

PITT  
iiii PUBLIC HEALTH



Recife ●

**CURA  
ZIKA**

**RESEARCH  
IN TOBAGO**

**STUDENT  
PRACTICA**

*and  
more*

# Contents

## 1 Dean's Message

## 2 Feature Story

### Once Upon this Island

For Clareann Bunker, a life-threatening allergy to lab mice diverted her professional trajectory to a dot in the Caribbean that became an ideal laboratory.

## 6 In Brief

## 12 Cover Story

### Cura Zika

The onset of the Zika crisis marks a confluence of emergency and expertise echoing Pitt's race for an effective polio vaccine in the 1940s and 50s.

## 18 Student Stories

## 20 Alumni Profile

### Rosemarie Ramos

## 22 Alumni News

## **Pitt Public Health Magazine**

### **Executive Editor**

Matthew Borkowski

### **Managing Editor**

Karen Coulter Perkins

### **Writers**

Matthew Borkowski, Sarah McMullen, Christine H. O'Toole, Kelly Sjol

### **Art Director**

Karen Coulter Perkins

### **Photographer, Illustrator**

Karen Coulter Perkins

### **Proofreader**

Kelly Sjol

### **Printing**

We care about the health of the environment, so this magazine is printed on New Leaf Reincarnation paper, made from 100% post-consumer recovered fiber, using vegetable-based inks, by KDC Printing.



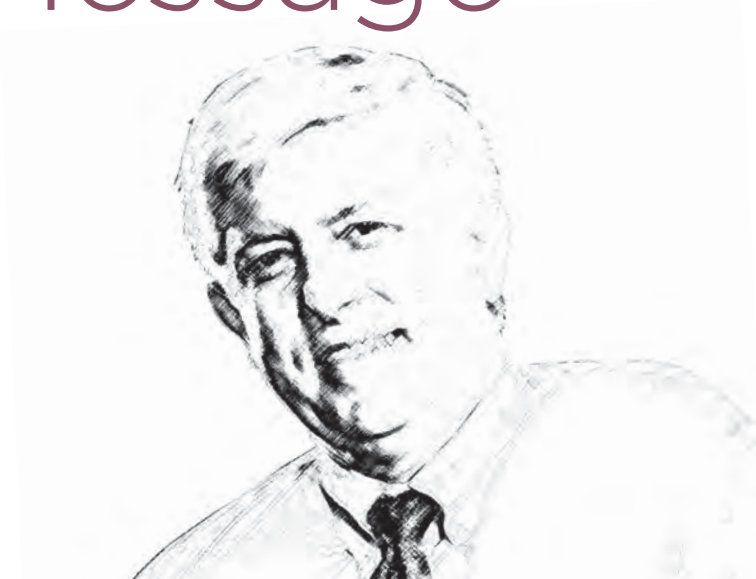
### **Pitt Public Health Magazine**

is published biannually for alumni and friends by the University of Pittsburgh Graduate School of Public Health, A600 Crabtree Hall, 130 DeSoto Street, Pittsburgh, PA 15261; [www.publichealth.pitt.edu](http://www.publichealth.pitt.edu). ©2015, University of Pittsburgh. The magazine staff accepts no responsibility for unsolicited contributions of artwork, photography, or articles. The University is an affirmative action, equal opportunity institution.

For inquiries, feedback, story ideas, or comments, contact [gsphalum@pitt.edu](mailto:gsphalum@pitt.edu).

Connect with us on social media via [www.publichealth.pitt.edu/socialmedia](http://www.publichealth.pitt.edu/socialmedia).

# Dean's Message



**No ivory tower academics, our Pitt Public Health faculty and students have a strong tradition of meeting head on the challenges posed by real-world epidemics.**

Zika poses such a challenge. Years ago, as a new dean, I realized we would need world-class capabilities in vector-borne disease to have a fighting chance in a world where new diseases frequently emerge in tropical areas. So over the past several years, Pitt Public Health has built a strong partnership with Associate Professor Ernesto Marques and the outstanding research unit at Fundação Oswaldo Cruz—Latin America's premier health research institution—in Recife, Brazil. When Zika struck, we already had the vital partnerships and tools in place to respond as well as any research group in the world.

While Congress was debating whether to authorize the \$1.9 billion proposed to fight the virus, we here at Pitt Public Health were taking action: We immediately launched our own response to the

threat. **Cura Zika** is designed to bring together our best minds—including our colleagues in Brazil, the epicenter of the present outbreak—on all aspects of the disease: vaccines, epidemiology, pathogenesis, and computational modeling. Funded by a \$1 million grant from an anonymous donor, we have jump-started six critical new research projects on Zika.

On another global health front, Associate Professor Clareann Bunker has created a valuable body of work on the correlations between prostate cancer and other diseases. Focused intensely on a very small population in Tobago, her longitudinal studies have generated a wealth of data on comorbidities that affect people of African descent.

Between responding to crises and making headlines, our research underlies steady progress toward a healthier world. This issue of our alumni magazine features both **Cura Zika** and the Tobago cancer research, along with research

briefs and a glimpse at how our students are making a difference in

the field during summer experiences. Discover the impact they're having through their local and international partnerships.

Global health *is* public health.

**Donald S. Burke**, dean ●

*Want to know more about the work of Cura Zika? Explore the resources at [www.publichealth.pitt.edu/curazika](http://www.publichealth.pitt.edu/curazika).*

# Once Upon this Island

by *Christine H. O'Toole*

**Clareann Bunker's three decades of work on the Caribbean island of Tobago have helped health professionals diagnose and treat some of the world's highest rates of prostate cancer.**

For a dedicated scientific researcher, the news that she has acquired a life-threatening allergy to lab mice might spell the end of a career. For Clareann Bunker, associate professor of epidemiology, the allergy diverted her professional trajectory to a dot in the Caribbean that became an ideal laboratory.

Since receiving her PhD from Pitt Public Health in 1984, Bunker has been an advisor, mentor, and colleague to dozens of scholars. She has forged a lasting partnership between Pitt Public Health faculty and health officials in Tobago, the smaller and poorer island politically twinned to Trinidad. For the past 20 years, she has studied the relationship of Tobagonian men's high rates of prostate cancer to other medical characteristics. She has followed a cohort of the highly homogenous population—more than 95 percent of whom are of African descent—through adulthood into old age. The trove of data on this uniquely isolated group has allowed other Pitt Public Health researchers to examine the incidence of diabetes and cardiovascular disease among Tobagonian men, as well as gain insights into how bone density and bone health affect them as they age.

In research among Nigerians in Benin City in the early 1990s, Bunker noted high rates of prostate cancer in Africans. Tobago, she realized, could provide an ideal laboratory. In 1997, Bunker enlisted some 3,300 men—40 percent of the island's population—for baseline screenings for

prostate cancer. "The amazing thing was that the cohort was recruited simply by word of mouth," explained Bunker. Despite a lack of health care services on the island, Bunker found a community in Scarborough, Tobago, intensely interested in addressing prostate cancer.

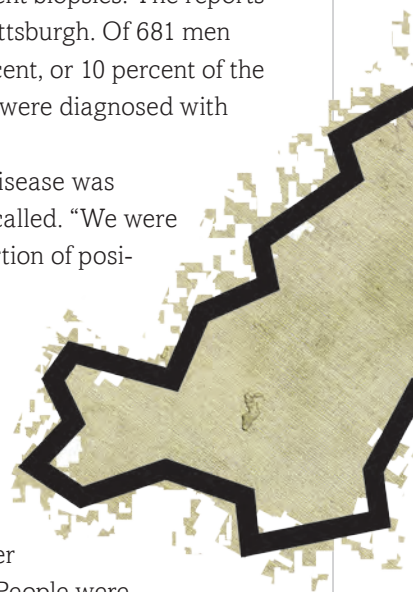
"In Tobago in the mid-90s, there was a lot of prostate cancer. In the U.S. at that time, it really wasn't being talked about. But there, everyone was worried," said Bunker.

Americans of African descent die of prostate cancer at much higher rates than Whites. In Bunker's calculations for Tobagonians in the research cohort, the rate was even higher: 468 per 100,000, compared to U.S. Blacks, (309/100,000), and U.S. Whites, (118/100,000).

Among the members of the cohort, those referred for biopsies for high levels of PSA (prostate-specific antigen) or abnormal rectal exam results underwent biopsies. The reports were faxed back to Pittsburgh. Of 681 men biopsied, 259 (38 percent, or 10 percent of the total 2,484 screened) were diagnosed with prostate cancer.

