ICML + EAHIL 2017 Continuing Education Courses

Last updated: 21 March 2017**|** All CECs are half day courses unless otherwise stated

Monday 12 June 2017 10.00am – 13.00

CEC 1. PRESSing search strategies and AMSTARing systematic reviews: have a go session
Date and Time: Monday 12 June 2017 10.00-13.00

Target audience: Any information professional involved in, or hoping to be involved in, health care systematic reviews
Level: All
Aims:

1. To use the PRESS checklist to help assess other systematic review searches
2. To use this experience to help develop own systematic review searches
3. To gain experience of using the AMSTAR method to review a published systematic review
4. To use this experience to gain confidence in writing systematic reviews

Learning Outcomes: Evaluating and applying both checklists
Description / agenda:
The session will be split into two:

1. Using the PRESS checklist to assess a published search strategy.

We will all start with the same published search strategy and feedback. The groups will PRESS a different second one and feedback.
The second part of this session will involve a discussion around how we, as information professionals, can use this experience to develop and publish our own search strategies.

2. Using the AMSTAR checklist to assess the methodological quality of a published systematic review.

We will all start with the same one and feedback. The groups will then assess a different second systematic review and feedback.

The second part of this session will be a discussion generally about writing and publishing systematic reviews and the role of the information professional within it
The workshop leaders will act as facilitators and encourage participants to share their experiences. They will also encourage participants to detail in a personalised action plan what they might do differently back at their workplace
The level of delegate participation required: We will be aiming for a fully participative session
Is preparation in advance by participants applicable? No, but a laptop or tablet will be required
Course Leader Details: Alison Bethel and Morwenna Rogers
Keywords: systematic review; checklist; search strategy;

CEC. 2: Librarians as Open Science facilitators: How to develop Research Data Management Services

(This course has been extended to a full day CEC 09.00 – 17.00 Exact time to be confirmed)

Target audience: The workshop is targeted to librarians interested in Open Science practices and seeking to develop Research Data Management services for biomedical researchers or clinicians.

Level: Introductory / Intermediate
Previous knowledge about Open Science or Research Data is not required.
Preparation in advance is not required, nevertheless it would be recommended to think about the own experiences on Open Access and other research support services to share in the debate activity.

Aims: The general aim of this workshop is to provide biomedical librarians with the basic knowledge on Research Data Management in the context of Open Science and Open Knowledge. In addition, the attendees will acquire new skills, suitable resources and tools, in order to develop Research Data Management Services or support researchers or clinicians and their research processes at their institutions.

Learning Outcomes:

- *Remember* main concepts of Open Access and Open Science.
- *Understand* why research data is so important, what are the needs of researchers regarding research data management and what can librarians do to improve reproducibility and research integrity but preserving privacy.
- *Apply* all the new learnings together with other previous knowledges to develop new support services for clinicians and biomedical researchers.
- *Analyse* which new services could be interesting for the participants to propose or implement and *evaluate* the requirements, needs and the advantages for both, researchers and institutions.
- *Test* some tools to manipulate, anonymize and publish data sets.
- *Create* metadata, a data management plan and a proposal for new services related to research data management.

Description / agenda:
The workshop is planned to include a combination of presentations, discussion and practical activities. The course will be divided in two parts:

Part one: Introduction to Research Data

- Introduction of general concepts: Open Science and Research data
- Research data lifecycle
- Research data as a key element for transparency, reproducibility and research integrity in Science
- New requirements about Open Research Data and Data Management Plan
- Research data infrastructures and services
- Data Organization and Management: The Data Management Plan

Part two: Data management in practice

- Adding metadata: case studies with DDI and DataCite Metadata Schema
- Manipulation of tabular data: exercises with IPython Notebook
- Preparing data to be shared: exercises of de-identification, anonymization and encryption
- Sharing and publishing research data: install your own data repository or using Zenodo and GitHub
- Evaluating and measuring research data impact and visibility
- Conclusion: how to apply those skills and include Research Data Services in your institutions

The level of delegate participation required: A mixture of presentations, discussion and practical activities.

Is preparation in advance by participants applicable? No

Course Leader Details:
Alicia F. Gomez – aliciaf.gomez@yahoo.com
Alicia F. Gomez has a wide experience in biomedical information, digital libraries, science evaluation, open science and scholarly communication. She has been working for more than 10 years at the Fundación CNIC, the Spanish National Cardiovascular Research Centre, in Madrid, where she's Head of the Library and Information Service, and she's also part-time Associate Professor at the Universidad Autónoma de Madrid. Prior to this, she worked as Associate Professor at the University Alfonso X el Sabio in Madrid, and earlier worked at ABBOTT Diagnostika, in Frankfurt (Germany). She holds a post-graduation in Digital Libraries and Information Systems and a doctorate in Linguistics. She's active in many professional associations and networks in the field of Information Science and Terminology.

Pablo Iriarte – pablo.iriarte@unige.ch
Pablo Iriarte is the Information Technology Coordinator at the University Library of Geneva, Switzerland. He is also part-time teacher at the Information Science department of the Geneva School of Business Administration. Previously he worked many years as IT librarian specialist in the Lausanne University medical library and as research data librarian and Webmaster at the Data and Documentation unit of the Institute of Social and Preventive Medicine in Lausanne. His research fields are related to open science, research data, semantic Web and development of open source software for academic libraries.
Keywords: Research Data Management; Data Management Plans; Open Science; Reproducibility; Research integrity

CEC 3. Supporting Systematic Reviews: The Basics
Fit with Conference Theme:
- **Leadership & values:** health science librarians with their expert search skills are uniquely placed to gather data as part of the systematic review (SR) team. As an active member of the SR team the librarian can adapt to the rapidly changing environment of their users.
- **Integration:** collaboration of the librarian with researchers conducting SRs speaks enormously to librarian expertise and integration into a team.
- **Education and Learning:** As an SR expert, the librarian may become the teacher and trainer for researchers as they undertake a process in which they may have only emergent skills.

Target audience:
This is an Interactive Session for librarians who are being asked to work in research teams on systematic reviews, or who are exploring an SR service.
Level:
Librarians with intermediate or above experience in their field, but who are new to systematic reviews.
Participants should have a high level of competence with using Medline and MeSH.

