ラボセミナー･脳科学 GCOE セミナーのお知らせ

Benjamin Houot

(Jean-Francois Ferveur lab, Universite de Bourgogne, Dijon, France)

The male's perception of sexual pheromone in *Drosophila melanogaster* change according to selection paradigm.

11 月 7 日（金） 15:00ー16:00

青葉山キャンパス･理学部生物棟共通講義室

Abstract

In *Drosophila melanogaster*, the *desat1* gene is implied in two majors and complementary traits in pheromone communication：cuticular hydrocarbon production (as sexual pheromone) and the perception of pheromone by the male. This two phenotypes are controled independently by *desat1* (Marcillac et al, 2005), so there is no existence of a direct relation between the abnormal production and their perception when it is perturbated. Or to maintain a sexual viable comunication, production and perception of sex pheromone are coadaptated. This study is based on this 2 aspects of the chemical communication. For understand this link, we have realized a selection paradigm based on the ability of sex discrimination by male. Differents lines are generated according to their preference to discriminate the male (“Low line”) or femelle pheromone (“High line”). Morever, we used this selection in two differents background, where in one the aim is to get a gain of discrimination (*desat1* background, constituted by the *desat1* mutant line) and in the other to loose the perception of sex pheromone (wild type background). After 20 generations, in 2 backgrounds the ability of discrimination is modified. By microarray approach, 2 candidates genes, common of the 2 background, has been determinated to be responsable of discrimination phenotype and essential in pheromonal communication.

連絡先

生命科学研究科･脳機能遺伝分野･山元研究室･野島鉄哉

drosophila_nojilans@livedoor.com 内線（青葉山）5790