



11th Annual 2004

Summer Session

for Public Health Studies



July 1 – 23

July 26 – August 13

Graduate Courses in:

- Biostatistics
- Environmental Health
- Epidemiology
- Health and Social Behavior
- Health Policy and Management

Visit our website at:
www.hsph.harvard.edu/summer/brochure

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Application form enclosed.

Photo Credits

Richard Chase: inside front cover, pages 1, 2, 7, 8, 10, 11 (top), 13, inside back cover

Paula Lerner: cover (inset), pages 9, 11 (bottom), 14, back cover

Getty Images, cover

2004 Summer Session Course Schedule

Summer 1 July 1 – July 23

8:30 – 10:20

BIO 202 Principles of Biostatistics: Part I

HPM 510 Introduction to Management of Health Care Organizations

10:30 – 12:20

EPI 200 Principles of Epidemiology

ID 251 Ethical Basis of the Practice of Public Health: Health Care Delivery*

1:30 – 3:20

HPM 277 Current Issues in Health Policy*

RDS 286 Decision Analysis in Clinical Research*

SHH 201 Society and Health

3:30 – 5:20

EH 202 Principles of Environmental Health

HPM 276 Survey of Methods in Health Services Research*

ID 251 Ethical Basis of the Practice of Public Health: Health Care Delivery*

3:30 – 5:30

BIO 113 Introduction to SAS

Summer 2 July 26 – August 13

8:30 – 10:20

BIO 203 Principles of Biostatistics: Part II

BIO 224 Survival Methods in Clinical Research*

10:30 – 12:20

BIO 214 Principles of Clinical Trials*

EPI 202 Elements of Epidemiologic Research

HPM 209 The Economics of Health Policy

1:30 – 3:20

HPM 253 Quality Improvement in Health Care*

HPM 512 Medical Informatics*

ID 215 Environmental and Occupational Epidemiology

3:30 – 5:20

BIO 234 Research Synthesis and Meta-Analysis in Public Health and Medicine

HPM 299 Research with Large Databases*

* Limited enrollment: prerequisites and faculty approval required.

Introduction

Hot Topics

Each summer, faculty from the School of Public Health present a weekly seminar on topics of current interest in the field.

These seminars are offered during lunch-time and are free to all Summer Session students. The seminars provide an opportunity for summer students to meet and talk informally with faculty from a range of disciplines. Presentations from last year included:

Bioterrorism Preparedness and Connectivity

Leonard Marcus, Department of Health Policy and Management; Harvard Center for Public Health Preparedness

What are the Beliefs and Values Driving U.S. Health Policy?

Robert Blendon, Department of Health Policy and Management

You Are What You Eat – But Do You Know What You’re Eating?

Eric Rimm, Department of Epidemiology and Nutrition

Risk Perception: Why Our Fears Don’t Match the Facts

David Ropeik, Harvard Center For Risk Analysis

Violence Against Women, Sexual Health Risks, and Unwanted Pregnancy

Jay Silverman, Department of Society, Human Development, and Health



About the Harvard School of Public Health

The Harvard School of Public Health (HSPH) is dedicated to excellence in training public health practitioners and researchers. The School’s distinguished faculty members are engaged in teaching, research, and working with public health leaders locally, nationally, and internationally.

The School’s main buildings for research, teaching and administration are located in the heart of Boston’s Longwood Campus. The facilities adjoin those of the Harvard Medical School, Harvard School of Dental Medicine, and Harvard-affiliated hospitals such as Brigham and Women’s, the Dana-Farber Cancer Institute, and Children’s Hospital.

Summer Session for Public Health Studies

The Summer Session provides the same academically rigorous courses offered to degree candidates during the regular academic year, only shortened from 8 weeks to 3 weeks and meeting daily. Thus, the courses are very fast-paced and intense, requiring the full participation of the student. These courses are taught by Harvard faculty.

Course work in epidemiology; biostatistics; statistical analysis; society, human development, and health; economics; environmental health; and health care management provides the ground work for advanced study in every field of public health. These courses are essential for the practice of public health, for population-based primary care, and for evaluating clinical effectiveness in specialty medicine.

The Summer Session is intended for health professionals in training or those who are considering a mid-career change into public health and feel the need to strengthen their skills. Participants include public health professionals, primary care practitioners, physicians engaged in the evaluation of health care delivery and management, physicians in training (including preventive medicine residents and medical students in an MD/MPH joint degree program), and candidates for a part-time MPH program.

During the 2003 Summer Session, 145 students from across the U.S., Asia, Canada, Europe, and Latin America attended the School. More than 50% of those students were physicians; the others included mid-level managers, lawyers, other health professionals, and graduate students.

Current HSPH students and students accepted for admission to a 2004 degree program may have greater flexibility in their course selection during the regular academic year by taking courses in the Summer Session. **Admission to the Summer Session requires a separate application for all students.**

“As a part-time student, the Summer Session allowed me to complete requirements outside of the regular school year. It was great to focus on one class at a time, rather than having to divide my attention among several classes.”

— Mary Vriniotis, BA
current SM candidate, Health Policy and Management

“My interest is in systematizing aspects of medical practice to reduce medical errors and omissions. Attending Harvard has exposed me to policy and decision makers, thought leaders, computer experts, and a wide-reaching medical expertise that will provide me with the necessary tools and allow me to contribute to health care for our next generation.”

— Sheldon Paul Kottle, MD, FACP
current MPH candidate, Health Care Management, Policy Focus

Summer-Only Master of Public Health Degree Program

(Quantitative Methods or Clinical Effectiveness concentrations only)

Qualified students with an interest in the areas of Quantitative Methods or Clinical Effectiveness may complete the MPH degree through courses offered in the Summer Session. The degree requirements take three years to complete, over three consecutive summers. Please note: there is a limited selection of summer courses. The summer-only MPH degree program is available only for the two concentrations noted. Students selecting a summer-only degree may not take courses during the academic year without additional costs. For more information, contact the Admissions Office (617-432-1031 or admisofc@hsph.harvard.edu) or Roberta Gianfortoni, Assistant Dean for Professional Education (roberta@hsph.harvard.edu).



