

Medical Education Research Certificate (MERC) Program

Space is limited to 34 participants

Registration Fee: \$500 to attend all six workshops (in addition to meeting registration fee).

* Preference will be given to attendees registering to attend all six workshops. In the event that workshops do not sell out, individual workshops will be offered at \$100 each.

The Medical Education Research Certificate (MERC) program is intended to provide the knowledge necessary to understand the purposes and processes of medical education research, to become informed consumers of the medical education research literature, and to be effective collaborators in medical education research. The program will be open to those registered for the spring meeting and are interested in improving their educational research skills and is targeted for those with a background in medical education but relatively less experience in conducting educational research. Registration is required and can be done so on the registration forms. **Attendees must be able to attend and complete all 6 workshops in order to register for this session and receive the certification.** www.aamc.org/members/gea/merc/

MERC Workshop Schedule

Thursday, May 29, 2014

Time	Event
9:00 am – 12:00 pm	MERC Workshop 1: Formulating Research Questions and Designing Studies <i>Judy Shea, PhD</i>
1:00 pm – 4:00pm	MERC Workshop 2: Introduction to Qualitative Data Collection Methods <i>Judy Shea, PhD</i>

Friday, May 30, 2014

Time	Event
3:30 pm – 6:00 pm	MERC Workshop 3: Data Management and Preparing for Statistical Consultation <i>Judy Shea, PhD</i>

Saturday, May 31, 2014

Time	Event
3:30 pm – 6:30 pm	MERC Workshop 4: Hypothesis Driven Research <i>Karen Richardson-Nassif, PhD</i>

Sunday, June 1, 2014

Time	Event
8:00 am – 11:00 am	MERC Workshop 5: Questionnaire Design and Survey Research <i>Karen Richardson-Nassif, PhD</i>
12:00 pm – 3:00 pm	MERC Workshop 6: Measuring Educational Outcomes with Reliability and Validity <i>Karen Richardson-Nassif, PhD</i>



MERC Workshop Objectives

MERC Workshop 1: Formulating Research Questions and Designing Studies

In this workshop, participants will brainstorm research ideas, write, and refine a measurable research question. They will discuss when IRB approval is required for their study. The basics of research design will be discussed and applied to their selected research question.

Participants will be able to:

- Write a finer (feasible, interesting, novel, ethical, relevant) educational research question;
- Specify an educational research area of interest;
- Evaluate whether they need irb approval for their study;
- Select the correct design for their research question.

MERC Workshop 2: Introduction to Qualitative Data Collection Methods

This workshop is intended for physicians and generalists in medical education, as well as faculty and staff involved in student affairs, who wish to develop perspectives and skills for collecting qualitative data, such as data from focus group discussions, interviews, observation field notes, and responses to open-ended questions—used in admissions processes, program development, curriculum evaluation, needs assessments, performance evaluation, and various scholarship and research applications.

After participating in this workshop, learners will be able to:

- Demonstrate applied knowledge of the appropriate selection, use, and standards for rigor of some common methods for collection of qualitative data;
- Generate research questions appropriate for qualitative studies and choose appropriate data collection methods;
- Demonstrate applied knowledge of approaches to achieve rigor in the design of qualitative studies and collection of qualitative data;
- Demonstrate essential skills required for conducting focus groups.

MERC Workshop 3: Data Management and Preparing for Statistical Consultation

This workshop helps participants prepare their data for analysis and be able to answer questions about their data that a statistician will likely ask when providing consultation.

At the end of the workshop the participants will be able to:

- Collect data;
- Set up data files;
- Enter data into data files;
- Check and clean data prior to analysis;
- Compare my sample to my population;
- Address statistical issues discussed during consultation with a statistician (e.g., Type i & ii errors, power, effect sizes).

MERC Workshop 4: Hypothesis Driven Research

Following completion of this workshop, attendees will be able to discuss:

- How to translate a research question into a hypothesis, and how to develop the null hypothesis;
- The steps in hypothesis testing;
- Type 1 and type 2 errors;
- Power, sample size, confidence interval, and statistical significance.

MERC Workshop 5: Questionnaire Design and Survey Research

This workshop will provide some basic principles in questionnaire/survey design and give workshop participants an opportunity for hands-on experience designing a questionnaire.

Following participating in this workshop, learners will be able to:

- Design a blueprint for a survey/questionnaire appropriate to their own application;
- Construct and edit questions to avoid common problems in wording and framing;
- Select an appropriate response format from a menu of alternatives;
- Design the overall format of the survey/questionnaire to facilitate data management and analysis.

MERC Workshop 6: Measuring Educational Outcomes with Reliability and Validity

This workshop introduces participants to the principles of score reliability and validity, using a combination of didactics and review of medical education research projects. The workshop is divided into two parts with group exercises designed to reinforce understanding of the main principles.

After participating in this workshop, learners will be able to:

- Identify three types of reliability (inter-rater, test-retest, and internal consistency);
- Match types of reliability with appropriate statistical measures;
- Describe the relationship between reliability and validity;
- Describe multiple forms of evidence for validity;
- Select an approach to reliability and validity assessment for a particular study.