

TARA Seminar

The seminar will be given in English.

Sterile induction of innate immunity in *Drosophila* larvae

ショウジョウバエ幼虫での無菌的な自然免疫活性化

16:30～17:30, Tue., November 5, 2019
Seminar room, Building A, TARA Center

Takayuki Kuraishi, Ph.D. 倉石 貴透 先生

Associate Professor
Faculty of Pharmacy, Institute of Medical,
Pharmaceutical and Health Sciences,
Kanazawa University
(金沢大学医薬保健研究域)

Drosophila melanogaster have been utilized as a genetically tractable model organism to decipher the molecular mechanisms of innate immune responses. We serendipitously found that *Drosophila* larvae were sensitive to mechanical stimuli with respect to activation of a sterile humoral response. In particular, pinching by forceps to a degree that might cause minor damage toward larval tissues could induce the expression of the antifungal peptide gene *Drosomycin*; notably, this induction was only partially dependent on the Toll pathway. We propose that *Drosophila* larvae may serve as a useful model to analyze the non-infectious inflammation that underlies various inflammatory diseases.

● Organizer: Prof. Ryusuke Niwa
ryusuke-niwa@tara.tsukuba.ac.jp (Tel : 029-853-7337)筑波大学
University of Tsukuba