Navigating the Literature

Step 1: Developing a research question
Be able to develop a searchable question based on your research topic
Good answers depend on asking the right question, in the right way, at the right time.
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consider the audience

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pulls from reputable resources

uses expert concepts & terminology
frames the question to engage the intended audience

Good answers depend on asking the right question, in the right way, at the right time

awareness of the way information is created and disseminated
Social Life of Information

Cycle of Scholarly Communication

Source: http://www.lib.sfu.ca/help/subject-guides/rem
Interesting...to you
Interesting...to you
Focused...on a few things
Interesting...to you
Focused...on a few things
Concise...but still specific
Interesting...to you
Focused...on a few things
Concise...but still specific
Arguable...with available information
Research is a process

Write down your question
Go search the literature
Digest what you found

Find anything that addresses your question?
Still have gaps?

Revise your question

[repeat...until you can write clearly about your answer to the question]
Examples

Unfocused (too broad): What effect has global warming had on people living in the US?
Focused (appropriately narrow): How are rising sea levels affecting coastal populations in the US?

Factual question: What are common treatments for diabetes in the US?
Research question: What are the common comorbidities with diabetes in the US, and what types of health disparities are linked to the populations with the highest incidence of these comorbidities?
Practice Exercise

Pick a topic, add one element to focus it, then search the literature to see how answerable it really is. Repeat until you have an answerable question.

Suggested Topics:

• Impact of the Affordable Care Act
• Silicon breast implants
• Barriers to primary care
You should know...

1. Access to databases & collections
   • University Library (ulib.iupui.edu)
   • Medical Library (library.medicine.iu.edu)

2. Interlibrary Loan
   • Never pay for access to full-text!

3. Your librarians
   • Heather Coates @ University Library
   • Beth Whipple @ Ruth Lilly Medical Library

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Slide 1: This is the first of several tutorials developed by the Library to help you find and use information you need to be successful in the MPH program.

Slide 2: The goal for this tutorial is that you’re able to develop a searchable question based on your research topic.

Slide 3: Getting good answers depends on asking the right question, in the right way, at the right time.

Slide 4: Good questions are answerable, informed, and iterative. Answerable means that you can address the question using the literature available to you. Informed means that you consider your current understanding and knowledge in developing the research question. Iterative means that you use information that you discover to refine your question.

Slide 5: Asking questions in the right way means that you consider your audience, pull from reputable resources, and use the language of experts. Reputable resources may differ depending on the question, but typically includes scholarly literature like journal articles and books, white papers and reports by reputable government and non-profit agencies, grey literature, and expert opinion.

Slide 6: Asking a question at the right time means that you frame your question appropriately for the intended audience and incorporate awareness of the way information is created and disseminated. For example, if you were trying to raise awareness of an issue in the community, you would write and deliver the message differently for consumers versus public health professionals versus academic researchers.

Slide 7: One way researchers think and talk about how information is disseminated is called scholarly communication, or the social life of information. This diagram is roughly chronological. As discoveries are made, information about them is distributed in various ways. A researcher might blog about a project, then do a presentation or poster at a conference, then submit a manuscript to a journal for peer-review. As an idea or finding becomes substantiated or discussed, it is often included in edited books and textbooks. While not all research results go through every step in this cycle, many do. This is the way that knowledge has been recorded and disseminated for hundreds of years. Although these days, there are many more options and the pace of dissemination is quicker.

Slide 8: Back to your research question. The most important thing is that you find your research question interesting.

Slide 9: Good questions, answerable questions are typically focused on just a few concepts.

Slide 10: You should be able to express your question concisely, yet still be specific about what you want to know.

Slide 11: Finally, to answer your research question, you need to be able to make a compelling argument that is supported by the available evidence.
Slide 12: As you begin to work through your assignments, remember that research is a messy process. The question that we start out with at the beginning isn’t usually the question that we end up answering. Knowing this can help you use the information you find to improve your question and develop a strong argument.

Slide 13: Let’s look a couple of examples we sometimes see from inexperienced researchers. First is a question that is too broad to answer in a typical research paper. Narrowing the question down to something that can be discussed in a 7-10 page paper means that we need to focus some of the elements of the question. In this case, I chose to focus the topic from global warming to rising sea levels and focus the who part of the question from people living in the US to coastal populations in the US. The second question is a factual question that really isn’t substantial enough to be a research question. It can be adapted into a research question by adding a connection or relationship with other ideas, such as common comorbidities and health disparities. In the end, the right research question should be one that you’re interested in, that meets the requirements for your assignment or project, and that can be answered with the available evidence.

Slide 14: If you want some practice apart from a course project, try taking one of the suggested topics and focusing it to create an answerable research question. Then browse the literature to see if there is anything there. Use the information you find to refine your question and then repeat that until you have a question that you can answer with the literature you found.

Slide 15: We’re going to finish with three things you should about your libraries while you’re at IUPUI. 1) you have access to millions of articles and books through the University Library and the Medical Library. If we don’t happen to have access to the thing you need, request it through Interlibrary Loan. It doesn’t cost you anything. Last, Beth and I are here to help you strategize, find, and organize the resources you need to succeed in the MPH program. We are your subject librarians and we’re happy to answer questions via email or schedule one-on-one or group consultations.