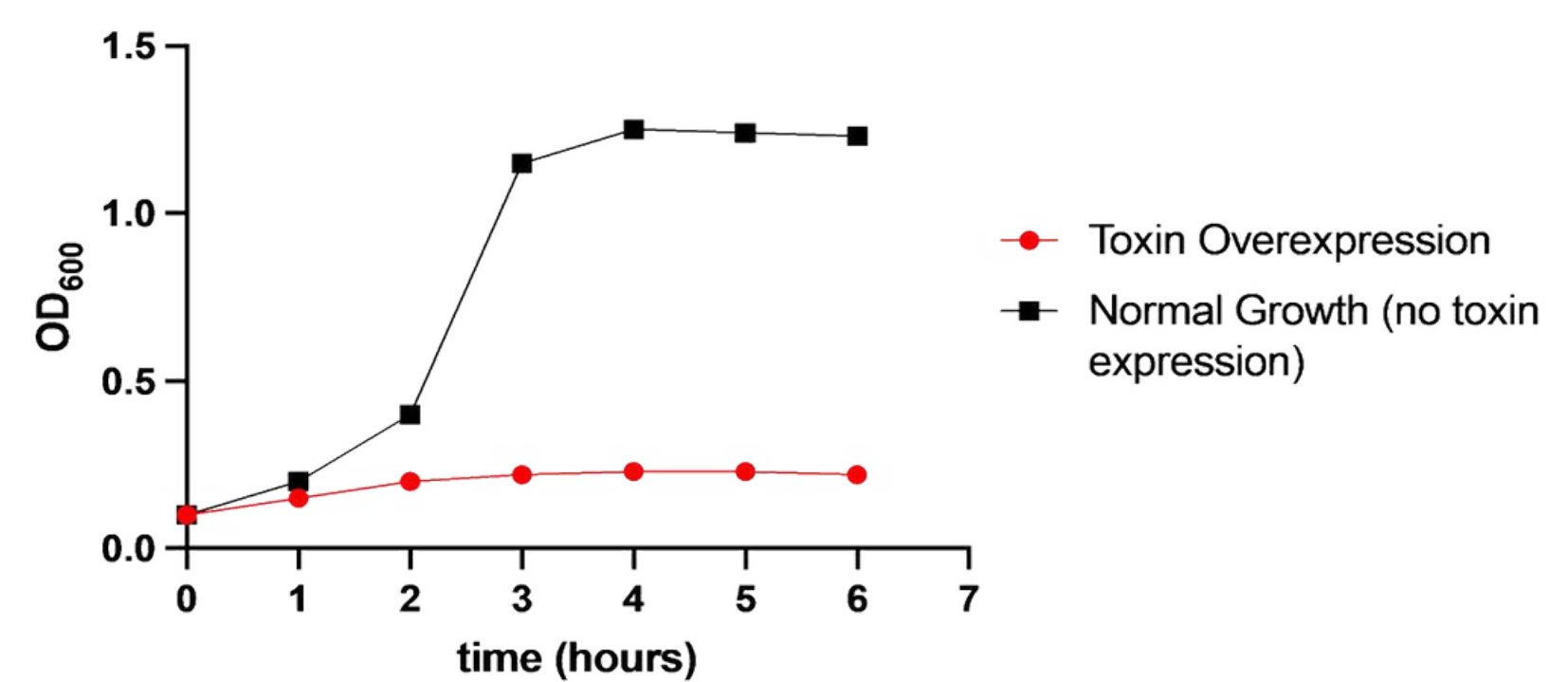


**Bacterial toxin-antitoxins halt growth and cells become non-replicating**

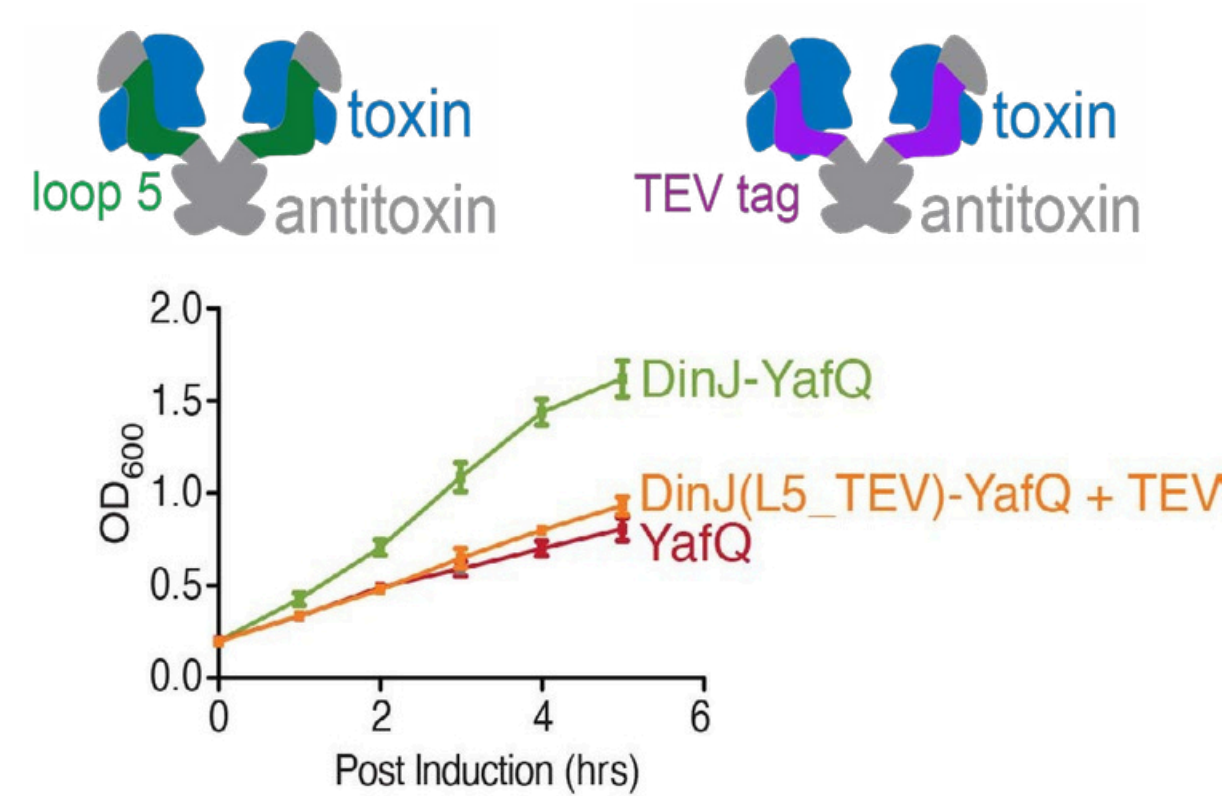
### Toxins target important cellular RNAs to halt growth



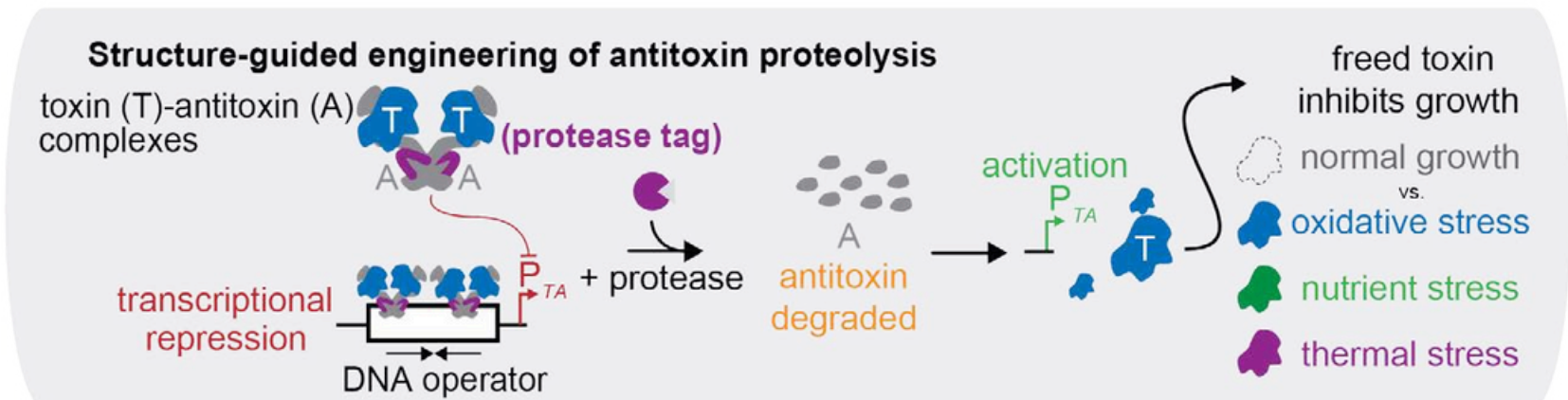
### The function of chromosomally-encoded toxins is unknown as toxin overexpression is bactericidal



### Loop 5 of DinJ is critical for suppressing YafQ toxicity



### Engineering an inducibly activated toxin to study the endogenous role of bacterial toxins



In collaboration with Marcin Grabowicz's lab, Department of Microbiology & Immunology

References: Ruangprasert et al., Mol Micro 2017