

2022, Spring Semester

Angiogenesis**An overview on new blood vessel formation and its relation with human diseases**

Course Goals: An overview on the factors and cell types involved in new blood vessel formation and the relation of their deregulation with the development of human vascular diseases. In addition to journal paper discussion on the latest reports on angiogenesis, two physicians will also share their bedside experience of treating vascular disease with angiogenic therapies.

Course Format: In the first 13 weeks, the lectures will be given by the assigned professors or physicians with expertise in the lecture topic. In the final 3-4 weeks, students in groups will be asked to present a most-updated journal paper on the topics they have learned from lectures and panel discussion, and write the PBL-based assigned homework.

Course Materials: Listed reference books and lecture notes.

Grading Criteria:

評分方法 (Itemized evaluation)	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
準時出席與參 (Punctuality and attendance)	20	V	V	V
Assignments	30	V	V	V
One PBL-based oral presentation and Q/A participation	30	V	V	V
group discussion	20	V	V	V

Class Time: Friday, 1:10 - 3:00PM
 Classroom: Rm 601 at NCKU Medical College
 Coordinator(s): 吳梨華 (ext.3618)

Date	Topic	Lecturer
02/18/2022	Course overview and mechanisms of blood vessel formation	吳梨華/Wu, Li-Wha
02/25/2022	Physiological angiogenesis	許聖民醫師/ Hsu, Sheng-Min
03/04/2022	Pathological angiogenesis	周楠華醫師/ Chow, Nan-Haw
03/11/2022	Heterogeneity of endothelial cells	吳梨華/Wu, Li-Wha
03/18/2022	Angiogenic factors and their receptors	吳梨華/Wu, Li-Wha
03/25/2022	The role of extracellular matrix in angiogenesis	鄭宏祺/Cheng, Hung-Chi
04/01/2022	Holiday	
04/8/2022	Inflammation and angiogenesis	沈延盛院長/ Shan, Yan-Shen
04/15/2022	The crosstalk between angiogenesis and neurogenesis	張雅雯/ Alice YW Chang
04/22/2022	Tumor neovascularization and lymphangiogenesis	吳梨華/Wu, Li-Wha
04/29/2022	Models for studying angiogenesis	吳梨華/Wu, Li-Wha
05/06/2022	Hemodynamic forces and nitric oxides on angiogenesis	王寧 (慈濟)/ Wang, Ning
05/13/2022	Anti-angiogenic therapeutic potential in human cancer	蘇文彬醫師/ Su, Wen-Pin
05/20/2022	Angiogenic therapeutic potential in human diseases	洪嘉鴻醫師/Jia-Horung Hung
05/27/2022	Student presentation	吳梨華/Wu, Li-Wha
06/03/2022	Holiday	
06/10/2022	Student Presentation	吳梨華/Wu, Li-Wha
06/17/2022	Student presentation	吳梨華/Wu, Li-Wha