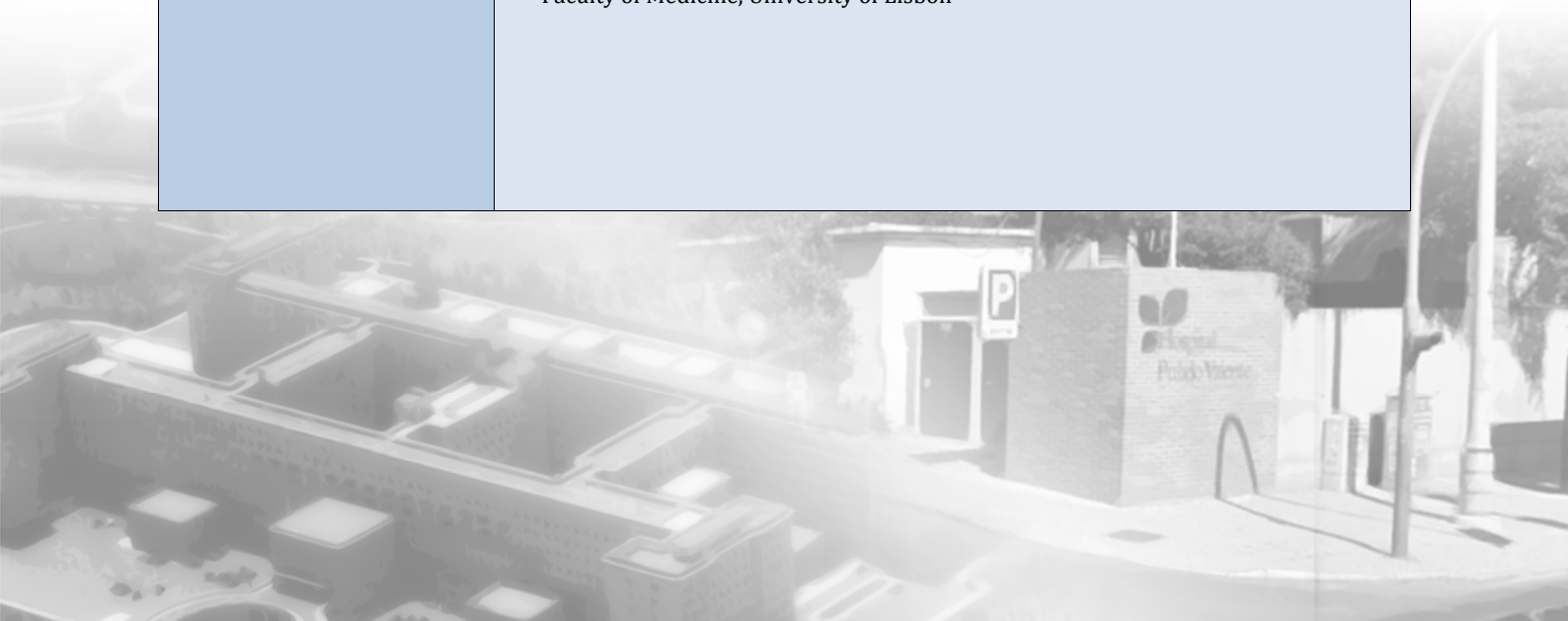
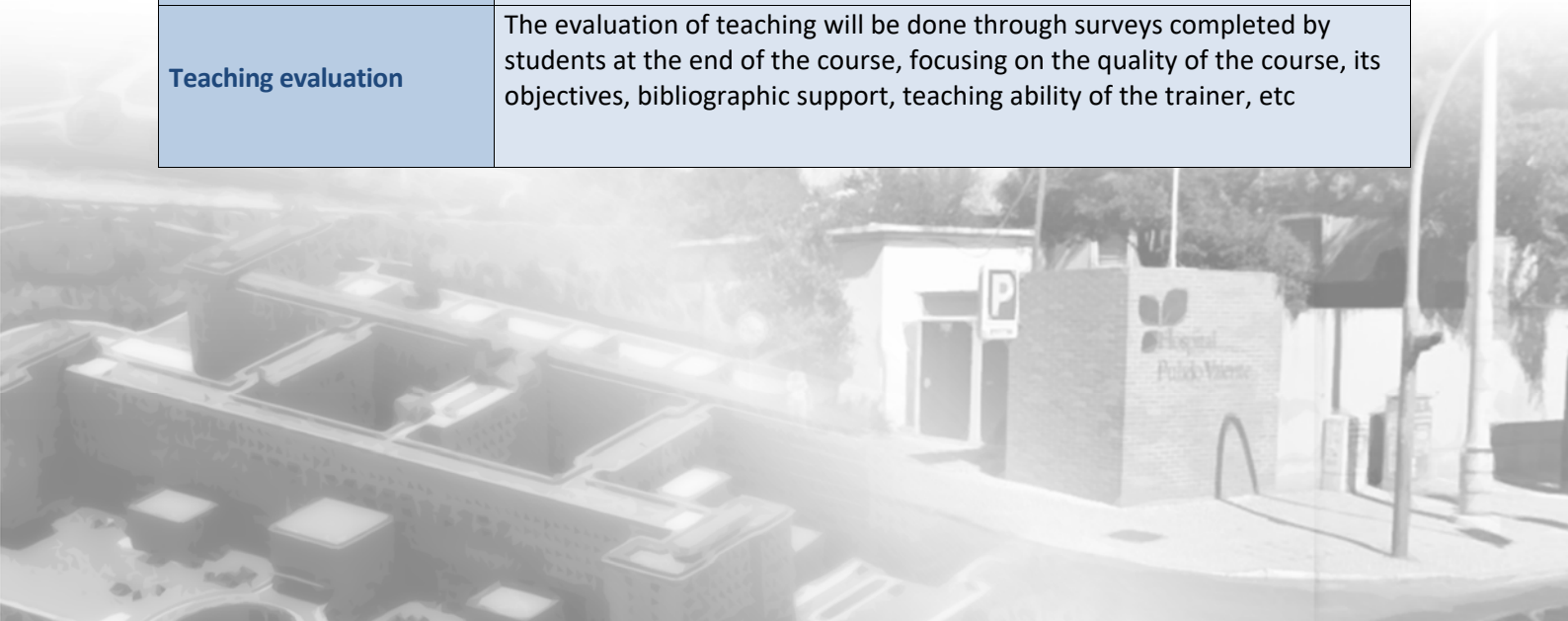
JUNIOR DOCTORS INTERNATIONAL MEETING