Curriculum

Students may complete one or two 2.5-credit courses per session, for a maximum of 5 credits per session or a total of 10 for the two summer sessions. The course work is very intense and fast-paced. Students registered for two courses in one session should not schedule other work commitments.

Degree Programs

HSPH offers programs leading to the graduate degrees of Master of Public Health (MPH), Master of Science (SM) and doctoral programs (SD and DPH) in public health. Courses taken in the summer program or in the Program in Clinical Effectiveness may count toward academic credit for the MPH, SM, or doctoral degrees. To receive further information and application materials for degree candidacy, contact the HSPH Admissions Office (617-432-1031 or admisofc@hsph.harvard.edu).

Please note: Qualified participants may seek admission to a degree program at HSPH. Admission to or academic performance in the Summer Session does not guarantee admission to the School's other full and part-time academic degree programs, which require a separate application and admissions process.

Summer Course Offerings • 2004

[Summer 1] and [Summer 2] following the course number indicates the Session:

Summer 1: July 1 – July 23

Summer 2: July 26 – August 13

Please note: An asterisk (*) following a course title indicates limited enrollment; prerequisites and faculty approval required. Please review all course notes for any prior preparation or requirements.

BIostatISTICS

BIO 113 [Summer 1] Introduction to Data Management and Programming in SAS

Instructors: Ms. Elizabeth N. Allred,
Dr. Marcello Pagano

3:30 p.m.–5:30 p.m. (Mon.–Fri.)

Lectures. 2.5 credits

Provides intensive instruction in the use of SAS to prepare data for statistical analysis. The focus is on database management and programming problems. Basic issues in each of these areas are discussed in the context of teaching the specific skills required to use SAS effectively.

BIO 202 [Summer 1] Principles of Biostatistics: Part I

Instructor: Dr. Marcia Testa
8:30 a.m.–10:20 a.m. (Mon.–Fri.,
lecture sessions) (Lab TBA)

Lectures, laboratories. Five 2-hour labs
each week (required). 2.5 credits

This course is the first part of introductory biostatistics and acquaints the student with the basic concepts and methods of biostatistics, their applications, and their interpretation. The material covered includes data presentation, numerical summary measures, rates and standardization, and life tables. Probability is introduced to quantify uncertainty, especially as it pertains to diagnostic and screening methods. Also covered are sampling distributions so that students may be introduced to confidence intervals and hypothesis testing. The computer is used throughout the course, and the student will gain familiarity with the software package STATA. Please note: Students enrolled in Biostatistics 202 are required to attend two hours of lab sessions each day in addition to daily lecture. Course note: Applicants planning to take biostatistics are expected to have a working knowledge of basic college mathematics and familiarity with the use of personal computers. A self-assessment test is available on request by calling Hildi Keary at 617-432-1052 to help you evaluate your readiness for this course. Students taking BIO 202 and BIO 203 will not be given credit for BIO 200, BIO 201, or BIO 205 in the academic year.

BIO 203 [Summer 2] Principles of Biostatistics: Part II

Instructors: Dr. Peter Park, Dr. Stephen
Lagakos

8:30 a.m.–10:20 a.m. (Mon.–Fri., lecture
sessions) (Lab TBA)

Lectures, laboratories. Five 2-hour labs
each week (required). 2.5 credits

This course is the second part of introductory biostatistics; it continues to explore inference in greater depth. Lectures and laboratory exercises will emphasize applied data analysis, building upon the fundamentals emphasized in BIO 202. Topics covered include the comparison of two means, analysis of variance, nonparametric methods, inference on proportions, contingency tables, multiple 2 x 2 tables, correlation, simple regression, multiple regression and logistic regression, analysis of survival data, and sampling theory. The computer is used throughout the course, and the student will gain more familiarity with STATA. Please note: Students enrolled in Biostatistics 203 are required to attend two hours of lab sessions each day in addition to daily lecture. Course note: Requires BIO 202. Students who take BIO 202 and BIO 203 will not be given credit for BIO 200, BIO 201, or BIO 205.

BIO 214 [Summer 2] Principles of Clinical Trials*

Instructors: Dr. Kenneth Stanley,
Dr. Richard Gelber

10:30 a.m.–12:20 p.m. (Mon.–Fri.)

Lectures. 2.5 credits

Designed for individuals interested in the scientific, policy, and management aspects of clinical trials. Topics include types of clinical research, study design, treatment allocation, randomization and stratification, quality control, sample size requirements, patient consent, and interpretation of results. Students design a clinical investigation in their own field of interest, write a protocol for it, and critique recently published medical literature. Course note: A course in introductory statistics is required.

BIO 224 [Summer 2] Survival Methods in Clinical Research*

Instructors: Dr. Roger Davis

8:30 a.m.–10:20 a.m. (Mon.–Fri.)

Lectures. 2.5 credits

This course will cover the common approaches to the display and analysis of survival data, including Kaplan-Meier curves, log rank tests, and Cox proportional hazards regression. Computing, using SAS, will be an integral component of the course. Course note: Students should have taken an intermediate-level course in biostatistics; BIO 210, BIO 211, BIO 213 or equivalent.

BIO 234 [Summer 2] Research Synthesis and Meta-Analysis in Public Health and Medicine

Instructor: Dr. Michael Stoto
3:30 p.m.–5:20 p.m. (Mon.–Fri.)
Lectures. 2.5 credits

Concerned with the use of existing data to inform clinical decision making and health care policy, the course focuses on research synthesis (meta-analysis). The principles of meta-analytic statistical methods are reviewed, and the application of these to data sets is explored. Application of methods includes considerations for clinical trials and observation studies. The use of meta-analysis to explore data and identify sources of variation among studies is emphasized, as is the use of meta-analysis to identify future research questions. Students should have knowledge of biostatistical and/or epidemiological methods. Course activities: Students prepare a protocol to conduct a meta-analysis and use existing meta-analysis software to apply principles outlined in the course to data sets provided for this purpose. This course is equivalent to EPI 233 and was formerly ID 233; credit will not be given for both courses.

EH 202 [Summer 1] Principles of Environmental Health

Instructor: Dr. Melissa Perry
3:30 p.m.–5:20 p.m. (Mon.–Fri.)
Lectures, case studies. 2.5 credits

†Also see *interdepartmental listing*.

