

Public Health

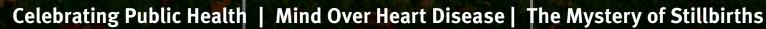
Rollins School of Public Health

SPRING 2011

REFLECTING ON

3() YEARS of HIV/ AIDS







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The Spirit of Public Health

After several years of planning and construction, the Claudia Nance Rollins Building was dedicated on October 6, 2010. Among those present were four generations of the Rollins family, whose longtime generosity has enabled the RSPH to grow in size and stature since it was established in 1990. Today, the extended Rollins family includes more than 1,000 students and 5,000 graduates seeking to improve health locally and globally. Turn to page 8 to read more about the dedication.

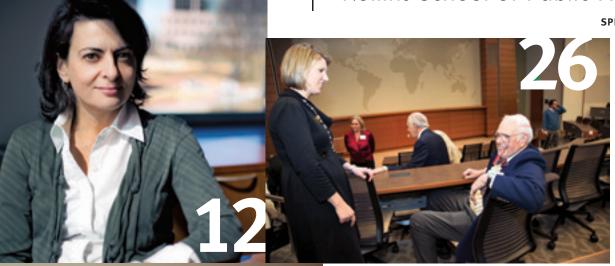


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EMORY | Public Health

Rollins School of Public Health

SPRING 2011







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On the Cover Each December 1, Emory hosts a portion of the AIDS Memorial Quilt in observance of World AIDS Day. The quilt panels represent only a portion of the 40,000 handmade panels honoring more than 91,000 men, women, and children who have died of AIDS in the United States and several countries. The quilt is curated by the Names Project Foundation, based in Atlanta.

The iPad edition of Emory Public Health is available by downloading Emory Health Magazines in the App Store.



Today, more people are living with HIV than ever before thanks to antiretroviral therapy. Emory researchers developed two of the most widely used ART drugs as well as a promising vaccine candidate now being tested in the United States.

The drumbeat continues

Each day in our new Claudia Nance Rollins and remodeled Grace Crum Rollins Buildings, we find much to celebrate. Our students are setting high standards for service and commitment to others. Our faculty are being recognized as world leaders. Here in the United States, Rollins is now ranked sixth among all schools of public health by U.S. News and World Report.

Yet during an era of hope, the drumbeat of AIDS continues. When the first cases of AIDS were reported in June 1981, we embarked on a journey few could imagine. Three decades later, our task is daunting yet promising. Nearly 30 million people worldwide have died of HIV-related causes since the epidemic began. In recent years, new HIV infections and AIDs-related deaths have dropped significantly. Today, more people are living with HIV than ever before thanks to antiretroviral therapy (ART). Emory researchers developed two of the most widely used ART drugs as well as a promising vaccine candidate now being tested in the United States. These scientists and over 100 others are part of the Emory Center for AIDS Research (CFAR), established in 1997.

Despite the challenges of AIDS, scientific progress and public health accomplishments give us much hope for the future. Each day, the spirit of students, faculty, and staff at the Rollins School of Public Health is strong. We encourage you to join us in our commitment to making the world a healthier place.

Sincerely,

James W. Curran, MD, MPH

James W. Curran Dean of Public Health

Joseph Chrisan



Humanitarians at heart

Students recognized for service to others

MPH students Rebecca Egner and Sally Embrey are among six Emory students who received 2011 Humanitarian Awards this spring. Both students exemplify community service, locally and globally.

Sewing good deeds

For Rebecca Egner, participating in Rollins' Peace Corps Fellowship Program for returned volunteers was more than an opportunity to give back to the Atlanta community in the same way she had served in Burkina Faso. It inspired her to think of creative ways to apply the knowledge she gained in West Africa to U.S. communities in need.

At Rollins, she has volunteered with the Refugee Sewing Society in Clarkston, Georgia, where hundreds of refugees live. At the Clarkston Community Center, nearly 40 women, many of whom have escaped war and lost loved ones to violence, use the creative

arts for fellowship, work, and healing. They gather weekly to make handbags, scarves, and jewelry to sell. Egner, who advises the society, negotiated with Emory's Barnes & Noble bookstore to sell their handmade items on campus.

This past year, Egner also assisted Bhutanese refugees who needed health services in Atlanta. She helped connect more than 200 refugees with the Grady Health System. Without her help, the refugees—who often don't speak English—would have little ability to navigate the U.S. health care system and receive critical health services.

"Rollins has been a perfect match for me because it allows me to combine everything I love—public health, global involvement, microenterprise for women, and health services—all in one setting," says Egner.

Her experience with the refugee community helped her discover her true calling—public health nursing. She has applied to several nursing schools, including Emory's. Before she enters the next phase of her journey, Egner will graduate with the seven students she has mentored in the Masters International Program, which prepares students for Peace Corps service. At graduation, each student will wear a Peace Corps stole made by the Refugee Sewing Society.

"For me," Egner says, "the Peace Corps was the inspiration for expanding the possibilities of not only what I could accomplish in the community, but also what I could achieve in my education and career."—Tarvis E. Thompson

Abating Nigeria's lead crisis

In a village in northern Nigeria, the sounds of children playing outside had grown quieter. Out of 227 children, only 150 were left.

Personnel from Doctors Without Borders/Médecins Sans Frontières (MSF) first noticed the missing children in early 2010 after looking at the meningitis vaccination records they kept on the children. When doctors asked

about the difference in their head count, village elders took them to see the dozens of graves they had dug outside the village. MSF contacted the Nigerian Ministry of Health, who called the United Nations, the CDC, and several nongovernmental organizations (NGOs) to determine why the children had died.

The culprit was lead poisoning. The village's subsistence farmers found gold mining to be a lucrative trade and in order to make more money, they turned processing of the mined ore over to their wives. At home, the women pulverized the ore into powder, washed and dried it, and then mixed it with mercury to extract the gold. The dust created by the process poisoned their children and contaminated the soil.

Blacksmith Institute, the NGO tapped to remediate the soil, asked Sally Embrey to assist. Last year, Embrey worked in villages to oversee removal of contaminated soil and creation of a landfill in which to bury it. She coordinated crews of up to 60 villagers and government workers to remove the top layer of soil from each home. Workers bagged and transported the contaminated soil to the landfill and then brought in fresh soil to place in homes.

"Nigeria has put a ban on mining before, but it's hard to stop," says Embrey. "Ore processing in homes still goes on, but we have to be culturally sensitive. We don't know what will happen after our emergency efforts end. It's the missing piece."

How cultural and social norms affect emergency efforts intrigues Embrey. She plans to pursue a doctorate in environmental health after she graduates from Rollins in May.—Kay Torrance ■

Global health experts honored

Two Rollins faculty members received honors for improving global health.

The Royal Society of South Africa will present Keith Klugman with the 2011 John F. W. Herschel Medal, the nation's top science award, in Cape Town this fall. The Herschel Medal recognizes Klugman for his contributions to science in South Africa and his groundbreaking work to prevent pneumonia in young South African children, especially those with HIV, through vaccination.

A physician and microbiologist, Klugman is a South Africa native and former director of the South African Institute for Medical Research. He now serves as the William H. Foege Professor of Global Health at Rollins.

This spring, the Carlos Slim Health Institute of Mexico presented Reynaldo Martorell with the 2011







Reynaldo Martorell

Carlos Slim Award for lifetime research achievement. He was among 153 nominees from 17 countries in Latin America and the Caribbean.

Martorell, a native of Honduras, is widely known for his studies on the effects of childhood nutrition on adult health, particularly in Guatemala. He is the former chair of the Hubert Department of Global Health and continues to serve as the Robert W. Woodruff Professor of International Nutrition.

Gates grant funds study of health risks from poor sanitation

A new study led by the

Center for Global Safe Water will assess the health risks associated with poor sanitation in cities in developing nations. Funded by a \$2.5 million grant from the Bill & Melinda Gates Foundation, the center will study expo-



sure to human waste, beginning in Accra, Ghana.

Researchers will observe behaviors related to exposure and collect samples to test for contamination in fresh produce, hands, soil, drinking water, recreational water, and drainage ditches. They will use the data to develop tools to characterize exposure and risk and design interventions to prevent enteric disease transmission, especially among children.

"We hope that the application of the tools we develop will inform sanitation investment priorities in cities and contribute to who-recommended approaches for assessing health risks from fecal exposures,"says Christine Moe, director of the Center for Global Safe Water.





Paige Tolbert is co-director of the new Southeastern Center for Air Pollution and Epidemiology in collaboration with Georgia Tech.

Rollins/Georgia Tech receive \$8 million to study air pollution

You are sitting in your car

in early morning rush hour, watching the minutes tick by on the dashboard clock. Traffic congestion is part of daily life in metro Atlanta. But what are those emissions doing to your health?

Paige Tolbert, chair of the Department of Environmental Health, wants to find out. She is the co-director of the new Southeastern Center for Air Pollution and Epidemiology (SCAPE), established recently by an \$8 million, five-year grant from the EPA to study the public health impact of air pollution. Armistead (Ted) Russell of the School of Civil and **Environmental Engineering** at Georgia Tech co-leads the center, one of four national clean air research centers funded by the EPA.

