

TIGP Bio 2022 Spring Syllabus & Guidelines

Student Presentation

For the latest syllabus, please visit the BP website: <https://tigpbp.iis.sinica.edu.tw>

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

Time: Thursday, 15:30-17:00

Chair: Dr. Chuan-Hsiung Chang (cchang@ym.edu.tw), Dr. Chen-Ching Lin (chaoslin@ym.edu.tw)

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

*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. Chuan-Hsiung Chang and Dr. Chen-Ching Lin if you do have a difficulty on the assigned date.

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

Week	Date	Topic	Student
1	2022/02/17	Mitonuclear incompatibility as a hidden driver behind the genome ancestry of African admixed cattle	Hsin-Han Lee 李昕翰
2	2022/02/24	Gut microbiota composition is associated with SARS-CoV-2 vaccine immunogenicity and adverse events	Shu-Chuan Chen 陳淑娟(NYCU)
3	2022/03/03	Genomic impact of stress-induced transposable element mobility in Arabidopsis	Tzu-Hsiang Lin 林子翔
4	2022/03/10	Population-scale single-cell RNA-seq profiling across dopaminergic neuron differentiation	Hao-Jen Deng 鄧皓仁
5	2022/03/17	Lifestyle, cardiometabolic disease, and multimorbidity in a prospective Chinese study	Yu-Ching Hsu 徐于晴
6	2022/03/24	Transcriptome analysis discloses dysregulated genes in normal appearing tumor-adjacent thyroid tissues from patients with papillary thyroid carcinoma	Aishwarya Tiwari 艾希雅
7	2022/03/31	Review Week (no class)	--
8	2022/04/07	Midterm Exam (no class)	--
9	2022/04/14	Single-cell analysis of the cellular heterogeneity and interactions in the injured mouse spinal cord	Po-Yuan Chen 陳柏元
10	2022/04/21	The concurrence of DNA methylation and demethylation is associated with transcription regulation	Yu-Chun Huang 黃郁琿
11	2022/04/28	Intratumoral plasma cells predict outcomes to PD-L1 blockade in non-small cell lung cancer	Rodrigo Espinoza Silva 羅德
12	2022/05/05	Overcoming biases in causal inference of molecular interactions	Jia-Ying Su 蘇家瑩
13	2022/05/12	FAT-Net: Feature adaptive transformers for automated skin lesion segmentation	Chi-Tang Wang 王啓唐(NYCU)
14	2022/05/19	Escherichia coli Data-Driven Strain Design Using Aggregated Adaptive Laboratory Evolution Mutational Data	David Nicola Streuli 施大衛

15	2022/05/26	Review Week (no class)	--
16	2022/06/02	Final Exam (no class)	--

< Seminar presentation guidelines on the following pages >

Seminar presentation guidelines for PhD program students:

2021-08-26

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 cchang@ym.edu.tw (Dr. Chuan-Hsiung Chang), ChaosLin@ym.edu.tw (Dr. Chen- Ching Lin), tigpbio@gate.sinica.edu.tw (TIGP_Bio), 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 modification may be made right before the report, it is okay if the slides are not the final version.
2. **Article selection:** You are required to select a recent RESEARCH article that was published after September 2020. (Review articles are NOT acceptable.)
3. **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.

4. **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 attendance (10%).
2. Your seminar presentation (70%).
3. Your participation of discussion (20%).