

Division of Medical Sciences

Ph.D. Programs at Harvard Medical School

January Intensive Courses

January 2017

You must sign up for January courses on your spring term Study Cards

Classes Start: Monday, January 23, 2017

Online Check-In (formerly known as registration):

Wednesday, January 18, 2016 – Monday, January 23, 2016

Please visit the [Harvard University Knowledge Center](#) website for more information

Deadlines and Holidays: Please visit the [GSAS Calendar](#) to view deadlines and holidays for the 16-17 academic year

For information: Call 617-432-4134 or email dms_courses@hms.harvard.edu

DIVISION OF MEDICAL SCIENCES
Ph.D. Programs at Harvard Medical School
2016-2017 January Intensive Course Offerings

BCMP 301OC Translational Pharmacology

Enrollment: Limited to 35.

Donald M. Coen, David E. Golan and Harvard faculty & guest lecturers from pharmaceutical and biotechnology industries

Curriculum Fellow: Catherine Dubreuil

Course Manager: Stuart Ferguson

DRB 330OC Experimental Approaches to Developmental and Regenerative Biology

Enrollment: Limited to 15.

David Van Vactor, Ya-Chieh Hsu and Ted Feldman

Genetics 390OC Advanced Experimental Methods: Experimental Approaches in Genetic Analysis

Enrollment: Limited to 8.

Fred Winston

Curriculum Fellow: Emily Gleason

HBTM 301OC Case Studies in Human Biology and Translational Medicine

Caren Solomon and Mary Hamel

Curriculum Fellow: Christopher Burtner

Medical Sciences 316OC PhD Pathfinder

Enrollment: Limited to 50

David Cardozo and Joseph Arboleda

Course Manager: Lisa Rossini

Microbiology 302OC Introduction to Infectious Disease Research: Infectious Diseases Consortium

Boot Camp

Enrollment: Limited to 15.

Eric J. Rubin and Bradley Coleman

Curriculum Fellow: Bradley Coleman

SGBT 203 Anatomy of Speech and Hearing

Enrollment: Limited to 12.

Barbara Fullerton, James Heaton, and James Kobler

Virology 301OC Advanced Topics in Virology - Viral Oncology

Enrollment: Limited to 12.

James DeCaprio

PLEASE NOTE: Pre-registration opens on **November 1, 2016...** Students can pre-register for the January Intensive Courses on <https://nanosandothercourses.hms.harvard.edu/boot-camp-courses>.

Biological Chemistry and Molecular Pharmacology

BCMP 301OC Translational Pharmacology

Donald M. Coen, David E. Golan and Harvard faculty & guest lecturers from pharmaceutical and biotechnology industries

2 Units Enrollment: Limited to 35, instructor consent required.

Monday – Friday 9:00-4:00 (with an hour for lunch)

This intensive course, held during the first two full weeks of January (ten days), covers principles of pharmacology and their translation into new drug development. Students participate in project groups composed of both graduate students and post-graduate M.D.'s to propose a drug development strategy from target choice through clinical trials. There are two hours of lectures during each of the first eight mornings; afternoons include (i) case studies discussed by Harvard faculty and faculty from the pharmaceutical and biotechnology industries, or (ii) time to work on the group project. Evaluation is based on written and oral presentations of the group project and on class participation. Enrollment may be limited.

January Session 2017

Meeting Dates: January 9, 2017 to January 20, 2017

First Meeting: Monday, January 9, 2017

Final Meeting: Friday, January 20, 2017

Location: Modell 100A Fred S. Rosen Lecture Hall

Course Co-Directors: Donald M. Coen, don_coen@hms.harvard.edu, and David E. Golan, david_golan@hms.harvard.edu

Course Manager: Stuart Ferguson, stuart_ferguson@hms.harvard.edu

Developmental and Regenerative Biology

DRB 330OC Experimental Approaches to Developmental and Regenerative Biology

David Van Vactor and Ya-Chieh Hsu

2 Units Enrollment: Limited to 15, consent of instructor required.

Monday – Friday 10:00am-6:00pm

This introductory level course will provide a rapid survey of major topics and themes in developmental and regenerative biology in parallel with hands-on exposure to a variety of experimental approaches, technologies and model systems (*Drosophila*, *C. elegans*, Axolotl, mouse and human cell lines). The course is designed to offer an intense immersion or primer that will better prepare students for subsequent semester-long courses such as CB207 and NB207. DRB330 is required for DRB concentration students in the BBS graduate program.

