HEALTH

Health is a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, or economic or social condition.

— From the World Health Organization constitution

PITT PUBLIC HEALTH MISSION

Through excellence and leadership in education, research, and service, the Graduate School of Public Health promotes health, prevents disease, and strives to achieve health equity for everyone.

We do this by:

• Creating the best possible learning environment
• Fostering a multidisciplinary research approach to understand and solve health problems
• Engaging partners—regional, state, national, and global—to improve public health and well-being

WE ARE HERE FOR YOU!

If you have questions about what you see in this catalog or about our programs more generally, please do not hesitate to contact us. The student affairs staff can be reached at 412-624-3002 or by e-mail at stuaff@pitt.edu.

CONNECT WITH PITT PUBLIC HEALTH!

Web
Find information on academics and research, view upcoming events like our annual open house and accepted applicant events, and read recent public health news.
www.publichealth.pitt.edu

Facebook
Engage with your future classmates and get the latest school news. Find updated details about student events, get reminders for upcoming deadlines, and see showcased student achievements.
www.facebook.com/PittPublicHealth

Twitter
Learn about the groundbreaking contributions our researchers are making every day and follow media coverage of our public health advancements.
www.twitter.com/pittpubhlth

YouTube
Listen to Pitt Public Health researchers explain their findings and watch lectures given by our faculty.
www.youtube.com/PittPublicHealth

CAREER SERVICES

Facebook
Get helpful tips and advice on job hunting, interviewing, and much more!
www.facebook.com/GSPHcareers

LinkedIn
Network with Pitt Public Health alumni, find relevant job opportunities, and learn about upcoming events.
linkd.in/1gkL6A7

Twitter
See all the newest jobs retweeted from over 200 organizations, agencies, and companies.
www.twitter.com/GSPHcareers
The University of Pittsburgh is an internationally respected, world-class center of learning and research, offering exceptional educational opportunities in the humanities, sciences, and professions. With six health science schools on campus alongside the University of Pittsburgh Medical Center, a leading health care and research facility, Pitt Public Health students are uniquely positioned for collaboration and multidisciplinary study to improve the health of the world.
In 1999, Herbert Rosenkranz, then dean of the Graduate School of Public Health, established the Dean’s Day student competition as a venue for students to share their research. Since then, the event has become a much-anticipated showcase of student excellence in research and practice. There are monetary prizes in master’s and doctoral categories, department awards, and a special prize named for Rosenkranz for the research demonstrating the greatest public health significance.
A MESSAGE FROM DEAN BURKE

Donald S. Burke is an international expert in the prevention and control of epidemic infectious diseases, including HIV/AIDS, influenza, dengue, and emerging infectious diseases. He lived six years in Thailand, worked extensively in the rain forest of Cameroon, and conducted epidemiology and vaccine studies in India, China, and South Africa. Before coming to Pitt in 2006, he previously served as the associate director of the Walter Reed Army Institute of Research and as professor of international health and director of the Center for Immunization Research at the Johns Hopkins Bloomberg School of Public Health. Closer to home, Dean Burke serves Allegheny County as a member of the Board of Health.

In this catalog we demonstrate the outstanding options available to you at the University of Pittsburgh Graduate School of Public Health. If you are undecided about your future in the public health field, this publication’s overview of departments, degree programs, and certificates will help guide you. If you already know the area of study you want to pursue, this catalog will help you compare our programs with others. I am confident you will find that Pitt Public Health offers superior academic and research opportunities.

We have a long-standing reputation as a leader in fields of public health, including diabetes, maternal and child health, infectious diseases, and health care financing and policy, to name a few. Our school also offers unique programs not found in many schools of public health, such as human genetics and health equity.

Newer areas of public health in which we are in the forefront are global health, as evidenced by our Peace Corps Master’s International Track and our affiliation with the University of Pittsburgh Center for Global Health, and public health dynamics, where we bring together the expertise of public health researchers with computational modeling experts and engineers to predict how factors such as social dynamics and local infrastructures affect public health intervention strategies.

The training that Pitt Public Health provides enables our students to make a real difference on our rapidly changing planet. In addition to the challenging educational and research requirements of our programs, we collaborate with Pitt’s other schools of the health sciences, law, social work, and public and international affairs, as well as the University of Pittsburgh Medical Center, providing many exciting opportunities for students to pursue. And finally, choosing Pitt Public Health means finding a home in Pittsburgh, a dynamic and exciting city in which to live and learn.

Thank you for your interest in Pitt Public Health. Let us know if we can be helpful as you plan your public health career.

Donald S. Burke, MD
Dean, Graduate School of Public Health
Distinguished University Professor of Health Science and Policy
Associate Vice Chancellor for Global Health
WHAT IS PUBLIC HEALTH?

Public health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention. Public health involves the application of many different disciplines:

- biology
- anthropology
- public policy
- mathematics
- engineering
- education
- psychology
- computer science
- sociology
- medicine
- business
- and much, much more

Public health professionals work in government agencies such as the Centers for Disease Control and Prevention and local health departments; in nonprofits such as the Red Cross; in health care organizations such as hospital systems and long-term care facilities; in the private sector, such as health insurers and pharmaceutical companies; and in academia, such as a school of public health. Whether you like to crunch numbers, conduct laboratory or field research, formulate policy, or work directly with people to help improve their health, there is a place for you in the field of public health.

Being a public health professional enables you to work around the world, address health problems of communities as a whole, and influence policies, like increasing the number of smoking bans that protect us from secondhand smoke. During the twentieth century, the health and life expectancy of United States residents improved dramatically, and the CDC estimates that 25 years of this gain are attributable to advances in public health.

Here are the top ten achievements in U.S. public health, from 1900 to 1999:

- vaccination
- motor-vehicle safety
- safer workplaces
- control of infectious diseases
- decline in deaths from coronary heart disease and stroke
- safer and healthier foods
- healthier mothers and babies
- family planning
- fluoridation of drinking water
- recognition of tobacco use as a health hazard

The multidisciplinary nature of public health is critical to ensuring that professionals working in local, state, or national agencies and community-based organizations can accomplish the ten essential public health services:

- monitor health status to identify community health problems
- diagnose and investigate health problems and health hazards in the community
- inform, educate, and empower people about health issues
- mobilize community partnerships to identify and solve health problems
- develop policies and plans that support individual and community health efforts
- enforce laws and regulations that protect health and ensure safety
- link people to needed personal health services and assure the provision of health care when otherwise unavailable
- assure a competent public health and personal health care workforce
- evaluate effectiveness, accessibility, and quality of personal and population-based health services
- research new insights and innovative solutions to health problems

To learn more about the field of public health and the career a public health degree prepares you for, visit www.whatispublichealth.org.

DECIDING ON A PROGRAM

Are you trying to determine where you fit within public health? Our graduates have an array of skills, specific knowledge, and unique experiences applicable to a lifetime of career aspirations. Pitt Public Health has seven departments and multiple concentrations. To match issues you’d like to study and skills you’d like to acquire with our programs, visit www.publichealth.pitt.edu/choosepublichealth.
WHY CHOOSE PITT PUBLIC HEALTH?

CAREER SERVICES

Our career services office is an important resource for students’ professional development. We are committed to helping our students reach their desired career destination, whether that be a job, fellowship, or advanced education. We do this by providing resources for skill building and building partnerships with employers. Our office offers a broad range of services:

PittBridges: An online database provides Pitt Public Health students with domestic and international opportunities. We add positions daily.

Career workshops: We hold a variety of workshops throughout the year, including information on resume, CV, and cover letter writing, job search strategies, interviewing skills, and preparing applications for academia and industry positions. Current, specialized topics are introduced yearly.

Career counseling: We offer one-on-one appointments for students to discuss all aspects of career planning. Students are welcome on a walk-in basis every Wednesday afternoon, and longer appointments can also be scheduled.

Special events: We combine important networking opportunities with presentations by public health professionals. We partner with other schools at Pitt to provide career fairs and we invite alumni guests and professionals in the field to speak to students throughout the year.

Social media: Career services provides a number of ways for students to connect with us online. On LinkedIn, we foster relationships between current students and alumni. Our Facebook page (www.facebook.com/GSPHCareers) contains helpful tips and advice on job hunting, interviewing, and resume writing. On Twitter (www.twitter.com/GSPHCareers), we post and re-tweet job opportunities that are appropriate for our students.

Web pages: Students have access to our comprehensive on-line career development tool kit which contains guides on conducting a job search and examples of cover letters, resumes, and CVs. We also offer an expansive list of resources for locating position openings grouped by topical interests. Instructions on interviewing and post-interviewing topics (e.g. salary negotiations) are also included.

Alumni-student engagement opportunities: In conjunction with alumni affairs, career services offers an alumni-student mentoring program, which allows current students and recent graduates to find and connect with alumni who have similar career paths or interests. We also offer an annual alumni-student networking breakfast.

STUDENT ORGANIZATIONS

Eight student organizations are headed by the Pitt Public Health Student Government Association (SGA). Student organizations provide students with a greater degree of participation in the decision-making processes within the school. SGA and its sub-organizations sponsor social events encouraging informal interaction between faculty, staff, and students, as well as educational and service activities. Membership is open to all students.

The other organizations are the Association of Women in Public Health, the Doctoral Student Organization, the Global Health Student Association, the Health Policy and Management Association, the Minority Student Organization, the Public Health Fitness and Recreational Organization, and the Student Public Health Epidemic Response Effort. For more information, visit www.publichealth.pitt.edu/studentorganizations.

