



“Vietnam has a good medical health system, but there is room for public health.”

DUC HA

Master's student, Department of Population and International Health

Duc Ha's parents urged him to become a doctor, so he did. As he gained in experience, however, he realized that he might do more good by taking a broader view of health care in Vietnam.

Duc finished his medical studies at Hanoi Medical School in 1996 and worked for several years for a medical supply company. In 1998 he became an officer at the Vietnamese Ministry of Health, responsible for work ranging from administration and coordination to the formulation of national health policy and regulations. Duc comments, "Vietnam has a good medical health system, but there is room for public health."

Seeking the training that would help him improve health policy implementation, Duc won a Warren Buffett Foundation scholarship to HSPH. Here he has been dividing his time between the Department of Population and International Health and the Department of Health Policy and Management. "I want to obtain practical experience from the developing world and applicable knowledge from the developed world," he says. Health care financing, quality of care, and management control are some of his concerns.

Duc will complete the doctor of public health program at Boston University before returning to Vietnam and the ministry of health. He is confident that he can make the system more effective and efficient: "If I can show that my ideas work, they will listen."

DEPARTMENT OF POPULATION AND INTERNATIONAL HEALTH

THE DEPARTMENT OF POPULATION and International Health seeks to improve global health through education, research, and service from a population-based perspective.

The twenty-first century has arrived with complex changes in demographic patterns, disease burdens, and health policies. These changes are affecting all societies, rich and poor, developed and developing. The department's approach to these problems combines the analysis of population and health using quantitative and qualitative methods, the investigation of policies that affect health, and a concern with the politics and ethics of health and development.

The department's members generate knowledge and ideas through their research, strengthen technical and leadership skills through educational programs, and enhance national capacities through collaborative projects, especially in the developing world. In their examination of population and international health issues, department faculty members draw on their disciplinary expertise in many areas: anthropology, biostatistics, demography, ecology, economics, epidemiology, ethics, medicine, political science, reproductive biology, and sociology. The department's research interests span a wide spectrum of topics, including social and economic development, health policy, and demography; design and financing of health care systems;

women's health and children's health; and prevention and control of infectious and chronic diseases. The department has a special concern with questions of health equity and human rights, particularly in relation to health and population issues in developing countries.

Students in the department come with various backgrounds. Many students are from developing countries. All have an interest in the health of disadvantaged populations worldwide.

Degree Programs in Population and International Health

As described below, the department offers both an 80-credit master of science (SM) program and a program leading to the doctor of science (SD) or doctor of public health (DPH) degree. For information on schoolwide requirements for master's and doctoral degrees, see page 58.

In addition to these programs, the department hosts research fellows and midcareer leaders in international health and in research ethics and undertakes cooperative technical projects overseas.

Master of Science in Population and International Health

The department's SM program offers two tracks, each comprising 80 course credits, geared toward preparing individuals for acad-

emic and public service careers, respectively. Students on the academic track generally continue with doctoral work at the end of the master's program; their eventual aim is to work as researchers in academic institutions. Graduates of the professional track pursue a variety of careers in national and international agencies and institutions.

Applicants in both tracks must hold a bachelor's degree or equivalent, although many students already hold advanced degrees in medicine or a social science discipline. The program strongly prefers applicants with relevant work experience in population or international public health.

In both tracks the courses and the thesis work are based on practical aspects of current health and population issues in developing countries and at the same time introduce students to the major theoretical concerns in international health and population. In addition to meeting schoolwide requirements, students acquire a grounding in the concepts and tools used for field survey work, experience with data analysis and qualitative research methods, and familiarity with the classic literature in population and international public health.

The first year of study is devoted to full-time course work. During the summer between the first and second years, students are encouraged to gain practical experience by undertaking an internship. The second year generally involves

a combination of course work and independent research linked to completion of a required master's thesis, which is usually based on the summer internship experience. The thesis provides an opportunity for the student to bring together the conceptual models and analytic skills presented in the courses and to apply them to a single issue. For students continuing into a doctoral program, the thesis often forms the core of the research proposal for more advanced work.