Aims:
It is designed for medical librarians who want an introduction to the systematic review process in general and the librarian's role in that process in particular.

Learning Outcomes:
Participants will be able to:
- Describe the steps in the systematic review process
- Identify standards for development of systematic reviews
- Apply and analyse the roles of the librarian within this process
    - Select databases and other resources appropriate for the topic
    - Utilize project management tools to keep track of search strategies and citations
    - Design the SR search methodology for publication

Description / agenda:

Through informal discussion, hands-on and case-based learning, participants will acquire skills needed to support systematic reviews in your institution:

- Introduction to the workshop and the systematic review
- Overview of the systematic review process and the role of librarians
- Selecting databases, identifying resources, search strategies
- Project Management: Keeping track of searches & keeping track of citations
- Write-up of Search methodology
- Debrief and Wrap-Up

The level of delegate participation required:
Methods used during the CE include **Lecture, Demonstration,** PowerPoint, **Discussion, Brainstorming, Hands-on Exercises, Case Study.**

Is preparation in advance by participants applicable*?* Yes (small amount of pre-reading)
Co-Faculty
Janene Batten - janene.batten@yale.edu
Janene Batten is the Nursing Librarian at the Cushing/Whitney Medical Library, Yale University. The Medical Library is the library for the Yale-New Haven Hospital and Janene team teaches the *EBP Foundations* class to staff nurses and to YNHH nurse residents. She also works closely with nursing staff in the hospital assisting them with research for their clinical setting. Janene is also the librarian for the Yale University School of Nursing, and has extensive experience teaching evidence-based research principles to nursing students through course-integrated instruction. She currently works with nursing faculty, graduate and doctoral students, assisting them with all aspects of their research. Janene is faculty in the annual 3-day Institute *Supporting Clinical Care": An Institute in Evidence-based Practice for Medical Librarians*, held in both Denver, CO and in Australia.

Angela Myatt - angela.myatt@me.com
Angela Myatt is a Clinical Instructor in the Office of the Dean, School of Medicine at Oregon Health & Science University. Previously she was Liaison Librarian to the School of Medicine at The University of Texas, Health Science Center, San Antonio. Angela has been a tutor at the McMaster EBCP Workshop for several years and now co-teaches the distance education course "EBM for Medical Librarians" through the University of North Carolina at Chapel Hill. She has extensive experience teaching evidence-based principles and practice to faculty, residents and students. Angela is also a faculty member in the annual 3-day Institute "*Supporting Clinical Care: An Institute in Evidence-based Practice for Medical Librarians*", held in Denver, CO and in Australia

CEC 4. Synchronous Online Teaching – Keeping virtual classroom students engaged.

Target audience: Anyone who is an instructor or planning to teach online synchronous library courses. Particular interests to those currently teaching courses who would like to move to an online teaching environment using a synchronous model.

Level: Intermediate The course is geared to those already teaching or having developed face to face training.Participants should be familiar and comfortable in leading in a classroom environment but would like to transitoin to an online setting.

Aims:

This courses will focus on Synchronous Online Teaching. Dispelling some of the myths of online teaching, the course will help instructors to improve the learning experience and environment for their students. While still applying similar methods used in face to face teaching, course participants will learn tips on adapting their teaching style to an online environment.

Learning Outcomes

plan, create, invent and organize!

Participants will have learned to avoid some common mistakes in teaching online

Adapt face to face courses to an online environment

Engage students in the virtual classroom

> Improve retention of student's interest
>
> Identify the differences between face to face and online synchronous teaching

Description / agenda:

1) Basic principles of teaching
2) Exercises to demonstrate the challenges in teaching online
3) Difference and similarities between face to face and online
4) What to do to mitigate the challenges
5) Technology – the options
6) Key to success is not the technology, it is YOU!

The level of delegate participation required:

Some experience in teaching library skills

Is preparation in advance by participants applicable?

No, however some background information on the participants would be helpful by completing a short questionnaire to be provide by Tomas

Course Leader Details: Tomas Allen Librarian, Library and Information Networks for Knowledge
World Health Organization

Librarian for over 14 years within the unit of Library & Information Networks for Knowledge situated within the World Health Organization, Geneva, Switzerland. Tomas' current responsibilities in the WHO Library include Reference, In-depth Searching, Historical research as well as Training (both local and regional).

Tomas is originally from Manitoba, Canada with a Masters of Library and Information Studies from McGill University (Montreal, Canada). Tomas is co-chair of the Public Health Interest Group of EAHIL and spokesperson for the Supranational members of EAHIL. In previous EAHIL conferences and workshops, Tomas has been active as a course leader, poster presenter and conference speaker.

Keywords: Technology, Education Learning, Teaching,

Free Text Keywords : Synchronous Online Teaching, classroom instruction, teaching methods, distance learning

CEC 5. Improve your data! How to use surveys effectively in health information and library based research and evaluation

Service evaluation is a key aspect of the role of library and information professionals in the health and social care sector, and one approach to achieving this is through research, evaluation and audit activities. Within the LIS professions, the use of surveys is a common and popular approach to data collection in this process, however the complexities of survey design are often overlooked, and the survey is not always used as effectively as it could be. This session is aimed at benefitting health information and library professionals currently in the planning stages, or interested in beginning a work based evaluation, audit or research project that uses a questionnaire as the main method of data collection. Drawing on the personal experience and expertise of the course leader, and the work of experts in the field of survey and questionnaire design, this course aims to demonstrate good practice in LIS survey design and equip attendees with the relevant skills to achieve a high quality of data from their surveys. Using practical individual and group based exercises as a vehicle for learning, the course will contribute to developing the knowledge and skills of library and information professionals working in health and social care by equipping them with an understanding of how to get the best out of their survey based data collection activities. The course will focus in particular on the following aspects:

• Discussing the role and function of the survey as a data collection tool in research, evaluation and audit
• Critiquing and reviewing question types and approaches to question use in surveys
• Techniques for good practice in survey design
• How to achieve validity, reliability and good methodological rigour in surveys
• Techniques for planning and administering survey effectively

The course will combine the following methods as a vehicle for encouraging attendees to participate in the course and interact with one another:

1. A formal presentation to introduce background context of how surveys are currently utilised in health LIS, and an overview of good methodological practice in survey design
2. Practical group based exercises
3. Individual planning, developmental and reflection exercises relating to personal contexts and situations

Course Leader Details: Dr Hannah Spring, York St John University. By background Hannah is a clinical information specialist and her most recent post before coming to York was as Knowledge Manager at Airedale NHS Trust. She has also worked in a variety of independent consultancy roles and as a consultant research librarian for GP's and other health practitioners at Fisher Medical Centre, Skipton.

