



School of

# Biological Sciences

Spring 2017 Weekly Seminar Series



## Flying in the face of disease: Rapid *in vivo* drug screening for Alzheimer's disease

**Dr. Dan Marena**

**Department of Biology and Department  
of Neurobiology and Anatomy  
Drexel University College of Medicine**

Alzheimer's disease (AD) is the 6<sup>th</sup> leading cause of death in the United States and it is the only one of these top six causes of death whose prevalence is increasing. Unfortunately, there are currently no drugs available that can treat the underlying causes of AD. This is partly due to the complexity of AD, but is also due to the cost of drug discovery. The average cost of bringing a novel drug to market is \$1.8 billion, and requires approximately 13.5 years of development. In this talk, I will introduce you to a model of AD in the fruit fly *Drosophila melanogaster*, and describe the potential utility of using this animal for drug discovery in AD. I will present a novel drug that came out of two separate unbiased screens, and describe the potential mechanism of action of this drug. I hope to leave you with the suggestion that our AD model could be used as a sensitive *in vivo* predictor of drug efficacy for preclinical analysis.

Contact Alysia Mortimer ([admorti@ilstu.edu](mailto:admorti@ilstu.edu)) for appointments with this speaker

**Thursday, February 16, 2017 at 4:00 p.m.**  
**Moulton Hall 210**

Pre-seminar refreshments will be served from 3:30 - 3:50  
Felmley Science Annex outside Room 133