ENVIRONMENTAL HEALTH

This course focuses on the methods of qualitative and quantitative environmental risk assessment and the use of scientific data policy development and risk management. Sources of data for hazard identification, the influence of models of disease on dose extrapolation, and the importance of populations affected on priorities for management will be illustrated in a range of case studies relating to environmental hazards. Course note: Fulfills the environmental health core requirement for all professional master's degree programs.

EPI 200 [Summer 1] Principles of Epidemiology

Instructor: Dr. Albert Hofman
10:30 a.m.–12:20 p.m. (Mon.–Fri.)
Lectures, class discussion, seminars. 2.5 credits

EPIDEMIOLOGY

This course will provide an orientation to epidemiology as a basic science for public health and clinical medicine. It will address the principles of the quantitative approach to clinical and public health problems. The course will discuss measures of frequency and association, introduce the design and validity of epidemiologic research, and give an overview of data analysis. This course is an introduction to the skills needed by public health professionals to interpret critically the epidemiologic literature. It will provide students with the principles and practical experience needed to initiate the development of these skills. Lectures are complemented by seminars devoted to case studies, exercises, or critique of current examples of epidemiologic studies. Course activities: Class discussion, seminar, quiz, final exam.

EPI 202 [Summer 2] Elements of Epidemiologic Research

Instructor: Dr. Murray Mittleman
10:30 a.m.–12:20 p.m. (Mon.–Fri.)
Lectures, seminars. 2.5 credits

Introduces elements of study design, data analysis and inference in epidemiologic research. Principles and methods are illustrated with examples, and reviewed through homework and in-class exercises. May serve as an introduction to more advanced study or as a concluding course for those desiring a working knowledge of epidemiologic methods. Course note: EPI 200, EPI 201 or EPI 208 required – concurrent enrollment permitted; BIO 200, BIO 201, or BIO 202 and BIO 203 required – concurrent enrollment permitted.

HPM 209 [Summer 2] The Economics of Health Policy

Instructor: Dr. Meredith Rosenthal
10:30 a.m.–12:20 p.m. (Mon.–Fri.)
Lectures, class discussion, seminars. 2.5 credits

HEALTH POLICY AND MANAGEMENT

Students will learn how to analyze important health policy issues through the application of basic economic principles. No previous economics training is required; concepts will be learned as they are needed to understand the policy analyses. Among the topics we will discuss are health insurance, managed care and managed competition, hospital and physician payment incentives, the pharmaceutical industry, and an overview of cost-effectiveness and cost-benefit analysis.

HPM 253 [Summer 2] Quality Improvement in Health Care*

Instructors: Maureen Bisognano,
Dr. Donald Berwick
1:30–3:20 p.m. (Mon.–Fri.)
Lectures, case studies. 2.5 credits

This course is designed for practicing physicians and those with an interest in health care management. It will explore both the theory and practical methods being employed to make improvement in health systems. Clinical cases, organizational lessons and interactive learning modules will guide the learners to an understanding of the necessary elements for improvement and how to identify and eliminate barriers to change.

HPM 276 [Summer 1] Survey of Methods in Health Services Research*

Instructor: Dr. Arnold Epstein
3:30 p.m.–5:20 p.m. (Mon.–Fri.)
Lectures. 2.5 credits

This course introduces students to health services research. The course includes sessions on both methodologic techniques and applications. Individual sessions will be devoted to research design, analyses of large databases, cost effectiveness analyses, survey methodology, assessment of health status, assessment of quality, measurement of access to care, risk adjustment, and statistical techniques pertinent to health services research. There will also be sessions reviewing managerial applications such as case management, use of hospital information systems, and targeting for high-risk patients. Students will be asked to critically review several papers during some of the sessions. In the final part of the course, students will work in small groups to critique a “grant proposal designed to study an important problem in health services or health policy research.”

HPM 277 [Summer 1] Current Issues in Health Policy*

Instructors: Dr. Arnold Epstein,
Dr. Anthony Komaroff
1:30 p.m.–3:20 p.m. (Mon.–Fri.)
Lectures. 2.5 credits

This course introduces students to the major health policy issues facing the United States today. The course focuses on the roles of hospitals, doctors, private and government insurance, and different systems for organizing and financing care (such as traditional fee-for-service, HMOs, and other forms of “managed care”). Individual sessions in the course will be devoted to topics such as medical malpractice, policy issues related to pharmacological therapy, physician payment, academic health centers, workforce, physician profiling, managed care, Medicare, Medicaid, and ethical issues.

HPM 299 [Summer 2] Research With Large Databases*

Instructors: Dr. John Ayanian, Dr. Ellen
McCarthy
3:30 p.m. - 5:20 p.m (Mon.–Fri.)
Lectures, class discussions. 2.5 credits

This course will address potential uses of existing large administrative and survey databases to study important questions regarding clinical risk factors, treatment, outcomes and health policy. Strengths and limitations of large databases that are commonly used for research will be considered, and special attention will be devoted to large federal databases that are readily available to new investigators. Practical issues in obtaining, linking, and analyzing large databases will be emphasized in the course. Key statistical issues will be addressed, including risk-adjustment and sampling weights. Students will evaluate published studies based on large databases and develop a proposal for analyzing a specific research question with a large database. Course note: Limited enrollment; introductory courses in epidemiology and biostatistics required; permission of instructor required for first year PCE students.

HPM 510 [Summer 1] Introduction to Management of Health Care Organizations

Instructor: Dr. Marc Roberts
8:30 a.m.–10:20 a.m. (Mon.–Fri.)
Lectures, case studies. 2.5 credits

This course provides an introduction to two of the major tasks confronting managers of healthcare organizations. Building on an introduction to organizational theory, the course focuses on the main problems of organizational strategy and the management of human resources. This course makes extensive use of case-based classroom discussions as well as selected conceptual readings.

HPM 512 [Summer 2] Medical Informatics*

Instructors: Dr. Blackford Middleton, Dr.
Jonathan Einbinder
1:30 p.m.–3:20 p.m. (Mon.–Fri.)
Lectures, class discussion, seminars. 2.5
credits

This course will address the use of data from clinical information systems in performing clinical effectiveness research, including the strengths and limitations of these data. Major topics will include an overview of medical informatics; discussion of the nature of computer-based data including medical vocabularies and obtaining information from clinical systems; and clinical systems with a focus on clinical decision support and how to evaluate their impact. Special topics will also be covered including large databases, the Web, confidentiality-related issues, information retrieval and patient computing. Students will have to write a paper about a proposed analysis using data from a clinical information system. Course note: Ordinal grading only.

