



Systematic reviews and meta-analyses in animal research - an introduction

In collaboration with SYRCLE (Systematic Review Centre for Laboratory Animal Experimentation)
Radboud University Medical Center, Nijmegen, The Netherlands.

WEDNESDAY DEC 2, 2020	9:00 – 9:30	Introduction to the course. <i>Rafael Frías</i>
	9:30 – 10:00	Introduction to systematic reviews of animal studies. <i>Explanation of the concept of a systematic review, the differences compared to a narrative review, the standard steps and usefulness of systematic reviews of animal studies.</i>
	10:00 – 10:30	Identification of “all” relevant animal studies. <i>Introduction to the principles of designing a comprehensive search.</i>
	10:30 – 11:30	Computer practical - Development of comprehensive search strategies. <i>Designing a comprehensive search in PubMed yourself.</i>
	11:30 – 12:00	Practical - Inclusion/exclusion of studies. <i>Performing a title & abstract screening based on explicit selection criteria.</i>
	12:00 – 13:00	Break
	13:00 – 13:30	Group discussion - Extract study characteristics. <i>Designing the outline of a table of study characteristics.</i>
	13:30 – 14:00	Criteria of study validity. <i>Introduction to the concept of internal validity, different types of bias and tools to assess risk of bias.</i>
	14:00 – 14:45	Practical - Risk of bias assessment. <i>Assessing the methodological quality of a study yourself.</i>
	14:45 – 17:00	E-learning/study.
THURSDAY DEC 3, 2020	9:00 – 9:15	Recap.
	9:15 – 10:00	Introduction to a review protocol <i>Explanation of the importance and elements of a protocol; registration vs. publication.</i>
	10:00 – 11:30	Practical protocol. <i>Writing a protocol for the topic of your own systematic review.</i>
	11:30 – 12:00	Plenary discussion protocol <i>Discussion of issues encountered during practical protocol.</i>
	12:00 – 13:00	Break
	13:00 – 13:45	Introduction data extraction and meta-analysis. <i>Explanation of different types of outcome data synthesis and the main steps of conducting a meta-analysis including subgroup analysis.</i>
	13:45 – 14:45	Practical data extraction and meta-analysis. <i>Extracting outcome data from studies yourself and a demonstration of how to conduct a meta-analysis in Review Manager.</i>
	14:45 – 16:00	E-learning/study.
	16:00 – 17:00	Final examination.