CEETOP Evidence synthesis short course and placements

The Collaboration for Environmental Training Opportunities (CEETOP) is a NERC funded training initiative consisting of two elements, a modular **training programme** and a **placement**. Both are flexible and can be attended independently of each other. The training is led by evidence synthesis specialists with experience of producing information for stakeholders including policy makers and business.

For short course registration or placement enquiries, please email Nicola Randall nrandall@harper-adams.ac.uk

CEETOP Placements

NERC funded placements are available by individual arrangement between 2nd October 2017 and 31st March 2018 and may last from one week to one month at either Harper Adams University or Exeter University. For enquiries, please contact Nicola Randall nrandall@harper-adams.ac.uk in the first instance

Placement Details

Participants can receive bespoke support for an evidence synthesis on which they are working. Placements will be offered at Harper Adams or Exeter. Participant working on, or about to commence, their own synthesis can spend from a week and up to one month in the host institution. Onsite training and support through specialists will be provided (eg in specific stages of a review such as literature searching and reference management, meta-analysis, narrative synthesis, qualitative evidence synthesis in a specific type of review, or in a specific field). Participants will focus on a specific area of their own review, but gain advice and input from experienced staff at the centre.

Accommodation and subsistence for the participant is covered for the period of the placement

CEETOP Short Course Training Programme

A 5-day short course consisting of 4 consecutive modules:

An introduction to evidence syntheses
Protocol development
Making sense of data
Engaging with policy and industry end-users

Participants can attend the full 5 day course to be held over one week (recommended), or select from the modular elements within it. There are two opportunities to attend this course:

20-24th November 2017 Harper Adams University, Shropshire

19th-23rd March 2018 Exeter University, Devon

For enquiries, or to register please contact Nicola Randall nrandall@harper-adams.ac.uk

Short course programme details:

An introduction to evidence synthese**s**

20-21st November 2017 Harper Adams, or
19- 20th March 2018 Exeter

The full processes for systematic reviews, systematic maps, endorsed by the Collaboration for Environmental Evidence (CEE), http://www.environmentalevidence.org/
(students will receive a CEE certificate on completion). This interactive introductory module is useful for those that have little experience in evidence synthesis methods and covers key stages (question setting, searching, screening, sources of bias/quality appraisal, coding, synthesis etc.). It will consist of workshops, taught elements and hands-on activities on different evidence syntheses and on specific stages of a review process such as; Developing SR questions and inclusion criteria, developing a search strategy, study screening, developing a coding tool, critical appraisal of a SR.

Learning outcomes
At the end of this module you will be able to:
- Recognise different types of evidence synthesis, their strengths and weaknesses, consider the evidence needs of decision makers, and use this information to choose which type of evidence synthesis is appropriate in specific situations.
- Recognise the importance of planning and protocol development
- Understand the steps and rationale for evidence synthesis processes and associated methods and apply these appropriately to their own questions
- Interpret and evaluate existing evidence syntheses in order to inform decision making.

Protocol development

22nd November 2017 Harper Adams, or
21st March 2018 Exeter

A clinic activity led course, where the aim is for participants to have the key elements of a draft protocol prepared by the end of the day. Participants can bring their own problem or work on a question set for the course.

Learning outcomes:

At the end of this module you will be able to:
- Recognise the role and importance of the pre-specified protocol
- Plan all stages in sufficient detail to produce a draft protocol
- Activities will include: consideration of stakeholder involvement; search strategy; data extraction/coding tool; selecting appropriate quality appraisal tools and a synthesis method

Making sense of data

Friday 24th November 2017 Harper Adams, or
Thursday 23rd March 2018 Exeter

Lectures and hands on activities: this module will consider options for data synthesis & communication of the findings including when meta-analyses is appropriate within evidence synthesis. Mechanisms for, and presentation of a narrative synthesis and evidence mapping, and the strengths and weaknesses of different approaches.

Learning outcomes: At the end of this module you will be able to:
- Interpret published meta-analyses.
- Understand the data required to carry out a meta-analysis.
- Select the appropriate approach to synthesis for different data sets
- Understand the strengths and weaknesses of different approaches

Engaging with policy and industry end-users

Thursday 23rd November 2017 Harper Adams, or
Friday 23rd March 2018 Exeter

Policy experts will use workshops, taught activities and discussion order to explore how evidence syntheses can be made more relevant to users throughout, & will include communication before, during and after the review process.

