

## PROGRESS IN NEUROSCIENCE PINS

Seminar Series of the Brain & Mind Research Institute Weill Cornell Medical College (WCMC) &



The Graduate Program in Neuroscience of WCMC and Sloan Kettering Institute

Thursday, 1/15/15, 4 PM, coffee at 3:45 PM Weill Auditorium

## "Autophagy and the CNS Synapse"

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## Abstract:

Throughout life, CNS synapses undergo alterations that are required for learning and changes in behavior. While most research has been devoted to means to make new synapses, removal of synapses or their components may be just as important. We will discuss autophagic and lysosomal processes associated with synaptic modulation, and how disruption of these steps may cause autism and other disorders.

## **Recent Relevant Publications**

- Tang, G., Gudsnjk K., Kuo S-H, Cotrina M, Rosokliga G., Songers M, Kanter E., Barnard C, Yamamoto A, Yue Z, Champagne F, Dwork, A. J., Goldman J., Sulzer, D. (2014) Dendritic spine pruning defects in autism mediated by neuronal loss of macroautophagy. Neuron, 83:1-13.
- 2) Daniela Hernandez, Ciara A. Torres, Wanda Setlik, Carolina Cebrián, Eugene V. Mosharov, Guomei Tang, Hsiao-Chun Cheng, Nikolai Kholodilov, Olga Yarygina, Robert E. Burke, Michael Gershon, David Sulzer (2012). Regulation of presynaptic neurotransmission by macroautophagy. Neuron, 74:277-284.

