

10910DMS 370500 醫學遺傳學

Medical Genetics

任課教師: 黃貞祥、周裕珽

Time: T3T4 (星期二 10:10-12:00)

Room: LSII R217 生命科學二館 217 教室

一、課程說明(Course Description)

In addition to the basic introduction of human genetics, the most updated scientific and technical advance in human genetics will be included. The class will cover the basic genetic rules with emphasis on medical applications. The lectures will include genetic testing, screening, approaches to therapy, personalized medicine, disease models, comparative genomics, model organisms, and epigenetics.

二、指定用書 Human Heredity Principles and Issues. 10th/9th ed. M. Cummings 2014/2011

三、參考書籍

Emery and Rimoin's Principles and Practice of Medical Genetics (2013)

A large collection of related genetics textbooks will be deposited in the Lifescience 文念慈 library. 其他參考文章，PDF 檔將置放於 iLMS 數位學習平台。

四、教學方式

按教課書講授課為主

五、教學進度(Syllabus)

Week	Date	Topic	Chapter	Corresponding page	Instructor
1	9/15	Introduction and Cells		Ch 1 and 2	黃貞祥
2	9/22	Transmission genetics		Ch 3	黃貞祥
3	9/29	Pedigree analysis & Complex traits		Ch 4,5	黃貞祥
4	10/6	cytogenetics		Ch 6	黃貞祥
5	10/13	Development and sex determination		Ch 7	黃貞祥
6	10/20	Genetics of Behavior		Ch 18	黃貞祥

7	10/27	Population Genetics and human evolution		Ch 19	黃貞祥
8	11/3	Population Genetics and human evolution		Ch 19	黃貞祥
9	11/10	期中考試		Ch 1-7, 18 &19	黃貞祥
10	11/17	Nucleic acid and chromatin & gene expression		Ch 8, 9	周裕琹
11	11/24	Gene expression & proteins to phenotypes		Ch 9, 10	周裕琹
12	12/1	mutation		Ch11	周裕琹
13	12/8	Genes and cancer		Ch12	周裕琹
14	12/15	Genetic technology & social genetics		Ch 13, 14	周裕琹
15	12/22	Genomes and Genomics		Ch 15	周裕琹
16	12/29	Genetic testing and gene therapy		Ch 16	周裕琹
18	1/5	Immunogenetics		Ch 17	周裕琹
19	1/12	期末考試		Ch 8-17	周裕琹