Researchers at Rollins will analyze data linking air quality with health endpoints in children and adults, including birth outcomes, asthma, and cardiac illness. Air quality engineers and scientists at Georgia Tech will develop new modeling techniques to identify and track contaminants in the air and mixtures of these contaminants suspected of causing adverse health effects. Among the planned projects is an intensive study

of metro Atlanta commuters to examine their exposure to complex particulate mixtures in traffic and mechanisms of acute cardiorespiratory outcomes. The study will be among the first to measure highly sensitive biomarkers of oxidative stress in relation to air pollution exposure.

SCAPE investigators also will study air quality and acute health outcomes in five U.S. cities to understand how

differences in the mix of air pollutants, weather, population susceptibility, and other factors explain differences in the association between air pollution and cardiac and respiratory illness across the cities. The results will clarify the combined impact of these factors on acute cardiorespiratory morbidity across the United States.

Says Tolbert, "We hope to understand what aspects of the air pollution mixture are most harmful and how the pollutants act together information we can use to target control measures to protect the public's health."

Rollins rises in U.S. News rankings

The RSPH ranks sixth among the nation's 44 accredited schools of public health in U.S. News & World Report's 2012 edition of America's Best Graduate Schools. The school tied for sixth place with the University of Washington and rose from seventh place since the last ranking of public health schools in 2008.

"We are one of two schools of public health

founded in the past 50 years to appear among the top 12 schools in the rankings," says Dean James Curran.

The five top-ranked schools for 2012 are Johns Hopkins, North Carolina, Harvard, Michigan, and Columbia.

Rankings for all schools of public health are available at bit.ly/usnewspublichealth.

The mystery of stillbirths

National study identifies potential causes

BY MARTHA NOLAN MCKENZIE

Each year in the United States, some 26,000 pregnancies end in stillbirth. Despite this daunting statistic, the causes of these tragedies largely remain a mystery.

"It's a very under-recognized issue," says Carol Hogue, director of the Women's and Children's Center at the RSPH.

That is beginning to change. Hogue and other scientists have begun to uncover clues in the largest population-based controlled case study of still-births to date. The RSPH is one of five clinical sites in the Stillbirth Collaborative Research Network, funded by the National Institute of Child Health and Human Development. Over three years, the study enrolled more than 650 women who had stillbirths, defined as fetal deaths at 20 weeks of gestation or greater, and almost 2,000 controls, or women who gave birth to live babies. Both groups underwent a litany of tests: a placental exam by a pediatric pathologist, a maternal interview, a DNA study, review of their medical records, and an autopsy in cases of stillbirth.

The sites finished their data collection in 2009 and now are analyzing their vast findings.

"There have been very few studies on stillbirths, so everything we learn is new and potentially very useful," says Hogue, who co-leads the study with Barbara Stoll, chair of pediatrics in the School of Medicine and president and CEO of Emory-Children's Center. "We've barely begun to scratch the surface, but we've already discovered quite a bit."

Identifying key risk factors

One significant finding emerged from development of the study protocols.



"It's very hard to autopsy fetuses, and many pathologists don't know how to do it," says Hogue. "We developed protocols for examining fetal tissues. They will be published, and people already are using them to better understand the causes of stillbirth."

The study also identified several risk factors for stillbirth, some fairly intuitive and others surprising. The strongest risk factor for stillbirths is a prior stillbirth, and the timing of the next pregnancy can exacerbate that risk. Women tend to get pregnant very quickly after suffering a stillbirth, and a short time between pregnancies is associated with a poor outcome.

Maternal obesity was discovered to have a doseresponse relationship with stillbirths—that is, the more obese the mother, the higher her likelihood Carol Hogue (above) at Rollins and Barbara Stoll in the School of Medicine co-lead the Emory site for the Stillbirth Collaborative Research Network. The national study shows promising results to help more women have successful pregnancies.



Early results from the stillbirth study indicate that waiting longer between a stillbirth delivery and the next pregnancy may improve outcomes for mothers and infants.

of having a stillbirth. Also, the older the mother is, the greater her risk of stillbirth.

Perhaps one of the most unexpected findings was the role of blood type. Mothers with AB blood are at significantly higher risk for stillbirth than women with other blood types. "This has never been reported before, and we have no idea why this might be the case," says Hogue. "We need to study this further." Rh factor was not associated with stillbirth risk.

Genetic testing identified a copy pattern that signaled a heightened risk of stillbirth. Rather than missing a whole chromosome or having an extra one, pieces of a gene were copied over and over. This pattern is associated with autism, developmental delay, and other conditions. Some of these patterns were found in fetal tissue from stillbirths.

Additionally, researchers discovered that two screening tests used during the second trimester to identify birth defects may also predict stillbirths. Together, the tests for the hormone inhibin A (a high level may indicate Down syndrome) and the protein MSAFP (an abnormal level may indicate Down syndrome or a neural tube defect) "can also identify women whose pregnancies are at risk for stillbirth possibly early enough to do something to prevent it," says Hogue.

Stress as culprit

The few previous studies on stillbirths have focused on problems during the pregnancy and delivery. Until now, none considered the relationship between a poor pregnancy outcome and the mother's environment.

Researchers identified a doseresponse relationship between the number of stressful life events during the 12 months prior to delivery and stillbirth. Stressful life events included divorce or separation, a move to a new address, loss of a job, and hospitalization of a loved one, among others.

"If there were five or more stressful events, the woman was at twice the risk of stillbirth, after controlling for factors such as her age, race, ethnicity, education, and marital status," says Hogue. "Fewer than one in five women with stillbirths had no stressful events."

Hogue and her collaborators will be mining the data produced by the Stillbirth Collaborative Research Network for years to come, and what they find likely will make a real difference in women's lives.

"I've been in this field for 40 years and done many, many studies," says Hogue. "This is one of three studies in my career that will make a difference in the way we understand reproductive health." ■

National Children's Study is under way

The RSPH and Emory School of Medicine are participating in the ambitious National Children's Study, which aims to enroll 100,000 pregnant women in 105 counties and then monitor their babies until they turn 21. Participants will complete questionnaires and undergo blood tests and home visits to evaluate environmental conditions. The goal is to learn how environment, genes, and other factors affect children's health and identify possible causes behind the rise in autism, diabetes, hyperactivity, and other conditions.

Currently, Emory researchers are enrolling women in Baldwin County, Georgia. Women in DeKalb and Fayette counties and Bradley County, Tennessee, will be included next.

Emory is collaborating with Morehouse School of Medicine and the Battelle Memorial Institute in the long-term study.—Martha Nolan McKenzie



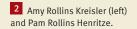
The Spirit of Public Health

A school dedicates a new building and honors the Rollins family legacy

BY PAM AUCHMUTEY



1 Gary Rollins (left), Randall Rollins, and Dean James Curran.



3 Faculty, staff, and students outside the Claudia Nance Rollins Building.









5 Eugene and Rose Gangarosa.













6 "We now have the best facility for public health in the world," Dean James Curran told guests during the dedication ceremony. held in the Rollins Auditorium.

7 "Access to this strong, internationally recognized School of Public Health is a powerful recruitment tool for graduate education across Emory," said Wright Caughman, executive vice president for health affairs.

8 Tom Sellers (left), co-founder of what became the MPH program, with Richard Levinson, executive associate dean for academic affairs. and Kathy Miner, associate dean for applied public health.

- The legacy of O. Wayne and Grace Rollins is part of the spirit, the backbone, the DNA of the Rollins School of Public Health," said Ben Johnson, chair of the Emory Board of Trustees.
- 10 Former Emory President James Laney first met O. Wayne and Grace Crum Rollins more than 40 years ago. Laney advocated establishing a School of Public Health.
- 11 Richard Rollins (left), Gary Rollins, and Randall Rollins tour the bridge connecting the Claudia Nance Rollins and Grace Crum Rollins buildings.

n her first day of class at Rollins, Christine Khosropour томрн had no idea she would study safe water and sanitation in Ghana, ask Congress to increase university funding for global health study, or join the school as a research assistant after graduation.

And she never imagined helping dedicate the school's new Claudia Nance Rollins (CNR) Building.

"Because of its location in the public health capital of the world [Atlanta], the collaborative vision on which it was founded, and the partners with whom it works, the Rollins School of Public Health is unique," Khosropour told speakers and guests at the fall ceremony. "I do not think any of us could have gotten a better public health education anywhere else in the world."

Among those present were members of four generations of the Rollins family, whose longtime generosity has enabled the RSPH to grow in size and stature in a relatively short time.

"The name Rollins has become synonymous with action, change, discoveries, and programs that prevent disease and save lives," said Emory President James Wagner. "In the years ahead, thanks to what this building makes possible, the Rollins name will travel even further and mean even more."

Former Emory President James Laney first met the Rollins family more than 40 years ago when he was dean of the Candler School of Theology. O. Wayne and Grace Crum Rollins became involved with the university through Candler and Wayne's role as an Emory trustee. As Emory president, Laney supported creation of the School of Public Health, along with vice president for health affairs Charles Hatcher, in 1990. Wayne Rollins favored the idea of constructing a building to house the school.

"We were not shy in our aspirations, but we never imagined what could happen in 20 years," said Laney of the school's rapid growth since then.

Following Wayne's death in 1991, subsequent gifts from the Rollins family led to the opening of the Grace Crum Rollins (GCR) Building in 1994 and provided support for faculty development and programs. In 2007, the family provided a \$50 million lead gift to construct the Claudia Nance Rollins Building, named for Wayne's mother. Like their father before them, Gary and Randall Rollins serve on Emory's board (as trustee and trustee emeritus), representing 35 years of family leadership.

