

Course title <English>	ゲノム科学と医療 Genome Science and Medicine		Affiliated department, Job title, Name	Graduate School of Medicine Professor, MATSUDA FUMIHIKO Graduate School of Medicine Associate Professor, TABARA YASUHARU	
Grade allotted	Professional degree students	Number of credits	2	Course offered year/period	2016/Second semester
Day/period	Thu.3	Class style	Lecture	Language	Japanese and English
[Outline and Purpose of the Course]					
<p>The purpose of this course is to understand what kind of impact the development of genomics will have on medical research/treatment in the 21st century. The main aim is to demonstrate what the researchers in the field of genomic science have achieved in the past, and also to recognize what they could achieve in the future as well as to show how the results could be applied to medicine. The course will be composed of small-group lectures and discussions, and the roles played in both the past and in the future by genomics in the era of preventative medicine will be discussed.</p>					
[Course Goals]					
<p>To understand the expansion of genomic science. To comprehend the impact that the scientific achievements will have on society. To acquire the basics of genomic science to be able to appreciate the essential achievements of research.</p>					
[Course Schedule and Contents]					
<p>10/6 Introduction to Genomic Medicine, Tabara Y 10/13 Leading-edge technology of genomic medicine: Genome, Higasa K 10/20 Molecular biology and its application to medicine, Teranishi Y 10/27 Leading-edge technology of genomic medicine: Omits, Sato T 11/3 11/10 Identification of genetic factors associated with disease: Family-based approach, Koizumi A 11/17 Genome and medical informations, Yamaguchi I 11/24 Identification of genetic factors associated with disease: Multifactorial diseases, Miki T 12/1 How do we communicate scientific knowledge 1, Muranaka R 12/8 12/15 How do we communicate scientific knowledge 2, Muranaka R 12/22 1/5 Cohort study for common diseases, Tabara Y 1/12 Genome cohort study, Matsuda F 1/19 Examination</p>					
[Class requirement]					
<p>Completion of Statistical Genetics I and II is strongly recommended</p>					
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ゲノム科学と医療(2)

[Method, Point of view, and Attainment levels of Evaluation]

Expression his/her opinion during class
Coursework
Examination

[Textbook]

Suggested reading: Human Molecular Genetics, 3rd edition, 2010

[Reference books, etc.]

(Reference books)

Introduced during class

[Regarding studies out of class (preparation and review)]

Lectures using textbooks, powerpoint presentations, and scientific reports.

(Others (office hour, etc.))

We welcome any questions both during and after class.

*Please visit KULASIS to find out about office hours.