



School of

# Biological Sciences

Spring 2018 Weekly Seminar Series



## Astrocytes Under Pressure: the Role of Astrocytic Transporters in a Model of Obstructive Sleep Apnea

**Dr. Diana Martinez**

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### \*\*\* Note Special Time and Place for this Seminar

Diseases such as Obstructive Sleep Apnea (OSA) affects ~24% of adult males, 9% of females, and 6% of juveniles. The consequences of OSA are both medically severe and economically costly. OSA manifests as problematic breathing and hypertension and the central nervous system has been implicated in these responses but the mechanisms are not fully known. The nucleus Tractus Solitarius (nTS) is the first central site for integration and modulation of reflexes originating from the periphery. Following chronic intermittent hypoxia (CIH), a model for OSA, excitatory glutamatergic nTS synaptic transmission and neuronal activity is enhanced. My work seeks to understand the neural circuits (specifically the role of astrocytes) and control schemes of the cardiorespiratory system; completion of this study will advance our understanding of central cardiorespiratory neurobiology which may lead to potential therapeutic interventions.

Contact Wolfgang Stein ([wstein@ilstu.edu](mailto:wstein@ilstu.edu)) for appointments with this speaker

**Thursday, May 3, 2018 at 12:00 p.m.**  
**Center for the Visual Arts 151**

*Pre-seminar refreshments will be served from 11:30 -11:50  
4th Floor Atrium, SLB*