"The legacy of O. Wayne and Grace Rollins is part of the spirit, the backbone, the DNA of the Rollins School of Public Health. To their descendants the descendants of Claudia Nance Rollins—I hope you can feel the waves of affection and appreciation coming from your other family—the school that honors your name," said Emory Board of Trustees chair Ben Johnson.

From the beginning, the school has drawn strength from collaborations with Atlanta-area universities and agencies such as CARE and the CDC. At Emory, the RSPH partners with other schools to offer dual degrees (more than any other school at Emory) and to advance research in fields such as cancer and HIV/AIDS.

"Access to this strong, internationally recognized School of Public Health is a powerful recruitment tool for graduate education across the university," said Wright Caughman, Emory's executive vice president for health affairs. "As a clinician, I can tell you that this collaboration is changing how our health

care providers think about health, all to the good."

Together, the nine-story CNR Building and the newly renovated GCR Building form a public health campus that promotes community and collaboration in and outside of Emory. The new building overlooks the CDC campus next door and the Atlanta skyline. The School of Medicine occupies laboratory space on one floor, strengthening research collaborations with public health colleagues.

When James Curran became RSPH dean in 1995, he was charged with slowing the rapid growth of the school and balancing the budget. "We haven't slowed down yet," Curran told dedication guests. "We've been in the black for 15 years, and we've more than doubled our physical size. We now have the best facility for public health in the world we're now better than we were. The momentum is spread by the alumni, supporters, students, faculty, and staff who share in our mission."

Today, the extended Rollins family includes more than 1,000 students and 5,000 graduates worldwide. Approximately half of the school's alumni work in Atlanta and in Georgia, including Christine Khosropour, whose passion is researching the epidemiology of infectious disease.

"The school first gave me the knowledge and skills that I needed, then gave me real-life opportunities to use that knowledge and those skills in the real world, and then brought me back to the campus to hone and share what I have learned," said Khosropour. "I promise gladly to spend the rest of my life trying to improve health and bring honor to the Rollins name." ■







- 1 The dedication ceremony was broadcast on the video screen in the lobby of the Claudia Nance Rollins Building.
- 2 Dean James Curran (left) and Richard Hubert. The Hubert Department of Global Health is named for his family.
- 3 Dean's Council Scholar Christine Khosropour 10MPH describes what the new building means for students.
- 4 Phyllis and Charles Hatcher, director emeritus of Emory's Woodruff Health Sciences Center.
- David Sencer, a founding father of the MPH program and former CDC director, and Subie Green.

















6 Henry Tippie (left), Tim Rollins, and Rick Rollins.

7 Gary Rollins (left) with Peggy and Randall Rollins. The brothers are the sons of O. Wayne and Grace Crum Rollins.

8 "The name Rollins has become synonymous with programs that prevent disease and save lives," said Emory President James Wagner.

Faculty members Christine Moe (left), Eugene Gangarosa, and Paige Tolbert.

10 A program commemorates the Claudia Nance Rollins Building dedication on October 6, 2010.



On a wall in Viola Vaccarino's office hangs a painting of the Temple of Hera, a symbol of her native land, Sicilia. To the temple's right, a flock of tiny fetus-shaped images float, each tucked safely into an egg-shaped space, all suspended in a mélange of earth tones. When asked about the painting, she smiles and says her daughter painted the piece.

Vaccarino, Rollins Professor and chair of the Department of Epidemiology, is an expert on matters of the heart—and the mind. She studies how the brain may rule the heart when it comes to stress and cardiovascular disease, especially among women.

Newly armed with a five-year, \$11 million grant from the NIH, Vaccarino and two School of Medicine collaborators are investigating mental stress ischemia, a lack of blood flow to the heart triggered by psychological stress, in three related studies involving up to 650 men and women, all Emory patients with stable coronary heart disease. Led by cardiologist David Sheps, the joint project has its roots in EPICORE—the Emory Program in Cardiovascular Outcomes Research and Epidemiology—directed by Vaccarino.

The joint project builds on work by Vaccarino and Sheps examining the relationship between stress and cardiovascular disease in patients like Antoinae Webb and Barbara Brown. They are among 100 Atlanta-area heart attack survivors taking part in another NIH study in which Vaccarino uses cardiac imaging to examine the effects of a psychological stress test on the heart and then compare the effects between women and men.

A CHANGE IN PRESSURE

On a Monday in May of last year, Toni Webb felt "a little pressure in her chest" but dismissed it as indigestion.

"The pressure would come and go and last a little longer each day," she recalls. "On Friday night, I asked my daughter to go online and find out about heart attack symptoms in women. She told me, 'Mom, you need to go to the doctor.' "

The next morning, Webb did just that and was admitted to Emory University Hospital, where

cardiologists inserted a stent into one of her arteries, which was severely blocked.

Webb has physical risk factors associated with heart disease. "My father had a bypass at 65 but didn't make it," she says. "My brother passed more than a year ago at 53. I have diabetes too."

She is also under considerable stress. After working in banking for 20 years, she lost her job and is now substitute teaching. Webb has two teenage daughters, and the older is autistic. Her mother lives with them as well.

"Just day-to-day life adds to what's going on with my health," says Webb, who is 49.

Like Webb, Barbara Brown struggles with managing stress. And the more stress she's under, the worse her symptoms

become. Now 59, Brown had her first heart attack at 46. It occurred one weekend in the midst of an argument with her husband. She took an aspirin and on Monday drove herself to her primary care physician. After several EKGs, he sent her to the hospital by ambulance where she received a stent.

"But three months later, I knew something really bad was happening," says Brown. She had experienced chest pain for weeks. The artery at the end of her stent had twisted, which can happen in arteries that tend to spasm. Brown was under a lot of stress when her next heart attack occurred. She

had just bought a business and was working nearly 60 hours a week.

It's not uncommon for those with cardiac disease to have emotional risk factors, says Vaccarino. Several years ago, researchers found that patients with heart disease can suffer from ischemia caused by mental stress rather than physical exertion. The

> researchers also found that people who carry certain genes may be more susceptible to the effects of mental stress. But whether the path to ischemia is

"If our results are compelling, we hope they will wake up the health community to pay more attention to the emotional factors in cardiac

> CARDIOVASCULAR EPIDEMIOLOGIST VIOLA VACCARINO

ONLINE Watch a video as Viola Vaccarino discusses the relationship between depression and heart disease at bit.ly/heartdepression.

Arshed Quyyumi, Viola Vaccarino, and David Sheps (not pictured) are studying different aspects of mental stress ischemia in a joint project involving the RSPH and Emory School of Medicine.



discretely physical or mental, or a combination of both, remains to be seen.

"In previous literature, there's no correlation between physical and mental stress and cardiovascular disease," Vaccarino points out. "If you are susceptible to ischemia due to physical stress, you're not necessarily susceptible to ischemia due to mental stress. It looks like these pathways are completely different."

Which raises a crucial point: myocardial ischemia brought on by mental stress can prove more dangerous than ischemia brought on by physical stress, says Emory cardiologist and collaborator Arshed Quyyumi. "In essence, mental stress ischemia is associated with worse cardiovascular outcomes in the long run."

WHY ME?

But why is this so? And why does mental stress ischemia occur in some people and not others? Quyyumi suspects the answer lies in the endothelium, the lining of the blood vessels.

During times of excitement or stress, the adrenal glands secrete hormones that increase heart rate and blood pressure. Increasing heart rate and blood pressure calls for increased blood flow to the heart, which means blood vessels and arteries should dilate to allow blood to flow more freely through the circulatory system. But in some people, this doesn't happen. The very chemicals

that increase heart rate and blood pressure instead cause arteries and blood vessels to constrict.

"The endothelium secretes a variety of different substances that make our blood vessels relax and constrict," Quyyumi says. "One of the most important is nitric oxide. People who have coronary artery disease have abnormal nitric oxide release in their blood vessels."

In his study, researchers will measure nitric oxide levels in the brachial artery and also examine arterial stiffness since major arteries can stiffen over time.

"There may be an element of stiffness that accounts for the abnormal reactivity to nitric oxide," Quyyumi says. "We will measure arterial stiffness to better understand how blood vessel function is associated with ischemia and how it differs in people who develop mental stress-induced ischemia versus those who do not."

The difference between those who develop mental stress ischemia and those who do not may lie in their genetic variations. Sheps will look at whether study participants with certain genetic markers may be more likely to develop mental stress ischemia.

"Understanding genetic variances that make people more susceptible to stress-induced ischemia could be useful for screening purposes," says Vaccarino.

In her study, she will investigate what role the

Learning to manage the physical and mental stresses in life makes a difference. "I can't believe it. I'm 59, and I'm heading to graduate school."

> -EMORY STUDY PARTICIPANT BARBARA BROWN



brain may play in mental stress ischemia.

"You could have ischemia due to stress because your blood pressure goes up and your heart rate increases. But our hypothesis is that everything happens from here," says Vaccarino, pointing to her head. "It's your nervous system, particularly your autonomic nervous system, but also perhaps other areas of the brain that are involved in cognition, perception, and mood. All these areas are connected to the autonomic nervous system

and could influence your tendency to have mental stress ischemia."

