

## 2024 Akita University Faculty of Medicine Syllabus

|                          |                                       |
|--------------------------|---------------------------------------|
| <b>Category</b>          | : 臨床医学 II                             |
| <b>Course Title</b>      | : Immunology , Allergy , Rheumatology |
| <b>Eligible Students</b> | : grade 3 Related Course              |
| <b>Code</b>              | : 71633015                            |
| <b>Schedule</b>          | : week 26 ~ week 29                   |
| <b>Credits</b>           | : 1                                   |

### 1. Lead Instructor

Naoto Takahashi 高橋直人 (Professor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6111, Office Hour: 8:30-17:00)

### 2. Instructors

Naoto Takahashi 高橋直人 (Professor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6111, Office Hour: 8:30-17:00)

Shigeharu Ueki 植木重治 (Professor, Department of General Internal Medicine and Clinical Laboratory Medicine 総合診療・検査診断学講座, 6209, Office Hour: 8:30-17:00)

Masaya Saito 斎藤雅也 (Assistant Professor, Clinical Research Promotion and Support Center 臨床研究支援センター, 6116, Office Hour: 8:30-17:00)

Fumito Abe 阿部史人 (Assistant Professor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6116, Office Hour: 8:30-17:00)

Ayano Saito 斎藤綾乃 (Assistant Professor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6116, Office Hour: 8:30-17:00)

Mako Hashimoto 橋本眞子 (Medical Doctor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6116, Office Hour: 8:30-17:00)

Tatsuro Kanazawa 金澤達郎 (Medical Doctor, Department of Hematology , Nephrology , and Rheumatology 血液・腎臓・膠原病内科学講座(第三内科), 6116, Office Hour: 8:30-17:00)

Atsushi Komatsuda 小松田敦 (Part-time Lecturer, Ogachi Central Hospital 雄勝中央病院)

Shin Okuyama 奥山慎 (Part-time Lecturer, Nakadori General Hospital 中通総合病院)

### 3. Course Description Outline(Course Objectives)

The goal of this lecture is to learn the causes, pathophysiology, syndromes, diagnosis, and treatment of major immunological, allergic, and collagen diseases. ( 3-1 ~ 3-4 , 6-1 ~ 6-2 )

Similarly, students will learn about related professionalism, medical ethics, medical safety, EBM, and medical law (healthcare system). ( 1-1 ~ 1-2 , 3-5 ~ 3-7 )

主な免疫疾患・アレルギー性疾患・膠原病の原因、病態生理、症候、診断、治療を学ぶ。( 3-1 ~ 3-4 , 6-1 ~ 6-2 )

関連するプロフェッショナリズム、医療倫理、医療安全、EBM、医療法(医療制度)について説明できる。( 1-1 ~ 1-2 , 3-5 ~ 3-7 )

### 4. Textbook/Reference Books

EBMを活かす膠原病・リウマチ診療 (MEDICAL VIEW)

分子標的/Bio 時代のリウマチ・膠原病治療ストラテジー (文光堂)

膠原病診療ノート第4版 (日本医事新報社)

### 5. Assessment

Standardized test , Formation Test , attend

統一試験、形成試験、出席

### 6. Out of Class Study/Message

Preparatory study such as preparation and review.