Doctor of Science in Population and International Health/Doctor of Public Health

The doctoral programs are designed to prepare students both for professional leadership positions in the public or private sectors of public health and for academic careers in universities or research institutions. Recent graduates have taken positions with the Centers for Disease Control and Prevention, the World Bank, and nongovernmental organizations and have assumed postdoctoral and teaching positions with universities in the United States and around the world.

Desired applicants have outstanding academic records, substantial relevant experience in the international public health arena, and professional interests relevant to the department. Applicants to the DPH program must hold an MPH and a prior doctoral degree. Though not required for the SD program, a master's degree is strongly recommended. Students are encouraged to enter the department's 80-credit master's degree program and apply to enter the doctoral program at a later date. Entry to the doctoral program will then depend upon outstanding performance in the master's degree program and acceptance through the regular doctoral program admission process.

In addition to schoolwide requirements, doctoral students must complete a common core of course work with a focus on global health. The core course work is completed in the first year. The second year of the doctoral program usually involves both course work and research planning. Core courses cover economics, ethics, politics, quantitative and qualitative methods, and population health measurement.

Applicants to the doctoral program must select one of three areas of interest currently offered by the department. The selected area becomes the student's required major for the doctoral program. Although course requirements for a specific area of interest may be taken concurrently with the core, the majority

COURSES OF INSTRUCTION

Please note that the courses listed are subject to change and some are not offered every year. Complete course descriptions are available at <http://www.hsph.harvard.edu/registrar/courses>.

<i>Societal Response to Disaster</i>	<i>Mathematical Models in Biology and Public Health</i>
<i>Epidemiology of Infectious Diseases of Public Health Importance in Developing Countries</i>	<i>Grant Writing for Funding of Research and Health Care Projects</i>
<i>Ethical Basis of the Practice of Public Health</i>	<i>Ethical Issues in International Health Research</i>
<i>Introduction to the Practice of International Health</i>	<i>HIV/AIDS in Developing Countries: Epidemiology and National Responses</i>
<i>Financing Health Care in Developing Countries</i>	<i>Field Experience in Health and Human Rights</i>
<i>Bioterrorism: Public Health Preparedness and Response</i>	<i>Applied Politics and Economics: Political Economy of Health</i>
<i>Culminating Experience for International Health and MPH Students</i>	<i>Political Analysis and Implementation of International Health Reform</i>
<i>Justice and Resource Allocation</i>	<i>Foundations of Global Population and Health I and II</i>
<i>Program Evaluation of Lead Poison Prevention</i>	<i>Applied Quantitative Methods</i>
<i>Computer Methods for Population Health Measurements</i>	<i>Measuring Population Health</i>
<i>Management Control in Health Organizations</i>	<i>Pharmaceutical Policy and Global Health</i>
<i>Health, Human Rights, and the International System</i>	<i>Econometrics for Health Policy I and II</i>
<i>Health and Human Rights: Concepts and Methods for Public Health</i>	<i>Issues in Health and Human Rights</i>
<i>Fertility Analysis</i>	<i>Geographical Information Systems and Health Planning</i>
<i>Policy Implementation and Management of Health Programs</i>	<i>Microeconomics and Applications to Public Health in Developing Countries</i>
<i>Health Sector Reform: A Worldwide Perspective</i>	<i>Individual and Social Responsibility for Health</i>
<i>Population and Development Policy Making</i>	<i>International Health Economics I and II</i>
<i>People in War: Developing New Strategies to Promote Human Security</i>	<i>Field Trip: Health Reform and Community Medicine in Chile</i>
<i>Planning and Evaluation of Health Programs</i>	<i>Field Trip to Kerala, India</i>
<i>Human Ecology</i>	<i>Population Ethics</i>
<i>Business Planning for Health Organizations</i>	<i>Research Methods in Population</i>
<i>Frontiers of Knowledge in HIV/AIDS Prevention, Care, and Research</i>	<i>Ethics and Health Disparities</i>
	<i>Independent Study, Tutorials</i>

of these will be taken during the second year of study. Minor fields may be chosen from the department or from allied departments of the school or university, including the HSPH Departments of Biostatistics; Epidemiology; Immunology and Infectious Diseases; Nutrition; or Society, Human Development, and Health.

