HPM 860/950
Population Perspectives for Health
FALL 2016

Faculty: Thomas C. Ricketts, PhD, MPH
Professor of Health Policy and Administration and Social Medicine
Deputy Director, Cecil G. Sheps Center for Health Services Research

Office: 725 Martin Luther King, Jr. Boulevard CB#7590
Chapel Hill, North Carolina
E-mail: ricketts(at)schsr.unc.edu
Phone: 919-966-7120 direct.
Fax: 919-966-5764

Class Meetings: Tuesday evenings various pm ED/ST

Course URL: tbn

Course Overview:
This course is intended to allow the learners a chance to understand what they believe and why they work in public health or a field that deals with the health of the public. The course will help learners to understand what the terms "population health", "social determinants of health", and "health" mean in the context of contemporary politics and public health. Population health is in many ways a loaded term, some call it a "cop-out" alternative to "public health." People who take this view feel that there are multiple public obligations for people and governments to promote and protect health while population health shifts more emphasis to "personal responsibility." Lately, we hear a lot about population health in the context of discussions about ACOs. I’m not sure that we really know what that means and we are going to explore what the ACO concept means for public and population health.

The goal of the course is to explore population (and public) health perspectives to see if there is something unique about the concept. However, we will spend a lot of time discussing public health and determining if the two are really different. Is population health the appropriate context for social as well as individual development and progress? The course provides learners with a basic familiarity of the use of epidemiology and aggregate measures of health in political and policy contexts.

For many years I worked with a project called "America's Health Rankings" which is a public relations approach to stimulating change in public health by comparing the US states on their relative "healthiness". We will review that process as a stimulus for your thinking as well as a platform to discuss your philosophies of public health.

I will also introduce, very briefly, students to the world of scientific and policy inquiry. This course is intended to start you on the road to the development of your dissertation. In this introductory phase, the emphasis is on the social place of knowledge and the development of new ideas and approaches to solving problems in society. This course is intended to start you on the way toward forming a question that will be the center of your dissertation.

Before you can form a question, you have to have a sense of what you know and how you know it. To that end, we'll read things that are philosophical in nature. We will explore what is real and imagined and how we determine which is which. We will touch on the question "what is truth" but I don't want to pretend that we will be seeking truth, just talking about it.

The dissertation we are asking you to write is, in many ways, more rigorous than a traditional dissertation in that we ask that you focus on a practical problem and develop new ways to deal with problems. We do not ask that you simply "generate new knowledge" but that you generate new applications and new methods that will effect or create change in the world.
Course Objectives:
By the end of this course, learners will be able to:

<table>
<thead>
<tr>
<th>Objective</th>
<th>ASPPH Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss current controversies in population health</td>
<td>A1, A2</td>
</tr>
<tr>
<td>Review the history and development of public health statistics</td>
<td>D2, D4</td>
</tr>
<tr>
<td>Recognize and apply the work of epidemiological policy entrepreneurs</td>
<td>D5</td>
</tr>
<tr>
<td>Use epidemiology and aggregate measures in political and policy contexts</td>
<td>A1, A2, A7</td>
</tr>
<tr>
<td>Examine major issues that may be resolved through a population perspective</td>
<td>D1</td>
</tr>
</tbody>
</table>

Grading and Assignments:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due date</th>
<th>% of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Presentation/Policy Plan</td>
<td>Oct 25</td>
<td>30%</td>
</tr>
<tr>
<td>Weekly &quot;Reflections&quot; on Readings&quot;</td>
<td>Weekly</td>
<td>25%</td>
</tr>
<tr>
<td>Model of determinants of population health</td>
<td>Sept 26</td>
<td>15%</td>
</tr>
<tr>
<td>“Book Report”</td>
<td>November 15</td>
<td>15%</td>
</tr>
<tr>
<td>Participation / quality of contribution on line discussions</td>
<td>Weekly</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>**</td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

You will receive a grade for the course according to the general rules of the Graduate School. Grades are “H” for outstanding contributions to the discussions and on the written materials. The standard is whether the material that you submit can be published with little modification in an op-ed piece in a major newspaper or web site, or in a substantial journal in health policy. The grade of “P” is “normal” and represents mastery of the material and that you have done fully acceptable work and made constructive contributions. The grade of “L” indicates that the individual has not grasped key concepts in the course and has not been able to contribute effectively but can, with work, achieve those levels. Any person doing “L” level work will be counseled by the instructor and given the opportunity to discuss their progress with other faculty prior to assignment of this grade. If you are not contributing substantively and there appears to be no reasonable way to bring the work up to an acceptable level, you will be counseled and a grade of F assigned.