予習や復習などの準備学習を行うこと。

| Topics and Contents of class, Course Objectives |                 |        |              |  |                    |                  |
|---|-----------------|--------|--------------|--|--------------------|------------------|
|   | Class Date      | Period | Class Format | Topics and Contents of class, Course Objectives  | Instructors        | Class Room       |
| 1   | 11 / 8<br>(Fri) | 1-2    | Lecture      | <p>Theme: Review of Collagen Diseases 膠原病総論</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>• Outline and list the types of collagen diseases.</li> <li>• To explain the types of autoantibodies and their clinical significance.</li> <li>• Outline each syndrome of collagen disease.</li> </ul> <p>1. 膠原病を概説しその種類を列挙できる。<br/>2. 自己抗体の種類と臨床的意義を説明できる。<br/>3. 膠原病の各症候について概説できる。</p>   | Fumito Abe<br>阿部史人 | 医学系研究棟 4 階 6 講義室 |
| 2   | 11 / 8<br>(Fri) | 3-4    | Lecture      | <p>Theme: Systemic lupus erythematosus, antiphospholipid antibody syndrome 全身性エリテマトーデス、抗リン脂質抗体症候群</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>• To be able to explain the pathophysiology, symptoms, diagnosis and treatment of systemic lupus erythematosus.</li> <li>• To be able to explain the complications of systemic lupus erythematosus (neuropsychiatric systemic lupus erythematosus, lupus nephritis).</li> <li>• To be able to explain the pathophysiology, symptoms, diagnosis and treatment of antiphospholipid antibody syndrome.</li> </ul> <p>1. 全身性エリテマトーデスの病態生理、症候、診断と治療を説明できる。<br/>2. 全身性エリテマトーデスの合併症（神経精神全身性エリテマトーデス、ループス腎炎）を説明できる。<br/>3. 抗リン脂質抗体症候群の病態生理、症候、診断と治療を説明できる。</p> | Fumito Abe<br>阿部史人 | 医学系研究棟 4 階 6 講義室 |
| 3   | 11 / 8<br>(Fri) | 5-6    | Lecture      | <p>Theme: Systemic scleroderma 全身性強皮症</p> <p>Objectives of this lecture:</p> <p>To be able to explain the pathophysiology, classification, symptoms, diagnosis, and organ involvement (especially lung and kidney) of systemic scleroderma.</p> <p>全身性強皮症の病態生理、分類、症候、診断及び臓器病変（特に肺・腎）を説明できる。</p>  | Fumito Abe<br>阿部史人 | 医学系研究棟 4 階 6 講義室 |
| 4   | 11 / 8<br>(Fri) | 7-8    | Lecture      | <p>Theme: Adult Still's disease, Juvenile idiopathic arthritis, Spondyloarthritis 成人 Still 病、若年性特発性関節炎、脊椎関節炎</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>• To be able to describe the symptoms, diagnosis, and treatment of adult Still's disease.</li> <li>• To be able to explain the characteristics of juvenile idiopathic arthritis.</li> </ul> <p>1. 成人 Still 病の症候、診断と治療を説明できる。<br/>2. 若年性特発性関節炎の特徴を説明できる。</p>   | Fumito Abe<br>阿部史人 | 医学系研究棟 4 階 6 講義室 |