To test her hypothesis, study participants will speak on an emotionally charged issue while addressing a frosty audience. Researchers will image the brain before and during the mental stress to see how it responds. Findings in the brain will then be compared with findings in the heart, which will be imaged under a similar mental stress procedure on a different day.

"A PET scan will show changes in the brain caused by mental stress, so particular areas will light up," Vaccarino explains. "We want to compare people with mental stress ischemia to those without mental stress ischemia and see if different areas of the brain are involved. In particular, we suspect that brain areas involved in mood states such as depression may be affected."

"If our results are compelling, we hope they will wake up the health community to pay more attention to the emotional factors in cardiac patients," she adds. "Perhaps in the future, we could devise a standardized psychological stress test to use in clinical practice. That may be our next step—to develop a clinical trial on stress reduction."

Meanwhile, the women in Vaccarino's earlier study are faring much better since their heart attacks. Webb exercises, maintains a healthy diet, and is studying for her teaching certificate. Brown, who follows a similar regimen and practices yoga, has lost 30 pounds. She also is headed back to school to earn a master's degree in community psychology. Learning to manage the mental and physical stresses in her life has made a difference.

"I can't believe it," says Brown. "I'm 59, and I'm heading to graduate school." ■

SHAPING FUTURE SCIENTISTS

Viola Vaccarino stepped into the world of cardiology research as a medical resident in Italy. Convinced that she needed more scientific training, she earned an MPH and a PhD in epidemiology at Yale University.

Today at Rollins, Vaccarino ensures that the 200 MPH students and 40 doctoral students who study epidemiology each year are grounded in rigorous scientific methods.

"One thing that sets our department apart from other programs is that we provide strong emphasis in methodological skills," says Vaccarino. "Our graduates know how to design studies, recognize biases, and conduct statistical analyses."

Until last year, Vaccarino served primarily as a professor and cardiology researcher in Emory School of Medicine. As Rollins Professor and epidemiology chair, she strengthens the ties between public health and medicine. Among her goals is increasing the faculty of 30-plus members by 25% to add or expand research expertise in areas such as genetics and cardiovascular disease

and provide a broader range of elective courses

Whatever their interests, MPH graduates in epidemiology are qualified for public health practice at local, state, national, and international levels. PhD graduates enter academia to continue their research and train future epidemiologists.

'Our goal," says Vaccarino," is to train students who can influence decisions and policies and put measures in place to prevent disease more effectively."



THE FABRIC OF HOPE BY PAM AUCHMUTEY

The enormity of it can hit quite suddenly.

The 1,200 panels of the AIDS Memorial Quilt displayed at Emory on World AIDS Day represent only a portion of the 40,000 panels stitched to honor more than 91,000 men, women, and children who have died since the quilt was conceived in 1985.

James Curran, dean of the Rollins School of Public Health, has seen the quilt displayed on the quadrangle at Emory, at the football dome in Minneapolis, and on the mall in Washington, D.C.

"When you pause by the quilts, you realize these people had one thing in common," says Curran. "They were no longer gay or straight, black or white, Hispanic or Asian, men or women. For every quilt panel, there was a person who died of AIDS. Collected together, the quilt panels represent an epidemic."

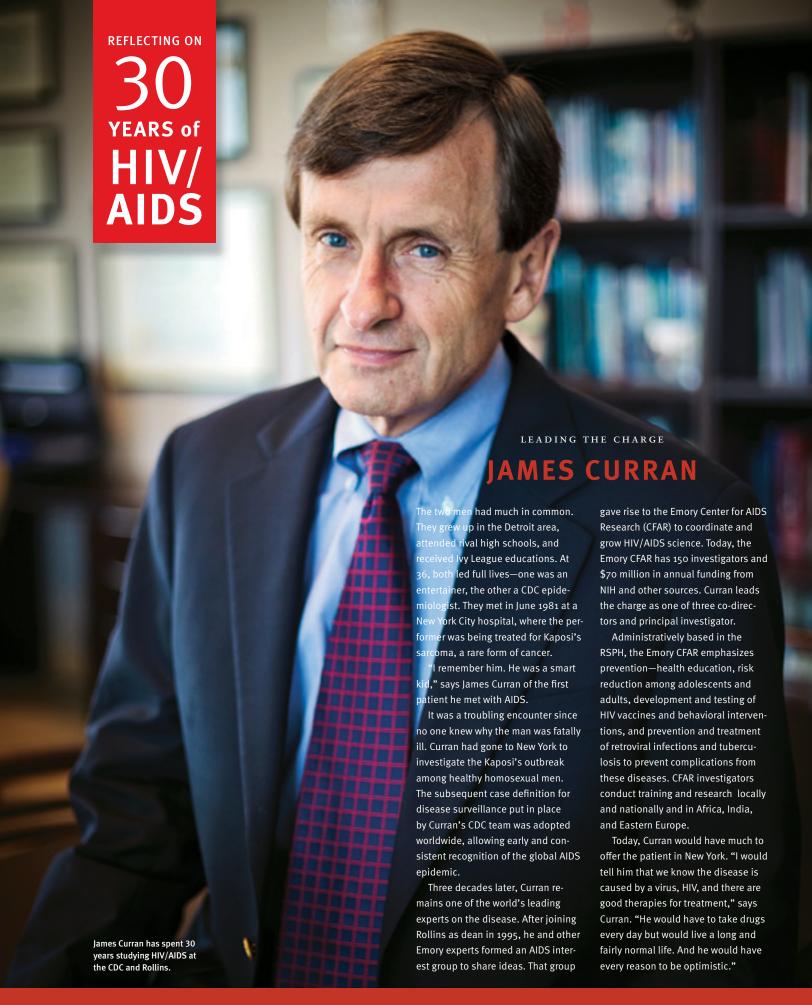
In the United States, the CDC estimates, more than 18,000 people with AIDS die each year. Nearly 600,000 Americans have died since the epidemic began in 1981. Globally, 33.3 million people are infected with HIV. Of those, 22.5 million live in sub-Saharan Africa, where AIDS is the leading cause of death among adults.

HIV frequently strikes those who can least afford it, widening the gap in health disparities. In Atlanta, substance abuse is a major driver of HIV infection. One of the highest concentrations of AIDS is found in the Southeast, where poverty, stigma, and limited access to care are factors.

While the numbers are staggering, scientists, health experts, and policy makers have made steady progress against the disease for three decades: Establishing the epidemiologic pattern of AIDS and its distribution throughout the world. Identifying the mode of transmission—blood, mother to child, and sexual intercourse. Isolating HIV and proving that it caused AIDS. Implementing diagnostic tests and screening blood donors. Introducing combination therapy—the AIDS cocktail. Proving that male circumcision and condom usage could prevent infection. And continuing the pursuit of the holy grail—developing a safe and affordable vaccine.

In the absence of a vaccine, prevention remains key. Each day, more than 7,000 people worldwide acquire HIV, totaling 2.7 million cases annually and including 56,000 cases in the United States.

Understanding which preventive measures work best for individuals and populations is paramount. The AIDS Memorial Quilt makes for a good starting point. Behind the name of every loved one are scientists, clinicians, and public health experts searching for answers.





CARLOS DEL RIO

Carlos del Rio has a soft spot for heroes. In junior high, he admired scientists like Louis Pasteur, who developed vaccines to combat infectious disease. During his medical residency at Emory in the early 1980s, del Rio idolized physician Sumner Thompson, who fought to open a clinic at Grady Memorial Hospital to serve the growing number of Georgians with HIV.

Since his days as a physician in training, del Rio has worked to reduce the spread of HIV on multiple fronts—leading the National AIDS Program in his native Mexico, caring for patients at Grady, directing the NIH-sponsored HIV Prevention Trials Network at Emory, advising U.S. agencies on HIV prevention and care, and growing global capacity for HIV research. Del Rio, Rollins Professor and chair of the Hubert Department of Global Health, also co-directs the Emory Center for AIDS Research and leads the Emory AIDS International Training and Research Program (AITRP).

Through AITRP, young investigators from Georgia, Mexico, Rwanda, Vietnam, and Zambia are trained in public health and in basic, clinical, and behavioral and social sciences. The program is supported by the NIH's Fogarty International Center to advance health through scientific cooperation worldwide. Specifically, the grant allows promising young investigators to study at Emory or at partner institutions abroad to strengthen HIV/AIDS research in their respective countries. More than 220 trainees have benefitted from the Emory AITRP since 1998.

"Approximately 97% of people with HIV live in low- and middle-income countries," says del Rio. "One key thing Emory can do is train the next generation of researchers and leaders in some of those countries. AITRP builds human capital and scientific capacity to stop the transmission of HIV."



TAMING TRANSMISSION

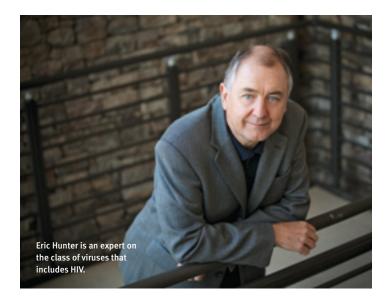
ERIC HUNTER

As a young scientist, Eric Hunter believed that the retroviruses known to cause cancer in animals eventually would be found in humans. "But I never thought we would be looking at a global epidemic," says Hunter, a leading expert on the class of viruses that includes HIV.

