

**Presenters:**

Bianca Maled and Tanner Reeb

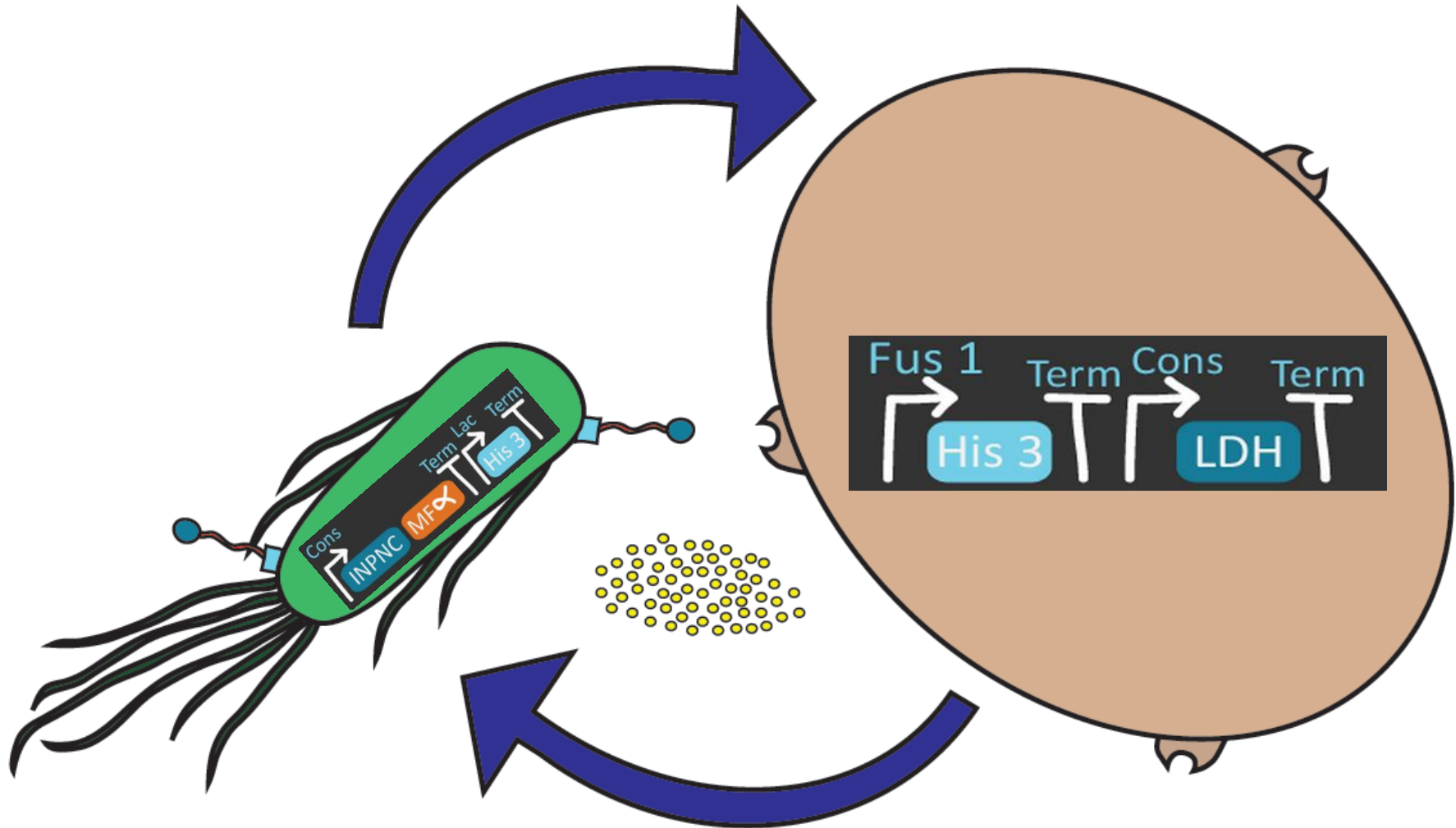
**Other Members:**Dax Earl, Adam Nighswander, Ted Samore,  
Mary Schultz, and Ayla Walter**Advisors:**