UNIVERSITY-WIDE RESOURCES

There are a number of important resources available to students at a large institution like the University of Pittsburgh. Learn more about these and other resources at www.pitt.edu/-graduate/.

Transportation: Get around town for free on all public buses. Pitt also runs free shuttles throughout campus, and offers SafeRider transportation when special, nonemergency needs arise.

Libraries: The University Library System, including the Health Sciences Library System, is the 26th-largest academic research library in North America, and the 16th-largest among the prestigious libraries of the Association of American Universities.

Workout facilities: In addition to a variety of standard facilities, Pitt also has pools, climbing walls, golf practice areas, track, racquetball, and squash courts, plus a number of intramural and recreational programs.

Student health: The Student Health Service offers health care to students while advocating for a healthy lifestyle.

Writing help: The University Writing Center offers free help for writing.

International services: International students will find the Office of International Services (OIS) helpful in areas such as admissions, immigration services, and social and cultural programming.

Disability resources: Through Disability Resources and Services, Pitt is committed to providing equal opportunities in higher education to students with disabilities.

Counseling: The University Counseling Center provides confidential personal and academic counseling to Pitt students free of charge.

LIVING IN PITTSBURGH

Pittsburgh is often ranked among the most livable cities in the nation based on categories including cost of living, arts and leisure, and income growth. National Geographic recently ranked Pittsburgh among their Best of the World 2012.

Our big city with the small town touch offers friendly and helpful tips and advice on job hunting, interviewing, and resume writing. On Twitter (www.twitter.com/GSPHCareers), we post and re-tweet job opportunities that are appropriate for students.

Social media: Career services provides a number of ways for students to connect with us online. On LinkedIn, we foster relationships between current students and alumni. Our Facebook page (www.facebook.com/GSPHCareers) contains helpful tips and advice on job hunting, interviewing, and resume writing. On Twitter (www.twitter.com/GSPHCareers), we post and re-tweet job opportunities that are appropriate for our students.

Web pages: Students have access to our comprehensive on-line career development tool kit which contains guides on conducting a job search and examples of cover letters, resumes, and CVs. We also offer an expansive list of resources for locating position openings grouped by topical interests. Instructions on interviewing and post-interviewing topics (e.g. salary negotiations) are also included.

Alumni-student engagement opportunities: In conjunction with alumni affairs, career services offers an alumni-student mentoring program, which allows current students and recent graduates to find and connect with alumni who have similar career paths or interests. We also offer an annual alumni-student networking breakfast.
DEGREES AND CERTIFICATES AT A GLANCE

As one of only 52 schools of public health accredited by the Council on Education for Public Health, our degree and certificate programs offer the essential core knowledge and the specialized scholarship to train future public health practitioners, researchers, and educators.

DEPARTMENTAL DEGREES

Behavioral and community health sciences .......... page 7
MPH, PhD, DrPH
Joint degrees
Peace Corps Master’s International Track .......... page 20

Biostatistics ........................................ page 8
MS, MPH, PhD

Environmental and occupational health .......... page 11
MS, MPH, PhD, DrPH

Epidemiology ........................................ page 12
MS, MPH, PhD, DrPH
Joint degree option
Peace Corps Master’s International Track .......... page 20

Health policy and management ................. page 15
MHA, MPH, PhD
Joint degree option

Human genetics .................................. page 16
MS, MS genetic counseling, MPH, PhD
Joint and dual degree options

Infectious diseases and microbiology .......... page 19
MS, MPH, PhD
Peace Corps Master’s International Track .......... page 20

Multidisciplinary Master of Public Health ........ page 20

CERTIFICATES

Community-based participatory research and practice. page 23
Environmental health risk assessment .............. page 23
Evaluation of public health programs ............. page 24
Global health ..................................... page 24
Health care systems engineering .................. page 24
Health equity ...................................... page 27
Health systems leadership and management .... page 27
Lesbian, gay, bisexual, and transgender individuals’ health and wellness. page 27
Public health genetics ................................ page 28

C. Everett Koop, 13th surgeon general of the United States, acknowledged the crucial role of public health: “Health care matters to all of us some of the time; public health matters to all of us all of the time.” The world is waiting for more gifted public health professionals to address existing and emerging health issues around the globe.
ACADEMIC DEPARTMENTS

If you’re looking for a school that challenges you, involves you in real-world public health issues, and prepares you for leadership positions, Pitt Public Health is the right choice. Because public health draws upon expertise from multiple academic disciplines, the school offers a wide variety of opportunities to help students achieve their career goals.

Among the organizations that have partnered with BCHS faculty, staff, and students on community-based projects are Asbury Heights long-term care facility, the Healthy Start program of the Allegheny County Health Department, EveryChild Inc., Hosanna House, Pittsburgh Early Head Start, and Tobacco-Free Allegheny.
All diseases are shaped by behavioral and social factors, whether at the level of etiology, access to care, or adherence to care recommendations, and many are shaped by all of these factors. Accordingly the behavioral and community health sciences within public health assess the health needs of populations, design interventions to prevent disease and increase adherence based on social/behavioral theory, and use research methods to evaluate these programs and recommend improvement, often within community-based settings.

At Pitt Public Health, the Department of Behavioral and Community Health Sciences (BCHS) emphasizes community-based programs and works with grass roots, nonprofit, private, philanthropic, and governmental organizations. Collaboration with other departments and centers (Center for Health Equity, Center for Public Health Practice, Center for Aging and Population Health, and Center for Healthy Environments and Communities) is extensive.

Students have the option of developing concentrations in the following areas:
- program evaluation/applied research methods
- community-based participatory research and practice
- public health and aging
- maternal and child health/women’s health
- minority health/health disparities
- public health preparedness
- lesbian, gay, bisexual, transgendered health and wellness
- global health
- the Peace Corps Master’s International Track (page 20)

RESEARCH ACTIVITIES

The department is well known both for its Institute for Evaluation of Science in Public Health and for the faculty and staff’s expertise in community-based participatory research strategies. Research topics include cancer screening, diabetes, maternal and child health, services to the elderly, health disparities, HIV/AIDS, and tobacco control.

DEGREES

BCHS offers a Master of Public Health (MPH) to prepare students for careers in public, voluntary, and private organizations that focus on public health concerns. Both of its doctoral programs (Doctor of Philosophy and Doctor of Public Health) prepare students for careers in research, leadership, and teaching in academic and practice settings.

BCHS also offers joint degrees with the Kenneth P. Dietrich School of Arts and Sciences Department of Anthropology (MPH/PhD), the Graduate School of Public and International Affairs (MPH/MID, MPH/MPIA, or MPH/MPA), and the School of Social Work (MPH/MSW or MPH/PhD).

CAREER PROSPECTS

BCHS graduates assume positions in a variety of public health and non-profit organizations, including federal, state, and local governmental organizations. Graduates work in all stages of community health programs designed to improve the health status of populations, including program planning and evaluation, implementation, and management and oversight. Examples of BCHS careers include:
- regional director for Pennsylvania Department of Health
- director of a statewide HIV/AIDS education program
- program director with an international relief agency
- evaluation and research director for a regional reproductive health program
- research and evaluation specialist for City of Pittsburgh school district

ADMISSIONS REQUIREMENTS

In addition to the school-wide requirements, it is recommended that applicants have a QPA of at least 3.0. DrPH applicants must have an MPH and PhD candidates must hold a post-baccalaureate degree relevant to public health. GRE scores are required for all doctoral applicants and applicants are encouraged to take math through calculus.
Biostatistics involves the design, analysis, and interpretation of data for studies in public health and medicine. Within academic, government, and private industry settings, the need for well-trained biostatisticians has grown substantially in recent years. Emerging research areas such as genetics, neuroimaging, and bioinformatics have necessitated the development of new methodologies.

Biostatistics students at Pitt Public Health benefit from collaborations with a large academic medical center, and extensive University computing facilities. Through graduate-level training, students gain a comprehensive understanding of statistical methods in the context of public health problems; they work with faculty on developing new and innovative analytical techniques; and they have the opportunity through both research and service to apply these methods to current and pressing concerns in biomedicine and public health.

**RESEARCH ACTIVITIES**

Faculty in the department have coauthored more than 1,000 publications. Collaborative and applied research efforts include design, quality control, and analysis of more than 80,000 patients in more than 40 Phase III clinical trials of the National Adjuvant Breast and Bowel Project. We serve as the biostatistical core for the Pittsburgh Cancer Institute, which houses an NIH Comprehensive Cancer Center. Our faculty study design and evaluation relating to occupational and environmental exposures to health outcomes with the Center for Occupational Biostatistics and Epidemiology and the design and analysis of clinical trials to treat psychiatric disorders. Areas of current research in statistical methodology include survival analysis, missing data analysis, ROC curve analysis, stochastic modeling, statistical computing, and statistical genetics.

**DEGREES**

Biostatistics offers a Master of Science (MS) and a Doctor of Philosophy (PhD) in biostatistics, academic degree programs that focus on statistical theories and methods, and a Master of Public Health (MPH) in biostatistics, a professional degree program that prepares students with a prior professional degree to understand and apply statistical methods to health problems in their fields.

**CAREER PROSPECTS**

Biostatistics graduates are in high demand and have a wide array of career opportunities. Recent articles have underscored the lack of statistical and biostatistical graduates across the nation and globally. Graduates are employed at academic institutions, private health and research organizations, by government, and in industry.

