## BIMM 101 Recombinant DNA Techniques Winter 2014

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Office hours: Monday 11 AM – 12 PM, or in lab

**Lectures:** Tues/Thurs 8 – 9:20 AM Center Hall 105

**Labs:** Tues/Thurs 9:30 AM – 1:30 PM 4318 and 4332 York Hall Wed/Fri 9 AM – 1 PM 4318 and 4332 York Hall

TAs:

Jenny Wilson-Connelly jwilsonc@ucsd.edu

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# **General Learning objectives:**

- Learn the theory behind molecular techniques, and the applications of the methodologies in biological research
- Become proficient at basic molecular biology techniques
- Learn the importance of proper controls in designing experiments and interpreting results
- Improve lab math skills and ability to graph data correctly
- Learn to make logical conclusions from experimental data
- · Become familiar with bioinformatics websites
- Learn to find, read, and evaluate primary literature
- Become aware of the implications of the technology for society

### Texts: BIMM 101 Lab Manual from University Readers -

From Genes to Genomes by Dale ( $1^{st}$  or  $2^{cd}$  edition) on reserve at BML and new electronic version available from UCSD computer

http://onlinelibrary.wiley.com/book/10.1002/0470856912

Readings listed on TED

#### Required Materials - needed by second day of LAB

Labcoat (the bookstore has cheap ones)
UV blocking safety glasses (also at bookstore)
Lab notebook with carbon copies (bookstore or Grove general store)
Sharpie (thin, to write on tubes)

# Grading will be based on the following:

**1. Quizzes:** There will be 7 quizzes, given on Tuesdays and Wednesdays right at the beginning of LAB. The quizzes will mostly cover material from the previous week, though they are to some degree cumulative. You can drop one quiz score so your course grade will include a total of 6 quizzes. If you need to miss a lab due to an interview, medical appointment, etc. *this is the quiz score that you will drop unless special arrangements can be made*. If you sleep late and miss a quiz, this is the score you will drop. Each

quiz is worth 5% of your grade, for a total of **30%** of the course grade. There is NO quiz on the following days: Jan. 7, Feb. 4 (day of midterm), and March 11 (week of final exam).

- **2. Homeworks:** there will 3-4 homework assignments due throughout the quarter, of varying lengths. The total value of the homeworks will be **15%** of your grade. **Late policy**: homeworks are due at the beginning of the lab on the assigned date. For each day thereafter, you will lose 10% off the total.
- **3. Exams:** there will be 2 exams given during LECTURE. Exam #1 will be on Tuesday February 4 and Exam #2 will be on the last day of class, Thursday March 13. Exam #1 is worth **25**% of your grade and Exam #2 is worth **30**% of your grade.
- **4. Lab notebook:** it is mandatory that you keep a lab notebook, with carbon paper. Please note the notebook requirements at the back of your lab manual. You will need to attach carbons of relevant labs to all homeworks you hand in (I will indicate which lab #s to include). The carbons you hand in with homeworks will be graded as part of those assignments. You will have random notebook checks and will **lose points** if your notebook is not complete.
- **5. Lab performance-** You can **lose points** if you are not a good lab citizen. When assigning the final grade, your effort, attitude, and the quality and success of your experiments, as well as the completeness of your lab notebook will be considered. This could make a difference if you are on the borderline between 2 grades.
- **6. Lab attendance is required –**If you miss one lab with no excuse, **you will lose 5% from your final grade**. If you miss 2 labs you will receive an F for the course. If you are ill, you must leave a message with me, not your TA, and make up the lab in a way that I will determine. You must be on time for lab; the TAs go over the experiments at the beginning of lab, and quizzes are administered right at the beginning of class.

**Policy on cheating**: anyone caught cheating (includes plagiarizing homeworks, providing your homework to someone to copy, cheating on a test, changing an answer for a regrade, or any other act of academic dishonesty as described in the UCSD Academic Integrity Policy) will be reported to the Academic Integrity Office.