MitOX 2022 April 8th

- 9.00 Karl Morten (Oxford) Welcome
- 9.05 Mitochondrial DNA, expression and recombination: Chair Jo Poulton (Oxford)
- 9.05 Dan Mishmar (Israel) The impact of mitochondrial gene expression regulation, and its coordination with the nucleus, on disease
- 9.30 Ana Victoria Lechuga-Vieco (Oxford) Mitochondrial heterogeneity: friend or foe?
- 9.55 Yizhou Yu (Cambridge) Parp mutations protect from mitochondrial toxicity in Alzheimer's disease
- 10.10 Hansong Ma (Cambridge) Mitochondrial recombination reveals genetic interactions that modulate the phenotypic expression of pathogenic mtDNA mutants

10.35 **Coffee**

11.00 Cancer: Chair Rhiannon McGeehan (Portsmouth)

- 11.00 Payam Gammage (Glasgow) The impact of cancer-associated mtDNA mutations on tumour metabolism and the microenvironment
- 11.25 Markus Ralser (The Crick) The metabolic growth limitations of petite cells lacking the mitochondrial genome
- 11.50 Nuno Santos Leal (Cambridge)Contacts between mitochondria and the endoplasmic reticulum protect from mitochondrial toxicity by activating the PERK/ATF4 branch of ER stress
- 12.05 Mike Duchen (UCL) Rewiring cell signalling pathways in pathogenic mtDNA mutations
- 12.30 Sponsors Talks BMG Labtech, Promega, Agilent, Atlantic imaging
- 13.00 Lunch & Poster session I
- 14.00 Katharina Schlacher (Texas) BRCA/FANC tumor suppressor roles in mitochondrial genome instability and inflammation.

1425 Mitophagy and Dynamics: Chair Tom Nichol (Oxford)

- 14.25 Pollard Lecture William Mair (Harvard) Metabolic Flexibility, Mitochondrial Dynamics & Healthy Aging
- 15.05 Brent Ryan (Oxford) Integrating animal and cellular models to understand mitochondrial dysfunction in Parkinson's disease

15.20 Tea & Poster Session II

- 16.00 Mitochondrial medicine: Chair Kerstin Timm (Oxford)
- 16.00 Leanne Hodson (Oxford) Tracing fat to determine factors influencing mitochondrial fatty acid oxidation in human
- 16.25 Lisa Heather (Oxford) Diabetic cardiac mitochondria are resistant to the regulation of respiration by lipid intermediates

- 16.50 Robin Klemm (Oxford) Mechanisms controlling de novo lipogenesis based lipid droplet expansion during adiopcyte differentiation"
- 17.15 Isabella Panfoli (Genova) The polyphenol Cirsiliol prevents the light-induced oxidative damage of the retinal rod outer segment in vitro
- 17.30 Close Poster prizes

Drinks at the White Hart Headington