

# Annual Meeting of the German Association for Aging Research June 23-24, 2022, Cologne

#### **PREAMBLE**

The German Society for Aging Research (DGfA) is delighted to welcome you to this year's meeting here in Cologne. It is a great pleasure to host the German community of aging researchers in our small but beautiful Ulm University. We are honored to welcome our three outstanding keynote lecturers Blasco. Eva Hoffmann and Joachim Furthermore, we welcome all members of the DGfA without whom organization of the meetings wouldn't be possible. We are looking forward to interesting talks and lively discussions at the posters and during the scientific sessions. One of the goals of the DGfA is to connect researchers in the field of aging, promoting networking and young scientists at the beginning of their career. The annual meeting of the DGfA is the perfect platform to establish collaborations and discover synergies between research groups to gain further insight into the biology of aging and aging-associated diseases. On behalf of the DGfA we wish you a successful meeting and a good time here in Cologne.

Hartmut Geiger Institute for Molecular Medicine Ulm University	Helen Morrison, PhD Leibniz Institute on Aging - Fritz Lipmann Institute (FLI) Jena, Germany	Thorsten Hoppe, CECAD, University of Cologne	Tatiana Korotkova, CECAD, University of Cologne	Stephanie Panier, MPI for Biology of Ageing / University of Cologne
Björn Schumacher President of the DGfA University of Cologne	Sophie Steculorum, MPI for Metabolism Research, Cologne	Peter Tessarz, MPI for Biology of Ageing, Cologne	Dario Valenzano Leibniz Institute on Aging - Fritz Lipmann Institute (FLI) Jena, Germany	

We would like to thank the Sponsors for their support:

Prof. Dr. Dieter Platt Stiftung

Fritz Boege Prizes

Thursday, June 23 12.55 - 01.00 pm

OPENING REMARKS Hartmut Geiger

<u>01.00 - 01.30 pm</u>

KEYNOTE LECTURE I (hybrid)

Introduction: Dario Valenzano

Maria Blasco

Centro Nacional de Investigaciones

Oncológicas, CNIO, ES

Telomeres at the origin of aging and age-related

diseases

#### <u>01.30 - 02.30 pm</u>

Session 1

Chair: Peter Tessarz

01.30 - 01.45 pm

Collin Ewald, ETH Zurich

Mechanotransduction Coordinates InterTissue

Extracellular Matrix Protein Homeostasis

Promoting Longevity in C. elegans

01.45 – 02.00 pm Maja Funk, German Cancer Research Center

(DKFZ), Heidelberg Aged intestinal stem cells propagate cellintrinsic sources of inflammaging

02.00 – 02.15 pm Philipp Haas, Ulm University The Adaptive Response of Old ABCB5+ MSCs is Changed Upon Exposure to LPS

02.15 – 02.30 pm Ali Hageb, Ulm University Reduced adhesion of aged intestinal stem cells contributes to an accelerated clonal drift

02.30 - 03.00 pm

**COFFE BREAK** 

#### 03.00 - 03.30 pm

KEYNOTE LECTURE II (hybrid)

Introduction: Sophie Steculorum

**Eva Hoffmann** 

University of Copenhagen,

Department of Cellular and Molecular Medicine

DNRF Center for Chromosome Stability,

Denmark

Reproductive longevity and ovarian aging in human

#### 03.30 - 05.00 pm

Session 2

Chair: Sophie Steculorum

03.30 - 03.45 pm

Imaz Khalid, Leibniz Institute on Aging, Jena Proteostasis failure represents a candidate mechanism for the loss of dietary restriction capacity to improve hematopoietic stem cell function in aged mice 03.45 – 04.00 pm Albert Kallon Koroma, Ulm University Aged NK Cells Fail to Efficiently Kill Leukemia and Lymphoma Cells

04.00 - 04.15 pm Jiongming Lu, Max Planck Institute for Biology of Ageing, Cologne Amino acid sensing signal in the regulation of longevity in Drosophila

04.15 – 04.30 pm Michael Milsom, German Cancer Research Center (DKFZ), Heidelberg Inflammatory exposure drives permanent impairment of hematopoietic stem cell selfrenewal activity and accelerated aging.

04.30 – 04.45 pm Chrysa Nikopoulou, Max Planck Institute for Biology of Ageing, Cologne Singlecell resolution unravels spatial alterations in metabolism, transcriptome and epigenome of ageing liver 04.45 - 05.00 pm Omrid Omani, Leibnitz Institute on Aging - FLI, Jena

Regeneration induced proteostasis stress impairs intestinal tissue restoration in old mice

05.00 - 06.30 pm

POSTER SESSION

06.45 pm Departure with tram to Maritim Hotel Köln, Heumarkt 20

**DINNER PARTY** 

## Friday, June 24

### <u>09.00 - 09.45 am</u> KEYNOTE LECTURE III

Introduction: Björn Schumacher
Joachim Lingner
Swiss Institute for Experimental Cancer
Research (ISREC), CH
Challenges of Telomere Maintenance: ROS and
TERRA Long Noncoding RNA

#### 09.45 - 11.00 am

Session 3

Chair: Thorsten Hoppe

09.45 - 10.00 am

Shahaf Peleg, FBN, Rostock Enabling a metazoan to harness the energy of light and directly translate it to chemical energy (Energy replacement) extends life span 10.00 - 10.15 am

Juan Felipe Pérez Correa, RWTH Aachen University

Epigenetic clocks for mice based on ageassociated regions that are conserved between mouse strains and human

10.15 - 10.30 am

Denise Posadas, Ulm University BMP signaling promotes zebrafish heart regeneration by resolving replication stress

10.30 - 10.45 am

Tanja Schuster, Ulm University Changes of the spatial distribution of the septin network within HSCs upon aging

10.45 - 11.00 am

Selina Stahl, Ulm University Revealing the causal relationship between ageassociated immune remodeling and agerelated changes in the gut microbiome

11.00 – 11.30 pm

**COFFE BREAK** 

#### <u>11.30 – 12.30 am</u>

Session 4

Chair: Collin Ewald

11.30 - 11.45 am

Carolin Thomas, ETH, Zurich Identification and characterization of a novel natural polyacetylene and its antiaging and healthpromoting potential in cells, C. elegans and mice

11.45 - 12.00 am

Mona Vogel, Ulm University Loss of metabolic heterogeneity in the hematopoietic stem cell population upon aging

12.00 - 12.15 pm

Siayo Wang, University of Cologne H3K4me2 regulates the recovery of protein biosynthesis and homeostasis from DNA damage during development and aging

12.15 - 12.30 pm

Alexander Wolf, Nippon Medical School How somatic mutations cause aging without causing aging 12.30 – 01.00 pm FRITZ BOEGE PRIZES

(Talk, Poster, Innovation)

**CLOSING REMARKS** 

01.00 - 01.30 pm SNACKS

01.30 – 02.30 pm DGfA Member Assembly