

TIGP Bioinformatics Program

Seminar

Fall 2025 Syllabus

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

Seminar Announcement: <https://www.stat.sinica.edu.tw/cht/index.php?>

Place: Room 308, Institute of Statistical Science, Academia Sinica.

Time: Thursday 14:00-15:20

Chair: Academia Sinica: Dr. Chung-Yen Lin (Informatics), Dr. Chien-Ling Lin (Biology), Dr. Wei-chung Liu (Statistics)

Remarks:

1. Attend 2 non-BP Seminars (on or off campus) conducted in English within the current semester.

*The deadline for the report is **December 25th, 2025**.

2. Write 2 seminar reports (1-page A4, 12pt font, single-spaced). Template: https://idv.sinica.edu.tw/tigpbio/resources/Seminar_Student%20Report.pdf

3. Send the reports to your advisor/lab professor for grading and signature.

4. Submit the graded and signed reports (PDF file) to the BP office before December 25th.

Grades: Attendance 100% (2 non-BP seminar reports included)

Week	Date	Topics/Brief Description	Speaker's Affiliation	Speaker	Abstract	Student Host
1	2025/9/4	Unlocking the Mystery of Mysteries: Avian Speciation through the Lens of Genomics	Department of Life Science, National Taiwan Normal University	Prof. Shou-Hsien Li	🔗	Apriandy Angdresey
2	2025/9/11	From microalgae to giant viruses: genomics and biology of key players in carbon cycling	Institute of Plant and Microbial Biology, Academia Sinica	Dr. Chuan Ku	🔗	Kiran Kumar Eripogu & Hsin-Ying Chang (1)
3	2025/9/18	DualLoc: Advancing Multi-Compartment Protein Localization with Dual PLMs	Department of Computer Science and Engineering, National Taiwan Ocean University	Prof. Kuan Y. Chang	🔗	Ching-Ya Lin (1)
4	2025/9/25	Turning Genetic Discoveries into Real-World Clinical Impact	Graduate Institute of Biomedical Informatics, Taipei Medical University	Prof. Yu-Hsuan Joni Shao	🔗	Cai-Sian Liao

5	2025/10/2	Advancing Clinical Decision Support through Explainable AI and Machine Learning	Institute of Biomedical informatics, National Yang Ming Chiao Tung University	Prof. Emily Chia-Yu Su	🔗	Thi Huong Giang Pham
6	2025/10/9	Contingency and Directionality in Evolution	Biodiversity Research Center, Academia Sinica	Dr. Sheng-Feng Shen	🔗	Ru-Yin Jian (1)
7	2025/10/16	Review Week (no class)	--	--	--	--
8	2025/10/23	Midterm Exam Week (no class)	--	--	--	--
9	2025/10/30	Statistical applications for human genetic data: from GWAS to integrative analysis	Department of Statistics, National Taipei University	Prof. Shih-Kai Chu	🔗	Daniel Nelson
10	2025/11/6	Bioinformatics for Glycan Synthesis, Vaccine Design, and Intelligent Drug Discovery	The Master Program of AI Application in Health Industry, Kaohsiung Medical University	Prof. Cheng-Wei Cheng	🔗	Ching-Ya Lin (2)
11	2025/11/13	Codon Bias–Mediated Gene Regulation in animals: Temporal, Spatial, and Interventional Perspectives	Department of Biochemistry and Molecular Biology, National Cheng Kung University	Prof. Chien-Hung Yu	🔗	Saptashwa Datta
12	2025/11/20 Canceled	Leveraging Taiwan Biobank WGS Data to Improve Precision Diagnosis and Population Health in Taiwan	Graduate Institute of Medical Genomics and Proteomics, National Taiwan University	Prof. Jacob Shujui Hsu	🔗	Ya-Chu Hsu
13	2025/11/27	Capturing the Stars: Pharmacogenomics and Immunogenomics as My Targets	Graduate Institute of Medical Genomics and Proteomics, National Taiwan University	Prof. Pei-Lung Chen	🔗	Ru-Yin Jian (2)
14	2025/12/4 Online Only Canceled	AI in drug discovery and development	Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University	Prof. Yufeng Jane Tseng	🔗	Hsin-Ying Chang (2)
15	2025/12/11	Review Week (no class)	--	--	--	--
16	2025/12/18	Final Exam Week (no class)	--	--	--	--