In his laboratory at the Yerkes National Primate Research Center, Hunter studies how HIV enters cells. He also collaborates with Emory pathology professor Susan Allen to study HIV transmission among discordant HIV couples (one infected, one not) in Africa. Her seminal studies in Rwanda and Zambia have shown that voluntary counseling, testing, and condom use reduce transmission as much as 75%. The cohort also allows Hunter to study how the virus behaves when one partner infects another.

"There are few cohorts in the world that allow you to study HIV transmission and identify newly infected partners at the very earliest stage of their infection and know where the virus came from," says Hunter. "The results of our work on these newly infected persons and their infecting virus gives us hope in understanding how HIV-1 initiates infection and how to direct vaccines against it."

Hunter, a Georgia Research Alliance Eminent Scholar, co-directs the Emory Center for AIDS Research (CFAR). Last fall, he presided over the AIDS Vaccine 2010 Conference in Atlanta, hosted by the Emory CFAR and the Global Vaccine HIV Enterprise.



The mood among the 1,100 participants was upbeat. At the 2009 conference in Paris, researchers announced that a vaccine trial in Thailand yielded a 31% protection rate against HIV acquisition. New discoveries presented in Atlanta showed that generating an immune response to neutralize different HIV strains might be feasible. Says Hunter, "That was important for people to hear—that it's not impossible to shut this virus down."

NAVIGATING EVERYDAY LIFE

CLAIRE STERK and KIRK ELIFSON

Claire Sterk and Kirk Elifson are familiar figures in Atlanta's poorer neighborhoods, where they work with people at high risk for HIV. They learn from individuals both young and old. And they have seen firsthand that the world can be a lonely place for those who change their behaviors to be more healthy.

"They feel isolated. They no longer fit in with their friends," says Sterk, Emory senior vice provost for academic affairs and Charles Howard Candler Professor of Behavioral Sciences. "Their social network is no longer a good match, and their neighborhood doesn't feel the same. That started us thinking about HIV/AIDS in the context of everyday life and the environment in which people live."

The hub for Sterk and Elifson's work is a storefront in Atlanta's West End, where

staff and students continue to build on HIP (Health Intervention Project), now widely used by the CDC to help African American women adopt healthy behaviors. The researchers are halfway through a study looking at health-related issues in 100 Atlanta neighborhoods in collaboration with residents, social service agencies, police, architects, and city planners. By talking with residents, they are learning and mapping what each neighborhood needs to improve health—from opening a health care clinic in a convenient location to cleaning up lots left vacant by the economic downturn.

"When you create a better environment, people feel safe in their neighborhoods," says Sterk. " And when you feel safe, you can better stand up for yourself. That includes avoiding those behaviors that cause HIV."



AIDS BY THE NUMBERS ▶ THE CDC ESTIMATES THAT MORE THAN 1 MILLION PEOPLE IN THE UNITED STATES LIVE WITH HIV.

IN A DIFFERENT LIGHT

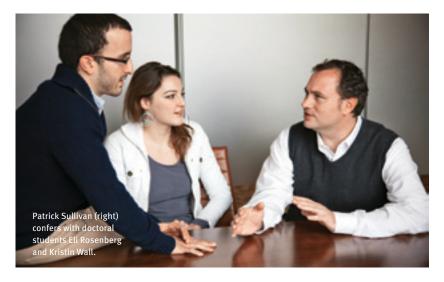
PATRICK SULLIVAN

Patrick Sullivan was a teenager when AIDS became a household word associated with gaunt images of people in the late stages of disease.

Younger generations now see AIDS differently. "We think of it as a disease that's chronic and not curable but manageable," says Sullivan, a Rollins epidemiologist specializing in HIV prevention and health disparities.

In an Atlanta study, Sullivan is examining the difference in HIV prevalence among black and white men who have sex with men (MSM). While black MSM tend to have fewer casual sex partners, they have two to three times the HIV rate of white MSM. Sullivan is looking at sexual partner characteristics, social networks, stigma, and poverty to understand how they may drive disparities.

Eli Rosenberg, a doctoral student, has begun a related study to learn more about the social networks of black and white MSM. Kristin Wall, a PhD student who has studied HIV in Africa, recently published a paper with Sullivan on HIV testing provided to MSM by their health providers. Wall found that MSM who disclosed their sexual partners were more likely to be offered HIV testing by



their doctor. The next step in her research is intervening with health care providers so they routinely ask for sexual histories and offer HIV screening.

The factors that drive HIV acquisition are complex, requiring new approaches to prevention and young inquiring minds to generate them. "Managing epidemics is complicated, even with great tools," says Sullivan. "We will be talking about this 30 years from now."

SEE CFAR RUN

A POWERFUL ENGINE

Kimberley Hagen, Shelle Bryant, and Judy Catasein are the go-to experts on the Emory Center for AIDS Research (CFAR). Funded by NIH since 1998, CFAR encompasses the RSPH and the schools of medicine and nursing, Yerkes National Primate Research Center, the Emory Vaccine Center and the Hope Clinic, the Atlanta Veterans Affairs Medical Center (VAMC), Emory University Hospital



(EUH) Midtown, and the Ponce de Leon Center, an outpatient clinic operated by Grady Health System. The 8,000 patients treated annually at the Ponce Center, EUH Midtown, and the VAMC constitute one of the largest concentrations of HIV/AIDS patients in the country.

The Administrative Core helps CFAR's wheels turn daily. For example, Bryant and Catasein assisted with planning and logistics for the AIDS Vaccine 2010 Conference in Atlanta, and once a month, Hagen organizes the Vaccine Dinner Club (VDC), a popular speakers program

with more than 2,000 members. On World AIDS Day, Kevin DeCock, director of the CDC's Center for Global Health and former director of HIV/AIDS at WHO, spoke to a packed house of VDC members and guests.

"There is no superman," said DeCock of ending the global AIDS epidemic. "The answer lies within ourselves."



MORE THAN 90% OF PEOPLE WITH HIV/AIDS IN THE UNITED STATES USE TWO DRUGS DEVELOPED AT EMORY.



SEARCHING FOR NORMAL

DENNIS LIOTTA and RAYMOND SCHINAZI

Two Emory researchers are credited with a miracle, having developed two of the antiretroviral drugs used by more than 90% of the people in the United States and by many around the world who are on medication for HIV/AIDS.

In the early 1990s, chemistry professor Dennis Liotta, virologist Raymond Schinazi, and researcher Woo-Baeg Choi co-developed the molecules 3TC and FTC, which help prevent or delay HIV from infecting other cells. With time, the WHO recommended FTC or Emtriva (the "Em" stands for Emory) and 3TC (Epivir, also used to treat hepatitis B) as part of a drug treatment regimen for HIV/AIDS. Ultimately, Emory sold the royalty rights to Emtriva, one of the largest such sales in higher education. Atripla, a combination of Emtriva and two previously approved drugs, now enables many patients to take just one pill a day, instead of the handful of pills required 10 years ago.

Emory continues to be a top leader in drug discovery. In 2011, a study in the *New England Journal of Medicine* named it as the nation's fourth-largest contributor to the discovery of new drugs and vaccines by public-sector research institutions.

What drives the scientists behind Emory's HIV/AIDS research? As Schinazi has said, "It's all about taking people who are dying, abandoned, and condemned, and with these new drugs, allowing them to have normal lives."—*Mary J. Loftus*



Gina Wingood works with African American congregations in the Atlanta area to inform women about reducing HIV risk through safe sex.

WOMEN AND SAFE SEX

GINA WINGOOD

Ralph DiClemente first encountered AIDS when a close friend died of the disease long before health experts knew how to treat or prevent it. Today, DiClemente, Charles Howard Candler Professor of Behavioral Sciences, and Gina Wingood, the Agnes Moore Faculty in HIV Research, have developed model programs to reduce the risk of HIV and other sexually transmitted diseases (STDs) among teens and young adults. One of their most successful efforts is SISTA (Sisters Informing Sisters about Topics on AIDS), used across the country to encourage young African American women to act responsibly when it comes to sex. The researchers have designed other interventions to guide African American teens and their parents, women in rural South Africa, sex workers in Armenia, adolescents in the Caribbean, and Latina women in Miami.

Currently, DiClemente is reaching out to girls in juvenile detention and women who use alcohol to reduce their risk of HIV and other STDs. Wingood is partnering with large African American churches around Atlanta to reduce women's risk of HIV across the life span and promote HIV testing. "Churches are highly respected within the African American community," says Wingood. "They are an important venue to inform women about HIV protection and safe sex."

AIDS IN AFRICA

AIDS BY THE NUMBERS ▶ THE UNAIDS REPORTS THAT NEW HIV INFECTIONS HAVE DROPPED BY NEARLY 20% WORLDWIDE IN

A PLACE ON THE MAP

SANDRA THURMAN

Less than 10 miles from Nairobi, the Mukuru slum teams with life. Though lacking in electricity and running water, Mukuru has a vibrant network of 17 villages and community leaders. But on any map of Kenya, this town of 600,000 people does not appear. Together, Rollins' Interfaith Health Program (IHP) and Mukuru citizens are putting it on the map.

Using global information systems technology and community manpower, IHP staff have identified 282 sites thus far to create a directory of health services. "What this does is give us the information to create a community-led response to HIV/AIDS," says IHP director Sandra Thurman.

