

# CAS Clinical Research

## Systematic Reviews and Meta-Analysis: a Practical Approach, 16 – 18 September 2020

**Faculty:** Prof. Georgia Salanti, Prof. Marcel Zwahlen, Doris Kopp, Béatrice Minder, Tonia Thomy, Diana Buitrago

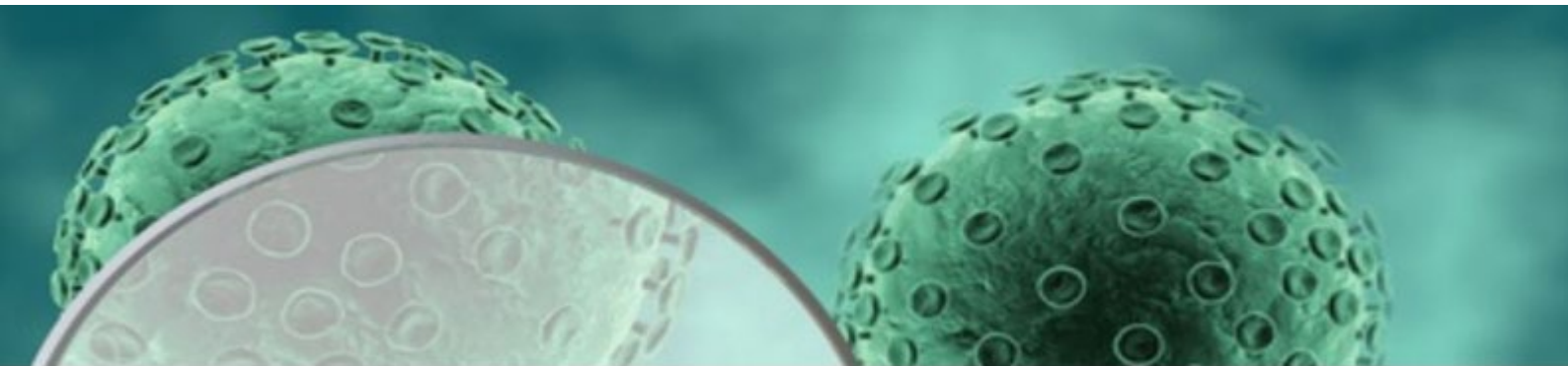
**Venue:** Institute for Social- und Preventive Medicine (ISPM), Mittelstrasse 43, 3012 Bern

Mixed course: **Room 220, 2<sup>nd</sup> floor or on Zoom**

### Program

**Wednesday, 16 September 2020**

Time		Handout No.
09:15	<i>Welcome, introduction (with coffee and croissants)</i>	
09:30	<b>Introduction to the systematic reviews and measures of association (MZ)</b>	<b>L1</b>
10:30	<b>Meta-analysis using fixed and random effects model (GS)</b>	<b>L2</b>
11:30	<i>Coffee break</i>	
12:00	<b>R practical: Basic meta-analysis (GS/Tutors)</b>	<b>P1</b>
13:00	<i>Lunch break</i>	
14:00	<b>R practical: Basic meta-analysis (GS/Tutors)</b>	<b>P1</b>
15:00	<i>Coffee break</i>	
15:30	<b>Medline et al: Identifying relevant literature (BM/DK)</b>	<b>L3</b>
16:30	<b>Practical in identifying relevant literature for a systematic review (BM/DK)</b>	<b>P2</b>
17:30	<i>End of first day</i>	



### Thursday, 17 September 2020

Time		Handout No.
09:15	Review of previous day	
09:45	<b>Exploring heterogeneity (GS)</b>	<b>L4</b>
10:45	<i>Coffee break</i>	
11:15	<b>Reporting bias (GS)</b>	<b>L5</b>
12:15	<i>Lunch break</i>	
13:15	<b>The GRADE system for evaluating the evidence from meta-analysis (TT)</b>	<b>P3</b>
14:30	<i>Coffee break</i>	
15:00	<b>R practical: Subgroup analysis and meta-regression (GS/Tutors)</b>	<b>L6</b>
17:00	<i>End of second day</i>	

### Friday, 18th September 2020

Time		Handout No.
09:15	Review of previous day	
09:45	<b>Systematic reviews and meta-analysis of prevalence studies (DB)</b>	<b>L7</b>
10:45	<i>Coffee break</i>	
11:15	<b>Dose-response meta-analysis (theory and practical in R) (GS/Tutors)</b>	<b>L8, P4</b>
12:45	<i>Lunch break</i>	
13:45	<b>Network meta-analysis (GS)</b>	<b>L9</b>
14:45	<i>Coffee break</i>	
15:15	<b>Practical for PRISMA in network meta-analysis (GS/Tutors)</b>	<b>P5</b>
16:30	<i>Question and answer session and feed-back on course</i>	
17:00	<i>End of course</i>	

#### To be read before course:

Egger M, Smith GD, Sterne JA. Systematic reviews and meta-analysis. Oxford Textbook of Public Health

Riley RD, Higgins JPT, Deeks JJ. Interpretation of random effects meta-analyses. BMJ. 2011;342:d549.

Cipriani A, Higgins JPT, Geddes JR, Salanti G. Conceptual and technical challenges in network meta-analysis. Ann Intern Med. 2013;159:130–7.

Cipriani A, Furukawa TA, Salanti G, Chaimani A, Atkinson LZ, Ogawa Y, et al. Comparative efficacy and acceptability of 21 antidepressant drugs for the acute treatment of adults with major depressive disorder: a systematic review and network meta-analysis. Lancet. 2018