**ADMISSIONS REQUIREMENTS**

In addition to the school-wide requirements, all applicants must:
- possess a BS or BA in arts, sciences, or engineering. MPH applicants must possess a professional degree, such as one in nursing, an MD, DDS, or DVM
- submit three letters of recommendation
- submit GRE scores
- have one course in computer science
- have one year of calculus
- have three credits of college-level biology (PhD, MS)
- have six credits of college-level biology and social science (MPH)
The Department of Biostatistics has collaborated with the VA Hospital of Pittsburgh; the Western Psychiatric Institute and Clinic; and the School of Medicine Departments of Critical Care Medicine, Radiology, and Otolaryngology. Department faculty have also contributed extensively to methods for developing individualized medicine or personalized therapy.
EOH faculty and students work with local governmental organizations such as the Allegheny County Health Department, the Pittsburgh Office of the U.S. Department of Labor, Occupational Safety and Health Administration, and the Allegheny County Sanitary Authority to study and improve the environmental health of southwestern Pennsylvania.
Environmental and occupational health strives to understand human exposures to toxic agents and the interaction between these agents and susceptibility in modifying and/or accounting for human disease. The mission of the department is to train students and to perform research in the principles and practice of environmental health ranging from basic research at the cellular and molecular level to applied translational studies of human disease, population exposure, and public health studies. Accordingly, many EOH faculty collaborate with basic sciences and clinical investigators throughout other departments at Pitt Public Health, and the schools of medicine and engineering.

**RESEARCH ACTIVITIES**

The combined efforts of an experienced faculty provide new insights into quantifying and modeling human exposures and investigating gene-environment interactions, basic action mechanisms of toxic substances, and physiological and environmental contributors to risk and/or sensitivity to developing acquired acute and chronic disorders. EOH has developed a sound reputation as a leader in mechanisms of cardiovascular response, stem cell biology of the lung, free radical biochemistry, and metal toxicology. More recently, opportunities for research have been added in the fields of DNA damage and repair, neurotoxicology of chronic neurodegenerative diseases, risk assessment, and advanced exposure science.

**DEGREES**

The Doctor of Philosophy (PhD) or Master of Science (MS) in environmental health sciences provides a broad theoretical and practical education for positions in academia, industry, or government. The multiple tracks provide flexibility in acquiring advanced training in toxicology, environmental biophysics, molecular and cellular pathobiology, risk assessment, and exposure science.

The Master of Public Health (MPH) allows students to earn concentrations in environmental health or risk assessment and apply these concepts to public health practice.

The Doctor of Public Health (DrPH) in environmental health sciences provides professional education for individuals who desire high-level administration and/or decision-making leadership positions.

**CAREER PROSPECTS**

EOH graduates with a doctoral degree are prepared to work in laboratory-based academic settings as faculty or postdoctoral fellows and be prominent members of government agencies and independent industries. Recent graduates have obtained fellowships at top tier academic institutions, positions with the National Institutes of Health and Environmental Protection Agency, as well as positions in firms conducting chemical and environmental risk assessment. Graduates with a master’s degree play prominent roles as environmental/occupational health practitioners in various settings, including industry, hospitals, government agencies, and private practice.

**ADMISSIONS REQUIREMENTS**

In addition to the school-wide requirements, a QPA of at least 3.0 is ordinarily required. Applicants must have a bachelor’s degree with some basic engineering or science focus – biological, chemical, environmental, and physical disciplines all being broadly acceptable for one or more of the specific programs. GRE scores are required unless an applicant has a previous graduate or professional degree (must still request a waiver). For the DrPH and MPH degrees, professional experience is evaluated.

---

www.publichealth.pitt.edu/environmental-and-occupational-health
Epidemiology is a key science of public health and preventative medicine, applying the scientific method to the study of disease in populations for the purposes of prevention or control. Epidemiologists identify variables that may critically influence the occurrence of disease and evaluate factors that may mark the presence of disease or cause disease to occur. This leads to interventions to prevent disease and promote health, which in turn impacts clinical care and public health policy.

**RESEARCH ACTIVITIES**

Faculty incorporate both research and prevention activities into the classroom experience. In addition, the department hosts two major centers—the Center for Aging and Population Health and the Epidemiology Data Center. Current research areas include aging, cancer, cardiovascular/diabetes, clinical trials/methods, genetics, global health, infectious disease, injury prevention/lifestyle intervention, neuroepidemiology, psychiatric epidemiology, and women’s health.

**DEGREES**

The Master of Public Health (MPH) educates students on the epidemiological approach to public health, featuring a broad overview of epidemiology, biostatistics, environmental influences on health, public health planning, and health services. Applied experience will also be gained through a directed internship. Visit page 20 to learn about the Peace Corps Master’s International Track within epidemiology.

The Master of Science (MS) is designed for individuals that seek concentrated training in epidemiological concepts, skills, and methodology with a research focus. This includes a flexible mix of courses in epidemiology and biostatistics. Thirty- and 45-credit programs are available.

The Doctor of Philosophy (PhD) provides students with an advanced level of preparation sufficient to conduct epidemiological research, and to teach, supervise, and mentor students in epidemiology.

The Doctor of Public Health (DrPH) prepares students for leadership in research, training, or high-level administration in a public health setting. The DrPH is comparable to the PhD in quality and innovation, but has added emphasis on the use of epidemiology for public health decision-making and leadership.

The MD/PhD in epidemiology and medicine allows medical students in the Medical Scientist Training Program (MSTP) to pursue PhD work in epidemiology. Read more at www.mdphd.pitt.edu.

**CAREER PROSPECTS**

Epidemiology graduates with a master’s degree are prepared for positions as practitioners and researchers in health departments, other government agencies, medical centers, and private practice. Examples of positions include:

- research specialist
- lab manager
- assistant professor
- health statistician

Graduates with a doctoral degree are prepared for faculty positions, independent investigation, and leadership positions with the aforementioned settings. Examples of positions include:

- Epidemic Intelligence Service (EIS) officer (with the CDC)
- National Cancer Institute fellow
- director, nurse anesthesia program
- health care analyst

**ADMISSIONS REQUIREMENTS**

In addition to the school-wide requirements, all applicants must submit GRE, MCAT, or DAT scores and have three credits of college-level human biology coursework, e.g. introductory human biology, microbiology, cell biology, genetics, physiology, and anatomy. DrPH applicants must have an MPH degree, a graduate or professional degree in a health sciences-related field, or an undergraduate health professional degree plus several years of work experience in a health-related field.
By studying the relationship of lifestyle factors such as diet and exercise to genetic susceptibility, researchers in the department have improved our understanding of cardiovascular disease, breast and ovarian cancers, diabetes, osteoporosis, and aging.
Strengths of the Department of Health Policy & Management include governance and management, long-term care, and pharmaceutical economics. In each of these categories over the past 10 years, published research by faculty members has had an impact on policy at the state and federal levels, and faculty have been recognized as national experts in their fields.
Health care system managers and executives provide leadership to organizations that deliver health care and related services and must know about management, financing and delivery of services, technological innovations, health policy and regulatory requirements, and public health and disease prevention strategies.

The programs of the Department of Health Policy & Management (HPM) are grounded in the faculty’s contributions to advancing the state of knowledge and professional practice in institutional and system health care management, health services, and health economics research and scholarship in the development, advocacy, and analysis of health policy and the policymaking process.

**RESEARCH ACTIVITIES**

Research activities address problems relevant to health policy, health services delivery, outcomes measurement, patient safety, leadership, and organization management relevant to health care organizations and systems.

**DEGREES**

The Master of Health Administration (MHA) trains students in organizational/system management by developing their interpersonal skills to execute effective organizational policies and transform outdated ones. Both the aspiring and practicing health care management professionals will be interested in the MHA to develop their leadership competencies. Professional development occurs through coursework, a management residency, a mentorship team including an Executive-in-Residence, and other curricular activities designed to enhance students’ ability to lead.

The Master of Public Health (MPH) in health policy and management prepares students for careers as public policy analysts, advocates for public health and high quality health care, and professionals engaged in the development and implementation of health-improving policies. The program has two concentrations: one in health policy, and the other in program management. Professional development occurs through a combination of coursework, a healthcare policy-related practicum, a mentorship team including an Executive-in-Residence, and other curricular activities designed to enhance students’ ability to improve the health of populations.

The Master of Science (MS) in health services research and policy program prepares graduates for positions in health services research and policy, analytics, and also prepares them for higher level education (such as a PhD). Graduates will be prepared to conduct research on policy issues affecting the organization, financing, and delivery of health care and public health services.

The doctoral program (PhD) in health services research and policy provides training in research design and methods appropriate for studying the health care system. The program meets an ongoing need for public health researchers who focus on cost, access, and quality of the health care system.

The Juris Doctorate and Master of Public Health (JD/MPH) program is offered in collaboration with the University’s School of Law. This program provides specialized interdisciplinary training for students who wish to apply their legal training in roles in health policy development and analysis, health law practice, and as in-house counsel for health care organizations, regulatory agencies, foundations, and other nonprofit organizations. Students apply separately to this program after being admitted into Pitt Law.

**CAREER PROSPECTS**

With the dramatic changes in health care organizational structures and financing, the aging of the population, and technological innovations, career venues have broadened to include managed care organizations, integrated long-term care systems, quality management/process improvement, financial/operational analysis, health care marketing/consulting, and health policy analysis and development. Students may also use the MHA and MPH programs as the foundation for doctoral studies and careers in higher education.

