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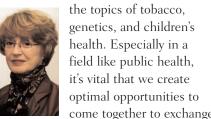
"We're an internationally kinetic place," says School of Public Health Dean Noreen Clark.
Our global health program shows how and why.

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A Letter from the Dean

ach fall for the past five years, the School of Public Health has closed its classrooms for a day and brought the entire school community together to examine and discuss a single health issue of pressing importance. This year, the topic of our annual schoolwide symposium was obesity. Last year, we looked at genetically modified organisms. Previous symposia have addressed



information and share ideas. Taking multidisciplinary approaches to problem-solving is the hallmark of the University of Michigan and most certainly of this school.

The need to pool and exchange our collective knowledge is also the driving concept behind the school's interdepartmental concentrations in reproductive and women's health and in public health genetics. This academic year, we will add a third IC to the list. Under the direction of epidemiologist Mark Wilson, who brings a proverbial "world" of experience to the job, the school's new IC in Global Health will provide an umbrella for our current research on global health issues and give both students and faculty a vehicle for developing new collaborations. Perhaps more than anything, it will call attention to the great work already being done at the school. You'll find more about the new IC and about Professor Wilson in the feature article of this issue of Findings.

Time and again, we hear from students and alumni that the talent of our faculty is what makes Michigan unique among public health schools. As it happens, this year's all-school symposium honored SPH Professor Emeritus Eugene Feingold, a past president of the American Public Health Association and a lifelong champion of social justice. Sadly, Professor Feingold passed away this October after an extended illness. To his family, friends, colleagues, and to the public health profession at large, his loss is immeasurable. A true scholar who inspired legions of students and colleagues to do their best work, Gene personified the teacher/learner. He was always willing to listen, to share his expertise, and to impart his sense of the situation, no matter how complicated or perplexing. He made his life's work doing what was right for those who often had no voice in the political and economic decisions that shaped their lives. In this, as in so many other ways, Gene Feingold demonstrated what we are capable of achieving when we choose to live our ideals in everyday interactions. As we mourn his loss, may we strive to heed his example.

As always, this issue brings greetings and best wishes from your public health colleagues in Ann Arbor.

Sincerely,

Noreen M. Clark Noreen M. Clark, PhD

Dean
School of Public Health
University of Michigan

Findings

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From Our Readers.

egarding the issue of health care coverage (spring/summer School of Public Health Dean's Letter), in 1950, I was one of four graduate students in Nathan Sinai's health economics class. The class recognized that managed care required a primarycare physician to provide personal care and manage overall care through referrals and consultation to limit uncontrolled, open-ended, unnecessary services. The primary-care physician also provides a vital service to the patient by interpreting specialists' recommendations and findings. Primary-care physicians must have a holistic approach that may include alternative health procedures.

An HMO is both a service and a business, but primarily a service. Today, many HMO primary-care physicians place business, or costcutting, before medical need. The most effective HMO would be a nonprofit, hospital-affiliated organization within a universal health insurance system that parallels the current Medicare program. With universal health insurance, medical care costs now included in insurance coverage (auto, malpractice, homeowner, worker compensation, employee health insurance, etc.) could be minimized. Federal, state, and local care funding for prisons, indigents, VA, and Medicare could be limited. There would be less expensive litigation and more timely provider reimbursement.

Alvin Hamburg
MPH '50

he recent dean's letter on health care coverage (spring/summer School of Public Health *Dean's Letter*) contained many pertinent and well-worded core questions that face us as a civil society. In a media-saturated, short-term-oriented culture, questions about health care are too readily simplified and swept aside in favor of any number of shallow, almost laughable priorities ("Do we or don't we include 'one nation under God' in the Pledge of Allegiance?").

Dean Clark's summary of the various past and present efforts by SPH faculty and researchers to frame the questions and solutions for many health care dilemmas enhanced my already existing sense of pride in my alma mater. Thank you to Dean Clark and the faculty for your continuing efforts to keep the University of Michigan School of Public Health a vanguard institution and important reference source for the creation of responsible and effective public policy.

Richard P. O'Donnell Director, Payer Relations, Spectrum Health Grand Rapids, Michigan MPH '80

UPDATE

David Persaud, MPH '02, who was recently profiled in an article about the School of Public Health's Preventive Medicine Residency program (spring 2002 *Findings*), has accepted a position as both medical director for the Kent County (Michigan) Health Department and medical examiner for the county of Kent.

CORRECTIONS

A photo caption in the spring/summer School of Public Health *Letter from the Dean* misidentified the person seated to the right of Professor Catherine McLaughlin of the Economic Research Initiative on the Uninsured. The person is not research associate Sarah Crow but rather research assistant Karoline Mortenson.

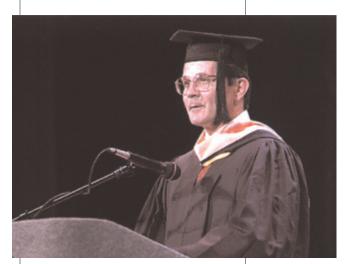
The feature article in the spring 2002 issue of *Findings* incorrectly described Cipro as an anthrax vaccination. Cipro is an antibiotic used to treat inhalation anthrax as well as other bacterial infections.

The article "Why Disparities in Oral Health among Low-Income African Americans?" (spring 2002 Findings) incorrectly identified Stephen Eklund as an associate professor of epidemiology. Eklund is a professor of dental public health in the SPH Department of Epidemiology and an adjunct professor at the UM School of Dentistry. The UM School of Dentistry received funding for this project from the National Institute of Dental and Craniofacial Research to develop the Detroit Center for Oral Health Disparities under the leadership of Dr. Amid Ismail, PhD '84, a professor at the School of Dentistry and a School of Public Health alumnus. The School of Public Health is one of several UM schools and colleges participating in the center, whose members also include community organizations.

Observatory News...

OSHA Director Tells Class of 2002: "You Have Received the Best"

ast April 26 was a big day for John Henshaw—and not just because his fifth grandchild was born that morning, although that event kept him even busier than usual as he monitored his cell phone for updates from the delivery room.



April 26 was also the day that John Henshaw, MPH '74, assistant secretary of labor for occupational safety and health, former president of the American Industrial Hygiene Association, and former member of the EPA National Environ-mental Laboratory Accreditation Advisory Board, returned to his alma mater to give the 2002 convocation address.

"When I received my U of M School of Public Health master's degree in 1974, I never pictured myself being a part of a graduation ceremony in this way," he told the 328 members of the graduating class who had gathered that evening with friends, family, and faculty in Ann Arbor's historic Michigan Theater. Later, Henshaw reminded graduates that at SPH they had received "the best—the best education, the best role models, the best opportunities. Now I trust that you will do your best with it."

Despite a flight itinerary that brought him to Ann Arbor late in the afternoon, Henshaw managed to pack in a quick meeting with faculty and alumni from the Department of Environmental Health Sciences before attending convocation. During

the meeting,
Henshaw said he
loves his work as
OSHA director,
even though the
on-job schedule—
from six am to ten
pm every weekday—is taxing.
"Nothing could be
more important,
nothing could be
more impactful,"
he said.

He talked about Congress's

bipartisan repeal of OSHA's ergonomics standard last year, calling it one of the most "pressing issues" his agency now faces. OSHA had invested \$10 million and 10 years in the development of an ergonomics standard that ultimately led to a fierce battle concerning the science of ergonomics, its relationship to occupational health, and the cost

scientific research. Toward that end, Henshaw said he has established a National Advisory Committee on Ergonomics, and he and his colleagues are working with industry and labor to develop industry-specific and site-specific guidelines aimed at reducing ergonomic hazards in the workplace. "If we can move the ball halfway down the court, the remaining distance won't be that different," he said. "We need to take the controversy out of the issue, move it forward."

During his remarks to the students later that evening, Henshaw returned to the ergonomics issue, citing it as a prime example of why compromise is a concept public health professionals need to embrace. "My first suggestion to you as you begin your professional lives is to be willing to compromise but maintain your professional standards," he told the graduates. He also encouraged them to dedicate a portion of their professional life to volunteer work.

Dean Clark told the graduates that Henshaw is an exemplary SPH alumnus, who has served on both the Alumni Board of Governors and the Dean's Advisory Committee. "Through the American Industrial Hygiene Association Foundation, Mr.

Henshaw loves his work as OSHA director, even though the on-job schedule — from six am to ten pm every weekday — is taxing.

of providing remedies. In response to the controversy, Congress for the first time in its history invoked the Congressional Review Act and killed the standard, which had been due to go into effect in January 2001. In the aftermath, said Henshaw, "the agency had to return to the drawing board."

Today, OSHA staff members are working hard to develop new ergonomics guidelines based on solid Henshaw raised money to endow a scholarship in memory of his former Michigan professor, Ralph Smith. His current position at OSHA puts Secretary Henshaw at the front line of environmental health. For that reason, and for his devotion to the School of Public Health, it is a great honor for us to welcome him back to Michigan tonight."

SPH Group Shares Research Results with Members of Congress

ast February, faculty, staff, academic and community partners involved in the School of Public Health Communities of Color and Genetics Policy Project traveled to Washington, DC, to meet with mem-

expression to the project's goal of bringing the voices of community to those who make policy," said Toby Citrin, principal investigator of the project and director of the school's Office of Community-Based Public



As a follow-up to their meeting with Senator Debbie Stabenow, center, members of the Communities of Color and Genetics Policy Project hope to form a national coalition.

bers of Congress, among them U.S. Senator Debbie Stabenow. The group shared policy recommendations and delivered a policy report summarizing the results of their community-based research on ethical and policy questions related to genetics research and technology. "The trip gave literal

Health. "Members of Congress and key staffers said they'd give serious consideration to the project's recommendations." Citrin and the project's community and academic partners are now working on plans to form a national coalition on genetics and health disparities.

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If you haven't visited www.sph.umich.edu recently, check out these new sections:

RESEARCH CENTERS & INITIATIVES

The index at www.sph.umich.edu/faculty_research/research_centers.html continues to grow, reflecting research and policy groups affiliated with the school. From this page you're just one click away from new web sites describing the University of Michigan Bioterrorism Preparedness Initiative, the Asthma Research Collaborative, the Michigan Center for Genomics & Public Health, the Michigan Public Health Training Center, and more.

PROFESSIONAL GROWTH

The school's executive and continuing education offerings have been grouped in the redesigned pages at www.sph.umich.edu/exec_ed/index.html page. This is where to look if you are considering a return to the School of Public Health for a degree, continuing medical education credit, refresher courses, or more.

Find out how health behavior health education students jump-start their careers with field experience at www.sph.umich.edu/hbhe/field/.

NEWS & EVENTS

We invite you to get the latest news on open events at the school via the web calendar at www.sph.umich.edu/
news_events/index.html. News releases webcasts of forums and programs, and media updates on breaking stories are all available in the News & Events section of the site, which can be accessed from the home page.

Send your comments and suggestions about the website to Terri Mellow, Director of Communications, at twm@umich.edu.

NoteWorthy

Last July, Xihong Lin, professor of biostatistics, began a four-year term as a member of the Social Sciences,



Nursing, Epidemiology and Methods (5) Study Section, Center for Scientific Review, National Institutes of Health. Members are selected on the basis of demonstrated

competence and achievement in their chosen field, and contribute significantly to the national biomedical research effort by reviewing grant applications submitted to the NIH, making recommendations on those applications, and surveying the status of research in their respective research fields. In addition to her NIH commitment. Lin will undertake a three-year term as editor of the international journal Biometrics, beginning January 2003. Lin is also the 2002 winner of two prestigious awards, the American Statistical Association's Noether Young Scholar Award and the American Public Health Association's Mortimer Spiegelman Award. The APHA award is given annually to a statistician aged 40 or younger who has made an outstanding contribution to the field of health statistics.

David Schottenfeld, professor of



epidemiology, is the recipient of this year's American College of Epidemiology (ACE) Abraham Lilienfeld Award. The Lilienfeld Award is the college's most prestigious award and is

given in honor of Abraham Lilienfeld, outstanding teacher, scholar, and

principal founder of the ACE. The award is given annually to an epidemiologist whose career has shown sustained excellence, particularly in the three aspects of epidemiology in which Abraham Lilienfeld excelled: research, teaching, and practice. In selecting Schottenfeld as this year's recipient of the award, the college said, "Dr. Schottenfeld's career has more than met those expectations. He has conducted research and published widely, especially with respect to cancer, he has received wide recognition as a remarkable teacher, and he has continuously worked to promote epidemiology as a basic discipline in the practice of public health." Schottenfeld worked closely with Lilienfeld and was directly involved in the establishment of ACE in 1979.