The three areas of interest offered by the department are described below:

Economics Economic analysis underlies many decisions being made in health care and population policy. A World Health Organization (WHO) report has argued the case for investing in health both as an intrinsic good and as an instrument for promoting economic growth.

The economics area of interest is designed to give students a strong foundation in microeconomic theory and to develop their skills in applying economic analysis to issues in population and international health. In addition to economic theory, students will also study recent empirical economic research on population and international health issues. The rigorous training provided in this area of interest, together with interdisciplinary training in other areas, will allow students to undertake their own research using economic models of behavior. While the required courses for this area can be completed in two years, it is sometimes recommended that students take additional advanced courses during their third year in the Department of Economics in the Harvard University Faculty of Arts and Sciences.

Research topics that might be pursued within the economics area of interest include the costs and benefits of medical interventions,



the effect of poverty and social deprivation on health, the impact of medical care costs on use of services, the effect of government regulation on market structures and private health care provision, mechanisms for developing new drugs and treatments, and the effect of family size on child poverty and health.

Health systems Health care systems today provide the critical link between the development of interventions capable of achieving significant population health improvements and the realization of this improvement. As recently defined by WHO, health systems include four major functions: creation of resources, financing, service provision, and stewardship.

The health systems area of interest trains students to apply a multidisciplinary approach to advanced research on health care systems. The focus of this area is to develop new knowledge to improve the design, implementation, and evaluation of strategies to improve health and equity in middle- and lower-income countries through better health system performance. Through course work and applied research, students will learn to integrate theories and methods from economics, political science, and management and administration and to apply them to the critical international health system issues of the day.

Examples of research topics in this area of interest might include the impact on national health spending of changes in health system

organization, the effect of decentralization on priority health service programs, consumer response to characteristics of public and private health care providers in developing countries, and evaluation of strategies to improve administrative and management efficiency in government services.

Population and reproductive health Assessments of the global and local burden of disease in both high- and low-income countries have become an important resource. These studies involve an understanding of the growth, structure, and change of human populations (demography) and additional training in biostatistics and epidemiology. Such global, regional, and national analyses, attempting to partition the factors determining population health, require competence in several areas, including the capacity to translate census, survey, and routine health statistics into summary assessments for both priority setting and action. Another aspect of these analyses, focusing on women, is to measure the contribution of sex and reproduction to the burden of disease in those of reproductive age and beyond.

The population and reproductive health area of interest is designed to provide the foundation for work on population health around the world but especially in low-income countries. The area utilizes demographic analysis as an essential tool for the measurement of mortality and fertility. Several courses illustrate the way in which models and well-established

demographic estimation techniques can be applied to new challenges in burden of disease assessments. Other recommended courses describe major methods of data collection and analysis, especially in Africa. Although the training is primarily quantitative, an understanding of the value of qualitative and ethnographic approaches is encouraged.

Students within this area have recently written theses on such topics as HIV/AIDS and infertility in Tanzania, longitudinal studies of child growth and development in rural Africa, the causes and consequences of induced abortion in Mexico and Ghana, domestic violence as a public health issue in Jordan, and the contribution of primary health care to child survival in Africa.

Postdoctoral Fellowships

The Department of Population and International Health offers two nondegree postdoctoral fellowship programs.

The Fellowship Program on Ethical Issues in International Health Research, sponsored by the Fogarty International Center of the National Institutes of Health, provides support for up to two years. During their residence at HSPH for the first ten months, fellows study ethical issues in health research and develop a project proposal. During the second year fellows return to their home countries and complete their projects.