Based in the Hubert Department of Global Health, the IHP partners with the Joseph W. Blount Center for Health and Human Rights,

which works with underserved populations, primarily in Africa. Thurman also leads the International AIDS Trust (IAT), an extension of her health policy work in the Clinton administration.

Just recently, the IAT produced a film on orphans in Romania who were infected with AIDS during the late 1980s. Thurman also organized the AIDS Legacy Project to document community response to the epidemic in Atlanta and other cities during the 1980s. The archive will be housed at Emory's Woodruff Library. Thurman and the IHP staff will continue working with Mukuru to build health capacity that is self-sustaining.

"We can't underestimate the importance of people understanding where they are on the map and where they are in the world," says Thurman.





Several Rollins researchers work on HIV/AIDS in Africa. Kate Winskell coordinates Scenarios from Africa, involving children, adolescents, and young adults who develop ideas for short films to educate others about HIV/AIDS. African directors have developed winning ideas into 37 short fiction films and a documentary, shown in up to 28 languages. Recently, Rob Stephenson launched a project in Cape Town, South Africa, to provide voluntary counseling and testing for gay couples in a safe, neutral environment.

STARTING THE CONVERSATION

FRANK WONG

Numbers can be deceptive. In China, less than 1% of the country's 1.3 billion people are HIV positive. "But when you look at specific subpopulations, the HIV rate is very high," says Frank Wong, associate professor of behavioral sciences and health edu-

Wong's research focuses on men who have sex with men (MSM), a subgroup that accounts for 5% of HIV cases in China. In urban areas like Shanghai, Wong's ongoing studies of MSM-of whom half are prostitutesshows an HIV rate of 8%. Through his research, Wong is addressing the stigma and social barriers that put MSM, gay and straight and including married men, at risk for HIV. Study participants are tested and counseled on prevention and treat-

ment. He plans to use the results to broaden governmental and cultural acceptance of MSM and other groups with HIV.

His study has yielded an unexpected finding: a pattern of intimate partner violence (IPV). He and RSPH colleague Kristen Dunkle plan to study this behavior further among MSM in China and South Africa, where Dunkle's research has shown a link between IPV among heterosexual couples and increased risk of HIV.

For Wong, the most important weapon in confronting HIV/AIDS is starting a conversation. "I don't know of any other disease in modern history that would allow people to talk so openly about their sexuality," he says. "We've got to talk about it, no matter how difficult."

THE PAST 10 YEARS. TREATMENT TO PREVENT MOTHER-TO-CHILD HIV TRANSMISSION INCREASED FROM 35% IN 2007 TO 53% IN 2009.



SCENARIOS FROM THE FIELD

THE HUMPHREY **FELLOWS**

Each year at Rollins, mid-career professionals from around the world take part in the Hubert H. Humphrey Fellowship Program. President Jimmy Carter established the program in 1978 to honor the late vice president for his long-time advocacy of international cooperation. Emory is one of 15 U.S. campuses that host Humphrey Fellows in a variety of disciplines. To date, 175 fellows have studied at Emory since 1993.

Emory has offered a concentration in HIV/AIDS since 2004. Of the 12 fellows studying at Rollins this year, 10 are focusing on the epidemic. After a year of study, these fellows will return to their respective countries—Burma, China, Liberia, Nigeria, South Africa, Sri Lanka, Turkmenistan, Zambia, and Zimbabwe—to practice what they have learned



as administrators, clinicians, educators, policy experts, and human rights activists. "We are living in a world where AIDS will be with us for the rest of our lives," says physician Qi Li, a 2011 Humphrey Fellow from China.

Emory offers a concentration in HIV/AIDS for the Hubert H. Humphrey Fellows, who practice what they learn in their respective countries.

HIV AND PRISON POPULATIONS

ANNE SPAULDING

If all Atlanta-area jails were combined into one, it would be the third largest in the nation. While the thought is daunting, Anne Spaulding sees an opportunity to reduce HIV risk in a vulnerable population. Through a cooperative agreement with the CDC, Spaulding leads a project to implement and evaluate rapid HIV testing in the Fulton County Jail. Results thus far show an HIV infection rate of over 2%, more than the 1.8% rate among entrants to Georgia prisons.

"Someone described rapid HIV testing in jail as a match made in heaven," says Spaulding, assistant professor of epidemiology. "We expect the data to show that it is a very fruitful place to detect previously undiagnosed cases. And we can have a larger impact on the community when these people are released."

She also leads a multi-year project to evaluate 10 national sites that link HIV-positive detainees with health services after they leave jail. Last year, she helped broker an agreement with the Georgia Department of Corrections, jails, prisons, and community clinics to promote sharing of health information for HIVpositive detainees who move among correctional facilities or re-enter the community.

"We must do everything we can for the prison population to make up for the deficiencies in our health care system," says Spaulding.

IN THE UNITED STATES, ONE IN SIX PEOPLE INFECTED WITH HIV IS IN PRISON OR PASSES THROUGH JAIL OR PRISON EACH YEAR.

30 YEARS of HIV/ AIDS Anne Spaulding leads a project to evaluate rapid HIV testing in Atlanta's Fulton County Jail.

COMMUNITY TRUST

PAULA FREW



When Paula Frew o1MPH first saw the Hope Clinic in 2001, the modest building in nearby Decatur had been gutted and dirt covered the floor. Small in size but large in scope, the facility has since earned an international reputation as the clinical trials arm of the Emory Vaccine Center. Key to the clinic's success are the ties that Frew has formed with Atlanta-area

Paula Frew has forged strong ties in the Atlanta community to build trust in HIV clinical trials.

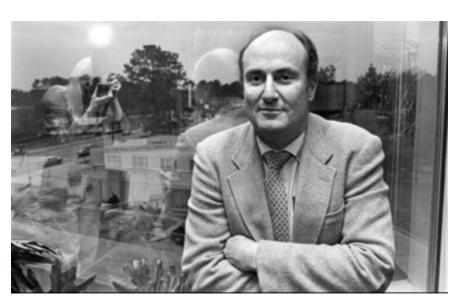
AS OF 2010, MORE THAN 60% OF GEORGIA'S HIV CASES ARE IN ATLANTA.

communities, especially those who traditionally are under-represented in HIV clinical studies. They include black men who have sex with men, minority women from low-income neighborhoods, transgender individuals, and African and Asian refugees. Beliefs, behaviors, and attitudes regarding HIV prevention and testing vary within these communities. In many instances, HIV risk is tied to poverty. Through her research, Frew has developed new models for involving communities in clinical trials by tailoring recruitment messages to

specific groups, overcoming mistrust about vaccine safety, and reducing HIV risk through education and promotion of economic stability.

"We're doing everything we can to keep HIV on the community radar," says Frew, director of health communications and applied community research for the Hope Clinic. "We want to raise awareness so that different groups can take ownership of preventing HIV. By heightening awareness of what that means to them, we're halfway there to getting them to enroll in clinical trials."





Half-Century Mark

After nearly 50 years of teaching, Michael Kutner honors students and professionals in biostatistics

The back wall of Michael Kutner's office is a tapestry of achievements and honors earned during nearly five decades as a biostatistician, professor, author, and administrator.

Reflecting on the 35 years he has spent at Emory, Kutner recognizes the parallels between the RSPH's rise among the ranks of U.S. schools of public health and the success he has enjoyed in his career.

To honor that relationship, Kutner has made a generous gift to MyEmory, the employee component of Campaign Emory. His gift will endow the Michael H. Kutner Award for Excellence in Biostatistics, which will recognize an RSPH graduate for distinguished achievement in the field, and the Michael H. Kutner Fund for Biostatistics to support outstanding PhD candidates in the Department of Biostatistics and Bioinformatics.

"If it weren't for Emory, I probably wouldn't have accomplished the things I have in my career," says Kutner. "It is time for me to pay back my gratitude for what I have achieved as a biostatistician."

Kutner grew up with biostatistics at Emory. In 1971, he joined the

Michael Kutner grew up with biostatistics at Emory, which he first joined in 1971.

the new School of Public Health in 1990, so did Kutner as director of the biostatistics division and the school's first associate dean for academic affairs.

He left Emory in 1994 to build the biostatistics and epidemiology department at the Cleveland Clinic Foundation but returned to Rollins in 2000 and subsequently was named Rollins Professor and department chair. He stepped down as chair in 2009.

Today, he is revising his seminal textbooks on Applied Linear Regression Models and Applied Linear Statistical Models and cowriting a new textbook, Introduction to Business Statistics.

From the undergraduate statistics courses he taught as a master's student at Virginia Polytechnic to the PhD-level courses he has taught in recent years, Kutner has always enjoyed being in the classroom.

"When all is said and done," he says, "I hope that I have given my students the desire and courage

"If it weren't for Emory, I probably wouldn't have accomplished the things I have in my career. It is time for me to pay back my gratitude for what I have achieved as a biostatistician."—Rollins Professor Michael Kutner, Department of Biostatistics and Bioinformatics

Department of Biometry and Statistics in the School of Medicine and later became director of biostatistics in the newly merged Department of Epidemiology and Biostatistics. When the department moved to

to be inquisitive, think creatively, and know that I have taught them the skills that will allow them to participate in the development of new ideas and knowledge."-Maria Lameiras

Seats chair Lisa Carlson 93MPH

Seats Campaign Funds Scholarships

The Seating Our Future Campaign raised more than \$33,000 for scholarships. In just six months, campaign participants purchased a total of 133 seats in Rollins Auditorium. All of the seats bear plaques in honor or in memory of alumni, friends, faculty, staff, students, family members, mentors, and public health leaders.