As a qualified lecturer and information specialist with over ten years teaching experience, she has significant experience in research and information and knowledge management in the health and academic sectors. She is particularly experienced in working with health professionals in the primary and secondary healthcare, and academic sectors.

At York St John she teaches across a broad range of health related undergraduate and postgraduate modules. She specifically takes the lead on the information and health literacy aspects of evidence based healthcare practice, teaches research methods and supports research capacity development within the Faculty advising and leading on systematic reviews and other research projects. Her specialist interest areas include:

Information literacy and health
Evidence-based health practice
The impact of internet and web 2.0 technologies on learning and information behaviour
Systematic reviews and associated research methodologies
Research development in health LIS professions
Clinical librarianship in primary care and the allied health professions
Health literacy

CEC 6. Librarians can help address reporting concerns in the biomedical literature, particularly for systematic reviews

Target audience: Biomedical librarians providing publication-related research support services

Level: Introductory

Aims:
This workshop will equip biomedical librarians with knowledge and skills to understand:
1. the importance of transparency and accuracy in health research reporting, the common deficiencies in research publications and their impact on information retrieval and further use of studies e.g. inclusion in a systematic review (SR)
2. the purpose of reporting guidelines, how to use them and the availability of reporting guidelines for different study types, including for literature searches
3. the practical actions biomedical librarians can take to raise awareness of reporting guidelines and justify their use amongst researchers and help explain the importance of involving librarians in research teams

Learning Outcomes: interpreting; producing; explaining; implementing.
Description/agenda:
The workshop will include:
- Introduction: types and characteristics of documents reporting biomedical research
- Overview of common deficiencies in biomedical research reporting
- Exploration of reasons for and consequences of poor reporting of studies (emphasis on literature search reporting) and the importance of promoting librarian support for research studies, particularly for SRs (*Include examples and group discussion*)
- Overview of what reporting guidelines are and how they help solve common reporting deficiencies
- Discuss key reporting recommendations/guidelines with particular reference to SRs and literature searching
- Demonstrate how librarians can promote guidelines to researchers (*Include invited case study/studies*)
- Explore barriers to and different methods for raising awareness amongst clinicians and reseachers (*Group discussion based on ideas/examples from previous session*)
- Write a practical action plan for new services/tasks that librarians could easily implement within their own library settings (*Group activity*)

The level of delegate participation required: mixture of presentations, discussion and practical activity.

Is preparation in advance by participants applicable? No

Course Leader Details: Shone Kirtley, Knowledge and Information Manager & Senior Research Information Specialist
Shona joined the EQUATOR Network at the Centre for Statistics in Medicine in February 2011. Her key responsibilities include the development and maintenance of both the website and the library for health research reporting and in providing information management and literature search support for the research and educational activities of the network. Shona graduated in 1999 with an MA (Hons) in Modern History from the University of St Andrews in Scotland and in 2001 obtained an MSc in Information and Library Studies from the University of Strathclyde. Before joining EQUATOR, Shona spent 7 years as the Project Co-ordinator/Information Specialist for the NHS Evidence Women's Health Specialist Collection based in the Nuffield Department of Obstetrics and Gynaecology, University of Oxford. Shona has wide-ranging experience in the provision of evidence-based health information to a variety of different stakeholder groups and in devising and conducting comprehensive literature searches to support systematic reviews and other research studies.
Keywords: Publication; Reporting; Biomedical Research; Literature Search.

CEC 7. Practice makes perfect - Improving information literacy through understanding the quality of evidence
(Full day CEC 09.00 – 17.00 Exact time to be confirmed)
Target audience:
Librarians involved with teaching, supporting Evidence Based Practice, or participating on systematic review teams.

Level: Introductory

Aims: Health librarians play a vital role in teaching, supporting Evidence Based Practice and contributing to the creation of systematic reviews. It is common for health librarians to collaborate with practitioners and instructors to enhance the research literacy skills of new learners. To be effective collaborators, health librarians must understand the basic clinical study designs and the criteria for judging the validity of a randomized clinical trial (RCT) and systematic review/meta-analysis. This one day workshop will provide a combination of large group lectures and small group exercises to practice and reinforce the workshop content. Recent research examples will be provided to introduce participants to the major clinical study designs. Practice sessions will help participants to build their skills on reviewing RCTs by gaining an understanding of how to read research results and assess the risk of bias in a systematic review.

Learning Outcomes:
1. Describe the key characteristics, strengths and weaknesses of clinical study designs including case control, cohort, RCT and systematic reviews
2. Using the various designs, formulate examples of studies to address a clinical question
3. Identify and explain the key criteria related to reducing bias in a RCT and systematic review/meta analysis
4. Demonstrate the use of this criteria with several published RCTs and systematic reviews/meta analaysis
5. Understand the terminology used to report the results of a RCT and systematic reviews/meta analysis

Description / agenda:

Details	Time allocation
Introductions	15 minutes
Overview of study design (lecture)	45 minutes
Practice - build a study and identify study design from abstracts (small group exercises)	60 minutes
BREAK	
Introduction to RCTs and assessing the risk of bias (lecture)	60 minutes
Practice: - review 2 published RCTS (small group exercise)	60 minutes
LUNCH BREAK	
RCTs - How are the results reported? (lecture)	30 minutes
Practice – critiquing/how to read the results (small group exercise)	30 minutes
BREAK	
Assessing the risk of bias in a systematic review (lecture)	30 minutes
Practice: Review 2 systematic reviews (small group exercise)	60 minutes
Practice: How to read a forest plot (lecture and small group exercise)	30 minutes

The level of delegate participation required:
Workshop will include interactive lectures, discussion and small group exercises to practice workshop content.

