Developing interventions for frailty: what do we measure?

Vienna, Austria

14th to 15th November 2016

COST is supported by the EU framework programme
Horizon 2020
Monday 14th November
InterCity Hotel, Vienna, Austria

9.00-10.45  Management Committee (MC) meeting (for MC members only)

Developing interventions for frailty: what do we measure?

10.45-11.00  Registration and coffee

11.00-11.05  Markus Schosserer, University of Natural Resources and Life Sciences Vienna, Austria
‘Meeting Welcome’

11.05-11.35  Icebreaker

11.35-11.45  Ilaria Bellantuono, University of Sheffield, UK
‘Update from the MouseAGE network’

Session 1: Clinical assessment, Chair: Anne-Ulrike Trendelenburg

11.45-12.15  Thomas von Zglinicki, Newcastle University, UK
‘Frailty measurement and biomarkers in the very old.’

12.15-12.45  Roger Fielding, Tufts University, Boston, Massachusetts, USA
‘Should Frailty be the Target of Therapeutic Interventions? The Impact of Physical Activity Interventions on Components of the Frailty Syndrome.’

12.45-14.15  Lunch

Session 1 continued: Clinical assessment, Chair: Günter Lepperdinger

14.15-14.45  Francesco Landi, Universita’ Sacro Cuore Roma, Italy
‘The SPRINTT project: changing the paradigm of geriatric research.’

14.45-15.15  Alexander Bürkle, Universität Konstanz, Germany
‘Title of talk TBC’

15.15-15.45  Coffee

Session 2: Biomarkers, Chair: Tamar Tchkonia

15.45-16.15  Kathryn Owen, Owen Clinical Consulting Limited, Manchester, UK
‘Overview of Biomarkers in Early Development.’

16.15-16.45  Johannes Grillari, University of Natural Resources and Life Sciences Vienna, Austria
‘From cellular senescence to miRNA based biomarkers of osteoporosis.’

16.45-17.15  Sophie Brachat, Novartis Institutes for Biomedical Research, Basel, Switzerland
‘New system biology approaches to biomarkers discovery.’
**Session 3: Short selected talks, Chair: Adelaide Fernandes**

17.15-17.20  Smilja Todorovic, Institute for Biological Research 'Sinisa Stankovic, Belgrade, Serbia  
'Dietary restriction as prevention for frailty.'

17.20-17.25  Elisabete Ferreiro, Center for Neuroscience and Cell Biology, University of Coimbra, Portugal  
'Metabolic and cognitive alterations in an Alzheimer’s disease mouse model under chronic hyperglycemia.'

17.25-17.30  Marjana Brkic, Institute for Biological Research, University of Belgrade, Serbia; IRC, VIB, University of Ghent, Belgium  
'Blood-cerebrospinal fluid barrier integrity is compromised in amyloid beta oligomer injection model of Alzheimer’s disease.'

17.30-18.30  Wine reception and networking (Winetgarden, InterCity Hotel, Vienna)

19.30  Conference Dinner (Stiegl Ambulanz, Alser Straße 4, 1090 Wien)
Tuesday 15th November  
InterCity Hotel, Vienna, Austria

8.45 - 9.00 Delegates sign in

Session 4: Biomarkers and new technologies, Chair: Natal van Riel

9.00-9.30 Nathan Lebrassuer, Mayo Clinic, Rochester, Minnesota, USA  
‘A tale of two growth factors: GDF8 and GDF11.’

9.30-10.00 Evgeni Levin-Tsivtsivadze, University of Amsterdam, The Netherlands  
‘Biomarker identification in complex biological data: statistical machine learning approach.’

10.00-10.30 Clemens Löwik, Erasmus MC, Rotterdam, the Netherlands  
‘Necrosis as a biomarker for diagnostic imaging but also a target for drug delivery.’

10.30-11.00 Coffee

11.00-11.30 Patrik Christen, ETH Zurich, Switzerland  
‘Computational physiology: Enabling personalised medicine beyond the genome.’

11.30-11.45 Elizabeth Parrish, BioViva, Seattle, USA  
‘A case for gene and cell therapies: Interventions for frailty needs more than just measurements, it needs advanced therapeutics.’

11.45-12.05 Short presentations from the MouseAGE network:

1. Gunay Yetik-Anacak, Ege University, Turkey  
‘Oxidative stress decreases hydrogen sulfide formation.’

2. Coral Sanfeliu, IIBB-CSIC, IDIBAPS, Spain  
‘Brain resilience induced by improved proteostasis and neurotrophism in mice’

3. Maria Alexandra Brito  
‘Glio-vascular temporal sequence of events along ageing in wild-type and in Alzheimer’s disease-like APP/PS1 mice’

4. Isabel Varela Nieto  
‘Genes and pathophysiological mechanisms underlying the progression of age-related hearing loss.’

5. Milka Perovic  
‘Glucocorticoid signaling in the cortex of aged rats - the effect of food restriction.’

6. Vladimir Avramovic  
‘Behavioral phenotyping of 5xFAD mouse model of Alzheimer’s disease after pre- and peri-natal fish oil supplementation.’
### Session 5: Discussion, Chair: Ilaria Bellantuono

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<td>11.30-12.00</td>
<td>What have we learnt for measuring frailty in preclinical models?</td>
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<td>12.15-14.00</td>
<td>Lunch</td>
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<td>13.00-14.00</td>
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### Session 6: Working Group Meetings

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<td>14.00-15.00</td>
<td>Working Groups updates from Working Group Leaders</td>
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<td>WG 1 - Anne-Ulrike Trendelenburg</td>
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<td>15.00-17.00</td>
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