

MONDAYS and WEDNESDAYS **1-3 pm** **E25-117**

<u>INSTRUCTORS</u>	Richard Hynes	E17-227	3-6422
	Monty Krieger	68-483	3-6793
<u>GUEST</u>	Michael Yaffe	E18-585	2-2443
<u>LECTURERS</u>	Harvey Lodish	WI-601C	8-5216
	Troy Littleton	E18-672	2-2605
	Morgan Sheng	E18-215	2-3716
	Frank Gertler	68-270	3-5511
	Hidde Ploegh	WI-301	4-1878
	Tom Kirchhausen		278-3140
<u>TEXTs</u>	LODISH et al.	MOLECULAR CELL BIOLOGY, 5th Edition, 2003	
	ALBERTS et al.	MOLECULAR BIOLOGY of the CELL, 4th Edition, 2002	

Readings will often be assigned BEFORE a particular class.
PLEASE READ THEM BEFORE THE RELEVANT LECTURE

OTHER READING - for Discussion sessions, generally 2-3 articles per session will be assigned.
The papers will be chosen to illustrate major principles and methods.
These papers will be available on the course web site (<http://mit.edu/7.61>).
These articles should be read carefully - they will be discussed in detail
by the entire class (a la 7.50 style).

NB **EVERYONE** should come fully prepared to discuss each of the assigned papers.

FINAL EXAM At the end of the term after the last day of classes we will schedule mutually convenient times for individual oral exams covering the content of the course. Students will choose two abstracts from a set of four. For each abstract, we will ask you to discuss the science underlying the work in the abstracts (context of the work, nature of the experiments, implications of the results) and suggest one or two follow-up experiments. This format will reflect the nature of the round-table discussions during the term.

GRADES: Grades will be based on general participation in the discussions (1/3rd), performance in leading discussion of an assigned paper (1/3rd) and performance during the final exam (1/3rd).

USEFUL SOURCES OF REVIEW ARTICLES

- Current Opinions in Cell Biology - and others in this series
- Annual Review of Cell and Developmental Biology
- Annual Review of Biochemistry
- Trends in Cell Biology
- Trends in Biochemistry
- Nature Cell Biology
- Nature Reviews in Molecular Cell Biology

BASIC METHODS OF CELL BIOLOGY

We will assume that students understand the basic principles and methods of biochemistry, molecular biology and genetics covered in Alberts Chapters 1-7 and Lodish Chapters 1-5 and 8/9. Alberts Ch. 8 and 9 and Lodish Ch. 5 and 9, in particular, cover methods of cell biology.

We suggest you review this material to refresh your memory.