This spring, approximately 50 donors and honorees gathered to celebrate the campaign's success and find their

rightful seats in the auditorium.

As Seats Campaign chair Lisa Carlson 93MPH can attest, receiving a scholarship to Rollins can be life-changing. Her education led her to become an administrator with the Emory Transplant Center and an alumni leader and adjunct faculty member at Rollins.

"Thank you," Carlson told guests at the Seats celebration. "Your support means a great deal in helping open doors for our students."





Far left: Richard Levinson (right) purchased seven seats honoring Rollins' top teachers. Roger Rochat (left) and John Boring also had seats purchased in their honor.

Left: Biostatistician Robert Lyles (left), and his father, Justin Lyles, purchased a seat in memory of Peggy Lyles, mother and wife.



Above: Karl Hagen purchased a seat honoring his wife, Kimberley Hagen, assistant director of the Emory Center for AIDS Research.

Above center: Founding dean Ray Greenberg (front) and former CDC director David Sencer had Rollins Auditorium seats purchased in their honor.

Right: Ellen Whitney 01MPH purchased a seat for Rollins Professor Ruth Berkelman, Both serve in the Department of Epidemiology.







Above: Katherine Ragland 11MPH was honored by her mother, who purchased a seat for her daughter as a Christmas gift. Ragland is a health policy major.



RSPH campaign support tops \$142 million

To date, the RSPH has raised \$142.8 millionmore than 95% of its \$150 million goal—for Campaign Emory. Gifts to the RSPH help build endowments for teaching and research, scholarships, programs, and facilities. As of mid-April, the university had raised \$1.19 billion, 74% of its \$1.6 billion goal. With less than two years to go, the RSPH is on track to meet its dollar goal, but support is still needed to increase the school's endowment.

To learn more about Campaign Emory and the RSPH, visit campaign. emory.edu. To make a gift, contact Kathryn Graves, Associate Dean for Development and External Relations, at 404-727-3352 or kgraves@emory.edu.

A Promise Fulfilled

Gangarosas endow complementary chairs to promote safe water and sanitation worldwide



Eugene and Rose Gangarosa make quite a team. Married for 61 years, the couple has lived in several countries during Gene's long career as an expert in waterborne diseases. In 2004, the Gangarosas pledged to endow two academic chairs. Today, the Eugene J. Gangarosa Chair in Safe Water is held by Christine Moe, director of the Center for Global Safe Water. The couple recently completed funding for the complementary Rose Salamone Chair in Environmental Health, to be held by an expert in sanitation. During a luncheon in their honor, Rose presented a final check on the couple's behalf to RSPH Dean James Curran. Pictured with Rose and Curran are Moe (left), Gene, Paige Tolbert, chair of the Department of Environmental Health, and Richard Levinson, executive associate dean for academic affairs.





Gene Gangarosa has been a mentor to Christine Moe, associate professor in the Hubert Department of Global Health and an expert on the environmental transmission of infectious disease. Gangarosa is a founding father of the RSPH and professor emeritus of global health. He continues to lecture Rollins students.

Leaders in HIV Prevention

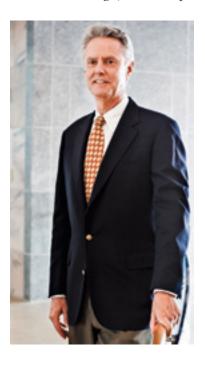
Two epidemiologists, bound by their global efforts to combat AIDS, are honored by the RSPH Alumni Association in 2010

Robert Bailey

DISTINGUISHED ACHIEVEMENT AWARD

In 2007, Time Magazine declared male circumcision to prevent HIV as the No. 1 medical breakthrough of the year. Robert Bailey 97MPH, the University of Illinois at Chicago epidemiology researcher behind the breakthrough, is the recipient of the Distinguished Achievement

Award for 2010.



Bailey's interest in male circumcision as a prevention measure surfaced in 1995 after reading about the parallels between uncircumcised men and the high prevalence of HIV in sub-Saharan Africa. Through subsequent studies, Bailey's research team sought to convince African policy-makers and international health officials to advocate circumcision as a widespread prevention measure. In 2006, their randomized clinical trial in Kenya was halted when interim results showed that circumcised men had a 60% lower rate of HIV infection than uncircumcised men. Two other trials showed similar results, leading the WHO and UNAIDS to recommend

in 2007 that circumcision be used to prevent HIV in countries with a high prevalence of disease.

Through his team's work, Bailey galvanized international donor agencies and policy-makers to address a problem hidden for decades and marshal resources to make male circumcision available throughout Africa. In Kenya alone, more than 250,000 men have been circumcised and thousands of couples counseled and tested for HIV.

"I and many others are now committed to making these services available on a broad scale because, as we have shown, it will result in the aversion of millions of new infections in both men and women over the next 20 years," says Bailey. "We will never be able to treat our way to an AIDs-free world. Circumcision is the first in what will hopefully be a series of new biomedical and behavioral interventions that will drive HIV into submission." ■



Alison Smith

MATTHEW LEE GIRVIN AWARD

Like fellow alumnus Robert Bailey, Alison Smith 05MPH has sought to prevent and control HIV/ AIDS. Prior to entering Mercer University School of Medicine last fall, Smith was an epidemiologist with the CDC's Global AIDS Program. There she led efforts to collect crucial HIV data and determine risk factors in countries like Sudan, the Democratic Republic of Congo, and Angola, where the threat of violence can arise daily.

For her efforts, Smith received the 2010 Matthew Lee Girvin Award, presented by the RSPH to young professionals who improve the lives of others. Girvin, a 1994 alumnus, died in a 2001 helicopter crash while on a U.N. surveying mission in Mongolia.

Smith put her own personal safety aside on several occasions. In Angola, she helped produce the first reliable HIV estimates and analyzed data to shape the Ministry of Health's response to the disease. In North Sudan, she developed a national HIV surveillance survey. She worked with the Ministry of Health and the U.N. High Commissioner for Refugees to collect HIV data from refugee camps in eastern Sudan for the first time.

In countries in Africa, Asia, and Central America, Smith taught public health workers how to collect

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RSPH Leadership on the Association of Emory Alumni Board

Lisa Carlson 93MPH, CHES Amri Johnson о5мрн

Upcoming Events

Spring Diploma Ceremony Monday, May 9

Rollins School of Public Health

Alumni Reunion Weekend

September 23-25 Rollins School of Public Health Includes recognition of the MD/ MPH program, which graduates its 100th student in May 2011.

Destination Public Health/ Open House

Saturday, October 15 Rollins School of Public Health

Dean's Reception American Public Health Association

Monday, October 31 Washington, D.C.

For information: alumni@sph. emory.edu or 404-727-4740.



Alison Smith has worked in Africa, Asia, and Latin America to inform national efforts on HIV prevention.

and analyze survey data. In the Democratic Republic of Congo, she advised in-country colleagues who gather and report health data and plan future surveillance programs. In Honduras and Guatemala, she used data on men who have sex with men, IV drug users, and commercial sex workers to inform health workers and officials there about the prevalence of HIV

among these vulnerable populations. Prior to enrolling in medical school, she was a public health adviser in the Malaria Branch of the CDC's Division of Parasitic Diseases, where she worked on campaigns to distribute insecticidetreated bednets and improve data collection and reporting in Uganda, Malawi, and Benin.

Through her various efforts, Smith armed national health leaders with crucial information and the skills needed to collect data independently in the future.

"By gathering data on what geographic areas and subpopulations are most affected by the HIV epidemic, we made important contributions to prevention and control efforts," says Smith. "Without data to guide programmatic efforts, we would be shooting in the dark."—Pam Auchmutey ■

Save the Date— September 24

Join us for our 2011 RSPH Alumni Reunion. Festivities will include building tours, a reception, the presentation of our Matthew Lee Girvin and Distinguished Achievement Alumni awards, and more. All alumni are welcome, so call your classmates and make plans today to attend in September.



Lyn Thi Nguyen (left), Ansley Lemons, and Dana Jean-Baptiste, all 09MPH, joined their classmates last fall for the 2010 RSPH Alumni Reunion.

MD/MPH Program Celebrates Milestone

This May, Emory will award its 100th MD/MPH degree. Established in 1996, the MD/MPH program offers medical students the opportunity to earn an мрн degree between their third and fourth years of medical school. Celebrate with us during Reunion Weekend to commemorate this milestone and recognize the leadership of John McGowan, professor of epidemiology, and William Eley 79C 83MD 90MPH, executive associate dean for medical education and student affairs, in creating the program. Former CDC director William Foege, presidential distinguished professor emeritus of global health, will be the guest speaker.

To help organize this year's reunions or learn more about the MD/MPH program celebration, please contact Michelle James, Director of Alumni and Constituent Relations, at 404-727-4740 or mjames4@emory.edu.