Is preparation in advance by participants applicable*? (Yes/No)* No

Course Leader Details: Connie Schardt, EBP library champion, formerly from Duke University,   North Carolina, USA and Lisa Kruesi, Librarian, Monash University, Australia

Connie Schardt is adjunct faculty at the School of Information and Library Science at the University of North Carolina at Chapel Hill where she teaches an online course - EBM and the Medical Librarian. Connie recently retired as the Associate Director for Research & Education at the Medical Center Library at Duke University. At the Library she coordinated an academic EBM Course for 3rd year Medical Students, maintained the EBM Tutorial (http://guides.mclibrary.duke.edu/ebmtutorial), and served as co-director of the annual workshop for clinicians - Teaching and Leading EBM: A workshop for Teachers and Champions of Evidence-Based Medicine.

Lisa Kruesi is presently undertaking a PhD and working as a librarian at the Monash University in Victoria, Australia. Lisa is on the Board for the Australian Therapeutic Guidelines Limited. She was formerly the Manager of the Hargrave-Andrew Library at Monash University. From 2011-2014 she undertook the role of Executive Advisor to the Editor-in-Chief of the journal, International Surgery, whilst also at The University of Queensland (UQ) Library as the Associate Director, Scholarly Publishing and Digitisation Service. During 2000 until early 2011 she had responsibility for the health sciences library service at UQ. Lisa has published a number of papers on health library services and has organised major professional development activities throughout her career.

Tuesday 13 June 10:00-13:00

CEC 8. Diverse Questions, Diverse Evidence, Diverse Review Types: Searching in Support of Qualitative and Realist Syntheses

Target audience:
This interactive workshop seeks to extend skills of librarians who support systematic reviews to cover the less familiar review types of qualitative systematic reviews and realist syntheses.

Level:
Intermediate: participants will be expected to have experience of searching to support systematic reviews using sensitive search strategies.

Aims: The aim of this session is to give librarians practical insight into the requirements for supporting qualitative systematic reviews and realist syntheses, particularly in connection with information retrieval techniques.

Learning Outcomes:
By the end of this session participants will be able to
- Identify appropriate review designs and accompanying search techniques for qualitative systematic reviews and realist syntheses
- Structure search queries using alternatives to PICO
- Develop and evaluate search strategies to retrieve qualitative research studies and accompanying contextual and theory information
- Understand the different search requirements for programme theory and mid-range theory
- Use innovative search methods such as the CLUSTER method (for contextual information) and the BeHEMoTh Approach (to identify theory)

Description / agenda:
This is the first ever international workshop to combine approaches for searching to support qualitative syntheses with techniques appropriate to realist synthesis. Participants will tackle the range of techniques required from formulating qualitative and mixed methods questions, through considerations of sampling to use of specific search strategies. Using PubMed MEDLINE and Google Scholar participants will be equipped to fully support a qualitative evidence synthesis (aka qualitative systematic review) or a realist synthesis. Topics will cover the full range of techniques from planning an overarching review strategy, through use of innovative search approaches to specific search terms and syntax. Real-life

examples will be derived from the work of the Cochrane Qualitative & Implementation Methods Group and from one of the UK's largest institutional portfolios of realist syntheses.

The level of delegate participation required: Interactive, Technology supported
Is preparation in advance by participants applicable? No. Optional pre-reading will be provided.
Course Leader Details: Andrew Booth

Keywords:
Information retrieval, systematic reviews, qualitative research, realist synthesis

CEC 9. Developing and validating geographic search filters for use in systematic literature searches

Target audience: The workshop will benefit information specialists who require geographic search filters to retrieve evidence on clinical, social and health related topics about a specific geographic location. It will also be of relevance to people who are interested in or wish to learn about search filter development methods.

Level: Introductory/Intermediate – participants should have some experience developing complex search strategies; an understanding of the application of search filters would be useful but not essential. No experience of developing or validating search filters is required.

Aims: To provide knowledge and practical experience in methods used to develop geographic search filters.
To provide participants with a framework for developing and validating any type of search filter.

Learning Outcomes: By the end of the session, participants will have:
- Knowledge and comprehension of search filter use, including strengths and limitations.
- Knowledge and comprehension of search filter development.
- Applied practical skills in search filter development and validation, including:
    o Identifying and selecting publications to create a gold standard for validating search filters.
    o Identifying relevant search fields and terms for search filters.
    o Testing and modifying search filters.
    o Validating search filters

Description / agenda:
This workshop is linked to the conference theme: Research / Evidence Based Librarianship and in developing the role of librarians in systematic reviews.
To help ensure our credibility, information specialists in the health sector must develop robust evidence-based methods to meet information requirements of their clients. Systematic literature searches on a range of bibliographic databases are conducted by information specialists to identify published research for evidence-based products such as guidelines and systematic reviews. Search filters are often applied to improve the retrieval of research with a common feature in bibliographic databases. The potential of geographic search filters to save time and reduce costs is of particular importance in the current economic climate where producers of evidence-based health and social care products are required to make efficiency savings within their regions. Few validated geographic search filters have been developed and it is hoped that this workshop will encourage the development of search filters for other geographic regions, and/or filter development in general.
The following agenda provides estimated timings for each section, and includes a 10 minute comfort break. The estimated times below leave an extra 30 mins spare which can be used for longer discussions, extra support needed, technical issues, and for networking.
- **Introductions and learning objectives**
- **Introduction to search filters:**
- **Developing a Gold Standard**
- **Comfort break**
- **Identifying fields and terms for the filter**
- **Finalising the filter**
- **Testing the filter**
- **Other issues to consider**
- **Round up and final discussion/questions**

The level of delegate participation required: Participants will be required to take part in the discussion sessions, to undertake exercises, and to provide feedback on their experiences.

Is preparation in advance by participants applicable? No

Course Leaders:
Tom Hudson
Tom is an Information Specialist at the National Institute of Health and Care Excellence (NICE) and a former Clinical Librarian. Tom has a special interest in public health and research and is currently working on developing a search filter to identify primary reports of interventional studies.

