

TIGP Bio 2024 Spring Syllabus Seminar

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

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

Place: Auditorium, B1F, 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 (due on June 13th):

Step 1 Attend any 2 non-BP Seminars—either on campus or off campus is acceptable—and send 2 seminar reports in the specified format (1-page A4, 12pts font, single-spaced) titled “**TIGP-BP Seminar Student Report** ([click to download](#))” to your advisor/lab professor. The 2 chosen non-BP seminars should be conducted in English and attended within the current semester (i.e. February 19th to June 13th).

Step 2 Once your reports have been graded and signed by the advisor/lab professor, kindly submit them to the TIGP-BIO office (tigpbio@gate.sinica.edu.tw) before the deadline of June 13th, 2024.

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

Week	Date	Topics/Brief Description	Speaker's Affiliation	Speaker	Abstract	Student Host
1	2024/2/22 @Webex Only	Plasma-Based Cancer Detection: A Machine Learning Enabled Multiomics Approach	Electrical Engineering Department, National Taiwan University	Prof. Tzu-Yu (Joyce) Liu		Ping-Yun Ou (1)
2	2024/2/26 (Mon) 10:00-11:20 @R308	Adapting to Adaptive: Evolutionary Insights into Biological Networks and Stress Readiness in Land Plants	Institute of Plant and Microbial Biology, Academia Sinica	Dr. Ting-Ying Wu		Daniel Garcia-Ruiz (1)
3	2024/3/7 Rescheduled to 3/11	Rescheduled to 3/11	--	--	--	--
4	2024/3/11(Mon) 14:00-15:20 @Webex Only	AI in Drug Discovery	Graduate Institute of Biomedical Engineering and Bioinformatics, National Taiwan University	Prof. Yufeng Jane Tseng		Cai-Sian Liao (1)
4	2024/3/14	Viral epitranscriptomics: reverse transcribing viruses utilizing RNA methylations for efficient replication	Institute of Biomedical Sciences, Academia Sinica	Dr. Kevin Tsai		Yu-Ching Hsu (1)

5	2024/3/21 Cancelled	Please refer to the remark (no class)	Department of Biomechanics Engineering, National Taiwan University	Prof. Chien-Yu Chen	--	Ping-Yun Ou (2)
6	2024/3/28	Link prediction via exploring common neighborhoods	Institute of Statistical Science, Academia Sinica	Dr. Tso-Jung Yen		Tzu-Hsiang Lin (1)
7	2024/4/4	National Holiday (no class)	--	--	--	--
8	2024/4/11	Midterm Exam Week (no class)	--	--	--	--
9	2024/4/18	A flexible NoSQL database for agriculture field trial using a cloud server	Department of Agronomy, National Taiwan University	Prof. Steven Hung-Hsi Wu		Daniel Garcia-Ruiz (2)
10	2024/4/25 Cancelled	Please refer to the remark (no class)	Institute of Statistical Science, Academia Sinica	Dr. Grace S. Shieh	--	Cai-Sian Liao (2)
11	2024/5/2	Understanding the genome-wide transcription cis-regulation in Drosophila using deep learning	Department of Biomedical Engineering, National Cheng Kung University	Prof. Tzu-Hsien Yang		Tzu-Hsiang Lin (2)
12	2024/5/9 @Webex Only	Unraveling the Dynamics of Genome Alteration in Embryonic Neural Progenitor Cells	German Cancer Research Center (DKFZ), Germany	Dr. Pei-Chi Wei		Shang-Kok Ng
13	2024/5/16	Big Data & AI in Biomedical Research : A Perspective View from ITRI	<ul style="list-style-type: none"> Graduate Institute of Biomedical Electronics and Bioinformatics, National Taiwan University Biomedical Technology and Device Research Laboratories, Industrial Technology Research Institute 	Prof. Eric Y. Chuang		Rodrigo Espinoza Silva
14	2024/5/23	Harnessing polygenic architectures for disease risk and health outcome prediction	Institute of Health Data Analytics and Statistics, National Taiwan University	Prof. Yen-Chen Anne Feng		Yu-Ching Hsu (2)
15	2024/5/27 (Mon) 14:00-15:20	Single-cell transcriptomics reveals growth factor signaling in pancreatic neuroendocrine tumors	Rutgers Cancer Institute of New Jersey, New Brunswick, New Jersey	Dr. Chang S. Chan		Dr. Chen-Hsiang Yeang
16	2024/6/6	Final Exam Week (no class)	--	--	--	--