

DNA processing in Drugs, Diseases and Health  
創薬、疾患、健康における DNA プロセッシング  
(国立台湾大学)

Course	DNA Processing in Drugs, Diseases and Health
Course No.	01ER441
Credits	1 credit
Grade	1 <sup>st</sup> Year
Timetable	Spring AB
Instructor	Tsai-Kun Li
Course Overview	This course is conducted by discussion between professors and students to study the basic knowledge and research methods of DNA processing (replication, transcription, repair, and recombination). Students learn research ethics, history and tradition of medical sciences, and the latest research topic, through the literature designated by professors. Particularly, this course aims to provide students with an understanding of research method related to drugs, diseases and health on regulated transcription programming by topoisomerase.
Remarks	Conducted in English at National Taiwan University
Course Type	Lecture
Link between Course Objectives and Activities	Students will study health security issues from the viewpoint of DNA processing.
Academic Goal	<ul style="list-style-type: none"> <li>- To be able to explain various DNA processing related to cellular functions</li> <li>- To be able to explain ethics to perform DNA researches</li> </ul>
Course Schedule	<p>Week 1-3: General introduction on research methods and scientific ethics, advanced knowledge on DNA replication, advanced knowledge on DNA transcription programming.</p> <p>Week 4-6: Advanced knowledge on DNA repair and recombination, advanced knowledge of chromatin factors in regulated gene expression, advanced knowledge on DNA repair and DNA binding factors in regulated transcription.</p>
Course Prerequisites and Advisories	
Grading Philosophy (Percentage/ Criteria/ Methodology)	Participation (50%), Final report (50%)
Self-Directed Learning Other Than Coursework	Read materials introduced in class
Textbooks, References and Supplementary Materials	To be introduced in class
Office Hours	Tsai-Kun Li Appointment only
Other (i.e. Expectations on Classroom, Conduct and Decorum etc.)	
Related Courses	Cellular Network of Biological Molecules
Keywords	DNA processing (replication, transcription, repair, and recombination)