

2020, 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
02/21/2020	Course overview and mechanisms of blood vessel formation	吳梨華
02/28/2020	Holiday	
03/06/2020	Physiological angiogenesis	許聖民醫師
03/13/2020	Pathological angiogenesis	周楠華醫師
03/20/2020	Heterogeneity of endothelial cells	吳梨華
03/27/2020	Angiogenic factors and their receptors	吳梨華
04/03/2020	Holiday	
04/10/2020	The role of extracellular matrix in angiogenesis	鄭宏祺
04/17/2020	Hemodynamic forces and nitric oxides on angiogenesis	王寧 (慈濟)
04/24/2020	Inflammation and angiogenesis	沈延盛醫師
05/01/2020	The crosstalk between angiogenesis and neurogenesis	張雅雯
05/08/2020	Tumor neovascularization and lymphangiogenesis	吳梨華
05/15/2020	Models for studying angiogenesis	吳梨華
05/22/2020	Anti-angiogenic therapeutic potential in human cancer	蘇文彬醫師
05/29/2020	Angiogenic therapeutic potential in human diseases	羅傳堯醫師
06/05/2020	Student Presentation	吳梨華
06/12/2020	Student Presentation	吳梨華
06/19/2019	Student presentation	吳梨華