The Takemi Program offers fellowships for professionals and scholars from around the world for research and advanced, interdisciplinary training on critical issues of international health, especially those related to developing countries. The program addresses problems of mobilizing, allocating, and managing scarce resources to improve health, and of designing strategies for disease control and health promotion. The program can fund a limited number of fellowships each year and can assist in identifying external sources of funding, which applicants are encouraged to pursue.

Related Offerings

MPH concentration in international health, see page 52.

Interdisciplinary concentration in the epidemiology of infectious disease, see page 56.

Interdisciplinary concentration in women, gender, and health, see page 56.

Contact Information

For general information about the Department of Population and International Health, please contact the department at 665 Huntington Avenue, Boston, MA 02115.

Phone: 617-432-1232

Fax: 617-566-0365

For more information about master's and doctoral programs in population and international health, please contact the Education Office, Department of Population and International Health, at the address above.

Phone: 617-432-2253

Fax: 617-566-0365

Email: ajaimung@hsph.harvard.edu

Web: <http://www.hsph.harvard.edu/Academics/pih/index.html>

For more information about the Fellowship Program in Ethical Issues in International Health Research, please contact Richard A. Cash, MD, MPH, Department of Population and International Health, 665 Huntington Avenue, Boston, MA 02115.

Phone: 617-432-1076

Fax: 617-566-0365

Email: rcash@hsph.harvard.edu

Web: <http://www.hsph.harvard.edu/bioethics>

For more information about the Takemi Program in International Health, please contact Michael R. Reich, PhD, Department of Population and International Health, 665 Huntington Avenue, Boston, MA 02115.

Phone: 617-432-0686

Fax: 617-432-1251

Email: takemi@hsph.harvard.edu

Web: <http://www.hsph.harvard.edu/takemi>

DEPARTMENT FACULTY

Please note that some faculty members may be on leave during academic year 2004-05.

Department chair: David E. Bloom, MA, PhD; Clarence James Gamble Professor. Applied microeconomics: labor, population, health, development, and environment; demography.

Iain W. Aitken, MB, BChir, MPH; Lecturer on Society, Human Development, and Health. Maternal health care; management of primary health care workers; design and financing of urban health care systems in developing countries.

Peter A. Berman, MSc, PhD; Professor of Population and International Health Economics. Health care financing in developing countries; economic assessment of health policies and programs.

Barry R. Bloom, PhD; Joan L. and Julius H. Jacobson Professor of Public Health and Dean of the Faculty of Public Health. Mechanisms of resistance and pathogenesis of diseases in developing countries, particularly tuberculosis and leprosy; genetic analysis of host resistance; development of genetically engineered vaccines against tuberculosis.

Thomas J. Bossert, MA, PhD; Lecturer on International Health Policy. Health policy in developing countries, especially in Latin America, Africa, and Indonesia.

Claude Bruderlein, Lic.ès Droit, LLM; Lecturer on International Health. Human rights and humanitarian law; protection of civilians in war; role of international institutions in humanitarian intervention.

Paul H. Campbell, MPA, SD; Lecturer on Management. Financial management, strategic planning, and public health infrastructure; health system issues in developing countries.

David Canning, PhD; Professor of Economics and International Health. Economic development, particularly the role of health and demography in economic growth.

Richard A. Cash, MD, MPH; Senior Lecturer on International Health. Development of health systems for rural and urban populations in developing countries.

Norman Daniels, MA, PhD; Professor of Ethics and Population Health. Ethics and health care.

Arthur J. Dyck, AM, PhD; Mary B. Saltonstall Professor of Population Ethics. Concepts of human rights, including ethical issues.

Majid Ezzati, MEng, MA, PhD; Assistant Professor of International Health. Technology-environment-health interactions; impact of economic development, urbanization, and industrialization on health risks.

