



# BOW STREET BULLETIN

News and Ideas from the  
**Harvard Center for Population and  
Development Studies**

[www.hsph.harvard.edu/cpds](http://www.hsph.harvard.edu/cpds) • Winter 2010



## Harvard's Work, Family, and Health Study Enters Second Phase

The largest work-family study of its kind is now under way, with the potential for long-term, lasting impact on the health and well-being of low- and middle-wage workers and their families.

Now, in the second phase of the project known as the Work, Family and Health Study (WFHS), the Harvard Center for Population and Development Studies (HCPDS) has once again joined forces with academic and research partners from around the United States to delve deeper into the

During Phase I of the project, which took place from 2005 to 2008, the HCPDS team utilized four nursing home sites to investigate the link between workplace policies, managerial practices and employee health outcomes, measured by an employee's risk of cardiovascular disease, diabetes, high blood pressure and sleep deprivation.

At the conclusion of the first developmental phase of the study—encompassing many pilot studies in different industries—researchers found critical workplace policies and approaches that not only improved employee health, but also benefited the “health” of the organizations, including: increasing employees’ sense of control over the time and timing of their work; improving supervisor support for work and family balance; and changing the culture to focus on the results of the work that matter most for business.

“We found that, if managers are inflexible and non-creative in approaching work-family conflicts, their workers had a doubled risk of heart disease,” said Orfeu Buxton, a lead investigator for the project and an associate neuroscientist in the Division of Sleep Medicine at Brigham & Women’s Hospital and Harvard Medical School. “Having an open and flexible manager is also worth an extra half-hour of sleep per day, and every two weeks that’s a full-night’s sleep lost due to the style of your boss.... We could say, ‘Work influences health,’ and we believe we can fix some of these issues through worksite interventions.”

To continue this study, the five-year-long

## Social Determinants Conference Draws Global Audience

The Harvard Center for Population and Development Studies (HCPDS) will host a two-day *Social Determinants of Global Population Health Conference* this month, an event that will bring leading scholars and public policy officials from around the world to Cambridge.

The conference, to be held at The Charles Hotel on January 15 and 16, creates an opportunity for participants—comprised of government officials, politicians, policy consultants, foundation leaders, members of non-governmental organizations and academicians—to generate policy action items aimed at reducing health inequity by improving social, economic and environmental standards worldwide.

“For years and years, research has been conducted to see how social

*continues on page 4*



WFHS Principal Investigator Lisa Berkman and Project Manager Michael Ostler

findings of earlier pilot studies, where a significant connection was made between an employee’s health and sleep patterns in conjunction with manager’s attitudes and practices concerning work-family interactions.

“Our aim is to make employees healthier,” said HCPDS Director Lisa Berkman, principal investigator for the Harvard site, “but also to improve company policies and operations as well.”

*continues on page 3*

### INSIDE THIS ISSUE

- 1 Work/Family Project
- 1 Social Determinants Conf
- 2 Letter from the Director
- 4 Reproductive Health Laws
- 6-7 Calendar
- 8 Copeland Gift

# BOW STREET BULLETIN

THE HARVARD UNIVERSITY CENTER FOR POPULATION AND DEVELOPMENT STUDIES

## DIRECTOR

Lisa Berkman, Ph.D. Thomas D. Cabot Professor of Public Policy, Epidemiology, and Population and International Health, Harvard School of Public Health (HSPH)

## FACULTY STEERING COMMITTEE

Lisa Berkman, Ph.D., Director, Harvard Center for Population and Development Studies and the Thomas D. Cabot Professor of Public Policy, Epidemiology, and Population and International Health, Harvard School of Public Health (HSPH)

David Bloom, Ph.D., Chair, Department of Global Health and Population, and the Clarence James Gamble Professor of Economics and Demography, HSPH

Peter Bol, Ph.D., Charles H. Carswell Professor of Eastern Asian Languages and Civilization, and Director of the Center for Geographical Analysis, Harvard

Amitabh Chandra, Ph.D., Professor of Public Policy, Kennedy School of Government

David Cutler, Ph.D., Otto Eckstein Professor of Applied Economics, Dept of Economics, Harvard

Matthew Gillman, M.D., S.M., Professor of Ambulatory Care and Prevention, HMS

Claudia Goldin, Ph.D., Henry Lee Professor of Economics, Harvard

Kenneth Hill, Ph.D., Professor of the Practice of Public Health, Department of Global Health and Population, HSPH