| Topics and Contents of class, Course Objectives |                  |        |              |   |                     |                  |
|---|------------------|--------|--------------|---|---------------------|------------------|
|   | Class Date       | Period | Class Format | Topics and Contents of class, Course Objectives   | Instructors         | Class Room       |
| 5   | 11 / 8<br>(Fri)  | 9-10   | Lecture      | <p>Theme: Dermatomyositis, Polymyositis 皮膚筋炎、多発性筋炎</p> <p>Objectives of this lecture:</p> <p>To be able to explain the symptoms, diagnosis, treatment, and complications (interstitial pneumonia, malignancy) of dermatomyositis and polymyositis.</p> <p>皮膚筋炎・多発性筋炎の症候、診断、治療及び合併症（間質性肺炎、悪性腫瘍）を説明できる。</p>   | Mako Hashimoto 橋本眞子 | 医学系研究棟 4 階 6 講義室 |
| 6   | 11 / 15<br>(Fri) | 1-2    | Lecture      | <p>Theme: Allergy アレルギー総論</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>Outline the classification and characteristics of major systemic allergic diseases.</li> <li>To be able to describe allergic syndromes (shock, rash, dyspnea, etc.).</li> </ul> <p>1. 主要な全身性アレルギー性疾患の分類と特徴を概説できる。<br/>2. アレルギーの症候（ショック、発疹、呼吸困難など）について説明できる。</p>                                 | Shigeharu Ueki 植木重治 | 医学系研究棟 4 階 6 講義室 |
| 7   | 11 / 15<br>(Fri) | 3-4    | Lecture      | <p>Theme: Allergy アレルギー各論 (1)</p> <p>Objectives of this lecture:</p> <p>To be able to explain the symptoms, examination, diagnosis and treatment of anaphylaxis and other conditions.</p> <p>アナフィラキシーなどの症候、検査、診断と治療を説明できる。</p>  | Shigeharu Ueki 植木重治 | 医学系研究棟 4 階 6 講義室 |
| 8   | 11 / 15<br>(Fri) | 5-6    | Lecture      | <p>Theme: Allergy アレルギー各論 (2)</p> <p>Objectives of this lecture:</p> <p>Outline the types, diagnosis and treatment of eosinophilic inflammatory diseases and food allergies.</p> <p>好酸球性炎症疾患、食物アレルギーの種類、診断と治療を概説できる。</p>  | Shigeharu Ueki 植木重治 | 医学系研究棟 4 階 6 講義室 |
| 9   | 11 / 15<br>(Fri) | 7-8    | Lecture      | <p>Theme: Polymyalgia rheumatica, fibromyalgia リウマチ性多発筋痛症、線維筋痛症</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>To be able to explain the symptoms, diagnosis and treatment of polymyalgia rheumatica.</li> <li>To be able to explain the symptoms, diagnosis and treatment of fibromyalgia.</li> </ul> <p>1. リウマチ性多発筋痛症の症候、診断と治療を説明できる。<br/>2. 線維筋痛症の症候、診断と治療を説明できる。</p> | Shin Okuyama 奥山 慎   | 医学系研究棟 4 階 6 講義室 |
| 10  | 11 / 15<br>(Fri) | 9-10   | Lecture      | <p>Theme: Treatment of Collagen Disease 膜原病の治療</p> <p>Objectives of this lecture:</p> <p>Outline the major drugs used in the treatment of collagen diseases (mechanism of action, side effects).</p> <p>膜原病治療に使用される主な薬剤について（作用機序、副作用）概説できる。</p>   | Shin Okuyama 奥山 慎   | 医学系研究棟 4 階 6 講義室 |

