Systematic Reviews and Evidence Synthesis

**Facilitators**

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**Description**

A systematic review (SR) is a review of the scientific literature on a specific research question that adopts explicit and standardized methods to minimize potential biases and thus provide more reliable findings to support decision-making and to guide future research. It is a key element for evidence-base medicine and public health (EBM&PH).

Our course is designed for PhD students and researchers who want to know how SRs can be used within healthcare and public health to inform decisions making within and an EBM&PH framework.

The participants will learn how to conduct a SR and synthesize evidence (meta-analysis; MA) and the process from the initial research question to best practice reporting results. They will apply statistical methods and tools to conduct SR and MA (risk of bias tool to assess the methodological quality of studies; meta-analytic methods to quantitative summarize evidence; GRADE framework to assess the confidence in the MA results). Examples will be taken from experimental and observational research.

**Objectives**

To know the principals of EBM&PH and how to conduct a SR and MA. In particular, able to:

- Understand what is EBM&PH and why it matters for healthcare provision and public health decision making
- Recognize the different types of review and know their strengths and limitations for decision making
- Describe the key steps in undertaking a SR and evidence synthesis, including development of a review protocol
- Formulate a clear research question that can be addressed by a SR
- Identify the relevant literature
- Appraise the methodological quality of studies included in a SR
- Conduct basic MA and interpret the results
- Assess the confidence in the evidence from MA using the GRADE framework

**Dates**
13-16 June 2023

**Eligibility**
SSPH+ PhD students. External participants are welcome to apply.

**Course Structure**
Lectures and group work

**Assessment**
In-class assignments and presentations

**Credits**
2 ECTS

Preliminary Work: 10h; Contact time: 30h; Assignment: 10h

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

**Location**
University of Fribourg, room TBA

**Course Fees**

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<th>ECTS</th>
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<tr>
<td>2</td>
<td>SSPH+IGC Students</td>
<td>30 CHF</td>
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<tr>
<td></td>
<td>Postdocs from SSPH+ partner institutes</td>
<td>30 CHF</td>
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<td></td>
<td>External PhD students and MD students</td>
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<td>Others</td>
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**Registration**
www.conftool.com/ssph-phd-courses2023

**Deadline for registration**
13 May 2023