The University of North Carolina selected SPH biostatistician



Michael Boehnke, the Pharmacia Research Professor of Biostatistics. as this year's distinguished lecturer for the university's prestigious Bernard G. Greenberg Distinguished

Lecture Series. During the three-day series, Boehnke gave four lectures: "Statistical Strategies and Methods for Human Gene Mapping"; "Identifying Misspecified Relationships and Genotype Errors in Human Gene Mapping Data"; "Identifying Efficient Data Subsets for Gene Mapping of Complex Human Diseases"; and "Toward Identification of Genes for Type 2 Diabetes: Progress of the FUSION

Study." In a ceremony last summer, Boehnke was also named a fellow of the American Statistical Association. The award recognizes his "fundamental contributions to the theory and application of statistics to the genetics of complex diseases, [his] teaching of statistical genetics, and [his] editorial service to the profession."

At last summer's meeting of the Association of University Programs in Health Administration (AUPHA), **John Griffith**, professor of health management and policy, received the



Gary L. Filerman Prize, the highest award given by the association. The prize recognizes individuals from AUPHA member programs who have made outstanding contributions to the

field of health administration education, who have exhibited leadership in the field, and who have enriched their institutions, their students, and health administration education through their work. During the same meeting, two SPH alumni, Dennis Scanlon, PhD '98, and Shoou-Yih Daniel Lee, PhD '97, received the prestigious John D. Thompson Prize for Young Investigators, which recognizes young scholars' contributions to the research literature in the field of health services.

This is the first in an ongoing **Findings** series that looks at what **School of Public Health faculty are** reading, and why.

EVEN AS AN ASSOCIATE PROFESSOR

of health management and policy, Peter Jacobson harbors dreams of a future career. "I want to be a historian when I grow up," he confesses with a grin.

As a child, he loved the Landmark series of history books. Ever since, Jacobson has been a voracious reader—mostly of history. At one point, he even considered getting a doctorate in history.

As a teacher and scholar at the School of Public Health, "I read and write all day long," Jacobson says. By contrast, his leisure reading goes "in spurts. When I read, I read intensively." A self-described "compulsive underliner," Jacobson reads 10 to 12 books a year, making notes as he goes. Nearly all of his pleasure reading is in one of three areas: American history (with a focus on the early-tomid-19th century), Holocaust studies, and modern Europe.

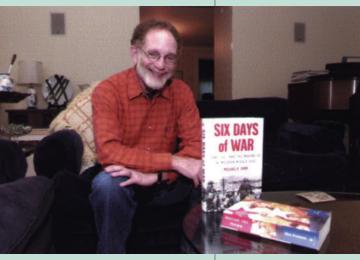
Recent reads include Louis Menand's The Metaphysical Club: A Story of Ideas in America, Rick Perlstein's Before the Storm: Barry Goldwater and the Undoing of the American Consensus, and Joseph Ellis's Founding Brothers: The Revolutionary Generation. Jacobson found the last of these germane to his work at SPH, where he teaches law and public health. "A lot of Ellis's book is about the tension between the individual and the community in shaping the contours of the new government. We see the same thing now in deciding how to respond to an issue like bioterrorism."

Jacobson himself has written one book, Strangers in the Night: Law and Medicine in the Managed Care Era



(Oxford University Press, 2002), and co-authored another. He's under contract to write a second book for Oxford, a text on health law for nonlawyers, and he intends to write an additional book about the American public health system.

Then Jacobson plans to act on an idea he's had since college. He wants to write a book comparing two decades of American history, the



1840s and the 1960s. Both decades were eras of great intellectual ferment and liberal activism, and as such are atypical of the United States. "This is a very conservative country, with the exception of a few brief spurts of liberal activity, such as the Progressive Era and the New Deal," Jacobson explains. The similarities between the 1840s and 1960s are particularly striking, he adds. "If you look at the anti-war slogans during the Mexican-American War and Vietnam, they're eerily the same."

Until then, Jacobson will keep reading and taking notes. "Part of the pleasure of reading history," he says, "is simply getting lost in another time."

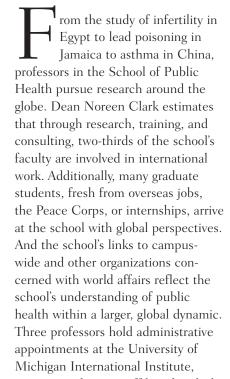
reading history," says Peter Jacobson, is "getting lost in another time.

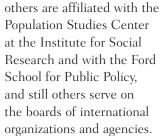
Eyes on +k



The health of any particular place or population is usually the result of complex forces half a world away. It's one reason why global health is a key component of the School of Public Health curriculum.







With such a critical mass of expertise in global health, it's a propitious time to draw together the many individual strands of activity. For months, a faculty group

has been guiding the creation of a new global health program, the purpose of which is to bring current research under one umbrella, provide a vehicle for new research and collaboration, offer students a formal course of study, and raise the stature of the school's global health experience.



"We're an internationally kinetic place," Clark says, "but we're not seen that way." She points out that not long ago, the words "global health" didn't appear on the school's web site or in marketing materials, all the places that describe what the school does. "It's like this hidden treasure chest," Clark says. "The global health program will signal, and focus people on, this great work being done."

The program's centerpiece will be an Interdepartmental Concentration (IC) in Global Health, scheduled to begin by fall 2003. Open to students from any department, the global health IC will complement students' chosen majors with special courses, seminars, and an internship. "The internship will allow students to participate directly in intervention, analyses, and/or policy development in which the themes of globalization and health are paramount," says Mark Wilson, associate professor of epidemiology and director of the new program. "I consider the internship to be really, really critical for the IC." Wilson expects that SPH alumni will be key to the success of both the internship program and the school's global health program at large. By attracting students and faculty from across the school, interdepartmental concentrations are a response to an increasingly multidisciplinary world. The existing ICs, in public health genetics and reproductive health,

The core curriculum for the global health IC is still in development—that was the summer project of Wilson and several of his colleagues. While the curriculum is yet to be finalized, the IC's focus will be broader than that of the international health track housed within the Department of Epidemiology. That track is available to a limited number of students entering the master of public health program through epidemiology.

Wilson describes the traditional model of international health as "us

poverty, or insufficient education? "To understand the health of any group," he says, "we have to step back and say, "What do we mean by "cause"?' "

The pathways by which a specific disease arrives at a particular population are complex and far-flung. "Health problems can arise in any part of the world due to processes in other parts of the word," Wilson says. "You can't think about infectious diseases in strawberries without thinking about where both the diseases and the strawberries come from, and why, and what this has to do with global food production. You can't understand child labor in Indonesia without under-

Wilson describes the traditional model of international health as "us going to them."

going to them": public health officials working in a Third World country to vaccinate against infectious diseases, establish nutrition programs, help villages improve water safety, and so on. That's terribly important work that must and will continue, but international health, Clark says, has been seen as a split between industrialized countries in the Northern Hemisphere and developing countries in the Southern Hemisphere. Yet, in an increasingly globalized world, everyone is closer together than ever before. The health of any particular place or population is usually the result of complex forces—economic, environmental, legal, policy-related—half a world away. A more realistic perspective is one that takes into account all the global forces that bear on public health.

"Traditionally, we look at etiological exposures," Wilson says. "We're not going beyond that to see what led to those exposures." For example, it's accepted that malaria is caused by certain species of Plasmodium, a one-cell parasite that's spread by mosquitoes. But, Wilson asks, couldn't the cause also be thought to be poor housing, or

standing the demand for expensive athletic shoes."

Public health officials aren't, and aren't expected to be, experts in global economics or international trade law. But with greater awareness of these complex issues and more experience working across sectors, public health officials can participate more effectively in larger dialogues that impact public health. "I certainly don't have all the information," says Wilson, whose research on infectious diseases has taken him to the Middle East, South America and Africa, as well as throughout the United States, "but I know enough to know when I need to know more."

A fact of the globalizing world, says Siobán Harlow, associate professor of epidemiology, is that multilateral organizations, such as the World Trade Organization, make policies that have enormous health implications. "Within public health, we often don't even have these organizations on our radar screen," she says. "We need to be a player at the table. When we train students, we need to incorporate training across sectors such as health,

Worldly Wise

Mark Wilson is equally at home speaking French and English—it's one of many skills he brings to his job as director of the school's new Program in Global Health.

side from a semester in Germany to hone his language skills as a college student, Mark Wilson had never spent much time outside the United States until 1975, when he traveled to Kenya and Ethiopia to study the behavioral ecology of baboons. It was the start of a lifelong pattern.

Ten years later, after getting his doctoral degree from Harvard, Wilson headed to Senegal. During his four-year stay in the west-African nation, he studied Crimean-Congo Hemorrhagic Fever and Rift Valley Fever, two viral diseases transmitted by ticks and mosquitoes, respectively. Wilson spent much of his time working in laboratories in the capital, Dakar, but once a month he traveled eight hours by Land Rover to north central Senegal for a week of field work. There was no electricity or potable water. "To see things that we would never see here in the United States was disturbing," he remembers. "To see the poverty, to see the living conditions, to see the extent of illness and the difficulty in finding treatments. It only strengthened my commitment to doing work in my life that would eventually, in some small way, hopefully improve those conditions."

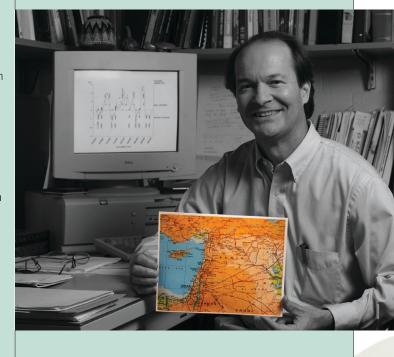
In the nearly 15 years since then, Wilson has participated in environmental and epidemiological studies in Venezuela, Colombia, East Africa, the U.S., and Israel, where he is currently working with a joint Palestinian-Israeli research team investigating Visceral Leishmaniasis, a sand-fly-borne disease. An ecologist and epidemiologist with broad research interests in infectious diseases, Wilson serves on an Institute of Medicine panel on emerging diseases in the 21st century. He is collaborating with NASA on studies aimed at understanding the risk of Dengue Fever as it may be affected by annual variations in climate, and with the National Oceanic and Atmospheric Administration on studies examining the role of environmental factors as they may influence the risk of influenza.

Married since 1990 to Marie-Armande, a French-born virologist whom he met in Senegal, Wilson speaks fluent French as well as rudimentary Spanish. (He notes that his English is also "reasonably good.") Earlier this year, he was named director of the School of Public Health's new Global Health Program and will lead the development of an Interdepartmental Concentration in Global Health. In August, he spoke to *Findings* about his new post.

Findings: You've been doing international work for 20 years. From your perspective, how has the world changed in that time?

Mark Wilson: There is much less scientific imperialism, if I can use that term. More and more scientists from developed countries who go to the Third World are collaborating with scientists from those countries, rather than going in, doing their science, leaving with their data, publishing it on their own, and sometimes not even contributing to the local circumstances. This is one positive change, and I'm all for it.

Another very positive change is that there's much more concern for the local population that's being studied. This includes recognizing that the study itself may have a negative impact—either culturally or by some kind of an intervention. If the research is applied, it ought to be



"It's absolutely critical that we, as Americans, understand how we are intimately linked with other cultures, with other peoples, with other parts of the globe, with other environments."

very consciously applied so as to eventually improve people's well-being and not just simply to produce another publication.

F: What key health problems does the world face today?

MW: Undeniably, HIV/AIDS is going to have an absolutely devastating impact, especially on sub-Saharan Africa, in the next 20 to 50 years.

F: Far more than it's having now?

MW: Oh, much much more so. Estimates now suggest that in countries where the population growth rate has been on the order of, say, 3% for the last few decades, there will actually be a decline in population over the next 20 to 50 years—without any changes in reproductive rates.

"More and more scientists from developed countries who go to the Third World are collaborating with scientists from those countries rather than going in, doing their science, leaving with their data publishing it on their own, and sometimes not even contributing to the local circumstances.'

