

## **MEMBERS OF THE SELF-STUDY EXECUTIVE COMMITTEE**

Chair: David F. Cruess, PhD  
Professor

Tomoko I. Hooper, MD, MPH  
Assist Professor

Gary D. Gackstetter, DVM, MPH, PhD  
Associate Professor

## **MEMBERS OF THE SELF-STUDY SMALL WORKING GROUP**

Chair: David F. Cruess, PhD  
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Tomoko I. Hooper, MD, MPH  
Assist Professor

Gary D. Gackstetter, DVM, MPH, PhD  
Associate Professor

Martha Turner, RN, PhD  
Assistant Professor

Richard J. Thomas, MD, MPH  
Associate Professor

Galen Barbour, MD, MPH  
Professor

Beverly B. Thompson, MHSA  
Administrative Director, Center for Population Health

**MEMBERS OF THE INITIAL SELF-STUDY WORKING GROUP**  
**June 2005**

<u>Chair:</u>	David F. Cruess, PhD Professor
<u>Criterion I:</u>	Tomoko I. Hooper, MD, MPH Assistant Professor
<u>Criterion II:</u>	Kenneth E. Kinnamon, PhD Professor
<u>Criterion III:</u>	Martha Turner, PhD Assistant Professor
<u>Criterion IV:</u>	Patrick Carney, PhD Professor
	Thomas Neal, MD, MPH Assistant Professor
<u>Criterion V:</u>	Robert J. Lipnick, ScD Assistant Professor
	Martha Turner, PhD Assistant Professor
<u>Criterion VI:</u>	Donald R. Roberts, PhD Professor
<u>Criterion VII:</u>	Richard J. Thomas, MD, MPH Assistant Professor
<u>Criterion VIII:</u>	Richard G. Andre, PhD Professor
<u>Criterion IX:</u>	Robert Fitz, MS, MPH Assistant Professor
	William P. Butler, MD, MTM&H Assistant Professor
<u>Criterion X:</u>	Galen L. Barbour, MD Professor
<u>Ex-Officio Members:</u>	Gary D. Gackstetter, DVM, MPH, PhD Associate Professor

## **ACKNOWLEDGMENTS**

**June 2005**

The CEPH Accreditation Self-Study Committee, Department of Preventive Medicine and Biometrics (PMB), wishes to thank Ms Lucia Shercliffe, MHR, for her outstanding assistance with the accreditation self-study process. The PMB Department faculty also thanks the practicum site preceptors and adjunct faculty for their support and significant contributions to our Graduate Programs in Public Health.

# INTRODUCTION

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## **General Description of Our Graduate Programs in Public Health**

The Uniformed Services University of the Health Sciences (USUHS) was established by Congress in 1972 and was authorized to develop advanced degree programs in the various health sciences with a priority on preparing qualified individuals for careers as Medical Officers in the Uniformed Services. As the Nation's only Federal health sciences educational facility, we are committed to excellence in military medicine and public health during peacetime and during war, fulfilling a unique mission among U.S. Schools of Medicine.

The University's F. Edward Hébert School of Medicine and the Graduate School of Nursing are resources of the Surgeons General of the Army, Navy, Air Force, and the U.S. Public Health Service. The University faculty serves as educators, researchers, and consultants for military medical readiness, disaster relief and emergency preparedness, and force health protection issues. Located on the grounds of the National Naval Medical Center in Bethesda, Maryland, we are conveniently close to several federal health facilities, including the National Institutes of Health, Walter Reed Army Medical Center, the National Naval Medical Center, the Armed Forces Institute of Pathology, the Armed Forces Radiobiology Research Institute, the National Library of Medicine, to mention just a few.

Our Graduate Programs in Public Health are a major component of the educational enterprise within the F. Edward Hébert School of Medicine. The Department of Preventive Medicine and Biometrics plays a key role in the education and training of physicians dedicated to careers in public service with expertise in military medicine, preventive medicine, tropical medicine, and disaster medicine. The mission of the Department's Graduate Programs in Public Health is to produce knowledgeable and highly skilled public health professionals in support of the global health missions of the Uniformed Services.