This laboratory course is designed to provide a survey of major topics and contemporary research in developmental and regenerative biology. Students will rotate in the laboratories of DRB faculty across the Harvard campuses and affiliated hospitals. Students engage with faculty and gain hands on experience in a variety of model systems, experimental techniques and research areas. Each day of the course will consist of a lecture followed by hands-on laboratory activities and interactive discussions.

Note: Open to first-year and second-year BBS students; Not repeatable for credit. There will be one lecture on Saturday.

January Session 2017

Meeting Dates: January 4, 2017 to January 18, 2017

First Meeting: Wednesday, January 4, 2017

Final Meeting: Wednesday, January 18, 2017

Location: TMEC 117

Course Directors: David Van Vactor, davie@hms.harvard.edu, and Ya-Chieh Hsu, yachieh_hsu@harvard.edu

Curriculum Fellow: Ted Feldman, tfeldman@fas.harvard.edu

GENETICS

Genetics 390OC Advanced Experimental Methods: Experimental Approaches in Genetic Analysis

Fred Winston

2 Units Enrollment: Limited to 8

Monday - Friday, 8:30-6:00

The goal of this course is to provide a survey of major topics and themes in genetics and genetic analysis in conjunction with exposure to a variety of experimental techniques, technologies, and model systems. Building on fundamental principles learned in Genetics 201, students will gain knowledge and hands-on experience in using genetic approaches to address biologically relevant questions in a variety of experimental systems, such as *Drosophila*, yeast, *C. elegans*, and humans. The course will combine lectures and hands-on laboratory activities emphasizing experimental methods, hypothesis generation and testing, and data analysis.

Students will be graded on a pass/fail basis. In order to earn a passing grade and receive credit for this course, students must attend and arrive prepared for every course session. Students must also complete daily evaluations of course activities and a final overall course evaluation.

Note: This is an intensive January course. Priority will be given to first year graduate students. Students must first contact the faculty for enrollment approval prior to registration for the course. Meeting Dates/Times: Approximately 8:30 am-5:00 pm each day for 8days.

Prerequisite: Genetics 201 or with permission from the instructor.

January Session 2017

Meeting Dates: January 3, 2017 to January 13, 2017

First Meeting: Thursday, January 5, 2017

Final Meeting: Friday, January 13, 2017

Location: Location varies each day.

Course Instructor: Fred Winston, winston@genetics.med.harvard.edu

Curriculum Fellow: Emily Gleason, Emily_Gleason@hms.harvard.edu

Course Schedule:

Thursday, January 5th – Hochschild Lab

Friday, January 6th – MacArthur Lab

Saturday, January 7th – Morton Lab

Monday, January 9th – Warman Lab

Tuesday, January 10th – Vidal Lab

Wednesday, January 11th – Zon Lab

Thursday, January 12th – Kennedy Lab

Friday, January 13th – DePace Lab

Human Biology and Translational Medicine

HBTM 301OC Case Studies in Human Biology and Translational Medicine

Caren Solomon and Mary Hamel

2 Units

Monday - Friday, 9:00-11:00

Two-week course that is required of and restricted to first-year LHB students. Each week of the course focuses on a different "case study" in translational medicine.

Note: This is an intensive January term course. Restricted to Leder students only.

January Session 2017

Meeting Dates: January 9, 2017 to January 20, 2017

First Meeting: Monday, January 9, 2017

Final Meeting: Friday, January 20, 2017

Location: Countway Library, 6th Floor, New England Journal of Medicine Conference Room

Course Instructor: Caren Solomon, (csolomon@nejm.org), and Mary Hamel, (mhamel@nejm.org)

Curriculum Fellow: Christopher Burtner, christopher_burtner@hms.harvard.edu

Medical Sciences

Medical Sciences 316OC PhD Pathfinder

David Cardozo, Joseph Arboleda and Lisa Rossini

2 Units Enrollment: Limited to 50, instructor consent required

Monday - Friday, 5:00- 7:00 (with an hour after for networking session) *

*Students are required to attend all 5 sessions

The course is open to all Ph.D. students interested in learning about the range of career options available to biomedical Ph.Ds. The course includes talks, didactic sessions, workshops and networking events to promote interactions between students and invited speakers. There will be a special emphasis on helping students design their own career map using a tool created by RA Capital. After each session there will be a small networking reception for both the students and lecturers.