That's because adults and teenagers are dying. There will be an enormous social, and certainly an economic and demographic, impact, and there's no way you can turn that around, short of some exceptional finding for treating people. Having said that, there are a number of other major issues for global health that can't be forgotten.

F: Such as?

MW: One has to do with the unprecedented increase in the movement of goods and people across national boundaries in very short periods of time, such that infectious agents are being introduced at an alarming rate into new areas where they never existed before. Sometimes we don't even know this is happening. But there have been a number of recent events—West Nile Virus is a good example. The suspicion is

that either an infected animal or mosquito, or perhaps even an infected person, arrived at Kennedy International Airport and introduced the virus to the New York region. Now, three years later, it's spread to much of the United States. There are plenty of other examples like that. We should expect this to happen more often. And it's not simply the introduction of organisms to new areas, but the introduction of organisms that are resistant to antimicrobial drugs.

F: How is the environment affecting world health?

MW: Environmental changes are taking place at an alarming rate and are having a huge impact on people's health—not just in terms of infectious diseases, but a variety of other pathways. Through nutrition. Through exposures to toxins. Through agriculturally intense cropping patterns that are not sustainable. Through reduction of the resource base that comes from natural products that can serve to treat diseases. The other major environmental change involves shifting water distributions through major dams and irrigation systems. These can all have health impacts in ways that in the past were not nearly as widespread or at as large a scale.

F: Your wife, Marie-Armande, is French. What language do you speak with each other?

MW: Fortunately for me, we speak French together virtually all the time. When we first met, in Senegal, we spoke almost entirely in English, because I knew no French. It was an enormous handicap, because everyone around me spoke French. I had an additional handicap because I couldn't talk to people in the field, where only local African languages were known. I had to communicate through my French-speaking technicians.

F: To those who believe Americans don't need to learn other languages because "everyone speaks English," what do you say?

MW: I find that unacceptable, because it represents a chauvinism that is inappropriate if you really want to try to understand and participate in other cultures. Making even the simplest attempt to try to learn someone else's language is bound to give you a different cultural experience than if you require that they speak to you in English.

It's absolutely critical that we, as Americans, understand how we are intimately linked with other cultures, with other peoples, with other parts of the globe, with other environments. We need to understand not only how we can beneficially impact those relations, or alternatively, how we can avoid having negative effects on those relations, but how we can do really good research that ultimately gives answers to questions that go beyond the narrow and the simple. It would be foolish to pretend that we can remain isolated.

international law, ecology, and economics, and to think about the way public health is or is not engaged with multilateral institutions."

The public health field, to Harlow's mind, has missed some important issues, such as a topic she's explored deeply, the health of women laborers in northern Mexico's maquiladoras. "When I started this research," she says, "there was not a single foundation that would put money into women's occupational health in developing countries." Yet researchers from other sectors, such as economics, sociology, and ecology, had been studying the maquiladoras for years. "We need to be training students to engage in these questions," she says.

As an associate director of the University of Michigan International Institute, Harlow serves as a conduit for these questions to flow into the school's curriculum. Michael Kennedy, director of the institute and UM vice provost for international affairs, welcomes the new global health program. It will permit the school to coordinate its international resources, he says, as well as rethink the challenge that globalization presents to the practice and teaching of public health. Moreover, the involvement of public health faculty with the International Institute, he says, "will help public health students find additional learning opportunities across the university, on the one hand, and on the other, help put public health more to the center of university-wide efforts to engage the world."

Perhaps the best endorsement for a global health program comes from the school's own graduates, who work in a great breadth of international positions. Alumnus Kimma Chang, president of the Asian Hospital Federation and the Taiwan College of Healthcare Executives, says that as the world gets smaller, "the school has to walk into the international community sooner. In order to approach

"You can't think about infectious diseases in strawberries without thinking about where they come from and why, and what this has to do with global food production." — Mark Wilson

health problems, we have to get more global information to our students." During his commencement address to the SPH class of 2000, alumnus Julio Frenk detailed just how much smaller, and mobile, the world has become. "About two million people cross an international border every day," said Frenk, a former policy executive for the World Health Organization, and Mexico's current Minister of Health. "Of these, one million people go from a poor to a rich country each week. Today most American cities can be reached in less than 36 hours from any part of the world through commercial flights." Public health officials, Frenk concludes, "will necessarily operate on a global stage." That's the perspective the global health IC, and indeed the entire global health program, will emphasize.

Wilson expects the IC to begin with about ten students, but the num ber interested in global health is far greater. For example, the Department of Epidemiology's international health track always has many more interested students than faculty to mentor them. And more than half of students applying to the school overall, Clark points out, mention global health. These students' interests and experiences gener-

ally fall into four categories: students who have traveled extensively and are considering joining the Peace Corps after they graduate, students who have already been in the Peace Corps or with another international organization and realize the value of a broader public health world view, students who come from other countries. and students with no direct overseas experience who are still drawn to this type of work.

Despite the demand, the new global health IC won't be able to accommodate everyone. But students in all departments will benefit from the greater emphasis on global health throughout the school generally.

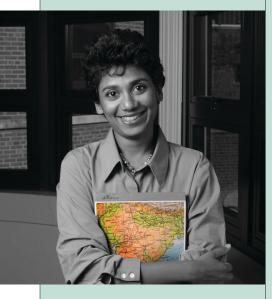
"There's a big demand for global health in this department," says Marcia Inhorn, associate professor of health behavior and health education. Inhorn also holds a joint appointment in the Department of Anthropology and is another liaison to the International Institute, where she's associate director of its Center for Middle Eastern and North African Studies.

Looking down a faculty list hanging on her filing cabinet, Inhorn reads off the names of professors who have some global aspect to their research. Fully half the department does. Last

Two Worlds, One Vision

Kacey Ernst and Sanjani Jane Varkey grew up on opposite sides of the globe, but as public health students they share much in common — above all a desire to improve their world.

rowing up in central Kansas, Kacey
Ernst and her two sisters used to study
the big world map that hung in their
parents' kitchen and talk about all the places
they wanted to visit. Today, Ernst's younger
sister is majoring in sustainable development



"We need safety nets in place if we're going to have globalization. We need to recognize and limit the effects of social, economic, and health disparities."

— Sanjani Jane Varkey

and hopes to do field work in Africa. Her older sister is pursuing a degree in natural resource management and may work in South America. Ernst herself plans to spend the next year living in a mud hut in a remote village in western Kenya, doing field work on mosquitoes for her doctoral dissertation in epidemiology. "I always wanted to see more and do more than most of the kids in my high school," she says. "I wanted to get out and get my hands dirty."

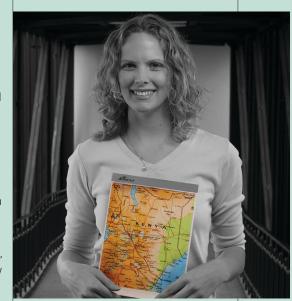
Halfway around the world, Sanjani Jane Varkey discovered what she wanted to do with her life when she took a job teaching child ragpickers in the slums of the Indian capital, Delhi. "This is my field. Social development," she realized. Varkey had already earned a bachelor's degree in commerce, but she hated accounting, and so she went back to Bombay, where she'd grown up, and got a master's degree in social work, specializing in urban and rural community development. An internship with the Institute of Health Management in a small village in Maharashtra, one of the poorest regions in India, gave Varkey her first taste of health care. She was hooked.

Today Varkey is a first-year MPH student in the International Health Track in the School of Public Health Department of Epidemiology. She and her husband live in the town of Grass Lake, Michigan—whose 900 inhabitants are a far cry from Bombay's 14 to 15 million—with their 16-month-old daughter, whom Varkey calls "the love of my life."

Despite their differences in background and experience—Varkey has lived in India, South Africa, and the United States, while Ernst took her first trip outside the U.S. just two years ago—both women are committed to doing health work on a global stage. "One person can make a bigger difference overseas than in the U.S.." Ernst believes.

Ernst will spend the next year in Kenya looking at environmental determinants of anopheles mosquito density and malaria cases. "There's a lot of emphasis on developing vaccines and new drugs, but that's a long way off," she says. "I'm more interested in reducing malaria morbidity by finding really good ecology-based interventions, such as filling in breeding sites with mud or creating drainage systems." In addition to conducting research, she hopes to teach, so that "this isn't just a handout. I'll be allowing people to create and do their own research."

Except for "not being able to take a long, hot shower," Ernst doesn't mind that she'll be living



"One person can make a bigger difference overseas than in the U.S."

— Kacey Ernst

in a remote village near Lake Victoria, without electricity or running water, far from family and friends. She'll take plenty of books and a few pictures from home with her, and a full address book. She loves the landscape of western Kenya and is fond of the Kenyan people. Someday she hopes to do malaria research in other parts of the world—South America, Africa, Southeast Asia. "I'm pretty much open to going anywhere."

Still new to SPH, Varkey is less sanguine about her future, but she knows she'll be an activist for women's health, and she hopes eventually to work for a non-governmental organization or agency. Varkey says that although as an Indian she initially resented the process of globalization ("it felt like an invasion"), she now understands that "it's inevitable," and she wants to do what she can, as both an advocate and a researcher, to convince policymakers that "we need safety nets in place if we're going to have globalization. We need to recognize and limit the effects of social, economic, and health disparities."

She applauds the School of Public Health's newly visible focus on global health, as evidenced both by the creation of the Interdepartmental Concentration in Global Health and by the key role that internships will play in the IC. "One has to recognize that policies which are developed here in America affect the rest of the world, so one needs to know the rest of the world," Varkey says. "We in developing countries realize that life is about relationships. Rich or poor, we're all in one little water body—and we need to understand these relationships in order for life to make sense."

fall, Inhorn taught Global Health: Anthropological Perspectives—the department's first, as she called it, "explicitly global" course. Most of the 50 students were from HBHE. The first day, Inhorn passed around cards and asked students to write down their international experiences. "I was really impressed by how many students had done significant work overseas," such as study abroad, Peace Corps, or missionary work. "HBHE students will definitely want to participate in the global health IC, and they won't want to do it through an exclusively epidemiological lens."

Her course encouraged students to explore the interplay between global forces and local responses, and to question the actions of public health programs and development agencies in developing nations. For example,

As the world gets smaller, "the school has to walk into the international community sooner." — Kimma Chang, MHA '65

how do local communities respond when an international aid agency comes in with, say, a vaccination program? How do communities accommodate, resist, or change global forces? In this way, the course blended high-level policy with a distinctly HBHE ingredient, examples of community-based participatory research. As a medical anthropologist, Inhorn's understanding of local cultures is inherent in her research on infertility in Egypt and the suffering of both poor and elite urban couples, particularly women, who fail to become pregnant.

Echoing Harlow's exhortation for public health officials to become players at the global table, Inhorn points out that international development is a multi-million-dollar industry, carried out by non-governmental organizations, intergovernmental

organizations, humanitarian agencies, and other groups. "Those are all potential places where our students could work," she says. Learning languages and cultures, she adds, is imperative for students who might pursue such careers. "When you get to know a country and a place," she says, "you can develop a real love and passion for it." She encourages students to avail themselves of the International Institute's resources. such as its foreign language and area studies fellowships. "They're extremely receptive to students from professional schools."

Jack Kalbfleisch, chairman of the Department of Biostatistics, also reports high student interest in global health work. "We've received applications from students seeking an option in this area, and we expect that the IC will be attractive to several of our stu-



dents," he says. Again, students find experienced professors to work with: faculty members in biostatistics have done important work in world fertility surveys and modeling the AIDS epidemic. "There is great potential and need for biostatistical components to research in the general area of global health," Kalbfleisch says.

Clark expects that a global health program will give rise to new research projects and collaborations within the school and across the university. Global issues are naturally of interest to schools of business, natural resources, public policy, or law, says Wilson, who holds a joint appointment in the Department of Ecology and Evolutionary Biology in the College of Literature, Science and the Arts, and is a member of the executive committee of the International Institute. "Without multidisciplinary teams," he says, "the worst problems won't get solved." He's been working with graduate students and colleagues in SPH and the Medical School to compile a database of university-wide research projects that have a primarily global orientation. Scholars will be able to search the database to see if anyone from another discipline is exploring the same topic, creating an opening for the cross-pollination of ideas.

