REGULATION OF LONGEVITY BY INSULIN/IGF-1 SIGNALING, SENSORY NEURONS AND THE GERMLINE IN THE NEMATODE C. ELEGANS

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Aging is regulated hormonally in the nematode C. elegans. In my presentation, I will describe this elaborate endocrine system, which involves an insulin/IGF-1 signaling pathway, with inputs from the sensory tissues and the reproductive system. Our studies suggest that multiple hormones regulate the life span of this animal, including insulin/IGF-1-like hormones and a steroid hormone. Aging in this organism is extremely plastic; changes in any of a number of genes can extend youthfulness and double, or even quadruple, life span.