

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE

Animal Models and Pathology of Neurological Disease (1 credit)

Fall 2020

Delivery Format: On-campus. Thursdays 4:00 PM – 5:00 PM

Instructor Name: Dr. Yuqing Li

Room Number: R4-133

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Email Address: yuqingli@ufl.edu

Office Hours: by appointment (office R4-120A)

Graduate Assistant: None

Preferred Course Communications: email

Prerequisites: *graduate students*

Purpose and Outcome:

This journal club is for graduate students interested in learning pathophysiology and animal models of neurological diseases. By reading the latest papers in this field, the students are expected to learn multidisciplinary approaches used in this field, how the research questions are formulated, and experiments are designed to answer the questions. The students are expected to learn how to critically analyze the published data, understand the potential limitations of the paper, and propose possible future additional studies.

Course Overview:

Each week the students will discuss one recent paper published in the field of pathophysiology, experimental therapeutics, and animal models of neurological disease including but not limited to Alzheimer's disease and related dementia, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis or ALS, peripheral neuropathy, and spinal cord injury. Occasionally, the students will also read and discuss papers on the brain-machine interface, neural stem cells, stroke, and brain tumor. Students will have the opportunity to present the paper and to lead the discussion. Integrative studies will be emphasized that use molecular, cellular, electrophysiological, neurochemical, and behavioral techniques. Clinical and preclinical studies that are related to the development of experimental therapeutics will be included to give students perspectives on translational neuroscience.

Relation to Program Outcomes:

The participation of the journal club is part of the broad scope of our graduate training program to develop students into an independent scientist and educator. It will broaden the knowledge base of the students and develop their critical thinking skills.

Course Objectives and/or Goals:

Upon successful completion of the course, the students will be able to: 1) discriminate between ground-breaking/paradigm-shifting research vs. incremental advances, 2) formulate a reasonable and testable hypothesis of a particular scientific inquiry, 3) design appropriate experiments with controls to test the hypothesis, 4) perform necessary data analysis and data interpretation, and 5) solve discrepancies between the results and existing scientific literature.

Description of Course Content:

Topical Outline/Course Schedule

Week	Date(s)	Topic(s)	Readings
1	8/27/2020	Organizational meeting	
2	9/3/2020	Paper discussion	To be selected
3	9/10/2020	Paper discussion	To be selected
4	9/17/2020	Paper discussion	To be selected
5	9/24/2020	Paper discussion	To be selected
6	10/1/2020	Paper discussion	To be selected
7	10/8/2020	Paper discussion	To be selected
8	10/15/202	Paper discussion	To be selected
9	10/22/2020	Paper discussion	To be selected
10	10/29/2020	SFN meeting, no class	
11	11/5/2020	Paper discussion	To be selected
12	11/12/2020	Paper discussion	To be selected
13	11/19/2020	Paper discussion	To be selected
14	12/3/2020	End of semester summary	
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Course Materials and Technology:

Papers for discussion at the journal club will be selected by the students from the leading scientific journals. Only original research papers, not review papers or book chapters, are allowed. They should be published in the last 24 months before the class meeting date, although exceptions will be granted in consultation with the instructor. The students are encouraged to select papers that are outside of their immediate scientific inquiry.

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- [UF eLearning](#)

Academic Requirements and Grading:

Assignments:

Students are expected to present at least once during the semester.

Grading:

Satisfactory/Unsatisfactory. Grades will be determined based on class attendance and participation in paper discussions.

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

Exam Policy: No exam.

Policy Related to Required Class Attendance:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>). Additional information can be found here:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Academic Integrity:

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at

<https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Policy Related to Guests Attending Class:

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers.

Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the [Classroom Guests of Students policy](#) in its entirety.

Support Services:

Accommodations for Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health:

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>. On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.
- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).
- Crisis intervention is always available 24/7 from:

Alachua County Crisis Center:

(352) 264-6789

<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall 352-392-2010 or to make an appointment 352 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process