"The extent of the disease was shocking," Bunker recalled. "We were stunned at the proportion of positive results."

Before the advent of the study, which received 12 years of National Institutes of Health (NIH) funding, the island had no prostate cancer screening program. "People were diagnosed near morbidity, with urinary blockage or other severe symptoms," said Bunker.



Instituting an annual public awareness workshop on the disease brought Pittsburgh experts to the island. "We had lots of media exposure: TV and radio and local and national newspapers," she recalls. "In fact, there's one television program on the problem that's still running, 15 years later."

Awareness alone couldn't solve the bigger problem of scarce resources. "We made a huge dent in early diagnosis. However, we couldn't make a dent in how early treatment was provided, because there wasn't any. In fact, there was basically no treatment for prostate cancer in the southern Caribbean," Bunker explained.



**Scarborough**

After an urgent meeting in Pittsburgh in 2001, Pitt urologists joined the effort. Joel Nelson, the Frederic N. Schwentker Professor and chairman of the Department of Urology at the School of Medicine, brought chief residents, surgical nurses, and staff to the island for the public workshop. The group performed free radical prostatectomies



*A downtown Scarborough street*

*Jeffrey Carr, Vanderbilt radiologist, who has often assisted with our CT imaging protocols at the Tobago Health Studies office*

*Clareann Bunker; Pamela Joseph, nurse and Tobago Study staff; and Iva Miljkovic, Pitt epidemiologist and primary investigator*



during each stay. Over nine years, the specialists donated their services for 90 procedures and offered training for local urologists.

Another valued partner was a local expert. “We have a tremendous, committed partner there in Alan Patrick, who did his thesis on prostate cancer. He is beloved on Tobago—despite being Trinidadian. Everyone knows him—he’s been working there since the late 70s. He’s had a weekly practice, flying in every Wednesday for the past 40 years,” said Bunker, who has made more than 100 trips to the island herself. “The joke is, you only get sick on Wednesdays, when he’s on the island.”

Slowly, local health services improved. A consulting urologist has joined the staff at the hospital, which has also opened an oncology clinic. Anti-androgen medications are available, along with screening tests. Surgery and focused radiation are available on Trinidad, and a urology residency is now offered at the country’s medical school. And Pitt research continues to find corollaries to the island’s unusual disease risks.

### **Correlating Risks**

As data from the prostate study accumulated, Pitt researchers applied it to understand additional health questions. People with African ancestry have the highest bone density in the world. One research project compared hip bone mineral density (BMD) measurements between Tobagonians with prostate cancer and those without. Results showed a clear association of higher BMDs among older cancer patients. In men aged 60-79, prostate cancer risk was two-fold higher in the highest BMD quartile, compared to the lowest.

Joseph Zmuda, associate professor of human genetics and epidemiology, characterizes the





genetics of osteoporosis in different ethnic and racial groups. “The Tobago results were surprising and interesting,” said Zmuda. “Why were these men protected from osteoporosis?” As he and his colleagues pursue findings among the original cohort, he said, the evolving data “is becoming more of a study of aging.”

Zmuda’s NIH-funded research provided Scarborough Hospital with its first CT scanner, and colleague Jane Cauley, distinguished professor of epidemiology and associate dean for research, helped the researchers procure DXA (dual x-ray absorptiometry) equipment to study body composition. Both Cauley and Professor Emeritus Lewis Kuller have coauthored papers with Bunker on aspects of cardiovascular disease and bone density.

“I always wanted her to write a book on third world epidemiology,” said Cauley. Bunker has set up well-designed epidemiologic studies on a shoestring budget in Benin, Nigeria, Tobago, and in Hyderabad, India. Each of the studies had one initial focus: hypertension in Nigeria, prostate cancer in Tobago, and a birth cohort study in India. Through her tireless efforts, all studies were expanded to include other outcomes.

### Expanding the work

Several of Bunker’s former students have further extended the work of the Prostate Survey to understand other health risks for Tobagonians. Iva Miljkovic-Gacic, assistant professor of epidemiology, examines body composition for clues

to diabetes. She has found that Tobagonian men, like other Afro-Caribbeans, are relatively lean and physically active. However, a high level of fat in their skeletal muscles distinguishes them. The

stored fat provides bursts of energy in high-exertion activities like sprinting. Their unique body composition allows them to excel in track and field competitions, where

**“The extent of prostate cancer was shocking. We were stunned at the proportion of positive results.”**

they are often world champions. In fact, two Tobagonians recently competed for their country’s 2016 Olympics team. “We see lots of fat in muscle, but little intra-abdominal or liver fat. The men have favorable lipoproteins. So, what are the protective factors in that composition?” asks Miljkovic-Gacic. She is focusing on 1,000 men recruited from the prostate cohort.

Allison L. Kuipers, visiting assistant professor of epidemiology, looks at markers for cardiovascular disease on the island. She has followed the men’s cohort for insights into their heart health. “In the group, we see lower rates of heart attacks than in Whites, but higher rates of stroke and hypertension,” said Kuipers. “Participants are aware that heart disease is common, that it’s a big problem. They’re eager to get the heart scans” offered in Kuipers’ study.

Bunker retired from the Pitt Public Health faculty in August. Her post-retirement plans include yet more travel. Supported by an NIH Fogarty grant, she will continue a project to train clinicians in a rural medical school outside Hyderabad in public health population-based implementation and intervention studies. ●

# In Brief

by Kelly Sjol

## Surgery Success



In the first three years after undergoing bariatric surgery, most severely obese patients experience less pain and better physical function. This according to the results of a Pitt Public Health study led by **Wendy King**, funded by the National Institutes of Health, and reported in the *Journal of the American Medical Association* that followed 2,221 patient participants in the Longitudinal Assessment of Bariatric Surgery-2. After one year, 58 percent reported less pain and 77 percent better physical function. These percentages decreased three years post surgery to 49 and 70 percent, respectively; however, over the course of the three years, around 60 percent of patients said their usual walking speed increased and, among those with severe knee and hip pain or disability, approximately three-quarters experienced less pain and better

mobility around these joints.

The study also revealed that such characteristics as younger age, male sex, higher income, less obesity, greater weight loss, and fewer depressive symptoms led to a higher likelihood of improvement in pain and mobility in the three years after surgery. All of these findings suggest that while improvement in pain and physical function is common following bariatric surgery, says King, “some patients continue to have significant pain and disability. This data can help patients and clinicians develop realistic expectations regarding the impact of bariatric surgery on pain and disability.” ●

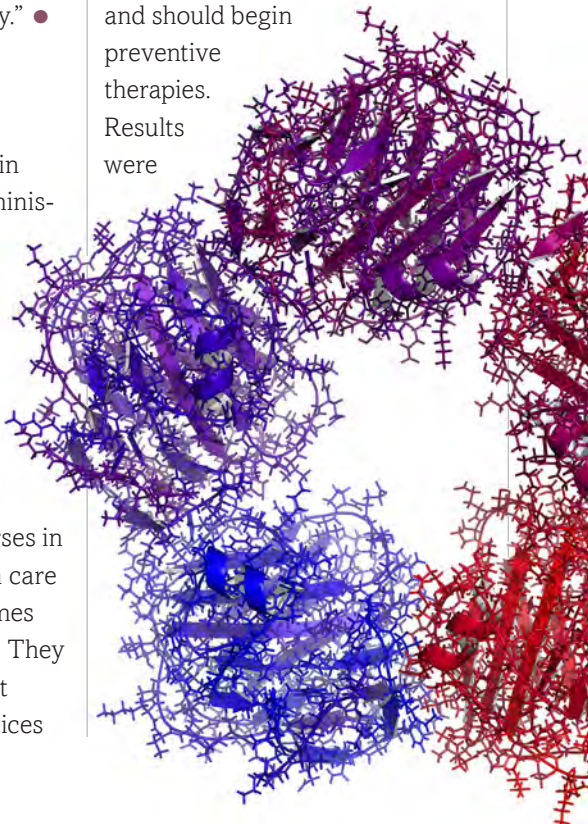
## Joint MHA/MBA Launched

Developing future leaders in health management and administration, the newly launched joint MHA/MBA combines the strengths of Pitt Public Health and the Joseph M. Katz Graduate School of Business. Over three years, students gain key business skills and specialized knowledge through a blend of courses in management, finance, health care quality improvement, outcomes measurement, and analytics. They also complete a management residency in health care services

or health-related practice. Learn more at [www.publichealth.pitt.edu/mha-mba](http://www.publichealth.pitt.edu/mha-mba). ●

## Predictive Protein

A joint study conducted by Pitt Public Health and the Pitt School of Medicine has found that middle-aged Black women, regardless of weight, have higher levels of a certain protein associated with a predictor of heart disease in their blood than their White counterparts. This suggests routine blood testing of Black menopausal women may determine whether they are at increased risk of heart disease and should begin preventive therapies. Results were





published in the journal *Menopause*.

