



Oral Program

Thursday, November 1, 2018

07:30-08:30	Registration <i>Room: Sunset Foyer</i>
Room	<i>Sunset Ballroom</i>
08:00	Welcoming Remarks
08:15-09:45	Session 1: Aberrant translation and neurological disease
08:15-08:45	Ribosome rescue factors and neurological function Susan Ackerman , <i>University of California San Diego, USA</i>
08:45-09:15	Diverse biology of tRNA-derived small non-coding RNAs Paul J. Anderson , <i>Brigham and Women's Hospital, Harvard Medical School, USA</i>
09:15-09:30	Characterization of neuropathological features of miR-218 and exploration of miR-218 as a candidate of biomarker for early diagnosis of ALS John Ravits , <i>UC San Diego, USA</i>
09:30-09:45	ALS/FTD-linked mutation in FUS suppresses intra-axonal protein synthesis and drives motor neuron and FTD like-disease without nuclear loss-of-function of FUS Sandrine Da Cruz , <i>Ludwig Institute, USA</i>
09:45-10:15	Refreshment break <i>Sunset Pavilion South</i>
10:15-12:00	Session 2: Consequences of pathological repeat expansions
10:15-10:45	Production and toxicity of Poly(GR) in C9ORF72-ALS/FTD Fen-Biao Gao , <i>University of Massachusetts Medical School, USA</i>
10:45-11:15	C9ORF72 haploinsufficiency synergizes the toxicity of GGGGCC RAN translation, a double hit mechanism that can be prevented by drugs activating autophagy Nicolas Charlet-Berguerand , <i>University of Strasbourg, France</i>
11:15-11:30	ADAR2 mislocalization and widespread RNA editing aberrations in C9orf72 mediated ALS Rita Sattler , <i>Barrow Neurological Institute, USA</i>
11:30-11:45	The RNA binding protein Zfp106 protects against neurotoxicity caused by C9orf72 GGGGCC repeats Brian Black , <i>University of California, San Francisco, USA</i>
11:45-14:00	Lunch & Poster Session 1 <i>Sunset Pavilion South</i>
14:15-16:00	Session 3: RNA-binding protein metabolism and neurodegeneration
14:00-14:30	Formation and spreading of TDP-43 pathology in animal models Virginia Lee , <i>University of Pennsylvania, USA</i>
14:30-15:00	Working with mouse models to understand ALS and then move into translation Elizabeth Fisher , <i>University College London, UK</i>
15:00-15:15	Activity-dependent TDP43 accumulation in iPSC-derived neuron models of ALS Sam Barmada , <i>University of Michigan, USA</i>
15:15-15:30	Structural and functional MRI reveals cerebellar and frontal cortical deficits in the TDP-43 ^{Q331K} knock-in mouse model of ALS-FTD Jameen Sreedharan , <i>King's College London, UK</i>
15:30-16:00	Refreshment break <i>Sunset Pavilion South</i>

16:00-17:30	Session 4: RNA-protein assemblies and neurological disease
16:00-16:30	Amyloid-like TDP-43 myo-granules associate with sarcomeric RNAs during skeletal muscle formation Roy Parker , <i>University of Colorado, USA</i>
16:30-17:00	RNA binding proteins as engineers of neuronal health Gene Yeo , <i>University of California San Diego, USA</i>
17:00-17:15	RNA aggregation in repeat expansion disorders Ankur Jain , <i>Whitehead Institute, USA</i>
17:15-17:30	Optogenetic enhancement of TDP-43 intermolecular interaction triggers its cytoplasmic mislocalization and inhibits axon outgrowth of spinal motor neurons Koichi Kawakami , <i>National Institute of Genetics, SOKENDAI, Japan</i>
17:30-19:00	Welcome Reception Sunset Terrace

Friday, November 2, 2018

Room	Sunset Ballroom
08:00-09:45	Session 5: Repeat-associated non-ATG translation and disease
08:00-08:30	Targeting RAN proteins improves phenotypes in <i>C9orf72</i> BAC ALS/FTD mice Laura Ranum , <i>University of Florida, USA</i>
08:30-09:00	Ribosome heterogeneity in translating the genetic code Maria Barna , <i>Stanford University, USA</i>
09:00-09:15	RAN translation, cellular stress pathways, and neurodegeneration in repeat expansion disorders Peter Todd , <i>University of Michigan, USA</i>
09:15-09:30	Repeat-associated non-AUG (RAN) translation of expanded hexanucleotide repeats in <i>C9ORF72</i> -ALS/FTD Shuying Sun , <i>Johns Hopkins University School of Medicine, USA</i>
09:30-10:00	Refreshment break Sunset Pavilion South
10:00-11:30	Session 6: Nucleocytoplasmic transport and disease
10:00-10:30	Nuclear Pore complex as a contributor to neurodegeneration Jeff Rothstein , <i>Johns Hopkins University School of Medicine, USA</i>
10:30-11:00	Multiple roles of nuclear import receptors in protein aggregation diseases Dorothee Dormann , <i>Ludwig Maximilian University of Munich, Germany</i>
11:00-11:15	Mechanistic insights into the complex cation- π interactions, antiparallel β -sheet and molecular hydrogen bonding that contribute to physiological and pathological LLPS and gelation of FUS Peter St George-Hyslop , <i>University of Cambridge, UK</i>
11:15-11:30	Defective RNA interaction drives aberrant phase separation and cellular aggregation of ALS-linked mutant FUS Sua Myong , <i>Johns Hopkins University, USA</i>
11:30-13:30	Lunch and Poster Session 2 Sunset Pavilion South
13:30-15:30	Session 7: Aberrant phase transitions and neurological disease
13:30-14:00	Dynamic RNA-protein assemblies and neurological disease Paul Taylor , <i>HHMI and St. Jude Children's Research Hospital, USA</i>
14:00-14:30	The role of RNA binding proteins in tauopathies Benjamin L. Wolozin , <i>Boston University, USA</i>
14:30-15:00	Driving forces of tau-RNA complex coacervation and relationship to tau aggregation Songi Han , <i>University of California Santa Barbara, USA</i>

15:00-15:15	Functional and pathological RNA-binding protein phase separation with atomistic detail Nick Fawzi , <i>Brown University, USA</i>
15:15-15:30	Photokinetic modulation of TDP-43 proteinopathy reveals mechanism of pathogenic aggregation Chris Donnelly , <i>University of Pittsburgh, USA</i>
15:30-16:00	Refreshment break <i>Sunset Pavilion South</i>
16:00-17:30	Session 8: The advent of therapeutics for disorders of RNA metabolism
16:00-16:30	Translation of gene therapeutics in neurological and neuromuscular diseases Brian Kaspar , <i>AveXis Inc., Illinois, USA</i>
16:30-17:00	Premature polyadenylation and loss of the neuronal stathmin-2 inhibits axonal regeneration in TDP-43-dependent neurodegeneration Don Cleveland , <i>University of California San Diego, USA</i>
17:00-17:15	Closing Remarks