The graduate education programs at USUHS are fully accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. In addition, the Graduate Programs in Public Health within the Department of Preventive Medicine and Biometrics are fully accredited by the Council on Education for Public Health, the national accrediting organization for Programs and Schools of Public Health, and our Master of Science in Public Health is also fully accredited by the Accreditation Board for Engineering and Technology (ABET). The cornerstone of our Graduate Programs is our Master of Public Health degree program. In 2003, 2004, and 2005, USUHS was ranked among the top programs in the country by US News and World Report.

All the Graduate Programs in the Department of Preventive Medicine and Biometrics are conducted in facilities on the USUHS campus. Well-equipped modern laboratories support the tropical medicine and environmental health programs. Automated data-processing equipment is available at the University and within the Department. The affiliated teaching hospitals in the Washington area include the Walter Reed Army Medical Center, the National Naval Medical Center, and the Malcolm Grow Air Force Medical Center. The affiliated overseas laboratories include the United States Army and Navy biomedical research laboratories in Bangkok, Thailand; Nairobi, Kenya; Cairo, Egypt; Jakarta, Indonesia; and Lima, Peru. In addition, the

University currently has an affiliation with the Ministry of Health Laboratory in Belize City, Belize. A formal affiliation with the US Army Center for Health Promotion and Preventive Medicine provides even more opportunities for our students.

## **Degree Programs**

The Department of Preventive Medicine and Biometrics offers programs of study leading to the degrees of Master of Public Health (MPH), Master of Tropical Medicine and Hygiene (MTM&H), Master of Science in Public Health (MSPH), as well as Doctor of Public Health (DrPH), and Doctor of Philosophy (PhD) in the areas of Environmental Health Science and Medical Zoology. The total number of students usually accepted into the MPH, MTM&H, and MSPH programs during any given academic year is approximately 40.

The MPH degree program provides a broad didactic experience in public health and preventive medicine. It is a rigorous curriculum with a quantitative focus, is designed to be completed within 12 months, and is primarily for individuals planning careers in Preventive Medicine and Public Health within the Uniformed Services. An MPH degree or its academic equivalent is a specific requirement for physicians seeking residency training and board certification in Aerospace Medicine, General Preventive Medicine and Public Health, Occupational and Environmental Medicine, and several other public health specialties. MPH program matriculants are typically physicians, who wish to apply the disciplines of epidemiology and biostatistics to their expertise in other medical specialty areas. Other matriculants include veterinarians, dentists, dietitians, microbiologists, entomologists, environmental scientists, nurses, and pharmacists, as well as other health professionals. Uniformed personnel with education or experience in health-related disciplines are given priority as candidates for admission.

The goal of the MPH program is to provide each student with the necessary knowledge and skills to practice as competent public health or preventive medicine officers in one of the Uniformed Services. Graduates are expected to use their acquired quantitative and analytical skills in biostatistics and epidemiology to identify and assess community health needs and to investigate the impact of biological, environmental, and/or behavioral factors to solve public health problems. Each graduate is also expected to understand the components, operations, and financing of health delivery services, particularly those in the public sector, and have the administrative skills to plan, analyze, manage, and improve public health programs for the Uniformed Services. In addition to the required core courses, graduates are expected to complete elective coursework in an area of concentration and to demonstrate their ability to apply the knowledge and skills acquired in the classroom to their chosen field.

The goal of the MTM&H program is to provide each student with the necessary academic background to practice as a competent public health officer and tropical disease expert in one of the Uniformed Services. The program is designed for medical officers desiring specific preparation for assignment to tropical medicine clinical, research, and teaching positions. Graduates of the MTM&H program acquire the same quantitative and analytical skills in biostatistics and epidemiology as MPH graduates. In addition, graduates acquire in-depth knowledge of the agents of tropical diseases, medical parasitology, and vector biology and have the opportunity for hands-on experience with the epidemiology, pathology, diagnosis, management, treatment, prevention and control of selected tropical diseases. The MTM&H

degree also represents suitable academic preparation for residency training and board certification in General Preventive Medicine/Public Health.