Gary King, Ph.D., Albert J. Weatherhead III University Professor, and Director of the Institute for Quantitative Social Science, Harvard

Rob Sampson, Ph.D., Chair of the Department of Sociology and the Henry Ford II Professor of the Social Sciences, Harvard

Mark A. Schuster, MD, PhD, Chief, Division of General Pediatrics, Children's Hospital Boston, and William Berenberg Professor of Pediatrics, HMS

SV Subramanian, Ph.D., Associate Professor of Society, Human Development, and Health, HSPH

Mary Waters, Ph.D., M.E. Zukerman Professor of Sociology, Department of Sociology, Harvard

Jorge Dominguez (ex officio), Ph.D., Antonio Madero Professor of Mexican and Latin American Politics and Economics in the Department of Government, Vice Provost for International Affairs in The Office of the Provost, Harvard

## BOW STREET BULLETIN EDITORIAL STAFF

Editor/Writer: Mary Tamer

Contributing Writer: Laura Price

Contributing Writer: Emily M. O'Donnell

*Bow Street Bulletin* welcomes suggestions. Please contact us at:

The Harvard University Center for Population and Development Studies  
9 Bow Street, Cambridge, MA 02138

lprice@hsph.harvard.edu  
www.hsph.harvard.edu/cpsd

## LETTER FROM THE DIRECTOR

### Access to Sick Leave is Tantamount to Health Care

Last fall, a plethora of news reports had much of the nation on edge regarding the potential spread of the H1N1 virus, more commonly known as the “Swine Flu.” Sadly, as actual cases of this non-seasonal flu climbed through the months of October and November, so too did the number of low-wage workers reporting to their places of employment despite fevers and other symptoms of this highly contagious illness.

If you're wondering why anyone battling the flu—and its accompanying headache, sore throat, body aches and other disconcerting indicators—would still arrive to work, the answer boils down to the basic and fundamental lack of paid sick leave for far too many American workers.

As reported in an article from the November 2 edition of *The New York Times*, “Tens of millions of people, or about 40 percent of all private-sector workers, do not receive paid sick days, and as a result many of them cannot afford to stay home when they are ill.”

Here at the Pop Center, such reports serve to fuel the reasoning behind one of our largest longitudinal studies currently under way, thanks to a significant five-year grant

from the National Institutes of Health and the National Institute on Aging. Among its areas of focus, The Work, Family and Health Network project—the topic of this issue's cover article—will take a close look at how work conditions impact not only an employees' health, but also the well-being of their families.

As we enter the second phase of this important work, we do so with the awareness that the drivers that produce a healthy population have little to do with health care and more to do with awareness and prevention. Yet, as the United States Congress continues to debate the value and detriment of national health care, we already know that access to health care without a reasonable sick-leave policy is a battle not yet won.

As the *Times* article stated, “Many worker groups and women's groups have seized on the H1N1 pandemic to argue that Congress should enact legislation guaranteeing paid sick days.”

Such a measure may prove to be critical to the short- and long-term health of the American workforce in light of these recent events.

—Lisa Berkman



The multiple collaborators and partners of the Women's Health Survey of Accra (see cover story in Fall 2009 issue) convened for a conference at the Harvard Pop Center on May 20-22, 2009, to discuss latest results and next steps. Represented were the Institute for Statistical, Social and Economic Research at the University of Ghana, Ghana School of Public Health, Ghana Medical School, San Diego State University, Pennsylvania State University, George Washington University, Ibis Reproductive Health, John Snow Incorporated, City University of New York, Population Council, plus Harvard School of Public Health, Harvard Kennedy School of Government, Harvard Law School, Harvard College, Harvard FAS and Beth Israel Deaconess Medical Center.

## Study of Work, Family and Health *continued from page 1*

Phase II portion of the project involves hundreds of faculty and researchers across eight universities and research centers, including University of Minnesota, Portland State University, Michigan State University, Penn State University, Kaiser Permanente's Center for Health Research and the Research Triangle Institute. In all, 3,000 people will be interviewed across a total of 60 work sites—involving New England-based nursing homes and telecommunications IT workers—with an eye toward the development of interventions beneficial for workers in a broad range of business sectors.