RDS 286 [Summer 1] Decision Analysis in Clinical Research*

Instructor: Dr. Milton Weinstein
1:30 p.m.–3:20 p.m. (Mon.–Fri.)
Lectures. 2.5 credits

†Also see interdepartmental listing.

Introduces the following topics: decision analysis methods relevant to clinical decision making and clinical research; the use of probability to express uncertainty; Bayes theorem and evaluation of diagnostic test strategies; sensitivity analysis; utility theory and its use to express patient preferences for health outcomes; cost-effectiveness analysis in clinical research and health policy; and uses and limits of decision analysis and cost-effectiveness in clinical decision making and research design. Course note: Limited enrollment; priority will be given to participants in the Summer Program in Clinical Effectiveness.

INTERDEPARTMENTAL

ID 215 [Summer 2] Environmental and Occupational Epidemiology

Instructors: Dr. Douglas Dockery, Dr. Francine Laden
1:30–3:20 p.m. (Mon.–Fri.) Lectures, case studies. 2.5 credits

This course has three objectives: to review methods used in evaluating the health effects of physical and chemical agents in the environment, to review available evidence on the health effects of such exposures, and to consider policy questions raised by the scientific evidence. Topics include lectures on methodology, seminars on the review and criticism of current literature, and presentations by outside experts on specific environmental and occupational health issues of current interest. Course Note: EPI 200, EPI 201 or EPI 208 required; BIO 200, BIO 201, BIO 205, BIO 206, or BIO 202 and BIO 203 required (concurrent enrollment permitted).

ID 251 [Summer 1] Ethical Basis of the Practice of Public Health: Health Care Delivery*

Instructors: Dr. Troyen Brennan, Dr. Michelle Mello, Dr. David Studdert
10:30 a.m.–12:20 p.m. (Mon.–Fri.) or
3:30 p.m.–5:20 p.m. (Mon.–Fri.)
Lectures, case studies. 2.5 credits
This course is offered twice during the Summer 1 session (July 1–23).

This course is intended to provide physicians and public health professionals with an understanding of the manner in which politics, economic concerns, law, and ethics interact in health care policy decisions. Through discussion of legal cases and articles from medical and ethics literature, we will explore such topics as managed care, access to health care, rights to health, the physician-patient relationship, treatment refusal, medical errors, research ethics, and financial conflicts of interest. Course note: Fulfills a core course requirement for students pursuing an MPH degree at the Harvard School of Public Health.

SOCIETY, HUMAN DEVELOPMENT, AND HEALTH

SHH 201 [Summer 1] Society and Health

Instructor: Dr. Ichiro Kawachi
1:30 p.m.–3:20 p.m. (Mon.–Fri.)
Lectures, case studies. 2.5 credits

Analyzes major social variables that affect population health: poverty, social class, gender, race, family, community, work, behavioral risks, and coping resources. Examines health consequences of social and economic policies, and the potential role of specific social interventions. Reviews empirical and theoretical literature on mechanisms and processes that mediate between social factors and their health effects, and discusses alternative models for advancing public health. Course activities: short written assignments, class discussion, final examination. Course note: Fulfills a core course requirement for students pursuing an MPH degree at the Harvard School of Public Health. Fulfills a departmental requirement for students in the Department of Society, Human Development, and Health.

*FYI: Student course evaluations from prior years are available on-line at: <http://www.hsph.harvard.edu/registrar/evaluations/index.shtml>
Please note: Course numbers and instructors may have changed.*

Elizabeth N. Allred, SM (Harvard University); Biostatistician, Neuroepidemiology Unit, Children's Hospital. Twenty-five years experience with biomedical data management and analysis; epidemiology of disorders that occur in extremely premature newborns.

John Z. Ayanian, MD (Harvard Medical School), MPP (Kennedy School of Government); Associate Professor of Medicine and Health Care Policy. Access to care; quality of care; cardiovascular disease; cancer; primary and specialty care; health care disparities.

Donald Berwick, MPP, MD (Harvard University); President and CEO, Institute for Healthcare Improvement; Clinical Professor, Pediatrics and Health Care Policy, Harvard Medical School; Professor, Department of Health Policy and Management.

Maureen Bisognano, MS (Boston University), Instructor in Health Policy and Management, Executive Vice President and COO, Institute for Healthcare Improvement. Quality improvement in healthcare; strategic planning; leadership.

Troyen A. Brennan, MA (Oxford University), JD, MPH, MD (Yale University); Professor of Law and Public Health; Professor of Medicine, Harvard Medical School.

Medical ethics; personal injury and environmental litigation; medical malpractice and health policy reform.

Roger B. Davis, MA (University of Rochester), ScD (Harvard University); Associate Professor in the Department of Biostatistics. Associate Professor of Medicine, Harvard Medical School. Design and analysis of clinical trials; recursive partitioning methods; collaboration with medical investigators; health services research.

Douglas W. Dockery, SM, ScD (Harvard University), Professor of Environmental Epidemiology, Harvard School of Public Health; Associate Professor of Medicine (Epidemiology), Harvard Medical School. Epidemiologic studies of health effects of air and water pollution; intervention studies to reduce environmental exposures and responses.

Jonathan Einbinder, MD (Columbia P&S), MPH (HSPH); Corporate Manager for Quality Data Management, Partners HealthCare System. Practicing general internist at Brigham & Women's Hospital. Measuring and improving quality using information systems, with a particular focus on data warehousing, population registries, and clinical dashboards.

Arnold M. Epstein, MA (Harvard University), MD (Duke University); John H.

Foster Professor and Chair, Department of Health Policy and Management, Professor of Medicine, Harvard Medical School. Quality of care and disparities in care for disadvantaged populations.

Richard D. Gelber, MS (Stanford University), PhD (Cornell University); Professor of Pediatrics (Biostatistics), Harvard Medical School. Design and analysis of clinical trials; quality of life endpoints for clinical trials; statistical education of medical professionals.

