

UW-Madison

PhD in Clinical Investigation

Board of Regents of the University of Wisconsin System

May 7, 2009

Christine A. Sorkness, PharmD

Senior Associate Director

UW Institute for Clinical and Translational Research (ICTR)



Why a PhD in Clinical Investigation?

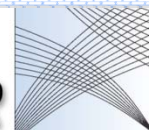
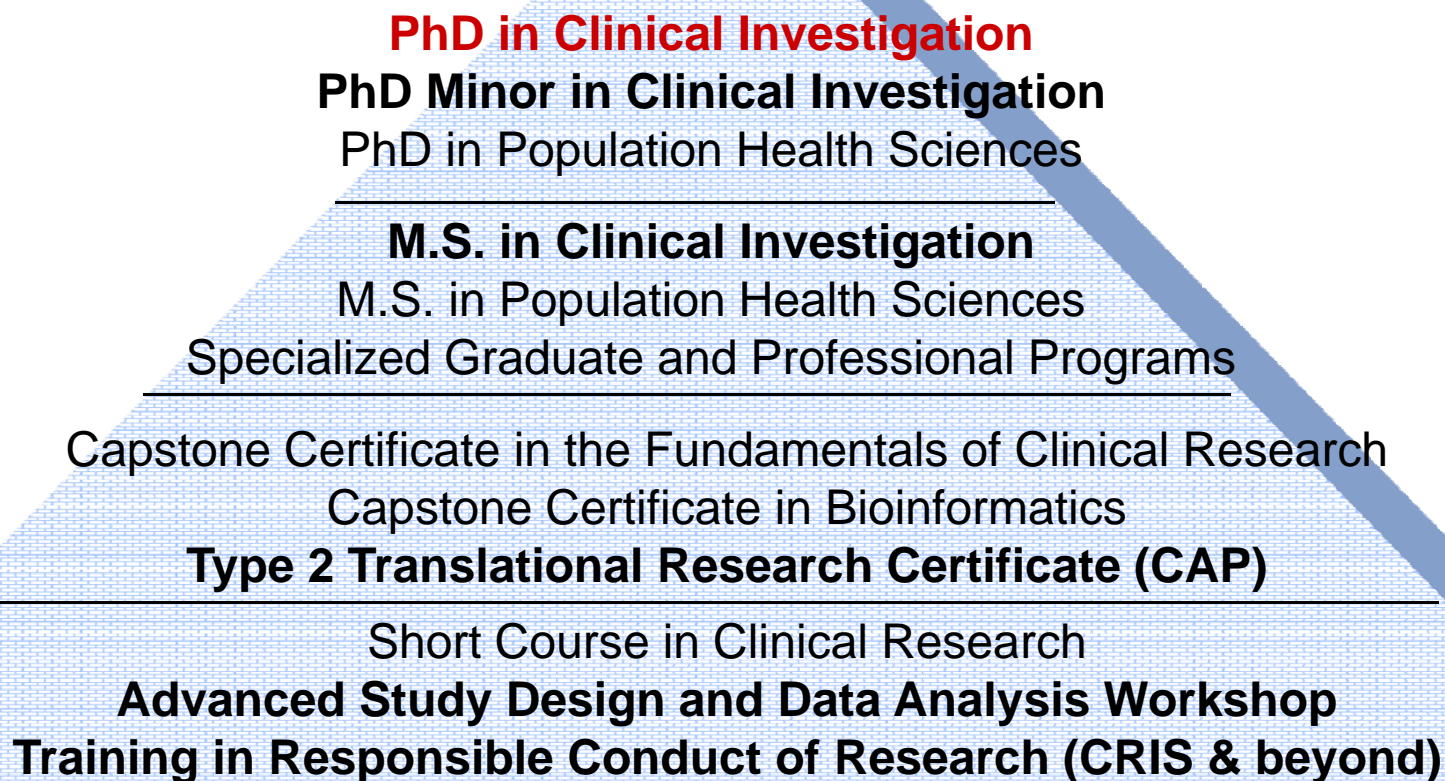
Clinicians are formally trained as practice-oriented scientists and have not had rigorous training in biostatistics, research methods, ethical conduct of multicenter trials, and scientific writing; therefore, a PhD...

