MCB7922 JOURNAL COLLOQUY (1 credit hour)

Theme: Mechanisms in Host/Microbe Interactions: Effector Molecules

Course Description: In this section of MCB7922, primary research papers covering various aspects of the microbiome and their interactions with the host are assigned for reading, analysis, and discussion in a bulletin board-type format.

Prerequisite Knowledge and Skills: Basic microbiology or biology and concurrent enrollment in another graduate-level introduction to microbiology/infectious diseases course. A basic understanding of statistics is expected.

Purpose of Course: The purpose of this course is to guide students on how to read and analyze the primary research literature in microbiology and their interactions with human, animal, and plant hosts.

Student Learning Outcomes – After successful completion of this course, students will be able to:

- Read primary research publications (articles) on microbiomes.
- Understand the methods used in the study.
- Comprehend data presented in figures, tables, and text within research articles.
- Constructively criticize the quality of the presentation of the figures and tables in research articles.
- Determine if experiments have been conducted with appropriate controls.
- Determine if appropriate statistics have been applied and interpreted.
- Determine if the presented data justify research conclusions for specific experiments and the article.
- Participate in discussions about research papers in an informed, thoughtful, and thorough manner.
- Examine the current literature for related papers and discuss those papers.
- Understand the difference between a primary research paper and a review or news piece.

Specific Learning Outcomes of the Section.

- Identify the role of small molecules as effectors in host-microbial interactions.
- Associate host regulatory systems and pathways involved in sensing microbial molecules.
- Associate host pathways directly or indirectly affected the microbial molecules identified.
- Define and understand the potential application of microbial-derived molecules on host health.

INSTRUCTORS: This course will be team-taught.

Claudio F Gonzalez, PhD

Professor Department of Microbiology and Cell Science College of Agricultural and Life Sciences

Graciela L Lorca, PhD

Professor Department of Microbiology and Cell Science College of Agricultural and Life Sciences

WebPage: Canvas (https://ufl.instructure.com/). Please select MCB7922 section CFG.

On line help with classroom technology: http://helpdesk.ufl.edu/

Communication: For questions regarding class and paper assignments, use the Discussion Board; for issues on Home Work Assignments or class organization, first check the syllabus, the announcements, and the calendar on Canvas, then post your questions on the discussion board. For all other issues, contact the instructors through CANVAS email ONLY (choose all teachers option)

VIRTUAL OFFICE HOURS: These are available on demand through Zoom Conferences in Canvas. To request an appointment, email three suggested times, and we will choose one to meet.

Contact Information: Use TEACHER in your emails through Canvas <u>ONLY</u> (personal emails should only be used in case of emergency)

Dr. Claudio F Gonzalez:

Email (the most efficient): ONLY use Canvas e-mail (If you do not have access to the e-learning platform and need to contact me for an emergency, use cfgonzalez@ufl.edu

Phone: 273 8088 (please leave a message).

Dr. Graciela L Lorca:

Email (the most efficient): ONLY use Canvas e-mail (If you do not have access to the e-learning platform and need to contact me for an **emergency**, use glorca@ufl.edu)

Phone: 273 8090 (please leave a message).

- **Discussion Board:** A discussion board is available in Canvas. It is very useful, please post and answer your questions on class content and organization there. Postings and answers are monitored by the instructor to make sure no mistakes get propagated. There are several discussion themes. Please post your questions in the adequate section.

Required Text: There is no assigned text book. Assigned research publications will be posted on the course web page.

Instructional Methods

Material: A research paper is assigned for reading and review by posting the PDF on the course web page. This course is based on peer reviewed papers either available for free through the links provided or through the UF library (ejournals).

Remember to connect to UF through VPN (if outside campus) before accessing the journals (https://connect.ufl.edu/it/wiki/pages/glvpn.aspx).

Assessment of learning

Assignments (100% of the grade).

- Weekly Quiz assignment (70% of the grade). Each week, a quiz with a definite deadline is posted for each paper. The quiz is aimed at enforcing the timely reading of the paper and directing thoughtful analysis of certain aspects of the paper. The quiz has a multiple-choice format and can be taken twice; the highest score will be recorded. The student can see the wrong answers after the initial submission.
- **Finding similar articles** (30% of the grade). Each student should search the scientific databases (https://www.ncbi.nlm.nih.gov/search/) and identify one article like the articles used in this course. This article (1 per student) should be submitted at the end of the semester. The student should write a short paragraph (200 words) justifying the selection of the article submitted. The students should include in this summary a brief description of the molecules mediating the host-microbial interaction and their primary effect on the system.
- IMPORTANT: the articles selected should be PRIMARY RESEARCH ARTICLES (this criterion excludes the use of literature review articles).