**ADMISSIONS REQUIREMENTS**

In addition to the school-wide requirements...

Master’s programs require:
- a QPA of 3.0 or higher (an applicant with a lower QPA may be considered if other strong factors exist)
- GRE scores
- at least three undergraduate or graduate credits in biology and mathematics/statistics (algebra or higher)
- at least six undergraduate or graduate credits in the social and behavioral sciences with at least one course in economics is preferred

Doctoral program requires:
- a QPA of 3.3 or higher (a master’s degree is not required)
- undergraduate or graduate calculus with a 3.0 or higher
- GRE scores

Doctoral applicants are encouraged to apply as early as possible. Complete applications are reviewed as they are received.
Human genetics is the study of how genes influence human traits, diseases, and behaviors, including how genetic and non-genetic factors interact. Public health genetics applies advances in human genetics and genomics to improve public health and prevent disease. Genetic counselors work as members of a health care team, providing information and support to patients dealing with birth defects or genetic disorders and those who may be at risk for inherited conditions.

At Pitt Public Health, emphasis is placed on understanding the genetics of complex traits such as aging, dental carries, cardiovascular disease, diabetes, lupus, obesity, pancreatitis, Alzheimer’s disease, and cancer cytogenetics by developing and using novel methods in population and statistical genetics, genetic epidemiology, and bioinformatics.

**RESEARCH ACTIVITIES**

Faculty and students are involved in varied research including:
- finding genes that are risk factors for aging and age-related macular degeneration and neurological and extracellular matrix disorders.
- studying the genetics of obesity and muscle development, pancreatitis, and inflammatory bowel disease
- researching the genetic basis of late-onset Alzheimer’s disease, coronary heart disease, diabetes, and lupus
- developing and implementing state of the art statistical methods for gene mapping and bioinformatics, especially next-generation sequencing
- studying genetic mechanisms underlying various cancers
- studying the influence of family health histories on risk perception
- exploring individuals’ experiences of facing genetic risk

**DEGREES**

The Master of Science (MS) is a research-oriented degree, intended to prepare graduates to participate in laboratory or biostatistical research or to go on to PhD-level study.

The MS in genetic counseling provides students with an in-depth background in human genetics and counseling.

The Master of Public Health (MPH) in public health genetics trains students in genetics and public health and prepares them for work that involves applying principles of genetics to improving the health of populations. It can be earned with the MS as a dual degree.

The Doctor of Philosophy (PhD) program trains students to become independent researchers in the field of human genetics.

MD/PhD in human genetics and medicine allows medical students in the Medical Scientist Training Program (MSTP) to pursue PhD work in human genetics.

**CAREER PROSPECTS**

MS and PhD graduates typically go on to positions in academia or to industry jobs. Genetic counseling students are typically employed by their graduation dates, working in clinical, research, public health, and/or administrative settings. Examples of positions include:
- associate professor, operations director, and senior lab director, Emory Genetics Laboratory
- staff member, Labeling and Consumer Protection Division, USDA
- research manager, Harris Interactive
- clinical genetic counselor, Kaiser
- associate director, Northwestern University Genetic Counseling Program

**ADMISSIONS REQUIREMENTS**

In addition to the school-wide requirements, all degree programs require a bachelor’s degree in a discipline related to the biological, behavioral, or mathematical sciences with a QPA of 3.0 or higher. GRE scores must be above the 70th percentile.

For PhD, MS, and MS genetic counseling applicants, the preferred academic background includes a first course in genetics, biochemistry or organic chemistry, calculus, and a behavioral or social science.

Genetic counseling applicants are encouraged to volunteer at a clinical genetics center and/or at an agency that would offer the opportunity to gain experience with individuals in a crisis situation, and must demonstrate an understanding of the profession.

For MPH applicants, some social science background is essential. Coursework in genetics, biochemistry, and calculus is helpful, but not required.
Human genetics research has helped answer fundamental questions about human nature and led to the development of effective treatments for many diseases that greatly impact human health. Faculty in the Department of Human Genetics have developed and used genetic methods to investigate the causes and treatment of hereditary and acquired human illness and to understand and explore the impact of genetics on public health, education, and disease prevention.
There was little hope of controlling the AIDS epidemic when, in 1996, IDM’s landmark Pitt Men’s Study showed that a single measurement of the amount of HIV in a patient’s blood could predict the subsequent risk of developing AIDS—years before symptoms of the disease emerged.
Infectious diseases are at the root of some of the world’s most pressing public health issues. Great progress has been made in the treatment, prevention, and eradication of many pathogens that have threatened humanity throughout history, but infectious diseases continue to cause suffering and death and pose an increasing risk to human populations worldwide. Some of the most urgent issues in infectious disease research and prevention include HIV/AIDS, newly-emerging infectious diseases, global microbial infections in resource limited regions, and vaccine development.

The Department of Infectious Diseases and Microbiology (IDM) has made major contributions in defining, preventing, and treating some of the most devastating diseases of the past 60 years. IDM scientists pioneered prevention of poliovirus with gamma globulin which helped in the development of the Salk polio vaccine, identified dengue viruses and the hemorrhagic fever caused by them, discovered adeno-associated virus, linked transmission of cytomegalovirus to infected organs in transplantation, showed that HIV load in the blood is a strong predictor of disease progression, and established the Pitt Men’s Study as part of the ongoing, nearly 30 year old, nationwide Multicenter AIDS Cohort Study on the natural history of HIV infection. As one of the few departments dedicated to studies of infectious diseases within schools of public health, IDM’s mission involves training the next generation of scientists and public health professionals to enhance the control of infectious diseases in the human population.

RESEARCH ACTIVITIES

IDM faculty members have brought in more than $28 million in National Institutes of Health funding in the last 15 years. Areas of research include:

- emergent and re-emerging infectious agents such as hepatitis C virus, dengue virus, avian influenza viruses, West Nile virus, Chikungunya virus, and tuberculosis
- development of HIV vaccines, immunotherapies, microbicides, and antiviral drugs
- infectious disease complications and health disparities in sexual minorities
- clinical and molecular infectious disease epidemiology

DEGREES

The Doctor of Philosophy (PhD) or Master of Science (MS) in biosciences emphasize the immunologic and molecular mechanisms by which microorganisms infect hosts and cause disease.

The Master of Public Health (MPH) emphasizes the broader impact of infectious diseases on communities and populations in one of two concentrations: Infectious Disease Pathogenesis, Eradication and Laboratory Practice, or Infectious Disease Management, Intervention and Community Practice. Visit page 20 to learn about the Peace Corps Master’s International track within IDM.

CAREER PROSPECTS

IDM graduates benefit from a high placement rate in prestigious professional positions in academia, government, and industry. Recent graduates have found positions with the Centers for Disease Control, Children’s Hospital of Pittsburgh, pharmaceutical and biotech companies, National Institutes of Health, and various colleges and universities.

ADMISSIONS REQUIREMENTS

In addition to the school-wide requirements, all applicants should be prepared in college algebra, biology, and chemistry, including organic chemistry with laboratory and biochemistry. Applicants who do not meet these requirements may be admitted conditionally and required to make up deficiencies before or during the program.

MPH applicants must have a bachelor’s degree or higher in an area related to public health. MS and PhD applicants must have a bachelor’s degree or higher in biological sciences or a related area.
PEACE CORPS MASTER’S INTERNATIONAL TRACK

www.publichealth.pitt.edu/pcmi

Interested in global health and development? Considering the Peace Corps? Pitt Public Health offers the Peace Corps Master’s International (PCMI) track in BCHS, IDM, and epidemiology. Combine an MPH with 27 months of field experience and apply your public health knowledge and skills in an international setting.

PCMI students complete an intense academic year, during which they take a sequence of courses that provides them with the critical competencies necessary for the Peace Corps. During that period, they also work closely with the PCMI coordinator and returned PCMI students to prepare for their assignment. After a year of study, students depart for three months of training followed by 24 months of field experience at their Peace Corps site. Students receive practicum credits for their field experience and then return to Pitt Public Health to complete a final year of study and their thesis or essay.

ABOUT THE PEACE CORPS

Over 200,000 Peace Corps Volunteers have been placed in more than 139 countries, all in service of three goals:

- helping the people of interested countries in meeting their need for trained men and women, helping promote a better understanding of Americans on the part of the peoples served, and helping promote a better understanding of other peoples on the part of Americans.
- public health is a major area of focus for the Peace Corps, with Volunteers working on issues ranging from HIV/AIDS to control of infectious diseases to child health.
- For more information on the Peace Corps, visit www.peacecorps.gov.

CAREER PROSPECTS

PCMI students have a unique opportunity to apply what they’ve learned in a real-world setting. They earn much more than a degree. They gain a deeper understanding of themselves and others, learn a new language, and develop leadership and networking skills which enhance their marketability for employment. Returned Peace Corps Volunteers are well-positioned for the public and private sector and receive one year of noncompetitive eligibility for employment in the federal government.

ADMISSIONS PROCESS AND REQUIREMENTS

The application process is the same as that of other Pitt Public Health degree programs. Applicants first apply to their department of interest. The admissions committee reviews files after they’ve been accepted by the department. Fall admission only.

