## Syllabus: MICB 542: Animal Virology: Special Topics on Infectious Diseases and Immunological Abnormalities (Spring 2019)

# Unit: 2

**Course Sessions: Wednesdays**

**Time: 9:00 am – 10:50 am**

**Location of Lectures: McKibben Addition (MCA) 149**

**Location of Exams: McKibben Addition (MCA) 149**

**First Day of Classes: January 9, 2019**

**Course Director: Jie Li, PhD (****jieli@usc.edu****)**

 **Clinical Assistant Professor**

 **Department of Molecular Microbiology and Immunology**

 **Office: HMR 401**

**Course Description:**

The main purpose of this course is to provide an in-depth examination of different aspects of diseases that are caused by the infectious pathogens and immune system defects. Some common diseases, as well as the emerging and re-emerging diseases will be discussed. Some interesting research and novel research methods will be introduced. While INTD522 introduces the students the general principles of infection and host defenses, our goal for this course is to focus on some examples and topics, so that the students understand some specific aspects of the dynamics between the microbes and animal hosts.

**Course Goals:**

While INTD522 introduces the students the general principles of infection and host defenses, our goal for this course is to focus on some examples and specific topics, so that the students understand some important aspects of the dynamics between the microbes and the animal hosts.

**Course Correspondence:**

All correspondence between instructors and the students will be made via email. All necessary information for the course is posted to Blackboard. Students are expected to regularly check the Blackboard contents. The Blackboard website may be entered at <https://blackboard.usc.edu/webapps/login/>.

**Course Recording Policy:**

As per USC policies, recording of lecture material requires the express permission of the instructor and announcement to the class, and can only be used for individual or group study.

**Resources:**

Textbooks are on reserve in the library. There are also copies for sale in the bookstore. Some textbooks provide online resources for students who have purchased the books. Also, take advantage of the website <http://blackboard.usc.edu>, and check frequently.

**Contacts:**

Anytime during the course, feel free to contact me if you have any questions, or the lecturers if the questions are directly related to the lecture contents. If there is a need to discuss anything in person, we can make an appointment via email.

**Recommended Textbooks:**

Murphy,K. and Weaver C. **2017** *Janeway’s Immunobiology* 9th ed., Garland Science: ISBN 978-0-8153-4505-3.

E-books are also available.

Abbas,A.K., Lichtman,A.H. and Shiv Pillai. **2015**. *Cellular and Molecular Immunology* 8th ed., W.B.Saunders: ISBN 978-0-323-22275-4

Knipe,D.M, Howley,P.M., Cohen,J.I., Griffin,D.E., Lamb,R.A., Malcom,M.A., Racaniello,V.R. and Roizman,B. **2013** *Field’s Virology* 6th ed., Lippincott, Williams & Wilkins: ISBN 978-1-4511-0563-6

<http://www.usc.edu/e_resources/hsl/gateways/7904.php>

Flint,S.J., Enquist,L.W., Racaniello,V.R. and Skalka,A.M. **2015**. *Principles of Virology* 4th ed., American Society for Microbiology Press:ISBN 978-1-55581-951-4

**Grading:**

Final grade= 40% term paper + 30% term paper presentation + 30% classroom participation + extra 10% research paper analysis

**Lecture Schedule:**

###### **Wed 9-11 a.m. Title Lecturer**

January 9 Course Orientation Li

January 16 Tumor Stem Cells Machida

January 23 System Biology in Health Sciences Lee

January 30 Humanizing Mice in Infectious

 Diseases and Cancer Yuan

February 6 Bioinformatics in Medical Research Lee

February 13 Deficiencies in Innate and Acquired Immunity Whelan

February 20 TBA

February 27 Autophagy and Its Role in Viral Infections Liang

March 6 Tuberculosis and Metabolomics Eoh

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March 13 Spring Break

March 20 Introduction to BSL3 Pathogens Huang

March 27 Emerging Viruses in Respiratory Infections Li

April 3 Student presentation

April 10 Student presentation

April 17 Student presentation

April 24 Student presentation

May 1 Student presentation & Final Exam (Term paper Due)

**USC Code of Honor:**

https://blackboard.usc.edu/webapps/portal/frameset.jsp?tab\_tab\_group\_id=\_2\_1&url=%2Fwebapps%2Fblackboard%2Fexecute%2Flauncher%3Ftype%3DCourse%26id%3D\_130194\_1%26url%3D

**E-MAIL CONTACTS FOR LECTURERS**

***Lecturer Email Address***

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## Statement on Academic Conduct and Support Systems

Academic Conduct
Plagiarism - presenting someone else's ideas as your own, either verbatim or recast in your own words - is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* [https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions](https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/). Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* http://equity.usc.edu/ or to the *Department of Public Safety* <http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us>. This is important for the safety of the whole USC community. Another member of the university community - such as a friend, classmate, advisor, or faculty member - can help initiate the report, or can initiate the report on behalf of another person. *The Center for Women and Men* <http://www.usc.edu/student-affairs/cwm> provides 24/7 confidential support, and the sexual assault resource center webpage <http://sarc.usc.edu/> describes reporting options and other resources.

Support Systems
A number of USC's schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* <http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html> provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* <http://emergency.usc.edu> will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.