

**INFORMATION FOR MICROBIOLOGY GRADUATE STUDENTS**  
**October 16, 2008**

**Emergency contact number while you are in class:** Ms. Sandy Weirich; (434) 243-2776

**Graduate Advisory Committee**

- Dr. Amy Bouton (1<sup>st</sup> year Advisor)
- Dr. Anjeanette Roberts (Academic Advisor [all years] and Program Co-Director )
- Dr. Tom Parsons (Chair)
- Dr. Tim Bender (2<sup>nd</sup>-year-and-beyond Advisor)
- Dr. Joanna Goldberg (2<sup>nd</sup>-year-and-beyond Advisor)
- Dr. Ann Beyer

**1st Year Advisory Committees:**

Consist of 3 Faculty Mentors and the student.

**Role of the 1st year advisory committee:**

- To provide help and guidance in any facet of the first year experience
- To respond to any problems that arise in the classroom or laboratory
- To provide advice about 2nd and 3rd rotations
- To advise on course selection for 2nd and 3rd semesters

\*\*\*\*First Year Advisory Committee meetings will be arranged by the Chair of the committee as needed. At a minimum, meetings will be held shortly after arrival, once during the first semester, no sooner than the first set of exams, and once after the beginning of the second semester.

CHAIR			
Amber Cardani	Ann	Tom B*	David R
Ebony Coats	Tim	Judy*	Ulrike
Jarish Cohen (MSTP)	Vic	Tim	Ulrike
Stacey Gorski	Ian G*	Young	Lou
Erin Greenley	Loren*	Amy	Martin
Claudia Han	Lucy	Dean*	Ravi
Natalie Perez**	AJ	David B	Mitch
Amy Verret	Deb*	David M	Jay B
Zach Weiner	Dan E.	Barb*	Vic
Stephanie Zilora	Sally	Paul*	Ian M

\* indicates first rotation mentor

\*\* 1<sup>st</sup> rotation mentor Joanna on sabbatical Fall 08 – Mar 09.

**Research Rotations:** 3 rotations are required. Under exceptional circumstances, students may petition the Graduate Advisory Committee to be excused from the 3<sup>rd</sup> rotation.

- **1<sup>st</sup> rotation:** July 7 through August 31\* 2008
- **2<sup>nd</sup> rotation:** January 5 - February 27 2009
- **3<sup>rd</sup> rotation:** March 2 - April 24 2009

~ ~ ~ **Students should select their thesis lab on or before the third week of April 2009.** ~ ~ ~

**Research Rotation Presentations:** Students will be asked to present their rotation work during each of three “1<sup>st</sup> Year Research Days.” The first two of these will involve giving a short talk describing the rotation project; the format of the third will likely be a poster session. These are designed primarily to update members of the department about the lab rotations, but they also provide an excellent venue for students to share their lab experiences with fellow students. Timing of 1<sup>st</sup> Year Research Days will occur in the following months:

- 1<sup>st</sup> rotation: January 12, 2009 (oral presentation)
- 2<sup>nd</sup> rotation: March – TBD (oral presentation)
- 3<sup>rd</sup> rotation: August (oral/poster session) given for incoming 1<sup>st</sup> year students

**Seminar series:** Students are **required** to attend the Microbiology seminar series, which generally takes place on Wednesdays at 4PM. Coffee and cookies are served 15 minutes prior to the seminar. Look for blue-rimmed flyers or go to the Microbiology Department website for details about the speaker, time, and location for particular seminars. Attendance at other seminars may also be required depending on the student’s training program affiliation.

**Lunch with the faculty:** Students will have the opportunity to hear about the research programs of our faculty during “lunch with the faculty” meetings on most Mondays in the fall. Lunches will begin in September following the Labor Day holiday and recess in late November for Thanksgiving Holiday, exams and term break. Each session will focus on a different scientific theme to highlight the varied research interests of our faculty. These lunches (in the Microbiology Library at noon) provide an excellent opportunity for students to become familiar with potential rotation and research opportunities in our program. Attendance is mandatory.