MULTIDISCIPLINARY MASTER OF PUBLIC HEALTH

www.publichealth.pitt.edu/mmph

The Multidisciplinary Master of Public Health (MMPH) program provides training for clinicians and health professionals with a flexible curriculum that prepares them for leadership roles in academic and administrative health settings, research, preventive medicine, public health and evidence-based practice programs, and global health. The program helps clinicians and health professionals build on their existing skills in data analysis, research design, statistics, preventive medicine, community health, health promotion, global health, and evidence-based medicine. By providing doctoral-level, clinically-trained health professionals with the skills to serve in “glocal” (global to local) leadership positions, this unique program provides a comprehensive overview that bridges the gap between clinical and public/global health disciplines.

MMPH students have a rich diversity of backgrounds including family medicine, pharmacy, psychiatry, dental medicine, veterinary medicine, rehabilitation science, and nursing. Many students obtain their MPH degree while in fellowship programs.

CAREER PROSPECTS

MMPH graduates will be prepared to practice in such areas as public and private health agencies, international health, clinical practice, academic institutions, or instructional settings in the community.

ADMISSIONS REQUIREMENTS

In addition to the school-wide requirements, applicants to the MMPH program must have earned a doctoral degree in a health science or be currently enrolled in doctoral-level clinical health training. GRE scores are sometimes waived for those with doctoral degrees from American universities.

International applicants must meet one of the following criteria:

- hold a valid dental or medical license or other professional licensure in the U.S. or be eligible for licensure in the U.S.
- be currently in a residency, fellowship, or equivalent training program
- be an outstanding candidate with appropriate clinical and/or research training and skills to justify consideration for admission (e.g. a visiting scholar clinician who will return to his or her native country)
One MMPH graduate told us, “The multidisciplinary MPH provided the opportunity to explore a broad range of topics that would not normally be available to the MPH student focusing on only one area of public health. I believe my patient care improved simply because I learned more about the “big picture” and long-range effects of various treatment options, and the knowledge I gained from the variety of courses allowed me to expand my career horizons to include more administrative and teaching roles.”

Do you have a strong commitment to working with people who are different than you (by race, ethnicity, country of origin, socioeconomic status, etc.)? Do you have experience living or traveling abroad, particularly in developing nations? If so, the PCMI track might be right for you.
Community-based participatory research combines methods of inquiry with community capacity-building strategies and approaches to bridge the gap between research and practice; a partnership approach involving shared ownership between community members and academic researchers.

At Pitt Public Health, we offer nine unique certificates that allow students to enhance their degrees and increase their job opportunities by simultaneously studying cutting-edge specialty areas focusing on a population, public health issue, or intervention method. Public health professionals already working in these fields also benefit from our certificates.

All certificates are 15 credits and can often be completed without adding additional time to the degree program. In certain cases, internships and/or practicums done in conjunction with a certificate program will count toward this requirement within the department. All applicants must adhere to the school-wide admissions requirements, and must apply through SOPHAS if not already enrolled. Visit www.publichealth.pitt.edu/certificates for more information.

One example of Pitt Public Health environmental risk assessment is the Allegheny River Stewardship project. This effort by leading researchers, working together with concerned citizens of the Alle-Kiski Valley river communities, seeks to determine the sources and types of river pollutants by monitoring the levels of toxins in fish living in the river.
Community-based study allows researchers to address community understanding of health problems to tailor interventions and health education through partnership with community members. Communities are generally defined as those that share a unit of identity (e.g. social ties, geographical locations).

The certificate in Community-Based Participatory Research and Practice (CBPRP) includes courses in community health, community-based participatory research, community engaged research methods, and community leadership. It also includes a six-credit internship, matching students with a local community agency. Together, the student, the agency, and the certificate program field coordinator identify community public health needs and work with community members to address identified needs. This certificate prepares students for careers in CBPRP.

This program also provides understanding of the role of environmental law in directing risk assessment activities and applying risk assessment results to the protection of public health. It aims to impart proficiency in the risk sciences to individuals who desire positions requiring the application of risk assessment strategies or who already have such positions and are seeking to strengthen their professional competency.

By learning the processes and pathways of environmental exposures and how they reach human populations, students understand the impact of the environment on human health and learn to assess and estimate risk. Students will learn about the impact of the environment on human health and how it is manifested both at the organ level and at the cellular level; will learn to integrate this information into the processes of risk assessment to determine science-based risk estimates; will understand the role of environmental law in directing risk assessment activities; and will apply risk assessment results to the protection of the public.
CERTIFICATE IN EVALUATION OF PUBLIC HEALTH PROGRAMS

Students are trained in the application of both quantitative and qualitative methods for evaluation, are exposed to the newest cutting-edge strategies, and have the opportunity to participate directly on interdisciplinary evaluation teams of actual community-based projects. Graduates with a specialization in program evaluation in public health have expanded opportunities for employment in organizations such as health departments and ministries of health, health and hospital systems, educational programs, philanthropic foundations, and consulting firms.

The certificate includes a six-credit internship where students work on an evaluation project as part of an interdisciplinary team managed by an expert in the field of program evaluation. Examples include: evaluation of falls prevention interventions in residential programs for the elderly, assisting in implementation and evaluation of specialized services for young mothers and their children, monitoring and providing evaluation technical assistance to community-based smoking prevention and cessation programs, and assisting in development of methodologies for the evaluation of disaster response efforts.

Demand for comprehensive program evaluations is rising in a range of public and private organizations dealing with the health and social welfare needs of populations in the U.S. as well as worldwide.

CERTIFICATE IN GLOBAL HEALTH

Global health refers to health issues that transcend national boundaries. It is a field that, today, faces unprecedented challenges brought on by issues such as shifting immigration patterns, climate change, conflict, and global commerce. The Global Health Certificate prepares students for occupations in public health, health care, and affiliated fields that increasingly demand interdisciplinary, cross-cultural, and international thinking skills and competence in responding to challenges brought on by this dynamic global environment.

Requirements include four core courses (8 credits), a research methods course, an elective course, and a field practicum that is coordinated with the department practicum requirement and focuses on global health. Students have the opportunity to complete this global health practicum in the form of local opportunities or in an international setting. No overlap for the certificate and degree is permitted for the 8 core course credits.

In addition to academic course focus on global health, certificate students also have the opportunity to attend numerous global health lectures and events throughout the academic year, engage in interest-based student groups, and participate in multiple global health career workshops and information sessions.

CERTIFICATE IN HEALTH CARE SYSTEMS ENGINEERING

Health care systems engineering brings together engineers and health care professionals to focus on improving health care operations. Offered jointly by Pitt Public Health and the Swanson School of Engineering, this certificate is designed for students in the Department of Health Policy and Management (Pitt Public Health) and the Department of Industrial Engineering (Swanson) and provides students with specific experiences and analytical tools required for effective problem solving relative to quality improvement and process engineering in the health care industry.

Students are equipped to serve as leaders in addressing the challenges health care faces in the twenty-first century. Health care management students will learn engineering principles, models, and tools following a systems approach to analysis, problem solving, and project implementation while engineering students gain knowledge of health care operations, the organizational culture, and the strategic issues facing the industry. With a focus on innovation, effectiveness, and efficiency in health care and public health, the certificate
Some of the emerging issues in global health are health and climate change, food security, H1N1 influenza, international trade, and cancer in developing countries.

According to the CDC, “As the targets of public health actions have expanded beyond infectious diseases to include chronic diseases, violence, emerging pathogens, threats of bioterrorism, and the social contexts that influence health disparities, the task of evaluation has become more complex.” This certificate will train you to meet those complex and ever-changing needs.

Advancements in technology along with changes in economic models and government policies create a need for reformed health care systems with improved quality and reduced cost. Students will have the opportunity to work with a health care provider to improve patient flow across hospital departments.
Trusted community members such as barbers and beauticians are effective vehicles for disseminating accurate, evidence-based health promotion messages, especially relating to preventable diseases. Since 2002 the Take a Health Professional to the People initiative has brought health professionals to the African American community.

HSLM students will have an opportunity to improve staff turnover in hospital departments by engaging staff in job redesign and the development of performance incentives.

As one of only a few such existing programs, the LGBT certificate teaches students to use public health skills to address disparities and demonstrate cultural competency for the provision of health care, preventative services, and research in LGBT populations as well as subpopulations such as those further defined by race/ethnicity, age, social status, urban/rural dwelling, handicap, etc.
CERTIFICATE IN HEALTH EQUITY

Health equity includes fairness and justice in both health care and in the social and economic conditions that impact health. Achieving health equity means allowing all people to attain their full health potential, eliminating health disparities. Language barriers, targeted marketing, stereotypical medical models, and uninformed policies are just a few of the factors that perpetuate health disparities.

This innovative certificate program was created to address the systemic root causes of health disparities. While racial and ethnic health disparities are examples of the consequences of social and economic disadvantages, disparities may also be related to sexual orientation, religion, gender, native language, age, and disability status. The certificate provides students with an academic foundation for achieving health equity through assessing the complexity of inequities among diverse groups of marginalized populations, mobilizing communities where disparities exist, developing culturally tailored interventions, and advocating for healthy public policy.

This program includes the courses Overview of Health Equity, Introduction to Community Health, Health Equity Research and Practice, and Integrative Seminar in Health Equity.

CERTIFICATE IN HEALTH SYSTEMS LEADERSHIP AND MANAGEMENT

The field of health systems leadership and management develops leaders who can transform their local health care organizations into efficient, integrated delivery systems that reward providers and payers for attaining desired outcomes. Forerunners in the field recognize that the success of a health care organization comes not only from the administration but also those that provide care and monitor the quality of services.

