**RISE Talks Series**

Who? Marvin Bayne, Ph.D., Synergy Partners R&D Solutions

What? Chemoreception in the Nematode *C. elegans*

When? 12:00-1:00 on Wednesday, February 10

Where? Hall of Sciences, Room 326

*C. elegans* is a free-living nematode that has become an extremely useful model organism to study multiple aspects of cell biology, neurobiology and developmental biology. Chemoreception of environmental stimuli is a major sensory system in small soil nematodes like *C. elegans*. *C. elegans* chemotaxes to bacteria, its natural food source, by following both water-soluble and volatile cues. Chemoreception is mediated in *C. elegans* by members of the G protein-coupled receptor class (GPCRs). Many volatile organic compounds produced by bacteria feeding on rotting fruits and vegetables are attractive to *C. elegans* in chemotaxis assays. Initial studies have identified the chemoreceptor ODR-10 as a receptor for diacteyl. The focus of the proposed studies would be to identify new odorant/receptor pairs in *C. elegans*.