

UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE

Communication between Peripheral Immunity and the CNS (Journal Club)
GMS6029 (1 credit)

Fall 2024

Delivery Format: On Campus. Fridays 12:30pm-2:00pm
9/6/2024 – 12/06/2024

Instructors: Dr. Habibeh Khoshbouei and Dr. Eduardo Candelario-Jalil

Room Number: L1-101

Phone Number: 352-273-8115 (Dr. Khoshbouei) and 352-273-7116 (Dr. Candelario-Jalil)

Email Addresses: habibeh@ufl.edu and ecandelario@ufl.edu

Office Hours: Mondays 1-3pm and Wednesdays 9-11am (Office: L1-100J)

Graduate Assistant: None

Preferred Course Communications: Email

Prerequisites: Doctoral students

Purpose and Outcome:

This journal club is intended for all PhD students interested in learning about the complex communication between the central nervous system (CNS) and the peripheral immunity.

Course Overview:

It is unclear whether or not changes in the peripheral immune cells are a causal mechanism or consequence of altered neurotransmission in neurodegenerative disorders such as Parkinson's disease (PD). For example, does idiopathic PD start in the periphery, in the brain, or both occur in parallel? Discovery of a link, or lack thereof, between these possibilities would be the first step for the identification of disease mechanism(s). Another less explored research area is brain-gut microbiota axis in stroke, traumatic brain injury (TBI), PD, and addiction. The goal of this course is to discuss key recent and historical findings and the implications for future advances in these research areas. This journal club will provide graduate students with the opportunity to further develop their skills in the reading, interpretation, and communication of current scientific research in the exciting area of CNS-periphery bidirectional neuroimmune communication.

Course Objectives and/or Goals:

Upon successful completion of this course, students will obtain basic knowledge of the anatomical connections, as well as the neural and humoral signaling mechanisms underlying the complex bi-directional communication between the CNS and the peripheral immunity. Students will gain an appreciation and new knowledge of how changes in the periphery could alter the

CNS function and vice versa. Students will be able to better appreciate how different neurological disorders and peripheral disease states could be the result of changes not only in the target organ, but in its interaction with other organs and the immune system.

Instructional Methods:

Students are expected to select an original research article that aligns with the journal club topic. The paper should have been published within the last 2 years in a peer-reviewed journal with an impact factor higher than 5. Each week, instructors will select a student to prepare a PowerPoint presentation for the following week that includes a brief introduction to the paper and the main findings of the study. All the students are expected to read the paper and be ready to explain the results presented in each figure of the article. At the end of the presentation, students and instructors will engage in a discussion of the paper focusing on the significance of the study, as well as the major strengths and weaknesses of the article.

Description of Course Content:

Topical Outline/Course Schedule

This journal club will take place every Friday from 12:00pm-1:00pm during the Fall semester. In the Table below, we have provided the specific dates for each journal club. Specific topics and readings are not provided since we have a dynamic course schedule dependent on the research article that each student selects for discussion.

Course Materials and Technology:

Journal articles published within the last two years. Specific articles are selected by the students. A digital version of the research article in PDF format will be emailed a week in advance to all enrolled students and instructors.

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:

Each student is expected to present at least one paper during the semester and actively participate in the discussion every week. Student presenters will be selected by the instructors.

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