I am interested in obtaining an advanced degree in public health, population health research, or clinical research. Which degree in your department should I pursue?

The answer to this question depends on several factors, but it likely depends most on your research/public health interests and/or future career goals. The School of Medicine and Public Health at the University of Wisconsin-Madison offers the following professional and graduate degree options in the Department of Population Health Sciences that may be of interest.

**Master of Public Health (MPH)** – This professional degree provides multidisciplinary education and training in public health concepts and methods to current and future health professionals. The degree provides a practice-oriented program for students who want to strengthen their general knowledge and skills in the core public health concepts (Biostatistics, Epidemiology, Environmental Health, Health Services Administration and Social/Behavioral Health). The focus of this degree is on preparation of students who will become leaders in public health practice, whether in local, state or federal public health agencies, voluntary health agencies, community-based organizations or non-governmental organizations around the world. Through public health practice, they apply the knowledge and skills from their degree to collaborate with others to promote healthy behaviors and prevent disease in community populations. An essential part of the MPH degree experience is the completion of a 400 hour field experience in which the student has the opportunity to practice and enhance their skills in a public health setting. The program will likely be accredited by the Council on Education in Public Health (CEPH) in June 2009.

**Master of Science in Population Health** -- This academic graduate degree aims to provide students with the knowledge and skills to understand health, diseases, and their determinants across the lifespan; test interventions to improve health; and develop methodological approaches for population health research. This foundation in research provides preparation for either further graduate work or employment in a variety of research settings (including clinical). This interdisciplinary training program builds on the core disciplines of epidemiology, health services research/health determinants, and quantitative research methods. With a background in these core areas, students are then given the opportunity to pursue one or more of the following concentrations: epidemiology, health services research/health determinants, social and behavioral health, or clinical research. Students are prepared in a holistic way about the various aspects of population health – which in turn helps them develop a complete understanding of various public health issues and how to initiate quality research. An essential part of this degree is a research thesis.

**Doctorate in Philosophy in Population Health** – This academic graduate degree has the same focus as the Master of Science in Population Health but explores it at a deeper level. There is a heavy focus on research methods and experience in the conduct of research studies. PhD graduates tend to gravitate toward academic positions in colleges and universities, research firms, and government agencies like the National Institutes of Health. An essential part of this degree is a research dissertation which is defended after passing a qualifying written exam and preliminary oral exam.

**What is the difference between a professional degree and a graduate academic degree?**

Generally, professional degrees emphasize *practice* in public health or healthcare settings whereas graduate academic degrees tend to emphasize *research* of public health issues or clinically-related problems. In turn, professional degrees generally are suited for those who want careers as practitioners in public health or clinical setting (collaborating with individuals or groups to promote healthy behaviors and prevent disease in patients and community populations); whereas graduate academic degrees are generally suited for those who want careers as researchers of public health or clinically-related problems (finding solutions or understanding of public health or clinical issues through research and analysis). It is possible for graduates of either degree type to work in similar settings (such as government or non-profit organizations), but the scope or focus of their work would likely be different (practice vs. research).
What is the difference between public health and population health?

C.E.A. Winslow defined public health as "the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort..." Public health focuses on prevention and through practice it develops and implements the policies and programs that promote health. For example, it can focus on improving health through society-wide measures like vaccinations, the fluoridation of drinking water, or through policies like seatbelt and non-smoking laws.

Population health is the body of scientific disciplines interested in the study of the distribution and determinants of health and disease states in the population. It is an approach to health that seeks to step beyond the individual-level focus of traditional clinical and preventive medicine by addressing a broad range of factors that impact health on a population-level. For example, it can focus on ways to reduce health inequities among population groups by exploring factors such as the environment, social structures, resource distribution, etc.

What are the typical career paths associated with each degree?

There are several possible career paths for each degree. Thus, the following listing is not exhaustive of all the possible opportunities/options:

Master of Public Health (MPH) — This degree prepares graduates for entry level positions in variety of settings including health departments, government agencies, research firms, non-profit organizations, hospitals, insurance companies, pharmaceutical companies and universities. The interdisciplinary nature of the degree leads graduates to work in fields such as health education, food safety, epidemiology, and policy analysis, among others. Some graduates of other degrees (e.g. MD, PharmD, DVM, MPA, MS-Nursing) seek an MPH as a dual degree to add a public health perspective to their training.