**Technical Presentation/Policy Plan:** Scenario: You are to critique the America’s Health Rankings scores and propose a substitute for a specific nation, region or jurisdiction. Due Oct 25

**Reflections on Readings:** You are required to write at least one page of reaction to the readings for each session (on-line and off-line). Those are to be sent to me by Monday, 5 pm your local time every week. These are an opportunity for you to react to the readings saying whether you learned anything from them or whether you agree or disagree with their content. I will respond with comments as soon as I can, usually before the next on-line session depending on my schedule.

**Model of Determinants of Population Health:** You will create your own causal/explanatory model of the Determinants of POPULATION HEALTH and defend it to the group. Please develop this as a visual (ah yes, the inevitable Powerpoint® but do not feel like you have to use that application, there are other things like Prezi that can do this, but make certain that it can be uploaded to the systems we use) that you will share on line, but you must also submit to me accompanying explanatory text and analysis of your model. Due Sept 26

**Book Report:** You are to have read one of the following books—or an approved substitute—and write a one-to-three page “book report” to your colleagues that tells how the book affected how you think about public health. We will try to find the best match of person to book. Please do not pick one you have already read. These are all “fun to read” in some way or another. If you have a book that inspired you that you would like to suggest, please do. The following list is NOT complete...I will circulate a lengthier listing prior to the classes starting, there are "highlights." Due Nov 15
1. Sinclair Lewis: *Arrowsmith*. A wonderful story of the conflicts between medicine and public health and biomedical research in the 1920s. Complete with the “model family”. A page turner with a story.

2. Michel Foucault: *The Birth of the Clinic*. Medicine as “carcereal”; how power is transmitted in the social construction of medicine. Deep but not too deep, Foucault’s interpreters are far harder to understand than he is.

3. Francis Fukuyama: *Our Postmodern Future*. A fun look at how the medical-industrial-research complex will create more history after Fukuyama declared the end of history.

4. Tracy Kidder: *Mountains Beyond Mountains*. If you haven’t been inspired by Paul Farmer, then give it a go. You can perhaps go to the man himself and read *Infections and Inequalities or Pathologies of Power*.

5. Rene Dubos: *Mirage of Health*. I consider this a seminal work on how humans cope, from the man who coined the phrase, “act local, think global”. You may also choose one of his other books like *Man Adapting*.


7. John Barry: *The Great Influenza*. A great story, easy to read, makes you think twice about government and how “free” we were in the good old days.

8. Randy Shilts: *And the Band Played On*. People you know remember this very well, it’s good to recall.

9. Laurie Garrett: *Betrayal of Trust*. Laurie is the Cassandra of global public health, but her stuff is good. But, it’s 585 pages in the hard back version... [www.lauriegarrett.com](http://www.lauriegarrett.com).

10. Daniel DeFoe: *Journal of the Plague Year* (Gutenberg files: www.gutenberg.org/files/376/376-h/376-h.htm)


12. Andrea Barrett: *Ship Fever*. Not often noticed but it has a lesson for global health that we re-learn.


OR, you may choose a book that you might consider a “classic” of public/population health that I haven’t identified. Please do not propose a book you have already read, but something you WANT to read.

Course Attendance/Participation: Learners are expected to participate in the on-line sessions and be prepared to participate in discussions with faculty and classmates. Interactions are sometimes difficult due to the limitations of the technology as well as the fact that we will be discussing things where there are disagreements. On-line discussions are not as conducive to “side” conversations that you may have on the “chat” function or with your colleagues. I encourage you to use side-streams to communicate, but do share them at some time. On-line communications tend to “flatten” (and body language tips that help smooth out misunderstandings. So, be prepared to work in a “moderated” environment.