Future medical directors, quality officers, department chiefs, and other leaders of health care organizations will get focused training that enhances their competencies in transformation, execution, and interpersonal skills. Students complete foundational coursework in health care finance, health policy analysis, quality assessment, leadership theory, quality and patient safety, and the strategic management of health care organizations. The certificate also includes an applied research project.

Applicants have an advanced health care provider degree (e.g., MD, RN, PharmD, PT, OT), job experience, and stated career plans.

CERTIFICATE IN LESBIAN, GAY, BISEXUAL, AND TRANSGENDER INDIVIDUALS’ HEALTH AND WELLNESS

Social, cultural, and individual factors specifically influence the health and wellbeing of LGBT communities. The certificate builds skills for design, implementation, and evaluation of programs to improve health levels among LGBT populations as well as the conduct of intervention research, epidemiological research, and policy analysis to enhance the health and well-being of individuals related to sexual orientation and/or gender identity/presentation. Graduates will be well prepared to assume positions in LGBT health-related programs, or develop LGBT programs within current programs.

Members of the Center for LGBT Health Research provide multidisciplinary and collaborative opportunities within the academic medical center and the local community. Faculty members also work collaboratively with faculty at other universities and leaders in LGBT public health across the nation, providing additional research opportunities for students. The certificate works closely with the center to identify and monitor appropriate optional practica and evaluate student performance. Students are required to submit a written thesis or project related to LGBT health and wellness and to present their work to peers and center members.
CERTIFICATE IN PUBLIC HEALTH GENETICS

Current advances in genetics are occurring so rapidly that they challenge our collective ability to respond to the many social, legal, ethical, and policy implications that they generate. Consequently, there is a compelling need to prepare future public health professionals in the biology, technology, applications, responsibilities, and issues of genetics information, which will play an increasing role in our understanding of health and disease. All areas of public health can be improved and expanded by examining the role of genetics in public health.

Students enrolled in this certificate program are trained to incorporate knowledge of how genes, together with the environment and behavior, influence health and then to apply this insight into their area of practice or research. This certificate offers interdisciplinary training in genetics, risk assessment, and communication and may include three credits of seminar, project, or practicum work. All students take Public Health Genetics and choose at least two courses among Human Population Genetics, Introduction to Human Biochemical and Molecular Genetics, Molecular Genetics of Human Inherited Disease, and Chromosomes and Human Diseases.
The CDC has made a priority of integrating genetics and genomics into public health policy and programs at the national, state, and local levels. Key issues of planning, workforce training, expansions of surveillance systems, health policy development, and changes in disease prevention programs are important components of the CDC’s current and planned activities in public health genetics.
CENTERS, INSTITUTES, AND LABORATORIES

These centers within Pitt Public Health and the University of Pittsburgh allow students to pursue in-depth research projects or assist in the translation of research findings into public health practice and policy.

AIDS EDUCATION AND TRAINING CENTER  
www.pamaaetc.org
This center provides HIV/AIDS-related training and technical assistance to health care providers in Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. The purpose of this project is to increase the providers' capacity to provide high-quality HIV/AIDS care within the region's health care systems.

CENTER FOR AGING AND POPULATION HEALTH  
www.caph.pitt.edu
CAPH strives to generate new solutions to the challenges of an aging society by conducting population-based research that promotes healthy aging, longevity, and prevention of disability. They focus on optimizing health in older adults by emphasizing health promotion and disease prevention. CAPH orchestrates epidemiologic and public health research on aging, trains professionals in population research methodology, and conducts community outreach.

CENTER FOR ENVIRONMENTAL ONCOLOGY  
www.environmentaloncology.org
This center was formed to improve the understanding of avoidable causes of cancer development and recurrence and employs a novel interdisciplinary approach to assess and modify environmental factors linked to cancer, providing infrastructure and state-of-the-art technology to translate basic research findings into effective educational outreach for health professionals and the public.

CENTER FOR HEALTH EQUITY  
www.cmh.pitt.edu
CHE is responsible for providing leadership and coordination of research, teaching, and practice activities focused on the elimination of health inequities or disparities, with the ultimate goal of eliminating excess mortality among populations suffering from health disparities. The center provides technical assistance to research investigators on cultural competence and the recruitment of minority populations to public health and biomedical research. The center is committed to community engagement research as the foundation for all efforts.

CENTER FOR HEALTHY ENVIRONMENTS AND COMMUNITIES  
www.chec.pitt.edu
CHEC strives to improve environmental health in western Pennsylvania through a community-based approach to social and physical aspects of local environmental health. The center's goals are to improve access to local environmental health data, to create opportunities for collaboration and education on environmental health issues, and to conduct research and outreach activities that empower people to improve their own lives and neighborhoods.

CENTER FOR LGBT HEALTH RESEARCH  
www.lgbtlres.pitt.edu
Center members carry out a number of research projects focusing on the relationship between sexual orientation and health, including studies of cardiovascular disease among lesbians and nonlesbians, substance abuse among transgendered people, bullying of gay youth, and HIV epidemiology and prevention among gay men. Center faculty collaborate with other University researchers to assist them in examining sexual orientation in their own studies.

CENTER FOR OCCUPATIONAL BIOSTATISTICS AND EPIDEMIOLOGY  
cobe.biostat.pitt.edu
COBE's mission is to build on Pitt Public Health's successful, long-standing history in developing and applying biostatistical methods to the study of workplace exposures and health outcomes. Research focuses on occupational studies to explore the long-term health effects of employment in various occupations, and also investigates health outcomes in communities exposed to industrial pollutants or hazardous waste site materials.

CENTER FOR PUBLIC HEALTH PRACTICE  
www.cphp.pitt.edu
CPHP focuses on building the link between the academic and practice arenas of public health. Faculty provide practice-oriented teaching through the Certificate in Public Health Preparedness and numerous Pitt Public Health courses. Their practice-based research focuses on public health law and policy, workforce development, and preparedness and emergency response systems. The center also manages two federally funded training centers as well as community-based interventions.

CENTER FOR RURAL HEALTH PRACTICE  
www.upb.pitt.edu/crhp.aspx
This center provides state and national leadership in the
“Health disparities adversely affect groups of people who have experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, mental health, cognitive, sensory, or physical disability, sexual orientation, geography, or other characteristics historically linked to discrimination or exclusion.” —from the U.S. Healthy People 2020 initiative.
Pitt Public Health researchers recently published findings indicating that proper planning before the introduction of new vaccines into a developing country’s active immunization program could prevent storage problems and transportation bottlenecks that decrease availability of existing vaccines by as much as two-thirds. Computational models can assess the evolving needs of the vaccine supply chain—or the series of steps required to get a vaccine from the manufacturer to the target population.
emerging field of rural and public health. Within the University system, the center works to identify and articulate rural health issues and engage University of Pittsburgh colleges and schools in addressing those issues and formulating policy recommendations for the improvement of rural health systems.

**DIABETES PREVENTION SUPPORT CENTER**
*www.diabetesprevention.pitt.edu*
This center is one of the first in the country specifically developed to address the diabetes epidemic through evidence-based prevention intervention programs. The center provides education, training, and support to health professionals for program delivery in the community, and is a resource for students and faculty alike at the University and beyond.

**EPIDEMIOLOGY DATA CENTER**
*www.edc.pitt.edu*
The EDC coordinates data management and analysis activities for a number of research projects sponsored by federal agencies and industry and provides a research environment in which complex health questions can be explored and answered using the combined tools of biology and statistics. The center establishes collaborations with clinicians to design, conduct, and analyze the data from multi-center, randomized clinical trials, and epidemiologic cohort studies. To contribute to the development of new knowledge, the EDC develops and refines data collection, data management, computing, and statistical methods, with the ultimate goal of advancing treatment and prevention of disease.

**HEALTH POLICY INSTITUTE**
*www.healthpolicyinstitute.pitt.edu*
Health care executives and board members, as well as public policy makers, recognize HPI as a reliable regional resource dedicated to improved health care decision making. Their Governance Briefings were developed in response to the increasingly difficult challenges facing those who govern the region’s health care organizations. HPI also provides analytical and educational activities, publications, and presentations to help improve management and governance decisions.

**MODELS OF INFECTIOUS DISEASE AGENT STUDY**
*www.midas.pitt.edu*
MIDAS is a collaborative network of research scientists who use computational, statistical, and mathematical models to understand infectious disease dynamics and thereby assist the nation to prepare for, detect, and respond to infectious disease threats.

**PENNYSYLVANIA PUBLIC HEALTH TRAINING CENTER**
*www.paphtc.pitt.edu*
PAPHTC is part of the national network of public health training centers whose goal is to improve the nation’s public health systems by strengthening the technical, scientific, managerial, and leadership competencies and capabilities of the current and future public health workforce.

**PUBLIC HEALTH ADAPTIVE SYSTEMS STUDIES**
*www.phasys.pitt.edu*
PHASYS conducts research to develop criteria and generate indicators to measure the effectiveness and efficiency of preparedness planning and emergency response, benefiting decision making in both evidence-based preparedness planning and information-based emergency response decision making. PHASYS is also building public health systems research capacity on preparedness and emergency response by awarding funding to new investigators.

