

Lab Goals

Dimensions of Biological Diversity (Dark Matter)
&
Roseobacter SIO 67 & Roseophage Interaction

Cullen Pivaroff

Last weeks goals and comments:

April 2 - April 6 2012

Goal	Comments
Dimensions Chemostats: Get them to work: I WILL GET THEM TO WORK DAMN IT ☺!	Multiple experiments started to test for source of contamination
Keep 4th floor incubation room and lab clean: will be bleached and cleaned with ethanol (racks, wall, floor, and stir plates)	Accomplished
Work on Roseobacter chemostats: Start initial experiments→ CHEMOSTATS!	Started 3/20/12 and still running. Closing onto appropriate reactor volume and flow rate for working density
Keep Aquarium room work space clean, neat, and prepped	Accomplished
Work on write up for Jeremy	Revising current protocols

Goals for upcoming week

Goal	Comments
Dimensions Chemostats: Interpret last weeks experiments and get the system working	
Keep 4th floor incubation room and lab clean: will be bleached and cleaned with ethanol (racks, wall, floor, and stir plates)	
Work on Roseobacter chemostats: Start initial experiments→ CHEMOSTATS!	
Keep Aquarium room work space clean, neat and prepped	
Work on write up for Jeremy	

Dimensions of Biological Diversity (Dark Matter)

Experimental Approach Overview

Number of
clones
successfully
cultured:

Class III genes selected



Synthesized by DNA 2.0 (Menlo, CA)



Number of
clones
remaining:

E. Coli G786 Transformed



Cultured in chemostat reactors



Mass spectrometry (UC Davis)

Dimensions of Biological Diversity (Dark Matter)

Experimental Approach Overview

Number of
clones
successfully
cultured: 47

Number of
clones
remaining: 83

Total: 130

Class III genes selected



Synthesized by DNA 2.0 (Menlo, CA)



