Oral Program

Monday, June 4, 2018

12:30-14:30 Registration | Room: Sunset Foyer

Room	Sunset Ballroom
14:30-18:00	**Session 1: Quality Control** Session Chair: T. Langer
14:30-14:45	Opening remarks: Editors
14:45-15:30	**KEY01: Coordinating mitochondrial function via secreted neuronal signals** A. Dillin**,** *University of California, USA*
15:30-16:00	**INV01: The complex roles of mitochondrial E3 ligases** H. McBride, *McGill University, Canada*
16:00-16:30	**Refreshment Break |** Room: Sunset Pavilion
16:30-18:00	**Session 1: Quality Control (Contd.)** Session Chair: T. Langer
16:30-17:00	**INV02: Mitochondrial derived compartments: Protecting mitochondria from nutrient stress** A.L. Hughes, *University of Utah, USA*
17:00-17:15	**ST01: YME1L reshapes the mitochondrial proteome to promote cellular adaptation to hypoxia** T. MacVicar*[1,2], H. Nolte[1], B. Lindner[1], N. Zamboni[3], R. Schwarzer[1], H. Sprenger[1,2], M. Krüger[1], T. Langer[1,2], *[1]CECAD Research Center, Germany, [2]Max Planck Institute Biology of Ageing, Germany, [3]ETH Zurich, Switzerland*
17:15-17:30	**ST02: The PERK arm of the unfolded protein response regulates mitochondrial morphology during acute endoplasmic reticulum stress** J. Lebeau*, J.M. Saunders, V.W.R. Moraes, A. Madhavan, N. Madrazo, M.C. Anthony, R.L. Wiseman, *The Scripps Research Institute, USA*
17:30-18:00	**INV03: The guided tour of proteins to mitochondria** A. Chacinska, *International Institute of Molecular and Cell Biology in Warsaw, Poland*
18:00-18:12	Poster Teasers
18:15-20:00	**Welcome Drinks Reception & Poster session 1 |** Room: Sunset Pavilion

Tuesday, June 5, 2018

Room	Sunset Ballroom
08:30-09:00	Coffee and Tea available | Room: Sunset Pavilion
09:00-12:00	**Session 2: Discoveries through new methodology** Session Chair: A. Hughes
09:00-09:30	**INV04: High-resolution cryo-EM of mitochondiral membrane protein complexes** W. Kühlbrandt, *Max Planck Institute of Biophysics, Germany*
09:30-10:00	**INV05: Genetic screens for studying metabolism** D.M. Sabatini[1,2], *[1]Whitehead Institute, USA, [2]MIT, USA*
10:00-10:30	**Refreshment Break |** Room: Sunset Pavilion
Room	Sunset Ballroom
10:30-12:00	**Session 2: Discoveries through new methodology (Contd.)** Session Chair: A. Hughes
10:30-11:00	**INV06: Defining mitochondrial protein function through systems biochemistry** D. Pagliarini[1,2], *[1]Morgridge Institute for Research, USA, [2]University of Wisconsin–Madison, USA*
11:00-11:15	**ST03: Regulation of Fatty Acid Oxidation by the Mitochondrial Matrix Isoform of MCL-1** S. Escudero[1,2], E. Zaganjor[2], S. Lee[1], C. Mill[3], G. Bird[1], T. Wales[4], J. Engen[4], M. Haigis[2], J. Opferman[3], L. Walensky*[1,2], *[1]Dana-Farber Cancer Institute, USA, [2]Harvard Medical School, USA, [3]St. Jude Children's Research Hospital, USA, [4]Northeastern University, USA*

11:15-11:30	**ST04: Generation of *de novo* site-specific mitochondrial gene deletions in mammalian cells** L.J. Hogdal*[1], N. Otto[1], S. Kumar[1], T. Cordie[1], B. Webber[1], D. Largaespada[1], J. Campbell[2], S. Ekker[2], B. Moriarity[1], *[1]B-MoGen Biotechnologies Inc., USA, [2]Mayo Clinic, USA*
11:30-11:45	**ST05: The E3 ligase HUWE1 promotes PINK1/PARKIN-independent mitophagy by regulating AMBRA1 activation via IKKα** F. Cecconi*[2,1], F. Strappazzon[1], A. Di Rita[2,1], P. D'Acunzo[2,1], *[1]University of Rome Tor Vergata, Italy, [2]Paediatric Hospital Bambino Gesù, Rome, Italy*
11:45-11:57	Poster Teasers
12:00-13:00	**Lunch |** Room: Sunset Pavilion
13:00-15:00	**Poster Session 2 |** Room: Sunset Pavilion
Room	Sunset Ballroom
15:00-18:00	**Session 3: Mitochondria Behavior & Interorganelle Contacts** Session Chair: D. Pagliarini
15:00-15:30	**INV07: Mitochondrial behavior** J. Nunnari, *University of California Davis, USA*
15:30-15:45	**ST06: Two mechanisms of mitochondria-associated actin assembly with differing effects on mitochondrial dynamics** T.S. Fung, R. Chakrabarti, H.N. Higgs*, *Geisel School of Medicine at Dartmouth, USA*
15:45-16:15	**INV08: Link between lipid synthesis and transport to mitochondria** W. Prinz, *National Institute of Diabetes and Digestive and Kidney Diseases, USA*
16:15-16:30	**ST07: A mitochondrial membrane-spanning ternary complex regulates mitochondrial motility** L. Li*, X. Wang, *Stanford University, USA*
16:30-17:00	**Refreshment Break |** Room: Sunset Pavilion
17:00-18:00	**Session 3: Mitochondria Behavior & Interorganelle Contacts (Contd.)** Session Chair: D. Pagliarini
Room	Sunset Ballroom
17:00-17:30	**INV09: Mitochondrial fusion and fission in health and disease** D. Chan, *California Institute of Technology, USA*
17:30-18:00	**INV10: Moving and removing axonal mitochondria** T. Schwarz, *Harvard Medical School, USA*
19:00-22:30	**Meet the Speaker Dinner |Bali Hai (buses to depart at 18:45)**

