

**Location (person/institute):** Dr. Katarina Matthes, University of Zurich

**Possible period (months/year) and length of visit:** September – October 2026, 2 months

**A preliminary title:** Socio-Demographic and Socio-Economic Inequalities in Causes of Death During the 1918–1919 Pandemic and the Following Years

**A short description of the topic/theme of the proposed project, including how it strengthens the main objectives of GREATLEAP (200-500 words):**

The 1918 - 1919 pandemic led to severe excess mortality worldwide, and Switzerland was heavily affected as well. Mortality was particularly high among individuals aged 20–40 years. However, in Switzerland, individual causes of death related to the 1918/19 pandemic have not yet been systematically analysed. Previous studies have focused only on overall mortality and excess mortality during this period. Furthermore, no detailed age-group analyses or analysing on socio-economic inequalities have been carried out so far. Likewise, no investigations have been conducted on causes of death after the pandemic, with the sole exception of one publication examining tuberculosis mortality on population level in the aftermath of 1918.

The aim of this project is to investigate mortality during the 1918 - 1919 pandemic in the City of Zurich by using individual-level causes of death data and to examine changes in causes of death over the approximately ten years following the pandemic.

This project has two research topics:

**1) Mortality of the 1918-1919 pandemic:**

- a) How does influenza mortality during the 1918 pandemic vary by age group, sex, and socioeconomic status?
- b) Is there a peak in mortality around age 28?

**2) Mortality after the 1918-1919 pandemic:**

- a) How do specific causes of death change after the pandemic?
- b) Are there increases or decreases in specific causes of death after the 1918-1919 pandemic, and if so, do these patterns differ across age groups, sex, and socio-economic status?

This study will use deaths records from 1910 to 1928 of the City of Zurich. In addition to detailed information on causes of death, age, sex, and residential addresses, the records include precise occupational information for the deceased, or, in the case of married women or children, the occupation of the husband. The population at risk for Zurich by age, sex, and occupation is derived from census data for 1910, and 1920 and 1930, with values for the intervening years are obtained by interpolation.

This project aims to improve our understanding of socio-demographic and socio-economic inequalities during a pandemic. It also seeks to shed light on how causes of death may have changed following an event like the 1918 - 1919 pandemic, and how these changes influenced existing inequalities.

The project offers one scholar the opportunity to work in a quantitatively strong team to investigate socio-demographic and socio-economic inequalities during a pandemic and in the years that follow. The project is in line with the main objective of the COST Action to better understand inequalities in health as measured by individual causes of deaths. Furthermore, innovative statistical methods will be used (working group 3) and international cooperation will be deepened.

**Possible output/outcomes of the project:** Publication