

## **Biology9500B: Seminar in Genetics, Genomics, Molecular Cell Biology and Development.**

### **Specific Topic: Small RNAs**

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Office hours: by appointment

This course focuses on current topics in the area of small RNAs. It will allow us to investigate these cool group of molecules and their potential function. The topic will span organism and as it has been shown that these RNAs are quite prevalent will give us a better understanding of their diversity in roles. Participants in this course will have the opportunity to hone their abilities in scientific writing and preparation of oral presentations. For the first presentation I will prepare a list of potential topics, the second presentation will allow you to choose one of these molecules to study them in more detail. So overall, the exact content covered will depend a lot on the students taking the class. However, you will have to work on a topic which is OUTSIDE of your thesis work and the work performed in your laboratory in the hope this will broaden your scope and allow you to look at something new and intriguing.

For this course you have to prepare two talks and two essays. There will be also a peer evaluation component and a participation mark.

For the first talk and essay choose I will provide a list of topics each centering on one type of small RNA. It is your objective to provide a review of this class and to report what is unique, if they have common features with other small RNAs, what kind of mechanisms and functions they might be involved. Anything you can discover!

For the second talk and essay, you can choose one small RNA. This time the topic should be more focused on a specific example and dig deeper. However, it should not just cover a single research paper. The second topic can overlap with the topic of your first presentation but it does not have to. In other words you can pick a small RNA from a different class. When discussing the small RNA you should explain its unique or common features, how prevalent the distribution of such RNAs is among organisms, what is functionall known about it. The topic you choose you will have to be discussed with me to ensure class diversity in topics and appropriate choices.

For each presentation, please submit by E-mail a relevant (=key) publication (PDF file preferred) to all members of the class one week prior to your talk.

#### **Talks**

20 min plus 10 min of discussion

note: talks will be timed and will be LIMITED to the time provided.

## Essays

first essay: a maximum of 4 pages

second essay: a maximum of 2 pages

Page counts refer to text only. Bibliography and up to 5 figures with appropriate figure legends can be used in addition. Figures have to be provided on separate pages. Figure legends can be collated and have to be given on a separate page. All text has to be in 12p Times New Roman, with an 1 inch margin all around. References have to be formatted according to the guidelines of "BMC Biology". The essays have to be submitted in printed form and in several copies (number of students in class plus one). They will be redistributed to all class participants and everyone will have 1 week to read and mark them. Sheets for comments will be provided.

## MARKING SCHEME

Student component 5 % for each talk

5 % for each essay

Faculty component 30% for the first submission (15% each for talk and essay)

40% for the second submission (20% each for talk and essay)

10% for participation

This class has a peer component – as a participant you will have to mark all the other talks and essays. Rubrics will be provided. Dates for talks and deadlines for all the submissions will be provided as soon as possible. Class time and location will depend on the availability of participants. This is an in person class.

## Plagiarism

*Plagiarism: Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar and website listed below).*

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