Research Tools of Basic Medical Sciences－Fall 2018
基礎醫學研究技術

Room: 601
Time: Monday, AM 10:10-12:00

Date	Topic	Instructor
9/10	Introduction	Po-Hsien Huang
9/17	Start a research project: Internet resources (dry lab work)	Ming-Derg Lai
9/24	Public Holiday	
10/1	Transgenic animal	Shang-Hsun Yang
10/8	Virus-based techniques	Shang-Hsun Yang
10/15	Digital pathology	Po-Hsien Huang Lu (J&H)
10/22	Analyze RNA expression (Single gene level)	Chang-Shi Chen
10/29	Analyze RNA expression (Systematic analysis) & Demonstration	Chang-Shi Chen
11/5	Methods for optical imaging	Wen-Tai Chiu
11/12	Application of fluorescence protein	Wen-Tai Chiu
11/19	Demonstration	Wen-Tai Chiu
11/26	Analyze protein expression (western, IHC, proteomics)	Po-Hsien Huang
12/3	Analyze protein expression (Core facility in Hospital)	Po-Hsien Huang
12/10	Cell separation & analysis (Flow sorting, magnetic)	Hung-Chi Cheng
12/17	Signal transduction (shRNA, inhibitor, gene pulser)	Hung-Chi Cheng
12/24	Demonstration	Hung-Chi Cheng
12/31	Public Holiday	
1/7	Animal imaging (IVIS and supersonic in Animal Center)	Yau-Sheng Tsai Sarah Tseng (J&H)

Objective: The purpose of this course is to provide the knowledge of basic biomedical techniques in modern medical research and how to use the core facility in Medical College and Hospital. The virtual experiment or demonstration may be included in the class.

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Course instructors:

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Shang-Hsun Yang　楊尚訓

Chang-Shi Chen　陳昌熙

Wen-Tai Chiu　　邱文泰
Po-Hsien Huang　黃柏憲
Hung-Chi Cheng　鄭宏祺
Yau-Sheng Tsai　蔡曜聲
Ms. Sarah Tseng
Ms. Lu

To the students enrolled in the class "Research Tools of Basic Medical Sciences"

The course grade will be evaluated by the "term report"

Please write a report on any two different biochemical tools

The report includes:
(1) The principle of research technique
(2) The advantages of research technique
(3) The disadvantages of research technique
(4) The application of research techniques.

Page limit: 5 pages
Language: English

deadline: 12/31