

**Academic Bootcamp
Hocking Hills, OH
September 17-19, 2027**

Day 1: Friday, September 17th

Philosophies of Science

- Compare/contrast physical and social realities
- Describe worldviews that underpin those realities
- Appreciate methodological differences that stem from different worldviews and realities

Problem Identification

- Discuss what makes a good research question
- Identify tools, including FINER criteria and PICOT framework, that aid in developing research questions
- Develop a research question important to you

Introduction to Quantitative Study Design (Part 1)

- Review basic study designs, including advantages and disadvantages of each
- Define bias and confounding
- Identify different variable types and how they affect choice of statistical tests

Introduction to Qualitative Study Design (Part 2)

- Describe “goodnesses” of qualitative research
- Craft a research question that aligns with worldview and methodology
- Discuss quality criteria for qualitative research

Introduction to Quality Improvement

- Identify an improvement opportunity, define an improvement aim, and plan appropriate interventions using QI tools
- Define the components of a successful charter (e.g., model for improvement, aims, key drivers, tools, PDSA cycles)
- Define measures involved in quality improvement (e.g., structure, process, outcome, balancing measures)
- Interpret common QI analytic tools, such as run charts and statistical process control charts

Theoretical Frameworks

- Describe the concept of a theory
- Define conceptual frameworks

- Use theories to build a conceptual framework in educational research

Specifics of Medical Education Scholarship

- Define educational scholarship
- Discuss Glassick's Six Standards of Excellence in Scholarly Work as a framework for demonstrating quality of scholarship
- Identify best practices for curriculum development and program evaluation

Developing a Study Protocol: Quantitative (Part 2)

- Identify components of quantitative research protocols
- Discuss considerations for planning a study timeline

Developing a Study Protocol: Qualitative (Part 2)

- List types of data collection and sampling
- Describe thematic analysis
- Define reflexivity and describe its importance when conducting qualitative research
- Conduct initial coding

Day 2: Saturday, September 18th

Equity in Research

- Acknowledge historical and present-day bases for medical distrust within many minoritized communities
- Identify sources of trust erosion in research and society
- Recognize strategies to achieve diversity in research and to build durable and trusting relationships

Identifying Feasibility/Resource Needs and Factors of Project Implementation

- List potential resources required for an academic project
- Discuss feasibility considerations for research projects
- Identify considerations related to your project's IRB approval
- Discuss basic principles of recruiting and data collection to support project success

Practical Guide to Scholarship Dissemination

- Identify key steps in writing a good abstract for scientific meetings
- Identify specific strengths and common problems in abstracts submitted for presentation at scientific meetings

- Describe the manuscript and publishing process including pre-writing (e.g., authorship issues, selecting a journal, journal styles)
- Develop successful manuscript writing skills with emphasis on title, introduction, methods, results, discussion, and figures/tables
- Formulate an approach to post-manuscript submission issues, including response to manuscript disposition (i.e., rejection, revision) and response to letters to the editor

Day 3: Sunday, September 19th

Mentorship/Sponsorship

- Discuss the differences between mentorship, sponsorship, and coaching
- Identify practical strategies to understand which model may be right for you for a particular situation
- Identify various mentorship models (e.g., dyadic, team, peer, etc.)
- Discuss elements of an effective mentor-mentee relationship and highlight the importance of mentoring across differences

Using Research to Implement Change

- Discuss the process by which research initiatives can be implemented into clinical practice
- Identify keys to success for implementing practice changes based on research findings

Grants/Sources of Funding

- Identify how grants and other funding options can accelerate your academic work
- Identify major funders of scholarly work and how to search for others
- Discuss how to write a strong and compelling proposal

Advocating for Resources/How to Talk to Leaders

- Discuss different sources of resources
- Discuss strategies for approaching leaders

Moderated Faculty Panel