Researchers studied blood levels of five biomarkers for inflammation—all associated with coronary artery calcification, a predictor of heart disease—in 372 Black and White women participating in the Study of Women’s Health Across the Nation. High body mass index (BMI) was a key factor linking the elevated inflammation biomarkers with coronary artery calcification; however, researchers found no link between BMI and coronary artery calcification in Black women who had higher levels of one particular biomarker in their blood: C-reactive protein. These women were more likely to have coronary artery calcification than their White counterparts—in fact, those with coronary artery calcification had an average level of

C-reactive protein in their blood that was almost double that of Whites.

**Samar El**

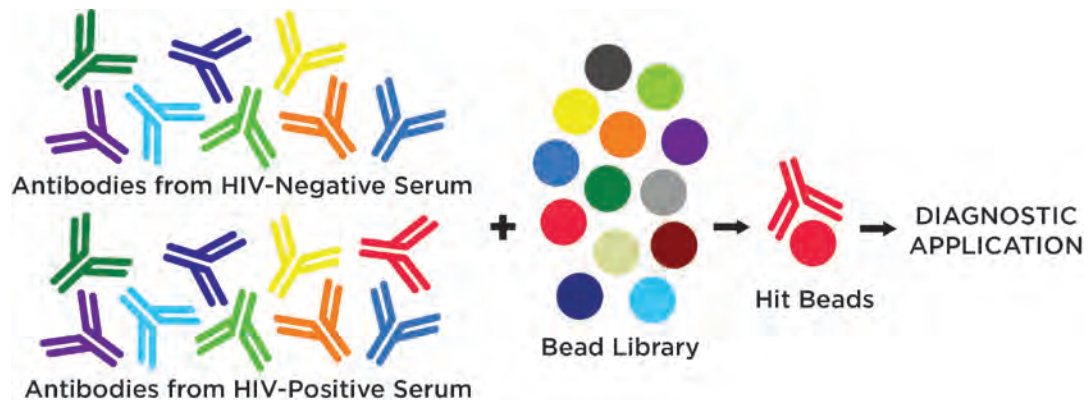
**Khoudary**, senior author said, “Future research should build on our findings regarding Black women and C-reactive protein by testing similar associations over time, which could potentially yield interventions that can help these women avoid developing heart disease.” ●

### Drop Test

A million to one. It could describe the odds of diagnosing a condition without a known microbial cause, such as a new epidemic, certain type of cancer, or autoimmune disease. But to Dean **Donald S. Burke** and his team of Pitt Public Health researchers, it represents the

to match the corresponding shape on an antibody, that antibody will connect to it, and the researcher can study the resulting shape.

After chemically generating a massive library of random molecular shapes, Burke’s team took blood samples from HIV-infected and non-infected patients and screened a million of the



possible future of diagnostic testing for these conditions.

Rather than focus on the antigens, which may or may not be known, researchers examined the antibodies—specifically, the unique shapes they form when they attach themselves like puzzle pieces to invading cells. Using a technique pioneered by coauthor Thomas Kodadek, they synthesized millions of molecular shapes hooked onto microscopic plastic beads, called peptoids. Peptoids aren’t organic, but if one happens

shapes to find only the ones that bound to the antibodies present in the HIV-infected patients. They then resynthesized the HIV-antibody-targeting peptoids en masse and tested them by screening hundreds of additional samples. The test was able to distinguish between samples of HIV-positive and HIV-negative blood with a high degree of accuracy.

“This means that we may be able to take a single drop of blood from a patient and detect antibodies to all manner of infections, cancers,

or other conditions,” said Burke. Results of the study, funded by the Bill & Melinda Gates Foundation, were published in the *Journal of Immunological Methods*. ●

### Bachelor+Master in Five

Intense interest from Pitt undergraduates in global and public health inspired an expansion of the school’s accelerated 3+2 early admission program for outstanding undergraduates. Qualified undergraduates may apply in their junior year to begin graduate coursework as seniors. Students complete both their bachelor’s and master’s degrees in just five years ([www.publichealth.pitt.edu/3-2](http://www.publichealth.pitt.edu/3-2)). ●

### Seniors Shape Up

For many older adults, losing weight is a losing battle. But participants in the Pitt Public Health Center

for Aging and Population Health (CAPH)’s Mobility and Vitality Lifestyle Program (MOVE UP) are winning by combining counting calories and watching portion sizes with exercising. They’re learning that by living a healthy lifestyle, they can eat the foods they love and still lose weight.

“The goal is for people to lose weight in as healthy a way as possible. So it’s not simply about not eating—It’s about a healthy lifestyle,”

**Anne Newman**, CAPH director and principal investigator for the study, told the *Pittsburgh Post-Gazette*.

MOVE UP is an evidence-based weight management intervention

program for men and women ages 60–75 with a body mass index (BMI) of between 27 and 45 (30 or above is considered obese). As of July 2016, 11 groups are meeting at sites throughout Allegheny County with 14 more to be added to total about 250 participants. The program lasts 13 months. Group sessions meet weekly during the first five months, bimonthly for the next four months, and monthly for the final four months.

Participants learn about calorie control, nutrition, physical activity and exercise, and safety, maintaining a log that they hand in at each meeting. They have a physical activity goal of 50 minutes per week to start, and are encouraged to gradually, safely increase that to 175 minutes per week.

CAPH is one of 26 prevention research centers nationwide funded by the federal Centers for Disease Control and Prevention to combat chronic disease. For more information about MOVE UP or any CAPH programs, visit [www.caph.pitt.edu](http://www.caph.pitt.edu). ●

### Heavy Traffic(king)

Cited by CBS News, the Huffington Post, and NPR among others, a Pitt Public Health study has found that although drug-





## DRUG DEATHS

Drug overdose is the leading cause of accidental death in the United States, and Pennsylvania ranks in the top 20 states for overdose mortality. More alarmingly, overdose is the number one cause of premature mortality in Pennsylvania (as measured by years of life lost at age 65). Our researchers have completed the first-ever analysis of accidental poisoning death rates in Pennsylvania, 1979 to 2014, relying on the Mortality Information and Research Analytics (MOIRA) system, a repository and retrieval system for detailed death data from the National Center for Health Statistics developed at the school and named for the Fates of Greek mythology. Results were published in the online journal PLOS ONE.

“Pitt Public Health has the most comprehensive mortality database in the nation, which can be easily cross-referenced with U.S. Census data to shed light on myriad public health issues,” said coauthor, Dean **Donald S. Burke**. “Our latest analysis reveals that drug overdoses are the biggest problem facing our nation in terms of years of life lost—more than car crashes, or cancer, or HIV—and we as a society need to work together to solve it.”

This analysis, as well as another led by **Jeanine Buchanich** that looked at nationwide mortality rates, produced the following insights that could be used to guide prevention and drug intervention efforts:

- Drug-overdose deaths in Pennsylvania increased 14-fold since 1979, with rates climbing especially fast in relatively young White women.
- Since 1979, death rates nationwide increased for all age groups, with the smallest rate of growth in those older than 65 and the largest in 45- to 54-year-olds.
- The 35- to 44-year-old age group had the greatest increase in rate of overdose deaths in Pennsylvania, growing almost 22-fold since 1979, but 25- to 34-year-olds seem to be overtaking them, with the highest overdose death rate in 2014.
- Nationwide in 1979, overdose deaths occurred most frequently among 25- to 34-year-olds and Blacks; in 2014, rates were highest among 45- to 54-year-olds and Whites.
- In Pennsylvania, the overdose death rate for White men peaks between ages 25 and 44; for Black men, it peaks between ages 45 and 65, indicating different racial patterns in drug use.
- In Pennsylvania, accidental overdose rates are higher in men than in women; however, women saw a more dramatic increase, particularly from 2010 to 2014. High overdose death rates for women also spanned a longer age range of 25 to 54 for White women and 35 to 64 for Black women, compared to the U.S. average peak between ages 45 to 54.
- Nationwide, deaths due to overdose in women began increasing in the mid-1990s and increased dramatically in 2002; for men, the rates began climbing in the mid-1980s with a more rapid increase also beginning in 2002.
- Nationwide, mortality rates were slightly higher in urban counties than rural counties. ■

overdose mortality rates in the United States have increased an average of 6.7 percent per year between 1979 and 2014, death rates have held relatively steady in some border counties in the Midwest, California, and Texas.

