

# TIGP-BIO 2023 Fall 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](mailto: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	2023/9/7	No class	
2	2023/9/14	<a href="#">Hypergraph factorization for multi-tissue gene expression imputation</a>	Shang-Kok Ng 黃襄國
3	2023/9/21	<a href="#">Genomic and transcriptomic analysis of checkpoint blockade response in advanced non-small cell lung cancer</a>	Chien-Jung Huang 黃千容
4	2023/9/28	Teachers' Day (NYCU--working day but no class)	
5	2023/10/5	<a href="#">Deep learning based phenotyping of medical images improves power for gene discovery of complex disease</a>	Cai-Sian Liao 廖才嫻
6	2023/10/12	<a href="#">Accurate proteome-wide missense variant effect prediction with AlphaMissense</a>	Daniel Garcia-Ruiz 加西亞丹尼爾
7	2023/10/19	Review Week (no class)	--
8	2023/10/26	Midterm Exam (no class)	--
9	2023/11/2	<a href="#">Sybil: A Validated Deep Learning Model to Predict Future Lung Cancer Risk From a Single Low-Dose Chest Computed Tomography</a>	Hsu-Ching Huang 黃煦晴
10	2023/11/9	<a href="#">Analysis of the microglia transcriptome across the human lifespan using single cell RNA sequencing</a>	Ping-Yun Ou 歐秉昀
11	2023/11/16	<a href="#">Disease-associated astrocytes in Alzheimer's disease and aging</a>	Yin-Cheng Chen 陳胤丞
12	2023/11/23	--	--
13	2023/11/30	--	--
14	2023/12/7	--	--
15	2023/12/14	Review Week (no class)	--
16	2023/12/21	Final Exam (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](mailto:chenching.lin@nycu.edu.tw) (Dr. Chen- Ching Lin), [tigpbio@gate.sinica.edu.tw](mailto: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.