Dr. David Goulet and Dr. Richard Anthony

cupids

cupids

MFA activates mating pheromone response turning on expression of yeast His3 gene



Lactate secreted by the yeast turns on expression of *E. coli* His3 gene

# Future Research

Transform Yeast and *E. coli*

Grow together under  
selective pressure

Characteristics of Interest

Aggregate Size

Synchronization

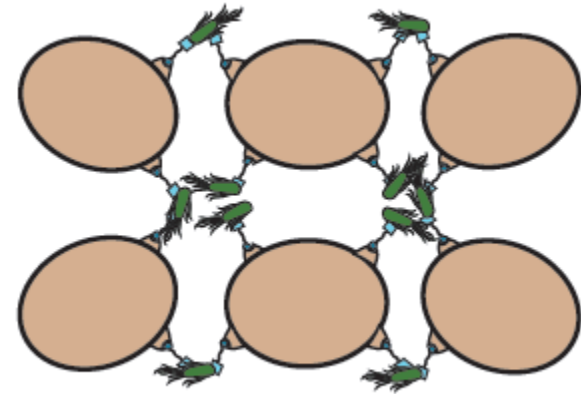
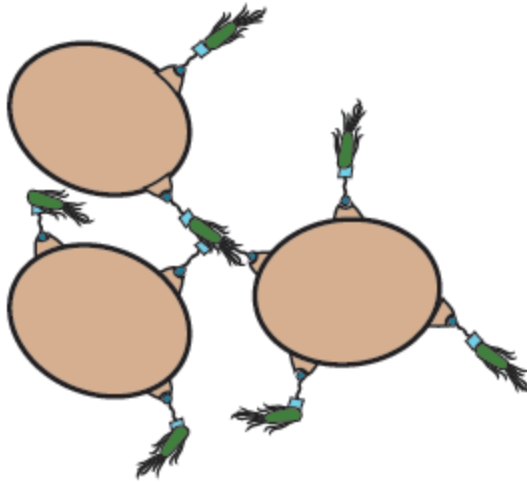
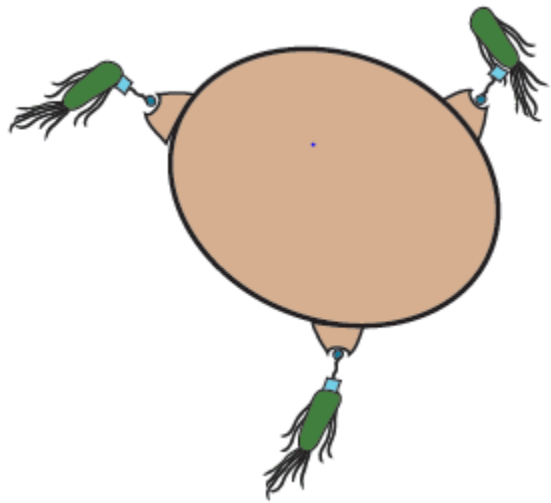
Binding Affinity

Potential Outcomes

Unstable Population

Exosymbiont

Dynamic Stability



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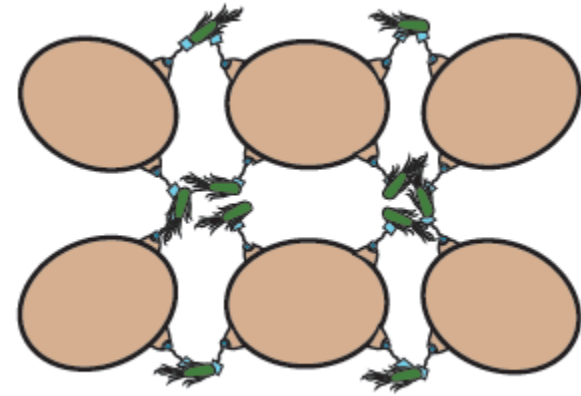
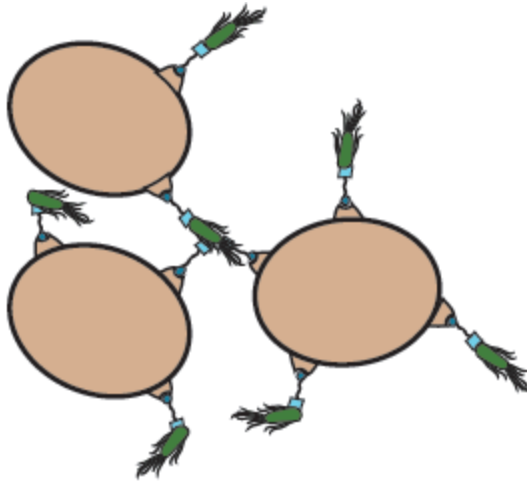
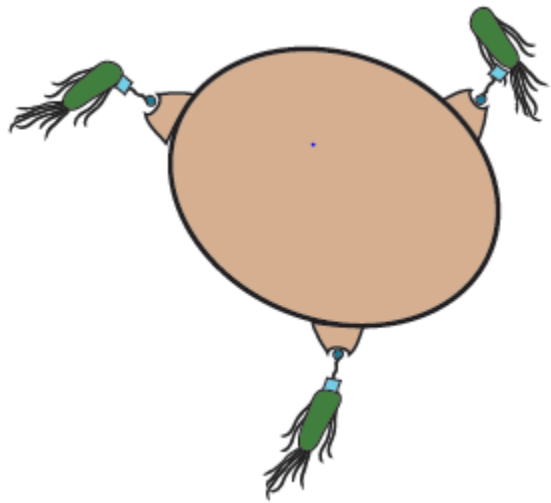
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# Special Thanks to:



Shannon Tieken (Biology Lab Technician)

Lou Johnson (Chemistry Lab Technician)

Tom Rogge (Facilities Manager)

Suzie Erwin (Chemistry Stock Room Technician)

Peter Coppinger (Associate Instructor of Applied Biology)

Interdisciplinary Research Collaborative (IRC) Program

Yale University (*E. coli* strain)