

2024年度 教育学部 学士入試 問題用紙

受験番号					
氏名					

「 英語 」
生物学専修

問1 次の英文を和訳しなさい。

A central question in biology is how cells generate and sense information to form complex yet reproducible patterns. Any given phenomenon in biology involves time-dependent changes in states. Moreover, several developmental events rely on temporal cues to generate specific outputs, where time itself can contribute to creating cell diversity and coordinated patterns. However, the encoding of time information and how the biological system deciphers such temporal codes are longstanding questions. Various time scales in biological events are mutually related and tightly coordinated, ranging from events occurring in milliseconds, such as ionic regulation, to seconds, such as signaling, and minutes to hours, such as the control of gene expression. This temporal scale further extends to days, encompassing processes like organogenesis, and even up to millions of years in the context of evolution. Processes such as the timing of metamorphosis, and heterochrony revealed by the comparison of the developmental timetable of events in different animals, are integral aspects of understanding these temporal dynamics.

development: 発生

organogenesis: 器官形成

heterochrony: 異時性

※ページ下部に出典を追記しております。

問2 次の設問（1）と（2）にそれぞれ英語で答えなさい。

- （1） Provide one example of a recent Nobel Prize in Physiology or Medicine and explain its contribution to the field of biology.
- （2） Describe what motivates you to pursue the study of biology.

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