

TIGP-Bio 2024 Spring Syllabus & Guidelines

Student Presentation

Latest syllabus: <https://idv.sinica.edu.tw/tigpbio/>

Place: Online (Skype): <https://join.skype.com/ycvKdxnlMeku>

Time: Thursday, 15:30-17:00

Chair: Dr. Chen-Ching Lin (chenching.lin@nycu.edu.tw)

*Effective from the 2014 Fall semester, all TIGP-BP students are required to present once a semester in student presentation.

*First Year Students: the paper should be assigned by your lab professor.

*The following schedule is confirmed and will not be changed. Please contact Dr. Chen-Ching Lin if you do have difficulty with the assigned date.

*The presenter shall introduce the host and attended professors at the beginning of each seminar.

Week	Date	Topic	Student
1	2024/2/22	No Class	--
2	2024/2/29	No Class	--
3	2024/3/7	Inferring single-cell gene regulatory network by non-redundant mutual information	Ping-Yun Ou 歐秉昀
4	2024/3/14	Assembly theory explains and quantifies selection and evolution	Daniel Garcia-Ruiz 加西亞丹尼爾
5	2024/3/21	Biology-aware mutation-based deep learning for outcome prediction of cancer immunotherapy with immune checkpoint inhibitors	Chien-Jung Huang 黃千容
6	2024/3/28	VEGA is an interpretable generative model for inferring biological network activity in single-cell transcriptomics	Shang-Kok Ng 黃襄國
7	2024/4/4	National Holiday & Review Week (no class)	--
8	2024/4/11	Midterm Exam (no class)	--
9	2024/4/18	A statistical method for image-mediated association studies discovers genes and pathways associated with four brain disorders	Cai-Sian Liao 廖才嫻
10	2024/4/25	--	--
11	2024/5/2	--	--
12	2024/5/9	--	--
13	2024/5/16	--	--
14	2024/5/23	--	--
15	2024/5/30	Review Week (no class)	--
16	2024/6/6	Final Exam (no class)	--

< Seminar presentation guidelines on the following pages >

Seminar presentation guidelines for Ph.D. program students:

2023-01-18

This research seminar course is intended to provide students planning a research career in Bioinformatics with the opportunity to develop the skill of critically reading and evaluating research papers. The course consists of a weekly timetabled session in which students will read, present and discuss research papers published on high impact journals. A fixed threshold of impact factors is not imposed. Use your common sense instead.

Guidelines:

1. **Research article:** Each week, students will choose RESEARCH papers to be presented. The paper (+ supplements) pdf file should be emailed to chenching.lin@nycu.edu.tw (Dr. Chen- Ching Lin), tigpbio@gate.sinica.edu.tw (TIGP-Bioinformatics Program), all students in student presentation class, and also other participating professors **at least one week before** your in-class seminar presentation takes place. Any delay will result in 10 points deducted from your final grade. Please also send the slides to everyone **2 days before** the report. Because some modifications may be made right before the report, it is okay if the slides are not the final version.
1. **Article selection:** You are required to select a recent RESEARCH article that was published after September 2020. (Review articles are NOT acceptable.)
2. **Presentations:** Everyone in the class will present one paper. You should plan to talk for around 40 minutes. Starting from this you should initiate a discussion of the paper (so it is a good idea to conclude your slide presentation with a selection of points to consider and discuss). We should plan to have time for a lively discussion of each paper; your job in giving a presentation is to initiate this discussion. Make sure to
 - a. Draw **valid** conclusions from results of your presented paper.
 - b. **Summarize evidence for each conclusion**. (How does the paper support its conclusions?)
 - c. **Compare the results with other similar experiments published previously, if appropriate.**
 - Please refrain from presenting an article written by your supervisor or your friends/classmates. You need to increase the exposure to the breadth and depth of bioinformatics research.
 - Students are encouraged to prepare a few questions for group discussion at the end of the

presentation. Students are not expected to simply sit in the class.

- Please make a rehearsed presentation if you don't know how long your presentation is going to last. An over-length presentation doesn't translate to a good one.

3. **Language of presentation:** You are required to present your research article **in English**.

Evaluation Criteria:

You will be evaluated by the following criteria:

1. Your seminar presentation (70%).
2. Your participation of discussion (30%).

Note: you must participate the discussion, e.g., at least asking one question in each presentation, to obtain this 30% of your final grade. If you don't ask question in any class, this grade will be zero.