According to HCPDS Project Manager Michael Ostler, the Harvard team's focus on long-term care facilities was based on the industry's multicultural population of employees, many of whom are low-wage workers with limited benefits as well as high rates of turnover and absenteeism.

"The way our population is growing, we are having more and more people live well into their years ... and we want to have a place where our loved ones are taken care of as we'd want them to be. Residence satisfaction is key" when it comes to long-term care facilities, said Ostler. "When we are asking nursing home workers to care for our loved ones and when they are in a work environment that is negative, it causes an impact on the residents. It could directly affect them on a daily basis."

As well as the families of the workers, who are also significant participants as part of this project. "We will go to the homes of individual employees and interview their spouses and children," said Buxton, adding that researchers will measure individual worker health outcomes through the collection of physical measurements, a blood test to determine risk of heart disease and diabetes (among other health factors), and sleep quantity by way of a wrist device worn over a period of days. "The multi-level analysis is one of this study's greatest strengths as we try to capture data from all different facets of living."

"I have been on other projects that have an equally high number of participants but what makes this project so complex is the longitudinal follow-up," says Ostler. "We have to recruit 3,000 employees over two industries, with follow-ups at 6, 12 and 18

months, so collecting 12,000 sets of employee data with significant family data, too."

While Phase II is still in its earliest stages, Ostler said the response of participating nursing home workers has indeed been positive. "We really hope to create a positive impact on workplace dynamics and improve the health of the workers, which all trickles down to the residents that they are taking care of."

With the initial research pointing to concrete links between work-related stress and health, with a correlated negative trickle-down to families, Phase II, said Buxton, will focus on the integration of workplace interventions that will address the improvement of an employee's mental health, sleep quality and quantity, and improved overall health with a reduction in chronic conditions.

While Ostler acknowledges that outcomes are "too soon to predict" this early in the project, hopes are high that a positive

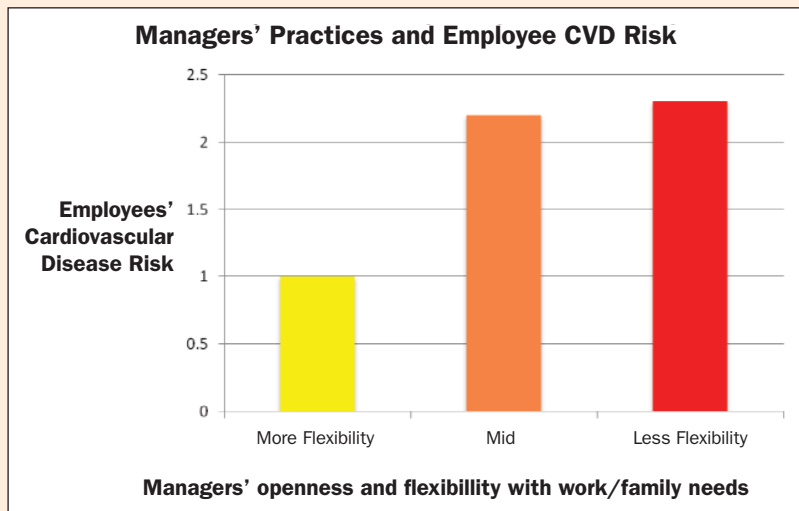
result will be achieved. The WFHS is also determining what customization may cost for other industries to apply similar intervention-based programs—where workplace flexibility and support of work-family issues are the norm rather than the exception—for the benefit of both the employee and employer. "If we can prove there is a great return on investment, this will hopefully be a program that is desired," he said. "If things do go as we plan, I see a great impact, and it is those goals we think will be met."

Phase II of the five-year Work, Family and Health Network is funded by a \$31 million grant from the National Institutes of Health including the National Institute on Aging, the National Institute for Child Health and Human Development, the Centers for Disease Control, the Office of Behavioral and Social Sciences Research and the National Institute for Occupational Safety and Health. ■

### Managers' Practices Related to Work-Family Balance Predict Employee Cardiovascular Risk Sleep Duration in Extended Care Settings

Between 2005 and 2008, 452 low-wage employees and 52 mid-level managers were surveyed in long-term care facilities in Massachusetts.

- Managers were queried for "Openness" in helping/adjusting for employees work family needs (e.g., schedules) and "Creativity" in applying current policies
- Employees' health was measured in terms of blood pressure, cholesterol, body mass, diabetes risk and sleep duration.