E. Coli G786 Transformed



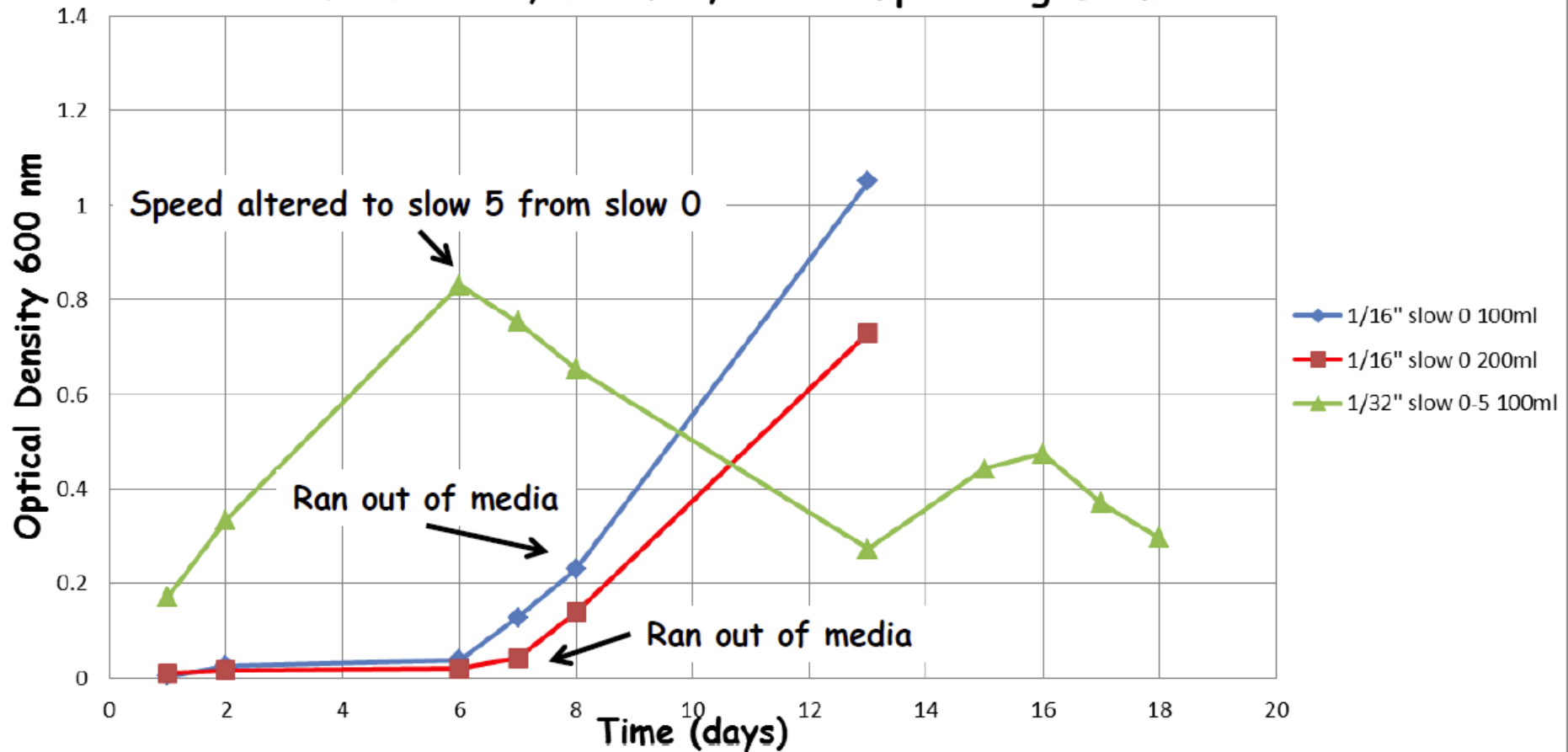
Cultured in chemostat reactors



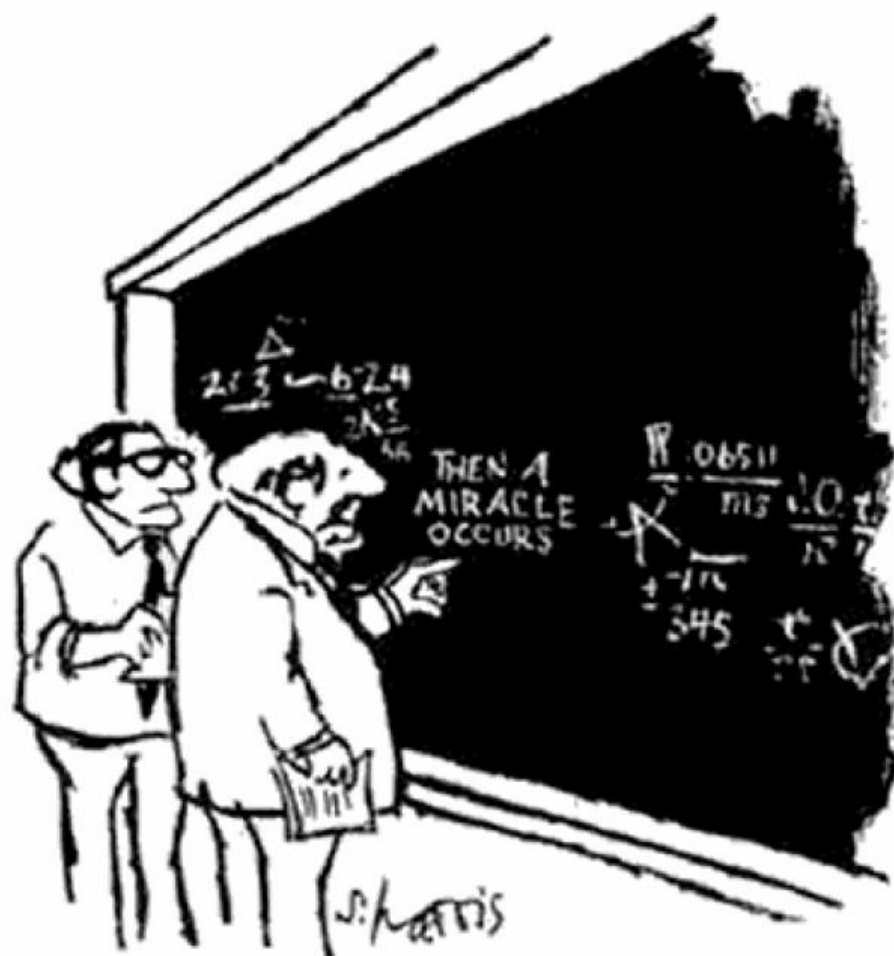
Mass spectrometry (UC Davis)

