

Syllabus of RNA technology 2024

Lecture time: Tuesday 2:10-5:00 PM

Classroom: Science and Engineering Building III Room #B203

No textbook. Reading assignment is required

Instructor: Ruey-Yi Chang (email: rchang@gms.ndhu.edu.tw)

Week	Date	Subject
1	9/10	Course introduction/ DNA vs. RNA
2	9/17	Moon Festival/ no class
3	9/24	RNA world and evolution
4	10/1	Ribozyme/ Working with RNA molecules
5	10/8	Northern hybridization
6	10/15	RT-PCR and qPCR
7	10/22	Miscellaneous RNA methodology
8	10/29	RNA structure prediction
9	11/5	Midterm
10	11/12	NGS
11	11/19	Interactions of subcellular molecules
12	11/26	Oligonucleotides: application and site-directed mutagenesis
13	12/3	RNAi technology
14	12/10	CRISPR
15	12/17	ncRNAs, exosomes, and RNA modifications
16	12/24	RNA vaccine
17	12/31	Final exam

Final grade: Homework and quiz (20%), midterm (35%), final exam (35%), presence (10%)