

17-19 May 2021

#### Virtual Conference Agenda

Start Finish Presenter details (BST) (BST)

#### Monday, 17 May 2021

13:00	13:10	Welcome
		Scientific Programme Committee: Patrick Lewis, Royal Veterinary College, UK Helene Plun-Favreau, University College London, UK Craig Blackstone, Massachusetts General Hospital/Harvard, USA Fiona Elwood, Novartis, USA
13:10	13:50	Keynote 1
		Introduction to the session Chair: Craig Blackstone
13:10	13:40	ER to Golgi protein delivery through an interwoven, tubular network extending from ER  Jennifer Lippincott-Schwartz, HHMI Janelia, USA
13:40	13:50	Q&A Chair: Craig Blackstone Moderator: Fiona Elwood
13:50	15:10	Session 1: Axonal vesicle transport disruption
		Introduction to the session Chair: Craig Blackstone
13:50	14:10	The role of axonal transport dysfunction in the pathogenesis of neurodegenerative diseases  Giampietro Schiavo, University College London, UK
14:10	14:30	Next generation cytogenetics – optical genome mapping for comprehensive structural variant detection Erika Holzbaur, University of Pennsylvania, USA
14:30	14:40	Gga3 deletion and a GGA3 rare variant associated with late onset Alzheimer's disease trigger BACE1 accumulation in axonal swellings  Selene Lomoio, Tufts University School of Medicine, USA
14:40	14:50	Endoplasmic Reticulum morphological regulation by NOGO/RTN4 determines axonal plasticity by speed-limiting luminal transport Edward Avezov, University of Cambridge, UK
14:50	15:10	Q&A Chair: Craig Blackstone Moderator: Fiona Elwood
15:10	15:30	Break
15:30	16:00	Lightning talks followed by a poster session



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16:00		Session 2: Autophagy
		Introduction to the session
		Chair: Patrick Lewis
16:00	16:20	Genetic Screening Paradigms for Autophagy Pathway Regulators
		Beat Nyfeler, Novartis, Switzerland
16:20	16:40	PINK1/Parkin Mitophagy: Sending faulty mitochondria to the garbage disposal
		Michael Lazarou, Monash Univserity, Australia
		Parkinson's disease LRRK2-G2019S mutation alters neuronal autophagy by disrupting the axonal transport of
16:40	16:50	autophagosomes.
		Alexander Boecker, University of Pennsylvania, USA
16:50	17:00	Defective autolysosomal trafficking and disrupted ER-mediated autophagosomal biogenesis in a Drosophila
		Hyun Suna, Johns Hopkins University, USA
17:00	17:20	Q&A
		Chair: Patrick I ewis
		Moderator: Helene Plun-Favreau
		Wederator Florence Flam Favored
17:20	17:40	Break
17:40	18:10	Lightning talks followed by a poster session



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### Tuesday, 18 May 2021

13:00	14:20	Session 3: Lysosomal & Endosomal vesicle biology
		Introduction to the session Chair: Helene Plun-Favreau
13:00	13:20	Lysosomal dysfunction in Parkinson's disease: from genetics to the clinic
13:20	13:40	Pablo Sardi, Sanofi, USA Adaptor protein complexes and neurological disorders
		Margaret Robinson, University of Cambridge, UK
13:40	13:50	Understanding Parkinson's disease little by LYTL  Luis Bonet Ponce, National Institute of Health, USA
13:50	14:00	Aberrant phase separation of FUS leads to lysosome sequestering and acidification Dragomir Milovanovic, German Center for Neurodegenerative Diseases, Germany
14:00	14:10	Understanding the effect of Huntingtin aggregates on clathrin-mediated endocytosis  Surya Bansi Singh, National Centre For cell Science, India
14:10	14:30	Q&A Chair: Helene Plun-Favreau Moderator: Patrick Lewis
14:30	14:40	Break
14:40	15:10	Lightning talks followed by a poster session
15:10	16:30	Session 4: Mitochondrial biology
		Introduction to the session Chair: Fiona Elwood
15:10	15:30	Mitochondrial vesicle transport pathways  Heidi McBride, McGill, Canada
15:30	15:50	Mitophagy, from genetics to biology, and back Helene Plun-Favreau, University College London, UK
15:50	16:00	The mitochondria-endoplasmic reticulum axis in C9orf72-related ALS/FTD  Patricia Gomez Suaga, King's College London, UK
16:00	16:10	Dysfunction and degeneration of inhibitory interneurons underlying seizure activity in Alpers-Huttenlocher syndrome  Laura Smith, Newcastle University, UK
16:10	16:30	Q&A Chair: Fiona Elwood Moderator: Craig Blackstone
16:30	16:50	Break
16:50	17:50	How do we drug vesicle pathways? Panel discussion Fiona Elwood, Novartis, USA Fiona Menzies, Eli Lilly and Company, UK Pablo Sardi, Sanofi, USA Ravi Jagasia, Hoffmann-La Roche Ltd, Switzerland Tina Schwabe, Alector, USA



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### Wednesday, 19 May 2021

13:00	13:40	Keynote 2
		Introduction to the session Chair: Patrick Lewis
13:00	13:30	Novel pathways of intracellular lipid transport and neurodegenerative diseases  Pietro De Camilli, Yale, USA
13:30	13:40	Q&A Chair: Patrick Lewis Moderator: Helene Plun-Favreau
13:40	15:00	Session 5: Synaptic dysfunction
		Introduction to the session Chair: Patrick Lewis
13:40	14:00	Tau toxicity at the synapse Patrik Verstreken, VIB Leuven, Belgium
14:00	14:20	Improving synaptic transmission in the failing brain Ira Milosevic, University of Oxford, UK
14:20	14:30	Proteomics and lipidomics of synaptic compartments in mouse models of Huntington's disease support vesicle trafficking defects  Kimberly Kegel Gleason, Massachusetts General Hospital, USA
14:30	14:40	Alpha-Synuclein facilitates endocytosis by elevating the steady-state levels of Phosphatidylinositol 4,5-bisphosphate  Ronit Sharon, Hebrew University of Jerusalem, Israel
14:40	15:00	Q&A Chair: Patrick Lewis Moderator: Helene Plun-Favreau
15:00	15:20	Break
15:20	15:50	Lightning talks followed by a poster session
15:50	17:10	Session 6: Genetic links to vesicle trafficking dysfunction
		Introduction to the session Chair: Fiona Elwood
15:50	16:10	Alzheimer's disease risk alleles implicate microglial endolysosomal trafficking  Alison Goate, Mount Sinai Medical School, USA
16:10	16:30	Neurological disorders associated with defects in synaptic vesicle trafficking genes  Henry Houlden, University College London, UK
16:30	16:40	Correlative light and electron microscopy reveals that mutant huntingtin dysregulates the endolysosomal pathway in presymptomatic Huntington's disease  Ya Zhou, University College London, UK
16:40	16:50	A role for the ER-shaping protein ARL6IP1 in lipid droplet organisation  Niamh Osullivan, University College Dublin, Ireland
16:50	17:10	Q&A Chair: Fiona Elwood Moderator: Craig Blackstone
17:10	17:20	Closing remarks
		Scientific Programme Committee: Patrick Lewis, Royal Veterinary College, UK Helene Plun-Favreau, University College London, UK Craig Blackstone, Massachusetts General Hospital/Harvard, USA Fiona Elwood, Novartis, USA