



CDB SEMINAR

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Tuesday, September 18, 2007

16:00~17:00 A7F Conference Room

Development and immunity in the nematode *C. elegans*

Summary

The nematode *C. elegans* has provided a major experimental system for understanding developmental biology. More recently, this nematode has been used to explore innate immune defenses against bacterial infection. It has been found that several different developmental signaling pathways are also used for innate immunity. Our laboratory has studied interaction of *C. elegans* with the nematode-specific pathogen *Microbacterium nematophilum*, a bacterium which causes both disease and morphological change in the worm, and induces defensive activation of a MAP kinase cascade. Microarray analysis reveals distinctive transcriptional responses to infection. The infection process also depends on specific glycosylation enzymes in the nematode host, one of which has been shown to be a developmentally essential gene, required both for embryonic ventral enclosure and for postembryonic cuticle formation.

Host:

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