Eve Byrd 98MSN/MPH



Corliss D. Heath 98MPH



Michael Hensle 99MPH

1990s

JAMES (JIM) DAHL 93MPH is a nursing home administrator at Golden Hill Health Care Center in Milford, Conn. He has been involved in senior care and rehabilitation for several years, including in California and Illinois. He has become interested in the strategic direction of the industry and ways to educate the public to better prepare for retirement. "To me, this is the quiet crisis in health care," he writes, noting that Europe and Japan also face an aging population

scenario. "It will have public health as well as economic implications."

DR. DAVID DUNSON 97G

received the Committee of Presidents of Statistical Societies Presidents' Award at the Joint Statistical Meeting in Vancouver last summer. The award is presented annually to a young (under 40) member for outstanding contributions to the statistics profession. Dunson is a professor of statistical science at Duke.

EVE BYRD 98MSN/MPH was named Nurse of the Year for

MICHAEL HENSLE 99MPH was made unit chief of the FBI Biological Countermeasures Unit in Washington, D.C. Before his promotion, Hensle was one of only three supervisory special agents in the FBI Bioterrorism Prevention Program. He also is one of only six agents out of 30,000-plus FBI employees who have a public health degree.

"Keeping people safe and disease-free is the mission of public health and law enforcement, especially with regard to preventing bioterrorism attacks," Hensle says. "I like to let students know that we aren't the bad guys."

Last fall, he met with Department of Epidemiology faculty and Student Outbreak and Response Team leaders about partnering with Rollins to bring this type of training to MPH students. "The idea is to integrate the topics early in their training to foster a positive relationship among public health, law enforcement, and academia," he notes.

Stay Connected





Link up with fellow RSPH alumni through Facebook, LinkedIn, or E-Connection, the online community of the Emory Alumni Association. Add your photos to Rollins' Facebook page in honor of the 35th anniversary of the public health program. To make a connection, visit "Alumni and Friends" at sph.emory.edu.

Advanced Practice Nursing by the March of Dimes last fall. Byrd is a nurse practitioner at Emory's Wesley Woods Center. She is one of four Emory Healthcare nursing professionals chosen from among 130 finalists in 14 nursing specialities.

THE REV. CORLISS D. HEATH 98MPH 04T 05G

was the keynote speaker at the 31st Annual MLK Leadership Breakfast hosted by the Tampa Organization of Black Affairs in January. Corliss is enrolled at the University of South Florida as a doctoral student in applied anthropology, specializing in bicultural medical

anthropology. She is also founder of SAVE Inc. (Shaping a Vision through Empowerment), a community outreach organization for youth.

STEVEN TROCKMAN

99MPH was named director of community relations and outreach at Mid Coast Health Services in Brunswick, Maine. Mid Coast is a family of health care service providers that addresses the full spectrum of community needs. Previously, Trockman directed the Southern Maine Regional Resource Center for Public Health Emergency Preparedness, which he launched six years ago at



Steven Trockman 99MPH



R. Thomas Sherba 01MPH



Sadi Moussa 05MPH and wife Ramatou



Andrea Dopico 05MPH and husband **Charles Castillo**

Maine Medical Center in Portland. He and his wife and two young sons live in Topsham, Maine.

2000s

DR. R. THOMAS SHERBA 01MPH was awarded a PhD in social welfare from Case Western Reserve University in January 2009. In spring 2010, he began working with the Ohio Department of Alcohol and Drug Addiction Services as the principal investigator of the Ohio Substance Abuse Monitoring Network. The network provides epidemiological descriptions of drug abuse trends and emerging drug problems. Sherba lives in Columbus, Ohio.

DR. PETER EHRENKRANZ 02MD/MPH is working for CDC/PEPFAR in Swaziland as the Care and Treatment Team lead. He focuses on both HIV and TB, from testing through retention in care. After leaving Emory, he completed a residency in internal medicine and a two-year fellowship in health policy as a Robert Wood Johnson Clinical Scholar at Penn. He then spent two years

in Liberia as the medical director for the Clinton Foundation HIV/AIDS Initiative, serving as senior technical adviser to the National AIDS Control Program.

DR. AJAY VASANT VATAVE **04MPH** was appointed director of the Center for Public Health of The Cloudburst Group. Cloudburst staff partner with public and private organizations, domestically and internationally, to enhance the impact of programs that serve socially and economically disadvantaged groups. Vatave has worked extensively with underserved populations throughout his career, focusing on infectious disease, minority health issues, and rare genetic disorders.

DR. DAVID A. BRAY 04MPH was promoted by the Director of National Intelligence to senior executive for programs and technology with the Information Sharing Environment in Washington, D.C.

SADI MOUSSA 05MPH, a William H. Foege Fellow, was honored by his home country of Niger for 20-plus years

of service and outstanding contributions to the Ministry of Health. He was recognized by the Minister of Health during a nationally televised ceremony. In January, Moussa took on a new challenge as resident technical adviser in Mali for the Carter Center.

MARRIED: ANDREA DOPICO **05MPH** and **CHARLES** CASTILLO 04MBA on Aug. 28, 2010. The couple held their wedding in Cancun, Mexico, with family and friends. They live in St. Petersburg, Fla., with their two adopted greyhounds. Andrea is the surveillance program manager at the Pinellas County Health Department. Charles is a senior research associate at Raymond James.

MARRIED: MEGHAN MUR-PHY 06MPH and WILLIAM (WILL) BOURS 08MPH on



Aug. 14, 2010. The couple lives in Portland, Ore.

MARRIED: MELISSA AIMEE CHEUNG 06MPH and **ROBERT JONATHAN MILLER** 05C on Oct. 10, 2010 in New York City. ANAND NATARAJAN **04C** officiated at the wedding ceremony.

MARRIED: DR. RAMON O. PARRISH 06MPH and Lisa Marks on Jan. 16, 2009, in Bear Lake, Mich. They now live in Augusta, Ga., with her son, Tanner Chapman. Parrish, an associate professor of family medicine at the Medical College of Georgia (now part of Georgia Health Sciences University), received an Outstanding Teacher Award for 2009-2010. He teaches in the family medicine clerkship rotation as well as the inpatient service subinternship. He wrote two recent articles for

> Melissa Cheung 06MPH and Robert Jonathan Miller 05C



Meghan Murphy 06MPH and William Bours 08MPH



Natasha Prudent 08MPH and Paul Schramm 09MPH



Jessica Gross 09MSN/MPH and husband Paul



Lydia Ogden 10G and husband Jim Buehler

Essential Evidence, an online medical reference, and spoke at the Georgia Academy of Family Physicians meeting.

NATASHA PRUDENT 08MPH and PAUL SCHRAMM 09MPH were among the authors of an interagency federal government report, "A Human Health Perspective on Climate

Change." The colleagues work in the Climate Change Program at the CDC. As part of the "Green Dream Team," they won a GreenGov Presidential Award for their work on the report. Schramm attended the ceremony at the Executive Office Building in Washington, D.C., where the head of the White House Council

A ROLLINS PRESENCE IN JAPAN: Seven graduates and two students got together in Tokyo last August. All are safe following the earthquake and tsunami in March. Of the seven alumni, six work in Japan; the other works for the Minnesota Department of Health. HAJIMI KAMIYA 08MPH sent this photo. Front row, L-R: TARO SHIMIZU 11MPH, KAMIYA, NAOMI SHIMA 07MPH, and TOMOKO FUJII 11MPH. Back row, L-R: NORIKAZU GOTO 08MPH, GO TANAKA 05MPH, TOMOE SHIMADA 07MPH, CHIE NAGATA 10MPH, and EIICHIRO KANDA 10MPH.

on Environmental Quality presented the award. Prudent and Schramm also received individual awards from the director of the National Center for Environmental Health.

IESSICA MADIGAN GROSS 07N 09MSN/MPH and her husband Peter Gross 10B are living in Ghana. Jessica is a public health consultant for the CDC and Emory on two health workforce projects, led by Emory's nursing school, in Kenya and Zimbabwe. Peter serves as the country manager for MicroEnsure. Jessica is a former Americorps volunteer in Atlanta and emergency room nurse at South Fulton Medical Center.

DR. LYDIA L. OGDEN 10G worked at the White House for five months last year. Ogden was detailed by the CDC to the National Economic Council in the Executive Office of the President, where she staffed the National Commission on Fiscal Responsibility and Reform (AKA the debt commission) as a senior health policy adviser. She worked with congressional staff, deficit commission team members, and external experts to craft

proposals to contain health spending while assuring access and quality. Her job at CDC is similar, Ogden writes, but is focused on the "emerging intersection of personal health services (clinical care) and population health services (public health)."

ROULA ABISAMRA 11MPH was featured in a recent segment on WABE, Atlanta's public broadcasting radio station. Roula was a returning contestant in the 41st annual Atlanta Orthographic Meet. She won the written spelling bee in 2010.

Alumni Deaths

LIA NIKKI LASHLEY 06MPH,

24, on Oct. 23, 2008, of kidney failure in Jamaica. She was a second-year medical student at the University of West Indies. Lia also was the niece of Jamaican National Security Minister Tommy Turnquest and the granddaughter of former Governor General Sir Orville Turnquest.

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The Spirit of Public Health

Randall Rollins (left),
Ann Estes Klamon, and
Gary Rollins joined the
RSPH community to
dedicate the Claudia
Nance Rollins Building
last October. For more
photos, see page 8 or
view the slide show at
bit.ly/dedicationcnr.

