

TIGP Bioinformatics Program
Student Presentation
Spring 2025 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 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	2025/2/20	BANKSY unifies cell typing and tissue domain segmentation for scalable spatial omics data analysis	Hsuan-Ya Chiu 邱暄雅 (NYCU)
2	2025/2/27	Eye-brain connections revealed by multimodal retinal and brain imaging genetics	Cai-Sian Liao 廖才嫻
3	2025/3/6	Opportunistic detection of type 2 diabetes using deep learning from frontal chest radiographs	Apriandy Angdresey 林明智
4	2025/3/13	Spatial Architecture of Myeloid and T Cells Orchestrates Immune Evasion and Clinical Outcome in Lung Cancer	Hsu-Ching Huang 黃煦晴 (NYCU)
5	2025/3/20	Structurally divergent and recurrently mutated regions of primate genomes	Ru-Yin Jian 簡茹茵
6	2025/3/27	Prediction of virus-host associations using protein language models and multiple instance learning	Hsin-Ying Chang 張心盈
7	2025/4/3	Makeup Holiday for Children's Day (no class)	--
8	2025/4/10	Midterm Exam Week (no class)	--
9	2025/4/17	A deep-learning framework to predict cancer treatment response from histopathology images through imputed transcriptomics	Chien-Jung Huang 黃千容 (NYCU)
10	2025/4/24	--	--
11	2025/5/1	--	--
12	2025/5/8	--	--
13	2025/5/15	--	--
14	2025/5/22	--	--
15	2025/5/29	Review Week (no class)	--
16	2025/6/5	Final Exam Week (no class)	--

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.