

Healthviews

SPRING 2009 >> VOLUME 8 >> ISSUE ONE



INSIDE THIS ISSUE

SAVING A VILLAGE | FIGHTING OBESITY | WATER, WATER EVERYWHERE



An illustration created by two Chicago grade-school students for a poster contest organized by the Urban Health and Diversity Programs during National Public Health Week.

Healthviews

Editor

Tina M. Daniel

Copy Editor

Nichola Moretti

Contributing Writers

Danielle Desjardins
 Nichola Moretti
 Karen Schmidt

Art Direction and Design

Kristin Tomsits Dunn
 New Yardstick Strategic Design

Photography

Constance Kostrevski
 Eye Shot'cha

UIC Photography

Printing

Grove Communications

Healthviews Advisory Board

Paul Brandt-Rauf
 Serap Erdal
 Michele Kelley
 William Kling
 Supriya Mehta
 Kathleen Spiess

The UIC School of Public Health is committed to preserving the environment. This publication is printed on post-consumer recycled paper using soy-based ink.

COVER TO COVER

5	Saving A Village Educating Public Health Students One Water Sample At A Time
11	Fighting Obesity Through The Lens Of A Child's Camera
13	Water, Water Everywhere But Is It Safe To Play In?



FEATURES



DEPARTMENTS

2	Dean's Desk
3	The Pulse of Public Health
4	National Scope / Global Reach
7	Advancing Health
8	SPHere
15	Neighborhood Commitment
16	Class Acts

Visit the UIC School of Public Health web site at www.uic.edu/sph

Isn't Chicago a great city? As a life-long New Yorker, I was pleasantly surprised that it has taken less than a year to acclimate to my new home. The lively and diverse Chicago neighborhoods embrace you. The urban environment is full of vigor and enrichment. Most importantly, the UIC School of Public Health has proven its impressive reputation as a significant part of this illustrious city, as its faculty, students, staff and alumni work diligently to build healthier communities.

To build healthier communities: What exactly does that mean? Because the challenges we face today are great, we, as public health professionals, have much to think about when it comes to building healthier communities.

In this issue of *Healthviews*, read about one of our PhD students, Christine Bozlak, who is focusing on giving children a voice on their health. Her modern methods of educating Chicago's youth on how to lead a healthier life are aimed at helping reduce childhood obesity. Then, travel to Guatemala with Assistant Professor Steven Lacey to see how public health intervention and engineering implementation can

make a difference in the developing world. In the small, rural village of Cerro Alto, Lacey and several UIC students are working to bring safe drinking water to families who live there. And finally, learn how Research Assistant Professor Sam Dorevitch is recruiting thousands of Chicagoans to participate in an experiment that may ultimately change the ways we regulate Chicago's lakes and rivers.

As you can see, the UIC School of Public Health is everywhere. We are in your backyard, exploring ways to live safer, more productive, more fulfilling lives. We are ever present in developing countries, helping communities learn and thrive. We are public



health professionals whose primary intent is to help build healthier communities throughout the world.

Paul Brandt-Rauf, DrPH, MD, ScD
UIC SPH Dean

FROM THE EDITOR

The innovative and meaningful work that comes out of the UIC School of Public Health has become part of local, national and international conversation. My hope is that *Healthviews* develops a similar reputation for quality.

We are proud to launch the redesigned *Healthviews* magazine, complete with



three sections that demonstrate our pledge to improving public health. *Neighborhood Commitment* recognizes community outreach efforts in our own backyard. *National Scope/Global Reach* highlights the ground-breaking research we conduct everyday that impacts people and communities across the globe. *SPHere*, the namesake of our new e-newsletter, celebrates the school with its diverse student body, faculty, alumni and staff.

In every issue, you will also find *The Pulse of Public Health*, a place where we engage the UIC campus and Chicago community to discuss an important public health question. Alumni accomplishments and updates will be featured in *Class Acts*, and *Advancing Health* will highlight our advancement team's efforts and trace the ongoing support of our school.

You will receive *Healthviews* each spring and fall. We hope that our stories inspire a wide array of Letters to the Editor, a section

that will debut in the next issue. Send your comments to tellSPH@uic.edu.

Lastly, I would like to extend special thanks to the *Healthviews* Advisory Board for their editorial direction; my writing interns, Danielle Desjardins and Karen Schmidt, and my communications council for their commitment; our graphic designer, Kristin Tomsits Dunn (New Yardstick), and photographer, Constance Kostrevski (Eye Shot'cha), for bringing this issue to life; my copy editor, Nichola Moretti, for her diligent editorial support and tireless nights of "cut and paste;" and our printer, Rob Grzelewski (Grove Communications), who worked relentlessly to find the best possible option to support our school's concern for the environment.

We hope you enjoy this issue!

Tina M. Daniel
UIC SPH Director of Communications

Q: What does 'building a healthy community' mean to you?



Healthy communities are those that allow the people to maintain a high quality of life and productivity. A healthy community has a safe environment and includes access to health care services that focus on both treatment and prevention for all members of the community.

Dave Jasicki > Head of IT/Radiology at the UIC Medical Center



It's a connected, democratic and committed community in which residents and local institutions work, learn and play together. This ensures interpersonal and environmental safety, access to various fitness activities, and a means to produce and purchase affordable, sustainable and locally grown food.

Radhika Sharma Gordon > Coordinator, Healthy Albany Park Coalition



A healthy community means integrating science into health care and improving preventative health care and community awareness of preventative health.

Mike Demars > UIC doctoral student in Neuroscience



A healthy community requires support from the community—the ability to foster creativity within the community as a whole. That's important to science.

Adam White > UIC doctoral student in Anatomy and Cell Biology



A healthy community is a vibrant living space providing its residents with access to support and services, so that each member is wholly engaged in his or her life. Having inviting parks for recreational opportunities, a health care system treating the whole person, opportunities for personal and spiritual development, and a transportation network that makes good use of current physical assets.

Jerry Goldstein > UIC SPH Alumnus (DrPH, '07)



Communities should discuss health risks and how to live in a healthy environment. The community could also organize outings to health events that talk about living a better lifestyle.

Alexandria Jones > UIC undergraduate student in Psychology

From Kenya To Campus, HIV Researcher Honored

FOR NEARLY 15 YEARS, Robert Bailey, an epidemiologist at the University of Illinois at Chicago School of Public Health, has dedicated his life to understanding the benefits of male circumcision in Sub-Saharan Africa as a means to prevent the spread of HIV.

On Feb. 11, Bailey was recognized at the UIC Researcher of the Year award ceremony, the first of its kind for the university. “You hear in the aggregate how well the university does,” said Larry Danziger, interim vice chancellor for research, “but I thought it would be nice to highlight the faculty for the important work that they do.”

Through his research in Kisumu, Kenya, Bailey has been able to provide evidence that male circumcision results in at least a 51 percent reduction in the risk of contracting HIV. As a result, the World Health Organization and the Joint United Nations Programme on HIV/AIDS announced in 2007 that male circumcision is a proven HIV prevention tool. Bailey’s research was also named the number one medical breakthrough in 2007 by *Time* magazine.