Students will learn about the many career paths available to people with advanced degrees in biomedical research including academia, biotech, patent law, science writing/publishing, consulting/business, education, and science policy/regulation.

A Ph.D. education provides students with fundamental knowledge about the principles and practice of the scientific method and promotes development of problem-solving skills in ways that are quite useful for many different professions. Students will have the opportunity to learn from experienced professionals representing each of these paths, to learn about strategies for career development, curriculum enrichment, and networking opportunities that will make them competitive for their career of choice.

Note: Students are required to attend all five sessions. To pre-register, contact Lisa Rossini at Lisa_Rossini@hms.harvard.edu.

January Session 2017

Meeting Dates: January 9, 2017 to January 13, 2017

First Meeting: Monday, January 9, 2017

Final Meeting: Friday, January 13, 2017

Location: Cannon Room

Course Co-Directors: David Cardozo & Joseph Arboleda

Course Manager: Lisa Rossini: Lisa_Rossini@hms.harvard.edu

Microbiology and Immunobiology

Microbiology 302OC Introduction to Infectious Disease Research: Infectious Diseases Consortium Boot Camp

Eric J. Rubin and Bradley Coleman

2 Units. Enrollment: Limited to 15, instructor consent required

Monday - Friday, 9:00-5:00

This intensive January course provides an introduction to the breadth of infectious disease research carried out at Harvard. Students will learn techniques for studying infectious diseases, more about different types of infectious diseases, and meet faculty, students, and postdocs in infectious diseases labs at Harvard.

January Session 2017

Meeting Dates: January 9, 2017 to January 13, 2017

First Meeting: Monday, January 9, 2017

Final Meeting: Friday, January 13, 2017

Location: TMEC 447

Course Instructor: Eric J. Rubin, erubin@hsph.harvard.edu

Curriculum Fellow: Bradley Coleman, Bradley_Coleman@hms.harvard.edu

Speech and Hearing Bioscience and Technology

SHBT 203 Anatomy of Speech and Hearing

Barbara Fullerton, James Heaton, and James Kobler

4 Units. Enrollment: Limited to 12, instructor consent required

Lecture: Monday - Friday, 9:30-10:30 Lab: 10:30-1:30

This course covers anatomy of the head and neck, with cadaver dissection, stressing structures important in speech and hearing. Lecture topics also include basic neuroanatomy, imaging, surgery, and cancer of head and neck.

Note: This is an intensive January course. Offered jointly with MIT as HST 718. Classes to be held at the Harvard Medical School campus (HMS).

Prerequisite: Introductory biology or equivalent and permission of the course director, if not an SHBT student.

January Session 2017

Meeting Dates: January 3, 2017 to January 26, 2017

First Meeting: Tuesday, January 3, 2017

Final Meeting: Thursday, January 26, 2017

Location: TMEC 425

Course Instructor: Barbara Fullerton, BFULLERTON@PARTNERS.ORG, James Heaton, jheaton@partners.org, and James Kobler, jkobler@partners.org

Virology

Virology 301OC Advanced Topics in Virology - Viral Oncology

James DeCaprio

2 Units Enrollment: Limited to 12

Tuesday and Thursday 4:30-6:00 PM

Introduction to viral oncology and critical evaluation of key papers in viral oncology. Requirements include presentations, written critiques and class participation.

January Session 2017

Meeting Dates: January 3, 2017 to January 19, 2017

First Meeting: Tuesday, January 3, 2017

Final Meeting: Thursday, January 19, 2017

Location: TBD

Course Instructor: James DeCaprio, James_Decaprio@dfci.harvard.edu