発生ダイナミクス分野主催セミナー
Developmental Dynamics Seminar

“Volatile Sex Pheromones of Nematodes”

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Friday, December 21, 2018; 16:00~17:00

Katahira Campus: Life Sciences Project Research Laboratory,
Lecture Room B (Rm. 105)
Aobayama Campus (Live Video): Biology Bldg., Large Conference Room
片平キャンパス: 生命科学プロジェクト研究棟　1階 講義室B (105)
青葉山キャンパス（ビデオ中継）：生物学棟 大会議室

Nematodes produce an array of water-soluble social cues, glycosides of deoxy sugars such as the ascarosides, that are secondary metabolites and communicate information such as population density and location of sex partners. Recent studies have suggested that nematodes utilize volatile compounds as pheromones as well as the ascarosides, but the volatile pheromone compounds still remain unknown. We have performed GC-MS analysis to identify the volatile sex pheromones of two distant genera of nematodes - the fungal-feeding and plant-parasitic *Bursaphelenchus* and the free-living *Caenorhabditis*. As a result, a total of 15 compounds (12 for *Bursaphelenchus* and 3 for *Caenorhabditis*) derived from female/hermaphrodite have been found as candidate compounds. Some of these chemicals were functionally verified as sex attractants by the chemotaxis assay using synthetic chemicals. I will discuss the character and evolutionary conservation of the newly discovered sex pheromones in this seminar.

This seminar will be held in English.
This is a credit granted seminar (1 point) for:
・Graduate School of Life Sciences
・Neuro Global Program “(Advanced) Brain Science Seminar Series Ex”

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