HEAL Raises Awareness, Brings New Hope To Africa’s HIV/AIDS Patients

In addition to his work in Kisumu, Bailey is one of the founders of HEAL, Health and Empowerment for African Lives, a group started by faculty and students from the UIC SPH.

HEAL began in 2007 as a way to advance health care and educate the people of Kisumu, a region of Africa with one of the highest HIV/AIDS prevalence rates. The group is training doctors and nurses to understand the sensitive needs of HIV-positive patients in Kenya, especially those who are homosexual, which is illegal there.

Larry Danziger, right, presents Robert Bailey, with the UIC Researcher of the Year award.



A mural painted by Kisumu artists on the walls of the clinic where Bailey is conducting trials.

To raise awareness, HEAL hosted its second annual fundraiser at the Sidetrack Bar in the Lakeview area of Chicago known as Boystown on April 17.

Craig Hyland, assistant director of development and alumni relations for the UIC SPH, said AIDS in Africa is spreading fast, yet the mentality surrounding the disease and homosexuality is behind the times. “It’s unbelievable to hear of a place like Kenya, with an AIDS epidemic similar to what we saw in the U.S. in the 1980’s, but with ideas of homosexuality that are like those of the 1940’s.”

Bailey said HIV in Kisumu is more than just a growing epidemic. In a region where 30 percent of adult women and 20 percent of adult men are infected, everyone has a relative with HIV, he said. “So almost everyone is infected or affected by it.”

For nearly seven years, Bailey has been visiting Africa with his wife, Nadine Peacock, a UIC SPH associate professor of community health sciences. While conducting male circumcision research there, they discovered that many of the men

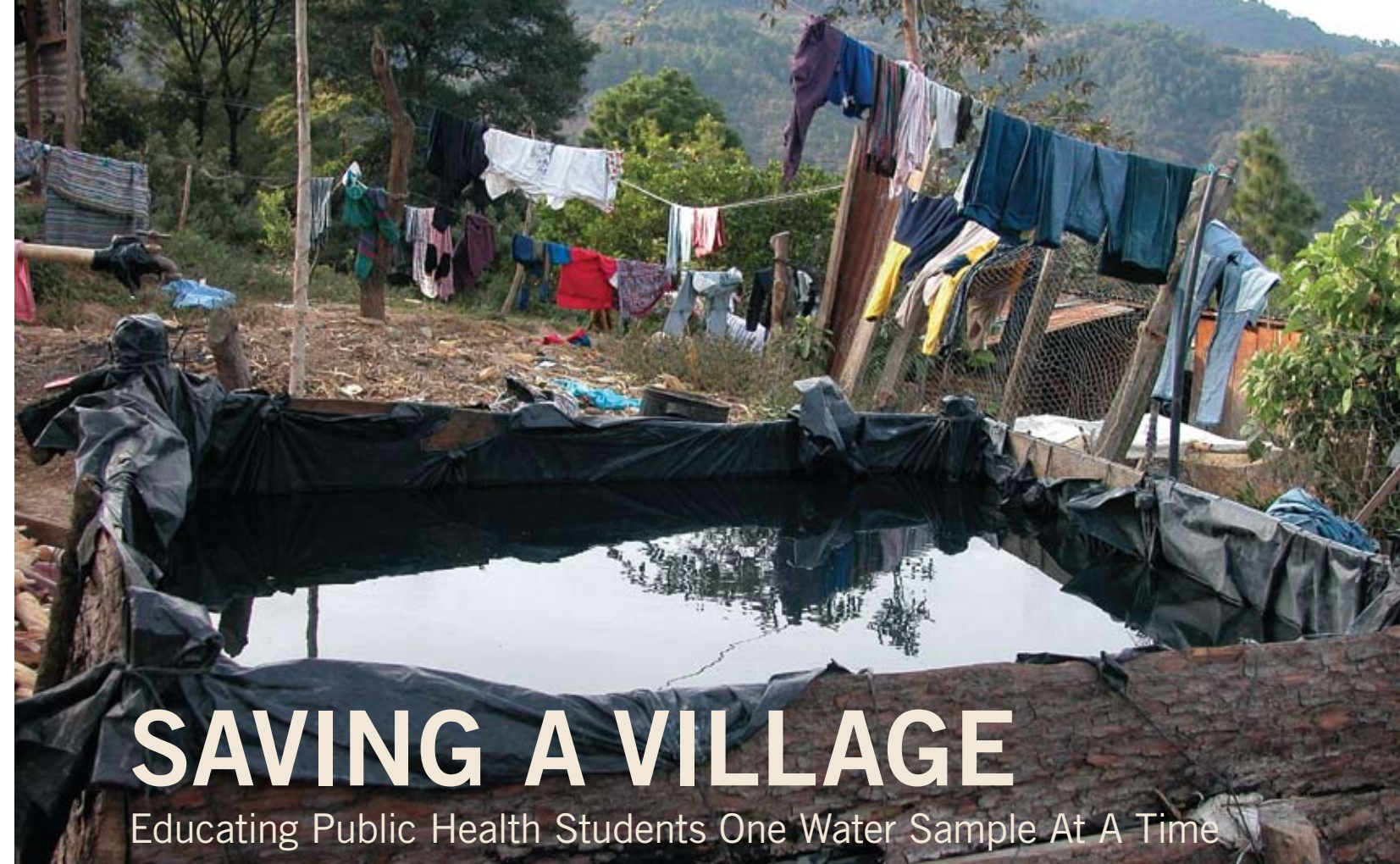


Nadine Peacock, third from the right, with staff and clients from a community organization serving young mothers in Kisumu, Kenya.

volunteering for the study were testing positive for HIV. “We couldn’t just turn them away,” Peacock said. “We figured if we had an organization like this, we could do a lot more good.”

Leslie Stayner, director of the division of epidemiology at the school said the contribution Bailey and his team have given to the community is great. “I think it’s rare in epidemiology to be able to say that somebody’s research is literally going to save millions of lives.”

— Karen Schmidt and Danielle Desjardins



SAVING A VILLAGE

Educating Public Health Students One Water Sample At A Time

By Nichola Moretti

From Chicago to the mountains in Guatemala, UIC SPH students learn lessons in humanity.

Can you change your own life by helping someone else?

The students and faculty working to bring clean water to a village of 1,400 in Guatemala know it is true. “Experiences like these bridge the gap between what you learn in an academic setting and what is practical outside of that setting,” said Katherine Heiman, a Master of Public Health candidate in epidemiology at the University of Illinois at Chicago School of Public Health.

Heiman is part of a team that left in May to undertake the educational component of a multi-year project aimed at improving the lives of families in Cerro Alto, Guatemala.