Credit for this part of the course is divided into two aspects: on-line and off-line participation. The material assigned for readings should prompt you to read further on your own. I am interested in how you pursue certain topics and issues and how you relate your professional lives to the material that is presented. We welcome “show-and-tell” where you bring to the discussions current events and specific issues that you encounter.

Course Evaluation

HPM participates in the UNC-CH’s online course evaluation system, enabled at the end of each semester by DigitalMeasures. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.

Required Texts:

Young, T. Kue. *Population Health, Concepts and Methods*. 2nd Edition. New York: Oxford University Press, 2005 ISBN 0-19-515854-7. This book is a interdisciplinary approach to epidemiology. It covers a number of technical issues and methods. You should be familiar and conversant with all of the methods that are discussed in the book. It also discusses to some degree the history of vital statistics and epidemiology. The book is available from Oxford University Press directly, people reported having a hard time getting it from Amazon or BN.com but there appears to be a ready

I require all of you to read all of the excellent book: The Ghost Map. By Steven Johnson (Penguin, 2006) see his TED talk at: https://www.ted.com/talks/steven_johnson_tours_the_ghost_map?language=en. This is a great book about how evidence and policy sometimes don't get along. It also tells the story of one of the first epidemiologists and his work. $15.00 in paperback. Due November 8.

America's Health Rankings™ 2015 Edition. www.americashealthrankings.org for almost 10 years I was the chair of the scientific advisory committee supporting the development of the rankings system. The state rankings spurred the development of the county rankings supported by the RWJ Foundation and are seen as a stimulant to policy makers to think about the integration of public health principles into health policy in general. See October 25 Session.

Other required readings will be posted on the Sakai course web site.

Supporting and supportive web sites include:

http://www.improvingpopulationhealth.org/
If you have a favorite blog that follows public health—share it with us.

www.healthmetricsandevaluation.org/ Institute for Health Metrics, University of Washington.

http://uwphi.pophealth.wisc.edu/ University of Wisconsin Population Health Sciences

http://www.aihw.gov.au/population-health/ Australia’s population health project


Rose, Geoffrey. The Strategy of Preventive Medicine, Oxford Medical Publications, 1992. ISBN 0-19-262486 5. This book lays out some awkward facts about how “health” is distributed and how our behaviors are constrained by society and how our policies rest on some strange beliefs and values. It appeared in 1992 and has been reprinted every year since. You will have access to an extended article based on the book

UNC HONOR CODE
The principles of academic honesty, integrity, and responsible citizenship govern the performance of all academic work and student conduct at the University as they have during the long life of this institution. Your acceptance of enrollment in the University presupposes a commitment to the principles embodied in the Code of Student Conduct and a respect for this most significant Carolina tradition. Your reward is in the practice of these principles. Your participation in this course comes with the expectation that your work will be completed in full observance of the Honor Code. Academic dishonesty in any form is unacceptable, because any breach in academic integrity, however small, strikes destructively at the University's life and work. If you have any questions about your responsibility or the responsibility of faculty members under the Honor Code, please consult with someone in either the Office of the Student Attorney General (966-4084) or the Office of the Dean of Students (966-4042). See appendix.

Read “The Instrument of Student Judicial Governance” (http://instrument.unc.edu).

Class Schedule, Links to class outlines and readings:
First class: 4:00 – 5:25pm EST/EDT
Break: 5:25 – 5:35pm EST/EDT
Introduction:

Welcome to HPAA 860

- Course overview and review of syllabus
- Introduction to a Philosophy of Public Health and Population Health
- Discussion of the ACOs and public health case paper and presentation:

We will discuss some things that have been in the news lately (Zika, Migration, War) and that activity will structure some of our work over the next two years. Please pay attention to the world of health ratings and rankings we will discuss these time and time again.

T. Kue Young Book. This is a good introduction to epidemiology and population health and it serves as a self-paced learner with questions included in the text. I expect you to go through the entire book and to work all the exercises. They are not too difficult and will help you become aware of technical terms and processes in the calculation of health indices for populations. Many of you will have had training in epidemiology and this will be a review, others may not be at all familiar with this material. You will not be “tested” on the material, but we will try to review each of the main points throughout the course. In the sections below I refer to the book as YOUNG.