Exploring similar problems in different places offers rich research possibilities that also can shed light on domestic matters. Clark's comparisons of childhood asthma in Beijing and Detroit, for example, prompted a re-evaluation of assumptions about the importance of air pollution and smoking as risk factors for the disease.

In Beijing, childhood asthma prevalence rates are much lower than in Detroit, even though in Beijing the air is more polluted and nearly every man smokes. This led Clark and her colleagues to conclude that in Detroit, childhood asthma is more allergenbased than previously thought. "So, you upset conventional wisdom by doing these kinds of comparisons," she says.

Of course, scholars go where the work is. In environmental health, overseas research is practically a given, because the biggest problems are in developing countries, says Jerome Nriagu, professor of environmental health sciences. Many developing countries, he says, either don't have or don't enforce restrictions on toxic metals, so his work naturally dovetails with policy; in Jamaica, where Nriagu was recently on sabbatical as a Senior Fulbright Fellow, he's seen children playing on piles of asbestos. He's currently conducting a risk assessment to evaluate health effects of long-term lead exposure in Jamaica, which he calls a "unique environment" because exposure levels are much higher than any place in the United States. Yet, even after years of exposure, some people never show symptoms of lead poisoning. The question, then, of how much of lead constitutes a hazardous level figures importantly in his work. This type of comparative, global research, Nriagu says, "allows you to learn from some unique situations, and then the information can be applied to policies."

In probably no other single issue do the forces of global economics, international law, human behavior, and public health battle as they do in tobacco. Kenneth Warner, the Avedis Donabedian Distinguished University Professor of Public Health and director of the UM Tobacco Research Network, has devoted his career to studying tobacco and health policy. While he's quick to point out that his research doesn't typically have a global focus, his books and publications are widely read overseas, and he's involved in numerous international tobaccocontrol activities.

Currently, he serves as the World Bank's representative to the Framework Convention on Tobacco Control, the World Health Organization's firstever use of its international treatymaking authority. The convention's goal is to curb tobacco use, the leading cause of preventable death in the world, but the treaty will include a host of topics that fall beyond the traditional realm of public health. Smuggling, for example. One-third of cigarettes that are exported are never legally imported someplace else, Warner says, so "smuggling is a huge issue. It significantly lowers the price of cigarettes both directly and indirectly, the latter by discouraging countries from raising their taxes." The treaty probably will also address, among many other issues, advertising bans and taxes. Whether a decent treaty will be achieved is problematic,

he says. The plan calls for the treaty to be presented to the World Health Assembly in Geneva in May 2003. With significant differences remaining in countries' positions on central issues, Warner notes, the 160 countries involved will have to show more negotiating flexibility than he has observed to date. Warner received a frank reminder of the competing interests at play when, during a recent meeting of the convention in Geneva, a member of the Chinese delegation handed a him business card that read: Chinese Tobacco Monopoly. "The motivation for the treaty is public health," Warner says, "but the economics and politics pose an incredible challenge to realizing the planners' lofty public health objectives."

It's a statement that speaks to the realities to which public health officials must be increasingly savvy. Wilson believes that the processes of economic globalization need to be part of the new global health IC. With the new IC, and the school's many experienced faculty members to advise them, students will be even better prepared to do important work in a complicated world.

Mary Jean Babic is a freelance writer who lives in Ann Arbor.

In probably no other single issue do the forces of global economics, international law, human behavior, and public health battle as they do

in tobacco.



Research Update

A Unique Approach to the Debate on the Uninsured

t's a known fact that nearly 39 million Americans currently lack health insurance. What's not known is the relationship between the United States economy, specifically, the nation's labor market, and

tive models for understanding the basic dynamic between labor markets and insurance coverage. If real progress were to be made in addressing this critical issue, she reasoned, it would be necessary to bring a new



Catherine McLaughlin, second from right, with members of the ERIU staff.

the size and composition of the uninsured population. That's what Catherine McLaughlin and her colleagues at the University of Michigan—based Economic Research Initiative on the Uninsured (ERIU) are trying to find out.

"To really contribute to the political debate on the uninsured in a meaningful way, we need a better understanding of the interplay between labor force dynamics, health insurance coverage, and markets in general," says McLaughlin, professor of health management and policy at the School of Public Health and director of ERIU.

After a decade of researching the problem of the uninsured, McLaughlin realized that health policy researchers had stopped asking new questions or developing innovagroup of labor economists into the field. ERIU is the direct result of that vision. It is the only program of its kind in the country.

Established in 2001 and funded by a three-year, \$9 million grant from The Robert Wood Johnson Foundhealth care coverage before, a fact
McLaughlin says is crucial to the program's strength. "It was time to bring
new critical views into the process."
McLaughlin notes that despite a
wealth of information on the prove

in the initiative had never studied

McLaughlin notes that despite a wealth of information on the prevalence of health insurance coverage among Americans, the kinds of health plans offered, and enrollment patterns, there is little information on how consumers make health coverage choices and whether the desire for health insurance influences key decisions about work, such as when and where to take a job or how many hours to work.

ERIU is part of a much broader Robert Wood Johnson Foundation effort to address the problem of the uninsured in America, a national program motivated largely by the Clinton administration's failed attempt to institute a nationwide health care plan in 1993. During the debate in 1993, health care experts were unable to reach a consensus, in part, says McLaughlin, because they lacked economically valid research findings. "It's clear that if we're going to revisit this issue, we need better analyses," she says.

After a decade of researching the problem of the uninsured, McLaughlin realized that health policy researchers had stopped asking new questions.

ation, the initiative brings together a wide range of economists from the University of Michigan and other U.S. universities in an effort to determine why people are uninsured in the first place and how health insurance affects labor market decisions. Many of the researchers involved

Toward that end, McLaughlin and her ERIU associates have screened and summarized the existing literature and are currently funding approximately 20 research projects that ask such questions as: Do people choose jobs based on the availability of health insurance? What is the rela-

insurance and employee decisions to participate?

ERIU will fund an additional round of research projects this year. McLaughlin and her colleagues have also convened an advisory panel of Washington policymakers to target key questions for future debate and have assembled task forces to look at health-care coverage as it relates to vulnerable populations and the chronically ill.

This past July, ERIU hosted a research conference focusing on its sponsored research. Economists from the University of Michigan as well as universities all over the country learned about a variety of topics, including the relationship between rising health care costs and employersponsored health insurance, the need for health insurance by the so-called "near elderly," and the importance of health insurance for children of women going off welfare. The papers presented at the conference, as well as the list of participants, are posted on the ERIU web site at www.umich.edu/eriu. The web site also features a database of economic articles on health insurance and the uninsured and information on available data sets.

Michigan President Mary Sue Coleman: "Health Insurance Makes a Difference"

mong her many achievements,
Mary Sue Coleman, the new president of the University of Michigan,
is a member of the National Academy of
Sciences' Institute of Medicine. As cochair of the institute's Committee on the
Consequences of Insurance, Coleman
oversees the committee's efforts to study
and report on the problems of uninsured
populations in the United States.

Last May, in a public briefing on the committee's most recent report, *Care without Coverage: Too Little, Too Late,* which documents the increased health risks faced by people who have lost health coverage as a result of the weaker economy, Coleman



told her audience, "This research led us to conclude that health insurance does, indeed, make a significant difference in the health of Americans, and that uninsured adults experience worse health and die sooner than they otherwise would with insurance."

Coleman noted that the health benefits of insurance coverage can be realized in full "only when health insurance is acquired well before the development of advanced disease." Coverage that includes preventive and screening services, offers outpatient prescription drugs and mental health services, and enlists adequate providers is more likely to facilitate appropriate care than health insurance without these features, she said. Additionally, members of racial or ethnic minority groups, or people with lower incomes, stand to benefit more

"Uninsured adults experience worse health and die sooner than they otherwise would with insurance." — Mary Sue Coleman

from coverage than other groups, because these individuals more often lack consistent health insurance and have worse health to begin with.

Future reports by the committee will examine family impacts, community-wide impacts, and the societal costs of uninsured populations in the United States, as well as models and strategies for addressing the problems caused by the absence of insurance.

The complete text of President Coleman's remarks is available at www.nationalacademies.org/. Print copies of the committee's reports can be ordered through the National Academy Press at www.nap.edu/.

Epidemiological Study Would Be One of Nation's Largest

hat makes children healthy? It's a question that's bedeviled parents and physicians for centuries, and it's now caught the attention of the federal government in a very big way. In fact, if a new study goes through as proposed, researchers across the United States will soon embark on one of the largest and most ambitious epidemiological studies ever attempted anywhere in the world.

It's called the National Children's Study, and it grew out of the President's Task Force on Environmental

> Health Risks and Safety Risks to Children. A large long-term study of environmental influences on children's health and development, the study will follow approximately 100,000 children through-

out the U.S. from prenatal development, through birth and childhood into young adulthood, for a total of some 20 years. The study will allow researchers to evaluate a range of environmental factors—including chemical, biological, social, and behavioral—linked to a broad variety of health and developmental outcomes in children, adolescents, and voung adults.

The National Institute of Child Health and Human Development is the lead agency planning the study, together with a consortium of federal agencies, including the Environmental Protection Agency, in a consortium involving the Centers for Disease Control and Prevention, and the National Institute of Environmental Health Sciences.

"Potentially anything could be in this study," says John Lynch, associate professor of epidemiology, who is one of several SPH faculty members now

working to assess the feasibility of the project. Lynch serves on the Study Design Work Group, one of several specialist working groups comprised of federal and non-federal scientists helping to plan the study.

dealing with issues ranging from the impact of neighborhoods and communities on child health to the role of public policy. MaryFran Sowers, professor of epidemiology, serves on two working groups.

The study will follow approximately 100,000 children throughout the U.S.

The groups have each been asked to develop core hypotheses that can help shape the final design of the study.

Other SPH faculty working on the project include Edith Parker, associate professor of health behavior and health education, who is co-chair of the Community Outreach and Communications Working Group,

The first, Childhood Origins of Adult Disease, is a content group focusing on the childhood precursors of such adult diseases as heart disease, osteoporosis, arthritis, and diabetes. The second group, Repository, is a methodology group whose goal is to determine what materials will be informative not only now but 20 to



a committee aimed at providing guidance on how best to engage and involve community members in the design and implementation of the study. George Kaplan, professor and chair of the Department of Epidemiology, is a member of the Social Environment Group, which is

30 years from now, and should therefore be collected and saved

Because of the potential size and length of the study, not every research question can be addressed. Perhaps the biggest challenge now facing researchers is, in fact, just how to make the study manageable.

"Somewhere along the line, someone has to decide what criteria should be adopted to judge what's most important to assess so that we can better understand the determinants of infant, child, and adolescent health,"

Lvnch savs.

Roderick Little, Richard D. Remington Collegiate Professor of Biostatistics, is one of the people who will make that decision. As a member of the project's Federal Advisory Committee, he and a dozen or more distinguished colleagues will determine the ultimate size and scope of the National Children's Study. They'll address such basic questions as how to justify a study of this size and length, and such detailed matters as whether the study should begin with pre-pregnancy or birth, and what types of data should be collected across the lifecourse.

"I imagine this is the most complex and ambitious observational study of health ever attempted," Little says. "If done well, child-rearing 25 years from now will be highly influenced by its research findings."

The study is currently projected to begin in the fall of 2004 and conclude in 2030, with shorter-term outcomes emerging in between. It will likely be conducted through "vanguard centers" positioned throughout the U.S., through which researchers will recruit participants and collect and evaluate data. In anticipation of the study, the University of Michigan has created a consortium with Wayne State University, Michigan State University, and the Henry Ford Health System to prepare a proposal to locate a vanguard center in Michigan.

Bioterrorism Preparedness Initiative Gets \$1 Million from CDC

he University of Michigan will work toward making the state of Michigan a safer place by training public health professionals who must prevent and respond to bioterrorist attacks and other infectious disease outbreaks. The UM Bioterrorism Preparedness Initiative recently was notified that it will receive \$1 million from the Centers for Disease Control and Prevention this year, renewable for up to three years.

The initiative, funded by the CDC in collaboration with the Association of Schools of Public Health, joins a nationwide network of academic centers in public health preparedness, including Johns Hopkins University, Harvard University, and the University of California-Berkelev.