Originally undertaken by the UIC student chapter of Engineers Without Borders, the project, includes students and faculty from public health, urban planning and engineering. Its goal is to revamp the existing water system in a sustainable way that will include chlorination, thereby reducing contamination in the village’s drinking water.

But this portion of the project is neither the beginning nor the end. “Our first project...constructing a wall around the village school to improve safety and security...was a very visible and tangible project that helped us establish our relationship,” said UIC SPH Assistant Professor Steven E. Lacey, an active member of the group working in Cerro Alto. “Now we are working on much

(Top) Large, concrete or plastic-lined wooden cisterns store water used for bathing and washing, since water is only provided to households every two to three days.

more delicate issues, namely drinking water and how it affects the health of their community, their children. And that demands significant trust.”

Currently, water is delivered to Cerro Alto residents every few days through a pipe. Many contamination points exist in this delivery system, and this means constant exposure to illness. “Gastrointestinal diseases (like diarrheal illness) have a large impact on people living in less developed countries,” Heiman said. “Often times the source of infection is from contaminated drinking water.”

Heiman, who is also a member of the Global Health Student Interest Group, said that proper storage and an understanding of how water becomes contaminated is essential. “When the water reaches the households, it is stored in containers for later use. There is potential for the water to become contaminated with bacteria and other sources of disease at this point if the lid is left



(Left) Steven Lacey tours the kitchen of the village school. Most cooking in the area is done here over an open fire and without ventilation.

(Right) Surrounded by some of the village's children, Charles Frangos conducts a field test on a water sample.



off...or if dirty hands go in the water. Children are especially susceptible to illness and are more likely to die. By working with the community to develop a way to sanitize their water, much of these illnesses, and even deaths, can be prevented.”

Many of the village holding tanks resemble crudely constructed backyard pools with dirty, wooden planks for sides and plastic tarps for liners. Inside the homes of the 160 families served by this system, drinking water is kept in plastic containers that resemble trashcans, located in areas where children, insects and livestock have easy access.

So along with water quality research and infrastructure, a solution to Cerro Alto's problems must include education, not only on contamination factors, but also on maintenance of a new system, and it must be economically sustainable in a community where over 80 percent of the families live on less than \$135 per month.

Students are working on a plan to educate the residents, by developing a GIS map that will indicate all the contamination points found in the water supply. This map, created by the urban planning group, will be instrumental in tracking improvement, said Angela Larson, a member of the UIC Urban Planning and Policy Student Association.

UIC SPH Dean Paul Brandt-Rauf points out the need not just for educating the community, but for their direct involvement in the development of the new water purification system. “Just because they build it, doesn't mean they will come,” he said. “You don't do it, then convince people to use it. You engage them in the process. This group has done a good job of that.”

“One village at a time will take forever, and we don't have forever.”

— Paul Brandt-Rauf

Lacey agrees the idea of working on a solution and presenting it to a community without resident input is outdated and ineffective. “We do not want to go in with the antiquated model of industrialized countries coming in and telling developing countries what their priorities should be...we work with the community, as part of the community, to derive solutions.”

For students, participating in such a project allows them to appreciate the human aspect of public health through personal experience, Brandt-Rauf said. “You could give lectures on the human element, the need for real-world application, the ethics of working with humanity, but it just wouldn't stick with students in the same way that a project like this teaches those same values.”

But better still, from the students' point of view, is getting to see their work in action. “The student's work is actually being installed; they're working not just to obtain a good grade but to actually improve the lives of people in the developing world,” said Frank Zurek, a master of urban planning and policy student and president of EWB.

Brandt-Rauf is particularly pleased with this project, because the lessons learned have broad applicability. “It's a very good example, because it deals with the major issue of water,” he said. “People's health has been profoundly affected by engineering interventions, but public health needs to be reacquainted with the benefits of simple engineering solutions to the world's public health problems.”

Brandt-Rauf also said he feels that every student should have the opportunity to work on a real-world project like Cerro Alto before graduating. The application can be far reaching if students choose to share their knowledge, he said. “One village at a time will take forever, and we don't have forever. Once they have gained sufficient prominence, they can take it to a more macro level. As long as you share the lessons, you've done something.”

Those participating in this project not only see the potential for impact on the villages and policies of the world, but just as importantly, the influence they have in effecting change. “It's an amazing feeling,” Zurek said. “Sitting in a classroom and walking the roads of Cerro Alto are two completely different things. Working on this school project was the first time I was able to put a face behind my engineering work.”

Brandt-Rauf agrees this human connection is essential to a complete education. “There is a big difference between knowledge and wisdom; and impact takes wisdom,” he said. “You have to begin somewhere. You have to know what works and what doesn't. You have to have experience to share it. These experiences don't just provide practical experience, but real-world humanitarian experience. By doing this, you not only gain experience in your profession, but learn humanity, humility, honor and hopefully, humor.”

According to Lacey, stable advising, dedicated people and generous donors are essential to the project's long-term success; people like Charles Frangos, a recent civil engineering graduate, now employed with Clark Dietz, Inc., an area firm. “Charlie first traveled with us as a UIC student, and now he continues to work closely with us to see the project through,” Lacey said. “Having a long-term partnership with an area engineer ensures stability and sustainability of all EWB efforts.”

“I bring the public health expertise,” Lacey added. “Charlie brings the civil engineering expertise necessary for a long-term campaign.”

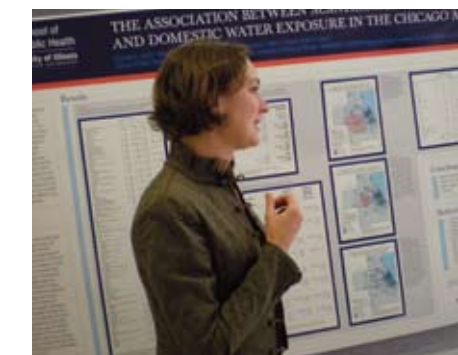
As students graduate and move on, Frangos, Lacey, Brandt-Rauf and others intend to be there providing irreplaceable learning experiences for students and life-changing public health solutions by way of a small village nestled in the lush, green mountains of Guatemala. ■

ADVANCING HEALTH

Honoring Students

On Friday, April 10, the University of Illinois at Chicago School of Public Health celebrated student accomplishments at the 4th Annual Research and Awards Day.

Doctoral students, **Bogdan Catalin** and **Sarah Forrestal** (tied for first place), and master's student, **Antoinette Price**, each received a \$300 award for their posters reflecting research excellence in public health. Doctoral student, **Ignatius Praptoraharjo**, was the Global Health poster competition winner, also receiving a \$300 award. Senior Associate Dean Faith Davis presented school scholarships and awards at a mid-afternoon ceremony followed by a reception attended by faculty, family and friends.



Charlotte Joslin discusses her dissertation research on the relationship between eye infection and water exposure in the Chicago area.



Left to right: Terry Passaro, Lanny Passaro, Albert Hosea John Plenty and Sherry Nordstrom.