Albert Hofman, MD (University of Groningen), PhD (Erasmus University); Adjunct Professor, Department of Epidemiology. Incidence and risk factors of Alzheimer's disease, vascular dementia, Parkinson's disease and Creutzfeldt-Jakob disease. Determinants of atherosclerosis, heart disease and stroke.

Ichiro Kawachi, MD, PhD (University of Otago), DipCommH (College of Community Medicine of New Zealand); Associate Professor of Social Epidemiology, Department of Society, Human Development, and Health. Social inequalities in health, especially related to income distribution; stress and cardiovascular disease; quality of life and healthy aging; tobacco control.

Anthony Komaroff, MD (University of Washington); Professor of Medicine, Harvard Medical School. Clinical epidemiologic studies of common problems in primary care; computer systems in medical care. Publishing of medical information for the public.

Francine Laden, ScD (Harvard University), Assistant Professor of Environmental Epidemiology, Harvard School of Public Health; Assistant Professor of Medicine (Epidemiology), Harvard Medical School. Epidemiologic studies of environmental risk factors, including exposure to air pollution and persistent organic pollutants, and risk of cancer, mortality, and chronic respiratory and cardiovascular disease.

Stephen W. Lagakos, PhD (George Washington University). Professor of Biostatistics. Statistical methodology, clinical trials, HIV/AIDS research.



Ellen P. McCarthy, PhD (Tulane University); Assistant Professor of Medicine, Harvard Medical School; Research Associate, Division of General Medicine and Primary Care, Beth Israel Deaconess Medical Center. Using large administrative and survey databases to address healthcare issues; cancer outcomes, and end of life care for the elderly.

Michelle Mello, MPhil (Oxford University), PhD (University of North Carolina), JD (Yale University); Assistant Professor of Health Policy and Law. Public health law and ethics; research ethics; medical malpractice; medical errors and patient safety; mass tort litigation.

Blackford Middleton, MD (SUNY-Buffalo), MPH (Yale), MSc (Stanford). Corporate Director of Clinical Informatics Research & Development, Partners HealthCare System; Assistant Professor of Medicine, Harvard Medical School. Design and implementation of integrated clinical information systems, special focus on electronic health records, technology assessment, and patient-centered informatics.

Murray A. Mittleman, MD, CM (McGill University), MPH, DPH (Harvard University); Associate Professor in the Department of Epidemiology; Associate Professor of Medicine, Harvard Medical School. Epidemiologic methods; cardiovascular epidemiology; stress and heart disease; injury epidemiology.

Peter J. Park, PhD (California Institute of Technology); Instructor in Biostatistics (HSPH) and in Pediatrics (HMS). Statistical and computational genomics; analysis of DNA microarray data; mathematical modeling of gene regulatory networks; large-scale computing.

Melissa J. Perry, MHS, ScD (Johns Hopkins University); Assistant Professor of Occupational Epidemiology; injury epidemiology and prevention; health effects of pesticide exposure; agricultural health; occupational preventive interventions.

Marc J. Roberts, PhD (Harvard University); Professor of Political Economy. Health policy; environmental policy; ethical aspects of allocating scarce public health resources.

Meredith Rosenthal, PhD (Health Economics, Harvard); Assistant Professor of Health Economics and Policy. Health economics; U.S. health policy; managed care; financial incentives; mental health policy; pharmaceutical industry.

Kenneth E. Stanley, MA (Bucknell University), PhD (University of Florida); Lecturer on Biostatistics. Clinical trials; clinical and natural history research in HIV disease, estimating mortality attributable to tobacco in the presence of incomplete information.

Michael Stoto, PhD (Statistics, Harvard); Senior Statistical Scientist, RAND. Research synthesis; epidemiology; surveil-

lance; performance measurement; regional health data; public health and health policy.

David Studdert, LLB (University of Melbourne), MPH, ScD (Harvard School of Public Health); Assistant Professor of Law and Public Health. Health law and regulation; medical malpractice, medical injuries, and quality of care; dispute resolution; medical ethics.

Marcia A. Testa, MPH, MPhil, PhD (Yale University); Senior lecturer on Biostatistics. Design, methodology, measurement, and analytical techniques for evaluation of quality of life and health economic outcomes in therapeutic clinical trials and quality of care research; statistical techniques for health transition models, structural equation modeling and large health outcomes database algorithms.

Milton C. Weinstein, AM, MPP, PhD (Harvard University); Henry J. Kaiser Professor of Health Policy and Management (Health Policy and Management and Biostatistics); Professor of Medicine, Harvard Medical School. Cost-effectiveness of health practices and technologies.



“BIO 202 was excellent in all aspects – my fellow students, the TAs, Marcia Testa, and its relevance to my present work. It was a pleasure to learn with such motivated, bright peers and from a professor who explained concepts clearly, thoroughly, and in an interesting manner. The two hour lectures flew by! It was an excellent introduction and provides me both a conceptual framework as well as some initial skills that will help me with my research here at the Population Council.”

— Carrie Tatum, Research Assistant

Population Council

Regional Office for Latin America and the Caribbean, Mexico City, Mexico



The Summer Session for Public Health Studies

The application for the Summer Session is enclosed. All information regarding the application process is included. Please read the instructions carefully. Complete applications are reviewed for admission to courses by the teaching faculty. Incomplete applications, those without an application fee, or applications lacking supporting documents or signatures will not be reviewed.

Application deadline: March 1, 2004.

In most cases, applicants will be notified of their admission status in writing.

Please Note: Admission to, or academic performance in, the Summer Session does not guarantee admission to the School's other full- and part-time academic degree programs, which require a separate application and admissions process. Current degree candidates at HSPH and individuals who have applied to a degree program at the School this admissions season (for the fall of 2004) must complete and sign the first page of the application but are not required to submit the application fee.

Housing

Students are responsible for their own housing. There are a variety of accommodation options available in the area including apartments, dorms, guest houses, bed and breakfast establishments and hotel rooms. For information about housing for summer students in the Boston area please contact: Tyler Case, by phone: 617-432-0488 or by e-mail: housing@hsph.harvard.edu

Please Note: The Democratic National Convention, which will be held in Boston from July 26 to July 29, 2004, will coincide with the start of Summer 2 session (July 26 – August 13). We expect the convention to bring an influx of people to Boston, and therefore housing may be difficult to locate during this time. Should you decide to attend Summer Session 2, we recommend that you act quickly to secure housing.