- Provides rigorous, intense, and efficient multidisciplinary education that prepares future generations of clinician-scientists to lead multidisciplinary research teams and ...
- Translate scientific discoveries to applications that improve human health

Why a PhD in Clinical Investigation? (Continued)

- Graduates are more competitive for funding and high-ranking positions in academic institutions and government agencies
- Consistent with NIH Roadmap initiatives to better train the next generation of clinical and translational researchers
- Part of our commitment with the \$42 million NIH Clinical and Translational Science Award (CTSA)

Spectrum of Clinical Research



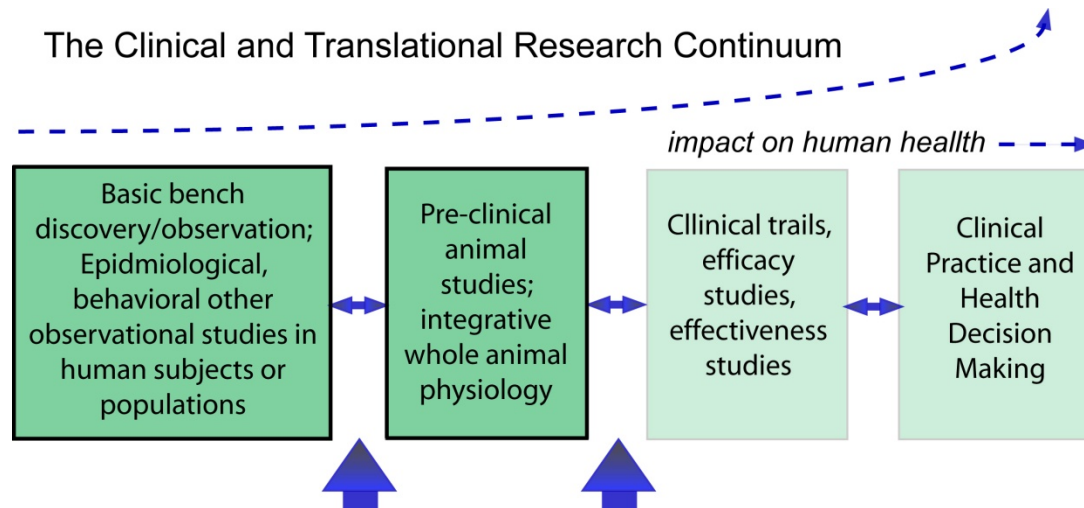
Alignment with UW Strategic Priorities and Initiatives

- “Enhance the speed with which we transfer knowledge and technology to promote economic development”
- “Ensure strength in the core disciplines, while promoting innovation, interdisciplinary connections...”

<http://www.chancellor.wisc.edu/strategicplan/priorities-initiatives.html>

Distinctive Features

- Part of a continuum of programs that train and educate multidisciplinary clinical investigators
- Represents a collaboration among the UW Schools of Medicine and Public Health, Nursing, Veterinary Medicine, Pharmacy and College of Engineering, as well as Marshfield Clinic
- Involves clinicians throughout Wisconsin.
- Focuses on type 1 translational and clinical research



PhD in Clinical Investigation Targeted Students

- The clinically-oriented healthcare professional (e.g. physician, veterinarian, or pharmacist) who will be a **leader** of a multidisciplinary clinical research team in academics, government agencies, or industry.
- Those seeking a high level of independence in research and leadership in advancing the field.
- Program accommodations ———> greater access
 - Maximization of instructional technology in learning activities and content delivery
 - Course offerings in late afternoon hours
 - Part-time enrollment

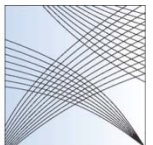
PhD in Clinical Investigation

Student Learning Objectives

- To prepare a clinician-researchers to lead multidisciplinary teams in the conduct of research.
- Students will learn to...
 - Determine the appropriate use of patient-oriented research designs
 - Conceptualize and design a research protocol
 - Execute therapeutic intervention studies
 - Interpret and report research findings that draw on the expertise of multiple disciplines
 - Contribute to the leadership of programs that integrate clinical and translational science
 - Translate research from the laboratory to the clinic as an active participant in a multidisciplinary research team.

University of Wisconsin School of Medicine and Public Health Diversity Commitment

- **The UWSMPH is committed to...**
 - provide training dedicated to producing clinicians and scholars who understand the needs of diverse individuals, families, and populations;
 - educate an ethnically and racially diverse group of clinicians and scholars;
 - study ethnic and racial disparities in health and health care and the potential means to eliminate those disparities; and
 - maintain an open, inclusive and respectful learning and working environment
- **How will this be done in the PhD Program in Clinical Investigation?**
 - utilize a diverse cadre of faculty mentors
 - recruit, admit and graduate a diverse student body
 - advance a research agenda in areas of scholarship focusing on diversity and ethnic and racial disparities



State and Nationwide Impact

- Development of vaccines for emerging flu strains
- Early detection/prevention/treatment approaches for Alzheimer's
- Strategies to reduce antimicrobial resistance
- Prevention of Type 2 diabetes in children

Graduate Curricula

Course emphasis	Ph.D.	M.S.
Multidisciplinary Perspectives and Evidence-based practice	6	7
Bioethics	2	1
Study design & management	9	9
Biostatistics and advanced research methods	12	6
Clinical Research Informatics	3	0
Grant writing	3	0
Research	18	6
Electives	10	6
TOTAL CREDITS	63	35