

MCB 532
Fall 2017

Class Meeting Place and Time: Thursdays 3:00-3:50 PM C605 CLSL

Course Requirements:

We'll read a primary research article prior to each discussion. One student will be assigned as the discussion leader for each session.

Class Schedule:

Discussion	Date	Topic	Paper	Discussion Leader
1	Sept. 3	Cell Structure	Yao, PNAS 109:E2561	
2	Sept. 10	Cell Division	Arjes, Curr Biol 24:2149	
3	Sept. 17	Translation	Woolstenhulme, Cell Rep 11:13	
4	Sept. 24	Small RNAs	Papenfort, PNAS 112:e766	
5	Oct. 1	Protein Trafficking	Salomon, PLoS Pathog 11:e1005128	
6	Oct. 8	Protein Trafficking	Phillips, PLoS Genet 11:e1005443	
7	Oct. 15	Metabolism	Hill, PLoS Genet 9:e1003663	
8	Oct. 22	Metabolism	Berney, PNAS 112:10008	
9	Oct. 29	Cell Signaling	Oren, PNAS, 111:16112	
10	Nov. 5	Microbe-Host Interactions	Viana, Nature Genetics 47:361	
11	Nov. 12	Stress Response	Weber, PNAS 112:9442	
12	Nov. 19	Development	Oliveira, PLoS Biol 13:e1002232	
13	Dec. 3	Microbial Communities	Ottesen, Science 345:207	

Grading: 150 points total (50 points for leading, 10 points for participating in each discussion)

Leading discussion: Discussion leader will present relevant background information and then lead the class through a discussion of the research question, methods used, results obtained and data interpretation.

Participation: The whole class should read each discussion paper critically and thoroughly. Every student should be able to describe the question the researchers were trying to answer, the basics about the methods used, the results and interpretations of the authors. You should also form your own opinions about the experiments and describe why you do or do not agree with the authors' conclusions. We have a total of 12 discussions this semester; each student will lead 1 discussion, leaving 11 discussions for participation. A total of 10 points will be available for participating in each discussion (only the top 10 will count). To receive participation points, students must: 1) Read the paper and *come up with a thoughtful question or comment*; 2) *Attend the discussion and participate* by asking your question, answering a question posed by discussion leader, or making a comment during the discussion. No points will be awarded if a student is absent from the discussion. Discussion participation points cannot be made up.