Thomas Bruton, left, and Shakirudeen Amuwo at the annual donor recognition dinner at Braseri Jo in Chicago.

Alan W. Donaldson Award
Wade Ivy, III

Amuwo Minority Scholarship
Yashika Watkins

Bonnie C. Minsky Award
Sarah Forrestal

Douglas Passaro International Award
Albert Hosea John Plenty
Ted Hufstader

Estelle Goldstein Memorial Scholarship
Renaee Smith-Ray

Michael Bruton Workplace Safety Foundation Fellowship
Shakirudeen Amuwo

Paul Q. Peterson Scholarship
Lora Oswald

Scrimshaw Latino Health Scholarship
Ana Ricardo

Viron L. Diefenbach Award for Excellence in Student Research
Jared Maeda

William Haenszel Memorial Scholarship
Charlotte Joslin

From The Director Of Advancement

Since my arrival in January, I have been impressed with the hard work, energy and enthusiasm that surrounds the UIC School of Public Health. Alumni, volunteers and friends are the lifeblood of any school, and after spending the early part of this year getting to know this devoted group, I see a vital, dynamic association poised to make a significant impact on the future of our academic resources.

Annual giving is a crucial component of our development plan. It is through our donors' excitement and interest that we are able to achieve our challenging goals for the UIC Brilliant Futures Campaign. Every donor makes a difference, no matter the size of the donation. The more donors we have, the more powerful our voice in influencing the decisions that affect our future. Our goal for this year is to encourage everyone on our mailing list to provide whatever level of financial support they can.

Embedded in all our activities is the generous support of our donors, who give for student scholarships, faculty support positions, and global travel opportunities for student research. Gifts also sustain the Dean's Fund for Excellence, which provides unrestricted support and lays the foundation to embrace new opportunities like lecture series, alumni events and commencement activities.

I encourage alumni to keep in touch with their alma mater by subscribing to the alumni listserv, and to receive *SPHere*, our school's new e-newsletter which is full of exciting news and upcoming events. As we follow new opportunities and build on the results of our work, I hope that everyone will support our aspirations to advance the deeply personal world of philanthropy in public health.

Kathleen Spiess, CFRE
UIC SPH Director of Advancement



A Soldier's Mission Of Merit



Aaron Williams

"I HAD THE PLEASURE of fighting alongside the bravest men and women bred in America," said Aaron Williams of his deployment in Iraq.

For Williams, who graduated in May from the University of Illinois at Chicago School of Public Health with a Master of Healthcare Administration, the experience of war was an eye-opener. It brought him to study public health in Chicago, and this summer it's taking him to Baltimore, Maryland to work at one of the leading research hospitals in the nation.

Williams received the Johns Hopkins Postgraduate Fellowship, winning the award among semi-finalists from universities including Cornell, Harvard, Michigan, Xavier and Texas A&M.

"I'm elated to have been placed within the Johns Hopkins medicine system and to be mentored by leaders in today's health care field," he said.

When Williams, a Chicago native, returned to the United States as a war veteran, he was touched by the stories of his fellow soldiers and wounded friends. "They were shipped home to Walter Reed Army Medical Center with hopes of receiving a higher level of care than what was offered

overseas," he said. "When they arrived at Walter Reed, they faced whitewash and woe-filled conditions, an impending obstacle of recovery for wounded combat veterans. The medical center, one of the largest medical treatment facilities within the entire Department of Defense, got it wrong."

While helping people has always resonated strongly with Williams, it was not until he learned of the experiences of the injured soldiers, that he discovered his passion for health care administration.

What Williams called an "upset" within Walter Reed led to an unacceptable healing environment, which he attributes to a breakdown in leadership and responsibility among health care managers. "I felt compelled to become a health care administrator and uphold a higher standard of excellence in clinical care."

The fellowship combines work in three hospitals (The Johns Hopkins Hospital, Johns Hopkins Bayview Medical Center and Howard County General Hospital), multiple ambulatory care sites and several physician/academic group practices in Baltimore.

Benn Greenspan, a clinical associate professor and director of the MHA program at the UIC SPH, said Williams exemplifies

UIC SPH Faculty Contribute To New Book On Outbreak Investigations

Outbreak Investigations Around the World: Case Studies in Infectious Disease Field Epidemiology is a collection of 19 case studies, some never before published, that uncover the details of actual infectious disease outbreaks from the U.S., Europe and Africa. Each case study is retold by the investigator who recalls the critical issues considered along the way. Some of the investigations include Legionnaires' pneumonia in Philadelphia, the beginning of the AIDS epidemic, the anthrax investigations in New York City, an Ebola hemorrhagic fever outbreak in Africa, a syphilis outbreak associated with an internet chat room and an outbreak of botulism in Egypt.

Mark S. Dworkin, associate professor at the University of Illinois at Chicago School of Public Health, is the editor of the book. He also wrote the preface along with chapters 1 (the steps of outbreak investigation) and 18 (an outbreak of whooping cough). UIC SPH Associate Professor Ronald Hershov is the author of chapter 9 (a deadly hepatitis B outbreak in an Israeli hospital). Dworkin has begun assembling a subsequent book of non-infectious disease investigations, for which many UIC faculty will contribute, that is scheduled for publication in 2010. To order *Outbreak Investigations Around the World*, visit www.jbpub.com.



a future leader. "Fellowships are scarce across the country, and being awarded a prestigious fellowship is a measure of the quality of our graduates and the growing recognition of our program."

With the desire to lead and serve his community again, Williams said he feels fortunate. "I overcame a lot of odds to get to this point in my life. I am so grateful to be blessed with the opportunity to create change in the world."

— Tina Daniel

Online Program Broadens Job Opportunities For Medical Professionals Everywhere



CLINICIANS ALL OVER THE WORLD, who wish to fill a growing need for team leaders in research, can now get the training required to accomplish this goal, without even leaving their own homes.

The Health Policy and Administration Division of the University of Illinois at Chicago School of Public Health is launching a new online graduate certificate program in Clinical Research Methods. The program is expected to attract doctors, pharmacists, nurses, dentists, and physical and occupational therapists.

"There is a growing demand for clinically trained health professionals who are familiar with the research skills required to lead multi-disciplinary clinical and translational research teams," said Jack Zwanziger, director of the HPA Division.

The CRM certificate consists of five courses and is offered entirely online by research faculty. The courses promote student and faculty interaction through online discussion groups and the use of virtual collaboration sessions.

A baccalaureate degree from an accredited university is the minimum requirement for admission to the program, developed through the UIC Center for Clinical and Translational Science Research Education, Training and Career Development Program. For more information on admissions, visit www.clinicalresearch.uic.edu.

— Tina Daniel

CeaseFire Illinois Resumes Full Operations For Areas In Need

FEW SEE VIOLENCE AS A DISEASE that spreads from person to person. But epidemiologist Gary Slutkin has changed the mind-set in many Chicago neighborhoods; and now, due to the restoration of state funding, his successful violence prevention program, CeaseFire, has resumed its public health strategy in 16 Chicago communities that are most in need.