Models control for age, gender, wage, education, race/ethnicity and worksite

## Social Determinants Conference *continued from page 1*

conditions impact health,” said HCPDS Director Lisa Berkman. “This conference is intended to develop interventions and policy based on research to date. This is about implementation, and in many cases, we know enough to act on a number of critical issues.”

According to the World Health Organization (WHO), the social determinants of health “are the conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power and resources at global, national and local levels, which are themselves influenced by policy choices. The social determinants of health are mostly responsible for health inequities—the unfair and avoidable differences in health status seen within and between countries.”

Broadly, those who live in poor social circumstances experience worse health outcomes, including increased susceptibility to chronic diseases, such as cardiovascular disease and diabetes, and infectious diseases including HIV/AIDS and malaria, as well as higher rates of mortality and more barriers to healthcare access.

Among its stated goals, the January HCPDS conference aims to build upon the recommendations outlined in both the

*WHO Commission on Social Determinants of Health Final Report* published in 2008 as well as the *Robert Wood Johnson Foundation (RWJF) Commission to Build a Healthier America Report* released in 2009. Both the WHO and RWJF commissions



Sir Michael Marmot

have called for action on identifying and improving social determinants of health, and their reports present specific recommendations toward achieving health equity.

Participants from the United States, Uganda, Japan, China, Mexico, Brazil, the United Kingdom and India will hear keynote

addresses by Sir Michael Marmot, professor of Epidemiology and Public Health at University College London and chair of the *WHO Commission on the Social Determinants of Health*; and Dr. Julio Frenk, dean of the Harvard School of Public Health and former Minister of Health in Mexico.

Through small working groups, participants will also have an opportunity to review the latest research on many of the commissions’ focus areas—early childhood development, aging, gender inequities, safe housing and environment—and begin discussions on taking evidence findings and transforming them into policy action items. Additional goals of the conference include fostering commitments from nations to make effective changes in these essential areas, and the creation of communications strategies directed toward politicians, activists, and the public at large. At the conclusion of the conference, session facilitators will share the policy action items produced in the breakouts with all participants.

The conference is co-sponsored by the Harvard Center on the Developing Child (HCDC); the Harvard Initiative for Global Health (HIGH); the Robert Wood Johnson Foundation Commission to Build a Healthier America. ■



Participants from around the globe met on October 22-23 at the Harvard Pop Center for the “Latin American/North American exploratory workshop on investigating societal determinants of health inequities between & within countries.” Convened by HSPH Professor Nancy Krieger (*seated, far right*), this distinguished group of public health academicians and officials represented Brazil, Canada, Columbia, Mexico, and the United States.

# Economist Gauges the Impact of Changes to Reproductive Health Laws

A great change to fertility rates around the world followed the introduction of the contraceptive pill in 1957, prompting the so-called “population bomb” concerns around 1968 and the surge in family planning programs throughout the 1970s.



The pace of time also saw various countries through an era of post-war prosperity, colonial independence, legal autonomy, and liberalization of abortion and contraception laws, the latter of which leads to questions regarding the trend of fertility decline.

Now, some 50 years after the introduction of the contraceptive pill, the time is right to analyze how changes in reproductive health laws have affected fertility and other social outcomes. To do this, I am applying the wealth of information captured in the Demographic and Health Surveys, and its predecessor, the World Fertility Surveys. Using this data, it is possible to track changes in birth rates as well as noteworthy characteristics such as education and employment of women and their partners from the 1970s to the present.

If one compares countries around the world, laws for abortion, contraceptive pills, condoms, IUDs and sterilization have been liberalized in some instances, or restricted in others to a varying extent since 1960. At the same time, fertility rates have declined differentially around the globe: from 6.8 births per women aged 15-44 in 1960 to 3 in 2005 in Bangladesh, from 6.7 to 4 in Ghana, from

5.7 to 1.08 in Korea, and from 7.3 to 3 in Nicaragua.

In order to take a closer look, I have constructed a database of the laws associated with abortion and sterilization as well as those associated with the use of contraceptive pills, condoms and IUDs. To quantify the qualitative legal information from 1960 to the present, I have coded the annual status of the law in terms of the degree of legality.