Background to some of the materials you will have been given (Not required)
You may want to look at some international comparisons of health systems. The Commonwealth Fund has generated a series of these. You can get some charts and graphs and a good report at: http://www.commonwealthfund.org/publications/fund-reports/2016/jan/international-profiles-2015 The report is downloadable and the first author is Elia Mossialos.

The IHI Population Health 101 course might be interesting to look at online but it now requires a subscription—if you feel like paying $300.00, go for it.
http://app.ihi.org/lms/onlinelearning.aspx

FUN STUFF
Google “Public Data” Life Expectancy graphs (www.google.com/publicdata/ ) Play with the data--you can ”animate” fertility rates and life expectancy for example and see who is going down, who is going up.

Session 1: Sep 6 In class, I will be coming to you from France

Readings:
REMEMBER. You are to send me via e-mail a “reflection” on the readings for this session by 5 pm Monday, September 5. Submit these reflections every week by 5 pm of the Monday before class, whether we have an online session or not.

These are a selection of readings about public and population health and ACOs, there will be many more out there—these are
not necessarily the best. You may suggest some to your colleagues or comment on additional articles in your feedback paper.


Dave Kindig’s blog entry on population health and population medicine. OPTIONAL [http://www.improvingpopulationhealth.org/blog/2012/06/is-population-medicine-population-health.html](http://www.improvingpopulationhealth.org/blog/2012/06/is-population-medicine-population-health.html)


**YOUNG: Read:** Introduction and Measuring Health and Disease in Populations, 1 through page 62 and the last chapter (yes, we start with the dessert in this class) Improving the health of populations, p. 324-326

**Session 2:**  **Sep 13, 2016 reflection due midnight.**
Readings:  
**YOUNG:** Read: Measuring Health and Disease in Populations (II) through page 111. This section will introduce the notion of “summary measures of population health” see page 81, which is the central metric of this course.


You may select another substantial reading on “summary measures of health” and you may want to reflect on how they might be used or not used to assess how ACOs are improving population health.

**Session 3:**  **Sep 20, 2016, reflection due midnight**
What are disparities?
Readings:  
**YOUNG.** Planning Population Health Interventions pp 264-295. This moves us forward in the book a bit, but touches on what our initial policy reactions are when we tackle inequities: “Programs” of various sorts intended to change the risk profile for groups. Is that the best way to deal with inequalities?

Pick either one of the next two:
Daghofer, Diana 2011. Communicating the Social Determinants of Health. Wellspring Strategies. (Fort Collins, Colorado). There are many discussions of the social determinants of health. This volume tackles the problem of how to argue about disparities it.


And, read this:  
Geoffrey Rose: “Sick individuals and sick populations.” (Rose Paradox and Rose Challenged in Course Resources) This is the gist of Rose’s “paradox of prevention” if you find this interesting you may want to purchase his excellent little book, *The Strategy of Preventive Medicine*. And read the entire book with special emphasis on Chapter 7, “The Population Strategy of Prevention.” pp. 95-106.

**Session 4:**  **Sep 27, 2016**  **Your "reflection" is in the form of** a proposed model of health that reflects your beliefs and helps prioritize decisions to improve health and reduce inequality due Sept 26 2016.  
**Model of Health Due!!!** Send them in..ppt format is fine or whatever you can use to “visualize” health  
*Modeling Population Health*
Politics and policy making are important to population health and the population approach, but the field is equally a technical one. Epidemiology and biostatistics are important parts of the armamentarium of the public health professional who uses a population approach. We are assuming that you have the basic skills of these two disciplines but a review is useful at any time because there are trends and changes in the technical fields as well as in the political aspects of population health.

Readings: YOUNG: “Modeling Population Health” pp 115-173. The America's Health Rankings technical advisory group has struggled to develop a “model”. For your "reflection" I'd like for you to develop your own causal/explanatory model of POPULATION HEALTH and defend it to the group. Please develop this as a visual that we will share, but you must also submit to me accompanying explanatory text and analysis of your model.

Session 5: Oct 4, 2016 Not in session, reflection due Oct 4 (a day later than usual)
Readings: YOUNG. Three Chapters: Assessing health risks in populations and Designing Population Health Studies. Pages 177-261. This is a big chunk of reading, but you may have gotten to it prior to this week.