"Our goal is to help the state of Michigan and the nation evolve a public health system that is robust enough to prevent or treat infectious disease outbreaks, be they a result of bioterrorist acts or naturally occurring. This grant will move us well down the road toward the goal," said Noreen Clark, dean of the School of Public

Initiative leaders hope to have web-based training available by the end of the year, consolidating existing information into easily accessible formats. They'll begin developing new programming by spring 2003, focusing specifically on the kind of training people in the field say they need most.

The goal is to offer information that will help public health staff members better prepare for bioterrorism threats and events and give them resources they can tap in times of crisis. Rosemarie Rowney, formerly of the Oakland County Health Department and now a UM School of Nursing lecturer, directs the training efforts.

The UM Bioterrorism Preparedness Initiative was formed in the wake of September 11 to pull together experts from across campus to find innovative ways to address bioterrorism concerns.

The goal is to offer information that will help public health staff members better prepare for bioterrorism threats and events and give them resources they can tap in times of crisis.

Health and chair of the UM Bioterrorism Preparedness Initiative's advisory council.

Training efforts will target the more than 9,000 public health workers in the state, at 45 local public health departments and at the state Department of Community Health.

Environmental Pollution Affects Children Disproportionately, Nriagu Tells Earth Summit Audience

erome Nriagu, professor of environmental health sciences, has spent his career discovering the toxins that plague children. This summer, he had the chance to discuss them in front of an international audience at the United Nations Earth Summit on Sustainable Development.

The summit, which convened in Johannesburg, South Africa, in late

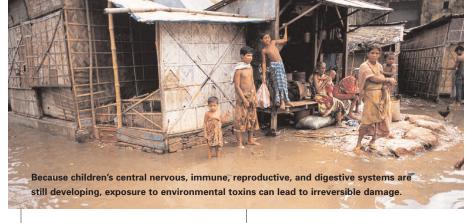


to discuss solutions to these pervasive problems. The World Health Organization (WHO) invited Nriagu to address scientific factors pertaining to the environment and childhood disease burdens, especially in developing countries.

Nriagu says. "I'm interested in what conditions predispose children to environmental risks, as well as why and how children in developing countries respond differently to these risk factors."

During the summit, Dr. Gro Harlem Brundtland, directorgeneral of the WHO, and other summit participants launched a Healthy Environments for Children Initiative. The initiative, according to a WHO press release, is designed to foster cooperation among nations and construct a network of teachers, health professionals, and non-governmental organizations. Brundtland anticipates that with the program, the nearly 13,000 child deaths that occur every day can be reduced.

Nriagu, for one, believes in the initiative. He agrees that swift action must be taken because children are more susceptible to diseases than



As a leading researcher on toxic metals in the environment and their effects on children, Nriagu was delighted to be part of the summit. His own field work in South Africa, Nigeria, and Jamaica prepared him to contribute to panel discussions on health and sustainable development. "I have a lot of experience dealing with environmental risk factors,"

adults. Nriagu highlights basic human biology as a starting point. For example, a child's intake of food, air and water is proportionally greater to his or her weight than is an adult's intake. Children's central nervous, immune, reproductive, and digestive systems still are developing, and exposure to environmental toxins can lead to irreversible damage.

Children, especially infants, are more likely to be exposed to toxins such as lead, pesticides, and pathogens because they behave differently and have different patterns

Children, especially infants, are more likely to be exposed to toxins.

of exposure than adults, Nriagu says. In particular, they like to explore with their mouths. "An infant crawls on the floor, and that's where they pick up the lead," Nriagu says. "You can spray pesticides to control roaches, but most of them end up on the carpet and couch cushions—places where children play."

Nriagu is most concerned with the fact that these toxins specifically target a child's growing cells. Environmental pollution is a global problem that can affect the health of children disproportionately, he says. Nriagu believes that the participation of a child on the panel was a wake-up call for the scientific community. "It's their world, so it was good to know how he [the child] felt about it," he says.

Nriagu views the summit as an opportunity to address the needs of the world's poorest nations in a sustainable and environmentally friendly way. "It was a unique experience. I've never done anything like it before," he says. "I was very happy to see the World Health Organization actually take the position that protecting children from environment-related illnesses is a critical element of sustainable development."

This story was written by Jim Schiff, an intern with the University of Michigan *University Record*.

Small Enough to Protect Workers' Lives

here's a bit of the magician's art to what Ted Zellers is trying to do. As he explains it, he and his colleagues are trying to take an instrument the size of a small refrigerator and reduce it to the size of a sugar cube. In and of itself, this may not seem daunting, except that the device Zellers, a professor of both environmental health sciences and chemistry, and his fellow researchers are trying to miniaturize is a gas chromatograph (GC), a powerful analytical instrument capable of measuring complex mixtures of volatile organic chemicals at trace concentrations in a matter of minutes. If the endeavor is successful, workers in high-risk occupations will ultimately be able to wear this "micro-GC" as a means of monitoring and protecting them against chemical,

Integrated MicroSystems (WIMS), an engineering research center funded by both the National Science Foundation and a consortium of companies, and designed to serve as a worldwide focal point for work in microsystems. Directed by Professor Ken D. Wise, University of Michigan College of Engineering, and launched in 2000, the center combines efforts on micro-power circuits, wireless interfaces, sensors and actuators, and wafer-level packaging to create miniature information-gathering modules that can act as bridges to the cellular world. "Essentially, these are smart wireless MicroElectroMechanical Systems, or MEMS," says Wise. MEMS technology has widespread potential applications in both electronics and communications. The

Zellers has oversight of the micro-GC effort as well as specific responsibility for several component development efforts. "The exciting thing is the interdisciplinarity," Zellers says of his involvement with the center. "It really is working."

The device also has important implications for homeland security, Zellers says.

Bench-scale GCs already exist and are widely used in environmental laboratories. Capitalizing on recent advances in microfabrication, Zellers and his colleagues are seeking to build in several unique features to the WIMS micro-GC, such as tunable separations and microsensor-array detection, to make the instrument small and versatile enough for a broad range of applications, from ambient air monitoring to meteorological measurements and occupational health and safety monitoring. A "meso-scale" prototype of the micro-GC has already proved capable of identifying and quantifying the components of mixtures of 30 vapors at part-per-billion concentrations in just ten minutes. The WIMS micro-GC team plans to unveil a preliminary version of the micro-GC by May 2003.



Ted Zellers holds a component of the micro gas chromatograph he and others are developing.

and even microbial, exposures. The device also has important implications for homeland security, Zellers says.

It's one of several research projects currently being conducted under the auspices of the Center for Wireless University of Michigan is the center's lead university; Michigan State University and Michigan Technological University are also partners.

As a co-leader of the center's Sensors and Microinstruments group,

Alumni Network

Allan A. Filek, MSPH '41, MD, cel-



ebrated his 95th birthday on May 25. Two months earlier, the retired physician played the part of a doctor in "Oh, Doctor," part of a variety show in Sun City, Arizona, where

Filek resides.

In 1949, MPH candidate **Evelyn** (Gregory) Crystal left the School of Public Health to join her husband and his career in the U.S. Army. Following his resignation from the army in 1956, the couple moved to Michigan and then to Long Island, New York. Crystal worked as a school nurse and eventually received a degree as a school-nurse-teacher from Oneonta University, New York. Now retired, she lives in North Carolina.

Veterans Affairs Secretary

Anthony J. Principi has appointed Dr. Bailus Walker Jr., MPH '59, to the Department of Veterans Affairs Expert Panel on Gulf War Illness. The panel will advise the secretary on proposed research stud-



ies, research plans, and research strategies relating to the consequences of military service in the southwest Asian theater of operations during the Gulf War. Walker is pro-

fessor of environmental and occupational medicine, and toxicology, at the Howard University Medical Center in Washington, D.C..

The Greater Washington Board of Trade has named John P. McDaniel, MHA '66, its 2002 Leader of the Year. First presented in 1947, the award recognizes individuals who have made significant contributions to the greater Washington



region. Past recipients include Katharine Graham and Walter Washington. McDaniel is CEO of MedStar Health, the Baltimore-Washington region's most extensive

network of health care providers and facilities. He is also actively involved with the Marine Corps Scholarship Foundation, which awards highereducation scholarships to children of active-duty and retired marines.

Caren McCarthy, MPH '73, PhD, has been elected president of the



Central Florida Association of Marriage and Family Therapists. McCarthy has a private practice in Orlando, where she also specializes in health psychology.

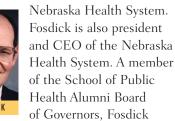
As a program administrator for Jackson County, Missouri, which includes half of Kansas City, James **T. Nunnelly**, MPH '75, oversees



the implementation of treatment and prevention strategies generated by the county's Community-Backed Anti-Drug Tax, or COMBAT. Approved by Kansas City voters in 1989

in response to a surge of violent crime linked to crack cocaine, the anti-drug tax funds an array of local programs designed to reduce drug use and drug-related violence. COMBAT anti-drug programs provide voluntary substance-abuse treatment to more than 300 adults and children per month, and provide drug-prevention services to more than 25,000 school-age children annually. Nunnelly has also developed drug-treatment courts for adults, adolescents, and those with mentalhealth and substance-abuse issues.

The University of Nebraska Medical Center College of Medicine has appointed Glenn A. Fosdick, MHSA '76, associate dean for the



has previously held administrative positions at the Genesee Memorial Hospital, Batavia, New York; at Buffalo General Hospital; and at Hurley Medical Center, Flint, Michigan, where he was president and CEO. He joined the University of Nebraska Medical Center in August 2001.

In July, Vernice Davis-Anthony, MPH '76, left Detroit's St. John Health System, where she was senior vice president for corporate affairs and community health, to become president and CEO of the Greater Detroit Area Health Council.

Harry Perlstadt, PhD, MPH '79, has been named chair of the American Public Health Association's Science Board and co-chair of the association's Joint Policy Committee.

FUTURE Findings

New Tools to Break Down Old Barriers

hrough their ongoing efforts to increase health care coverage for children in eastside Detroit, Richard Lichtenstein, associate professor of health management and policy, and his colleagues have found that many children who were eligible for



Alonzo Lewis, MHSA '93, left, and Richard Lichtenstein, with a prototype of their RootMap™ application.

health coverage through Medicaid were not enrolled in the program. "The classic reasons for not enrolling kids," Lichtenstein says, "are that no one understands the criteria for enrollment, and people really dislike dealing with the Family Independence Agency (FIA), which administers welfare programs."

So last year, Lichtenstein and several community partners from eastside Detroit approached three regional directors of local FIA offices to suggest they collaborate on implementing organizational change at FIA. Blue Cross Blue Shield of Michigan Foundation and the Detroit Empowerment Innovation Fund underwrote the initiative, and for the past year, Lichtenstein has been working with both community organizations and FIA offices in eastside Detroit to improve customer service at the agency and to reduce the barriers of understanding and attitude that keep community residents from using FIA. Former School of Public Health student Joy Calloway, MHSA/MBA '92, ar administrative manager for Henry Ford

Health System, Detroit, is collaborating on the project, as is SPH Assistant Professor Jane Banaszak-Holl.

In a related effort, Lichtenstein has also received a grant from Root Learning® Inc., an Ohio-based company that develops customized learning solutions, to develop a new educational tool to further understanding of the health resources available to residents of eastside Detroit. Another former SPH student, Alonzo Lewis, MHSA '93, managing director of client services at Root Learning® *Inc.*, is a key consultant on the project. Both Lewis and Calloway participated in the SPH Summer Enrichment Program, which introduces minority high school students to the field of health management.

Lewis and Lichtenstein are working with Root Learning® Inc., FIA, and community partners in eastside Detroit to create a RootMap™ application, a large visual map that graphically depicts the benefits of using FIA—and the negative consequences of "going it alone"—and also shows how to access the health care system. The Root Map™ visual, which measures approximately 3'x5', can be explored by groups of eight to ten people in informal dialogues aimed at helping participants process complex information.

"It's an active-learning model, and one that doesn't require a high level of literacy," says Lichtenstein. Once he and his colleagues develop the Root*Map*™ application, they plan to use it once or twice monthly in meetings with parents. The overall goal, says Lichtenstein, is to increase the percentage of eligible children enrolled in Medicaid and to improve the relationship between the eastside Detroit community and FIA.

