## Sunday, October 7<sup>th</sup>

3:00 pm	Check-in
6:00 pm	Reception (Lobby)
7:00 pm	Dinner
8:00 pm	Session 1
8:00 pm	Welcome and opening remarks (Organizers)
8:10 pm	<b>Thomas L. Schwarz</b> , Harvard Medical School <i>Regulation of mitochondrial movement in neurons</i>
8:35 pm	<b>Christopher E. Henderson</b> , Columbia University Mechanisms of motor axon degeneration and regeneration
9:00 pm	Refreshments available at Bob's Pub

**NOTE:** Meals are in the **Dining Room** Talks are in the **Seminar Room** Posters are in the **Lobby** 



## Monday, October 8<sup>th</sup>

7:30 am	Breakfast (service ends at 8:45 am)
9:00 am	Session 2: New insights into the cell biology of axons Chair: Thomas Misgeld
9:00 am	<b>Martin Kerschensteiner</b> , Ludwig-Maximilians-University Munich Imaging cellular, subcellular and molecular mechanisms of axon degeneration in vivo
9:25 am	Erika Holzbaur, University of Pennsylvania Initiation and regulation of axonal transport
9:50 am	Mike Fainzilber, Weizmann Institute of Science The importins of retrograde signaling in neurons
10:15 am	Break
10:45 am	Session 3: Mechanisms of axon loss and regrowth Chair: Catherine Collins
10:45 am	<b>Mohammed Farah</b> , Johns Hopkins University Length-dependent axo-terminal degeneration in the lateral thoracic nerve of the SOD1 ALS mouse model
11:10 am	Gary J. Bassell, Emory University School of Medicine A Role for SMN in the assembly and transport of axonal mRNPs
11:35 am	<b>Valeria Cavalli</b> , Washington University in St. Louis HDAC5 is a novel injury-regulated tubulin deacetylase controlling axon regeneration
12:00 pm	<b>Frank Bradke</b> , German Center for Neurodegenerative Diseases Moderate microtubule stabilization reduces scarring and causes axonal regeneration after spinal cord injury
12:25 pm	Lunch (service ends at 1:15 pm)



2:00 pm	Session 4: Neuron-glia interactions in axonal and synaptic loss Chair: Martin Kerschensteiner
2:00 pm	Mary Logan, Oregon Health & Science University Insulin-like signaling networks that govern glial responses to axon injury
2:25 pm	Klaus-Armin Nave, Max Planck Institute of Experimental Medicine Glycolytic oligodendrocytes support axonal energy metabolism and long-term survival
2:50 pm	<b>Graeme W. Davis</b> , University of California, San Francisco <i>Glial-derived pro-degenerative signaling in Drosophila</i>
3:15 pm	<b>Felipe A. Court</b> , Catholic University of Chile Autonomous processes in axonal degeneration and their regulation by glial cells
3:40 pm	Break
4:10 pm	<ul> <li>Panel Discussion: Basic aspects of axon biology in disease: transport, organelles, and ions</li> <li>Chair: Marc Freeman</li> <li>Panelists: Thomas Schwarz, Erika Holzbaur, Frank Bradke, Michael Fainzilber</li> </ul>
5:10 pm	Poster Reception
6:45 pm	Dinner
8:00 pm	Session 5: Molecular mechanisms of cell survival and loss Chair: Charlotte Sumner
8:00 pm	<b>Valina Dawson</b> , Johns Hopkins University School of Medicine <i>PAR network signaling regulates survival and death in the brain</i>
8:25 pm	Susan Ackerman, HHMI/The Jackson Laboratory Post-transcriptional mechanisms of neurodegeneration
8:50 pm	Refreshments available at Bob's Pub