Elizabeth Barrett
Elizabeth joined the National Institute of Health and Care Excellence (NICE) in Manchester in 2011 firstly as part of the Evidence Information Services team working with NICE Evidence content and since 2013 as an Information Specialist in the Guidance Information Services team where she primarily provides specialist information support to underpin the development of evidence-based guidance products at NICE. Elizabeth recently participated in a project to develop validated geographic search filters for MEDLINE and Embase (OVID) to retrieve research about the UK. The filters are used by information specialists both within NICE and externally.

CEC 10. De-myth-ifying observational study design: modelling deliberate library collaboration to support competency-based curricula

Structuring educational experiences to develop professional competencies, such as evaluating study design and critically appraising scientific literature, is challenging. The process requires carefully constructed activities to facilitate development of a competency through application of the course material. When done deliberately, creating educational experiences to emphasize competencies enables students to demonstrate their mastery of the subject by actively applying the subject in a useful way for their future professions.
This workshop illustrates how librarians can collaborate with subject experts to create classroom activities that will be used to develop information-based competencies. One such competency is critical appraisal of scientific literature that incorporates an observational study design.
We will discuss the advantages of librarian support for implementing successful critical appraisal skills and emphasize adapting this model for a variety of class settings and competencies. Carefully designed educational experiences can support the development of critical appraisal by teaching students how to evaluate study designs in scientific literature. Participants will leave this workshop with a basic understanding of study design that they can use to support information-based competency development.

This workshop presents a model class, based on one currently taught, with the workshop participants taking on the role of the students. Participants will have a pre-class reading assignment: a peer-reviewed scientific article with known incorrect information. Participants should arrive prepared to discuss the paper's strengths and weaknesses. The workshop mimics the progression of the class, including activities. We will pause periodically to step away from the class and identify the pedagogy from the instructor's perspective and provide a general overview of study designs. During this facilitated discussion, participants will be instructed to look beyond any outdated information provided in the paper and focus on the paper's study design, specifically how data were analyzed and presented. An emphasis will be placed on the necessity of considering research within the context of the time it was published.
Participants will be guided through analyzing the paper's study design, including how study populations were selected and how this might introduce bias into the study's findings. Additionally, differences in the strength of evidence in common study design types will be addressed. Considering each of the study's elements will culminate in a discussion about how incorrect information can be, and is, published and how this relates to the strengths and shortcomings of the peer review process.

Understanding how to evaluate scientific literature, identify, and provide examples of both bad and good scientific literature will help librarians support and contribute to current academic curricula where using the scientific literature is

essential. By experiencing the model class, librarians can more effectively collaborate with instructors to create or adapt educational activities to develop professionally relevant competencies.

Target audience: *(Please describe who the intended audience is)*
Librarians who teach or guest lecture within any of the veterinary or human medical curricula.
Level: Introductory
Aims:
1. Participate in both a simulated class and the analysis fundamental pedagogy.
2. To provide participants with a basic overview of observational study design that they can then use to support information-based competencies in their curricula.

Learning Outcomes:
1. Identify opportunities for librarians to support subject based instruction.
2. Identify opportunities to revise current teaching activities to facilitate the development, and reinforcement, of information-based competencies.
3. Adapt the demonstrated classroom model to create novel ways to facilitate and support information-based competency development in veterinary or medical curricula.
4. Develop skills for evaluating study design and scientific literature by using published literature with known flaws in the data to understand study design.

Description / agenda:
Room set up should ideally be for small group discussion. An overhead projector is required, a whiteboard is preferable—ideally both the projector and the whiteboard can be used simultaneously. Handouts will be available electronically and participants will be responsible for either printing or bringing electronic versions of the observational study and handouts.
- Introductions of workshop leaders
- Context of class/Workshop goals/Structure of workshop
- Mock class part 1: General Audience reading level
- Pedagogy discussion part 1: Avoiding assumptions about an audience's reading level
- Mock class part 2: General audience numeracy level
- Pedagogy discussion part 2: Using numbers to emphasize not obfuscate points
- Mock class part 3: Observational study, part 1
- Pedagogy discussion part 3: Study design, part 1
- Mock class part 4: Observational study, part 2
- Pedagogy discussion part 4: Study design part 2
- Mock class part 5: Discussion wrap-up
- Pedagogy discussion part 5: Study design part 3

The level of delegate participation required:
Interactive

Is preparation in advance by participants applicable?
Yes

Course Leader Details:
Micah J. Waltz is a lecturer at Texas A&M University at the College of Veterinary Medicine and Biomedical Sciences with a joint appointment at the University Libraries in the Medical Sciences Library. He is currently working towards his PhD in Epidemiology and has a master's of Science in Biomedical Sciences with an emphasis in Cellular Physiology with a certificate in University Teaching.
Micah teaches undergraduate writing courses that emphasize reading and writing about scientific literature, with a focus on students learning to critically evaluate articles. Students practice translating scientific information for non-scientific audiences, using clinical skills to guide their discussions for best practices of communication.
As a guest lecturer, Micah teaches graduate classes how to analyze scientific literature by evaluating the study design. He also teaches students how to prepare personal statements for professional and graduate school with an emphasis on making informed choices about what skills to highlight.