Data collection and management – The first Monday following Labor Day (Sept. 10, 2007), during the noon hour, students will be instructed on how to keep a laboratory notebook, how to collect and store digital or electronic data and images and what types of data manipulation and presentation are acceptable. Data generated by students during their graduate studies are ultimately the property of the University of Virginia and as such should be collected and stored properly. Attendance is mandatory.

**Courses and registration (1st semester):**

Course	Schedule #	Title	Day/Time
BIMS 811	902EN	Gene Structure and Expression	MWF 1015-1145
BIMS 512	904ZT	Cell Structure and Function	TR 1000-1130 F 1330-1500
BIMS 503	901Y3	Biochemistry: Macromolecular Structure and Function	MTR 0830-1000
MICR 881	9016C	Colloquium in Microbiology	T 1200-1300
or BIMS 835	904RS	Colloquium in Immunology	T 1200-1300

Times and locations of courses may be checked online at:

<http://www.healthsystem.virginia.edu/internet/gpo/courses/courses.cfm>

<http://etg08.itc.virginia.edu/cod.pages/20083/ASF/BIMS.html>

<http://etg08.itc.virginia.edu/cod.pages/20083/ASF/MICR.html>

**Remaining course requirements:** Four advanced courses, 2 additional semesters of colloquium, and research ethics must be taken over the next 3 semesters. Specific information about these requirements is provided below. While there is some flexibility, NIH-supported training programs (i.e. immunology, cancer, infectious disease, biodefense, cell and molecular biology, pharmacology, and cardiovascular training programs) each have programmatic course requirements that must be met. As a consequence, the actual courses that will be taken by an individual student may be driven to a large extent by his/her program affiliation.

- At least two of the advanced courses must come from the following list of core courses.

Course	Title	Day/Time
BIMS 803	Fundamental Immunology	Spring
BIMS 808	General and Molecular Genetics	Spring
MICR 815	Molecular Basis of Carcinogenesis	Spring
MICR 809	Virology	Fall
MICR 810	Microbial Pathogenesis	Fall

- The remaining courses must be approved by the 2nd-year-and-beyond graduate advisors Drs. Tim Bender, Joanna Goldberg and AJ Roberts). Acceptable courses must have some mechanism for evaluation. **Examples** of acceptable courses include:

Course	Title	Day/Time
BIMS 809	Cell Imaging	Fall
MICR 820	Current Topics in Immunology	Fall
MICR 822	Molecular Eukaryotic Chromosome	Fall
MICR 829	Clinical Immunology and Immunopathology	Fall
BIMS 841	Advanced Topics in Cancer	Fall
BIMS 824	Chromatin Structure and Function	Spring
BIMS 832	Graduate Physiology	Spring
BIOL 508	Developmental Mechanisms	Spring

- Research Ethics (*this is required in the 2<sup>nd</sup> semester*)

Course	Title	Day/Time
BIMS 710	Research Ethics	Spring

- Two more semesters of colloquium. Students coming into the Microbiology department through programs other than MII can substitute other colloquia or journal clubs as long as they include a minimum of 2 presentations over 3 semesters that are evaluated and graded.

Course	Title	Day/Time
MICR 881	Colloquium in Microbiology	T 1200-1300
or BIMS 835/6	Colloquium in Immunology	T 1200-1300

### Proficiency assessment:

Students who have passed all of their first year courses and have a GPA of 3.0 or greater are considered to be in good standing by the Department of Microbiology and the Graduate School of Arts and Sciences (GSAS). However, even in those instances where a student has a GPA that is above 3.0, the MII program considers a grade of B- (B-minus) to be indicative of a lack of proficiency in that subject area. If a student receives a grade of B- in any course but still has a GPA of 3.0 or greater, they may be asked to retake all or part of the course a second time.