What do these areas have in common? They are known to have high levels of drug trafficking.

What does this mean? Drugs are passing *through* these areas without affecting the death rates of residents. This is a problem because these counties have been identified as high drug-trafficking areas, and so receive coordinated federal law enforcement resources as part of the High Intensity Drug Trafficking Areas program. However, other counties, primarily in Michigan, Ohio, Pennsylvania, New Jersey, New York, and New England, that saw the largest increases in overdose death rates during the study period—70-fold in some cases—are *not* high drug trafficking areas and therefore don't receive the needed resources.

“While resources are justifiably being targeted to the High Intensity Drug Trafficking Areas, they must also be allocated to counties outside those areas with rapidly increasing and currently high drug overdose rates,” said the study's lead author

**Jeanine Buchanich**, who plans to continue this research with funding from the Pitt Public Health opioid pilot grant program. The study relied on data from the Mortality and Population Data System, a unique repository and retrieval system for detailed death data from the National Center for Health Statistics, housed at Pitt Public Health, and results were published in the April 13 issue of *Preventative Medicine*.

Find out more at [www.publ-health.pitt.edu/opioid](http://www.publ-health.pitt.edu/opioid). ●

## Women Representing Women



In May, Pitt Public Health PhD candidate **Chelsea Pallatino** (BCHS), along with Pitt graduate students in political science, sociology, and public administration, participated in an international working group with the United Nations Development

Programme (UNDP) Global Initiative on Gender Equality in Public Administration (GEPA). The group presented on how countries are tracking women's representation in public administration and civil service, gender-related policies such as those focusing on maternity leave, and gender quotas in other areas of government.

Pallatino continued her work over the summer, connecting with current and former working group participants in Bangkok, Thailand; Amman, Jordan; and Istanbul, Turkey. Their goal was to explore links between women's leadership and decision-making roles in public institutions and young women's participation and engagement in political processes.

"It was very rewarding to represent the University of Pittsburgh at the United Nations this summer," Pallatino said. "I hope to help UNDP to build on this critical research on global gender equality in public administration, and to use the findings to develop evidence-based programs and policies to ensure women are represented in leadership and decision-making roles and their needs are met across the lifespan."

GSPIA's Ford Center and the Center for Global Health provided support for Pallatino over the summer. ●



## Hot Flashes

Most women will get hot flashes or night sweats at some point in their lives. However, when these symptoms occur and how long they last can vary dramatically among women. New findings published in the journal *Menopause* show that women fit into four distinct groups when it comes to getting hot flashes and night sweats, with potential ramifications for therapy and prevention of future health conditions

Pitt psychiatry professor and epidemiologist at Pitt Public Health, **Rebecca Thurston**, and her colleagues followed 1,455 participants enrolled in the Study of Women's Health Across the Nation (SWAN) for an average of 15 years and identified characteristics that predisposed them to certain trajectories for getting hot flashes and night sweats—including consistently high (or low) chances of having symptoms and either early (or late) symptom onset. Said Thurston "We now know that these symptoms persist for far longer—typically seven to 10 years—and occur at different times for different women."

"It's fascinating that we can distinguish

these unique patterns and then pinpoint specific characteristics associated with each,” said Pitt co-author **Maria M. Brooks**, principal investigator of the coordinating center for SWAN. “It indicates that there’s something going on beyond hot flashes and night sweats being a passing nuisance. Depending on which category a woman falls into, there may be important implications regarding her health.” ●



### Somoan Obesity

As recently published in *Nature Genetics*, **Ryan Minster**, **Daniel Weeks**, and their team found that almost half of Samoans carry a particular variant of a gene called *CREBRF*, which increases obesity risk while decreasing diabetes risk—making it the strongest genetic predictor of body weight discovered in humans so far. The otherwise rare variant was identified through genomic analysis of more than 3,000 people in Samoa and may have evolved during their history of colonizing the South Pacific. “They had to endure voyages between islands and subsequently survive on those islands,” says Minster. Collaborators including molecular geneticist **Zsolt Urban** and endocrinologist Erin Kershaw used mouse fat cells in laboratory models to determine that this “thrifty” gene variant works through promoting more efficient storage of fat. ●

### Vaccine Passions

The 2016 Porter Prize was awarded to physician, educator, virologist and author Paul A. Offit, in recognition of his contribu-

tions to health promotion and disease prevention. View Offit’s impassioned address “Unvaccinated: The Strange History of Vaccine Exemptions” on the school’s YouTube channel or at [www.publichealth.pitt.edu/porterprize](http://www.publichealth.pitt.edu/porterprize). ●

### Dean’s Scholars

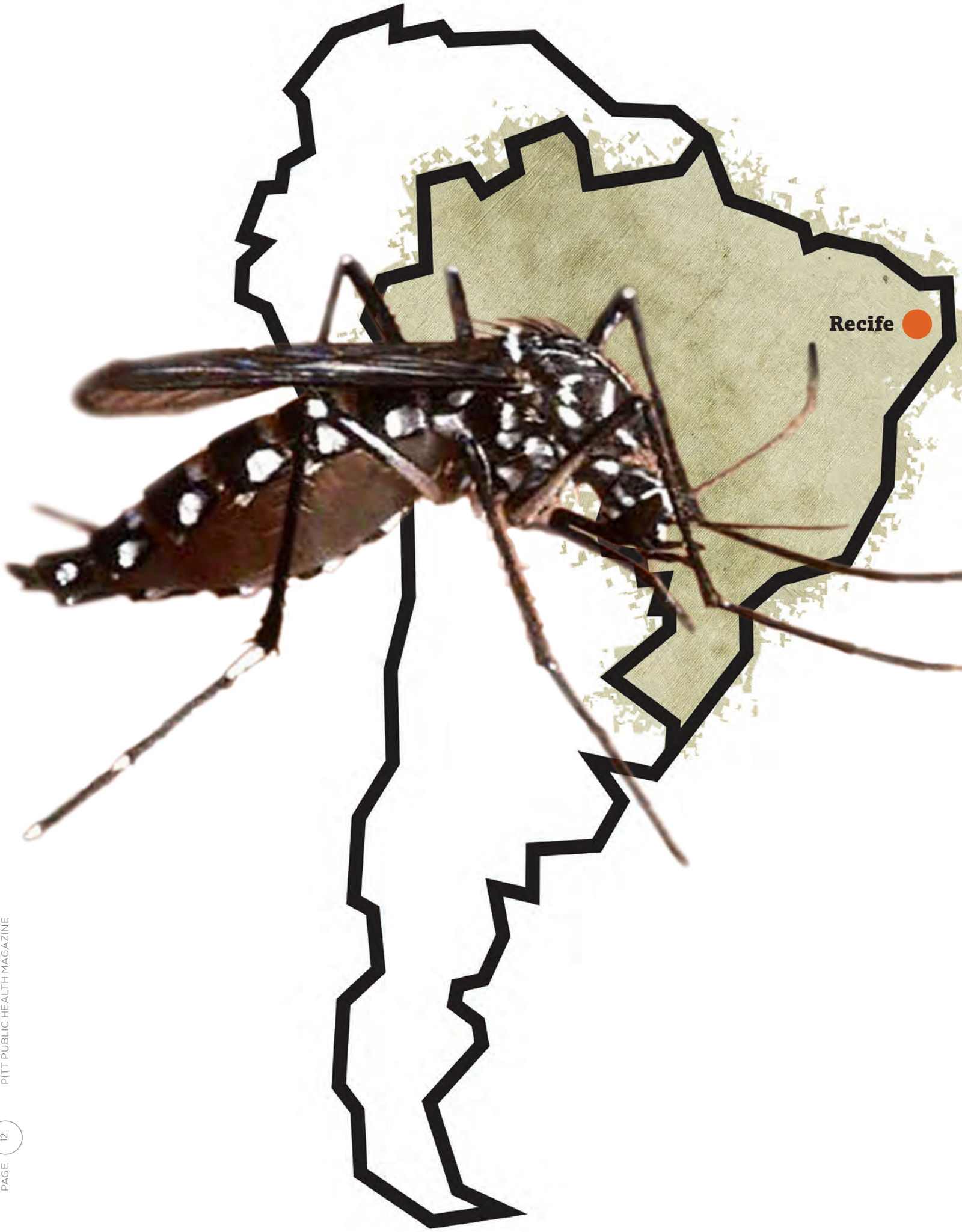
Pitt Public Health’s incoming class will include seven Dean’s Public Health Scholars. This recently established program supports

outstanding incoming master’s students from each depart-

ment who receive a 50 percent tuition scholarship to support up to two years of full-time graduate studies:

- Amanda Everman** (HUGEN ’18) from Penn State University
- Kelsea LaSorda** (EPI ’18) from Vanderbilt University
- Helen Ann Lawless** (BCHS ’18) from Pitt
- Peter Lewellen** (HPM ’18) from Duke University
- Sarah Sanders** (BCHS ’18) from Temple University
- Joanna Shaw** (IDM ’18) from New York University
- Simon Yohannes** (MMPH ’17) from Vanderbilt University ●

*Get to know a bit more about these scholars, and find out additional details about this year’s incoming class at [www.publichealth.pitt.edu/scholars](http://www.publichealth.pitt.edu/scholars).*



Recife ●

# Cura Zika

by Christine H. O'Toole

On March 29, 2016, Allegheny County announced its first confirmed case of the Zika virus, thousands of miles from the tropical regions where mosquito-born illnesses have long been a scourge. As the virus migrated northward from South America to the American South, a drumbeat of ominous media reports thumped its frighteningly swift progress. An overlooked and seemingly innocuous cousin of the dengue virus made a stealth attack, with consequences both political and medical.

The onset of the Zika crisis, with its impact on sexually active adults, pregnant women, and

neonates, marks a confluence of emergency and expertise that echoes Pitt's work on an effective polio vaccine in the 1940s. As the world clamors once again for a public health response, the school has marshaled researchers both at

the epicenter of the crisis in northeastern Brazil and in Pittsburgh to lead the charge against a disease that poses as big a challenge as AIDS/HIV, West Nile virus, and rubella combined.

**Cura Zika**, an initiative that literally commands "cure Zika" in Spanish and Portuguese, aims to outrun the fast-moving epidemic through both detection and prevention.

"We have the tools in place to respond," said Donald Burke, associate vice chancellor, dean, and director of the Center for Global Health.

While Congress weighed President Obama's request for \$1.9 billion in emergency federal funding for the epidemic, the school moved ahead, mobilizing work with the University's Center for Vaccine Research and its Center for Global Health, virologists, epidemiologists, and scholars in computational modeling.

The initiative has attracted \$1 million pledged in support since its announcement in May. "We have a deep understanding of dengue, a closely related virus," Burke added, "and we've also launched our own grant program to encourage Pittsburgh

biomedical scientists to work with our colleagues at FIOCRUZ, the Brazilian Ministry of Health's Oswaldo Cruz Foundation." The century-old scientific institution is Latin America's premier health research institution.

Embodying this alliance between

North and South America is a curly-haired 48-year-old Brazilian who has been a member of the school's faculty since 2009. Ernesto T. A. Marques Jr., an associate professor in the Department of Infectious Diseases and Microbiology at Pitt Public Health, holds an appointment at FIOCRUZ. He is also a native of the epicenter of the current Zika epidemic: Recife, in the northeastern state of Pernambuco.

Marques, who received his medical degree in his home country in 1993, had already embarked on

**The onset of the Zika crisis, with its impact on sexually active adults, pregnant women, and neonates, marks a confluence of emergency and expertise echoing Pitt's race for an effective polio vaccine in the 1940s and 50s.**

his doctoral studies at Johns Hopkins University when his mother in Recife was infected with dengue fever. Then completing a dissertation on schistosomiasis, a parasitic tropical disease affecting the liver, he became intrigued by the vector-borne disease. His focus shifted to liver-related flaviviruses. His translational research includes the development of preventive and therapeutic immunotherapies and diagnostic tools for epidemiological

research, particularly in HIV, yellow fever, and dengue.

By the time Marques was born in 1968, his country—like most of South and

Central America—had completely eradicated dengue. Discoveries by a handful of public health heroes like William Gorgas, Walter Reed in Cuba, and Oswaldo Cruz

*Watch the complete video of the May 2016 Cura Zika Symposium at [tinyurl.com/ztdksno](http://tinyurl.com/ztdksno).*

in Rio de Janeiro had convinced the Rockefeller Foundation to make a decades-long investment in combatting the *Aedes aegypti* mosquito. The advent of the powerful insecticide DDT in the mid 1940s capped the effort. It seemed that a nemesis first reported in the New World in 1635 was finally beaten.

Dean Burke ruefully calls the continent's mid-century mosquito control programs "victims of their own success. The disease went away," he explained. "Yellow fever disappeared. And what happened was that over the past couple decades, there was no further serious investment in vector-borne disease control, whereas a generation ago,

there was. It's something we see in public health all the time: When there's an obvious problem, resources are dedicated. When the problem goes away, resources are withdrawn. Inevitably the problem returns, because conditions are still there."

The Zika virus was first identified in a rhesus monkey in Entebbe, Uganda, in 1947. But human victims were scarce until 2007. An outbreak

on Yap Island in Micronesia was the first time the disease was detected outside Africa and Asia. Seven years later, humans were infected in French Polynesia.

The virus probably arrived in Brazil in 2013 during the Confederation Cup, when Tahiti's soccer team played against other teams in a few Brazilian cities for large audiences. Zika's low-key symptoms—mild rash, fever, and red eyes—kept it from being identified for almost a year. By then, the outbreak had already spread. Recife was particularly hard-hit. The impoverished city of 3.7 million claimed one-third of the country's cases—some 2,000 victims. By the beginning of 2016, a spike in cases of newborn microcephaly was linked to Zika infections in pregnant mothers. Sexual transmission of the virus was confirmed, and neurological conditions including Guillaine-Barre Syndrome were associated with infection. Zika had mutated into virulent form.

## Solutions

**Cura Zika.** Pitt Public Health's response to the crisis, was launched with an international

**“By November 2015, Brazil had seen a 20-fold increase in birth defects. That rang the bell: the house is on fire.”**



on-campus symposium on May 5. The program included an overview from Burke, whose 35 years of research on dengue has made him a global leader in the field of mosquito-borne diseases. Celina Turchi Martelli, senior public health scientist at Fundação Oswaldo Cruz, presented an energetic review of the disease's epidemiology in Brazil in which she emphasized the urgent need for a coordinated response.

"No flavivirus has (previously) been shown to cause birth defects in humans. This is something new," she told the audience.

"And no birth defects were noted among the previous cases in the Pacific islands. Why not? Normally one percent of fetuses and infants would have had microcephaly. By November 2015, Brazil had seen a 20-fold increase in birth defects. That rang the bell: The house was on fire. But we still don't have commercial lab tests" for diagnosis.

Marques, whose team has developed the first effective assay for diagnosing Zika, followed with a review of his lab's ongoing work on the links between dengue's four serotypes and Zika.



*At the 2016 Cura Zika Symposium, Brazilian researchers join Pitt colleagues to share their early results and an overview of the epidemic. Pictured (left to right) are Donald Burke, Ernesto Marques, Celina Martelli, Yoel Sadovsky, and Jennifer Adibi.*

Their research, published *Science*, found different levels of dengue antibodies among those infected with the strains of the virus. Prior infection with dengue 3 was related to antibody-mediated Zika-enhancing activity. By contrast, serum from pregnant women showed that immunity to dengue 3 and 4 enhanced Zika infection.

Marques' lab is now developing a DNA vaccine for Zika. Among the challenges in creating an effective vaccine, he emphasized, is

*Find the latest news about the **Cura Zika** initiative, including results of ongoing research, at [www.publichealth.pitt.edu/curazika](http://www.publichealth.pitt.edu/curazika). And then look for a related story in an upcoming issue of Pitt Magazine.*

understanding the mechanism for neurological disease in the virus. Microcephaly is only the first symptom of what may be a series of disorders that Zika patients may face over a lifetime. To

prevent congenital disease, a vaccine would have to be administered to millions of people; therefore, he said, researchers must define whether to create a vaccine that would prevent the disease altogether, or prevent infection of the fetus. A vaccine might also be required to prevent sexual transmission.

Jennifer Adibi, assistant professor of epidemiology at Pitt Public Health, is also a member in the School of Medicine's faculty of obstetrics, gynecology, and reproductive sciences. Her ongoing investigation of environmental factors affecting the placenta and fetal brain development complements the virologic approach in **Cura Zika**.