"Cochrane Course - Introduction to systematic reviews and meta-analysis"

Date	November 19th 2017
Schedule	9h00m – 19h00m
Course programme	**Course Promotors:** Faculty of Medicine, University of Lisbon Cochrane Portugal *See detailed programme in attachment*
Course Directors and Speakers	**Course Directors** **João Costa**, MD, PhD (*Coordinator Director, Cochrane Portugal; Associated Director, Center for Evidence Based Medicine; Professor, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon*) **António Vaz Carneiro**, MD, PhD, FACP (*Executive Director, Cochrane Portugal; Director, Center for Evidence Based Medicine, Faculty of Medicine, University of Lisbon*) **Speakers** António Vaz Carneiro CEMBE, Cochrane Portugal, Faculty of Medicine, University of Lisbon Daniel Caldeira Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon Joana Alarcão Cochrane Portugal, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon João Costa CEMBE, Cochrane Portugal, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon



Objective	To describe the principles and learn the basic steps in conducting a systematic review in order to be capable to critically appraise the results of a systematic review. The level of the course is introductory. Therefore, at the end of the day, students should not expect as an objective to be able to independently conduct their own high quality systematic reviews and meta-analysis.
Specific objectives	a) Describing basic concepts of Evidence Based Medicine b) Describing basic concepts of a systematic review and a meta-analysis c) Writing a protocol of a systematic review d) Developing strategies for searching bibliographic databases and studie selection e) Critically appraise clinical trials f) Preparing a systematic review and a meta-analysis g) Critically appraise a systematic review and a meta-analysis
Target audience	This course is aimed at health care professionals including students and researchers. The level of this course will be introductory (aimed primarily at health care people in training, or those wishing to refresh/update their basic knowledge in the field of systematic reviews and meta-analyses). Number of participants: 30 (max).
Course structure	The course is composed of different modules, interconnected, providing a broad knowledge of the subject as well as the various methods for its practical application. *See detailed programme in attachment*
Teaching evaluation	The evaluation of teaching will be done through surveys completed by students at the end of the course, focusing on the quality of the course, its objectives, bibliographic support, teaching ability of the trainer, etc