Richard P. Jacobs, MPH '82, is a

The Science Board ensures that

APHA public policies are science/

evidence-based. The Joint Policy

Committee facilitates the policy

proposals, holding hearings, and

development process by reviewing

marking up final drafts for presenta-

tion to the APHA Governing Council.

member of the St. Louis, Missouri, law firm Husch & Eppenberger, LLC. Jacobs practices in the firm's Environmental and Regulatory Practice Area, where his focus is toxic tort and environmental litigation for large chemical manufacturers and a large railroad. He has been involved in matters pertaining to the Clean Water Act, the Clean Air Act, the Department of Transportation, the Occupational Safety and Health Administration, and state hazardous waste voluntary cleanup programs, as well as other environmental concerns and organizations.

Marilyn Woolfolk, MPH '82, MS, DDS, assistant dean of academic affairs in the University of Michigan School of Dentistry, was one of five UM faculty members to receive a

2002 Harold R. Johnson

Diversity Service Award,

which recognizes commit-



ment to the development of a more culturally and ethnically diverse campus community. In nominating

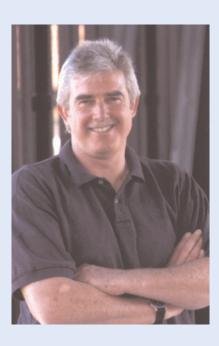
Woolfolk, School of Dentistry Dean William E. Kotowicz cited Woolfolk's "leadership role in our school's efforts to proactively respond to the changing composition and needs of the student population," and her efforts to "pre-

FUTURE Findings

A Lifecourse Approach to Epidemiology

he study of history is not something one typically associates with pathbreaking public health research—but for John Lynch, associate professor of epidemiology, it's an "under-investigated piece of the puzzle."

"Modern epidemiology has mainly focused on cross-sectional, or relatively short-term, prospective studies of the determinants of health in populations—often recruiting a group of adults and following



them over time and monitoring them for different health outcomes," Lynch says. "But relative to life expectancy, these studies are short. Many health outcomes in adulthood are likely the result of a complex set of exposures and experiences that may extend far into the past—into childhood, infancy, in-utero, and across generations."

As a framework for better understanding what is observable as population health at a given point in time, Lynch and other epidemiologists are rediscovering an approach called "lifecourse epidemiology," which

looks at those exposures and experiences early in life that can affect health in later life. Lifecourse epidemiology is prominent in Europe but has only recently caught on in the United States.

With his colleague George Davey Smith of the University of Bristol, England, Lynch has received a three-year Robert Wood Johnson Health Investigator Award to develop a frame work for determining how "lifecourse influences" affect both individual and population

"Many health outcomes in adulthood are likely the result of a complex set of exposures and experiences that may extend far into the past—into childhood, infancy, in-utero, and across generations."

health. At the individual level, markers of earlylife exposures, such as in-utero growth retardation, have been shown to have a direct impact on later conditions, such as diabetes, hypertension, and even schizophrenia and cognitive

At the population level, exposures that take place at an earlier period in history can affect the health of populations at later time periods. Patterns of heart disease observable today, for instance, are actually the result of complex processes accumulated over the lifetimes of cohorts born before World War II.

"Clearly, underlying patterns exist, which are worthy of reflection," says Lynch. "We must think intergenerationally. And it's not just about biological transmission. To some extent, our tastes for different foods today may be conditioned by what our grandparents fed our mothers and fathers."

By developing a lifecourse framework, Lynch and Davey Smith hope to clarify two of the most prominent features of population health in the 20th century: massive overall improvements in population health, and widening disparities between different social groups. "The health-disparities literature has not addressed the co-existence of these two phenomena, and yet they are fundamental aspects of population healththe average trend in the population, and the social dispersion around that trend over time," Lynch says.

Drawing on individual-level data: aggregate data from cities, states, and regions in the United States and the United Kingdom; and country-level data for wealthy nations, Lynch and Smith will analyze lifecourse influences and trends, at both the individual and population levels, in a variety of outcomes, from low birth weight to stroke, asthma, suicide, and various forms of cancer. The researchers hope to better understand how social conditions affect exposures in particular birth cohorts over their lifecourse, and how such influences help generate specific disease trends among populations.

pare and develop a diverse work force in our profession." A significant portion of Woolfolk's research and teaching activities has focused on documenting the oral health status of underrpresented populations. Woolfolk also served for 12 years as project director of the Traverse City (Michigan) Migrant Program. Earlier this year, Woolfolk was one of 45 women from U.S. and Canadian medical and dental schools chosen to participate in the Executive Leadership in Academic Medicine (ELAM) Program for Women, a yearlong fellowship program focusing on issues critical to academic health management. In May, Woolfolk began a three-year term as a member of the Executive Council of the American Association of Public Health Dentistry.

Iesus Gonzalez, PhD '85, is chair of the Department of Environmental Health at the University of Puerto Rico. The department, which has approximately 100 students and 12 full-time faculty members, offers MS and DrPH degrees in environmental health and an MS degree in industrial hygiene.

In June, MaryAnn Rizk, MPH '86, graduated from Oakland University in Rochester, Michigan, with a master's degree in training and development. She is now a project manager in business process improvement for Blue Care Network of Michigan.

Debra K. Sandridge (formerly Irvine), MPH '86, has taken a position as Chief Operating Officer of St. Francis Hospital in Milwaukee, Wisconsin.

Last May, Mechelle Johnson Abernathy, MPH '91, JD, graduated from the University of Baltimore School of Law. She plans to pursue a career in health care law. In her current position as a health policy analyst with the U.S. Department of Health and Human Services, Abernathy develops policy and provides guidance to state and federal agencies, hospitals, health plans, state licensing boards, and attorneys on reporting to the National Practitioner Data Bank and the Health Care Integrity and Protection Data Bank.

Nam-Won Paik, DrPH '93, has been appointed dean of the Seoul National University School of Public Health, South Korea's premier university, and president of the Korean Industrial Hygiene Institutions Association. His son Sam Paik recently completed his doctorate in environmental health sciences at SPH.

As the newly-named chief of staff of facility and waste operations at Los Alamos National Labs in New Mexico, Michael Brandt, MPH '94, DrPH '97, has wide-ranging responsibilities for solving technical, operational, business, and administrative problems. He says his Michigan experience "has prepared me well" for the job of coordinating facility safety and waste management at the nuclear facility.

Stephanie A. Kubow-Capruso, MPH '95, of Great Neck, New York, is a manager in the Office of Planning at the North Shore-Long Island Jewish Health System.

Susan Wallin, MHSA '95, is director of a health center for immigrants in Washington, D.C..

Jeffrev T. Albers, MHSA '97, is a division administrator for Pulmonary and Critical Care Medicine in the University of Michigan Health System.

At this year's meeting of the Associa-tion of University Programs in Health Administration, **Dennis** Scanlon, PhD '98, and fellow SPH alumnus Daniel Lee, PhD '97, were co-recipients of the John D. Thompson Prize for Young Investigators, which recognizes young scholars who have contributed significantly to the research literature in the field of health services. The prize honors John D. Thompson, a professor of health administration education, who established exemplary standards in teaching, commitment to learning, collegial relationships, and health services research. Scanlon has served on the faculty at Penn State University since 1997; Lee joined the faculty at the University of North Carolina in 2001.

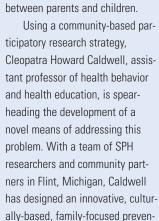
As a research specialist at Harvard University School of Public Health, Paul R. Reaser, MS '00, is heading the field operation for a five-year study aimed at defining the relationship between diesel-exhaust exposure and lung cancer among workers in the transportation industry.

Tamarah Moss, MPH '02, is the program manager for the Emergency Contraception Initiative at Advocates for Youth, based in Washington, D.C.

When Fathers and Sons Talk

ven under the best of circumstances, communication between fathers and sons can be a tricky matter. But when a father doesn't live in the same house with his son, it can be all but impossible. And when that's the case, especially for boys facing the challenges of adolescence, the results can be disastrous. Substance abuse, violent behavior, poor health, unplanned pregnancies, sexu-

ally transmitted diseases—these are the all-too-frequent outcomes of communication breakdowns between parents and children



tive intervention designed to facilitate communication between non-resident African-American fathers and their eight-to-12-year-

During one session, a father shared that his son had been so tormented by classmates at school that he was contemplating suicide.

old sons. The Fathers and Sons Project is the demonstration project from the Prevention Research Center of Michigan, which was established at the School of Public Health in 1998 with funding from the Centers for Disease Control and Prevention.

"At the heart of this intervention is communication between fathers and sons," says Caldwell. "But we're also concerned with enhancing ethnic pride." The intervention program has been designed to be "culturally appropriate, locally relevant, and gender-specific," Caldwell says. During the 15-session program, cohorts of fathers and sons learn about and discuss topics as far-ranging as Ghanaian symbology, culture and health, parental monitoring, sexuality, substance-abuse behavior, and bullying. Each intervention cohort consists of five to eight father-son families and is led by a trained community facilitator.

"We've had some very powerful exchanges," says Caldwell. During one session, a father shared that his son had been so tormented by classmates at school that he was contemplating suicide. Because of the program, the son had been able to talk about his feelings with his father. In a letter written as a homework assignment, another father said to his son, "As a young man, the world should be an open book. As a young Black man, that book is a lot thinner, but yet more complex. ... No matter what the problem is or how big the obstacle, I'll be there."

Looking ahead, Caldwell plans to expand the program, with new funding from the Centers for Disease Control and Prevention, by hiring a community outreach coordinator who will connect families to local resources and needed services, both during and after the intervention. A rigorous evaluation of the program will also be conducted. Caldwell says she and her team ultimately plan to prepare successful components of the program for application in communities throughout Michigan.

As for the fathers and sons who have taken part in the project, the results have often been gratifying. "You may not be there all the time for me," one son told his father. "But ... you are a good role model to me."

SPH Professor Marc Zimmerman is the co-principal investigator for the project, and Mrs. E. Hill De Loney is the community co-Pl; lead community partners are the Genesee County Health Department and the Flint Odyssey House—Health Awareness Center.

"What We Bring"

For 30 years, the school's On Job/On Campus program has been training public health professionals like Bridget Simone to handle whatever comes their way—even a national crisis.

s luck would have it, her oldest daughter was college-age when **Bridget Simone**, MPH '79, decided to go back to school in 1978. So Simone, a single mother of three, could rely on her oldest to "look after the young ones" while Simone commuted from Detroit to Ann Arbor once a month to attend classes.

Not that there's anything simple about going for a master's degree while holding onto a full-time job and raising a couple of kids. But it's a formula that's worked for hundreds of students ever since the School of Public Health launched its first cohort of On Job/On Campus students in 1972. Now celebrating its 30th anniversary, the OJ/OC program lets working professionals pursue graduate degrees while remaining employed. Since its inception, the program has graduated more than a thousand students in the fields of health management and policy, environmental health sciences, and clinical research design and statistical analysis.

Simone was administering Wayne State University's oncology program when she enrolled in OJ/OC. "I really felt the need to learn more about the health delivery system, because I didn't know anything," she remembers. During on-campus weekend sessions once a month, she developed close friendships with many of her classmates—friendships that have endured. Her classmates provided not only support, she says, but knowledge. "You get exposed to people who are not just working in the trenches, but are actually involved in decision-making. It was one of the really great parts of OJ/OC—getting that insight into all the different components of the system."

"The other great thing," Simone adds,
was that the faculty treated us as partners
rather than as students."

The training she received from SPH nearly 30 years ago informs Simone's work today. As first assistant deputy commissioner for the Medical Assistance Program of the Human Resources Administration of New York City, a job she's held for the past three years, Simone is responsible for administering \$1.4 billion worth of personal services annually to approximately 65,000 Medicaid-eligible clients throughout the five boroughs of New York. "It's a challenge, believe me," she says. "It's the largest personal-care service in the country."

Simone's office designs personal-care plans for their clients, and through 90 different service providers assigns home care attendants

attendant abandoned a client on the day of the attacks. At work early that morning, and watching his client's television, one homecare assistant saw the World Trade Center collapse and knew his son had perished. Despite his grief, he called his agency to confirm the safety of his client and to say that he could spend the next 24 hours there if necessary.

"They are unsung heroes," Simone says of the attendants, some of whom took clients home with them during the emergency. Simone herself worked long hours clearing the bureaucratic pathways so that clients could receive care. "I waived every regulation in the book."

