

# TIGP-Molecular Medicine Program - Experimental Approaches in Molecular Medicine Syllabus

Credits: 2 (Elective; lectured in English)

Time: 1:30-3:20 PM, Tuesdays, Feb. 23 ~ June 1, 2021

Classroom: 8F TIGP classroom, Institute of Biomedical Sciences, Academia Sinica

Coordinator: Dr. Yun Mou, IBMS

Evaluation: Both the midterm and final exam are take-home exams (50% each). 3 question sets have to be answered in the exam, question sets will be picked by draw lots.

Category	Class	Date	Topic	Lecturer		Contact
Molecular and Cell Biology	1	2021/2/23	DNA and Epigenetics	Dr. Shu-Ping Wang	王書品	spwang@ibms.sinica.edu.tw
	1		Transcriptomics Analysis: basic to advanced	Dr. Yao-Ming Chang	張耀明	petitming@ibms.sinica.edu.tw
	2	2021/3/2	Current tools in high throughput sequencing	Dr. Mei-Yeh Lu	呂美暉	meiyehlu@gate.sinica.edu.tw
	3	2021/3/9	Tools in proteins and proteomics	Dr. Yet-Ran Chen	陳逸然	yetran@gate.sinica.edu.tw
	4	2021/3/16	Cell culture	Dr. Chia-Wei Li	李家偉	cwli@ibms.sinica.edu.tw
	4		Light and electron microscopy	Dr. I-Hsuan (Jessica) Wang	王宜萱	ihwang@ibms.sinica.edu.tw
	5	2021/3/23	Super resolution microscopy	Bi-Chang Chen	陳璧彰	chenb10@gate.sinica.edu.tw
	6	2021/3/30	Cell sorting	Dr. Ya-Jen Chang	張雅貞	yajchang@ibms.sinica.edu.tw
	6		Recombinant Virus	Dr. Song-Kun Shyue	徐松錕	skshyue@ibms.sinica.edu.tw
7	2021/4/6	Single cell technologies and analysis	Dr. Shih-Yu Chen	陳世濟	sychen@ibms.sinica.edu.tw	
<b>Midterm Exam (4/6 draw lots, 4/6-4/16 take home exam)</b>						
Animal Studies	8	2021/4/13	Neurobiology Techniques	Dr. Wan-Chen Lin	林宛蓁	wchlin@ibms.sinica.edu.tw
	9	2021/4/20	MRI	Dr. Dennis W Hwang	黃聖言	dwhwang@ibms.sinica.edu.tw
	10	2021/4/27	Genetic Manipulation and Phenotyping of Mouse	Dr. Ching-Yen Tsai	蔡青宴	cytsai@imb.sinica.edu.tw
Genomics	11	2021/5/4	Genomic techniques	Dr. Yuh-Shan Jou	周玉山	jou@ibms.sinica.edu.tw
	12	2021/5/11	Genetic epidemiology	Dr. Yungling Leo Lee	李永凌	leolee@ibms.sinica.edu.tw
Biotechnology	13	2021/5/18	CRISPR and CAR-T technologies	Dr. Yun Mou	牟昀	ymou@ibms.sinica.edu.tw
	14	2021/5/25	Nanomedicine	Dr. Che-Ming (Jack) Hu	胡哲銘	chu@ibms.sinica.edu.tw
<b>Final Exam (5/25 draw lots, 5/25-6/4 take home exam)</b>						