Make-Up policy: Make-up assignments will ONLY be allowed with a VALID justification. If one assignment is missed, it will result in a score of 0 (see below for "Excused absences").

Excused absences:

Documentation MUST be provided for absences caused by serious illness, accident, jury duty, or death in the immediate family. You must contact the instructor **as soon as possible** about the missed assignment, and I will arrange an alternative time for the submission.

Requirements for class attendance, make-up assignments, and other work are consistent with university policies, which can be found at https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Grades and Grade Points

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Grading: Straight scale

Grading Scale

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A-	860-899
B+	830-859
В	790-829
B-	750-789
C+	720-749
C	690-719

900 or above

C- 660-689

D+ 630-659 **D** 600-629

D- 570-599

E 560 or below

University of Florida Policies

Grades and Grade Points

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

Services 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 (https://disability.ufl.edu/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.

Campus Helping Resources

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website (https://umatter.ufl.edu/) to refer or report a concern and a team member will reach out to the student in distress.

- Counseling and Wellness Center: Visit the Counseling and Wellness Center website (https://counseling.ufl.edu/) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website (https://shcc.ufl.edu/).
- University Police Department: Visit UF Police Department website (https://police.ufl.edu/) or call 352-392-1111 (or 9-1-1 for emergencies). UF Health Shands 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 32608; Visit the UF Health Emergency Room and Trauma Center website (https://ufhealth.org/emergency-room-trauma-center).
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website (https://gatorwell.ufsa.ufl.edu/) or call 352-273-4450.

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 (https://career.ufl.edu/).
- Library Support: Various ways to receive assistance with respect to using the libraries or finding resources (https://uflib.ufl.edu/).
- Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring (https://teachingcenter.ufl.edu/).
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers (https://writing.ufl.edu/writing-studio/).
- Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information (https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/).
- On-Line Students Complaints: View the Distance Learning Student Complaint Process (https://distance.ufl.edu/state-authorization-status/#student-complaint).

Course Evaluation

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/.

Class demeanor

Opinions held by other students should be respected in the discussion, and conversations that do not contribute to the discussion should be held at a minimum.

Netiquette guide for online courses

It is important to recognize that the online classroom is, in fact, a classroom, and certain behaviors are expected when communicating with both your peers and your instructors. These guidelines for online behavior and interaction are known as netiquette.

http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

Academic Honesty

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 assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. 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 more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

Additional comments regarding academic integrity:

Students are encouraged to discuss material with each other from the course, help each other understand concepts, study together, and even discuss assessment questions with each other once the quiz window is closed. However, the following is considered academic dishonesty, and I expect that no student will ever do any of the following:

- Have another person complete a quiz in this course
- Copy another student's quiz in this course
- Collaborate with anyone during a guiz in this course
- Discuss the questions and answers of a quiz with other students while the quiz window is still open
- Manipulate and/or distribute any materials provided in this course for any purpose (including course lecture slides).

• Use any materials provided by a previous student in the course

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Microsoft Office 365 Software is free for UF students

http://www.it.ufl.edu/gatorcloud/free-office-365-downloads/

Other free software is available at:

http://www.software.ufl.edu/

To check for availability of the media and technical requirements, contact the UF Computing Help Desk at (352)392-HELP(4357).

University of Florida Complaints Policy and Student Complaint Process

Most problems, questions, and concerns about the course will be resolved by professionally communicating with the instructors.

The University of Florida strongly believes in students' ability to express concerns regarding their experiences at the University. The University encourages students who wish to file a written complaint to submit it directly to the department that manages that policy.

If a problem really cannot be resolved by communicating with the instructor or the TAs you can contact

- Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.
- Online Course: http://www.distance.ufl.edu/student-complaint-process.

This said professionalism is a two-way street. Unprofessional behavior by students includes, among other things, lack of communication, blaming other people or external factors, lying, affecting others negatively in a group or in the class, not accepting criticism, and not being proactive in solving problems or seeking help. Furthermore, faculty often have family and other obligations to tend to. Over the weekend, replies to your inquiries or questions may be delayed. If a student repeatedly lacks professionalism, the instructor can file a formal complaint against the student through the Dean of Students's office.