



Syllabus Reference

Course title	Regulation of Biological Function 1	
Term	前期 1st Half	
Credit(s)	1	
The main day		The main period
Program/Department	48 Physiological Sciences	
Lecturers	西田基宏、村上正晃、曾我部隆彰、長谷部理絵、西村明幸、山崎剛士	
成績評価区分 Grading Scale	A, B, C, Dの4段階評価 Four-grade evaluation	
レベル Level	Level 3	
力量 Competence	専門力 Academic expertise、独創性 Creativity	

Instructor

Full name

* NISHIDA MOTOHIRO

MURAKAMI MASA AKI

SOKABE TAKA AKI

HASEBE RIE

NISHIMURA AKIYUKI

YAMASAKI TAKESHI

Outline	Learn basic knowledge about the cardiocirculatory system, immune system, feeding behavior system, and sensory sensing system, all of which are important for maintaining homeostasis in the body through eight lectures.
Learning objectives	<ol style="list-style-type: none"> 1) Understand the physiological and pathophysiological functions of the cardiovascular system. 2) Understand autoimmune diseases and neuroimmunity related diseases. 3) Understand neural mechanism of feeding behavior. 4) Understand nociception, thermoreception, and sensory sensing.
Grading policy	<ul style="list-style-type: none"> • Attendance of at least half of the lectures is required for credit. • A summary report on one of the lectures must be submitted. The instructor of the lecture will grade the submitted report based on the level of understanding of the lecture. • Based on their judgment, the course instructor will assign a pass or fail grade.
Lecture Plan	<p>April 19 – July 19, 2024, Friday 10:00 – 11:30 a.m. (Dates are subject to change, please check the Physiological Sciences course page.)</p> <p>Apr. 19th “Cardiac physiology and pathophysiology” (Nishida)</p> <p>Apr. 26th “Decoding cardiovascular homeostasis from mitochondrial quality control (Nishimura)</p> <p>May 10th “Pathogenesis of autoimmune diseases” (Murakami)</p> <p>May 24th “Biological functions and pathogenesis regulated by neuro-immune interaction” (Hasebe)</p> <p>June 7th “Tissue Specific inflammation regulated by neuro-immune interaction” (Yamasaki)</p> <p>June 14th “Neural mechanism of feeding behavior” (Nakajima)</p> <p>July 5th “Molecular mechanisms for detection of nociceptive stimuli and temperature in</p>

	mammals” (Tominaga) July 19th “Molecular mechanisms of sensory functions in Drosophila” (Sokabe)
Location	Zoom online
Language	English
Textbooks and references	NA
Notes for students of other programs	NA
Related URL	https://www.nips.ac.jp/graduate/curriculum.html
Explanatory note on above URL	上記の生理科学コースのウェブサイトで最新のスケジュールをご確認ください。
Others	
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