The MPH and MTM&H are 12-month degree programs and require a minimum of 60 quarter credit hours for graduation. The MPH degree requires specific core courses, including epidemiology, biostatistics, environmental health, health services administration, and social and behavioral sciences. The minimum credit load per quarter required for a full-time student is 12, the maximum allowed is usually 22, and the average load is 18-20 credits. The satisfactory completion of an independent project and a practicum is also required. The culminating experience for the MPH degree can take a number of forms. The overall objective is the synthesis, integration, and application of core public health concepts and principles to solve public health problems.

In addition to completing the MPH core courses, the MTM&H student must also complete additional required courses in tropical medicine and tropical public health. A clinical rotation of at least six weeks is spent at an affiliated overseas facility and involves diagnosis and treatment, as well as field study of diseases endemic to tropical regions. This overseas rotation satisfies the requirement for a practicum experience. The MTM&H curriculum offers more specialization and less opportunity for elective courses than the MPH degree program.

The American Society of Tropical Medicine and Hygiene (ASTMH) has certified a 12-week course, "Training in Clinical Tropical Medicine and Travelers' Health," directed by the Division of Tropical Public Health. This training is offered in the Spring Quarter and fulfills the eligibility requirements for physicians to take the ASTMH Certificate of Knowledge Examination. This comprehensive lecture, seminar, laboratory, and case-based curriculum incorporate ongoing courses which are a part of the MPH/MTM&H program.

Finally, the two-year, thesis-based MSPH program provides students with the necessary academic background to function as public health specialists in environmental health sciences, industrial hygiene, health physics, or medical entomology within the Uniformed Services. Graduates of this program acquire the same basic knowledge and skills as graduates of the MPH program, plus in-depth knowledge in a selected area of concentration. Each MSPH graduate gains competence in the recognition, evaluation, and control of a variety of public health problems and has the ability to develop policy initiatives in response to these issues. The MSPH degree also provides suitable academic preparation for board certification in selected disciplines of public health. Prior education or experience in the biological or physical sciences or in a health-related field is required to be considered for admission.

## **Student Profile**

Our public health curriculum is rigorous, quantitatively focused, and relevant to needs of the Uniformed Services. Because our students are experienced and focused, we set our expectations high. The vast majority of our students come from the Uniformed Services (Army, Navy, Air Force, and Public Health Service). As a result, they return to their respective services once they complete their graduate education or residency program(s). Because our students are sent to us and return to their respective Services, our Graduate Programs receive both formal and informal feedback from immediate supervisors and senior leadership across the Department of Defense and the Federal Government, all members of our community. Our community includes the more

than two million active service members, stationed overseas and in the U.S., as well as the more than 7 million eligible beneficiaries of the Military Health System. Additionally, members of the Uniformed Services are deployed globally to assist with natural disasters and other humanitarian crises.

### **Response to the Pervious CEPH Site Visit Findings**

Each of the findings and recommendations from the last CEPH site visit in 1997 were reviewed, and processes were developed to address the areas that required strengthening. To specifically address the identified program weaknesses, we took the following actions that were summarized in a letter to CEPH, dated September 16, 1999: (1) Developed mission, goals, and objectives for the PMB Graduate Programs; (2) strengthened the program review and evaluation process; and (3) created a new full-time faculty position and hired a physician, board certified in General Preventive Medicine/Public Health, to develop and implement the MPH practicum program.

The process of developing program mission, goals, and objectives took place over a 10 month period by first establishing an *ad hoc* committee. This committee developed a draft document of appropriate program-level goals and objectives and ensured multiple opportunities for the entire faculty to review and comment before finalizing the document. Learning objectives were developed for each core public health discipline and areas of concentration within our degree programs. A copy of this document was provided to CEPH as an attachment to our interim report in 1999. As part of the current self-study, our Mission, Goals, and Objectives document has been redistributed to all faculty for review and comment.

