Master Course N°4: Dissemination and Implementation Research in Cancer Control

Course description:
One of the most critical issues impeding improvements in public health today is the enormous gap between what we know can optimize health and healthcare and what actually gets used and implemented in everyday practice. Dissemination and Implementation (D&I) Research is a field of inquiry that investigates methods and tools for bringing evidence from cancer research to public health practice. Spanning the entire continuum of cancer control from prevention, early detection and diagnosis to treatment and survivorship, D&I research considers not only individual factors influencing behaviors and attitudes toward cancer but also structural factors such as health systems and health policy that can affect access to cancer prevention and treatment.

Course objectives:
The field of D&I research in cancer control has expanded in recent years, however there remains a need to grow a cadre of both new and established scientists, especially from low and middle-income countries who are prepared to:

1. Address the complex process of bridging research and practice in a variety of real-world settings
2. Conduct research that balances rigor with relevance and employs study designs and methods appropriate for the complex processes involved in dissemination and implementation of evidence-based programs and policies.

In this Masters Course, we will review the principles of D&I research, outline conceptual frameworks to help develop research questions, and discuss research design and methods. We will provide examples from research and programs to illustrate these principles. We will focus on several topics relevant
cancer control including cancer screening, and will specifically highlight the role of dissemination and implementation research principles in tobacco control research. Given the broad evidence-base for tobacco control policies and implementation of new policies and interventions across many countries in response to the Framework Convention on Tobacco Control, tobacco control provides a useful focus to illustrate the role of implementation research.

Target audience:
This Masters Course is targeted at investigators from low and middle-income countries working in cancer prevention and control. It will provide an introduction the field of D&I and lay the groundwork for developing D&I research proposals. Successful applicants will work in cancer control and have plans to pursue research in D&I. In order for this learning to offer maximum benefit to all participants, we expect that participants will develop and refine a research proposal during the period of this course and come to the in-person workshop prepared to discuss this proposal. Applications are encouraged from a variety of disciplines and topic focus areas.

Teaching methods:
The course will consist of 6-7 webinars and will culminate in the one-day, in-person workshop on October 31, 2016 at the World Cancer Congress. Course participants are expected to participate in all 6 webinars and complete a draft D&I research concept. Participants are expected to complete all reading assignments and are also expected to ask relevant questions on an online discussion platform following the webinars and to respond to questions posted by faculty and other course participants about their D&I research project.

Assignments and expectations:
The course is designed to help researchers understand the field and develop skills to craft a research proposal based on D&I research principles. In order to do this, course participants are expected to complete the following:

- Readings related to D&I research
- 1-2 page Initial abstract of research concept
- Participate in online discussions following each webinar
  - Pose questions to faculty and other participants
  - Respond to questions posted by faculty and other course participants
- Create a draft D&I research project and be prepared to discuss with fellow participants and faculty at the in-person workshop.

Webinars:
It is anticipated that webinars will begin in July with approximately 2 webinars per month prior to the Congress. Tentative topics for the webinars include:

1. Introduction to Dissemination and Implementation Research
2. Dissemination and Implementation Models
3. Measurement and Evaluation for Dissemination and Implementation Research
4. Fidelity and Adaptation
5. Designs and Design Issues for Dissemination and Implementation Research
6. Practical Dissemination and Implementation
7. Examples of successful D&I projects

Course leaders:
Dr. Cynthia Vinson
Dr. Sudha Sivaram

Other faculty:
Dr. David Chambers
Dr. Wynne Norton
Ms. Sarah Bernal
Dr. Mark Parascandola

Cynthia Vinson, PhD, MPA
Senior Advisor for Implementation Science, Implementation Science Team, Division of Cancer Control and Population Sciences, National Cancer Institute

Cynthia Vinson is a Senior Advisor for Implementation Science in the Division of Cancer Control and Population Sciences at the National Cancer Institute. In her current position she works on building and sustaining the field of implementation science in order to enhance the integration of evidence-based guidelines, programs, and policies for cancer control in public health and clinical practice. She is responsible for working both within NCI and with other agencies and organizations at the international, national, state and local level to translate research funded by DCCPS into practice. In this capacity she has worked to develop and implement the Cancer Control P.L.A.N.E.T. (Plan, Link, Act, Network with Evidence-based Tools) web portal, the Research-tested Interventions Program website and the Research to Reality community of practice in the US. She received her PhD at George Washington University. Her dissertation focused on fostering federally-sponsored virtual communities of practice for moving cancer control research into practice.