This provokes discussions of perception and choice making and evokes Blaise Pascal and the behavioral economists. Added reading can be "A Brief History of Decision Making" and "Bounded Rationality".


At this point I find that I need to add material by Dan Beauchamp—and the discussion of public health as politics.

Session 7: Oct 18, 2016 Not in session. Reflection due Oct 17
The relationship between democracy and public health.

That’s the question for your reflection: What is the link between democracy and public health?

Some quotations:
"...In recent years, the spread of infectious diseases across national borders has brought the global dimensions of public health to the center of the international political and legal agenda. New outbreaks of diseases such as AIDS and SARS, and the recognition that health and health care are influenced by the global distribution of resources, have challenged traditional legal and regulatory approaches to public health issues.

At the same time, the traditional theoretical preoccupation with the state, in legal and other literatures, began to decline. In its place, scholars from across a variety of disciplines are focusing on "governance," rather than state law, as a paradigm for organized social control of behavior, and on the variety of transnational, supranational and private actors that participate in an emerging system of global governance. Many of these scholars suggest that much governance is achieved without recourse to law, and highlight the expanding roles that markets, international bodies, NGOs, corporations, and other actors play in an increasingly globalized world. In the case of a good traditionally seen as "public," such as public health, the new descriptions of governance raise important practical and normative questions about the responsibilities and accountability of non-state actors.

Is this a “retreat” from Public Health principles of the past to a new democratic form? Or is it a recognition that only in a participatory democracy that accepts government by the people can you have true advances in public health?
Readings: You’re on your own here, see what you can find—identify three articles or reports you feel are key to this topic and reflect on their content (emphasize one if need be). You might Google® things like “health as foreign policy” or just democracy and health. Ever heard of someone named Paolo Freire?

**Session 8: October 25, 2016**
**Book Report NOT Due but make sure you are getting it done**
Deep breath time, but I would like for you to review the *America’s Health Rankings* and tell me how you would improve them, just a page of insight on how you might go about this.

**Session 9: Nov 8, 2016, 1st Session, Reflection due before you dress up for Halloween**

A separate task: tell me if this makes sense to you, you don’t have to “reflect” just think about it—if it provokes you, let it loose...

"Abstract:
**Objective:** to present a critical reflection upon the current and different interpretative models of the Social Determinants of Health and inequalities hindering access and the right to health.

**Method:** theoretical study using critical hermeneutics to acquire reconstructive understanding based on a dialectical relationship between the explanation and understanding of interpretative models of the social determinants of health and inequalities.

**Results:** interpretative models concerning the topic under study are classified. Three generations of interpretative models of the social determinants of health were identified and historically contextualized. The third and current generation presents a historical synthesis of the previous generations, including: neo-materialist theory, psychosocial theory, the theory of social capital, cultural-behavioral theory and the life course theory.

**Conclusion:** From dialectical reflection and social criticism emerge a discussion concerning the complementarity of the models of the social determinants of health and the need for a more comprehensive conception of the determinants to guide inter-sector actions to eradicate inequalities that hinder access to health.

**Session 10: Nov 15, 2016 1st session (Book Report is also due this day)**
Let’s also talk about what we might have learned about learning from the *GHOST MAP.*

We are treating public health these days as something of a social science. But public health is very tied into “hard” science and its problems. In fact is the true collision of the natural with the social sciences but we don’t think much about how well the two get along. Edward Wilson has and he wants us to bring them closer together. But first, how have we looked at the social end of our experience? I am also including a brief description of how some great public health discoveries are made...

Do you know who Jerry Morris is? Read his story and learn about the origins of some research (Google: Jerry Morris and Exercise). Thinking of Jerry, is his work **qualitative**? Was his qualitative observation about bus conductors part of the quantitative analysis or a thing of itself. Qualitative inquiry is controversial, see the debate about it between Greenhalgh and the BMJ. Available on Sakai site

BMJ 2016;352:i563

**Session 11 Nov 22, 2016, 1st session**

**Science as a controversial concept**
These are included in one posted reading

Feynemann [http://www.youtube.com/watch?v=EYPapE-3FRw&sns=em](http://www.youtube.com/watch?v=EYPapE-3FRw&sns=em)


Kuhn, Thomas. “Anomaly and the emergence of scientific discoveries,” from *The Structure of Scientific Revolutions.*

This is where we get the idea of ‘paradigm shifts’.
Feyerabend. How to defend society against science. From *Radical Philosophy*. We begin to read about the idea of science as social construction, which, as my friend Arnie Kaluzny likes to say is an OK idea until you’re flying along at 30,000 feet in something that you’d prefer to be more than just a social construction.


