

FOODBORNE DISEASES

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BIO 495
Fall 2009
Office hours: MWF 9:00-9:50
or by Appointment

<u>No.</u>	<u>Date</u>	<u>Topic</u>	<u>Speakers</u>
1	Aug 20	Introduction	Sizemore
2	Aug 27	Food Microbiology	Sizemore
3	Sept 3	Scientist Biography	Wallace, Smith, Sargent
4	Sept 10	Scientist Biography	Sagers, Pettypool, Perez
5	Sept 17	Scientist Biography	Mattocks, Lewis, Kessell
6	Sept 24	Scientist Biography	Gentile, Bunch, O'Shaughnessy
7	Oct 1	Practice Talk	Wallace, Smith, Sargent
8	Oct 8	Practice Talks	Sagers, Pettypool, Perez
9	Oct 15	Practice Talks	Mattocks, Lewis, Kessell
10	Oct 22	Practice Talks	Gentile, Bunch, O'Shaughnessy
11	Oct 29	Final Presentations	Wallace, Smith, Sargent
12	Nov 5	Final Presentations	Sagers, Pettypool, Perez
13	Nov 12	Final Presentations	Mattocks, Lewis, Kessell
14	Nov 19	Final Presentations	Gentile, Bunch, O'Shaughnessy

August 26 = Last day to add or drop without a grade

October 8 = Last day to withdraw with W

**THE DEPARTMENT OF BIOLOGICAL SCIENCES STRONGLY SUPPORTS
THE ACADEMIC HONOR CODE AS STATED IN THE STUDENT HANDBOOK AND
CODE OF STUDENT LIFE AND WILL NOT TOLERATE ACADEMIC DISHONESTY**

Grades:

Grades in this course will be based primarily on the quality of the final presentation. Attendance and participation in class discussions will also affect grades. Each student will be expected to make 3 15 -20 minute (presentations shorter than 10 minutes will usually result in a lower grade) oral presentations using PowerPoint during the semester. The first 2 presentations will not be graded but will be critiqued. The third presentation will be graded. Students will be asked to submit written reviews of the first 2 talks. Anonymous copies of these reviews will be given to each speaker. If the student does not have experience or access to a computer with PowerPoint please notify the instructor early in the semester.

By the September 4 class period, students must have picked one waterborne disease and a microbiologist who work with that disease (see list below). The student is expected to go onto the internet to learn a little bit about the disease (a good link is: [Waterborne diseases](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/default.htm) or <http://www.cdc.gov/ncidod/dbmd/diseaseinfo/default.htm>) and develop a biography on their scientist which will be presented as their first talk. Then pick 2 current articles (2002-2008) which your scientist authored. These articles should be from scientific literature not the popular press must be approved in advance by the instructor. You will be expected to clearly and precisely explain these articles to the class. The first article presented will be considered a practice talk but the second article will be graded. It is expected that the students will have to read additional background material to understand the articles.

While appropriate audiovisual usage is expected, a clear oral presentation is more important to the grade than a flashy audiovisual presentation. Students not presenting will be expected to ask questions after the talks and the presenter should understand the article well enough to answer questions. Attendance is mandatory for this class and missed classes will lower grades. If you must miss a class, consult the instructor before the absence. If an emergency causes the student to miss class, please notify the instructor as to the nature of the emergency. The instructor may excuse absences under appropriate circumstances.

Microorganisms causing important Foodborne Diseases and scientists who study them:

<i>Helicobacter pylori</i>	Martin J Blaser
<i>Campylobacter jejuni</i>	Irving Nachamkin, Patricia Guerry
<i>E coli</i> O157-H7	H. Karch, T.S. Edrington
<i>Listeria monocytogenes</i>	P. Cossant, M. Lecuit
<i>Salmonella typhimurium</i>	Roy Curtiss, B.B. Finlay
Rotavirus	MA Borchardt, CP Gerba, M.K. Estes, R.I. Glass
<i>Vibrio parahaemolyticus</i>	Firdausi Qadri, Linda McCarter;
<i>Vibrio vulnificus</i>	James D. Oliver
Enterotoxigenic <i>E. coli</i>	P.M. Becker, Moselio Schaechter, FC Neidhardt
<i>Yersinia enterocolitica</i>	S.T. Lambert, R.V. Tauxe, MJ Arduino, EJ Bottone
<i>Clostridium botulinum</i>	K. Oguma, G. Sakaguchi
<i>Staphylococcus aureus</i>	T.J. Foster, D. McDevitt
Norwalk virus	M.K.Estes, H.B. Greenberg
<i>Bacillus cereus</i>	P.E. Granum, M.A. Andersson

Other Food-borne illnesses scientists: Ravdin, JI, Gerrant, RL Doyle, MP, Beuchat, LP Montville, TJ, LaMont, J; Nataro, JP; Kaper, JB; Sears, CL,