Last year on September 11, Simone had to ensure that the 2,500 personal-care clients who lived in lower Manhattan continued to receive the services they needed.

who assist with everyday activities such as bathing and grooming, as well as basic household tasks. Because different agencies control different aspects of long-term care, "integrating the long-term care needs of the elderly and the disabled is extraordinarily difficult," Simone says. "There's no one entity that has overarching responsibility for an individual."

What can be a daunting challenge on an ordinary day became a crisis last year on September 11, when Simone suddenly had to ensure that the 2,500 personal-care clients who lived in lower Manhattan continued to receive the services they needed, not only on the 11th but in the weeks afterward, when many lost water and electricity, and transit in and out of the area was highly restricted. Astonishingly, Simone says, not one home care

Then, as now, her Michigan training proved indispensable. "The big problem is that many people who sit in my position have no understanding of the whole healthcare delivery system and how it ties together, what all of the components are, and how they impact on an individual," she says. "Those of us who are trained in the health delivery system can address any aspect of health administration. That's what's so special about the Michigan program. It teaches you the full array of the health delivery system. We can administer virtually any health care program."

Front-Line Duty

SPH Alumna Lisa Gordon-Hagerty describes her work as a director in the White House Office of Combating Terrorism as "the coolest job in the world." It's also one of the most sobering.

ost of us would be thrilled to be the inspiration for a character in a Hollywood movie, but when **Lisa Gordon Hagerty**, MPH '86, learned that she was one of the real-life models for the role of a White House counter-terrorism director in the 1997 thriller *The Peacemaker*, she was underwhelmed. It didn't even matter that Nicole Kidman was playing the role. "I have more important things to do than advise Nicole Kidman," Gordon-Hagerty laughs.

Those other "things" include overseeing the United States government's efforts to prepare for and respond to acts of terrorism, serving as chief liaison between the National Security Council and the Office of Homeland Security, and managing the counter-terrorism portfolio for terrorist groups seeking or acquiring weapons of mass destruction. And that's just a partial list.

As a director in the White House Office of Combating Terrorism, a post she's held since July 1998, Gordon-Hagerty reports directly to the recently established Deputy National Security Advisor for Combating Terrorism, to National Security Advisor Condoleeza Rice, "and ultimately to the President." Gordon-Hagerty is the first person to hold the post, which was created in 1998 after President Bill Clinton signed a directive calling for the federal government to prepare for, defend against, and be able to mitigate unconventional threats on the U.S. homeland. "I was brought in to handle that portfolio," Gordon-Hagerty explains. Three weeks into the job, Al-Qaeda terrorists bombed the American embassies in Kenya and Tanzania. Gordon-Hagerty promptly sold the house she'd owned 30 miles from downtown Washington and moved to a home within seven miles of



the White House. A 1986 graduate of the School of Public Health, Gordon-Hagerty holds an MPH in health physics (formerly radiological health). In her first post-graduate-school job, she worked in the nuclear weapons program at the Lawrence Livermore National Laboratory. She then moved to Washington to serve on the staff of the U.S. House of Representatives Committee on Energy and Commerce, and subsequently took a job with the Department of Energy before joining the White House. "I came to Washington for a year, and I've been here 12," she says. "I've got Potomac fever, there's no doubt about that." In fact, earlier this year she agreed to extend her tenure at the White House.

In late August, Gordon-Hagerty talked to *Findings* about her work.

Findings: What's a typical day like for you?

Gordon-Hagerty: I'm usually in my office at the White House between five and six in the morning, and I read intelligence message traffic. I have key words like "chemical," "biological," "radiological," "nuclear," and "terrorism," and the names of certain people and terrorist organization names, so I get anywhere between 500 and 1,000 messages a day. A message can be a paragraph or 20 pages long. If you've been doing it as long as I have, you know which ones you need to read just by the title. I attend an intelligence briefing at seven every morning, six days a week. We'll schedule Sundays as necessary. And then I have a variety of meetings. I chair several policy coordinating committees on a variety of topics—nuclear counter-terrorism, overseas crisis management, training and readiness, things like that

If a crisis pops up, then we drop all things and move toward dealing with that crisis. At three there is a follow-up afternoon intelligence briefing. Several days a week there is a subcabinet-level meeting of counter-terrorism operations, basically dealing with our war on terrorism. If I get out of the office by seven, that's a day with nothing going on. Normally it's more like nine. During the anthrax crisis, I probably worked 20-hour days.

F: Where were you on 9/11?

G-H: I was here in the White House. My office basically facilitated the inter-agency coordination of getting airplanes down, securing borders, making recommendations to the leadership—to Condoleeza Rice, to the Vice President and to the President.

F: Did the September 11 attacks come as a surprise?

G-H: Yes, but only because you're hoping that it never happens. If you see the information that I see every day, if you understand that there are really horrible people out there—and I use the term "people" loosely—that there are evil people out there who wish us harm and wish our allies and wish others harm because of our way of life, or because of some inane reason, and want to cause innocent people harm, then it's very difficult not to see it coming. It's here now, and it will continue. The best we can do is do our level best to disrupt it, deter it, and prevent it from happening.

F: Do you still draw on your SPH education?

G-H: Absolutely. I draw on it every day. I have a technical expertise that few bureaucrats have. I can understand complexities behind acts of nuclear terrorism or complex emergencies, and that lends itself as well to the chemical and biological realm. I'm able to have good conversations with, and to understand what's going on in, a variety of agencies. As a result of my degree in health physics, I have a detailed grasp of things like the Chemical Weapons Convention, the Biological Weapons Convention, nuclear arms control issues.

F: What sort of advice would you give students who might want to use their expertise as you have, in a policymaking role?

G-H: Keep your mind open, try different opportunities that might not necessarily be right up your alley. I went from working literally on nuclear weapons design to working on Capitol Hill. Now, somebody might look at that and say, "Wow, that's a strange jump." But because I had that technical background, I had an opportunity to engage on a broader front. So I would say don't limit yourself to just staying in one field. Use every opportunity possible.

F: How do you see the Department of Homeland Security affecting the delivery of public health services? F: How do you cope with your job—not only the pressures, but the awful knowledge to which you're privy? How do you keep from getting paranoid?

G-H: You have to have some level of common sense. Obviously, you don't put yourself in harm's way. But more importantly, we are fortunate to live in the freest society in the world, and as long as we are going to retain our civil liberties and opportunities, we have to behave that way. Because once I start becoming paranoid, then the terrorists have won. That's what they want us to do. Terrorists incite terror—that's their whole objective. Once they start making people worried about doing everyday things, such as flying in airplanes, things like that, then they've won. And I'm not going to let them win. That's how I get through it every day.

"I'm usually in my office at the White House between five and six in the morning, and I read intelligence message traffic. I get anywhere between 500 and 1,000 messages a day."

G-H: The delivery of our medical and public health services is mostly privatized, and there are issues about how much government intervention there should be, and how much responsibility the private sector should assume. How do you deal with a catastrophic event? Those are the kinds of questions we ask ourselves every day. Do we want to put together a capability to deal with 100,000 casualties? Is there a cost benefit to doing that? Is that prudent? Do we ever think we'll need a 100,000-bed health system in the East? Who's going to pay for that and maintain it? Who's going to deliver the health care? As long as we can work together at the local, state, and federal levels to make these plans and procedures, we'll be far better off.

F: You clearly relish your work.

G-H: It's going to be very difficult to leave a job like this. This is probably the coolest job anybody could ever have.

F: How will you top it?

G-H: You know what my next job's going to be? I'm going to go out and scoop ice cream. And you know why? Because it makes people happy, and I get to see little kids smile. I never deliver good news to people, and that is very sobering.

FUTURE Findings

Improving the Design of Therapeutic Trials in Bone Marrow Transplantation

ne of the greatest problems facing bone marrow transplant patients is a condition known as Graph Versus Host Disease, or GVHD. This occurs when a new immune system contained in bone marrow attacks key areas of the body—typically the skin, abdomen, and liver—into which it has been transplanted.



"The difficulty," says Tom Braun, an assistant research scientist in the Department of Biostatistics, "is that although the new bone marrow attacks the body, it also attacks cancer. It's a trade-off. Can we eliminate the attacks on the skin, abdomen, and liver, but still let the marrow attack the cancer?"

In a series of Phase I clinical trials conducted by the Blood and Marrow Transplantation (BMT) Program of the University of Michigan Cancer Center, Braun is working with BMT

Director James Ferrara to discover agents or drugs to prevent GVHD. Braun's role as a statistician is to determine which dosage of a given drug compound is safest for patients. To date, Braun has completed two trials, one designed to evaluate the ability

"There are no real statistical designs out there for **the cumulative administration of drugs."** — Tom Braun

> of Keratinocyte Growth Factor, or KGF, to protect the stomach, and a second aimed at assessing the efficacy of Enbrel in treating acute idiopathic pneumonia syndrome. Approximately 20 to 30 patients participate in a single clinical trial.

Traditional statistical models for Phase I trial design rarely yield the correct dosage of a given compound, Braun says. "With more sophisticated statistical models, we can design trials to find the most effective dose more often." What's more. Braun is collaborating with other investigators to devise new statistical design methodology capable of showing not only how much of a particular drug to administer daily, but how often a drug can be administered over an extended period of time. "There are no real statistical designs out there for the cumulative administration of drugs," Braun says.

In order to determine optimal dosage levels, Braun first consults with medical investigators and then develops a statistical model that can determine the degree to which a patient's likelihood of toxicity increases or decreases over time after receiving a drug. Through extensions of the Continual Reassessment Method, or CRM, Braun is able to estimate how often a given drug can be readministered to a patient before the patient's likelihood of toxicity exceeds a tolerable threshold.

Braun combines this model with the results of the ongoing trial and continually monitors and reassesses administration of the drug. "If three subjects are treated, this will determine what the fourth subject receives," he explains. "With older methodology, dosages typically only escalate, and once toxicity occurs, the trial is stopped. With CRM-based designs, we are able to escalate or de-escalate the dose, allowing us to fine-tune the dose given to each subject. With enough subjects, we'll have sufficient evidence that we are giving as much drug as possible without causing excess toxicity. Statistically, it's a more sophisticated approach."

IN MEMORIAM

Douglas N. West, MSPH '32 December 26, 2001

Anabel Robb Milczewski, MS '35 March 12 2002

Alexander Hatoff, MPH '36 May 5, 2002

Ben Aaron Kogan, MD, MSPH '37, DPH '45

Ralph T. Fisher, MSPH '39 May 16, 1999

Everett J. Olenick, MD, MSPH '39

Arthur Barbakoff, MD. MSPH '40 December 3, 2000

S. Robert Lewis, MD, MSPH '41

Joseph G. Carling, MSPH '42

Hester G. McCurley, (no degree) '45 November 19, 2001

Arthur R. Zintek, MD, MPH '45, DPH '47 December 11 1993

Marion I. Murphy, MPH '46 Iune 2, 1993

Sylvia T. Andronik, BSPHN '47 December 12, 2001

Marion Grier Fisher, MD, MPH '47 August 30, 2001

John P. Smouse, MPH '47 Ianuary 4, 1996

Catherine B. Glennon, MPH '49

Anna Marie Fredrick, BSPHN '51 August 1, 2002

Andrew J. Zeberi, PhD, MPH '51

Elsie Carpenter, MPH '52 January 1, 1997

Dorothy M. Ketchmark, BSPHN '53

Grace Musselman, MPH '57 July 16, 2002

William M. Brown Jr., MD, MPH '59 September 28, 2001

Mattie L. M. Humphrey, MHA, '59 November 12, 2001

Iris V. Echelberger, MPH '60 September 2, 2002

Joe C. Woosley, PhD, '60 August 10, 2000

Edmond Steele Jr., MPH '61 May 1 1993

Robert L. Evans, PhD, MHA '62 Iune 7, 2002

Lois L. Chodoff, MD. MPH '65 October 13 1993

Iean C. Hanna. MPH '66 February 17, 2002

Thomas H. Maher, MS '66 February 25, 2002

Thomas M. McCaffrey, MHA '70

Leighton H. Tooms, MPH '71

Georgia Floyd Smith, PhD, MPH '74 September 2, 2001

Lorna T. Lewis, MPH '77 March 13, 2002

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Class of '76 Raises Over \$60,000 to Fund Annual Lecture Honoring John Griffith

o mark their 25th anniversary. celebrate their own success, and thank the faculty of the School of Public Health for providing them with "knowledge, expertise, and collegiality," members of the class of 1976 Hospital Administration Program have established a visiting lectureship endowment designed both to enrich the school's teaching mission and "to



W. Raymond C. "Ernie" Ford. MHSA '76, right, shares the stage with John R. Griffith at last year's Department of Health Management and Policy Biennial Institute.

inspire future generations of classes to follow our example." The lectureship honors SPH Professor John R. Griffith, "who for many of us was the driving force of the program during our time at Michigan," said W. Raymond C. "Ernie" Ford, MHSA '76, who chaired the fundraising campaign.