Tuition and Fee Schedules

Tuition

In summer Session 2003, tuition for each 2.5 credit course was \$1,730. Tuition rates for the summer of 2004 are not yet available. In summers past, tuition rates have changed by approximately 5%. There is a non-refundable deposit/registration fee of \$125.

These fees do not include certain course materials (i.e., texts estimated at \$60 per course). In addition, participants are responsible for all other expenses associated with attending courses and/or living in Boston (i.e., food, housing, transportation, health insurance coverage).

Note: Financial assistance is not available for the 2004 Summer Session.

Fee Schedule

A non-refundable registration fee/deposit of \$125 is due by April 30, 2004 *or by the date specified in letter of admission*. Total tuition is due by May 30, 2004.

Cancellation Policies

Students

Admitted students who withdraw from summer session courses on or before July 1 for Summer 1 and July 23 for Summer 2 will be reimbursed 100% of their tuition fee. A written request to withdraw must be received on/or before those dates to receive the full reimbursement. Withdrawal after those dates corresponds to a pro-rated schedule. Please contact Hildi Keary in the HSPH Registrar's Office at 617-432-1052 for more information.

Course Cancellation Policy

We reserve the right to cancel courses with insufficient enrollment.

“Summer Session allowed me more flexibility for other courses during the rest of the academic year. Thus, my curriculum within the MPH is much richer as a result.”

— **Marianella Gonzalez, MBBS**
MPH candidate, International Health



Program Administration

Roberta Gianfortoni, MA
Director, Summer Session
Assistant Dean for Professional Education, MPH Program

Hildi Keary, AB
Administrative Assistant for Summer Programs
Registrar and Admissions Offices

Richard R. Monson, MD, ScD
Associate Dean for Professional Education

For Further Information

For questions regarding Summer Session admission procedures, contact Hildi Keary: phone: 617-432-1052, fax: 617-432-2009, email: hkeary@hsph.harvard.edu

For questions regarding the Summer Session academic program or Master of Public Health Program, contact Roberta Gianfortoni: phone: 617-432-0090, fax: 617-432-3365, email: roberta@hsph.harvard.edu

To receive a Harvard School of Public Health catalogue and application for any of our degree programs, please request by going to the admissions web site: www.hsph.harvard.edu/admissions or call 617-432-1031.

For Future Consideration

The 2005 Summer Session is likely to repeat courses offered in 2004.

Important Information on Completing the Application for Admission to the HSPH Summer Session • 2004

Application Deadline

All applications and supporting documents must be received by **March 1, 2004**. Applications submitted and/or completed after this date will not be considered for admission to the Summer Session.

Application Fee

A non-refundable application fee of \$60.00 is required. A check drawn on a bank in the United States, a U.S. postal money order, or an international money order in U.S. currency, made payable to the Harvard School of Public Health must accompany your application. Please indicate your name on the check or money order. **Currently enrolled HSPH students or individuals who have applied to a degree program at HSPH for Fall 2004 and have paid a \$60 application fee are not required to submit another application fee. All other applications without the fee will not be processed.**



Please visit our website at:
<http://www.hsph.harvard.edu/summer/brochure>

Instructions for Completing the Application Form

The application form should be completed in full unless otherwise indicated (see Item IV). Please type, if possible, or print in black ink.

Each segment of information corresponds to the Roman Numeral on the application for admission.

I. Biographical Information

Name

Please provide your legal name in the spaces provided. If you have been affiliated with Harvard University under any other name, please indicate. If your name legally changes during the application process, you must submit appropriate legal documents supporting the name change.

Identification Numbers

Your U.S. Social Security number will be used only temporarily to identify your application in the local computer database until a nine-digit Harvard University ID number is assigned to you if your admission is accepted and confirmed. If you do not hold a U.S. Social Security card, a random nine-digit identification number will be assigned to you. After acceptance into the Summer Session and confirmation of enrollment, each student is assigned a Harvard University student ID number. If you already have a Harvard ID Number, whether as a student or a staff member, please indicate your previous affiliation and ID number in the space provided.

Address

Please provide a current address and day and evening telephone numbers. If your address or telephone numbers change during the admissions process please inform the Summer Session of such changes.

II. Course Selection

Please indicate on the application form the courses to which you are applying for admission. Please note course times and credit limits for each session. **If courses meet at the same time, indicate which is your first choice.** Refer to the program brochure for descriptions of course content and requirements, or check the school's website for course information: www.hsph.harvard.edu/registrar/courses/index.shtml

III. How Did You Hear About the Summer Session?

Please indicate how you heard about the Summer Session, using the appropriate code from the following choices:

Code/Source

- 51 I attended a previous Summer Session
- 52 HSPH community (word of mouth)
- 53 Colleague
- 54 HSPH Admissions Office
- 56 Summer Session brochure in the mail
- 57 APHA annual meeting
- 58 Nation's Health ad
- 61 MPH Office at HSPH
- 62 HSPH Web site
- 63 Other Web site (please specify)

IV. Release of Application Materials Previously Submitted to HSPH

If you have applied for degree candidacy at the Harvard School of Public Health for the 2004-2005 academic year, you may authorize the Admissions Office to release your application materials to the Summer Session by signing in the space indicated. All materials submitted in support of your application for admission to degree candidacy will be

Please Note

Admission to and participation in the Summer Session does not guarantee admission to a degree-granting program. If you are interested in applying to a degree-granting program either before or after attending the Summer Session, contact the Admissions Office at 617-432-1031 to request application materials. The Admissions Office can be reached by e-mail at admisofc@hsph.harvard.edu.

Similarly, admission to a degree-granting program at the School of Public Health does not guarantee admission to the Summer Session. Because the Summer Session courses are intensive, and because space is limited, current and entering HSPH students may not, in some instances, be admitted to Summer Session courses.



released to the Summer Session reviewers. If you are a current student or current degree candidate, you may skip parts V through IX and sign here to release your application materials from the Registrar's Office to the Summer Session.

V. Citizenship

Indicate your citizenship by checking the appropriate category and provide the additional information requested. Note that if you are a permanent resident of the United States (Green Card holders only) you must submit a photocopy of the front and back of your permanent resident card.

