TIGP Bioinformatics Program
Student Presentation
Fall 2024 Syllabus & Guidelines

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 Fall 2014 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	2024/9/5	No Class	--
2	2024/9/12	No Class	--
3	2024/9/19	Multi-PGS enhances polygenic prediction by combining 937 polygenic scores	Cai-Sian Liao 廖才嫺
4	2024/9/26	Automated classification of giant virus genomes using a random forest model built on trademark protein families	Hsin-Ying Chang 張心盈
5	2024/10/3	Rescheduled to 10/31 due to the impact of Typhoon Krathon	--
6	2024/10/10	Holiday—Double Tenth Day (no class)	--
7	2024/10/17	Review Week (no class)	--
8	2024/10/24	Midterm Exam (no class)	--
9	2024/10/31	Rescheduled to 11/7 due to the impact of Typhoon Kong-rey	--
10	2024/11/7	Spatial transcriptomics defines injury specific microenvironments and cellular interactions in kidney regeneration and disease	Hsuan-Ya Chiu 邱暄雅
11	2024/11/14	Obesity Prediction with EHR Data: A Deep Learning Approach with Interpretable Elements	Apriandy Angdresey 林明智
12	2024/11/21	Distinct Classes of Complex Structural Variation Uncovered across Thousands of Cancer Genome Graphs	Ru-Yin Jian 簡茹因
13	2024/11/28		
14	2024/12/5		
15	2024/12/12	Review Week (no class)	--
16	2024/12/19	Final Exam (no class)	--

< Seminar presentation guidelines on the following pages >

2023-01-18

This <u>research</u> seminar course is intended to provide students planning a research career in Bioinformatics with the opportunity to develop the skill of <u>critically reading and</u> <u>evaluating research papers</u>. 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**: <u>Each week, students</u> 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 <u>after</u> 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 <u>have time for a lively discussion of each paper; your job in giving a presentation is to initiate this discussion</u>. 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. **<u>Language of presentation</u>**: 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.