



## Paravertebral sympathetic thoracic chain ganglia: recruitment principles and plasticity after spinal cord injury

### SEMINAR & VISITING SPEAKER SERIES

DATE  
Thursday, December 13, 2018  
12:00 PM (Noon)

LOCATION  
BMSB, Theatre B

SPEAKER  
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Paravertebral chain sympathetic postganglionic neurons (SPNs) represent the final neural control element regulating vasomotor tone and can be thought of as a distribution system for sympathetic activity that must span the body vasculature. Alterations in sympathetic chain activity are implicated in various autonomic disorders. The thoracic SPNs (tSPNs) control vasomotor function in upper extremities and trunk (this includes vascular supply to integumentary, cardiorespiratory and digestive systems). tSPNs remain a barely-studied area of vertebrate autonomic neuroscience.

#### OBJECTIVES

1. Use whole-cell patch clamp recordings in an adult mouse ex vivo preparation to uncover the operational principles governing tSPN recruitment
2. obtain a reliable cellular and synaptic data set for realistic computational simulation. The relative simplicity of the organization makes discovery of principles through modeling more assured than in more complex systems
3. To determine whether changes in tSPNs contribute to autonomic dysfunction after spinal cord injury

For more information:

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