IBMS 7010-5III Microbiology, Immunology & Molecular Genetics (MIMG) Journal Club Spring 2018

Course co-directors: Michael T. Berton (berton@uthscsa.edu)

Xiao-Dong Li (lix8@uthscsa.edu)

Journal club directors:

Main (on-campus) journal club

MIMG Michael T. Berton (berton@uthscsa.edu)

Xiao-Dong Li (lix8@uthscsa.edu)

Venue, day and time: Main Campus, Monday @ 4:00 PM, room 444B.

Off-campus journal clubs

Virology Anthony Griffiths, Ph.D. (agriffiths@TxBiomed.org)

Venue, day and time: TBRI, Wednesday @ 12:00 PM, room (see schedule below)

Tumor Immunology Tyler Curiel, M.D., M.P.H. (<u>curielt@uthscsa.edu</u>)

Venue, day and time: STRF, Tuesday @ 9:00 AM, room 300.03.

READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

This course involves presentation and discussion of current literature in the fields of immunology and microbiology. This course will be a continuous requirement beginning the fall semester of the second year until the preceding semester of the dissertation or thesis defense.

Prerequisites: None

Semester credit hours: 1

Course objectives:

By the end of this course, each student should:

- gain a better understanding of the most recent high-impact discoveries in immunology and microbiology through an in-depth analysis of the current literature
- be able to facilitate discussion and scientific interaction among all participating members of the journal club class.
- demonstrate improved presentation, scientific discussion and critical analysis skills.

COURSE ORGANIZATION

Schedule

See class schedules on last three pages of syllabus

Attendance and Participation

All students are required and expected to attend a number of journal clubs equivalent to at least 85% of the total number of MIMG journal clubs held each semester (e.g. 11 out of a total of 13 fall semester journal clubs). At least 50% of attendances must include the MIMG journal club. Students can choose to fulfill the remaining required attendances by attending the off-main campus COGS-approved journal clubs (*Virology* at the TBRI and/or *Tumor Immunology* at the STRF). Students at off-main campus sites such as TBRI and STRF may attend the MIMG journal club via video conferencing, but attendance must be verified with Dr. Berton or Dr. Li.

With the exception of 15% unexcused absences per semester (eg: 2 absences out of a total number of 13 fall journal clubs), all students are required and expected to attend and participate actively in journal club. Requests for additional absences should be made as far in advance as possible and will be considered on a case-by-case basis (please contact Dr. Berton, berton@uthscsa.edu). Please note that time to perform lab work or study for exams is not considered an acceptable excuse for failure to attend journal club. A sign-in sheet will be used to monitor attendance for all students. Please remember to sign-in when you arrive. Faculty, postdoctoral fellows and other trainees, including those from outside the III Discipline (particularly those in clinical departments) are also strongly encouraged to attend and participate in journal club.

<u>Attendance</u> at off-campus journal clubs that involve presentation of the same paper, which is presented at the main campus journal club will not count towards course credit.

<u>Presentations</u> of papers at off-campus journal clubs which are the same as those presented at the main campus journal club will not count towards course credit.

Course Requirements:

Oral Presentations: All students must present a paper in <u>at least two journal club meetings per academic year.</u> At least one of those presentations must be held at the main MIMG journal club. The other presentation can be held at an off-campus COGS-approved journal club (*Virology* and/or *Tumor Immunology*), if desired, and count towards the course requirements.

In addition, students will be required to serve as a discussion facilitator at least twice per academic year (see details below) and provide 2 written critiques per academic year (see details below). Everyone must read the paper prior to journal club and be prepared for discussion. <u>All students are expected to actively participate in journal club discussions</u>.

Students should select recent (2016-2017) papers in high-quality and high-impact journals. The paper topic must also be consistent with general themes in the immunology and microbiology fields (see below). Students should not choose a paper on a topic directly related to their own work. At least 8 days prior to the presentation date (and preferably earlier), each student must submit a PDF copy of their paper to both Dr. Li (lix8@uthscsa.edu) and Dr. Berton (berton@uthscsa.edu) for approval. Following approval, the student must forward a copy of the paper to the assigned facilitator as well as to Jane Wilson (WilsonJ4@uthscsa.edu) for distribution to student and faculty members of the *III Discipline*.

When preparing for presentations, the presenters are encouraged to consult with their supervisors, the journal club course co-directors or others for difficult issues related to either the techniques used or scientific concepts indicated in the papers if these issues are too difficult to be solved by the presenters themselves. A well-prepared presentation will enable a more productive discussion at the meeting.

When delivering journal club presentations, students should introduce the topic and give sufficient background so that the audience can grasp the problem and the significance of the study. The background review should lead to the overall hypotheses of the papers. The presenters are also expected to be able to explain all techniques/methods/materials used in the papers. For each data figure/table, the presenters should state (a) why the experiment was performed (e.g. what question is being addressed or tested by the particular experiment), (b) how the experiment was performed (e.g. what method was used), (c) what was the result of the experiment and provide a description of the figure/table, and (d) what conclusion was drawn from the results. The presenters should then state their own views on the experiment by identifying potential problems and offering alternative interpretations of the data. After analyzing individual experiments, the presenters should be able to sum up the overall study in a logical fashion, discuss the results in the context of the big picture, offer alternative interpretations of the data, as well as point out potential future directions. Importantly, presentations and discussions should not only include a description of results but also a critical analysis of the paper: Are there flaws in the authors' hypothesis, data and/or conclusions? Is the data of sufficient quality to be convincing? Does the data presented support the claims of the authors? Are the conclusions justified? What is the significance of the findings and do these findings warrant publication in a high-impact journal?