Keywords: *(Please list up to 5 keywords to describe your workshop)*
Collaboration, Evidence-based librarianship, Integration, Partnership, Teaching

CEC 11. Searching for studies for systematic reviews: developing the librarian's methodological toolkit

Target audience:
Librarians experienced in searching, who wish to reflect on their repertoire of methods, and develop them further in the context of searching for systematic reviews

Level:
Advanced - Librarians with an understanding of searching for studies for SRs and a willingness to both share their own experience and knowledge, and to learn from their peers

Aims:
More systematic reviews are being published year on year, and the standards applied to the underlying search for studies are becoming more highly developed. This workshop aims
- to familiarise librarians with the Cochrane methodological standards relevant to searching for studies
- to enable them to derive a sound and reflected search strategy that adheres to these standards, starting from the clinician's / researcher's question
- to add a new, but proven and published method for the development of the search strategy to their toolbox (the IQWiG´s 'objective approach')
- to reflect upon the search process and become aware of potential limitations or bias
- to become aware and discuss current developments and objectives of search methodology

Learning Outcomes:
- Apply standards and methods to the development of a search strategy
- Analyse search methodology for risk of bias
- Evaluate both one's own, and other searchers' search strategies against a set of standards
- Create methodologically sound search strategies

Description / agenda:
1. Trials register records and publications: how a study manifests itself (Presenter 1)
2. The Cochrane standards (Presenter 2)
3. From the researcher's question to a methodically sound search strategy (Presenter 3)
4. The 'objective approach' (Presenter 4)
5. Peer review of electronic search strategies (Presenter 2)
6. Panel discussion (with audience participation) on developments and objectives of search methodology (Chair of session)

The level of delegate participation required:
This is a workshop where participants will be invited to and are expected to contribute actively, but according to their own level of skills and experience

Is preparation in advance by participants applicable? No

Course Leader Details:
Presenter 1: Prof. Dr. Bernd Richter, Co-ordinating Editor, Cochrane Metabolic and Endocrine Disorders Group, Düsseldorf, Germany
Presenter 2: Carol Lefebvre is an independent information consultant and was previously the Senior Information Specialist at Cochrane from 1992 to 2012.Carol is Co-Convenor of the Cochrane Information Retrieval Methods Group, serves on the Cochrane Methods Executive and is lead author on the searching chapter of Cochrane Handbook. Carol was awarded an M.Sc. in Library and Information Science from the University of Loughborough (UK) in 1985 and an Honorary Fellowship of the Chartered Institute of Library and Information Professionals in 2007. She now focusses on teaching and consultancy in information retrieval for evidence synthesis.
Presenter 3: Maria-Inti Metzendorf is a Graduate Information Scientist and has been working for the Cochrane Metabolic and Endocrine Disorders Group (CMED) since 2014. Before that she worked as a medical librarian at the

University of Heidelberg for six years, where she developed a literature search service and trained medical students, clinicians and researchers in searching for medical information.

Presenter 4: Ulrike Lampert, works as Information Specialist for the Information Management Unit at Institute for Quality and Efficiency in Health Care.

Chair of session (proposal): Betsy Anagnostelis, Royal Free Hospital Medical Library, University College London, UK - chair of session and of the panel discussion

Keywords:
Review literature as topic, Information storage and retrieval, Research synthesis, EBM, EBHC

Tuesday 13 June 14.00-17.00

CEC 12. Improving efficiency and confidence in systematic searching through an innovative way of searching bibliographic databases

Theme: Research / Evidence based Librarianship
Target audience: Information specialists and librarians regularly performing librarian-mediated literature searches
Level: Intermediate /Advanced

Aims: To be able to realize thorough and exhaustive literature searches of good quality and within a reasonably short time schedule by using the stepwise systematic method

Learning Outcomes:
- Understanding how the method of systematic literature searching can improve the effectiveness of the searching process
- Appying the method of systematic searching to own research question

Description / agenda:
Searching bibliographic databases to assist researchers in preparing scientific publications (for instance in performing systematic reviews) often requires much effort and time from information specialists. One has to become familiar with the topic of the research to be able to determine relevant search terms. These terms have to be combined into search strategies with a correct syntax, with Boolean and proximity operators, and must be adapted for different databases. The search strategies have to be sensitive (not missing relevant references) and specific enough (not finding too much noise). These tasks are known to require up to about 20 hours. At Erasmus MC a method has been developed that allows for a faster process and results in good quality searches.
In this workshop participants will learn how to use this method.
The method will be explained in presentations and discussions. In between the participants will be trained by performing exercises with example questions and their own (or their patrons') research questions.
1. Analyzing of research or clinical questions (example, own question)
2. Finding search terms (demonstration, exercise together, own question)
3. Efficiently building a search strategy (demonstration, own question)
4. Optimizing a search strategy (demonstration, own question)
5. Translating search strategies between different aliciabases by using Macros (demonstration, exercise)

The level of delegate participation required: Medium to advanced experience in searching multiple medical bibliographic databases (including knowledge of Boolean operators and thesaurus terms)

Is preparation in advance by participants applicable? Yes

Course Leaders:
Wichor Bramer Biomedical Information Specialist, Erasmus MC - University Hospital Medical Library, Netherlands
Gerdien B De Jonge, Biomedical information Specialist, Erasmus MC - University Hospital Medical Library, Netherlands

CEC 13. Advanced search techniques: a guide to the developing a search strategy for a systematic review

Target audience: This workshop is aimed at healthcare librarians, who support researchers conducting systematic reviews and/or who want to gain more experience in advanced searching.

Level: Intermediate

Aims: To enable participants to convert an information query into an answerable question and ultimately into an effective search search strategy for a systematic review.

Learning Outcomes:
By the end of the workshop, participants will be able to:
- understand the difference between background versus foreground questions
- convert the need for information into an answerable question
- identify important concepts within a research question and capture search terms to describe those concepts
- translate the question into a search strategy
- search effectively applying advance search techniques
- transfer a search strategy from one database platform to another
- approaches to verify the search strategy performance
- acquire confidence to teach these skills

Description / agenda:
Healthcare librarians are active participants in developing new partnerships with health care colleagues where their supportive roles can directly influence clinical practice and patient care. One area, in particular, where they are contributing to research is in the process of conducting systematic reviews.
The quality and scope of the search strategy is the foundation on which every facet of the systematic review is based upon, therefore being an expert searcher becomes of particular relevance within the context of a systematic review. We will focus on identifying how to convert an information query into an answerable question and using advance search techniques to search for evidence.

This interactive workshop will provide opportunities to learn new techniques, to discuss best approaches and complexities involved in developing a search strategy for a systematic review.

The level of delegate participation required:
The participants will undertake small group exercises, followed by developing a search strategy for a systematic review.