Learning outcomes:
At the end of this module participants will be able to:
- Better understand the needs of, and deadlines which end-users need to work to
- Work with end-users and reviewers to develop achievable timelines for the review
- Have examples of effectively communicating with end-users throughout the process
- Develop different outputs for different end-user stakeholders, including use of infographics
- Understand how to deal with difficult situations and unexpected outcomes

Our Experience

Collaboration for Environmental Evidence

This proposal combines the complementary skills of the three Institutions that form the UK Centre of the Collaboration for Environmental Evidence (CEE). CEE has developed generic training courses for the conduct of systematic reviews and systematic maps for specific use in global environmental sector. These CEE endorsed training courses are consistent with their internationally recognised Guidelines and Standards on the conduct and reporting of evidence syntheses in environmental management. The training builds on these courses.

The CEE has 6 global centres and is linked to the wider evidence synthesis community (such as Cochrane and Campbell Collaborations) through the newly formed Evidence Synthesis International (https://evidencesynthesis.org/). This provides a cross-disciplinary

perspective to evidence synthesis with important links to public health and social sciences. CEE has been showcased in the NERC 'Science into Policy' publication in 2009. CEE has been working with Defra to establish guidance for a broader range of evidence synthesis methods and this aspect will be fully integrated into the course.

Teaching staff

The trainers' areas of interest are complementary, with specialisms in agriculture, environment and health and conservation, as well as methodological (types of reviews, and different approaches to synthesis).

Nicola Randall is a principal lecturer and manages the Centre for Evidence Based Agriculture, a specialist evidence synthesis centre, at Harper Adams University. She developed systematic mapping methodology for environmental evidence, and co-authored guidance in the methodology, and piloted rapid review methodologies for Defra. Nicola She spent three years as a trainer in systematic review and protocol development for the European Food Safety Authority, and is currently a synthesis methods expert for the EU Eclipse mechanism. She has worked on CEE and Campbell systematic reviews and maps for national and international policy bodies such as Defra and DFID.

Ruth Garside is Senior Lecturer in Evidence Synthesis at the European Centre for Environmental Evidence at the University of Exeter. She specialises in methods of systematic review and evidence synthesis and leads an Ecosystem Services and Health and Wellbeing group at CEE. She is a co-convenor of the Qualitative and Implementation Methods group, Cochrane Collaboration. She has taught systematic review methods for a range of audiences and timeframes including Master's level modules, short courses and workshops in the UK and internationally, and for policy makers such as NICE. Dr Garside is a social scientist with a particular interest in synthesising information from both quantitative and qualitative evidence in order to understand beliefs and behaviours in the context of public information, policy and practice.

Rebecca Lovell at the European Centre for Environmental Evidence, University of Exeter specialises in translating environmental and health evidence for policy and service delivery audiences. She has undertaken a variety of reviews for different audiences including for the Convention for Biological Diversity, World Health Organisation, Cochrane, GO Science (Cabinet Office), Defra, Natural England, and for Local Authorities. Becca has provided training on the use of review methodologies and in relation to communicating summaries of evidence to multiple audiences.

Andrew Pullin is Professor of Evidence-Based Conservation and Director of CEBC at Bangor University. He is interested in the evidence-based approach to environmental management and, through a series of NERC Knowledge Exchange grants, has developed methodology for systematic review in the environmental sector. In 2007 he co-founded the Collaboration for Environmental Evidence (CEE), He has been a major contributor to the development of the CEE guidelines and standards for systematic reviews and has established standard training courses on systematic review conducted by CEBC staff in the UK and abroad.

Deborah Coughlin is a knowledge broker and has been employed by the UK Department for Environment, Food and Rural Affairs and the Environment Agency to develop more rapid evidence review methods, based on CEE systematic review methods, to meet the needs of policy and practice end-users. A definitive evidence review guide for use across Defra and the EA was recently published, part-funded by NERC. Deborah, Andrew and Nicola have worked together on several reviews to inform policy and practice decisions.