BASIC TRAINING IN SYSTEMATIC REVIEWS AND META-ANALYSIS: A HANDS-ON WORKSHOP FOR FELLOWS

Thursday, August 11 - Friday, August 12, 2016

The University of Texas MD Anderson Cancer Center
Research Medical Library, Pickens Academic Tower, 21st floor

Workshop Leaders and Hosts
M. Angeles Lopez-Olivo, MD, PhD
Clara Fowler, MLS, AHIP
Laurissa Gann, MLS, AHIP
Stephanie Fulton, MSIS, AHIP
Maria Suarez-Almazor, MD, PhD
The University of Texas MD Anderson Cancer Center

Comparative Effectiveness Research Training and Instruction (CERTaIN) PI
Maria Suarez-Almazor, MD, PhD
The University of Texas MD Anderson Cancer Center, Department of General Internal Medicine

This work is supported by grant number R25HS023214 from the Agency for Healthcare Research and Quality
AGENDA

Thursday, August 11, 2016

3:00 – 3:30pm  Introductions

3:30 – 4:30pm  Overview of Systematic Reviews & Meta-Analysis
Angeles Lopez-Olivo, MD, PhD

- Cover the Knowledge-to-Action framework and explain the steps included
- Identify the main types of review available in the medical literature and describe their characteristics
- Identify the characteristics of a systematic review
- List the steps involved in the conduction of a systematic review

4:30 -5:00pm  Reception- Library conference room

Friday, August 12, 2016

8:00 – 9:00am  Breakfast- Library conference room

9:00-11:00am  Searching
Clara Fowler, MSLS, AHIP
Laurissa Gann, MSLS, AHIP

- Create a searchable question from a clinical scenario using the PICO framework
- Translate question into search statements using keyword and controlled vocabulary
- Modify search strategies for re-use in different databases
- Export citations from one database into EndNote
- Track search results that satisfies PRISMA guidelines

11:00 – 11:15am  Break (coffee)

11:15 – Noon  Study Selection
Angeles Lopez-Olivo, MD, PhD

- Describe the methods for selecting studies
- List and select the appropriate eligibility criteria
- Explain the use of programs aiding during the screening process
- Recognize the methods for calculating level of agreement among reviewers

Noon – 1:00pm  Lunch – Library conference room

1:00 – 1:45pm  Study Selection (continued)
Angeles Lopez-Olivo, MD, PhD

1:45-2:00pm  Break

*Note: Please complete Evaluation forms
2:00 - 4:00pm  Data Collection & Bias  
Angeles Lopez-Olivo, MD, PhD

- Recognize the main strategies for abstracting data
- List and select the appropriate data to be extracted
- Define ‘risk of bias’
- Describe the main sources of bias in clinical trials
- Explain the 7 domains assessed in the Cochrane Risk of Bias tool
- Identify considerations for incorporating risk of bias findings into a review

4:00 – 4:45pm  Synthesis & Reporting Results  
Angeles Lopez-Olivo, MD, PhD

- Perform meta-analysis and describe effect sizes
- Explain the PRISMA statement and the structure of the Results section of a systematic review
- Identify issues to consider whether to undertake a ‘narrative/structured’ or quantitative [i.e. meta-analysis] synthesis
- Understand approaches to describing results in a ‘narrative/structured’ synthesis
- Describe the two main concepts to consider when interpreting results
- ROBIS or AMSTAR- Criteria for quality of systematic review

4:45pm  Wrap-up/Evaluations

*Note: Please complete Evaluation forms*
Speaker and Host Bios:

ANGELES LOPEZ-OLIVO, MD, PhD, MSc
Assistant Professor, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center

Dr. Lopez-Olivo is a clinical researcher with expertise in pharmacology, epidemiology, and evidence-based medicine and its application to clinical decision-making evidence-based medicine, and translation of evidence into practice. She has conducted several systematic reviews of drug therapies for the Cochrane Collaboration and two Health Technology Assessments. In addition, she has experience in the methodologies for economic evaluations and has collaborated in the translation of evidence into educational tools to inform patients with chronic conditions and facilitate decision-making.

CLARA FOWLER, MSLS, AHIP
Manager, Research Services, Research Medical Library, The University of Texas MD Anderson Cancer Center

Clara Fowler is the Manager of Research Services and Assessment at the Research Medical Library. Her team of four librarians completed over 500 literature searches in 2015 including 40 searches for systematic reviews. Clara participates in the development of national and international evidence-based guidelines. She was inducted into the MD Anderson Academy for Health Science Education after winning the MD Anderson Educator of the Year Award in 2010. She earned her Master’s Degree in Library and Information Science from the University of North Carolina at Chapel Hill.

LAURISSA GANN, MSLS, AHIP
Manager, Education and Reference, Research Medical Library, The University of Texas MD Anderson Cancer Center

Laurissa Gann is the Manager of Education and Reference at the Research Medical Library. She has been with MD Anderson since 2005 and earned her Master’s Degree in Library Science from the University of North Texas in 2007 with a special certification in Health Informatics. Laurissa has expertise in literature searching, EndNote, the NIH Public Access Policy, point-of-care mobile apps, and teaching in-person and online classes. Laurissa manages the library’s education programs, reference services, special events, social media accounts, user experience initiatives and website content curation. Her goal is to enhance access to health information resources for our faculty, staff and students through outreach, instruction and reference services.

*Note: Please complete Evaluation forms*
**Stephanie Fulton, MSIS, AHIP**  
Executive Director, Research Medical Library, The University of Texas MD Anderson Cancer Center

Stephanie Fulton is the Executive Director of the Research Medical Library. Prior to joining MD Anderson in 2003, she worked for Ovid Technologies, Inc. She has her Master’s Degree in Library and Information Science from the University of North Texas (UNT). Stephanie served for nine years as an adjunct professor in the College of Information at UNT teaching a basic and advanced searching course. She served as a tutor for the Rocky Mountain Workshop on How to Practice Evidence-Based Health Care (2005-2010; 2012) and also on the planning committee and as a tutor for the Learning To Practice And Teach Evidence-Based Health Care: An Intensive Workshop held at MD Anderson Cancer Center in 2005; 2006; 2008. Stephanie enjoys sharing her tips and tricks gleaned from her twenty years of searching.

**Maria Suarez-Almazor, MD, PhD**  
Barncs Family Distinguished Professor, Department of General Internal Medicine, The University of Texas MD Anderson Cancer Center

Dr. Suarez-Almazor is a physician and clinical epidemiologist with an interest in late and lasting effects of cancer and its therapy. She has an interest in the effects and consequences of rheumatic and autoimmune disease in cancer patients. She chairs the Survivorship Research Workgroup at UT-MDACC, which organizes research and educational activities. She was recently awarded a R25 AHRQ grant to expand training in comparative effectiveness and patient research methods in cancer research, in partnership with the American Society of Clinical Oncology (ASCO). Dr. Suarez-Almazor has received funding from NIH and AHRQ to support her research.

*Note: Please complete Evaluation forms*