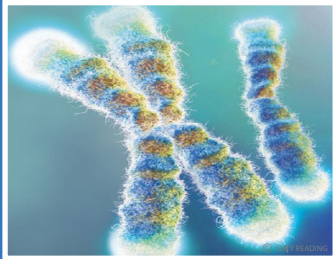


ONLINE SUMMER SCHOOL

Université de Lorraine
June 16-17-18, 2021
Nancy, France



Telomere length (TL) regulation and the aging process: from bench to bedside



GENERAL THEME



Telomeres are nucleoprotein structures localized at vertebrate chromosome ends. With age, in replicating somatic cells, telomeres display progressive shortening leading cells to acquire critically short and dysfunctional telomeres triggering replicative senescence or apoptosis.

Short telomere length (TL) limits the replicative potential of stem cells in high-turnover tissues and is linked with higher senescence. In humans, short leukocyte TL (LTL) is associated with decreased longevity, and several age-related degenerative diseases. The impact of TL dynamics (TL at birth and lifelong attrition) is presently at the center of many fundamental and clinical studies but also of very exciting debates.

The aim of this Summer School is to present the current knowledge on the connection between biological, clinical and epidemiological aspects of TL dynamics.

The potential role of TL dynamics in the COVID-19 pandemics will be discussed.

REGISTRATION ONLINE FROM APRIL 12, 2021



- Candidates should register on the website of the event : <https://telomere2020.event.univ-lorraine.fr/>
- Registration fees : 70 euros (free for Université de Lorraine Students)
- For any practical information, please contact Philippe De Carvalho to: philippe.de-carvalho@univ-lorraine.fr

PARTICIPANTS



- Participants will be PhD students, Post Docs, other scientists and any person with basic knowledge in biology & interest in the aging process.
- Language of the summer school: English

SCIENTIFIC COMMITTEE (SC)



- Athanase Bénétos, Geriatrician, Biology of Aging, Université de Lorraine, France - Coordinator
- Abraham Aviv, Physician, Telomeres Epidemiology, NJ, USA
- Tim de Meyer, Bioinformatics, Ghent, Belgium
- Simon Toupance, Cell and Molecular Biology, Université de Lorraine, France
- Simon Verhulst, Evolutionary Ecology, Groningen Netherlands



SUMMER SCHOOL

Telomere length (TL) regulation and the aging process: from bench to bedside

Save the Date : June 16-17-18, 2021

Duration 9 hours spread in 3 afternoons

Wednesday June 16 afternoon from 4 pm to 7.30 pm

Thursday June 17 afternoon from 4 pm to 7.30 pm

Friday June 18 afternoon from 4 pm to 7.30 pm



Main topics (non-exhaustive list)

Wednesday June 16 (16h-19h30)

Molecular structure of telomeres and link with replicative senescence - **Simon Toupance, Fr**

Genetic and epigenetic determinants of TL (Mendelian Randomization studies) - **Tim De Meyer, Belgium**

Telomeropathie - **Sharon Savage, USA**

Thursday June 17 (16h-19h30)

Degenerative age-related diseases and TL - **Athanase Benetos, Fr**

The Nexus between Telomere Length and Lymphocyte Count during Covid-19 - **Abraham Aviv, USA**

Mathematical model of telomere in COVID-19 - **Jim Anderson, USA**

Friday June 18 (16h-19h30)

Interactions between, telomere dynamics and behaviour - **Melissa Bateson, UK**

Telomere, telomerase and cancer -

The place for TL measurements in clinics? Medical and ethical issues - Students and teachers

Format

- Lectures by senior scientists (7 lectures of 1 h)
- Debates between students and teachers in order to propose answers to important questions (1 debate of 1 hour)
- Short presentations with discussion by the participants who do research work on the thematic (working groups, 1h)
- Virtual visit of Nancy



This Summer School is partially funded by LUE, a program of Université de Lorraine, within the project IMPACT GEENAGE (<http://lue.univ-lorraine.fr/en>)