As part of our plans to strengthen the program review and evaluation process, two new standing committees were created, one for the Masters' programs and one for the Doctoral programs. These committees were tasked with evaluating individual course objectives to determine alignment with our program Mission, Goals, and Objectives. Additionally, exit surveys, designed specifically for graduating MPH students, were initiated in 1999. These exit surveys not only include a written questionnaire, but also a group exit interview conducted by the Director of Graduate Programs, as well as faculty from the Graduate School of Nursing. Each year the suggestions for improvement are evaluated and appropriate changes are made to improve program processes. The Chair receives a report annually on the status of current mechanisms for program evaluation and quality improvement, as well as other areas identified for periodic review.

After a lengthy search and interview process, the Department hired a uniquely qualified Director for the Independent Project and Practicum Programs. Dr Tomoko (Tonie) Hooper is a physician with two masters degrees in public health and is board certified in General Preventive Medicine/Public Health. She also directs a research center focused on population health issues for the military and is an outstanding researcher in her own right. She has developed a set of courses, taught over the whole academic year, that guide each and every student through the entire public health research process.

In summary, since the last CEPH accreditation site visit, our Graduate Programs have undergone considerable growth in the midst of major changes in the leadership of the PMB Department. Our Graduate Programs continue to meet critical public health needs within our community of

Uniformed Services members and, in addition, promote public health values and principles throughout the wider Federal and civilian communities. For example, our students helped collect environmental samples at the Pentagon following the September 11th terrorist attacks, participated in relief efforts for the Asian Tsunami Disaster, contributed to the efforts to rebuild the public health infrastructure of Iraq, and have made significant contributions to local Public Health Departments. Each of the findings and recommendations from the last CEPH site visit has been revisited in the course of our self study.

We are very proud of our current students and graduates, and we look forward to showcasing our Graduate Programs in Public Health.

## MAJOR PMB GRADUATE PROGRAMS MILESTONES

The following chronology highlights significant events within our Department and documents the evolution of our Graduate Programs in Public Health

<u>DATE</u>	<u>EVENT</u>
1972	Uniformed Services University of the Health Sciences established by Congress
1976	Appointment of 1 <sup>st</sup> PMB Department Chair (Dr. Dirk Van Peenen: 1976-1979)
1979	Graduate Programs in Public Health at USUHS established
1980	Appointment of 2 <sup>nd</sup> PMB Department Chair (Dr. Llewellyn Legters: 1980-1997)
1982	Appointment of 1 <sup>st</sup> Graduate Programs Director (Dr. Tom Lamson: 1982-1987)
1982	Initial MPH class enrolled
1983	First graduates of MPH program
1985	Initial accreditation by CEPH Master of Public Health PhD in Med Zoology
1987	Appointment of 2 <sup>nd</sup> Program Director (Dr. Pat Carney: 1987-1991)
1991	Interim review leading to full accreditation for seven-year term
1991	Appointment of 3 <sup>rd</sup> Program Director (Dr. Ken Dixon: 1991-1999)
1994	DrPH program established
1995	CEPH emphasis on a public health practice component for an MPH graduate
1997	Appointment of 3 <sup>rd</sup> PMB Department Chair (Dr. Larry Laughlin: 1997-2002)
1998	CEPH site visit
1998	MSPH degree program established
1998	Ad hoc committee to establish program mission, goals, and objectives
1999	Mission/Goals/Objectives for Graduate Programs established
1999	Appointment of 4 <sup>th</sup> Program Director (Dr. Gary Gackstetter: 1999-2005)
1999	Practicum and Independent Project Coordinator hired
1999	CEPH interim report submitted by PMB Graduate Programs
1999	Maximum accreditation term granted (7 year)
2001	Laboratory Animal Medicine Residency Program moved to new department
2001	Establish additional MPH concentrations Aerospace Physiology International Health Occupational Ergonomics
2001	Establish PhD in EHS program
2002	Appointment of 4 <sup>th</sup> PMB Dept Chair (Dr. Gerald Quinnan: 2003 – present)
2003	ABET accreditation for our MSPH Program
2003	PMB Faculty off-site Strategic Planning: CEPH Accreditation Highest Priority
2005	Appointment of 4 <sup>th</sup> Program Director (Dr. David Cruess 2005 - present)
2005	CEPH accreditation site visit scheduled