Sofia M. Gruskin, JD, SD; Associate Professor of Health and Human Rights. Health and human rights; gender, reproductive, and sexual health; global implications for the rights of children to health; links between HIV/AIDS, health, and human rights.

Allan G. Hill, MA, PhD; Andelot Professor of Demography. Demography of the Middle East and West Africa; impact on mortality of child survival programs; modern contraception and reproductive health.

Saidi H. Kapiga, MD, MPH, SD; Assistant Professor of Reproductive Health. Development and assessment of community-based HIV/STD control programs; development and testing of interventions to reduce perinatal transmission of HIV; determinants of fertility, provision of family-planning services, and cervical cancer.

Ulla M. Larsen, MA, PhD; Associate Professor of Demography. Interface of demography and health; sterility and reproductive health; focus on Africa.

Jennifer Leaning, SM, MD; Professor of International Health. Medical human rights and international law; complex humanitarian emergencies; medical triage in war and disasters; environmental effects of war.

Richard Levins, PhD; John Rock Professor of Population Sciences. Human ecology; viability of populations and environments; special interest in Caribbean region.

Yuanli Liu, MD, MPH, SM, PhD; Assistant Professor of International Health. Equity in health care; health care financing in developing countries; Chinese health care system; interaction of health and social security systems.

Ajay Mahal, MS, PhD; Assistant Professor of International Health Economics. Macro implications of the AIDS epidemic; implications of rationally guided behavior for HIV transmission; impact of decentralization on effectiveness of health services delivery.

Stephen P. Marks, Doctorat d'état; François-Xavier Bagnoud Professor of Health and Human Rights. Human rights and international affairs.

Marc D. Mitchell, MD, MS; Lecturer on International Health. Management of health care programs in developing countries.

Christopher J. L. Murray, MD, DPhil; Richard Saltonstall Professor of Population Policy. Health system performance assessment; burden of disease; cost-effectiveness analysis; health system financing; health and poverty.

Michael R. Reich, AM, PhD; Taro Takemi Professor of International Health Policy. Political economy of health, population, and development; pharmaceutical policy and global health.

Joshua A. Salomon, PhD; Assistant Professor of International Health. Measurement of population health status and health valuations; evaluation of potential impact and cost-effectiveness of health interventions.

Joseph Sevilla, AM, PhD; Assistant Professor of International Health Economics. Effect of health improvements on economic growth and well-being; determinants of child mortality; most effective means of reducing child mortality.

Daniel Wikler, PhD; Professor of Ethics and Population Health. Ethics and health care.

Chi-Man (Winnie) Yip, PhD; Associate Professor of International Health Policy and Economics. Application of economic models and econometric techniques to study of health care policies.

Secondary Appointments

(primary appointments at Harvard Medical School or Kennedy School of Government)

Jonathan L. Burstein, MD; Assistant Professor in the Department of Population and International Health. Emergency medicine in the field, in hospitals, and in disaster situations.

Sheila Sen Jasanoff, MA, PhD, JD; Professor in the Department of Population and International Health. Comparative study of biotechnology in Britain, Germany, and the United States.

Grace Wyshak, SM, PhD; Associate Professor in the Departments of Biostatistics and Population and International Health. Biostatistical and demographic methods; women's reproductive health.

Adjunct Faculty

Donald S. Bialek, MD, SM, MPH. Consultant.

Joel H. Lamstein, SM. John Snow, Inc.

Adetokunbo O. Lucas, MD, SM. Consultant.

Carla M. Obermeyer, MA, MSc, SD. World Health Organization.

M. Omar Rahman, MD, MPH, SD. Independent University of Bangladesh.

Amartya K. Sen, MA, PhD. Trinity College, Cambridge University, United Kingdom.

Gita Sen, MA, PhD. Indian Institute of Management.

Arjun Sengupta, MA, PhD. School of International Studies, Jawaharlal Nehru University, India.

