

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,ANDO, Toshio	
						Part-time Lecturer,TSUKKITA, Sachiko	
						Part-time Lecturer,ROBINSON, Robert C. Center for iPS Cell Research and Application Professor,TSUMAKI, Noriyuki	
						Part-time Lecturer,NIKAIDO, Itoshi	
						Part-time Lecturer,YOKOSUKA, Tadashi	
Part-time Lecturer,OKUDA, Satoru Graduate School of Medicine Professor,ISA TADASHI							
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	2024・Intensive, Second semester	
Days and periods	Intensive 3rd&4th peiod on Tuesdays (December 22, January 5, January 12 and January 19)		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 22th (Tue), 2020 13:00- 14:30 Dr. Toshio Ando (Kanazawa Univ., Principle Investigator, Head of Imaging Res. Div., Bio-AFM Frontier Research Center) Dynamic molecular processes filmed by high-speed AFM</p>							
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先端生命科学(2)

14:45- 16:15 Dr. Satoru Okuda (Kanazawa Univ., Associate Professor)
Mechanics and modeling of self-organizing morphogenesis

January 5th (Tue), 2021

13:00- 14:30 Dr. Naoki Watanabe (Kyoto Univ., Professor)

Functions of flow and turbulence in the actin system

14:45- 16:15 Dr. Noriyuki Tsumaki (Kyoto Univ., Professor)

Biology and pathology of cartilage, a component of skeleton

January 12th (Tue), 2021

13:00- 14:30 Dr. Robert C. Robinson (Okayama Univ. & VISTEC Thailand, Professor)

Functions of eukaryotic-like genes from Asgard archaea

14:45- 16:15 Dr. Tadashi Yokosuka (Tokyo Medical Univ., Professor)

High resolution imaging unveils spatiotemporal regulation of T cell activation by “ Microclusters” -

Signalosomes of immune-check point and chimeric antigen receptors -

January 19th (Tue), 2021

13:00- 14:30 Dr. Sachiko Tsukita (Teikyo Univ. & Osaka Univ., Professor)

The Claudins: From Tight Junctions to Biological Systems

14:45- 16:15 Dr. Tadashi Isa (Kyoto Univ., Professor)

Neurobiology of recovery after brain and spinal cord injury

[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.)]

コーディネーター連絡先：渡邊 直樹 (watanabe.naoki.4v@kyoto-u.ac.jp)

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。