

# BIM 102: Quantitative Cell Biology, Fall 2008

University of California, Davis  
Department of Biomedical Engineering  
CRN: 75520 (4 Units)

**Schedule:** Lectures: MW 2:10–4:00 PM, Bainer 1128

**Instructor:** So(ichiro) Yamada (syamada@ucdavis.edu )

Office: 2317 GBSF, Phone: (530) 752-7251

**Office Hours:** MW 1:00–2:00 PM

**TA:** Michelle Roland (michelle.roland@gmail.com)

**Textbook:** Recommended textbooks:

*Molecular Biology of the Cells*, Alberts et al., 4/e 2002 Garland Science

Online at: <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=mboc4.TOC>

Article database: <http://www.pubmed.gov>

**Homework:** There will be homework assignments.

**Exams:** Two midterm exams and one final exam. The exams will be open book and in a format similar to homework assignments.

**Grading:** The course grade will be based on; 20% homework, 40% two midterms, and 40% final exam.

## Course Schedule:

	<b>Date</b>	<b>Topic</b>	<b>MBC</b>
1	Oct 1	Introduction to cells	Ch9
2	Oct 3	Manipulating proteins	Ch3,8
3	Oct 8	Manipulating genes	Ch8
4	Oct 10	Nuclear transport	Ch12
5	Oct 15	Sorting in ER and Protein coats	Ch13
6	Oct 17	Vesicle fusion and SNARE proteins	Ch13
7	Oct 22	<b>Midterm 1</b>	
8	Oct 24	Actin biochemistry	Ch16
9	Oct 29	Listeria motility	Ch16
10	Oct 31	Regulation of cell motility	Ch16
11	Nov 5	Actin motor proteins	Ch16
12	Nov 7	Molecular basis of muscle contraction	Ch16
13	Nov 12	Veteran's Day	
14	Nov 14	<b>Midterm 2</b>	
15	Nov 19	Microtubules and motors	Ch16
16	Nov 21	Cell division	Ch18
17	Nov 26	Cell-extracellular matrix adhesion	Ch19
18	Nov 28	Cell-cell adhesion I	Ch19
19	Dec 3	Cell-cell adhesion II	Ch19
20	Dec 5	<b>Final</b>	