科目ナンバリング	U-LAS14 20066 SE68						
授業科目名<英訳>	Biological Sciences through Scientific Articles I-E2 Biological Sciences through Scientific Articles I-E2			担当者所属職名・氏名	理学研究科　准教授　TAKENAKA, Mizuki		
群	自然科学科目群			分野(分類)	生物学(各論)	使用言語	英語
旧群	B群	単位数	2単位	週コマ数	1コマ	授業形態	ゼミナール（対面授業科目）
開講年度・開講期	2026・前期	曜時限	火5	配当学年	主として1・2回生	対象学生	全学向

[授業の概要・目的]

Genome editing is one of the hottest topics in modern biology. Various genome editing technologies have been developed and applied to basic science, industry, and medicine. In this seminar, we will read several papers on genome editing in English to discuss the technical background, history, and applications of genome editing. If necessary, supporting information such as scientific background, history, and experimental methods will be provided.

【内容説明】ゲノム編集は現代生物学で最も注目される分野のひとつである。これまで様々なゲノム編集技術が開発され、基礎科学や産業、医療に応用されている。本セミナーでは、ゲノム編集に関するいくつかの英文論文を読み、ゲノム編集の歴史や技術的背景、応用などについて英語で議論する。論文にのっていない科学的背景や歴史、実験手法の詳細などは必要に応じてセミナー中に説明する。

[到達目標]

Students will learn how to read scientific reviews, essays, and articles.
To grasp the essence of the article and summarize it efficiently.
To find interesting points in scientific articles.
To find complementary articles if necessary.
To read articles critically and purposefully.
Students will understand the background of gene editing technology.

[授業計画と内容]

1) In the first week, I will give an instruction of the seminar course. I will discuss an article to show the style of presentation. Then I provide an article on gene editing technology.

2) Brief lecture on the background knowledge of gene editing.

3)-14) Each student prepares a presentation about the article with my support if necessary and presents it at the seminar in turn. Other students are expected to actively participate in the discussion. Complementary information for the article will be provided as needed. We will read 4-5 articles in a semester.

15) I will provide a course summary for the feedback session.

Biological Sciences through Scientific Articles I-E2(2)へ続く↓↓↓

Biological Sciences through Scientific Articles I-E2(2)

[履修要件]

This course is open to all students, BUT it is recommended that students have at least a high school "basic biology" level of knowledge.

[成績評価の方法・観点]

Class attendance and active participation (70%), presentation following questions and answer session (30%).

[教科書]

授業中に指示する

Several recently published biological articles especially on gene editing will be provided as candidates at the first lesson. We will read 4-5 articles in a semester.

[授業外学修（予習・復習）等]

Students should read the provided article in advance.

[その他（オフィスアワー等）]

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Any questions and requests are welcome by prior arrangements via E-mail.

[主要授業科目（学部・学科名）]

理学部