Focusing on the transmission of the disease between a pregnant woman and her child, Adibi addressed the role of the placenta. Zika is unique among its related viruses because it crosses blood-brain and placental barriers to invade the nervous system of developing fetuses. Adibi reminded the audience that in the past, the children of mothers infected with the rubella virus were affected only in the first trimester of gestation; after 12 weeks, the fetus gained complete protection from the disease. Understanding the window in which the fetus contracts the virus, the mechanisms by which it is transmitted through the placenta, and the possible molecular changes that disrupt cues to fetal brain development are

important parts of the problem, she said.

Pitt Public Health's expertise in computational modeling has already been deployed to understand regional and global patterns of virus transmission. Researchers at MIDAS (Models of Infectious Disease Agent Study) recently published findings in the Proceedings of the National Academy of Sciences linking large dengue epidemics to unusually high temperatures during El Niño events.

The researchers collected and analyzed 18 years of monthly dengue surveillance reports on a total of 3.5 million reported cases across eight countries in Southeast Asia. The big data approach yielded clear patterns in dengue transmission during temperature spikes. MIDAS has also worked with international researchers interested in forecasting how introducing genetically modified mosquitoes could inhibit the spread of Zika, as has been done in dengue studies.

On the front lines of the battle in both his Brazilian homeland and Pittsburgh, Marques welcomes the new approaches. "In terms of global disease surveillance, we're at the same point as we were after World War II," he said. "We do it in electronic form rather than on paper, but it's still just counting cases. There are so many better technologies available now."

Burke agreed. "Work on vaccines, diagnostics, epidemiology, and modeling—they all fit together," he said. "The more synergy you have between different disciplinary approaches, the stronger each of those approaches is." In the fight against Zika, strength and speed may turn the tide. ●



# CuraZika

## PILOT GRANTS

The *Cura Zika* scientific review committee announced the selection of six top proposals for immediate funding through the 2016 *Cura Zika* Pilot Grant Program. Research work is currently under way on these projects, and findings will be presented in fall 2017.



### **Probing Zika's Impact on first Trimester Placental Interferons**

*Jennifer J. Adibi, assistant professor of epidemiology, Pitt Public Health*



### **Mapping Zika Virus NS1 Epitopes Through Engineered Antigens**

*Roberto D. Lins, research scientist, Aggeu Magalhaes Research Center, FIOCRUZ*



### **Modeling Zika Virus Infection of Dendritic Cells Within Pre-existing Flavivirus Cellular Immunity**

*Robbie B. Mailliard, assistant professor of infectious diseases and microbiology, Pitt Public Health*



### **High Performance Immunoassay to Detect Zika Virus Exposures in Pregnant Women and General Population**

*Eduardo Nascimento, research assistant professor of infectious diseases and microbiology, FIOCRUZ and Pitt Public Health*



### **Modeling Zika Virus Infections Using Human iPSC-derived Cells**

*Vishwajit L. Nimgaonkar, professor of psychiatry, Pitt School of Medicine*



### **Engineering and Efficacy Evaluation of a DNA Vaccine Against Zika Virus**

*Isabelle Viana, postdoctoral associate, infectious diseases and microbiology, FIOCRUZ and Pitt Public Health*

# Student Stories

by Kelly Sjol



Each year, master's and doctoral students practice applying classroom learning to real-world public health settings. This on-the-job experiential learning can range from 200 to 1,000 hours and may be called a practicum, internship, field placement, or residency.

With guidance from a faculty member and an on-site preceptor, students work at a variety of sites, including nonprofit organizations, hospitals, and corporations, exposing them to professional settings and contacts, enhancing valuable skills, and leading to more informed career decision making—and sometimes a job offer.

Here are recent Pitt Public Health field experiences from a few of our students.

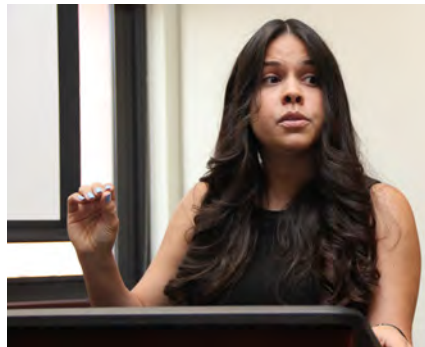
**Haylee Andrews** (EPI '17) traveled to Kigali, Rwanda, over the summer to intern with Life for a Child (LFAC) under Professor Trevor Orchard. LFAC partners with the Rwanda Diabetes Association (RDA) to provide insulin and syringes, diabetes educa-

tion, HbA1c testing, and blood glucose monitoring to youth with type 1 diabetes. Andrews compared participant files with database records and later traveled with two RDA nurses to hospitals around the country to meet with program participants for their quarterly check-ups. "After traveling to Rwanda and having such a good experience, I've decided that I would like to eventually work internationally in a global health-related career, so I would say that my internship in Rwanda was definitely a pivotal event in my life."

**Joel Lowery** (IDM '17), a participant in the Allegheny County Health Department's Pittsburgh Summer Institute (ACHD PSI), assisted in conducting its annual surveillance of West Nile Virus (WNV) in order to make informed decisions on vector control related to mosquitoes. In addition to WNV, the team monitored *Aedes albopictus*, a possible mosquito vector for the Zika virus. Lowery was responsible for setting

traps, entering data, and shipping samples to the Pennsylvania Department of Environmental Protection for testing. From his experience he took away a better insider understanding of how health departments operate and is considering pursuing a position in vector control. Lowery also appreciated the opportunity to confirm what many of his Pitt Public Health professors stressed during his first year: the importance of backing up public health measures with evidence. "I got a first-hand look at this with my project."

With support from a field research grant, **Lycia Tramujas Vasconcellos Neumann** (BCHS '19) returned to her home country to conduct fieldwork toward her DrPH studies. Titled "The Role of Community Support for Healthy Aging: A Study with Low-Income, Community-Dwelling Seniors in Brazil," her project is an observational cross-sectional research



study in cooperation with Pastoral da Pessoa Idosa (PPI), the country’s only national organization dedicated to supporting seniors. Neumann, who plans to publish and present her work as well as share it with PPI, used qualitative methods such as focus groups and key informant interviews to explore perceptions of community volunteers, seniors, and experts in aging across the country.

ACHD PSI participant **Samantha Rodriguez** (IDM ’16) helped to plan, execute, and review the county’s Raccoon Oral Rabies Vaccination (ORV) program, as well as assisted with ORV distribution. This year’s was the largest hand-baiting effort since the program’s inception 14 years ago; during this period, the county’s population of rabid raccoons has been reduced by 77 percent. Rodriguez, whose work was praised by her ACHD colleagues, took full advantage of her internship. In addition to working with the ORV program,

she went on housing and building inspections, spent a day with a public health nurse, and made many connections. “Most importantly,” she says, “I got a tour of the microbiology laboratory and, after a long process, was offered a job as a public health microbiologist, which has been my career goal for years.”

To fulfill the MHA program’s residency requirement, **Mario “Mark” Scarpinato** (HPM ’17) planned to spend the summer working with Allegheny Health Network (AHN); however, he’s now been asked to continue working at Allegheny General Hospital through the coming school year. Working in corporate finance enables Scarpinato to develop system-wide insights into how the finances of major health systems operate. “I chose to work as a financial resident to further my understanding of finance,” he says. “I have always been interested in numbers, and this residency gave me the opportunity to work with

numbers and to help move AHN to financial stability.”

**Kristina Wint** (BCHS ’17) interned this summer at Community Human Services (CHS) in Oakland as part of the Bridging the Gaps program, in which students work directly with underserved populations to better understand their health needs. Wint helped to set up the

CHS food pantry, assisted customers, and partnered

*Learn more about students and their practica experiences at [www.publi-health.pitt.edu/internships](http://www.publi-health.pitt.edu/internships).*

on launching a photo-journaling project that will both document customers’ lived experiences and serve to improve food pantry operations. “Both CHS and I were learning from each other, helping each other,” she says. “My time at CHS taught me that small interventions make a world of difference—that by providing food or a home, and ultimately both, you can start the process of completely changing a person’s life and their entire well-being.” ●

# Alumni Profile: Ros

by Kelly Sjol

**My positive experience at Pitt Public Health has had a lifelong impact on me as a public health professional. It's given me the self-confidence to contribute to improvements in population health and health equity.**

When her youngest child was close to graduating from high school, Rosemarie Ramos (EOH '05) decided to return to college and finish her degree

in biology. The decision would lead her down an unexpected career path in public health, engaging patients and addressing health disparities, such as the difficulty among the Latina community in accessing pre-

and postnatal care that she had witnessed more than a decade before as a young wife and mother in San Antonio, Texas.

