◎ ▲ 第84回HiHA Seminar

主催: 広島大学健康長寿研究拠点 Hiroshima Research Center for Healthy Ageing (HiHA)

HIROSHIMA UNIVERSITY

Diversity adaptation by collective cell migration

Professor Thierry Emonet Quantitative Biology Institute Department of Molecular Cellular and Developmental Biology Department of Physics Yale University, New Haven, CT



(Facilitator: Setsu Kato, Graduate School of Integrated Sciences for Life)

Cells live in communities where they interact with each other and their environment. By coordinating individuals, such interactions often result in collective behavior that emerge on scales larger than the individuals that are beneficial to the population. At the same time, populations of individuals, even isogenic ones, display phenotypic heterogeneity, which diversifies individual behavior and enhances the resilience of the population in unexpected situations. This raises a dilemma: although individuality provides advantages, it also tends to reduce coordination. I will report on our experimental and theoretical efforts that use bacterial chemotaxis as a model system to understand how populations of cells reconciliate individuality with group behavior and how that leads to adaptation of phenotypic diversity without the need for specific gene regulation or mutations.

<u>開催日時</u>:令和6年 1月15日(月)16:00-17:00 <u>会場</u>:広島大学先端科学総合研究棟3階 302S会議室

お問い合わせ先

○ 広島大学大学院統合生命科学研究科HiHA事務局(healthy-aging@hiroshima-u.ac.jp)
○ 加藤 節 (setsukato@hiroshima-u.ac.jp)