

2024, 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, four physician-scientists 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 3-4weeks, 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.

Language: English (>70%) and Mandarin (<30%)

Course Materials: Listed reference books and lecture notes.

Grading Criteria:

Itemized evaluation	Percentile (%)	Reading comprehension of scientific materials and applying professional knowledge	Updating and organizing innovative knowledge and communicational skills	Problem-solving skills
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
02/23/2024	Course overview and mechanisms of blood vessel formation	吳梨華/Wu, Li-Wha
03/01/2024	Physiological angiogenesis	許聖民醫師/Hsu, Sheng-Min
03/08/2024	Pathological angiogenesis	蘇美慈醫師/Su, Mei-Tsz
03/15/2024	Heterogeneity of endothelial cells	吳梨華/Wu, Li-Wha
03/22/2024	Angiogenic factors and their receptors	吳梨華/Wu, Li-Wha
03/29/2024	The role of extracellular matrix in angiogenesis	邱文泰/ Chiu, Wen-Tai
04/05/2024	School holiday	
04/12/2024	Inflammation and angiogenesis	沈延盛院長/ Shan, Yan-Shen
04/19/2024	Hemodynamic forces and nitric oxides on angiogenesis	莫凡毅/Mo, Fan-E
04/26/2024	The crosstalk between angiogenesis and neurogenesis	張雅雯/ Alice YW Chang
05/03/2024	Tumor neovascularization and lymphangiogenesis	吳梨華/Wu, Li-Wha
05/10/2024	Models for studying angiogenesis	吳梨華/Wu, Li-Wha
05/17/2024	Anti-angiogenic therapeutics in human cancer	蘇文彬醫師/ Su, Wen-Pin
05/24/2024	Tissue engineering and neovascularization	黃珍語/ Huang, Chen-Yu
05/31/2024	Student presentation	吳梨華/Wu, Li-Wha
06/07/2024	Student presentation	吳梨華/Wu, Li-Wha
06/14/2024	Student Presentation	吳梨華/Wu, Li-Wha