As of September, the endowment stood at over \$63,000, including pledges, gifts, and employer-matching

gifts. Monies from the fund will be used to bring in an outside expert for an annual Class of 1976 hospital administration lecture in honor of John R. Griffith.

Ford, the Chief Executive Officer of Specialty Hospital in Jacksonville, Florida, said that Griffith instilled in his students "strong values which have remained with us throughout our careers. The Michigan experience formed for us an enduring legacy and a strong bond and kinship among our classmates and with the school. Professor Griffith was instrumental in establishing both these ties, and this lectureship is intended to recognize his inspiration."

"The fund is a moving tribute and commitment from the class of '76," said Griffith. "More than simply a monetary gift, the fund represents an important concept of alumni/faculty relations. All professional education depends upon a continuing flow of knowledge between practitioners and the classroom. The fund is evidence of the class of '76's commitment to that concept, and the faculty will use it to improve our understanding and student understanding of professional practice realities."

Griffith noted that the fund is precisely the sort of support that "sustains the excellence of our educational programs. We will use it initially to strengthen our biennial symposium, next scheduled to take place on October 16 and 17, 2003."

What's New?

NEWS, NOTICES & NETWORKING

our classmates would like to know where you are and what you are doing. Please send us information, and a photo of yourself if you have one, for Class Notes. Information can be in the form of news items, press releases, written on the lines at the bottom of the page. Or you can send this information by e-mail to sph.alumni@ umich.edu. The form is also available at www.sph.umich.edu.

Please complete this page and fill in the circles if the information you are providing is a change in address or title, if you know of job openings for students, and/or if you are willing to be a resource person for SPH students/alumni.

RETURN TO:

Office of Communications University of Michigan School of Public Health 109 S. Observatory Ann Arbor, MI 48109-2029

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CLASS NOTE:		

SPH Bulletin

The Technology Connection

SPH News on the Web

Between issues of *Findings*, be sure to visit www.sph.umich.edu for breaking news from your school and program. You'll find:

- Research headlines
- Events listings
- Alumni news
- Career links and postings
- And much more

It's all updated frequently at www.sph.umich.edu.

To Contact Alumni

File this address in your e-mail address book and use it to contact SPH: sph.alumni@umich.edu If you request it, we'll forward your message to someone else in the school.

Career Networking

If you are new to the job market, exploring career options, or moving to a new city or state, consider networking among Michigan's 15,000 SPH alumni worldwide. Michigan's career network can provide you with alumni contacts in particular cities, states, regions, and countries, and in the various public health disciplines.

If you are seeking a career or job change

Log on to www.sph.umich.edu and click on careers and networking. The **UMSPH Job Bulletin** lists research and summer positions available on campus in each of the health disciplines. The ASPH (American **Schools of Public Health) Public Health Employment Connection** offers job opportunities and related information for public health careers. Full and part-time job opportunities, internships and fellowships, links to various employment listings, and sites of interest by discipline as well as job search strategies can be found at this site.

If you are seeking to fill positions for your agency, company, or organization

Log on to www.sph.umich.edu and click on careers and networking. The ASPH Public Health Employment Connection posts positions for public health careers. Postings can be done directly from the web site.

If you are interested in enhancing Michigan's Career Networking

Log on to www.sph.umich.edu and register as a UM SPH Networking Contact. Networking contacts act as

mentors in the field for students who are seeking information and feedback about internships, job searches, interviewing, and real-world experiences.

For more information about Career Networking, contact

Shelagh Saenz, Career Services Coordinator University of Michigan School of Public Health 109 S. Observatory Street #3537 Ann Arbor, MI 48109-2029

Phone: 734.763.3155 Fax: 734.763.5455 E-mail: sph.jobs@umich.edu

Datebook

November 9–13, 2002 APHA Annual Meeting

Join us in Philadelphia! Visit our booth in the exhibit hall. Even if you're not registered for APHA, alumni and their guests are invited to Michigan's Keep-In-Touch reception on Monday, November 11, 6:30 to 8 pm, in the Conference Center.

June 6, 2003 Emeritus Faculty and Alumni Luncheon

Alumni from the Class of 1953 and earlier and emeritus faculty are invited. Contact sph.alumni@umich.edu or phone 734.764.9480.

July 6-25, 2003 Graduate Summer Session in Epidemiology

Now in its 38th year, the internationally recognized Graduate Summer Session in Epidemiology provides instruction in the principles, methods, and applications of epidemiology. Distinguished faculty from academic centers and governmental agencies throughout the United States offer introductory and advanced courses in epidemiology, biostatistics, and data management, with special evening lectures by guest speakers, as well as weekly social events. Curriculum options include oneweek, three-week, and weekend courses. For more information contact Jody Gray at 734.764.5454, gssumich@sph.umich.edu, or visit www.umich.edu/epid/GSS.

October 16–17, 2003 Biennial Alumni Institute

Sponsored by the Department of Health Management and Policy, at the Sheraton Hotel, Ann Arbor—with a football game in the Big House to follow. For more information contact Professor John Griffith at 734.936.1304 or jrg@umich.edu.

For a complete listing of news and upcoming events, visit the School of Public Health website at www.sph.umich.edu.

Dean's Advisory Committee

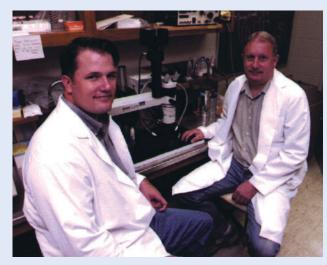
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FUTURE Findings

Why Does Thalidomide Cause Limb Deformities?

eveloped in the 1950s and marketed as a mild sedative in the early 1960s, thalidomide was also widely prescribed to treat a variety of maladies, including inflammation and the nausea associated with influenza and pregnancy. Thalidomide became infamous when researchers found it to be the cause of severe limb deformities in thousands of children born to women who had used the drug during



Jason Hansen, PhD '01, left, and Craig Harris.

pregnancy. Although initially thought to produce no side effects in adults, it later emerged that prolonged use of thalidomide also produces a painful neuropathy, or peripheral nerve damage, resulting in permanent loss of sensory function in the arms and legs.

Despite these grave side effects, says Craig Harris, associate professor of environmental health sciences, thalidomide has recently been re-introduced as an important therapy for the treatment of a wide range of ailments, including leprosy, inflammatory skin diseases, lupus, multiple myeloma, and the wasting syndrome associated with AIDS. Because of these and several other potential benefits to human health, thalidomide was first approved for use in the United States in 1999. The drug is not prescribed to women who are planning to become pregnant, are pregnant, or could become pregnant. Moreover, both dosages and duration of treatment are limited to prevent peripheral nerve damage.

With the ultimate goal of improving the safety of thalidomide usage, Harris is seeking to understand the molecular mechanisms through which thalidomide causes limb defects and neuropathy. A key part of the mechanism related to limb defects is thalidomide's propen-

sity to oxidize intracellular glutathione (GSH) and to produce oxidative stress. Glutathione, a tripeptide made up of three amino acids, is found in high concentrations in the cells of virtually all organisms and serves both to prevent oxidative stress and to help trap free radicals that can damage DNA, RNA, and proteins.

In collaboration with former SPH graduate student Jason Hansen, PhD '01, Harris is conducting a series of studies comparing whole and partial embryos from laboratory rats and rabbits, in an effort to determine species selectivity to thalidomide. To date, they've found that the offspring of pregnant rats treated with thalidomide show no signs of malformation, while the fetuses of rabbits treated at the same doses show a significant incidence of severe limb defects. Furthermore, the rabbit embryos were found to contain significantly lower concentrations of GSH and to have greater difficulty replenishing GSH once it had been depleted. "It's clear that the presence of GSH in high concentrations provides a 'reducing' environment that enables normal molecular signaling related to limb outgrowth to occur," Harris explains.

Hansen and Harris hypothesize that oxidative stress, produced as a consequence of thalidomide exposure, ultimately prevents the transcription-factor protein NF- κ B, from binding to DNA and activating the expression of genes required for limb outgrowth. As a result, severe limb-reduction defects occur in sensitive species that are unable to maintain adequate levels of GSH.

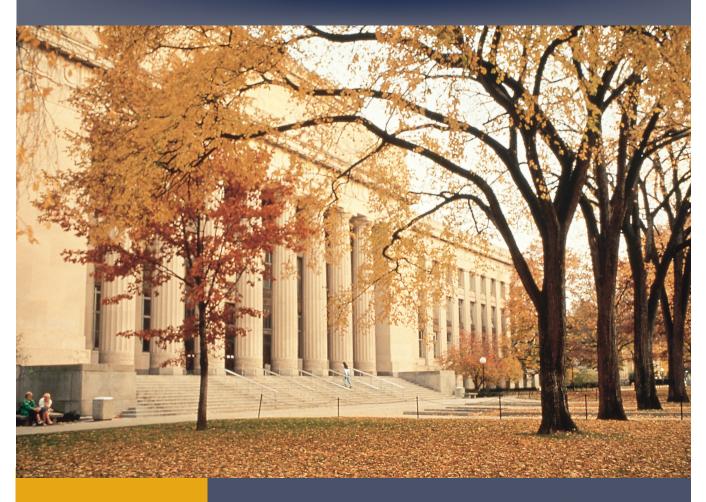
It's not clear whether similar mechanisms apply to the peripheral nerve damage caused by thalidomide. In further studies, and in collaboration with Martin Philbert, associate professor in the Department of Environmental Health Sciences, Harris and Hansen hope to extend

"There are many important therapeutic implications and uses for thalidomide."

their findings to elucidate the mechanism of thalidomide-induced peripheral neuropathy. "There are many important therapeutic implications and uses for thalidomide," says Harris. "By understanding thalidomide's mechanism of action, it may be possible to prevent the peripheral nerve damage it now causes and to greatly prolong the effective treatment period."



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Snapshot

NAME:

Erika Willacy

AGE: 25

HOMETOWN: Ann Arbor, Michigan

SPH DEGREE PROGRAM:

MPH, Health Behavior and

Health Education

GRADUATING CLASS: 2003

This past summer you did a threemonth internship with the Office of Women's Health at the Centers for Disease Control. What was the best part of the experience?

It's a small office, and they really wanted me to get a good experience and get a lot of hands-on work. That made all the difference. I was given my own project, to produce a "Healthy Tips for Women" brochure. It's one of the first brochures from the women's health office which will be geared to the general public. It was really interesting, because we



had to think critically about people in different situations and how we can approach them. How do you say certain things? You talk about exercise, and you say, "Take a walk at lunch," but there are women who work the midnight shift. What options are available for them? So your work focused on health communications?

I was also exposed to entertainment education, because there was a gentleman from Los Angeles who runs an organization that works with various health systems—in this case, the CDC—to try to encourage soap opera writers to include story lines that have accurate health messages. I sat in while several of the centers presented their ideas to him, and it was interesting to hear the kinds of questions he asked. He'd say, "Well, how do you see that a character would do this?" He has a soap opera summit twice a year, and he brings in all these writers. He may choose someone from the CDC or another organization to present information on a particular issue in a very scientific way, and then he levels it and says to the writers, "Here's how I think that you could incorporate this." The CDC is trying to embrace entertainment education. They understand that it's a great situation, because you have access to people who are already committed to these programs that they like to watch. If we can incorporate health messages in these programs, we can actually have influence.

You went away to Wellesley for your undergraduate education and then came back to your hometown for graduate school. What's that like?

The university is so much a part of Ann Arbor that it's hard to escape the fact that it's a great school, and that amazing alumni come out doing amazing things. So I wasn't necessarily surprised—but I was pleased to find out that it's *true*.