

University of Montana

## ScholarWorks at University of Montana

---

University of Montana Course Syllabi

Open Educational Resources (OER)

---

Fall 9-1-2020

### BCH 561.B01: RNA Structure and Function

J. Lodmell

*University of Montana, Missoula*, [stephen.lodmell@umontana.edu](mailto:stephen.lodmell@umontana.edu)

Jean-Marc Lanchy

*University of Montana, Missoula*, [jean-mark.lanchy@umontana.edu](mailto:jean-mark.lanchy@umontana.edu)

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Lodmell, J. and Lanchy, Jean-Marc, "BCH 561.B01: RNA Structure and Function" (2020). *University of Montana Course Syllabi*. 11208.

<https://scholarworks.umt.edu/syllabi/11208>

This Syllabus is brought to you for free and open access by the Open Educational Resources (OER) at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana Course Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

# BCH561– Spring 2020

## *RNA Structure and Function*

Special Topic for the semester is:

*Splicing factors, RNA-protein interactions, and protein-protein interactions*

### **Syllabus**

Instructor: Drs. Stephen Lodmell and Jean-Marc Lanchy

Office: CHCB202, Phone: 243-6393, 243-5720

**Meeting time:** Tuesday 3pm

**Meeting place:** CHCB 230

This class is designed to give students an opportunity to present both primary research and research materials from the current literature concerning the structure, function, and biochemistry of RNAs as they exert regulatory roles in the cell. These RNAs may be small RNAs or motifs of larger RNAs. Specific topics this semester will include, but are not limited to, the mechanisms used by viruses to subvert the host cell innate immune response at the transcriptional and RNA processing levels, and Mass Spectrometric and yeast two-hybrid approaches to elucidating RNA-protein and protein-protein interactions.

### **Learning Outcomes**

Upon completion of this class, the student will have:

1. Gained experience in reading current primary biomedical/ biochemical scientific literature pertaining to the special topic described for the semester.
2. Gained a deeper understanding of the details of the state of the current research on the special topic.
3. Gained experience in preparing and presenting scientific data to an audience with a high degree of prior knowledge in the area of study.

The format of the class is as follows: Each hour class period will be devoted to an individual presentation with group discussion of either original research or a review of a paper from the current literature. Each student will present twice during the semester.

When a student is presenting his/her original research, we will discuss results, problems, interpretations, and future directions of this research in an open forum format. Broad student participation in these discussions is essential.

When the presentation is centered on a current research article, the student will provide each member of the class with a copy of the paper he/she will present several days in advance so that all class members will be familiar with the material for the presentation. The presentation is designed to be a critique of the paper, and the presenter should offer his/her view about experimental design, results, and interpretations. Papers may be on any topic, as long as it is related to RNA, retroviruses, or translation.

#### Grading/assessment:

This is a one-credit course. Grading is on a Credit/ No credit basis. Students will be evaluated on the quality of his/her presentations as well as participation in discussions during class. Students are expected to have prepared for the class by reading the chosen literature article(s) prior to class time to promote informed discussion on the research at hand. Consistent failure to adequately prepare for presentations or discussions will result in a grade of NC.

#### Accessibility, disabilities, and special accommodations:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommasson 154. I will work with you and DSS to provide an appropriate accommodation.

## Presentation schedule BCH561 Fall 2020

Meetings are 3-4pm in room CHCB 230

	<u>Presenter</u>	<u>snacks</u>
Aug 25: organization	Steve	
Sept. 1:	Miyuki	Steve
Sept. 8:	Luke	Miyuki
Sept. 15:	Tom	Luke
Sept. 22:	Hunter	Tom
Sept. 29:	Jean-Marc	Hunter
Oct. 6:	Miyuki	Jean-Marc
Oct. 13:	Luke	Miyuki
Oct. 20: No mtg. (NIH Study Section)		
Oct. 27:	Steve	Luke
Nov. 3: No meeting- Election Day		
Nov. 10:	Tom	Steve
Nov. 17:	Hunter	Tom
Nov. 24: (Finals week)		