Combining these data sets provides a treasure trove of research opportunities, and—working with a team of fellow economists, David E. Bloom, David Canning and Guenther Fink—we consider the question of causality of how changes in fertility rates affected female labor supply around the world. Decisions of how many children to have and whether (and how much) to work are joint, but we isolate one of the links in the chain. We identify the effect fertility decline—driven by changes in reproductive health laws \_ had on female labor force participation. For women, for example, one less child translates to two more years of work than she would have had between the ages of 15 and 44, or four additional years of work for giving birth to two less children.

In another project, I work with an interdisciplinary team of Ashley Fox (sociomedical sciences), Paul Cruickshank (history of science) and Kavita Sivaramakrishnan (history of public health). In this group, we delve into the cultural and political underpinnings of the changes in reproductive health laws while reviewing a range of countries including those in Sub-Saharan Africa, South America and Asia.

New governments, lobby groups, international conventions and organizations such as the Pop Council, UNFPA, USAID, and the World Bank, as well as the influence of individuals in the judicial system, are among the drivers of legal change and program implementation. We aim to understand if legal change responds to domestic or external pressures. In addition, we ask if the legal change precedes these demands and contributes to shaping social attitudes toward

reproductive health and preferences over the timing and number of children.

While I am still in the midst of this analysis, the results to date indicate that laws evolve for a range of reasons, but the likes of the influence of the United Nation’s 1994 International Conference on Population and Development are empirically evident. Changes in reproductive health laws have had a significant effect on fertility decline,



**Now, some 50 years after the introduction of the contraceptive pill, the time is right to analyze how changes in reproductive health laws have affected fertility and other social outcomes.**

though not necessarily through the obvious link of contraceptive use. Following the fertility decline have also been social and behavioral changes including a rise in female labor force participation. Armed with this data and evidence, I will continue to explore family planning and what became of it all.

*—Jocelyn E. Finlay, Ph.D., is a research associate in the Department of Global Health and Population, Harvard School of Public Health and Harvard Center for Population and Development Studies. As an economic demographer, her research covers issues relating to the social consequences of fertility decline and aging populations. Finlay’s other research interests include the social and behavioral response to natural disasters and intergenerational effects of social security policy and reform. ■*

# Upcoming Winter 2010 Seminar

## POP CENTER SEMINARS

Pop Center, 9 Bow Street, Cambridge, 4:30 – 6:00 PM

These sessions are open to faculty, research scientists, postdoctoral fellows and all students. Advance readings are available at our website [www.hsph.harvard.edu/cpds](http://www.hsph.harvard.edu/cpds).

DATE	PRESENTER
February 8	Esther Duflo, Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics, Department of Economics, MIT.
February 22	Ichiro Kawachi, Chair, Department of Society, Human Development and Health, Harvard School of Public Health.
March 8	Barbara Entwisle, Director of the Carolina Population Center, and Kenan Professor of Sociology, University of North Carolina, Chapel Hill, NC.
March 22	James Banks, Professor of Economics, University College London.
April 5	 <b>FEATURED SEMINAR</b> <b>Spatio-Temporal Trends of Infant Mortality in Brazil</b> Marcia Castro, Assistant Professor of Demography, Department of Global Health and Population, HSPH.

## FEATURED SEMINAR



On April 5, 2010, the Pop Center presents “**Spatio-Temporal Trends of Infant Mortality in Brazil**” by **Marcia C. Castro**, Assistant Professor of Demography, Department of Global Health and Population, Harvard School of Public Health.

Though Brazil is among sixteen countries expected to meet the Millennium Development Goal to reduce child mortality by two thirds between 1990 and 2015, its infant mortality rate (IMR) remains high (compared with Chile and Argentina) and unequally distributed throughout the country. In response, Castro set out to understand the prevalence, inequalities and geographic clustering associated with infant mortality in Brazil from 1980 to 2005.

Castro's research indicates that better infant outcomes remained concentrated in the Southern regions, with higher infant mortality generally restricted to the Northeast region of Brazil. She found that declines in IMR were not accompanied by significant reductions in the inequality of infant deaths. That is, the relative gap between the better and the worse off micro-regions remained unaltered, and therefore infant deaths remained disproportionately concentrated among Brazil's poorest regions.