While completing her undergraduate research program, Ramos spent 12 weeks at the National Institutes of Health (NIH) in Bethesda, Maryland, where she was exposed to social researchers studying gene-by-environment interaction. They spoke about health disparities and the need for social and behavioral science to be integrated with hard science in order to address, reduce, and eventually eliminate health disparities and improve treatment outcomes.

For Ramos it was her first 'aha moment.'

"I thought 'That's it.' That's what I was looking for: the opportunity to integrate my basic biology knowledge—the nerdy part of me—with the social and behavioral aspects of population health that I felt were so perplexing."

This was how she ended up taking a train from Bethesda to Pittsburgh and sitting across the table from professors Evelyn Talbot and Lewis Kuller to discuss Pitt Public Health's programs.

PHOTO © 2016 RENE MADRIGAL RAMOS

# semarie Ramos

While Ramos left impressed by the school's breadth—covering both biological variability and social factors—and fully prepared to apply, it was a personal invitation from Patrick Koty in environmental and occupational health (EOH) and that department's close ties with epidemiology that led her to choose EOH as her academic home.

As part of her interest in geographic trends of asthma disparities and related complications among adults in Pittsburgh—a project that would later become her dissertation—Ramos volunteered for a brand-new outreach program during her first semester at Pitt Public Health. Dubbed Take a Health Professional to the People Day, the initiative is now housed in the Center for Health Equity, still partnering with Black-owned barber-shops in the city. Students join doctors, nurses, and other health and human services providers to engage with, educate, and offer health screenings to community members. As one of the program's earliest participants, Ramos was simply hoping to talk to people about the importance of getting a flu shot, especially for asthmatics.

Over the next four-and-a-half years, Ramos observed how the program fostered engagement within the Black community “on their terms, to discuss the issues most important to them.” She served on one of the center's community research advisory boards, made up not of academics but of “students, nurses, public school teachers, moms, dads, and grandparents.” She saw what could be accomplished when researchers “emerge from their silos, walk across the street, and communicate directly with medical professionals and lay people.”

And then she had her biggest ‘aha moment.’

“That’s when I discovered there’s so much distrust among communities of color toward the health care system,” she says. The lack of trust

she observed in Pittsburgh’s African American community “was the same distrust I heard about anecdotally from the Latino population in South Texas. So I began to think: Health disparity is not a function of skin color, race, or ability to articulate the English language; it’s a function of communication and opportunity.

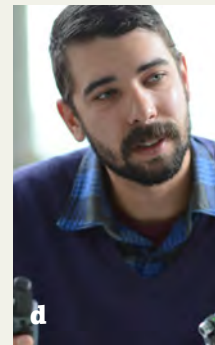
“Communication barriers are powerful social determinants of health disparities. When we as health care organizations and community public health leaders fail to communicate on a level where individuals, irrespective of their educational attainment, appreciate and respect each other, then disparities continue to prevail. Today, I view such social determinants of health not as barriers but as golden opportunities.”

Ramos says this perspective—along with the lessons she learned and the self-confidence she gained at Pitt Public Health—still informs her work today. As a faculty member and assistant research program director in the Department of Emergency Medicine at the University of Texas Health Science Center at San Antonio, she’s able to apply her expertise in chronic disease management to address disparities and engage patients when they are at their most vulnerable. She believes now is an extremely exciting time to work in public health. “The intersection of public health and medicine creates limitless opportunities.”

Ramos still keeps in touch with faculty members she respected as mentors but today values as colleagues, including professor Patricia Documet and Meryl Karol, her thesis advisor. She credits LinkedIn and the Pitt Public Health reception at the APHA annual meeting with helping her to stay in contact with Pitt Public Health friends, now spread all over the country at universities and places like the NIH, DHHS, and CDC. ●

# Alumni News

by Sarah McMullen



## Back on Campus

In April during National Public Health Week, **Veronica Sansing-Foster** (EPI '10), **Roderick Harris** (BCHS '13), and **Cassie Fickley** (EPI '14) joined us to reflect on first chances,

*We love to hear about what you're doing. Send your work updates and career news (with photos) to [phalum@pitt.edu](mailto:phalum@pitt.edu).*

stumbles, balancing career ambition with family, and the importance of personal brand building and collegial networking. Currently holding positions at the Food and Drug Administration, Allegheny County Health Department, and Quintiles, the panelists shared the details that drive their passion for their work. (a)

Accepted applicants, families, and faculty packed our Pitt Public Health auditorium where **Jesabel Rivera-Guerra** (IDM '13), **Jamie Sokol** (BCHS '07), **Beth Dutton** (EOH '96), **Karalyn Smith** (HPM '14), and **Yvette Conley** (HUGEN '93) discussed

their careers and reflected on what how the school equipped them for success. (b)

For the first time, alumni participated as guest judges during the annual Dean's Day Poster Competition. **Frank Amato** (HPM '99), **Mike Blackwood** (HPM '80), **Anita Caufield** (HPM '84), **Diego Chaves-Gnecco** (MMPH '00), **Joseph Costantino III** (EPI '76), and **Yvette Conley** (HUGEN '93), mingled with faculty and students, sharing their field expertise with researchers from all departments and disciplines.

The Department of Infectious Diseases and Microbiology's November 2016 Career Symposium welcomed **Dee Dee Downie** (IDM '06), now in her ninth year at the Centers for Disease Control and Prevention, as keynote to discuss her extensive work in emergency response, focusing on her recent Ebola relief efforts. During lunch, **Olivia Houck** (IDM '13), **Mary Kate**

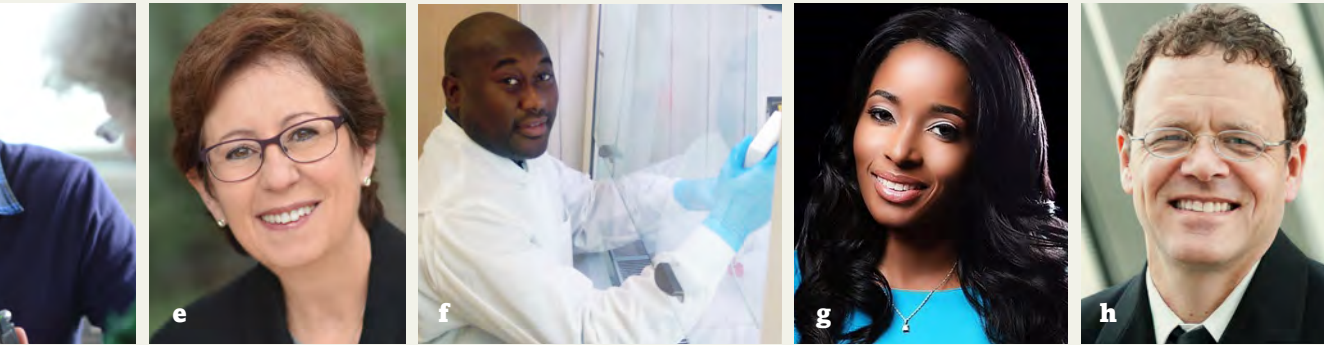
**Mannion** (IDM '13), **Sanjana Ravi** (IDM '13), **Alexander Sundermann** (IDM '14), **Elizabeth Schafer** (IDM '05), **Courtney Zych** (IDM '11), and **Ayan K. Chakrabarti** (IDM '09) joined the panel to share career advice. ●

## Updates

Michigan State University College of Human Medicine Midland Regional Campus has appointed **Carol Janney** (c) (EPI '12) as a community health researcher and assistant professor of epidemiology and biostatistics. Janney has an extensive range of research interests focused on mental health and behavioral interventions. She also presented a poster at the ISAD-ISBD conference in Amsterdam in July 2016.

Congratulations to **Natalie Mueller** (BCHS '13) on her promotion to product development manager with the National Committee of Quality Assurance (NCQA), a Washington, D.C.-based





nonprofit focused on improving the quality of health care in the United States. While busy developing NCQA's new program to help accountable care entities and clinically integrated networks align toward value-based care, and spending and updating the organization's Health Plan Accreditation to include a larger focus on population health, Mueller also took time out to help the school's career services team by sharing job openings.

**Kyle Ferrar** (d) (EOH '10) serves as western program coordinator of the FracTracker Alliance, where he focuses on analysis and research into California natural gas and oil activities and also handles community outreach and expert advising on related public health impacts. Ferrar grew his career in Southwestern Pennsylvania as a researcher with the Center for Healthy Environments and Communities (CHEC) prior to relocating to Oakland, California.