Wednesday, June 6, 2018

Room	Sunset Ballroom
08:30-09:00	Coffee and Tea available | Room: Sunset Pavilion
09:00-12:15	**Session 4: Mitochondria Communication** Session Chair: H. Christofk
09:00-09:30	**INV11: New insights into the genetics of mitochondria andaging** J. Auwerx, *Ecole Polytechnique Fédérale, Switzerland*
09:30-09:45	**ST08: MDM2 integrates cellular respiration and apoptotic signaling through NDUFS1 and the mitochondrial network.** J.E. Chipuk[1], *[1]Icahn School of Medicine at Mount Sinai, USA, [2]The Tisch Cancer Institute at Mount Sinai, USA*
09:45-10:15	**INV12: Mitochondria as signaling organelles** N. Chandel, *Northwestern University, USA*
10:15-10:30	**ST09: Mitochondrial retrograde signaling in mammals is mediated by the transcriptional cofactor GPS2 via direct mitochondria-to-nucleus translocation** M.D. Cardamone[1], B. Tanasa[4,2], C.T. Cederquist[1], J. Huang[1], K. Mahdaviani[1], W. Li[5,2], M.G. Rosenfeld[2,6], M. Liesa[3], V. Perissi*[1], *[1]Boston University, USA, [2]UCSD, USA, [3]UCLA, USA, [4]UCSF, USA, [5]UTHealth McGovern, USA, [6]HHMI, USA*
10:30-11:00	**Refreshment Break |** Room: Sunset Pavilion
Room	Sunset Ballroom

11:00-12:15	**Session 4: Mitochondria Communication (Contd.)** Session Chair: H. Christofk
11:00-11:30	**INV13: AMPK: Restoring mitochondrial homeostasis after mitochondrial damage** R. J Shaw, *Salk Institute, USA*
11:30-11:45	**ST10: New insight into mtDNA sensing in inflammatory responses and mitochondrial disease** Y. Lei, C. Guerra Martinez, A.P. West*, *Texas A&M University Health Science Center, USA*
11:45-12:15	**INV14: The integrated mitochondrial stress response in mammalian mitochondrial disease** A. Suomalainen-Wartiovaara, *University of Helsinki, Finland*
12:15-13:15	**Lunch |** Room: Sunset Pavilion (Q&A with the Editors)
Room	Sunset Ballroom
13:15-15:00	**Session 5: Metabolism, Bioenergetics and Disease** Session Chair: M. Haigis
13:15-14:00	**KEY02: Polyamines modulate mitochondrial respiration through eIF5A hypusination** D.J. Puleston, M.D. Buck, R.I.K. Geltink, E.L. Pearce*, *Max Planck Institute of Immunobiology and Epigenetics, Germany*
14:00-14:15	**ST11: A lipid metabolism checkpoint regulates self-renewal and differentiation of germline stem cells** R.S. Demarco*, B.S. Uyemura, C. D'Alterio, D.L. Jones, *University of California, Los Angeles, USA*
14:15-14:45	**INV15: Metabolic regulation of cell state** H. Christofk, *University of California, USA*
14:45-15:00	**ST12: Direct inhibition of BCAT by 2HG impairs glutamate biosynthesis and redox homeostasis in glioma** S. McBrayer*[1], J. Mayers[1,2], G. DiNatale[1], D. Shi[1,3], J. Khanal[1], J. Spinelli[3], M. Haigis[3], J. Asara[4], M. Vander Heiden[1,2], W. Kaelin, Jr.[1,5], *[1]Dana-Farber Cancer Institute, USA, [2]Massachusetts Institute of Technology, USA, [3]Harvard Medical School, USA, [4]Beth Israel Deaconess Medical Center, USA, [5]Howard Hughes Medical Institute, USA*
15:00-15:30	**Refreshment Break |** Room: Sunset Pavilion
Room	Sunset Ballroom
15:30-16:30	**Session 5: Metabolism, Bioenergetics and Disease (Contd.)** Session Chair: M. Haigis
15:30-16:00	**INV16: Structure, mechanism and Regulation of Mitochondrial Complex I** U. Brandt, *Radboud Center for Mitochondrial Medicine, Netherlands*
16:00-16:15	**ST13: Metabolic recycling of ammonia (in the mitochondria) supports breast cancer proliferation** J.B. Spinelli*[1,2], H. Yoon[1], L. Ellisen[3], C.B. Clish[2], M.C. Haigis[1], *[1]Harvard Medical School, USA, [2]The Broad Institute of Harvard and MIT, USA, [3]Massachusetts General Hospital, USA*
16:15-16:30	**Closing remarks: Editors**