

みなさま

7月16日(火)13:00から以下の内容で、スイス連邦工科大学ローザンヌ校(EPFL)の Andrew Oates 教授のセミナーを予定しております。

Oates 教授はゼブラフィッシュ胚のライブイメージングを含む実験と理論の両方から動物胚発生で見られる遺伝子発現リズムを研究されています。都合上、午後の早い時間のセミナーとなってしまいましたが、みなさまのご参加をお待ちしております。

瓜生耕一郎

タイトル: Clocks and timers in development

講演者: Prof. Andrew Oates (Ecole Polytechnique Federale de Lausanne, Switzerland)

日時: 2019年7月16日(火) 13:00 ~ 14:00

場所: 金沢大学角間キャンパス自然研本館 104 講義室

要旨:

Some biological oscillators function throughout the life of an organism, for example the circadian clock, whereas others have a more restricted duration, particularly in embryogenesis. The "segmentation clock" is a multi-cellular patterning system of genetic oscillators thought to control the rhythmic and sequential formation of the vertebrate embryo's body segments. Individual oscillating cells are synchronized with their neighbors, forming a coherent wave pattern of gene expression. How these wave patterns arise and how they are regulated during embryogenesis is not clear. I will describe recent progress in understanding the behavior of individual cells from the zebrafish as they slow their oscillations and differentiate during segmentation, and discuss how this gives rise to the tissue-level wave patterns. Central to this understanding is the concept of a timer that regulates the duration of a clock. This perspective reveals what part of the oscillatory cycle is changing as the cells slow and stop.

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