Roseobacter SIO 67 & Roseophage Interaction

Optical Densities of Three Chemostat Reactors with Varying Flow Rates, Volumes, and Pump Tubing Diameter



Multiple series of samples were plated on zoobell agar and monitored to check cultures for any contaminants. Controls and samples suggest roseobacter is present without any observable contaminants



"I THINK YOU SHOULD BE MORE EXPLICIT
HERE IN STEP TWO."

Lab Goals

4/23/12

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Last weeks goals and comments:

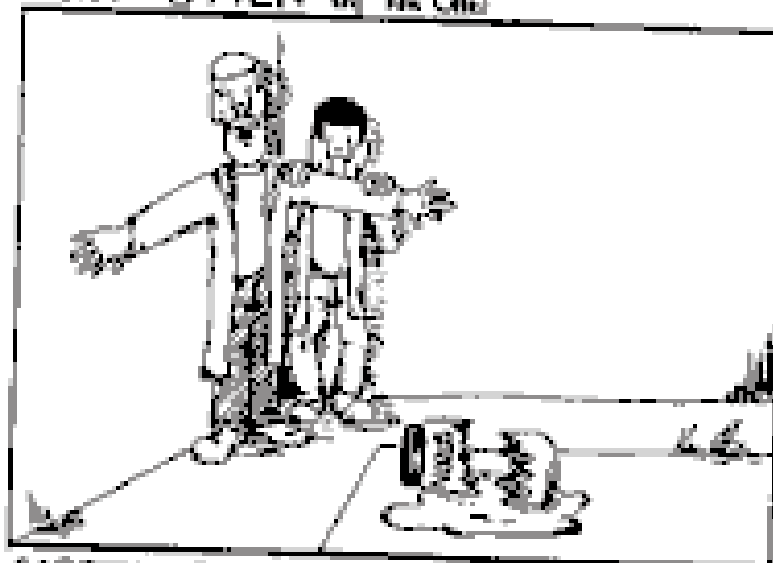
April 23 - April 27 2012

Goal	Comments
Dimensions Chemostats: Interpret last weeks experiments and get the system working	Determined sterilization of media as source problem, adjusted autoclave total volume and time→ seems to have done the trick
Keep 4th floor incubation room and lab clean: will be bleached and cleaned with ethanol (racks, wall, floor, and stir plates)	Cleaned
Work on Roseobacter chemostats: Start initial experiments→ CHEMOSTATS!	It is believed that an appropriate protocol, working volume, and flow rate have been found
Keep Aquarium room work space clean, neat and prepped	cleaned
Work on write up for Jeremy	Initial points down

Goals for upcoming week

Goal	Comments
Dimensions Chemostats: clones will be ran in full systems	
Keep 4th floor incubation room and lab clean: will be bleached and cleaned with ethanol (racks, wall, floor, and stir plates)	
Work on Roseobacter chemostats: Final test run before phage experiments	
Keep Aquarium room work space clean, neat and prepped	
Work on write up for Jeremy	

I.N. STIEN by Yon Ollat



CAREFUL RALPH, I HEAR THAT THEY
CAN SMELL FEAR!