Molecular Genetics 5705 - Advances in Cell Biology Spring Semester 2023

Lectures: Tue Thu 1:50-2:45 PM, Bio Sci 609

Instructors:

Dr. Stephen Osmani	804 Riffe	(osmani.2@osu.edu)
Dr. Iris Meier	520 Aronoff	(meier.56@osu.edu)
Dr. Hay-Oak Park	226 Bio. Sci.	(park.294@osu.edu)
Dr. Jian-Qiu Wu	615 Bio. Sci.	(wu.620@osu.edu)

General topics to be covered: (Lists of individual lecture topics will be posted on Carmen.)

Dr. Stephen Osmani: Cell cycle regulation and mitosis

Jan 10 – Jan 26 (6 lectures). Midterm 1: Jan 31

Dr. Iris Meier: Functional Organization of the Nucleus

Feb 2 – Feb 21 (6 lectures). Midterm 2: Feb 23

Dr. Hay-Oak Park: Actin Cytoskeleton and GTPase Signaling

Feb 28 - March 23 (6 lectures), Mar 13-17: no class (Spring Break). Midterm 3: March 28

Dr. Jian-Qiu Wu: Microtubules, Centrosome, and Cytokinesis

March 30 - April 20 (7 lectures). Final Exam: April 26, Wed, 2:00 pm to 3:45 pm

The mode of teaching will be in class lectures.

Required Course Materials

The <u>optional</u> textbooks for this course are Molecular Biology of the Cell (Alberts, 6th edition) and Cell Biology (Pollard and Earnshaw, 3rd edition). The textbooks will be used as a source of background information. Additional reading assignments for the course will consist of reviews and/or articles from the current literature. These will be posted on Carmen.

Exams and Grading

There will be three midterms and a final exam. The midterms 1-3 will be 55 minutes long and held during class time in the classroom. The final exam will be on April 26, Wed, 2:00 pm to 3:45 pm, which covers only Dr. Wu's lectures.

Each exam will be weighted as indicated below.

Midterm 1:60 pointsMidterm 2:60 pointsMidterm 3:60 PointsFinal:70 pointsTotal:250 points

Diversity statement

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited. All violations of this policy should be reported to the OSU Bias Assessment Response Team (BART, http://studentlife.osu.edu/bias/).

Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator via email at titleix@osu.edu

Mental Health Statement

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you are or someone you know is suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. No matter where you are engaged in distance learning, CCS is here to support you. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Academic Integrity and Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. The Ohio State University and the Committee on Academic Misconduct expect that all students have read and understood the University's Code of Student Conduct. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct may constitute Academic Misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations or other class assignments. Instructors shall report all instances of alleged academic misconduct (http://studentlife.osu.edu/csc/. For more information on academic misconduct please see the Committee on Academic Misconduct (https://oaa.osu.edu/academic-integrity-and-misconduct).

Accessibility Accommodations for Students with Disabilities

The University strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let instructors know immediately so that we can privately discuss options.

To establish reasonable accommodations, the instructors may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; 098 Baker Hall, 113 W. 12th Avenue.