

Course number		G-LAS11 80012 LE68					
Course title (and course title in English)	先端生命科学 Frontier in Life Sciences				Instructor's name, job title, and department of affiliation	Graduate School of Biostudies Professor, WATANABE NAOKI	
						Part-time Lecturer, HIRANO TASTUYA	
						Part-time Lecturer, Sato, Moritoshi	
						Part-time Lecturer, Ikenouchi, Junichi	
						Part-time Lecturer, Murayama, Masanori	
						Part-time Lecturer, Okada, Yasushi	
						Part-time Lecturer, Mizushima, Noboru	
						Part-time Lecturer, Iwasaki, Shintaro	
Group	Interdisciplinary Graduate Courses			Field(Classification)	Natural Sciences		
Language of instruction	English			Old group		Number of credits	1
Hours	15	Class style	Lecture (Face-to-face course)		Year/semesters	2025・Intensive, Second semester	
Days and periods	Intensive 3rd and 4th period on December 17, 24, January 7 and 14	Target year	Graduate students		Eligible students	For science students	
(Students of Graduate School of Biostudies cannot take this course as liberal arts and general education course. Please register the course with your department.)							
[Overview and purpose of the course]							
<p>生命科学領域の中で特に目覚ましい発展をとげている研究から、それぞれの領域の第一人者の先生に簡単な背景から将来の展望にいたるまでを講義をしていただき、大学院生の研究へのモチベーションを高めることを目的とする。</p> <p>Prominent leading scientists from several research fields of life science will provide their research histories from their backgrounds to future prospects, to encourage young scientists.</p>							
[Course objectives]							
Learning the most advanced topics in selected research fields such as cell and molecular biology, biophysics, neuroscience, developmental biology and regenerative medicine.							
[Course schedule and contents]							
Please be aware that details are subject to change.							
<p>December 17th (Tue), 2019 13:00- 14:30 Dr. Naoki Watanabe (Kyoto University, Professor) Witnessing kinetics of intracellular molecules 14:45- 16:15 Dr. Tatsuya Hirano (RIKEN, Chief Scientist) Chromosome architecture and dynamics</p>							
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先端生命科学(2)

December 24th (Tue), 2019

13:00- 14:30 Dr. Moritoshi Sato (Tokyo University, Professor)

Manipulating living systems by light

14:45- 16:15 Dr. Junichi Ikenouchi (Kyushu University, Professor)

Molecular mechanisms of cell membrane structure formation

January 7th (Tue), 2020

13:00- 14:30 Dr. Masanori Murayama (Riken, Team Leader)

Cortical circuit for sensory perception and memory consolidation

14:45- 16:15 Dr. Yasushi Okada (Tokyo Univ., Professor; Riken, Team Leader)

Super-resolution and single-molecule imaging in cell biology

January 14th (Tue), 2020

13:00- 14:30 Dr. Noboru Mizushima (Tokyo University, Professor)

Autophagy: an intracellular degradation system

14:45- 16:15 Dr. Shintaro Iwasaki (Riken, Chief Scientist)

Tips, tricks, and tweaks of ribosome profiling

[Course requirements]

None

[Evaluation methods and policy]

Evaluation will be based on attendance and effort. Further details will be announced in the first lecture.

[Textbooks]

Not used

[References, etc.]

(References, etc.)

Related papers, which are useful to understand lectures, will be indicated in flyers.

[Study outside of class (preparation and review)]

Basic knowledge of molecular biology will be required to understand the course content. No particular preparation is necessary, but students are advised to read related papers, which will be useful to understand lectures.

[Other information (office hours, etc.)]

オフィスアワーの詳細については、KULASISで確認してください。

[Essential courses]