If a student has received a grade of B- (B-minus) in one or more courses and their GPA is below 3.0, that student is not considered to be in good standing by GSAS. He/she will be asked to demonstrate proficiency in the area(s) where a deficiency was noted as described above, and the Chair of Microbiology will make a decision about whether the student can continue in the program.

Students who receive a C+ or lower (this is considered by GSAS to be a failing grade) in one course may be allowed to retake the course. Students who receive more than one failing grade will be asked to leave the program. Appeals may be made in writing to the Graduate Advisory Committee and to GSAS.

### 2nd year and beyond.....:

- Together with mentor, pick Thesis Advisory Committee
  - 5 faculty members including mentor
  - At least 3 of the faculty must be primary appointees in the Department of Microbiology
  - At least 1 of the microbiology faculty, excluding the mentor, must have tenure
  - 1 faculty member must be from outside the Department of Microbiology and have an appointment (primary or secondary) in a degree-granting program at the University of Virginia.
- Qualifying exam (middle to end of second year; **completed by July 1**)
- Meetings with the Thesis Advisory Committee should be **arranged by the student at least once per year**. Meetings must be documented in the official student file.

In addition to these Departmental activities, for those of you supported on a training grant (check with your mentor), there are other special requirements.

Cell and Molecular Biology (CMB) Training Grant:

Data Club (Monday 4 pm; BIMS 816, 1 credit)  
Attend and participate in CMB Poster Day

Infectious Disease (ID) and Biodefense (BD) Training Grants:

Attend and participate in Microbial Pathogenesis Journal Club, ID and BD Research in Progress, and ID and BD breakfasts  
Attend and participate in Annual ID and BD research day  
ID and BD Research Seminar (Tuesdays 4 pm)  
Must pass Microbial Pathogenesis (MICR 810, 4 credits) and Virology (MICR 809, 4 credits)  
Students on BD must pass Issues in Biodefense (BIMS 834, 2 credits; spring semester)  
(recommended for ID)

Cancer Training Grant:

Must pass The Molecular Basis of Carcinogenesis (MICR 815, 4 credits)  
Advanced Topics in Cancer (BIMS 841, 3 credits)  
Cancer Center seminars (Friday afternoon)

Immunology Training Grant:

Must pass Fundamental Immunology (MICR 803, 5 credits)  
Current Topics in Immunology  
Beirne B. Carter Seminar Series  
Immunology RIP

## QUALIFYING EXAM

**Your qualifying exam should be completed by July 1st** (generally 1 year after entering your thesis laboratory). A description of the qualifying exam is found on the web <<http://www.healthsystem.virginia.edu/internet/microbiology/education/qualifier.cfm>> Exceptions to the July 1<sup>st</sup> deadline are rare and must be requested well in advance of the deadline and must be approved by the 2<sup>nd</sup> year-and-beyond graduate advisors.

Along with your mentor, you should start identifying the faculty that you would like as examiners for your qualifying exam and thus on your thesis committee. You and your mentor should choose one of these people to act as “Chair of the Committee”, and to be the primary liaison between you and your committee. Your mentor will be an essentially silent member of the committee during your oral exam. Your thesis committee should include a minimum of five faculty members including your mentor. Three of these faculty members must have a primary appointment in the Department of Microbiology. At least one of the primary Microbiology faculty members, not including your mentor, must have tenure at the University of Virginia. In addition, one of your committee members must be from “outside” the Department of Microbiology and is considered to be the Dean’s representative. This “outside” committee member must have an appointment (primary or secondary) in a degree-granting program at the University of Virginia. This “outside” person may have a secondary (but not primary) appointment in the Department of Microbiology. **The composition of your committee must be approved by one of the 2<sup>nd</sup> year-and-beyond graduate advisors prior to your qualifying examination.** In addition to serving as examiners for your qualifying exam, your thesis committee is a valuable resource to guide you through your dissertation research. **You should plan on meeting with this committee at least once a year, or more often**, as required.