"We thank those state legislators who worked hard to have CeaseFire funding restored, because now we can move our program forward by connecting with existing community partners to reduce shootings and killings," Slutkin said.

An antiviolence initiative at the University of Illinois at Chicago School of Public Health, CeaseFire works by interrupting the transmission of violence. People from targeted communities are hired to anticipate disputes and help thwart shooting events. CeaseFire's method also employs trained, outreach workers to work with the highest risk individuals to fundamentally change their behavior and thinking about retaliation and violence.

The intervention and behavior change methods used by CeaseFire are now statistically proven to reduce shootings and killings. A three-year, independent evaluation, commissioned by the U.S. Department of Justice, found that shootings decreased by up to 73 percent in CeaseFire zones.

CeaseFire's model of treating violence in the same ways that epidemics are remedied has been replicated 18 times and is being used in several other U.S. cities. To follow CeaseFire activities visit www.CeaseFireIllinois.org.

— Tina Daniel



The Chicago community responds with a peaceful street demonstration to raise awareness for violence prevention.

Students Organize Minority Health Conference That Resonates Change

WHEN PAUL BRANDT-RAUF took two of his children, adopted from Russia, to an American playground for the first time, the dean of the University of Illinois at Chicago School of Public Health discovered that nearly every family there spoke a different language.

"I learned very quickly that Chicago is a city of diversity," he said to an audience of over 150 at the school's first *Minority Health in the Midwest Conference*. "That's the kind of environment I want my kids to grow up in. If we truly want to make an impact in Chicago and all over the world, we have to think about this every day."

Brandt-Rauf's remarks set the tone of change and global community on Friday, Feb. 27. The conference, *Minority Health in a Global Community: Midwestern Perspectives on Health, Poverty and the Environment*, was organized by the UIC SPH Minority Students for the Advancement of Public Health, the Illinois Public Health Research Fellows and the Great Lakes Center for Environmental and Occupational Health and Safety.

Barbara C. Wallace, professor of health education at Columbia University and keynote speaker, made an appeal for a movement toward change. "I am calling for a global civil rights and social justice movement to bring about equity and health for all."

Her address was offered via a webcast by the University of North Carolina and was broadcast at conferences being held simultaneously at other schools, including Boston University, Tulane University, University of California, Los Angeles and University of California, Berkeley.

Wallace articulated there must always be a strong sense of responsibility to effect global change. "The reality is that we are one world; we are one community, and we need to move into a new consciousness that what affects one, affects all of us."

Brandt-Rauf said the presentations were thought-provoking and anticipates the start of a new UIC SPH tradition. "I look forward to insuring that this becomes an annual event at the school."

— Danielle Desjardins

Champions Of Public Health



1 Arden Handler, co-director of the Maternal and Child Health Program, was named UIC principal investigator for The National Children's Study, in collaboration with Northwestern University and University of Chicago. The national study will examine the relationship between environmental exposures, and health and well-being for nearly 100,000 U.S. children and their families.



2 Lorens Helmchen, assistant professor and senior research scientist, was awarded the National Bureau of Economic Research Visiting Fellowship in Health and Aging which begins August, 2009. Among the topics Helmchen will study are medical-error disclosure, outcome warranties for cardiac revascularization and cancer therapy, and excessive risk-taking in the choice of treatment for terminal illnesses.



3 Benn Greenspan, clinical associate professor and director of the Master of Healthcare Administration Program, was appointed to the Cook County Health Hospital Board.



4 Claudia S. Morrissey, a clinical associate professor in the Health Policy and Administration Division, has been working at the World Health Organization in Geneva, Switzerland for the past nine months as a technical advisor in the department of Gender, Women and Health. Morrissey is developing a Gender and Public Health Briefing Kit for WHO country-level and regional staff, which will be previewed at an upcoming Gender, Women and Health Network retreat in Salzburg, Germany.

Dima M. Qato's research findings were published in the December 2008 issue of the *Journal of the American Medical Association* and garnered media attention from "NBC Nightly News," *USA Today* and the *Chicago Tribune*. Qato and her colleagues analyzed data from a survey to estimate the prevalence and patterns of medication use and major drug-drug interactions (including over-the-counter drugs) among older adults. Qato is currently working on her PhD in health policy and administration.

Lora Oswald and **Urszula Winkiewicz** were recipients of the Albert Schweitzer

Fellowship for spending a year improving health and access to care in underserved Chicago communities. Administered by Chicago's Health and Medicine Policy Research Group and representing a wide variety of disciplines at top, area universities, the fellowship is a service-learning program for outstanding students in health and social service professions. It embraces the concept of "investing in humanity," advocated by Nobel Peace Laureate, Albert Schweitzer.

Oswald won the fellowship for her work at Erie Neighborhood House with a group of health promoters to encourage leadership and self-care practices. Winkiewicz focused on intimate partner violence prevention through education at a domestic violence shelter. Since 1996, 340 fellows have designed and implemented innovative, year-long projects at health centers and community-based organizations throughout disadvantaged areas in Chicago.

Oswald is working on her Master of Public Health in community health sciences, and Winkiewicz graduated in May, 2009, with a joint Master of Public Health/Master of Science in Nursing degree.

Delta Omega Inductees

The Delta Omega Society is a national, honorary, public health fraternity established to recognize and encourage scholarship and research among those undertaking post-baccalaureate study in public health.

Students

Jungwha Lee (DrPH, '09)	Anne Jacobson (MPH, '09)
Jacqueline de la Cruz (MPH, '09)	James Doherty (MPH, '08)
Nawar Latif (MPH, '09)	Kathryn Langley (MPH, '09)
Adrienne Dellinger (MPH, '09)	Seijeoung Kim (MPH, '08)
Urszula Winkiewicz (MPH/MSN, '09)	

Alumni

Janine Jurkowski (PhD, '03)
Kusuma Madamala (PhD, '04)
Susan Muldoon (MPH, '85)

Faculty

Mark Dworkin
Nadine Peacock



FIGHTING OBESITY

Through The Lens Of A Child's Camera

By Nichola Moretti and Karen Schmidt

A picture can conjure up a memory or connect us to somewhere far away. The power of photos to spark both understanding and discussion is at the root of one student's research at the University of Illinois at Chicago School of Public Health.

Christine Bozlak, a PhD candidate in the school's Community Health Sciences Division, Maternal and Child Health Program, is working on her dissertation, a research project rooted in reaching out to children to help reduce childhood obesity by promoting their overall well-being.

Bozlak is using pictures as a way of giving kids a strong voice in a community dialogue to improve their health.

In the Chicago community of Oak Park, she asked children to take photographs of the things that represent 'wellness' to them. Among photos of foods and playgrounds, there were also images of libraries, spending time with siblings, and people reading or studying. Those images are then analyzed by the children and

shared with the community; and the photos, as well as the lessons learned from them, become part of an ongoing, multifaceted dialogue.