Sudha Sivaram, DrPH
Branch Chief, Public Health Networks and Research Branch, Program Director for South Asia Region, Center for Global Health, National Cancer Institute

Sudha Sivaram is Branch Chief at the Center for Global Health at the National Cancer Institute. In this capacity, she oversees research and training programs that are implemented by the center. She leads a team of scientists and experts and collaborates with colleagues across the US government as well as other international agencies to plan, implement and evaluate cancer research and training programs in order to achieve the common goal of reducing cancer burden.

Dr. Sivaram is a behavioral epidemiologist and her interests are to help bring public health research data and evidence to practice. She has worked extensively in the South Asia region in implementation science research, developing and evaluating interventions for HIV prevention, prevention of harmful alcohol use as well as improving access to screening for cervical cancer. She focuses additionally on the role of structural and environmental factors such as the role of social capital, access to micro-credit and social support in influencing disease prevention knowledge and behaviors. In addition to her work for the US Government, Dr. Sivaram is
also an associate faculty at Johns Hopkins University Bloomberg School of Public Health where she is involved in teaching and working on global health programs and where she was faculty in epidemiology before her tenure with the US Government. She has consulted for various agencies such as USAID, DC Department of Health, Africare and the World Bank. Dr. Sivaram has an undergraduate degree in Biological Sciences from the Birla Institute of Technology and Science in India. She has a Master in Public Health from the University of California, Los Angeles (UCLA) and her doctorate in International Health from the Johns Hopkins University Bloomberg School of Public Health in Baltimore, USA.

David Chambers, D.Phil.

Deputy Director for Implementation Science, Division of Cancer Control and Population Sciences, National Cancer Institute

Dr. David Chambers is Deputy Director for Implementation Science Team in the Office of the Director in the Division of Cancer Control and Population Sciences (DCCPS) at the National Cancer Institute (NCI). Dr. Chambers manages a team focusing on efforts to build and advance the field of Implementation Science (IS) through funding opportunity announcements, training mechanisms, dissemination platforms, and enhancement of partnerships and networks to integrate research, practice and policy.

From 2008 through the fall of 2014, Dr. Chambers served as Chief of the Services Research and Clinical Epidemiology Branch (SRCEB) of the Division of Services and Intervention Research at the National Institute of Mental Health (NIMH). He arrived at NIMH in 2001, brought to the Institute to run the Dissemination and Implementation Research Program within SRCEB, where he continues to manage a portfolio of grants that study the integration of scientific findings and effective clinical practices in mental health within real-world service settings. From 2006 to the fall of 2014, Dr. Chambers also served as Associate Director for Dissemination and Implementation Research, leading NIH initiatives around the coordination of dissemination and implementation research in health, including a set of research announcements across 15 of the NIH Institutes and Centers, annual scientific conferences, and a summer training institute.

Prior to his arrival at NIH, Dr. Chambers worked as a member of a research team at Oxford University, where he studied national efforts to implement evidence-based practice within healthcare systems. He publishes on strategic research directions in implementation science and serves as a plenary speaker at numerous scientific conferences. He received his A.B. degree (with Honors) in Economics from Brown University in 1997, and an M.Sc. and D.Phil degree in Management Studies (Organisational Behaviour) in 1998 and 2001, respectively, from Oxford University (UK).
**Wynne E. Norton, PhD**  
**Program Officer, Implementation Science Team, Division of Cancer Control and Population Sciences, National Cancer Institute**

Wynne Norton is a Program Officer for the Implementation Science Team in the Office of the Director in the Division of Cancer Control and Population Sciences (DCCPS) at the National Cancer Institute (NCI). Within the Division, she assists with the development and expansion of research and training activities related to implementation science, with a particular focus on healthcare delivery, de-implementation, and scaling-up effective health practices and programs across the cancer control continuum.

