Biology 563
Seminar in Physiology: Benefits of Parasitism
Spring 2007, M: 3:00-4:50

Instructor: Dr. Debbie Kristan
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Office Hours: W 9-10am and by appointment

Course description:
Parasites are horrible, nasty beasts that cause nothing but trouble. If you agree with this statement, you may be curious to know that many scientists now understand that some kinds of parasites may benefit their hosts in unexpected ways. This seminar will examine benefits of parasitism from theoretical and empirical perspectives. We will read the primary literature to explore how parasites change host physiology to influence susceptibility to other pathogens, autoimmune diseases, allergies, and to cause behavioral changes that may enhance foraging or reproductive success.

Graded materials:
There will be no exams. Students will each be responsible for directing the class discussion on one day. Before class discussion begins, you will give a short introduction (no formal powerpoint presentation required) on the topic of your chosen paper; your presentation should be based on your paper and on additional research you have done. This will be followed by class discussion.

When you are the presenter you will be graded on the following: (1) Oral introduction of the paper (50 pts), (2) Six questions that you might use to stimulate/direct class discussion about your paper (60 pts), (3) A one page summary (see guidelines below) of your paper (50 pts), and (4) A one page summary for each of 4 additional journal articles related to your paper topic (4 @ 10 pts each).

If you are not in charge of presenting a paper, you must come prepared to discuss each paper every week of the semester. You will be graded on (1) Participation in the group discussion (200 pts total), and (2) A one page summary of the paper (10 pts each; total assigned points will be prorated to 100 pts) being presented that day. Your summary will be due before the class discussion begins.

Summaries of papers should include the following:
• A summary of the goal/purpose/hypotheses of the research.
• An assessment of the scientific strengths and weaknesses of the research.
• A 1-3 sentence proposal for what follow-up research should be conducted to address the question(s) asked in the paper.

Final grades will be assigned strictly on a point basis (e.g. 90% of the total points = A, 80% = B, etc.). Therefore, you are not competing with each other—I encourage you to work together to share information, references, etc. as much as possible, but any written work submitted for a grade must be entirely your own.
**Student Learning Outcomes:**

Students who successfully complete this course should be able to: (1) Read and comprehend all components of a peer-reviewed journal article, (2) find the most relevant follow-up articles for the primary paper of interest, (3) articulate your conceptual understanding of a research topic using oral and written formats, and (4) lead a comprehensive, focused, and informative scientific discussion among your peers.

**Other Notes:**

*Email*

Occasionally I will want to contact the class or individual students via e-mail using your University assigned e-mail. If this is not an account you check often then please go to the following site to forward the CSUSM account to your home address - [http://public.csusm.edu/cwis/tools/forward/](http://public.csusm.edu/cwis/tools/forward/)

*Disabled student services*

Students with disabilities who require academic accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TDD (760) 750-4909. Students authorized by DSS to receive accommodations should meet with me during my office hours or in a more private setting in order to ensure your privacy.

*Academic honesty*

Academic honesty (e.g. no cheating, plagiarism, etc.) will be **strictly** enforced. Please carefully read pages 77-79 of the 2006-2008 CSUSM Catalog for University policy.

**Bio 563 Schedule:**

Week 1: Introduction by Dr. Kristan  
Weeks 2-15: Student presentations  
Holiday: March 26 (Spring break), no class.