JUNIOR DOCTORS INTERNATIONAL MEETING

DETAILED COURSE PROGRAMME

Faculdade de Medicina de Lisboa
CENTRO ACADÉMICO DE MEDICINA DE LISBOA

Cochrane Portugal

COURSE PROGRAMME — November 19th 2017

9:00-9:15

WELCOME NOTE

Course Directors:

João Costa, MD, PhD *(Coordinator Director, Cochrane Portugal; Associated Director, Center for Evidence Based Medicine, Professor, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)*

António Vaz Carneiro, MD, PhD, FACP, FESC *(Executive Director, Cochrane Portugal; Director, Center for Evidence Based Medicine, Faculty of Medicine, University of Lisbon)*

SESSION #01 — INTRODUCTION TO SYSTEMATIC REVIEWS

9:15 - 9:45

1. Principles of evidence-based medicine

António Vaz Carneiro, MD, PhD, FACP, FESC *(Cochrane Portugal, CEMBE, Faculty of Medicine, University of Lisbon)*

- Explain the importance of using an evidence-based approach
- Levels of evidence
- Systems of recommendation

9:45 - 10:15

2. Systematic reviews

António Vaz Carneiro, MD, PhD, FACP, FESC *(Cochrane Portugal; CEMBE, Faculty of Medicine, University of Lisbon)*

- Systematic reviews vs. narrative reviews
- The role of Cochrane
- Outline the process of undertaking a systematic review

COFFEE BREAK

SESSION #02 — PROTOCOL OF A SYSTEMATIC REVIEW

10:45 - 11:30

1. Writing a protocol

Joana Alarcão, PharmD *(Cochrane Portugal, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)*

- Outline the key components of a protocol
- Explain the PICO approach to defining the question and objectives for the protocol
- Prepare the background section of the protocol
- Describe the elements of the methods section

SESSION #03 — SEARCH STRATEGY

11:30 - 12:15

1. Searching for studies

Joana Alarcão, PharmD *(Cochrane Portugal, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)*

- Planning the search process
- Constructing a search strategy
- Managing and reporting the search results

12:15 – 13:00

2. Practical exercises: Searching for studies in Medline

Joana Alarcão, PharmD *(Cochrane Portugal, Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)*

LUNCH

SESSION #04 EVALUATION AND APPRAISAL OF CLINICAL TRIALS

14:00 - 14:45

1. Evaluation and appraisal of randomized controlled trials

Daniel Caldeira, MD (Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)

Describe different types of bias which randomised trials are at risk of

Identify and assess the risk of bias in randomised trials

Plan how to summarise and incorporate risk of bias assessments

14:45 - 15:30

2. Practical exercise

Daniel Caldeira, MD (Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)

Critical appraisal of clinical trials papers

COFFEE BREAK

SESSION #05 STUDY SELECTION and DATA COLLECTION

16:00 - 17:30

1. Study Selection and Data Collection

Daniel Caldeira, MD (Laboratory of Clinical Pharmacology and Therapeutics, Faculty of Medicine, University of Lisbon)

- Implementation of the selection process
- Discuss methods used to minimise errors and bias in collecting data
- Decide what data to collect from studies
- Devise an appropriate form for collecting data from included studies

SESSION #06 FUNDAMENTALS OF META-ANALYSIS

17:30-18:30

1. Introduction to meta-analysis

João Costa, MD, PhD *(Cochrane Portugal; CEMBE, Laboratory of Clinical Pharmacology and Therapeutics; Faculty of Medicine, University of Lisbon)*

- Explain the difference between meta-analysis and systematic reviews
- Understand the steps of conducting a meta-analysis
- Recognise the elements of a forest plot and interpret the results

18:30-19:00 GENERAL DISCUSSION