

アドバンス生命理学特論 Topics in Advanced Biological Science

Novel factors that regulate aging and immunity in *C. elegans*

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Many environmental and genetic factors that influence aging have been identified for the last two decades. My laboratory aims to elucidate molecular mechanisms by which intrinsic and extrinsic factors regulate aging and lifespan by using molecular genetics of the roundworm *Caenorhabditis elegans*. In this talk, I will present our latest work on the identification of factors that regulate aging and immunity in C. elegans. First, I will focus on how RNA quality control systems mediated by nonsense-mediated mRNA decay contribute longevity caused by reduced insulin/IGF-1 signaling. Second, I will discuss how mitochondrial factors, including mitochondrial chaperones, regulate immunity at the organism level. Because many findings on aging regulation in *C. elegans* have been shown to be evolutionarily conserved, homologous mechanisms may exist in mammals including humans.

10月23日(月) 16:00-17:30

理学南館1階セミナー室

Seminar Room, 1st Floor, Science South Building

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