VI. Optional Questions

Answers to questions in this section are optional. The answers are requested for statistical reporting only. Choosing not to provide answers to some or all of these questions will in no way influence the decision regarding your application for admission.

Please note: If accepted, gender and date of birth are required information.

VII. Professional Experience

Please indicate your most recent occupation by using the appropriate code listed below. Also indicate the length of time (in years) you have been in this occupation. **Please enclose your current resume or curriculum vitae.**

Code/Occupation

02	administrator	38	pharmacist
08	biostatistician	40	physician
12	dentist	44	psychologist
14	economist	45	rehabilitationist
15	educator	47	social worker
16	engineer	48	sociologist
18	environmental scientist	49	statistician
19	epidemiologist	54	bachelor's degree student
20	health educator	55	master's degree student
22	health service administrator	56	doctoral degree student
24	hospital administrator	57	other (please specify)
27	journalist	58	medical resident
28	laboratory scientist	59	research assistant
29	lawyer	98	dental degree student
33	nurse	99	medical degree student
34	nutritionist		

VIII. Education

List all colleges and professional schools you have attended, starting with the most recent, whether or not you received relevant academic credit from that institution. **Please submit transcripts from each institution from which you received a degree.** You may either ask the institution to send a copy of the transcript directly to the Summer Session, or you may forward it to us yourself. If your academic institution does not provide transcripts, you may have the Registrar submit remarks, rank in class, position in examinations, course curriculum, etc., in place of the transcripts. If the institution does not keep records in English, the transcript must be translated into English.

IX. Standardized Tests

The Test of English as a Foreign Language (TOEFL)

All students applying from countries where English is not the language of instruction and all U.S. permanent residents and U.S. citizens who were granted permanent residency or citizenship after January 1, 2003 must submit a TOEFL score report (minimum score of 560 on the paper-based test or 220 on the computerized test is required) to the Summer Session before their applications will be considered.

As a matter of policy, law and commitment, the Harvard School of Public Health does not discriminate against any person on the basis of race, color, sex, sexual orientation, religion, age, national or ethnic origin, political beliefs, veteran status, or handicap in admission to, access to, treatment in, or employment in its programs and activities.



Admissions Tests: “Do I have to submit a GRE score report?”

The Summer Session strongly encourages you to submit a score report from the GRE (or an appropriate substitute as outlined below) along with your application. Scores from such standardized tests can provide important information about your quantitative aptitude in particular. **If the transcript you submit from a baccalaureate or post-baccalaureate program does not include a grade for a college-level mathematics course, you will be expected to submit a standardized test score report.** You may submit a photocopy of your score report.

Scores from the following examinations are acceptable under the following circumstances:

Dentists and current dental students may submit scores from the Dental Admission Test (DAT)

Applicants holding an MBA or DBA, or current MBA or DBA students, may submit scores from the Graduate Management Admission Test (GMAT)

Physicians and current medical students may submit scores from the Medical College Admission Test (MCAT)

Attorneys and current law school students may submit scores from the Law School Admission Test (LSAT)

X. Statement of Intent

On a separate sheet of paper, please describe your areas of interest in public health, your reason for wanting to attend the Summer Session, and your career plans. Your statement should be typed, double-spaced, and no more than 500 words long.

XI. Signature

You must sign and date the completed application. Your signature certifies that the information provided by you on all sections of the application and any supplementary sections is complete and accurate in every respect, and that you understand that any misrepresentation or omission may be cause for denial of admission or revocation of academic record. Your signature also certifies that you understand that any materials submitted with your application become the property of the Harvard University School of Public Health. **Even if you have signed the release authorization at Roman Numeral IV, you must sign and date the application here.**

Unsigned applications will be returned to the applicant with a request for signature. Applications without a signature will not be processed.



XII. Mail Completed Application and Fee to:

Hildi Keary, Summer Programs
Admissions Office-HSPH
677 Huntington Ave., Rm G-4
Boston, MA 02115

For more information regarding Summer Session admissions procedures, contact:
Hildi Keary, Administrative Assistant for Summer Programs

Phone: 617-432-1052
Fax: 617-432-2009
email: hkeary@hsph.harvard.edu

For questions regarding Summer Session academic program and the Master of Public Health Program, contact:

Roberta Gianfortoni, Director, Summer Session
Phone: 617-432-0090
Fax: 617-432-3365
email: roberta@hsph.harvard.edu

“I took a wonderful course that was comprehensive, challenging, engaging, and skillfully taught. It was endlessly stimulating to study with medical professionals all grappling with the complex questions about society and health.”

**— Barbara Goldoftas, MS, Science Writer
Summer Session 2002**

Application for Admission – Harvard School of Public Health
Summer Session for Public Health Studies • 2004

I. Biographical Information

A. Name

Prefix: _____ Name: _____
Ms., Mr., Dr., etc. Last (Family) First Middle
Suffix: _____ Maiden Name: _____
Jr., M.D., R.N., etc.

Have you applied to or attended another school or taken a standardized test that you are submitting with this application under another name?

yes no If yes, under what name: _____

B. Identification Numbers

U.S. Social Security Number: _____

Please list the dates of any previous attendance or employment at Harvard University, and your Harvard ID Number:

From _____ to _____ Harvard ID Number: _____
(MM/YY) (MM/YY)

C. Address and Telephone

Number and Street
City, State and Zip Code Country Email Address
Telephone (Daytime) Telephone (Evening) Fax Number

II. Course Selection

Please check the courses to which you are applying for admission. If you are applying to more than one course in the same time slot, please indicate your first and second choice. Please note: students may register for a maximum of 5 credits per session. All courses are 2.5 credits.

Summer 1

- BIO113, Introduction to SAS (3:30-5:30 p.m.)
- BIO202, Principles of Biostatistics, Part I (8:30-10:20 a.m.)
- EH202, Principles of Environmental Health (3:30-5:20 p.m.)
- EPI200, Principles of Epidemiology (10:30-12:20 p.m.)
- HPM510, Introduction to Management of Health Care Organizations (8:30-10:20 a.m.)
- SHH201, Society and Health (1:30-3:20 p.m.)

