SSPH+ INTER-UNIVERSITY GRADUATE CAMPUS / SWISS SCHOOL OF PUBLIC HEALTH

in collaboration with

Swiss TPH
Swiss Tropical and Public Health Institute
Schweizerisches Tropen- und Public Health-Institut
Institut Tropical et de Santé Publique Suisse
Associated Institute of the University of Basel

University of Basel

Epidemiological data analysis strategy

Facilitators

Dr. Fiona Vanobberghen, PhD
Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel

PD Dr. Tracy Glass, PhD
Swiss Tropical and Public Health Institute (Swiss TPH), University of Basel

Description

This 5-day in-person course, comprising a mix of lectures and hands-on practicals, is designed for students who wish to learn about strategies for epidemiological data analyses. The course will cover framing the research question and translating this into an appropriate study design, the principles of statistical modelling including the choice of model and interpreting the output, model building strategies, and key concepts of confounding and effect modification. We will guide the learning through real-life examples. The focus will be on analysis strategies, not the execution of the analysis. However, the course will cover interpretation of results from statistical models in order to consolidate students' understanding of the models, inform their choices in analysis strategies, and gain experience in reporting model results. No particular statistical analysis software will be required, but practical examples will be demonstrated using software such as Stata or R.

Objectives

Students will learn to:

- Frame a research question and choose an appropriate study design.
- Develop an analysis plan, with appropriate choice of statistical model, a model building strategy, and consideration of key concepts such as confounding.
- Interpret results from statistical models in order to answer the research question.

Dates

23 – 27 September 2024

Ann Walser
Graduate Campus Manager
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https://ssphplus.ch/en/graduate-campus

Eligibility	Open to PhD students of the SSPH+ Inter-university Graduate Campus; other students and external participants are welcome to apply.
Prerequisites	Prerequisites for the course are knowledge and understanding of basic statistical concepts such as types of variables, population versus sample, descriptive statistics, estimation of population parameters (including confidence intervals), association measures (including odds ratios), and hypothesis testing (including p values).
Course Structure	5 full days with time split between lectures and practical sessions, and homework exercises.
Assessment	Group presentation of an analysis plan, developed over the course of the week, with students responsible for leading separate components and answering targeted questions to ensure full engagement and permit individual assessment.
Credits	**2 ECTS** Preliminary Work: 10 h; Contact time: 35 h; In-course work: 10 h (1 ECTS corresponds to appr. 25-30 hours workload)
Location	Swiss TPH, Kreuzstrasse 2, 4123 Allschwil, Switzerland, room tba

Course Fees

IGC course fees	2 ECTS
SSPH+ IGC Students	30 CHF
Postdocs from partner universities	30 CHF
External PhD students and MD students	600 CHF
Others	1'600 CHF

Registration	https://www.conftool.com/ssph-phd-courses2024
Deadline for registration	23 August 2024

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