Master of Science in Population Health — This degree prepares graduates to become public health staff/entry level researchers, analysts, consultants, administrators, and policy-makers. Graduates will often seek further education (MD or PhD) or positions in health departments, government/regulatory agencies, hospitals, HMOs, industry, foundations, academia, non-governmental organizations (NGOs), non-profit organizations, research institutes, etc.

Doctorate in Philosophy in Population Health — This degree prepares graduates to become professors and public health independent/senior level researchers, analysts, consultants, administrators, and policy-makers. Graduates will often seek post-doctoral positions or positions in academia (faculty positions), government/regulatory agencies (NIH, CDC, EPA, etc), industry, foundations, research institutes, non-governmental organizations (NGOs), non-profit organizations, etc.

What types of field experiences or research have students pursued with each degree?

Program requirements for a field experience or research thesis/dissertation will vary depending on the degree. For instance the Master of Public Health is a professional degree and requires the completion of a 400 hour field experience in which the student has the opportunity to practice and enhance their skills in a community setting. The other two degrees (Master of Science in Population Health and Doctorate in Philosophy in Population Health) are academic graduate degrees and require a thesis for the master’s degree or a dissertation for the doctorate degree. There are several possible field experiences or research topics for each degree. Thus, the following listing is not exhaustive of all the possible opportunities/options:

Master of Public Health (MPH) — Past field experience projects include:

- Perceptions of Raw Milk Consumptions in Wisconsin
- Story-telling as a Means of Increasing Smoking Cessation Among Low SES Smokers
- Launching the Next State Health Plan: Stakeholder Views of the Healthiest Wisconsin 2010
- Food Safety Risk Communication Efforts in Eastern Europe
- An Assessment of the Human Health Effects of Consuming Game Harvested with Lead Ammunition
- Development and Implementation of a Global AIDS Curriculum
- Improving Access to and Engagement in Addiction Treatment: The ACTION Campaign
- Wellness Matters: The Wisconsin Worksite Wellness Resource Kit
• The Epidemiology of Female High School Volleyball Injuries
• Community Perspectives on Health Impacts of Wetland Restoration in the Lower Ninth Ward of New Orleans

Master of Science in Population Health – Here is a sampling of past thesis topics:

• Marital Status, Marital Quality and Health and Well-Being in Cancer Survivors: A Proposal for a Master's Thesis Project
• Determination of optimal cut points for anthropometric indexes of obesity to identify individuals at high risk of coronary heart disease in a sample of Latin American populations.
• Physician Self-Assessment of Medical Error: Variation In and Predictors of Future Error in Primary Care
• Evaluating Disparities in the Clinical Trial Participation of Adult Cancer Patients
• Estimating the Risk of Alcohol Exposed Pregnancy in 18-44 year old women
• Effect of Vitamin D and Vitamin D Processing Genes with Blood Pressure in Hispanic and African Americans: the IRAS Family Study
• Condom Use in Heavy-Drinking College Students
• Estimating the frequency and distribution of child disability in developing countries: data from UNICEF’s Multiple Indicator Cluster Survey, Round 3 (MICS3)
• Modeling Probability of Falls in Nursing Home Residents
• Predictors of Early Hospital Readmission after Colon Cancer Surgery

Doctorate in Philosophy in Population Health – Here is a sampling of past dissertation topics:

• A Framework for Conceptualizing and Measuring Health Inequality Sensitive to Relative Moral and Quantitative Concerns
• Out-of-pocket Price, Prescription Medications, and Seniors
• The Economic Burden of HPV-Related Disease in U.S. Health Plans
• Quantifying the Benefits and Risks of Mammography for Women, Researchers and Policy Makers
• Access to level I or II trauma center and traffic related injury outcomes
• Epidemiology of Bone Mineral Density in Pre-menopausal Women with Type I Diabetes: The Wisconsin Women and Diabetes Study
• Acculturation and Risk of Alcohol and Tobacco Use among Pregnant Latina-American Women
• Psychopharmacological demand curve analysis: methods and applications to alcohol use in college students
• Public Awareness and Perceptions of Health Disparities
• Nutrition, Mental Health, and Quality of Life of Palestinian Preschoolers: Resilience and Vulnerability

Where can I retrieve more specific information about the Master of Public Health (MPH) and the MS/PhD Population Health degrees?

MPH Professional Program
Email: mph@mailplus.wisc.edu
Phone: 608.263.4889
Web: http://www.pophealth.wisc.edu/MPH/

MS/PhD Population Health Graduate Programs
Email: pophealth@mailplus.wisc.edu
Phone: 608.265-8108
Web: http://www.pophealth.wisc.edu/grad/