**PUBLIC HEALTH DYNAMICS LABORATORY**
*www.phdl.pitt.edu*
PHDL creates multidisciplinary approaches to using various computational modeling techniques for problems in public health, including the dynamics of infectious disease, the impact of epidemics on public health delivery systems, and how social factors affect health. The lab also serves as a link between Pitt Public Health, the University of Pittsburgh Center for Simulation and Modeling, and the Pittsburgh Supercomputing Center. PHDL welcomes queries from students interested in advancing computational approaches to problems in public health.

**UNIVERSITY OF PITTSBURGH ACADEMIC CONSORTIUM FOR EXCELLENCE IN ENVIRONMENTAL PUBLIC HEALTH TRACKING**
*www.upace-epht.publichealth.pitt.edu*
UPACE-EPHT establishes a regional and national academic partner for local and state public health agencies to enhance environmental public health surveillance and to assist in the development of a national, integrated environmental public health tracking network. UPACE-EPHT is designed to (1) facilitate environmental health capacity building, (2) evaluate existing environmental health surveillance and data linkage methodologies, (3) develop innovative strategies and tools to assess potential associations between environmental hazards and exposure and health effects, and (4) conduct epidemiological research based on environmental and health data made available and shared within the tracking network.

**UNIVERSITY OF PITTSBURGH CENTER FOR GLOBAL HEALTH**
*www.globalhealth.pitt.edu*
Under the leadership of Donald S. Burke, MD, associate vice-chancellor for global health and dean of Pitt Public Health, the center’s mission is to address health issues affecting global populations. This mission is carried out through four goals: (1) foster innovative, interdisciplinary global health research, (2) create the next generation of global health leaders and scholars, (3) facilitate sustained global health partnerships, and (4) promote translation of global health research findings into policy and practice. The center supports students by providing guidance on global health resources at Pitt and beyond—such as student interest groups; education and training programs; internship, fellowship, and employment opportunities; travel resources; funding sources; and events.
ADMISSIONS PROCESS AND REQUIREMENTS

The Pitt Public Health Office of Student Affairs is here to help you through your education from application to admission to graduation. The admissions process is detailed throughout these pages, but if you have questions, call us at 412-624-3002 or e-mail stuaff@pitt.edu.

APPLICATION INSTRUCTIONS

Degree applicants must apply through the on-line Schools of Public Health Application Service (SOPHAS).

Complete application and submit the following directly to SOPHAS at www.sophas.org:
• application fee
• personal statement
• letters of recommendation
• official transcripts for ALL education in the U.S.
• course-by-course WES evaluation for ALL education outside of the U.S. (not including study abroad)
• official GRE scores to Pitt Public Health code 4234 (no department code)
• official TOEFL scores (if applicable) to SOPHAS code 5688

We will receive your application only after all required materials are received by SOPHAS. Applicants should periodically check the status of their applications within SOPHAS to verify receipt of all materials.

Non-degree applicants may enroll in 12 credits before applying to a degree program. To apply:
• visit SOPHAS Express, sophasexpress.unicas.com
  a. create an account and then go into “My Application”
  b. under “My Application” complete all required sections (those marked with an asterisk)
  c. under “Designations” – “Add Programs” select “University of Pittsburgh” from the drop-down school list and select “non-degree” as the program level
  d. select the appropriate non-degree designation for the term to which you are applying
• pay application fee online
• submit official transcripts for all education in the U.S. to the Pitt Public Health Office of Student Affairs
• submit a course-by-course WES evaluation for all education outside the U.S. to the Pitt Public Health Office of Student Affairs
• submit official TOEFL scores (if applicable) to the University of Pittsburgh, institution code 2927, with no department code

International applicants must note the following:

WES Evaluations
• We require all education from outside of the U.S. to be evaluated by World Education Services (WES). Applicants must submit this evaluation through SOPHAS (non-degree applicants should submit to the Office of Student Affairs).

English Proficiency
• Official TOEFL exam score report must be submitted from the Educational Testing Service using either SOPHAS code 5688 (degree applicants) or University of Pittsburgh code 2927 (non-degree applicants). Copies of score reports are not accepted. The University of Pittsburgh requires a minimum TOEFL score of 550 on the written test, or 80 on the internet test.
• In lieu of TOEFL scores, official IELTS score reports may be submitted to Pitt Public Health through IELTS. Copies of score reports are not accepted. The minimum IELTS score accepted is Band 6.5, and applicants must take both the academic writing and reading modules of the test.
• Either TOEFL or IELTS must be taken within two years of application

Visa-Related Requirements
• International students must adhere to application deadlines to guarantee application review in time to meet the University’s I-20 deadlines.
• If accepted, international students must provide additional information required for I-20 processing: (1) confirmation of intention to enroll, (2) bank statements, (3) the International Graduate Student Supplemental Form, and (4) Certification of Financial Resources and Financial Responsibility. It is important to review these documents carefully, as financial aid and scholarships are typically not available to international students. These requirements and supporting documents are provided with acceptance letters and may not be submitted until an offer of admission is received. Additional information on immigration and visa requirements can be found at www.ois.pitt.edu.

APPLICATION DEADLINES

For all programs, the fall application deadline is January 15. In addition, the following programs offer spring and/or summer admission*:

Behavioral and community health sciences
• MPH: October 15, spring admission
Environmental and occupational health
• MPH and DrPH: October 15, spring admission
• DrPH: rolling, summer admission
Human genetics
• MS, MPH, PhD: October 15, spring admission
• Genetic counseling MS: fall admission only
Multidisciplinary master of public health
• October 15, spring admission and rolling summer admission
Certificate programs
October 15, spring admission and rolling summer admission

*International students* must apply by August 1 (spring) or December 1 (summer) for any applicable programs in order to comply with University I-20 deadlines.

Check www.publichealth.pitt.edu for updates.

ADMISSIONS REVIEW

Applicants will be notified by e-mail when a complete application is received by the Pitt Public Health Office of Student Affairs. Those with incomplete applications will be periodically notified by e-mail regarding the status of their application. Departmental review takes on average four to six weeks; however many programs will not start reviewing applications until after their deadline. As soon as an application is returned to the Office of Student Affairs, the applicant will be notified of the admission committee’s decision by e-mail. If accepted, an official offer of admission will be mailed to the applicant.

Note: Departmental committees evaluate applications and make recommendations to the assistant dean for student affairs. That recommendation is not final until the assistant dean for student affairs issues an official letter of acceptance to the applicant.

In the following circumstances, application materials will be kept for one year before being destroyed:
• application remains incomplete
• applicant is not accepted

• applicant is accepted, but does not respond
• applicant is accepted but declines admission

SCHOOL-WIDE PREREQUISITES

Social science: MPH applicants must have six college credits in behavioral and social sciences (with a C or better).

Mathematics: all applicants must have mathematical preparation appropriate for entrance into Principles of Statistical Reasoning, usually consisting of college-level statistics, algebra, or calculus (with a C or better). Advanced placement courses reflected on college transcripts may fulfill this requirement. An ETS administered advanced placement test score of three or higher in calculus or a GRE quantitative score at or above the 70th percentile is also evidence of acceptable preparation.

Biology: while there is no school-wide biology prerequisite, individual programs may have a requirement. Check online departmental requirements for more information.

FREQUENTLY ASKED QUESTIONS

Application process

*How can I help ensure that my application is complete?*
Please follow SOPHAS’ instructions. Failure to do so will cause a delay in receipt of your application. Also, be sure to immediately request your transcripts, WES evaluation (if applicable), GRE and/or TOEFL scores; contact your references. Check back to the SOPHAS Web site to make sure your application is complete. Finally, add donotreply@webadmmit.org and stuaff@pitt.edu to your safe-senders list.

COBE investigators are currently involved in a very large occupational cohort study of jet engine manufacturing workers, one component of which is to evaluate the incidence of central nervous system cancer among employees. This study was the first known to have successfully traced data through multiple state cancer registries, putting the COBE researchers in a unique position to lend their expertise to the successful completion of the cancer incidence studies using this methodology.
and watch for e-mails about your application status.

**Does my application have to be submitted or completed by the deadline?**
A complete application must be submitted by the applicable deadline.

**How will I be notified of my admission decision?**
You will be notified by e-mail with the final decision. If accepted, an official offer of admission will also be mailed.

**Application materials**

**Where should I send my additional application materials?**
*SOPHAS applicants:* Submit recommendations, WES evaluations, and official transcripts to SOPHAS
P.O. Box 9111, Watertown, MA 02471
*Non-degree applicants:* Mail official transcripts to Pitt Public Health Office of Student Affairs
114 Parran Hall, 130 DeSoto Street, Pittsburgh, PA 15261

**Do all of my application materials need to be submitted at the same time?**
*SOPHAS applicants:* follow SOPHAS’ instructions found at www.sophas.org to submit your materials and make sure that processing is not delayed.
*Non-degree applicants:* although we prefer that you submit a complete application, if we receive materials before you have submitted an application, we will keep those items on file for one year from the date received.

Submit all materials in a timely way so that your application can be reviewed quickly.

**Do my official transcripts have to be sent directly by my previous institutions?**
*SOPHAS applicants:* yes. You must request that the registrar of each institution you’ve attended submit an official transcript to SOPHAS. A transcript request form (printed from your application) must accompany each transcript. SOPHAS does not accept transcripts from the applicant.
*Non-degree applicants:* no. Your official transcripts may be submitted by you, but must be in the original sealed envelope from your previous institution when you send them to us.

**What is the minimum GRE score required for admission?**
Pitt Public Health does not have a required score for admission. We recommend that you score in the 50th percentile or higher.