"The purpose of my dissertation research is to address critical knowledge gaps in the literature surrounding the recent emphasis on wellness, especially as it is being promoted in reference to wellness policy discussions aimed at reducing childhood obesity," Bozlak said.

The study has used Photovoice and Literacy Through Photography, research and educational methodologies that encourage children to explore their world as they photograph scenes from their own lives. These methods combine photography, narratives and group discussion, with grassroots social action to gain knowledge of how young people think.

"As public health professionals, we need to find a way to make it so that youth are brought to the table and their opinions are valued just as much as anyone else's," Bozlak said. "It's important to provide an environment where they feel comfortable doing that, because they clearly have a lot to say." >>>

(Top) Christine Bozlak facilitates a nutrition and physical activity workshop for kindergartners at the 2009 Young Scientists Conference in Oak Park.

“As public health professionals, we need to find a way to make it so that youth are brought to the table and their opinions are valued just as much as anyone else’s...”

—Christine Bozlak

Bozlak has experience helping young people find a way to shape their community. Her efforts in studying youth empowerment in health promotion began in 2005, when she partnered with her advisor, UIC SPH Associate Professor Michele Kelley. Together they recruited adults and children to study youth participation in a local campaign aimed at passing a clean-indoor-air ordinance.

They looked at what motivated the kids to participate, how their involvement was maintained, what their contributions were, and what they gained from the experience. The campaign eventually resulted in the successful passage of the ordinance, before a state law was passed.

Bozlak is now using the same idea of youth empowerment for health promotion efforts to push forward the campaign against childhood obesity. “Allowing youth to have a voice into how their environments are changed to improve their well-being is key to the success of any childhood obesity prevention effort,” she said. “I chose to focus my dissertation research on an action-research project that has the potential to impact the community and allow for the voices and perspectives of a sample of the community’s youth to be heard.”

Kelley, Bozlak’s dissertation chair, said Bozlak’s efforts are meaningful. “Christine is really doing advanced work in action research with youth. She has identified community settings that foster youth development, and she works within those settings to engage youth in active inquiry about issues in their lives that impact their health. This process has taken more time, but she is seeing the rewards already in terms of positive changes in youth and the community as a whole.”

The study also addresses the children’s perceptions of how their community surroundings detract from, or allow them to achieve wellness in their lives. It also lets them make recommendations to maintain or improve their environment to enhance their well-being.

In Chicago, childhood obesity is an important issue. A study conducted by the Consortium to Lower Obesity in Chicago Children, a program of Children’s Memorial Hospital, in which Bozlak works as the advocacy program manager, shows that Chicago’s kindergarten-aged children are overweight at more than twice the national rate. A similar report from the Sinai Urban Health Institute reveals that children from predominantly minority neighborhoods in Chicago are overweight at three to four times the national average.

Bozlak said a change in perspective could help lower these numbers. “It seems that oftentimes obesity is looked upon as an individual problem, rather than a societal problem. In the case of when it is looked upon as an individual problem, a person is expected to be able to control all the factors, such as food intake and physical activity, that can impact his or her risk of becoming overweight. However, we know that an individual’s health, especially a child’s health, is greatly impacted by their environment.”

“For example, a child’s ability to eat healthy foods, such as fresh fruits and vegetables, is dependent on how accessible this food is within the child’s environment—at home, school, the neighborhood grocery store,” she continued. “We cannot simply tell a child to eat healthier foods; we must make sure that these healthier options are available. Positively impacting the environment so that children will be able to live healthier lives is the only way we will make progress in reducing the prevalence of childhood obesity.”

Barbara Usmial, senior program executive at the West Cook YMCA, where Bozlak conducted her Photovoice research, said if children follow a trend in overeating and inactivity, everyone will pay the price. “As far back as 2000, one in three children born in the U.S. that year were destined to develop diabetes. If we do not heed their warnings now, the costs will be tremendous both to quality of life and to our health care system.”

West Cook YMCA Child and Family Director, Mary Ann Kandah, said that the Photovoice project empowered and educated the kids. “It gave the students an opportunity to be heard and take action in their personal lives to live a healthier lifestyle regarding all areas of wellness. I would like to see more of these projects in the near future.”

Bozlak said she hopes her research will not only empower young people, but also help create change in community discussions that will let the children’s voices be heard. “My hope is that the findings from my study will be used to allow for the youth perspective to enter into the wellness dialogue already ongoing within the community. I know it’s cliché, but they really are our future, and it’s important to recognize that they have so much to contribute to public health, to their environment, and to the well-being of the greater society.”

(Below) Members of CHEERS research staff collect water samples for microbial testing on the Chicago waterways.



WATER, WATER EVERYWHERE, BUT IS IT SAFE TO PLAY IN?

On a sun-drenched day, glistening Lake Michigan looks almost good enough to drink. But, water that appears pristine may actually contain bacteria that are harmful to your health.

By Nichola Moretti

Researchers at the University of Illinois at Chicago School of Public Health are conducting a study to determine the health effects associated with recreational activities like boating, canoeing, kayaking and fishing on Chicago’s waterways.

The Chicago Health, Environmental Exposure, and Recreation Study, known as CHEERS, funded by the Metropolitan Water Reclamation District of Greater Chicago, is the first study in the U.S. to evaluate health and environmental factors associated with limited-contact water recreation. Local and federal regulations have been developed to protect people who swim at beaches, but water quality standards do not exist to protect those who use the water in other ways.

More than 75 students and research staff have worked to gather data for CHEERS, and thousands of people have been interviewed to help determine the risks in Chicago-area lakes and rivers.

At the center of this effort is UIC SPH Research Assistant Professor of Environmental and Occupational Health Sciences, Samuel Dorevitch, who hopes to uncover any short-term health effects of water recreation.

CHEERS began when public policy makers realized they didn’t have the information they needed to make good decisions on the safety of people using the waterways.

“There’s an important knowledge gap that the environmental health community has in how to best protect the public from microbial pathogens in recreational waters,” Dorevitch explained. “This research will provide useful information about what to measure in the water and how levels of microbes in the water translate to excess cases of disease among people who use recreational waters.”

Since 2007, Dorevitch’s team has worked toward bridging that knowledge gap, and this summer, they are taking their research to a new depth. They will enroll 3,000 fishermen, boaters, swimmers and kayakers, bringing the total number of participants in the study to 10,000. Research staff will interview each individual to gain a better understanding of which activities have greater exposure to the water and therefore the water’s contaminants. Participants will be surveyed before and after activities to see if they get sick with such things as gastrointestinal infections, skin infections, or eye, ear or respiratory conditions. >>>

Finding out how much water a kayaker swallows compared to a swimmer, a fisherman or a boater sounds impossible, but Dorevitch's colleagues have a plan. They are asking people to undertake their favorite summer pastimes in a controlled environment. "That part of the project is an experiment that will be conducted in swimming pools," Dorevitch said. "By measuring a chemical in pool water and measuring the amount of that chemical in urine samples, we'll be able to measure water ingestion rates for different recreational categories. This makes it possible to rank different activities according to how much exposure occurs."

