



WHY WE AGE: BIOPHYSICAL LIMITS & THE TRADE-OFFS OF AGEING

METHUSELAH HEALTH MEETING

CONFERENCE DATE: NOV. 23-25, 2020 ORGANIZER: ADAM DE GRAFF

BIG QUESTIONS IN AGEING BIOLOGY:

Biological systems are complex yet guided by simple principles rooted in physical laws. These principles apply across species and represent the transferable mechanisms we seek in our fight against ageing and age-related disease. Bringing together experts from a broad array of disciplines, the meeting will foster a creative, open exploration of the fundamental physical limits dictating why we age, from the molecular to the organism.

DAY 1 PROTEOFORMS & THE LIMITS OF QUALITY

12:00 GMT Keynote: Tom Kirkwood

12:40 GMT Session 1. Why deleterious proteoforms creep into proteomes
Ariel Lindner, Miro Radman

15:00 GMT Session 2. Trade-offs in protein quality & triage
Georgios Karras, Rahul Samant & Anat Ben-Zvi

DAY 2 METABOLISM AT STABILITY'S EDGE

12:00 GMT Session 1. Metabolic limits of a vulnerable proteome
Anita Krisko & Nick Lane

15:00 GMT Session 2. Increasingly deviant in space & time
Michael Petrascheck, Yifan Yang & Uri Alon

DAY 3 LOSING YOUR SENSE OF SELF

12:00 GMT Session 1. How a cell catches a phenotype
Marc Vidal, David Smith & Fabrizio Chiti

15:00 GMT Session 2. Immune to healthy ageing
Jamie Cunliffe, Emily Goldberg, Cole Haynes & Adam de Graff