British Society for Research on Ageing

68th Annual Scientific Meeting

Ageing here and now: current research and transformative therapies

Oriel College Oxford 6-8th September 2018
Programme

British Society for Research on Ageing annual scientific conference, Oriel College Oxford 6-8th September 2018

Ageing here and now: current research and transformative therapies

Thursday 6th September 2018

Early career researcher session:
   Chairs: Adam Rolt and Terry Davis

10.30 -11.00  Coffee and register

11.00-11.30  Introduction and ideas exchange to identify related research interests
11.30-12.30  Guided workshop: developing a review article or primary research paper
12.30-13.00  Pitch to panel for ideas for a paper for Biogerontology

13.00-14.00  Join other delegates for sandwich lunch

Ageing research in an ageing society
   Chair: David Weinkove

12.00-14.00  Arrival and registration for main meeting; sandwich lunch

14.00-14.10  Welcome
   Lynne Cox, Oxford, UK
14.10-14.40  Human longevity: myths and possibilities
   Sarah Harper, Oxford, UK

Cells as both cause and treatment of age-related disease
   Chairs: Lynne Cox and Jo Bridger

14.40-15.10  Stem cell therapies in heart disease
   Sian Harding, London, UK
15.10-15.40  Tracking and targeting of senescent cells
   Daniel Munoz-Espin, Cambridge, UK

15.40-16.20  Afternoon tea

16.20-16.50  Targeted apoptosis of senescent cells against aging and cancer
   Peter de Keizer, Netherlands
Targeting STING in senescence with small-molecule inhibitors  
Andrea Ablasser, Lausanne, Switzerland  

KEYNOTE: Senolytic drugs: from mutant mice to human clinical trials  
Nathaniel David, President, Unity Biotechnology, USA  

Lightning talks (2 minutes each)  
Even numbered poster presenters  

Posters with wine reception  

Dinner in Hall  

Cash bar  

Friday 7th September 2018  

Ageing mechanisms (1)  
Chairs: Kasia Whysall and John Henderson  

Cellular ageing and replicative senescence  
Suresh Rattan, Aarhus, Denmark  

Human ageing is associated with reduced natural killer cell cytotoxicity against and migration towards senescent cells  
Jon Hazeldine, Institute of Inflammation and Ageing, Birmingham, UK  

The genomic footprint of ageing: epigenetics, replication and somatic mutations  
Benjamin Schuster-Boekler, Oxford, UK  

Mitochondria to nucleus retrograde signaling triggers formation of cytoplasmic chromatin fragments and activation of SASP in senescent cells  
Peter Adams, Beatson Institute, Glasgow, UK and San Diego, USA  

Morning coffee  

Ageing mechanisms (2) – immunity, autophagy and mTOR  
Chairs: Lorna Harries and Hannah Walters  

Autophagy and immune aging  
Katja Simon, Kennedy Institute, Oxford, UK  

Genome-wide analysis identifies transcriptional down-regulation of insulin-like growth factor 1 receptor signalling as a major hallmark of ageing in developing B lymphocytes  
Daniel Bolland, Babraham Institute, Cambridge  

mTOR signalling in autophagy and ageing  
Viktor Korolchuk, Newcastle, UK  

Age-dependent effects of reduced mTor signalling on life expectancy through distinct physiology  
Mirre Simons, Sheffield, UK  

Longevity by RNA polymerase III inhibition downstream of TORC1
12.45-13.50  Lunch in hall

13.50-14.30  BSRA AGM (all members requested to attend; several constitutional matters require a quorate membership vote)

**Tools and models to study ageing (1)**

Chairs: Suresh Rattan and Fiona Mutter

14.30-14.45  Drosophila as a model to study innate immunity and ageing
Petros Ligoxygakis, Oxford, UK

14.45-15.15  Induced pluripotent stem cells: A versatile platform for the study and treatment of age-related diseases
Paul Fairchild, Oxford, UK

15.15-15.45  Tissue engineering approaches to modelling Alzheimer’s disease
Eric Hill, Aston, UK

15.45-16.15  Afternoon tea

**Tools and models to study ageing (2)**

Chairs: Marina Ezcurra and Abigail Otchere

16.15-16.45  Werner syndrome models implicate DNA damage signalling in premature ageing and identify WRN as a *bona fide* anti-gerontogene
Lynne Cox, Oxford, UK

16.45-17.15  NAD+ repletion inhibits accelerated aging in Werner syndrome through the restoration of mitophagy
Evandro Fei Fang, Oslo, Norway

17.15-17.30  Facilitating drug discovery by quantifying early declines in movement in large populations of adult worms
David Weinkove, Durham, UK

17.30-17.45  Defining an index for cellular senescence
Eva Latorre, Exeter, UK

17.45-18.05  Lightning talks (2 minutes each)  Odd numbered poster presenters

18.05-19.15  Posters with drinks reception

19.30-21.00  Gala dinner in Hall

21.00-23.00  Cash bar
Saturday 8th September

Ageing in time and place (1): biomarkers

09.00-09.15  Discovery of a predictive biomarker for death in older adults diagnosed with frailty
Jorge Erusalimsky, Cardiff, UK

09.15-09.30  Attenuation of age-related renal lesions in a model of RAGE (receptor for advanced glycation end products) knockout
Thibault Teissier, University of Lille, France

09.30-09.45  HNRNPM, HNRNPA0 and AKAP17A splicing factor transcript levels demonstrate predictive associations with human ageing phenotypes in peripheral blood
Ben Lee, Exeter, UK

09.45-10.00  Applications of deep neural networks to human ageing biomarker development
Polina Mamoshina, Insilico Medicine, Rockville, USA, and Oxford, UK

10.00-10.15  Circadian rhythms in immune parameters and functioning in older adults: impact on vaccine responses and inflammatory diseases
Niharika Duggal, Birmingham, UK

10.15-10.45  Morning coffee

Ageing in time and place (2): systems, trials and drug discovery
Chairs: Claire Stewart and Kay Hemmings

10.45-11.15  Circadian rhythms in the ageing musculoskeletal system: implications in therapies for osteoarthritis and low back pain
Qin-Jun Meng, Manchester, UK

11.15-11.45  Sarcopenia – making the science work for patients
Miles Witham, Newcastle, UK

11.45-12.00  Announcement of prizes and awards
BSRA committee

12.00-12.45  Open science, partnership with industry and close collaboration between UK universities and the NHS to accelerate treatments for multiple morbidities associated with ageing
Chas Bountra, Oxford, UK

12.45-13.00  Closing remarks
Layla Moran, MP for Oxford West & Abingdon

13.00-14.00  Sandwich lunch and depart

14.00 – 15.30  Guided walking tour of Oxford (if sufficient numbers) - experienced guide and access to many of the very special sights of Oxford.
PLEASE SIGN UP BEFORE LUNCH ON FRIDAY IF INTERESTED