Students wishing to change the date on which they are assigned to present a paper or facilitate a discussion must arrange to swap dates with another student. Once both students agree on the change of date an email should be sent to Dr. Berton (berton@uthscsa.edu) for final approval and cc'd to both students as well as to Jane Wilson (WilsonJ4@uthscsa.edu). Requests for date changes should be made as far in advance as possible.

Appropriate paper topics for this course include, but are not limited to:

Autoimmunity.

Innate immunity.

Inflammation.

Infection immunity.

Immunoregulation.

Immune effector mechanisms.

Immunopathology.

Cancer immunobiology.

Immune signaling mechanisms.

Pathogenesis of viruses, bacteria, fungi or parasites.

Mechanisms of microbial pathogenesis (eg: secretion systems, adhesion mechanisms, etc.).

Mechanisms of viral pathogenesis.

Novel virulence factors.

Host-pathogen interactions.

Innate mechanisms by which hosts detect and eliminate pathogens.

Facilitation: All students must serve as discussion facilitator for <u>at least two journal club meetings per academic year</u>. At least one of those discussion facilitations must be held at the MIMG journal club. The other discussion facilitation can be held at an off-campus COGS-approved journal club (*Virology* and/or *Tumor Immunology*), if desired, and count towards the course requirements. The role of the facilitator is to initiate and moderate discussion of the paper being presented with the goal of achieving a high level of participation by those attending the journal club.

Student Critiques: Drs. Berton and Li will assign three students to provide written constructive critiques of each oral presentation. These assigned reviewers will not be known to the presenter or to other students to

insure objectivity. The students will email their critiques to the course directors at the end of the journal club session. The critiques will be graded and form part of the overall grade for each student. The critiques will also be shared with the oral presenters by the course directors.

Grading Procedures

Drs. Berton and Li will base grading each semester on (i) attendance, (ii) the quality of journal club presentations, (iii) the quality of facilitation, and (iv) the quality of student participation and written critiques of each presentation. Grading of the presentation will be focused mostly on the effort and organization of the presentation, not the speaking ability of the presenter.

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

Information regarding accommodations for disabilities is available in the UTHSCSA Catalog. A student who wishes to request accommodation for a disability should contact the Associate Dean for Students, Graduate School of Biomedical Sciences. The Student Request for Accommodations under Americans with Disabilities Act form and additional information may be obtained at http://www.uthscsa.edu/eeo/request.html.

SCIENTIFIC INTEGRITY / PROFESSIONAL CONDUCT:

The expectation is that all students will exhibit the highest standards of scholastic and scientific integrity as elaborated on page 99 of the current UTHSCSA Student Catalog. Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating on exams, plagiarism, tampering with reference materials or files, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person (e.g. copying material from the web without proper attribution), and any act designed to give unfair advantage to a student or the attempt to commit such an act. Failure to abide by these rules of professional conduct will result in a grade of zero for the exam in question and, depending on the nature of the infraction, the consequences may include dismissal from the program.

If you suspect another student of professional misconduct, please bring your suspicions directly to the Course Director. Confidentiality will be maintained at every level during any ongoing investigation of suspected academic or scientific misconduct.

EMAIL POLICY

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student's University e-mail address are considered official business. Therefore, <u>students are expected to check their university e-mail inboxes on a regular basis</u> so that any announcements, instructions, or information regarding this course will be received in a timely manner. Missed communications due to inadequate monitoring of incoming emails on the University's email server will never be a valid excuse for unsatisfactory academic progress.

USE OF RECORDING DEVICES

Recording of lectures and other learning activities in this course by any means (e.g., video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

ELECTRONIC DEVICES

Cell phones must be silenced during all class meetings and exams. Computers and electronic tablets are allowed only for participating in classroom activities (e.g., viewing slides presented in lecture or conference materials). Texting, tweeting, emailing, web-surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is NOT permitted.

SCHEDULES

SPRING SEMESTER

IBMS 7010-5III MICROBIOLOGY, IMMUNOLOGY & MOLECULAR GENETICS JOURNAL CLUB Mondays, 4:00-5:00 PM, Room 444B

Date	Presenter	Facilitator
1/15/18	HOLIDAY	HOLIDAY
1/22/18	Samson Adeniji	Manpreet Semwal
1/29/18	Ivan Albino-Flores	Carlos Rivera
2/5/18	Daniel Chupp	Siqi Gong
2/12/18	Helia Sanchez	John Koprivsek
2/19/18	Jake Gonzales	Alisha Garcia
2/26/18	Meghan Guzman	Justin Moroney
3/5/18	Allison Hester	Erika Demel
3/12/18	SPRING BREAK	SPRING BREAK
3/19/18	Sergio Cepeda	Rebecca Lane
3/26/18	Rebecca Lane	Sergio Cepeda
4/2/18	Erika Demel	Allison Hester
4/9/18	Justin Moroney	Meghan Guzman
4/16/18	Alisha Garcia	Jake Gonzales
4/23/18	John Koprivsek	Helia Sanchez
4/30/18	Siqi Gong	Daniel Chupp
5/7/18	Carlos Rivera	Ivan Albino-Flores
5/14/18	Manpreet Semwal	Samson Adeniji
5/21/18	Shruti Mishra	Veronica Obregon- Perko
5/28/18	HOLIDAY	HOLIDAY
6/4/18	Hamad Alanazi	Shruti Mishra
6/11/18	OPEN	