

Category (科目区分)	Cluster of Inflammation and immune system		
Course Title (授業科目名)	Hematology, Nephrology, Rheumatology, practical training		
Instructors (担当者名)	Naoto Takahashi	Academic Year (配当年次)	1,2
Required Course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	1
Class Format (授業形態)	Lecture		
Schedule (開講期間)	Students will be notified by email after completing course registration.		
Class Date/Period (開講曜日・時間)	Every Monday from 18:00 to 21:30 (please contact us for details of the schedule)		
Course Outline/ Course Objectives (授業の概要・到達目標)			
Purpose of class: To understand the pathological conditions such as blood diseases and kidney diseases and their treatment methods.			
Achievement goal of class: To understand and explain the pathophysiology and treatment methods such as blood diseases and kidney diseases.			
Class outline:			
1. Various cytokines are produced by inflammatory stimuli. As a result, various hematopoietic diseases occur. One is anemia associated with chronic inflammation (inflammatory anemia), and the other is hemophagocytic syndrome. To understand these pathological conditions.			
2.To understand treatment methods based on the pathological condition of 1.			
3. Possible autoimmune diseases of hematopoietic organs include aplastic anemia, pure red cell aplasia, and idiopathic thrombocytopenic purpura. Although its pathogenesis is peculiar, the details of its pathogenic mechanism are unknown, and the key to unlocking the essence of immunity may be hidden there. Deepen understanding of each pathogenesis and pathogenic mechanism.			
4. To understand treatment methods based on the pathological condition of 3.			
5. Glomerulonephritis is classified into primary and secondary, both of which have immunoglobulin and complement deposition and are closely associated with immune system abnormalities. Deepen understanding of the latest pathophysiology of glomerulonephritis.			
6. To understand treatment methods based on the pathological condition of 5.			
7. There is a filtration barrier in the glomerulus of the kidney, which allows for selective filtration of plasma components. In recent years, molecular groups important for maintaining this barrier function have been identified one after another. In this lecture, we will outline and deepen our understanding of the latest findings on abnormalities in the constituent molecules of the filtration barrier and the mechanism of proteinuria expression.			
8. To understand treatment methods based on the pathological condition of 7.			
9. Secondary renal diseases caused by blood diseases are attracting attention. Both are thought to be caused by abnormal immunoglobulin and cytokine imbalance. Understand their latest pathology.			
10. To understand treatment methods based on the pathological condition of 9.			
Course Planning (授業計画)			
	Course Outline/ Course Objectives (授業の概要及び到達目標) (Contents of Class) (授業内容)	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
1	Pathophysiology of blood disorders and inflammation	Naoto Takahashi	Department of Hematology, Nephrology, and Rheumatology [Chair Professor's Office]
2	Treatment of blood disorders and inflammation		
3	Blood disorders and immune pathology		
4	Treatment of blood disorders with immune pathology		
5	Kidney disease and immune pathology		
6	Treatment of kidney disease with immune pathology		
7	Pathophysiology of nephrotic syndrome		
8	Treatment of nephrotic syndrome		
9	Pathophysiology of kidney disease associated with blood disorders		
10	Treatment of kidney disease associated with blood disorders		

Grading Criteria (成績評価の基準と方法)

30 hours of lectures in the lecture room + 15 hours of self-study, 45 hours in total, will be one credit, and the evaluation will be made in consideration of the attendance status, the results of oral and written examinations, and the contents of the submitted report.

Contact Information (問い合わせ先(氏名, メールアドレス等))

Name: Naoto Takahashi / E-mail: naotot@doc.med.akita-u.ac.jp

Comment (その他特記事項)

Information about courses: If you cannot attend the training due to work, such as a graduate student who is a member of society, we will adjust the schedule.

Textbooks / References: Distribute materials as needed. Alternatively, specify the document.

Self-study content during self-study time: It is desirable to carry out preparatory learning according to the goals to be achieved and the content of the lesson.