| Topics and Contents of class, Course Objectives |                  |        |              |   |                            |                 |
|---|------------------|--------|--------------|---|----------------------------|-----------------|
|   | Class Date       | Period | Class Format | Topics and Contents of class, Course Objectives   | Instructors                | Class Room      |
| 11  | 11 / 22<br>(Fri) | 1-2    | Lecture      | <p>Theme: Rheumatoid arthritis 関節リウマチ</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>To be able to explain the pathophysiology, symptoms, diagnosis, treatment and rehabilitation of rheumatoid arthritis.</li> <li>To be able to explain the extra-articular manifestations of rheumatoid arthritis.</li> </ul> <p>1. 関節リウマチの病態生理、症候、診断、治療とリハビリテーションを説明できる。</p> <p>2. 関節リウマチの関節外症状を説明できる。</p> | Tatsuro Kanazawa<br>金澤達郎   | 医学系研究棟 4階 6 講義室 |
| 12  | 11 / 22<br>(Fri) | 3-4    | Lecture      | <p>Theme: Collagen Disease and Renal Impairment 膠原病と腎障害</p> <p>Objectives of this lecture:</p> <p>Outline the typical renal disorders associated with collagen diseases.</p> <p>膠原病に関連する代表的な腎障害を概説できる。</p>  | Tatsuro Kanazawa<br>金澤達郎   | 医学系研究棟 4階 6 講義室 |
| 13  | 11 / 22<br>(Fri) | 5-6    | Lecture      | <p>Theme: Description of various collagen disease cases 各種膠原病症例の解説</p> <p>Objectives of this lecture:</p> <p>Outline the symptoms of collagen diseases (fever, general malaise, rash, anemia, dyspnea/shortness of breath, cough/sputum, arthralgia/joint swelling).</p> <p>膠原病の症候(発熱、全身倦怠感、発疹、貧血、呼吸困難・息切れ、咳・痰、関節痛・関節腫脹)について概説できる。</p>  | Ayano Saito<br>齋藤綾乃        | 医学系研究棟 4階 6 講義室 |
| 14  | 11 / 22<br>(Fri) | 7-8    | Lecture      | <p>Theme: Systemic vasculitis 血管炎症候群：大型血管炎</p> <p>Objectives of this lecture:</p> <p>To be able to list large vessel vasculitis and explain their pathophysiology, symptoms, diagnosis and treatment.</p> <p>大型血管炎を列挙しその病態生理、症候、診断と治療を説明できる。</p>  | Masaya Saito<br>齋藤雅也       | 医学系研究棟 4階 6 講義室 |
| 15  | 11 / 22<br>(Fri) | 9-10   | Lecture      | <p>Theme: Systemic vasculitis 血管炎症候群：小・中型血管炎</p> <p>Objectives of this lecture:</p> <p>To be able to list small and medium-vessel vasculitis and explain their pathophysiology, symptoms, diagnosis and treatment.</p> <p>小型・中型血管炎を列挙しその病態生理、症候、診断と治療を説明できる。</p>  | Masaya Saito<br>齋藤雅也       | 医学系研究棟 4階 6 講義室 |
| 16  | 11 / 29<br>(Fri) | 1-2    | Lecture      | <p>Theme: Autoinflammatory diseases 自己炎症性疾患</p> <p>Objectives of this lecture:</p> <p>Describe the symptoms, diagnosis and treatment of autoinflammatory diseases.</p> <p>自己炎症性疾患の症候、診断と治療を説明できる。</p>   | Atsushi Komatsuda<br>小松田 敦 | 医学系研究棟 4階 6 講義室 |

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|---|------------------|--------|----------------------|--|-------------------------------|-----------------|
|   | Class Date       | Period | Class Format         | Topics and Contents of class, Course Objectives  | Instructors                   | Class Room      |
| 17  | 11 / 29<br>(Fri) | 3-4    | Lecture              | <p>Theme: Differential disease of collagen disease 膠原病の鑑別疾患</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>• To be able to list the diseases that cause arthritis.</li> <li>• To be able to describe the skin rashes characteristic of collagen diseases and list the related diseases.</li> </ul> <p>1. 関節炎をきたす疾患を列挙できる。<br/>2. 膠原病に特徴的な皮疹を説明し、関連する疾患を列挙できる。</p>   | Atsushi<br>Komatsuda<br>小松田 敦 | 医学系研究棟 4階 6 講義室 |
| 18  | 11 / 29<br>(Fri) | 5-6    | Lecture              | <p>Theme: Mixed connective tissue disease, Sjogren's syndrome, Behcet's disease 混合性結合組織病、シェーグレン症候群、ベーチェット病</p> <p>Objectives of this lecture:</p> <ul style="list-style-type: none"> <li>• Outline mixed connective tissue disease.</li> <li>• Outline Sjogren's syndrome.</li> <li>• To be able to explain the symptoms, diagnosis and treatment of Behcet's disease.</li> </ul> <p>1. 混合性結合組織病を概説できる。<br/>2. シェーグレン症候群を概説できる。<br/>3. ベーチェット病の症候、診断と治療を説明できる。</p> | Mako<br>Hashimoto<br>橋本眞子     | 医学系研究棟 4階 6 講義室 |
| 19  | 11 / 29<br>(Fri) | 7-8    | Formative assessment | Theme: formative assessment (examination) 形成試験   | Masaya Saito<br>齋藤雅也          | 医学系研究棟 4階 6 講義室 |
| 20  | 11 / 29<br>(Fri) | 9-10   | Formative assessment | Theme: formative assessment (explanation) 形成試験<br>解説   | Masaya Saito<br>齋藤雅也          | 医学系研究棟 4階 6 講義室 |