The amount of water swallowed or inhaled will be measured with aerosol samplers, and the skin's water exposure will be quantified by using sponges clipped to the shirts of subjects. Both of these new methods of measurement were developed at UIC, Dorevitch said. When the study is completed, the findings will allow area municipalities to set water quality standards that take into consideration different levels of exposure for various types of recreational use.

A unique aspect of the study is that the researchers will also measure the actual pathogens in the water, such as Giardia, Cryptosporidium and norovirus, which cause disease. Most prior research has looked at indicators of sewage pollution in the water, like E. coli bacteria. "It's not usually E. coli that makes people sick," Dorevitch said. "But the presence of E. coli in the water indicates that there may be sewage contamination."

Finding new ways for science to keep people safe while they enjoy recreational water activities is only one of the many benefits of CHEERS. Another important part is the practical experience gained by dozens of students working with the research.

Ramon Lopez, a master's student in the Hazardous Substances Academic Training program, said he has had the opportunity to work in different areas of the study, but taking samples on the waterways has been his main job in the last year. "Before I began to work in CHEERS, I didn't have any type of understanding on how research projects were framed, validated and undertaken. After working at CHEERS, I have learned the amount of work it takes before any real research can be done."

(Below) The CHEERS team in September, 2007, before a busy day recruiting participants at the Flatwater Classic, the only canoe and kayak race on the Chicago River. The race was started by the Friends of the Chicago River to give people a chance to explore the waterway and learn why it needs their help to stay clean and accessible.

Both graduate and undergraduate students are participating in CHEERS. Some will use the data for their thesis and dissertation research. "There is so much that our students are getting out of this," Dorevitch pointed out. "We have students from all four divisions of the School of Public Health working on the project. I think this has been a great opportunity to see how principles that they have learned about in a theoretical way in the classroom become real, and that practical solutions have to be developed to take the theory from the classroom and apply it to all the complexities of the real world."

Ted Hufstader, a Master of Public Health student in health policy and administration, joined the CHEERS team in order to explore the various research opportunities that the UIC SPH offered. "This project provided me with incredible field research and data management experience and broadened my appreciation for the field of public health," he said. "Although I am in the HPA Division, the opportunity to work on issues of water quality and risk communication has been essential to my broad-based development as a public health professional. I love that the school creates and supports an environment of engaged learning."

CHEERS canvassers will recruit participants who use the Chicago River system, including the Cal-Sag Channel and the North Branch and North Shore Channel of the Chicago River system, which has three water reclamation plants that discharge treated wastewater into the channels. Other recruitment sites include the Fox River, the Des Plaines River and several small inland lakes such as Tampier Lake, Busse Woods Lake, Skokie Lagoons and Crystal Lake.

To keep track of the CHEERS team, visit www.cheerschicago.org.

(Right) Members of a local rowing team collaborate with the CHEERS project to facilitate recruitment into the study.



No Mother Left Behind

IF YOU'VE EVER BEEN INSIDE a hospital's neonatal intensive care unit, the first thing you notice is tiny babies hooked to untidy heaps of tubes and beeping heart monitors.

Many of these babies can fit in the palm of your hand, but they still have a fighting chance. Some will go home with their mothers after weeks or months to a life of impossible ends in Chicago's most impoverished neighborhoods. Some will die before their first birthday, and others will not live to see the outside world.

Infant mortality cannot be prevented with a vaccine or prescription drugs. It happens to babies who are born malnourished, born to poor homes without access to adequate health care, and babies who suffocate from Sudden Infant Death Syndrome, because they do not have cribs. Infant mortality happens to babies whose mothers did not receive prenatal care during their pregnancies.

One Chicago woman has made it her life's work to reach these mothers and their babies in time. Arden Handler, a professor of community health sciences at the University of Illinois at Chicago School of Public Health, began working on behalf of women's and children's health during her college years at Cornell University, where she fought for abortion rights and health care for low-income families. A community organizer and respected teacher, she now focuses on evaluating prenatal health programs, as well as mothers' access to and utilization of prenatal care.

"Infant mortality is an indicator that shows you how well society is taking care of its citizens."

—Arden Handler

"We now have data that suggests fetal health impacts child and adult health," said Handler, who is also co-director of the Maternal and Child Health Program at the school. "We know that the cycle starts way before pregnancy. If a woman enters pregnancy unhealthy, she can't get all of her problems solved in the course of nine months. The same is true if she's walking into prenatal care in her second or third trimester."

Handler's principles take shape in the



(Left) New mother with premature baby. (Right) Arden Handler.

daily workings of places like the Westside Association for Community Action in North Lawndale, a Chicago community affected by adverse pregnancy outcomes and infant mortality. Here, staff and clients alike pass through the rutted roads to the boarded-up office on Ogden Avenue to fight for quality maternal care and infant survival every day.

Kimberly Sanders, outreach specialist and family case manager at WACA, is on the frontlines of this struggle. She describes one of her cases: A 22-year old mother expecting her second child. This is her third pregnancy. Her first baby was born premature. Her second pregnancy resulted in a miscarriage. This is the first time she's receiving prenatal care. Diagnosed with depression at the age of 14, the expectant mother has no permanent place to call home to raise her growing family.

Together, Sanders and the young mother navigate this pregnancy. "I ask her, 'did the doctor check your blood pressure? Did he check your cervix? Is your heart rate and weight being monitored at every visit?' I have to make sure she's getting the proper care."

Studies show infants who die within the first year of life, or who are born prematurely, underweight or ill, are often the children of mothers who did not receive medical care until late in their pregnancies, if at all.

Lee Smith, program coordinator for WACA said a woman's risk for such outcomes is a result of complex social, economic and biological factors. "These women are under tremendous stress. They have inadequate housing, little or no access to health care and no support system in place."

According to the March of Dimes, premature birth affects one in every eight babies in America and is responsible for more than 10,000 infant deaths each year. Chicago has one of the highest rates of infant mortality in the country, at 7.9 per 1,000 live births in 2006, according to the Illinois Department of Public Health. Among African-American women, that rate is more than double.

Handler knows many of these infants could have been saved if the mothers were treated for problems like hypertension, anemia and sexually transmitted diseases. She says that stress and racism play a large role in creating the conditions that make women and their infants unhealthy. "Infant mortality is an indicator that shows you how well society is taking care of its citizens. We have a very interesting phenomenon going on right now. We actually have increases in adverse pregnancy outcomes, both preterm delivery and low birth weight. While we expect improvements over time, we've actually taken a major step backward over the last two decades."

In all the important steps forward she has taken for maternal and child health, and in all the meaningful initiatives she has led, Handler feels her largest contribution is displayed in the achievements of her students. "My students do great things in Chicago, in the U.S. and around the world. When they finish their training, they begin the journey of becoming maternal and child health leaders in their own right. I think the students we train in the MCH Program at UIC are the biggest testimony to our success."