Summer 1 Limited Enrollment

- HPM276, Survey of Methods in Health Services Research (3:30-5:20 p.m.)
- HPM277, Current Issues in Health Policy (1:30-3:20 p.m.)
- RDS286, Decision Analysis in Clinical Research (1:30-3:20 p.m.)
- ID251, Ethical Basis of the Practice of Public Health: Health Care Delivery (10:30-12:20 p.m.)
- ID251, Ethical Basis of the Practice of Public Health: Health Care Delivery (3:30-5:20 p.m.)

Summer 2

- BIO203, Principles of Biostatistics, Part II (8:30-10:20 a.m.)
- BIO234, Research Synthesis and Meta-Analysis in Public Health and Medicine (3:30-5:20 p.m.)
- EPI202, Elements of Epidemiologic Research (10:30-12:20 p.m.)
- HPM209, The Economics of Health Policy (10:30-12:20 p.m.)
- ID215, Environmental and Occupational Epidemiology (1:30-3:20 p.m.)

Summer 2 Limited Enrollment

- BIO214, Principles of Clinical Trials (10:30-12:20 p.m.)
- BIO224, Survival Methods in Clinical Research (8:30-10:20 a.m.)
- HPM253, Quality Improvement in Health Care (1:30-3:20 p.m.)
- HPM512, Medical Informatics (1:30-3:20PM)
- HPM299, Research With Large Databases (3:30-5:20 p.m.)

III. How did you hear about the Summer Session? Please place a code in the space provided. See page 11.

How did you learn about the Summer Session? _____ / _____
Code Description

IV. Release of Application Materials Previously Submitted to HSPH

If you have applied for degree candidacy at the Harvard School of Public Health for the 2004-2005 academic year or are a current degree candidate, you may authorize the Admissions and Registrar's Offices to release your application materials to the Summer Session by signing below. I hereby authorize the Admissions Office of the Harvard School of Public Health to release the contents of my application for admission to degree candidacy to the Harvard School of Public Health Summer Session for Public Health Studies.

Signature _____ Date _____

V. Citizenship

My country of citizenship is _____ My place of birth is _____
City Country

I am a U.S. Permanent Resident (Green Card holders only – a copy of front and back of Green Card must be enclosed).

To be completed by those who are not U.S. citizens or by those who do not hold U.S. Permanent Resident status (Green Card):

I currently hold a: F-1 visa for the U.S.A. J-1 Its expiration date is _____
(MM/DD/YY)

VI. Optional Questions

Sex: Male Female Date of Birth: _____
(MM/DD/YY)

Ethnic Background:

For U.S. citizens only (please check the appropriate box)

African American Chicano/Mexican American Other Hispanic

Asian American or Pacific Islander Puerto Rican White

American Indian or Alaskan Native Tribal Affiliation: _____

Other, please describe: _____

VII. Professional Experience

What has been your most *recent* occupation? See instructions, page 12, for code number. Please include a resumé or c.v. with your application.

Code/Description	Years in this position
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VIII. Education

School:	Location	Dates Attended	Degree Received	Date Awarded
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School:	Location	Dates Attended	Degree Received	Date Awarded
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School:	Location	Dates Attended	Degree Received	Date Awarded
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IX. Admission Tests (See application instructions in booklet, pages 9 - 14.)

Type of Test: _____ Date: _____ Score(s): _____

Type of Test: _____ Date: _____ Score(s): _____

X. Statement of Intention

On a separate sheet of paper, please describe your areas of interest in public health, your reason for wanting to attend the Summer Session, and your career plans.

XI. Signature (Please note that your application will not be processed without it.)

I hereby certify that the information given by me on the various sections of this application and any supplementary materials submitted are complete and accurate in every respect, and I understand that any misrepresentation or omission may be cause for denial of admission or revocation of academic credit. I also understand that my application and any materials submitted with my application become the property of the Harvard School of Public Health.

Signature

Date

XII. Mail Completed Application and Fee to:

Hildi Keary, Summer Programs, Admissions Office
Harvard School of Public Health
677 Huntington Ave., G-4
Boston, MA 02115

At a Glance

Important Contacts

Summer Session Admissions

Hildi Keary, Administrative Assistant for Summer Programs

617-432-1052

hkeary@hsph.harvard.edu

General HSPH Admissions

Vincent James, Director of Admissions

617-432-1031

admisofc@hsph.harvard.edu

Advising for Summer and Master of Public Health Programs

Roberta Gianfortoni, Assistant Dean for Professional Education, Director of Summer Session

617-432-0090

roberta@hsph.harvard.edu

Housing

Tyler Case, Program Coordinator

617-432-0488

housing@hsph.harvard.edu

Non-credit, Continuing Professional Education

617-432-1171

contedu@hsph.harvard.edu

Curriculum and Program Information

- Limit of two, 2.5 credit courses for a total of 5 credits per each summer session.
- Maximum of 10 credits per summer.
- Students enrolled in the summer-only degree programs should speak with the summer session director.

Application and Admissions

- Deadline for application: March 1, 2004
- \$60.00 application fee.
- Sign your application!
- A minimum TOEFL score of 560 on the written test or 220 on the computer test for all students from countries where English is not the language of instruction.
- GRE (or other standardized test) scores are not required but are strongly recommended.
- Admission to the Summer Session does not guarantee admission to the School's degree programs.

Tuition and Fees

- Tuition for 2003 was \$1,730 for a 2.5 credit course. Rates for 2004 have not been established. Rates have changed by approximately 5% in the past.
- Non-refundable deposit/registration fee of \$125.00 is due by April 30, 2004.
- Full tuition is due by May 30, 2004.



Summer Session for Public Health Studies

2004 Dates to Remember! Mark Your Calendar!

March 1: Application deadline
(Late applications may be reviewed on a space available basis.)

April 30: (or later date specified in admission letter) \$125 non-refundable registration fee/deposit and confirmation due

May 30: Full tuition due

July 1- July 23, 2004: Summer 1 Session

July 26-August 13, 2004: Summer 2 Session



HARVARD SCHOOL OF PUBLIC HEALTH

Summer Session for Public Health Studies
Admissions Office
677 Huntington Avenue
Boston, MA 02115-6023 U.S.A.

Tel: 617-432-1052

Fax: 617-432-2009

Email: hkeary@hsph.harvard.edu

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