**Session 12  Nov 29, 2016, No session**

OK, you’ve struggled with questions, now you are going to have to try out a dissertation question—more formally. So, pose a question that **COULD** be a dissertation question and then subject that to an ARISTOTLE test...see the check list below. State the question and then fill in the table.

I often use the term "cocktail party material" to describe what I consider useful information that will help you engage people in a social setting. The rules that govern that process of "capture" apply to dissertations. Consider this from a very nice discussion of how to come up with a topic for writing: "Understand that scholarship is the written exchange of a particular community - in this case, the academic community. As a student, you have joined this community, attending it like you might attend a cocktail party that has the peculiar quality of being centuries-long. In essence, what is expected of you as a student isn’t so very different from what is expected from you as a party-goer. As is true of any party, there are principles of conduct that govern your behavior. Nevertheless, the basic principles of conversation are the same in the academy as they are at the cocktail party: you must listen well, you must think about what you are hearing and your response to it, and you must contribute to the conversation in a way that is relevant, thoughtful, and interesting. - See more at: [https://writing-speech.dartmouth.edu/learning/materials/materials-first-year-writers/coming-your-topic#sthash.fb8Ergof.dpuf](https://writing-speech.dartmouth.edu/learning/materials/materials-first-year-writers/coming-your-topic#sthash.fb8Ergof.dpuf)

**Recognizing, Valuing, and Encouraging Diversity**

The importance of diversity is recognized in the mission statement of HPM. In the classroom, diversity *strengthens* the products, *enriches* the learning, and *broadens* the perspectives of all in the class. Diversity requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity. Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to “diversity of presence,” including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation, social position, and veteran status.

**Advice on plagiarism**

[http://writingcenter.unc.edu/handouts/plagiarism/](http://writingcenter.unc.edu/handouts/plagiarism/)

**Disability Accommodation**

“UNC-CH supports all reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability, or a pregnancy complication resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the UNC Office of Accessibility Resources & Services (ARS), http://accessibility.unc.edu; phone 919-962-8300 or email accessibility@unc.edu. Students must document/register their need for accommodations with ARS before any accommodations can be implemented.”

**Course Evaluation:**

“HPM participates in the UNC-CH’s online course evaluation system, enabled at the end of the semester by Scantron Class Climate. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment. For Fall 2016, the system will be open for students to complete evaluations from Date TBD (see announcements).
Attention: Required Human Subjects Training

The University now requires that all faculty, staff and students who are engaged in the planning, conduct or analysis of research at UNC-Chapel Hill involving human subjects complete an online training module. *This training must be completed before you can begin work on your dissertation.* We recommend that you complete this module during your first semester in the Doctoral Program. The **Office of Human Research Ethics (OHRE)** is responsible for ethical and regulatory oversight of research at UNC-Chapel Hill that involves human subjects. The OHRE administers, supports, and guides the work of the Institutional Review Boards (IRBs) and all related activities. Any research involving human subjects proposed by faculty, staff, or students must be reviewed and approved by an IRB before research may begin, and before related grants may be funded. OHRE and the IRBs are critical components of the coordinated Human Research Protection Program, which serves to protect the rights and welfare of human subjects.

A link to the online training module and details about the module can be found at [http://ohre.unc.edu/educ.php](http://ohre.unc.edu/educ.php). The **Collaborative IRB Training Initiative (CITI)** at [https://www.citiprogram.org/default.asp](https://www.citiprogram.org/default.asp) (direct link to the sign-in page for the module) is a web-based training package on issues relating to human subjects research. The CITI website is maintained by the University of Miami, with content developed by a national consortium. CITI contains modules on topics like informed consent, vulnerable populations, ethical principles and IRB regulations. Each module has a short quiz at the end to assess understanding. Over 400 institutions are using CITI for their mandatory training.