—Tina Daniel

1 Renisha Campbell (MPH, '07) returns to the UIC SPH as a technical assistant with CeaseFire, a violence prevention initiative of the school, after working in the department of preventative medicine at Rush University Medical Center. Campbell also worked as a medical advocate with the YWCA-Harris Center, providing crisis counseling to survivors of sexual assault. At CeaseFire, she assists community partners with grant management, program implementation and trainings. Campbell said she is happy to be back in the educational environment and excited to be working with a dynamic team that is committed to ending shootings and killings.



2 Nicole E. Stoller (MPH, '03) is currently working as a study coordinator for Trachoma Projects, F.I. Proctor Foundation in San Francisco, in collaboration with a team of ophthalmologists who are studying blinding trachoma, an infectious eye disease, in Ethiopia. Together with research partners at The Carter Center in Ethiopia, Stoller organizes and implements the research study in Ethiopia's Amhara region. Her work is focused on eliminating trachoma in the community through mass antibiotic treatment and environmental improvements.



3 Raquel Vazquez (MPH, '03) is a first-year student in the Emory University School of Medicine's Physician Assistant Program. Under physician supervision, she will diagnose and treat illnesses, order and interpret tests, assist in surgery and write prescriptions. After working in public health and research, Vazquez said she realized that many important research findings are not having the impact that they should. In merging public health and medicine, she hopes to translate public health recommendations to a feasible, clinical level.



Robert John Zagar (MPH, '82) has been appointed to a special task force on violent youth by Chicago Mayor Richard M. Daley. Zagar's appointment is the result of his work with youth, to be published in a 14-article monograph in *Psychological Reports*, entitled "Violent Youth: How to Find Them, What Works, and What It Costs." Zagar's research provides a fresh look at an age-old problem of incorporating public health prevention by combining actuarial testing with empirical treatments to targeted populations in high-risk geographical areas. His work is expected to make an impact on many social institutions including the military, churches, businesses, schools and universities.



Congratulations Class Of 2009!

A message of leadership and change resonates among University of Illinois at Chicago School of Public Health graduates on Friday, May 8. A total of 161 students received master's and doctorate degrees at the school's 36th commencement ceremony, held at the UIC Forum.



(Top) Commencement speaker, Kenneth Olden, former director of the National Institute of Environmental Health Sciences, National Institutes of Health, challenged graduates to use collaborative leadership to eradicate chronic disease, eliminate wars and reform health care as they embark on their future careers.

(Inset) Dean Paul Brandt-Rauf presents Olden with a gift of gratitude.

LAVOIE PHOTO GRAPHICS

ALUMNI NOTES

Dear Friends of the UIC School of Public Health,

The mission of the UIC SPH alumni association is to 1) serve existing students through mentoring and networking, 2) serve all alumni through networking, career development, continuing education and the potential to make meaningful contributions to the school community, and 3) serve the school through participation in planning efforts, curriculum evaluation and development.

As I reflect on my 2007-2009 term, I am pleased to say we have an increased alumni presence. We've had the largest alumni attendance at our annual meetings, raised funds for student scholarships, hosted

several alumni receptions and held career panels and networking events for students. We reviewed scholarship applications and Research Day awards, and participated in the 35th anniversary commencement ceremony.

Our board of directors is made up of alumni from varying backgrounds with a wide range of skills and expertise. All of us are united by a genuine dedication to the school's growth and a determination to serve the community.

Our newest board members, Dr. Laurel Berman and Ms. Wilda Knox, who joined last year, exemplify these ideals.

As I assume the role of past president, I am confident the UIC SPH community will be well served by the new Alumni Board President, Sherry Weingart, along

with all of those who join us in supporting the school and its community. I believe our communication and involvement with local, national and international alumni will increase in the years ahead, as will the presence of alumni ambassadors who advocate on behalf of the school and our united public health concerns.

I'd like to thank my fellow board members for their support with special appreciation to Dr. Barbara Giloth, Ms. Lisa Amoruso and Dr. Stephanie Brown, all of whom will be retiring from the board this year.

With Gratitude,

Kusuma Madamala, PhD ('04), MPH
UIC SPH Alumni Board President

(Center left) Students pose for pictures with friends and colleagues after the ceremony and reception.



(Center right) Lisa Kritz and Victoria Baum present Clinical Associate Professor D. Patrick Lenihan with the Bernard H. Baum Golden Apple Award for teaching excellence, chosen by the student body. Lenihan received a \$1,000 gift with the award, which was endowed this year in memory of Bernard Baum, a former UIC SPH faculty member.



LAVOIE PHOTO GRAPHICS



(Lower left) Class speaker, Wade Ivy, III, received the highest award granted by the school to a graduating student, the Alan W. Donaldson Award, for academic excellence, quality of leadership and community service.



(Lower right) Graduates with James Galloway, assistant surgeon general for the U.S. Public Health Service.

UIC SCHOOL OF
PUBLIC HEALTH

1603 West Taylor Street, (MC 923)
Chicago, IL 60612-4394
www.uic.edu/sph

Nonprofit Org.
U.S. Postage
PAID
Chicago, IL
Permit No. 4860

SCHOOL ADMINISTRATION

Dean

Paul Brandt-Rauf, DrPH, MD, ScD

**Senior Associate Dean and Director
of Graduate Studies**

Faith Davis, PhD, MPH, MPA

Associate Dean for Academic Affairs

Babette J. Neuberger, JD, MPH

**Associate Dean for Finance
and Resource Planning**

Curtisteen Steward

**Associate Dean for Urban Health
and Diversity Programs**

Shaffdeen A. Amuwo, PhD, MPH

Director of Advancement

Kathleen Spiess, CFRE

Director of Communications

Tina M. Daniel, MA

DIVISION DIRECTORS

**Environmental and Occupational
Health Sciences**

Linda Forst, MD, MPH

Epidemiology and Biostatistics

Leslie T. Stayner, PhD

Community Health Sciences

Bernard J. Turnock, MD, MPH

Health Policy and Administration

Jack Zwanziger, PhD

UIC SPH ALUMNI ASSOCIATION
BOARD OF DIRECTORS

President

Kusuma Madamala, PhD, MPH

Vice President

Diane M. Howard, PhD, FACHE

Secretary

Chukwuemeka Ezike, MD, MPH

Treasurer

David Amarathithada, MPH

President-Elect

Sherry E. Weingart, MPH

Board Members

Lisa S. Amoruso, MPH

Laurel Berman PhD, MS

Stephanie Brown, MD, MPH, MS

Fred E. Carlson, MPH, LEHP

Barbara E. Giloth, DrPH, CHES

Elsie Hernandez, RN, MPH

Tiana Kieso, MPH, MBChB

Wilda Knox, MPH

Michael N. Meltzer, MPH

Michelle Watters, MD, PhD, MPH

Kingsley Weaver, MPH