

## The Department of Molecular, Cellular and Developmental Biology Seminar Series Presents



## Victor R. Ambros

Professor of Molecular Medicine
University of Massachusetts
Medical School

"Function and developmental regulation of let-7 family microRNAs in C. elegans"

We have identified, by quantitative real-time PCR, hundreds of miRNAs that are dramatically elevated in the plasma or serum of acetaminophen (APAP) overdose patients. Most of these circulating microRNAs decrease toward normal levels during treatment with N-acetyl cysteine (NAC). We identified a set of 11 miRNAs whose profiles and dynamics in the circulation during NAC treatment can discriminate APAP hepatotoxicity from ischemic hepatitis. The elevation of certain miRNAs can precede the dramatic rise in the standard biomarker, alanine aminotransferase (ALT), and these miRNAs also respond more rapidly than ALT to successful treatment. Our results suggest that miRNAs can serve as sensitive diagnostic and prognostic clinical tools for severe liver injury and could be useful for monitoring drug-induced liver injury during drug discovery.

Wednesday, February 13, 2019 Sterling Chemistry Lab 160 225 Prospect Street, New Haven

3:45pm Tea 4:00pm Seminar

Hosted by: Josien van Wolfswinkel

Reception to follow for grad students & postdocs, hosted by RNA Center

Sponsored by the Mrs. Hepsa Ely Silliman Memorial Fund

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