

<b>TIGP-MCB Experimental Approaches in Molecular and Cell Biology for Fall 2020</b> (finalized 2020/09/24)		
Course code:	3024180	
Credits:	2 (lectures: 2 hr per week, in English)	
Organizers:	Dr. Nan-Shih Liao	
Time:	Monday, 15:30-17:20	
Place:	R123, Institute of Molecular Biology, Academia Sinica	
Evaluation:	Homework or in-class quiz assigned by each lecturer	
Maximum number of student	30	
Rule	The course credit will not be granted to student who miss more than three lectures.	

	<b>Date</b>	<b>Topic</b>	<b>Lecturer</b>
1	9/14	Protein expression, purification and characterization	Hanna Yuan
2	9/21	Experimental approaches for determination of protein tertiary structure	Kuo-Chiang Hsia
3	9/28	Methods to detect protein-protein interactions	Chih-Yen King
4	10/5	A brief history of light microscopy and how it transformed biomedical research	Suewei Lin
5	10/12	Protein subcellular localization	Hsou-min Li
6	10/19	Methods to study RNA & control of gene expression at RNA level	Huey-Nan Wu
7	10/26	High throughput next generation sequencing	Mei-Yeh Lu
8	11/2	Next generation sequencing data analysis - RNA-Seq & single cell sequencing	Chen-Hsin Yu
9	11/9	Model organism: Yeast	Tien-Hsien Chang
10	11/16	Model organism: <i>C. elegans</i>	Yen-Ping Hsueh
11	11/23	Model organism: Drosophila	Ya-Hui Chou
12	11/30	Model organism: Arabidopsis	Yi-Fang Tsay
13	12/7	Model organism: Mouse	Ching-Yen Tsai
14	12/14	Nuclease-mediated genetic modification in mouse	Ching-Yen Tsai
15	12/21	An introduction to bioinformatics and algorithms	Hsin-Nan Lin
16	12/28	Biostatistics	June Lai