MOLECULAR AND CELLULAR MECHANISMS OF AXON DEGENERATION: 2nd International Workshop

Marine Biological Laboratory, Woods Hole, MA, USA
October 26-28, 2008

PROGRAM

Sunday 26th October 2008

14.00-17.00  Registration, room check-in, posters up

17.00-18.00  Mixer

18.00-19.15  Dinner

Session 1: Wallerian degeneration and axon protection (1)
chair: Zhigang He

19.20  Introduction

19.30  Michael Coleman (Babraham Institute, Cambridge, UK):
Dissecting the regulation of axon degeneration using transgenic mice and rats

20.00  Marc Freeman (UMass Med School, Worcester):

20.30  Jeff Milbrandt (Washington University, St. Louis):
Axonal degeneration: mitochondria, energy and redox

21.00-23.00  Evening mixer
Monday 27th October 2008

7.30-8.30 Breakfast

Session 2: Wallerian degeneration and axon protection (2)
chair: Marc Freeman

9.00 Tom Gillingwater (University of Edinburgh): A 'molecular fingerprint' for altered axonal and synaptic vulnerability?

9.30 Lucy Broom (University of Southampton): Axoplasm proteomics: early events in axon degeneration and potential effectors of Wld<sup>5</sup>

10.00-10.30 Coffee

10.30 Marc Tessier-Lavigne (Genentech): Axonal self-destruction and neurodegenerative disease

11.00 Ryan Watts (Genentech): Signaling pathways regulating axon degeneration

11.30 Zhigang He (Children's Hospital, Boston):

12.00-14.00 Lunch & free time

Session 3: Axons in Alzheimer's disease and tauopathies
chair: Larry Goldstein

14.00 Erika Holzbaur (University of Pennsylvania, Philadelphia):

14.30 Eva-Maria Mandelkow (Max-Planck Unit for Structural Molecular Biology, Hamburg): Tau protein: Role in axonal transport, neurite outgrowth, and neurodegeneration

15.00 Larry Goldstein (UCSD, La Jolla): Elucidating mechanisms of vesicle movement and human neurodegenerative diseases
15.30  Bradley Hyman (Mass General, Charlestown): Calcineurin activation mediates morphological neurodegenerative changes of Alzheimer’s disease

16.00-18.00  Poster session and mixer

18.00-19.00  Dinner

Session 4: Neuron-glia interactions in development and disease
chair: Jack Griffin

19.00  Klaus-Armin Nave (Max-Planck Institute for Experimental Medicine, Göttingen):

19.30  Ben Barres (Stanford University): The Calcium Channel Subunit α2δ1 is the Neuronal Thrombospondin Receptor Responsible for Synaptogenesis.

20.00  Jack Griffin (Johns Hopkins University, Baltimore):

20.30  Simon John (The Jackson Laboratory, Bar Harbor): Glaucoma as an axonopathy

21.00-23.00  Evening mixer

Tuesday 28th October 2008

7.00-8.15  Breakfast

Session 5: Mitochondria in axon growth and stability
chair: Michael Coleman

8.30  Stephan Zuchner (University of Miami):

9.00  Zu-Hang Sheng (NINDS, Bethesda): Control of axonal mitochondrial mobility and its impact on short-term facilitation
9.30  Thomas Misgeld (Technical University of Munich): Cell biological mechanisms of developmental neuromuscular axon loss

10.00  Zhenyu Yue (Mount Sinai School of Medicine, NY): Neuronal Autophagy: Going the Distance to the Axon

10.30-11.00  Coffee

Session 6: Axon degeneration in neurodegenerative disease chair: Ben Barres

11.00  Ahmet Hoke (Johns Hopkins University, Baltimore):

11.30  Christine Beattie (Ohio State University, Columbus): Motoneuron diseases and the distal axon

12.00  Martin Kerschensteiner (Ludwig-Maximilians University, Munich): In vivo pathogenesis of immune-mediated axon damage

12.30  Lunch & depart