**May I submit a copy of the GRE score report?**
No. Only official score reports through ETS will be accepted.

**What if ETS says that the GRE score report has been sent, but Pitt Public Health has not received it?**
It may take ETS up to three weeks to submit your score report. To ensure that your scores are received, contact ETS and confirm the score report was sent to Graduate School of Public Health code 4234 with no department code.

**How do I request a GRE waiver?**
Before contacting the department, please refer to the GRE requirements on page 38. If the chart indicates that you
may be eligible for a waiver, then request a waiver from the department. If granted, remind the department to notify the admissions manager in writing.

What TOEFL/IELTS score is required for admission?
International students are required to score at least a 550 on the written TOEFL exam or an 80 on the internet-based test. The minimum IELTS score accepted is Band 6.5, and applicants must take the academic writing and reading modules of the test.

What if I do not meet the required TOEFL/IELTS score?
You must retake the exam and meet the score requirement for your application to be reviewed.

May I submit a copy of my TOEFL/IELTS score report?
No. Applicants must have official TOEFL score reports submitted through ETS or official score reports submitted through IELTS.

What if IELTS says my score report has been sent, but Pitt Public Health has not received it?
Contact IELTS directly to verify your scores were sent directly to Pitt Public Health Office of Student Affairs. Do not send official IELTS scores to SOPHAS, as they cannot accept them.

When is the TOEFL/IELTS exam waived for international students?
There are only three circumstances when these will be waived: (1) if you have obtained a degree from a U.S. accredited institution, (2) if you are a citizen of a country in which English is the official language, or (3) if you have completed a degree program at an institution where the language of instruction is English and the official language of the country in which the institution is located is English.

What if I have not met the prerequisite course requirements?
If the department determines that you are otherwise eligible for admission, you may be admitted with the condition that you complete additional coursework before or during your study.

Does an individual providing my reference have to complete the recommendation form?
Yes!

**DEGREE REQUIREMENTS**

Master of Public Health (MPH) and Master of Health Administration (MHA) applicants must possess a U.S. bachelor’s degree from an accredited institution or the equivalent degree from a foreign school and substantial knowledge in a discipline relevant to public health, either through study, experience, or a combination.

Applicants who do not already have a graduate degree must submit scores on the verbal, quantitative, and analytical portions (general test) of the Graduate Record Examination (GRE). A department may require GRE scores by any applicant. In some cases, LSAT, MCAT, or DAT scores may be substituted.

**Multidisciplinary Master of Public Health**
The program is open to holders of doctoral degrees in the health sciences. Advanced medical, dental, and veterinary students are considered on an individual basis. Individuals with extensive experience in health-related fields may be considered after review and approval of the MMPH advisory committee.

**Master of Science** applicants must possess:
- a bachelor’s degree in arts, science, engineering, or nursing, or an MD, DDS, or DVM from an approved U.S. school, or equivalent foreign degree
- evidence of adequate training in the sciences basic to public health (some applicants may be admitted at the discretion of the faculty, making up deficiencies as prescribed)

Applicants may be required to take any examinations deemed necessary to satisfy the faculty as to the applicants’ qualifications. In most cases, official scores from the verbal, quantitative, and analytical portions (general test) of the Graduate Record Examination (GRE) must be submitted.

**Doctor of Public Health** applicants must hold an MPH or a graduate degree in a field relevant to health care or the health sciences, or fulfill admission requirements for the MPH and also have completed the requirements for the MPHh. Applicants also must demonstrate (or have demonstrated previously) ability for leadership in their field, as well as for advancement of scientific knowledge. Applicants must have the approval of the head of the program and of the department in which they propose to do a dissertation.

Most DrPH applicants are required to submit scores on the verbal, quantitative, and analytical portions (general test) of the Graduate Record Examination (GRE).

**Doctor of Philosophy** applicants must:
- possess a graduate or U.S. bachelor’s degree in a field relevant to the PhD program to which they are applying
- have taken sufficient courses in mathematics and the biological and social sciences
- have taken sufficient prerequisite courses in the field to which they are applying

Applicants who do not already have a graduate degree must submit scores on the verbal, quantitative, and analytical portions of the Graduate Record Examination (GRE). A department may also require submission of GRE scores by any applicant. In some cases, LSAT, MCAT, or DAT scores may be submitted.

**Non-degree status** applicants must have a U.S. bachelor’s degree or the equivalent foreign degree and may enroll in 12 credits of non-degree study before applying to a degree-seeking program.
### GRE REQUIREMENTS

<table>
<thead>
<tr>
<th>Behavioral and community health sciences</th>
<th>Master of Science (MS)</th>
<th>Master of Public Health (MPH)</th>
<th>Master of Health Administration (MHA/PhD)</th>
<th>Doctor of Philosophy (PhD)</th>
<th>Doctor of Public Health (DrPH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biostatistics</td>
<td>Required</td>
<td>Required</td>
<td>x</td>
<td>Required</td>
<td>x</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Required**</td>
<td>Required**</td>
<td>x</td>
<td>Required**</td>
<td>x</td>
</tr>
<tr>
<td>Health policy and management</td>
<td>Required</td>
<td>Required**</td>
<td>Required**</td>
<td>Required**</td>
<td>Required**</td>
</tr>
<tr>
<td>Human genetics</td>
<td>Required*</td>
<td>Required**</td>
<td>Required**</td>
<td>Required*</td>
<td>x</td>
</tr>
<tr>
<td>Infectious diseases and microbiology</td>
<td>Required*</td>
<td>Required**</td>
<td>Required**</td>
<td>Required**</td>
<td>x</td>
</tr>
<tr>
<td>Multidisciplinary MPH program</td>
<td>x</td>
<td>Required**</td>
<td>Required**</td>
<td>Required**</td>
<td>x</td>
</tr>
</tbody>
</table>

* Applicants who have obtained a graduate degree may contact the department to which they are applying and request that the GRE requirement be waived. There is no guarantee that any department will grant this request. However, if the department agrees to waive the GRE requirement, it is the applicant's responsibility to remind the department that they must send a written memo to the admissions manager, informing her of this waiver.

** MCAT or DAT may usually be substituted for GRE; all international applicants must submit GRE scores.

Certificate programs also require GRE scores.

Please be advised that each department reserves the right to require any applicant to submit an official GRE score report, even if the chart above indicates that under specified circumstances the GRE is generally waived.

No photocopies of GRE score reports will be accepted. Please select Pitt Public Health code 4234 to have your scores sent directly from ETS. Department codes are not used, and adding any code to 4234 will delay the receipt of your scores.

---

### TUITION, FEES, AND FINANCIAL AID

<table>
<thead>
<tr>
<th>Fall and spring terms, 2012–13</th>
<th>Full-time students (9-15 credits/term)</th>
<th>Part-time students (fewer than 9 credits/term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA residents</td>
<td>$11,336 per term</td>
<td>$925 per credit</td>
</tr>
<tr>
<td>Out-of-state residents</td>
<td>$18,575 per term</td>
<td>$1,523 per credit</td>
</tr>
<tr>
<td>Full-time doctoral research</td>
<td></td>
<td>$500 plus fees</td>
</tr>
</tbody>
</table>

** Summer term, 2012 ** billing on a per-credit basis

* For fall and spring terms, an additional per-credit charge applies to every credit over 15.

** U.S. citizens (or immigrant or permanent resident visa holders) who have lived in Pennsylvania continuously for 12 months while not attending any college or university in the state. Contact the Tuition Eligibility Office, 251 Thackeray Hall, 412-624-7610 with questions.

Various fees are also associated with tuition, totaling $370 (full-time) and $200 (part-time). Rates at time of printing. For updated information, visit www.ir.pitt.edu/tuition/tuitionrates.php.

** GSAs, GSRs, TAs:** Graduate student researchers (GSRs), graduate student assistants (GSAs), and teaching assistants (TAs) receive a tuition scholarship, monthly stipend, and individual health insurance coverage in return for specified duties while gaining teaching or research experience under faculty guidance. Appointments may be full or part-time, and benefits are proportionate. Full appointment may require 20 or more hours of work per week. Students may seek a GSR, GSA, or TA position anywhere in the University, although departments generally award available positions to their own students. Each department has a limited number of these assistantships, usually awarded to doctoral students. However, some master's students may secure a GSR. For more information or to check on the status of a GSR application, contact the department student services liaison.

**Student loans:** Student loans are available to most U.S. graduate students registered for five or more credits per term. To apply for student loans, you must submit the Federal Application for Student Aid (FAFSA) form to the federal government. Once you have done this, and if you are admitted to the school, visit www.oafa.pitt.edu/fahome.aspx for further instructions.

Please note that there is a section of the Financial Aid Application Supplement (FAAS) that must be completed by the Office of Student Affairs.
Hourly work: Through Pitt Bridges, career services’ online job matching service, students have access to summer jobs and campus employment opportunities that may exist within Pitt Public Health departments or at other locations. Students can also check in with their departments, as hourly jobs can turn up at a moment’s notice with the awarding of new research grants.

Scholarships and other opportunities: Financial aid may consist of scholarships, traineeships, assistantships, fellowships, or loans from the department, the school, the University, or external sources. Although not all students are guaranteed funding and certain opportunities may be limited, we advise students seeking aid to check regularly with their departments, read the Weekly Update for periodic announcement of scholarships, and to read www.publichealth.pitt.edu/financialaid.