Prior to joining the Implementation Science Team in July 2015, Dr. Norton was a tenure-track Assistant Professor in the Department of Health Behavior in the School of Public Health at the University of Alabama at Birmingham. Her program of research focused on advancing the science of implementation of evidence-based health practices and interventions in a variety of health care and public health settings. While at UAB, Dr. Norton also developed and taught an innovative graduate-level course on dissemination and implementation science, leveraging a collaborative learning structure to involve both public health students and academic faculty (Norton, 2014). Dr. Norton was a finalist for the President’s Award for Excellence in Teaching at UAB in 2015 and 2013, respectively.

Dr. Norton received her PhD in Social Psychology from the University of Connecticut where she studied behavioral science, intervention development, health psychology, and experimental methods. Her dissertation research was funded by an individual (F31) National Research Service Award (NRSA) from the National Institute of Mental Health and tested the comparative effectiveness of condom-promotion interventions in a randomized controlled trial with young adults (Norton et al., 2012). Dr. Norton was a Scholar in the inaugural cohort (2015) of the NIH-funded Mixed Methods Research Training Program at the Johns Hopkins University, Harvard University and the University of Nebraska and a Fellow in the inaugural cohort (2010-2011) of the NIH- and VA-funded Implementation Research Institute at the Washington University in St. Louis. Dr. Norton is on the editorial board for the journal Implementation Science and was a member of the steering committee of the World Health Organization’s Implementation Research Toolkit (http://www.who.int/tdr/publications/topics/ir-toolkit/en/). In 2010, along with Joe McCannon and Dr. Brian Mittman, she co-chaired a state-of-the-art conference on the science and practice of scale-up and spread in health (Norton et al., 2012), funded in part by AHRQ, Commonwealth Fund, IHI, VA and the Donaghue Foundation. Dr. Norton received her Master’s in Social Psychology from the University of Connecticut (Storrs, CT) and her BA in Psychology with University Honors Distinction from the College of William & Mary (Williamsburg, VA).

**Mark Parascandola, PhD, MPH**  
**Epidemiologist, Tobacco Control Research Branch (TCRB), Behavioral Research Program (BRP), Division of Cancer Control and Population Sciences, National Cancer Institute**

Mark Parascandola is an Epidemiologist with the Tobacco Control Research Branch (TCRB) in the Division of Cancer Control and Population Sciences (DCCPS) at the National Cancer Institute (NCI), with a secondary appointment in the NCI Center for Global Health. He received his Doctorate in Philosophy of Science from Cambridge University and his Master of Public Health degree in Epidemiology from the Johns Hopkins
University School of Hygiene and Public Health. Dr. Parascandola also completed an NCI Cancer Prevention Fellowship. Dr. Parascandola currently oversees a portfolio of research projects in tobacco control and global health. He has authored numerous published articles on tobacco use prevention, tobacco control policy, and epidemiologic research methodology. He was an editor for the NCI/CDC report Smokeless Tobacco and Public Health: A Global Perspective (2014) and for the two-volume encyclopedia Tobacco: Its History and Culture (2005). He also served as a member of the IARC Working Group on Methods for Evaluating Tobacco Control Policies in 2007. His research interests include smokeless tobacco and other tobacco products, tobacco control policies, and the relationship of tobacco use to tuberculosis, maternal and child health, and other global health priorities.

Sarah Bruce Bernal, MA

Health Communication Specialist, Implementation Science Team, Division of Cancer Control and Population Sciences, National Cancer Institute

Sarah Bruce Bernal is a Health Communications Specialist for the Implementation Science Team in the Office of the Director in the Division of Cancer Control and Population Sciences (DCCPS) at the National Cancer Institute (NCI). Sarah manages communication efforts, developing and disseminating information relevant to the IS Team’s priorities and initiatives, as well as supporting several on-going training opportunities. Prior to joining DCCPS, Sarah worked for the Food and Drug Administration in the Immediate Office of the Commissioner and Office of International Programs, where she worked on various projects related to Agency and Center-wide programs, communications, consumer inquiry, multilateral relations and harmonization efforts. Ms. Bernal received both her Bachelor’s and Master’s degrees from the American University.