Is preparation in advance by participants applicable? No
Course Leader Details:
Mala Mann is an Information Specialist/Systematic Reviewer based at Cardiff University's Specialist Unit for Review Evidence (SURE).
Mala has worked on a range of projects including reviews National Institute for Health and Care Excellence (NICE) and the Welsh Government. She has co-authored over 50 publications, including several Cochrane reviews. She has particular expertise is in advanced literature searching and the development of systematic review methodologies. Mala provide support and training for staff and students and conduct workshops on advanced literature searching and critical appraisal for clinicians, students and healthcare librarians. Presently, she is involved in teaching on the Cardiff University Doctoral Academy and MSc/Diploma in Clinical Research.
Current reviews include systematic reviews on Paediatric Early Warning Systems, Peer support for breastfeeding maintenance and conducting rapid reviews to support professionals and other decision makers working in palliative care, as part of the Palliative Care Evidence Review Service.
Keywords:
Systematic Reviews, advanced techniques, evidence-based medicine, search strategy, research

CEC 14. Embedding knowledge in healthcare transformation: creating opportunities to inform strategic change

Target audience:
This workshop is open to anyone with an interest in developing their service to better support large scale change programmes in healthcare. It is likely to be relevant to library and knowledge staff working in health services/providers, support services, academic institutions and policy and research centres.

Level:
The workshop is not based on any prior specialist knowledge so will be appropriate for introductory, intermediate and advanced levels.

Aims:
The main aim of the workshop is to enable participants to develop a service development strategy for supporting evidence-informed strategic change in healthcare. This will be achieved by:
- Learning about the context of healthcare transformation and the specific needs and preferences of decision makers;
- Identifying the opportunities for librarians and knowledge specialists;
- Working through a sample question, from "reference interview" through to writing an evidence summary;
- Discussing enablers and barriers to expanding roles and services to meet the needs of strategic decision makers;
- Reflecting on next steps and development needs.

Learning Outcomes:
As a result of attending the workshop, participants will:
- Understand: the contextual factors influencing how decision makers use knowledge and evidence
- Analyze: a typical range of knowledge and evidence sources to provide an integrated summary
- Apply: learning to develop a strategy to identify and act on opportunities locally

Description / agenda:
In a climate of increasing financial pressure and rising demand, health and social care economies around the world are being driven to develop new and innovative models for delivering health and care services. A clear knowledge base is needed for: understanding the problems which need addressing; designing appropriate solutions; implementing change and evaluating against outcomes. There is a growing recognition of the complexity, ambiguity, volatility and uncertainty inherent in transformation – this suggests a more dynamic approach is needed to embed knowledge-based decision making. Patrick Mitchell, Health Education England, has recently talked of the role of librarians in delivering information to the bedside **and** the boardroom. The clinical librarian model has transformed the use of evidence in patient care – it's time now for librarians and knowledge specialists to shape new roles and services to effect a similar revolution to embed knowledge in strategic decision making.
Draft agenda:

00:00 - 00:15	Welcome and introductions	Participants will be given a sheet asking them to capture their personal learning points and actions during the workshop. Post-its and flipchart sheets will be made available for participants to share learning points/actions (optional).
00:15 – 00:30	Setting the scene (presentation)	This short presentation will summarise relevant empirical and experiential evidence on the knowledge needs, preferences and behaviours of decision makers.
00:30 – 01:00	Spotting the opportunities (groupwork)	In this short interactive session, participants will work in small groups (supported by facilitators) to deliberate what existing and new services we might offer to decision makers. This will include feedback and a larger discussion.

01:00 – 02:10	Seizing the opportunities (groupwork)	This session focuses on knowledge translation skills to support decision making. Participants will be divided into groups and will work through a real-life scenario.
01:00-01:20	a) The "reference interview"	For this exercise, participants will be given an outline of the scenario and will then work in groups with a facilitator (acting in the guise of a decision maker) to ask questions to understand the context and the specific knowledge need(s).
01:20 – 02:10	b) Writing a summary	Each group will then be given a small set of materials (there will be a few different sets to highlight the challenges in managing different types of evidence) to work with and will be required to extract key insights, prepare a short summary and feed back. The wider group will then discuss the issues involved in integrating multiple sources of evidence.
02:10 – 02:40	Sustaining the opportunities (discussion)	This will be an open discussion to highlight key barriers and enablers, in particular the support which library and knowledge professionals may need.
02:40 – 03:00	Summing up and close: Your key learning points and follow up actions	Participants will be given 5-10 minutes to add learning points/actions they wish to share to the flipchart. The workshop facilitators will guide a short discussion so that ideas can be shared.

Flipcharts, post-its and notes will be collected and a short briefing will be prepared to capture key learning points from the workshop. This will be made available to participants within 2 weeks of the workshop (subject to the participants agreeing to share their email address with the workshop lead).

The level of delegate participation required:
This will be an interactive workshop, including small group work, wider discussion and some individual work.

Is preparation in advance by participants applicable?
No preparation is required in advance.
Course Leader Details:
Alison Turner, Head of Evidence Analysis, Midlands and Lancashire Commissioning Support Unit
Alison is passionate about providing actionable insights for decision makers, based on high quality analysis of research-derived and practice-based evidence. She is particularly interested in developing more dynamic solutions to keeping decision makers abreast of the latest knowledge, including developing pragmatic versions of "living" reviews and evidence map.   Alison leads an evidence analysis service which provides support for transformation and strategic commissioning. Involved in various initiatives to help decision makers make sense of the latest evidence and knowledge, Alison contributes regularly to the National Elf Service (www.nationalelfservice.net) and is on a number of panels and committees, including the NIHR Dissemination Centre Advisory Group, the NICE Adoption and Impact Panel and the CILIP South West Members Network.   Alison has recently co-presented workshops at Evidence Live and the What Works Global Summit, with the aim of stimulating collaboration to embed knowledge and evidence in healthcare transformation.

Alison will be supported by Anne Gray (Arden and Greater East Midlands Commissioning Support Unit) and Caroline de Brun (Public Health England).
Keywords:
Organizational innovation
Evidence based practice
Decision making, organizational
Policy making

CEC 15. Room for a Review? Matching Review Type to Purpose and Search Strategies to Review Type

Target audience: Information specialists and librarians working within the health sector

Level: Intermediate to advanced. Participants should be familiar with searching databases, using supplementary search methods and working on reviews. However, having knowledge but no experience of this would not be a barrier to participation.