## Tuesday, October 9<sup>th</sup>

7:30 am	Breakfast (service ends at 8:45 am)
9:00 am	Session 6: Axonal and synaptic loss in neurodegenerative disease Chair: Robert Burgess
9:00 am	<b>Christine Beattie</b> , Ohio State University Motor axon defects in the motor neuron disease spinal muscular atrophy
9:25 am	<b>Charlotte J. Sumner</b> , Johns Hopkins University The role of the SMA-determining gene SMN in synaptic and axonal maturation and maintenance
9:50 am	<b>Virginia Lee</b> , University of Pennsylvania <i>Transmission of alpha-synuclein in Parkinson's disease: A novel mechanism of pathogenesis</i>
10:15 am	<b>Jonathan D. Glass</b> , Emory University School of Medicine Axonal degeneration: A rational therapeutic target for neurodegenerative diseases
10:40 am	Break
11:10 am	Session 7: Molecular mechanisms driving neurodegeneration Chair: Erika Holzbaur
11:10 am	<b>Aaron D. Gitler</b> , Stanford University New insights into the role of ataxin 2 intermediate-length polyglutamine expansions in ALS
11:35 am	<b>Robert W. Burgess</b> , The Jackson Laboratory <i>tRNA synthetases and heritable peripheral axon degeneration</i>
12:00 pm	<b>Guy Rouleau</b> , University of Montreal <i>HSANII gene discoveries provide insight towards the molecular pathogenesis</i>
12:25 pm	Lunch (service ends at 1:15 pm)
1:15 pm	Tour (optional – meet at reception)



2:15 pm	Session 8: Neurite pruning Chair: Aaron Gitler
2:15 pm	<b>Oren Schuldiner</b> , Weizmann Institute of Science Plum, an immunoglobulin superfamily protein that regulates axon pruning, is a $TGF-\beta$ accessory receptor
2:40 pm	<b>Thomas Misgeld</b> , Technical University Munich Selective loss of axon branches during development
3:05 pm	<b>Fengwei Yu</b> , Temasek Life Sciences Laboratory Molecular mechanisms of neuronal pruning during Drosophila metamorphosis
3:30 pm	Break
4:00 pm	Panel Discussion: <i>RNA/Post-transcriptional mechanisms in disease pathology</i> Chair: Christine Beattie Panelists: Robert Burgess, Aaron Gitler, Sue Ackerman, Gary Bassell
5:00 pm	Poster Reception
6:45 pm	Dinner
8:00 pm	Session 9: Axonal loss in development and disease Chair: Marc Freeman
8:00 pm	<b>Simon John</b> , HHMI/The Jackson Laboratory <i>Defining early mechanisms leading to axon degeneration in glaucoma</i>
8:25 pm	Marc Tessier-Lavigne, The Rockefeller University Molecular control of axon degeneration
8:50 pm	Refreshments available at Bob's Pub



## Wednesday, October 10<sup>th</sup>

7:30 am	Breakfast (service ends at 8:45 am)
9:00 am	Session 10: Molecular mechanisms of axon degeneration I Chair: Mary Logan
9:00 am	Michael P. Coleman, The Babraham Institute Nmnat2 deprivation triggers a pathway of Wallerian-like degeneration
9:25 am	<b>Catherine A. Collins</b> , University of Michigan The Highwire ubiquitin ligase promotes Wallerian degeneration by tuning levels of Nmnat protein
9:50 am	Aaron DiAntonio, Washington University School of Medicine Drosophila model of chemotherapy-induced peripheral neuropathy
10:15 am	Break
10:45 am	Session 11: Molecular mechanisms of axon degeneration II Chair: Mohammed Farah
10:45 am	<b>Michael Granato</b> , University of Pennsylvania Cellular and molecular analysis of zebrafish peripheral nerve degeneration
11:10 am	<b>Weichun Lin</b> , UT Southwestern Genetic deletion of both v-SNAREs and t-SNAREs leads to the degeneration of neuromuscular synapses in mice
11:35 pm	Lunch and Departure (To-go boxes available in servery for those on first shuttle)
12:15 pm 1:15 pm 2:15 pm	First shuttle to Dulles Second shuttle to Dulles Last shuttle to Dulles