**Jaclyn Biegel** (e) (HUGEN '81)

has been named director of the Center for Personalized Medicine and the inaugural chief of the Division of Genomic Medicine at the Children's Hospital Los Angeles, a recognition of her extensive knowledge and research in the field of molecular genetics and pediatric brain tumors.

Currently the head of the Department of Biochemistry, Cell and Molecular Biology at the University of Ghana, and the director of the West African Centre for Cell Biology of Infectious Pathogens at the College of Basic and Applied Sciences, **Gordon Awandare** (f) (IDM '07), became the first Ghanaian to receive the Royal Society Pfizer Early Career Award for his research in molecular and cellular studies of malaria. He is also a key leader in the West African Centre for Cell Biology of Infectious Pathogens at the University of Ghana, supported by grants from the World Bank and the Wellcome Trust.

**Latika Davis-Jones** (g)

(BCHS '07) was honored for her work with families affected by addiction by the Message Carriers of Pennsylvania as the 2016 Tree of Life award recipient. Davis-Jones is currently the administrator for the Bureau of Drug and Alcohol Services at the Allegheny County Department of Human Services.

For his extensive dedication to the field of diabetes epidemiology, **Edward Gregg** (h) (EPI '96), was recognized by the American Diabetes Association as the 2016 Kelly West Award recipient. He is currently chief of the epidemiology and statistics branch in the Division of Diabetes

Translation at the CDC, where he oversees the National Diabetes Surveillance system. This honor is also held by **Ronald LaPorte** (EPI '80), **Marian Rewers** (EPI '88), and Trevor Orchard, Distinguished Professor, edpide-

*How can you share your career experiences with current students? As a mentor! Contact Joan Anson and Marissa Kaplan at [pittbridges@pitt.edu](mailto:pittbridges@pitt.edu) for details.*

miology. Gregg is also recipient of the 2012 Pitt Public Health Distinguished Alumni Award for Research.

**Mara Leff** (i) (BCHS '15) recently joined the Jewish Healthcare Foundation (JHF) in Pittsburgh as a program associate. She is working on the organization's long-term care and aging team as well as on JHF's initiatives to improve behavioral health services for adolescents.

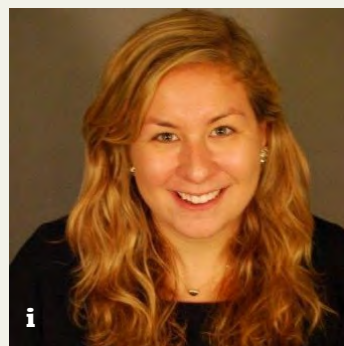
**Enrique Velazquez-Villarreal** (EPI '11, HUGEN '15) has joined Rady Children's Hospital—San Diego as a research fellow. His work focuses on the integration of clinical and genomic data for precision medicine.

**Natalie Solomon-Brimage** (j) (BCHS '06) recently presented at the 2016 National Ryan White Conference on HIV Care and Treatment.

She and her copresenters focused on HIV prevalence in women of

color and interventions to improve health outcomes. In November Solomon-Brimage also presented on the topic at the Seventh Annual International Conference on Stigma.

Congratulations to **Michael Neusch** (HPM '80) for authoring



i



j



k

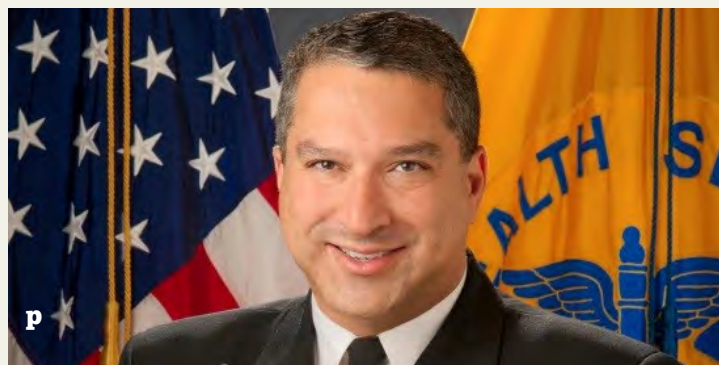
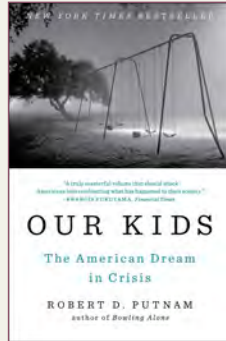
and publishing *The Essential Christ: Why He is the Only Way*. The book explores his faith journey, including his acceptance into Pitt Public Health. ●

## Get Involved

- Participate as an alumni mentor for the fourth annual **Alumni-Student Networking Breakfast** on Friday, February 24, 2017. Help students hone their networking skills and envision their own career paths when you return to campus and share about your professional experiences.
- Serve as an alumni speaker for your department or at a school-wide event.
- Attend the annual **Dean's Day Student Research Competition** (k) Oral Presentations and Awards Ceremony on Wednesday, April 19, 2017 (preliminary poster sessions will be held April 5-7, 2017).
- Did you know that, as an alumnus, you can get free study guides and partial or full

- payment of the exam fee to become **Certified in Public Health** (CPH)? Your alma mater also offers lectures, courses, and other continuing education (CE) opportunities for **CPH recertification credit**. For information and a schedule of CPH-CE events, visit [www.publichealth.pitt.edu/cphce](http://www.publichealth.pitt.edu/cphce).
- Alumni and friends of the school are encouraged to join in the **One Book, One Community Alumni Read-Along Program**. In this year's selection, *Our Kids: The American Dream in Crisis*, author Robert Putnam examines the emergence of a disturbing "opportunity gap" in America over the last 25 years. To learn more about this expanded program and to participate, visit [www.publichealth.pitt.edu/oboc-alumni](http://www.publichealth.pitt.edu/oboc-alumni).
- **Nominations are now open** for the 2017 Alumni Awards and for induction into Delta Omega. February 13, 2017, is the submission deadline; May 19, 2017, is the

Find details about events and alumni opportunities both in Pittsburgh and in your home region at [www.publichealth.pitt.edu/alumni](http://www.publichealth.pitt.edu/alumni).



awards dinner. For nomination instructions and event information, visit [www.publichealth.pitt.edu/alumniawards](http://www.publichealth.pitt.edu/alumniawards). ●

## 2016 Alumni Awards

The Distinguished Alumni Awards are the highest honors given to alumni for significant contributions to the field of public health, to the school, or to both.

**Janice Scully Dorman** (l) (HUGEN '81, EPI '83) received the teaching and dissemination award for her impact on the students of the University of Pittsburgh and as an internationally recognized leader in teaching and training.

**Susan Slaughaupt** (m) (HUGEN '91) received the research award for her dedication to gene identification, screening, and therapies for neurological disorders, her efforts to spearhead in biobanking, and her leadership in the field.

**Michael Blackwood** (n) (HPM '80) received the Margaret F. Gloninger Service Award in recognition of more than 25

years of service to the school and leadership of the HPM alumni association.

**Rashida R. Dorsey** (o) (EPI '06) was the recipient of the Early Career Excellence Award for her leadership in demographic data collection, coordination, and strategy at the federal level, as well as her impactful work with minority health and health disparities.

**Mehran S. Massoudi** (p) (EPI '93) was given the award for practice in recognition of his extensive career with the U.S. Public Health Service and leadership in global epidemic efforts with the CDC.

The 2016 Delta Omega Omicron Chapter alumni inductees:

**Andrew Althouse** (EPI '13)

**Gwendolyn Haile Cattledge** (EPI '89)

**Mary H. Huynh** (EPI '03)

**Christina Louise Wilds** (BCHS '97, DrPH '06)

Awardee bios and more can be found at [www.publichealth.pitt.edu/alumniawards](http://www.publichealth.pitt.edu/alumniawards). ●

## Graduate School of Public Health

A600 Crabtree Hall  
130 DeSoto Street  
Pittsburgh, PA 15261

Nonprofit Org.  
**U.S. Postage Paid**  
Pittsburgh, PA  
Permit No. 511



**OUT WITH THE OLD; IN WITH THE NEW** When the most recent round of demolition began in November, we said goodbye to the last of the old lab spaces in Parran Hall, made obsolete with the 2014 opening of the Pitt Public Health laboratory pavilion. By the end of last



summer, contractors were busy with final touches and furniture installation in the newly renovated southern half of Parran Hall. This bright area is now home to students, faculty, and staff who enjoy contemporary offices, conference rooms, and seminar spaces. ●