Please join us on April 5 as Castro discusses these findings and their implications for Brazil's ability to meet the Millennium Development Goals to reduce child mortality. ■

## POP CENTER SEMINARS *continued*

DATE	PRESENTER
April 12	Sara McLanahan, William S. Tod Professor of Sociology and Public Affairs, Princeton University.
May 3	Teresa Seeman, Professor of Medicine & Epidemiology, UCLA Schools of Medicine and Public Health.
May 10	Mark Schuster, Chief, Division of General Pediatrics at Children's Hospital Boston, and William Berenberg Professor of Pediatrics, Harvard Medical School.
May 17	Alberto Palloni, Samuel Preston Professor of Sociology, University of Wisconsin-Madison.

## ROBERT WOOD JOHNSON FOUNDATION HEALTH AND SOCIETY SCHOLARS SEMINARS

Harvard School of Public Health, Kresge 708, Boston, 4:00 – 6:00 PM

These sessions are open to faculty, research scientists and postdoctoral fellows. Advance readings are available at our website [www.hsph.harvard.edu/cpds](http://www.hsph.harvard.edu/cpds).

DATE	PRESENTER & SEMINAR TITLE
January 21	Lauren Smith, Medical Director of the Massachusetts Department of Public Health. <b>Seminar Title: The Challenge of Public Health: Translating Research and Clinical Experience into Practice</b>
February 4	Maria Glymour, Assistant Professor of Society, Human Development, and Health, HSPH. <b>Seminar Title: School Policies in Childhood and Cognitive Function in Old Age</b>
February 18	Kate Strully, Assistant Professor of Medical Sociology, the University at Albany, State University of New York. <b>Seminar Title: Job Loss and Health in the U.S. Labor Market</b>
March 4	Amitabh Chandra, Professor of Public Policy, Harvard Kennedy School of Government. <b>Seminar Title: Cost Growth and the Keys to Healthcare Reform</b>
May 6	Elizabeth Sweet, RWJ Health and Society Scholar, Cohort 6, Harvard University and Wendy Berry Mendes, John L. Loeb Associate Professor of Social Science, Department of Psychology, Harvard University. <b>Seminar Title: Culturally Salient Social Status and Stress Reactivity</b>
May 20	Laura Kubzansky, Associate Professor of Society, Human Development, and Health, HSPH. <b>Seminar Title: TBD</b>

# Copeland Gift Establishes Timely New Initiatives

In June, Lammot du Pont Copeland Jr. AB'54 made a significant philanthropic commitment to the Harvard Center for Population and Development Studies and to the School of Public Health. With a pledge of \$2.5 million, Copeland will launch the Andelot Global Population Data Enclave at the Pop Center as well as the Andelot Public Health Fora at HSPH.

Copeland's family ties to population research date back to 1964, when his late father, Lammot du Pont Copeland Sr., AB'27, helped HSPH Dean John C. Snyder establish the Harvard Center for Population and Development Studies by donating the Andelot Professorship in Global Demography, named in honor of his French ancestry. More recently, his son chose to mark his own 50th Harvard College reunion in 2004 with a gift to establish the Andelot Scholarships and Fellowships at HSPH. As a result of regular reports on the recipients of the funds and their accomplishments, as well as hearing often from Andelot Professor Allan Hill regarding his global research,

Copeland was inspired once again to support these new public health initiatives.

With input from new HSPH Dean Julio Frenk and Pop Center Director Lisa Berkman about their priorities for the



School and the Center, Copeland directed his transformational support to two key areas: knowledge translation in public health and population data management for researchers at the Pop Center. As a result, the 2009-2010 academic year will see the inauguration of the Andelot

Public Health Fora at HSPH to promote the conversion of the School's research into real-world policy and action to improve health both nationally and globally.

In addition, the Harvard Center for Population and Development Studies will create the Andelot Global Population Data Enclave to promote and advance its core research goals. "The School and the Center have a responsibility to improve the quality of health care throughout the world," said Copeland, "and I feel privileged to play a part in fulfilling this absolutely essential commitment."

"With this gift, we begin the process of upgrading our data management and security capabilities to world-class levels to enable our own researchers and those at other universities to benefit from rich troves of population health information that require the strictest levels of confidentiality," said Berkman. "We are deeply grateful to Mr. Copeland for his willingness to fund this central component of our mission." ■



## Harvard Center for Population and Development Studies

Harvard School of Public Health  
9 Bow Street  
Cambridge, MA 02138