103-1 Introduction to Research 研究導論

Time: Tuesdays 13:10 - 15:00
Classroom: Lecture Room 2, B1 floor, Uni-President Health & Research Building
統一健康研究大樓 B1 樓 第二會議室
Coordinator: Christina Chang 張玲(ext. 3615) (clchang@mail.ncku.edu.tw)
Chi-Wu Chiang 蔣輯武(ext. 3637) (chiangcw@mail.ncku.edu.tw)
Teaching Assistant:

Course Objectives: This course introduces graduate students to scientific integrity and research ethics, biosafety, time management, hypothesis testing, scientific reading and communication, abstract/poster/proposal writing, and an overview of various biomedical methodologies and technologies. Students will also be exposed to current pharmaceutical developments or job opportunities in Taiwan and Asia.

Course Format: A weekly 2-hour course and each topic will be covered in 2 sequential sessions with a combination of informal didactic presentation by the faculty, as well as discussion, oral and written presentation and hands-on planning by the students. **English** is used in the classroom and in written reports.

Grading Criteria: Students are evaluated based on attendance and classroom participation/performance (30%), assignments (40%), and Final report (30%).

方法	百分比%	閱讀、理解與運用專業知識	彙整新知與良好的溝通能力	解決研究問題的能力
出席與課堂參與: Attendance, classroom participation & performance	30	V	V	V
作業: Assignments	40	V	V	V
期末報告: Final report	30	V	V	V

課程進度 Course Progress Outline

日期	週次 Week	進度說明 Progress Description
104/9/15	1	Scientific Integrity & Keeping Lab Records (Christina Chang 張 玲)
9/22	2	How to be a Good Researcher? (Chi-Wu Chiang 蔣輯武)
9/29	3	Research Resources (e.g., public databases, tools, protocols) (Christina Chang 張 玲)

10/6	4	Biosafety and Lab Safety　(Ching-Hao Teng 鄧景浩)
10/13	5	Scientific Reading (journal formats, data presentation & interpretation, etc.) (Li-Wha Wu 吳梨華)
10/20	6	Communication Skills (interpersonal & scientific) (Larry Paris)
10/27	7	Scientific Writing (abstract & poster) (Shainn-Wei Wang 王憲威)
11/3	8	Favorite Nobel Laureates (Chi-Wu Chiang 蔣輯武)
11/10	9	Private Industry & Career Opportunities in Taiwan and Asia (to be named)
11/17	10	Animal Models for Human Disease (student oral presentation) (Christina Chang 張 玲)
11/24	11	Methodology in Molecular Biology (Chi-Wu Chiang 蔣輯武)
12/1	12	Methodology in Cell Biology (Li-Wha Wu 吳梨華) (Larry Paris)
12/8	13	Methodology in Bacteriology (Ching-Hao Teng 鄧景浩)
12/15	14	Methodology in Protein Chemistry and Proteomics (Nanshan Chang 張南山)
12/22	15	Methodology in Virology (Shainn-Wei Wang 王憲威)
12/29	16	Methodology in Genetics (Christina Chang 張 玲)
105/1/5	17	DNA sequencing technology for Biomedical Sciences
105/1/12	18	Final Report: a short written proposal applying one or more methodologies to student's own research　(Christina Chang 張 玲)