Aims: In this workshop we aim to give information specialists and reviewers a guide to the changing review landscape, by examining different review types. We will then go on to look at the most appropriate way of tailoring search strategies to review types and how best to make decisions about this.

Learning Outcomes:
- Describe the major review types and explain the differences between them
- Classify review types, given a purpose or scenario
- Differentiate between the search approaches required for different review types
- Generate appropriate search strategies

Description / agenda

Health librarians and information specialists have traditionally had a key role in searching for evidence to support the production of systematic reviews. Over the last two decades, there has been a proliferation in review types (Grant & Booth, 2009; Booth et al, 2016; Tricco et al, 2016).

Different types of review can be characterized by such features as their audience and purpose, timescale, type of data, resources and expertise. Each of these characteristics places specific requirements on the scope, search techniques and range of search approaches that comprise a well-planned and well-executed search strategy.

Instead of a 'one search fits all' approach, we are now being asked to tailor searches to the review type, based on not only the question being asked by the review audience, but the resources and time available. In addition, we have to factor in the wide range of data that is now being included in reviews.

Traditionally, the preferred search approach for systematic reviews has been to undertake a search in a number of databases, using a well developed and tested 'a priori' search strategies, developed from review protocols. However, over the last decade, there has been a growth in both the variety and acceptability of 'supplementary search methods' such as citation searching and pearl growing in locating evidence for reviews (Greenhalgh 2005). However, when we are working in time and resource limited settings with complex questions, should we be searching in as many databases as possible? At what stage are supplementary methods most helpful? When time is short, what proportion should be spent on supplementary methods versus comprehensive strategy?

Taking into account these challenges, this workshop will enable librarians to understand more about the requirements of reviewers and the demands of funders. It will then provide practical experience in the important task of ensuring that the review type chosen matches the review purpose and then the search strategy matches to the review type.
In this workshop, we will
- Present some of the main review types and reflect upon the changing landscape of reviews, with particular emphasis on health and medical subject areas.
- Present review scenarios and ask participants to match the review type to the scenario.
- Examine the search strategies of key exemplars of the different review types and provide participants with the opportunity to critique these strategies.
- Using the scenarios and their matching review types, ask participants to develop search strategies for the review types and compare and contrast the approaches used.

Upon completion of this course participants will be able to:
- Describe the main review types, their requirements and intended purposes.
- Match review types to a given purpose, issue or scenario.
- Identify further sources of information with regard to taxonomies of review types, choice of review types and review standards for conduct and reporting.

- Analyse search strategies as to whether they are capable of producing a rigorous, relevant and timely evidence product to meet the needs of audience and funders.
- Evaluate search strategies with regard to rigour, feasibility and fitness for purpose.
- Develop appropriate search strategies, taking into account review type and purpose, resources and other requirements.

References
Booth A, Sutton A & Papaioannou D (2016) Systematic Approaches to a Successful Literature Review, 2nd ed. London: Sage.
Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. Health Information & Libraries Journal, 26(2), 91–108. doi:10.1111/j.1471-1842.2009.00848.x
Greenhalgh T and Peacock R (2005) Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources BMJ 331 :1064
Tricco, A. C., Soobiah, C., Antony, J., Cogo, E., MacDonald, H., Lillie, E., … Kastner, M. (2016). A scoping review identifies multiple emerging knowledge synthesis methods, but few studies operationalize the method. Journal of Clinical Epidemiology, 73, 19–28. doi:10.1016/j.jclinepi.2015.08.030

The level of delegate participation required: Delegates will be given 3-4 practical exercises. Access to tablets or laptops would be useful but not essential.

Is preparation in advance by participants applicable? No

Course Leader Details: Dr Louise Preston, Research Fellow, ScHARR, University of Sheffield
Louise works as a Research Fellow and Information Specialist in the Information Resources Group, HEDS, which she joined in May 2008 as an Information Specialist (Public Health). Louise joined ScHARR in October 2006 as a Research Associate on the Evaluation of Supplementary Prescribing in Nursing and Pharmacy project, based in the Public Health section. Prior to this, she worked as a Research Assistant in the School of Nursing and Midwifery, University of Sheffield. Her research interest lie primarily in the identification of evidence to inform reviews of complex interventions and models and the identification of evidence for rapid reviews.

Keywords: Reviewing, evidence, searching

CEC 16. Writing for Publication: Getting Started, Getting Help and Getting Published

Target audience: Anyone wishing to write for publication.

Level: No prior experience of writing for publication is necessary.

Aims: To help workshop participant move forward in realising their goal of writing for publication.

Learning Outcomes: (Please describe the intended learning outcomes. Refer to Bloom's Taxonomy as a guide)
- Apply a template to structure their next piece of writing
- Understand the steps involved in having your manuscript peer reviewed
- Remember the range of key resources which can support and inform the development of our approach to writing

Description / agenda: This practical workshop will encourage you to think about writing for publication as part of everyday library practice. It will facilitate you in identifying potential writing ideas, consider how best to schedule your time, signpost resources to enhance your writing experience and explore what to expect on your journey through to publication.

The level of delegate participation required: This is a practical workshop in which participants will be actively engaged in identifying and developing writing ideas with a view to becoming fully realized publications post-workshop.

Is preparation in advance by participants applicable? No

Course Leader Details: Maria J Grant. Maria has an academic background in information science and is employed as a Research Fellow at the University of Salford. She is passionate about writing for publication and has been instrumental in the establishment of two writers group: an international group which meets via Skype and a local face-to-face group. Maria is a PhD student at Liverpool John Moores University exploring strategies employed to learn the skills need to write and publish peer reviewed academic papers. She is Editor-in-Chief of the official journal of the Chartered Institute of Library and Information Professionals' Health Libraries Group, the Health Information and Libraries Journal (http://wileyonlinelibrary.com/journal/hilj). Twitter: https://twitter.com/MariaJGrant Web site: http://www.seek.salford.ac.uk/profiles/MGRANT.jsp

Keywords: Comprehensive; Interactive; Informative; Structured; Writing