

学術セミナー

‘How sex-determining genes specify circuits
influencing male-type aggression in *Drosophila*’

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日時 : 平成 **28** 年 **11** 月 **21** 日 (月) **16 : 00** ~ 17 : 00

場所 : 金沢大学角間キャンパス自然科学本館(講義棟)
1階 ワークショップ1

Abstract: Sex determination is genetically programmed, but no single gene accounts for all sexually dimorphic features. In mammals, the androgen and estrogen steroid hormones coordinate sex determination by signaling through specific nuclear receptors. In *Drosophila*, two transcription factors, Doublesex (Dsx) and Fruitless (Fru), are the actuators of sex determination. We are particularly interested in understanding the genetic mechanisms by which sexually dimorphic behaviors, and the underlying dimorphic neural circuits, are specified. Here, we investigate the modular roles of Dsx and Fru in controlling specification of sexually dimorphic neurons important for male aggressive behavior in the *Drosophila* brain. We combine genetic and neuronal manipulation techniques to reveal combinatorial nature of mechanisms underlying the formation and operation of aggression-controlling neural circuits. This study identifies a genetic mechanism for transforming specific neural components that support sex-specific social behavior.

本セミナーには大学院講義「高次生命システム学」受講の大学院生も参加します。

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