

Life Course Epidemiology and Public Health

Facilitators

Dr. Cristian Carmeli, PhD

Population Health Laboratory (#PopHealthLab), University of Fribourg

Prof. Arnaud Chiolero, MD PhD

Population Health Laboratory (#PopHealthLab), University of Fribourg
Department of Epidemiology, McGill University, Canada

Dr. Stéphane Cullati, PhD

Population Health Laboratory (#PopHealthLab), University of Fribourg
Department of Readaptation and Geriatrics, University of Geneva

Prof. Julia Dratva, MD MPH

School of Health Professions, Zurich University of Applied Sciences
Medizinische Fakultät, Universität Basel

Description

Population health is shaped by a complex set of determinants occurring throughout the life course. Life Course Epidemiology (LCE) aims to causally link exposures across the life course to long-term health outcomes via longitudinal studies. LCE investigates the dynamic of exposures at different periods of life (from conception to old ages), at various levels (social, environmental, behavioural, and biological) and historical periods (birth cohorts), and how these exposures influence population health.

For this course, we focus on LCE in public health whereby unravelling the complex origins of disease and health aims at informing preventive strategies. Life course epidemiology informs public health interventions via i) identification of windows of opportunity (life periods), ii) identification of target exposures and iii) assessment of potential intervention strategies.

Stemming from the same framework, we introduce life course theories and contemporary methods of causal inference from observational data, allowing to explicit confounding assumptions underlying LCE research questions and to evaluate potential public health interventions. More specifically, we will address the following topics:

- 1) Why life course studies are essential in Public Health, with an emphasis on early life determinants and primordial intervention of chronic diseases.

- 2) Core epidemiologic study designs of life course studies (birth and prospective cohort studies).
- 3) Main life course models (critical/sensitive period and accumulation) through which exposures may affect later health outcomes.
- 4) Causal thinking and statistical methods to assess LCE models from observational data.

Objectives

After the course, participants should be able to:

- understand the life course approach in health
- critically appraise the life course models
- critically appraise longitudinal epidemiological studies on the relationship between health changes and various exposures at different life periods.
- find suitable longitudinal data to answer their life course research question
- choose the most suitable statistical model to answer their life course research question

Dates

7 – 9 June 2022

Eligibility

Open to SSPH+ PhD students, and senior researchers in the public health field. Max number of participants: 20

Course Structure

This course includes lectures as well as many practical examples and exercises. The first two days will focus on life course epidemiologic concepts and methods, while the third day will provide two examples of public health topics where a life course approach lead to improved understanding of disease determinants and potential interventions. Each day participants will work in groups and share presentations of their work.

Assessment

Active participation in the exercises and short presentations.

Credits

1 ECTS

Preparation Work: 10 h, Contact: 18 h

(1 ECTS corresponds to appr. 25-30 hours workload)

Location

University of Fribourg. This course will be organized as part of the Population Health Week (#PopHealthWeek) and details will follow.

Course Fees

SSPH+ PhD Students	30.- CHF (processing fee)
External MD/PhD Students	300.- CHF
External Academics	850.- CHF
Other Participants	1250.- CHF

(The cost scheme depends on the Number of ECTS. Per ECTS participants are asked to pay 300,- CHF, 850,- CHF or 1250,-CHF, respectively)

Registration

<https://www.conftool.com/ssph-phd-courses2022>

Deadline for Registration

7 May 2022