IMMIGRATION:
GOING GLOBAL
At Home and Abroad

How immigrant populations use and contribute to urban health care
The Dean’s Corner
Our Focus

Faculty
News, Research, Awards

Cover Story
Thinking Globally, Acting Locally

Alumni
Stat Man

Community
Nursing a Poor Neighborhood

Invention
Sexual Health App

Books
The Heart of the Matter

Public Health
Fat Fighter

Discovery
Bioinformation Please

Reaching Out
Students Helping Students

Development
SPH Invites Your Participation

Page 4-5

Page 6

Page 10

Page 12
Diversity and Strength

WHAT MAKES THIS institution such a special place to study public health? I believe it’s our engagement with real health and social justice initiatives in real communities, right here in New York.

Among our greatest strengths is our student body, which reflects the unparalleled diversity of New York City. Proudly associated with CUNY, our school provides economic and intellectual pathways to immigrants from all over the globe, first-generation college students and students from underrepresented communities. These diverse, real-world perspectives infuse and enrich our classrooms, our public events and our wide-ranging research efforts.

While they are with us, our students have numerous opportunities to gain valuable real-world experience, working in East Harlem, Bedford-Stuyvesant, the South Bronx — even in Ghana and Kenya. When they leave, they find jobs at government agencies, global NGOs or with local community-based organizations doing real work in real communities everywhere.

We take particular pride in our partnership with the greatest health department in this country, the New York City Department of Health and Mental Hygiene. Many of our faculty and students work or have worked there, which brings rich experiences and important insights to their scholarship.

Every academic domain has the opportunity to improve lives and make the world a better place, but in public health, it’s in our DNA. In New York City, the epicenter of so many historic advancements in public health, we proudly carry that torch forward, as new and bold ideas are not just entertained, but tested, and implemented.

In late 2015, the CUNY Board of Trustees voted to restructure the school as the CUNY Graduate School of Public Health and Health Policy — a move that will now allow us to more effectively build our school’s reputation as a leader in global health, health equity and health policy. The resolution calls for a transition from the school’s existing “consortial” model to a unified graduate school.

Such a free-standing graduate school “will best serve CUNY students, bolster faculty development and scholarship, address public health workforce needs, and increase opportunities for collaboration across the CUNY system,” notes Harrison Spencer, president of the Association of Schools and Programs in Public Health. And CUNY Board Chairperson Benno Schmidt added that the consolidation “will allow the institution to flourish in the broader marketplace of public health graduate schools.”

I invite you to come dream with us, and help us grow. By applying to join us as a student, or as a new hire, or by making a financial contribution, you too can become part of our new unified graduate school: a wide-ranging collaboration of students, faculty, community members and policymakers, working on issues that affect real people in the real world, right now.

— Dr. Ayman El-Mohandes
DEAN OF THE CUNY GRADUATE SCHOOL OF PUBLIC HEALTH AND HEALTH POLICY

Five Strategic Focus Areas for CUNY SPH

A
THE NEWLY STRUCTURED CUNY Graduate School of Public Health and Health Policy, our dedication to promoting and sustaining healthier populations in New York City and around the world is guided by our strong sense of social justice. We examine how social, cultural and public policy developments influence every aspect of population health, and we take approaches that are both transdisciplinary and collaborative: We seek out partnerships with other universities and with the New York City Department of Health to conduct groundbreaking research that addresses the most important public health challenges.

This year we have formalized our commitment to five strategic focus areas — each one a field of expertise in which we teach, do research and work closely with our colleagues in New York City and around the world. We have a diverse faculty that engages in a wide range of research disciplines, but our five focus areas represent specific areas of depth and opportunity for innovation. All of it benefits our students, at every academic level.

Preventing Chronic, Noncommunicable Diseases

MEDICINE in the 21st-century is ill-equipped to deal with the social determinants of health — poverty, education, housing, environmental challenges, and economic, political and cultural variables, among others. The most consequential health issues we face — obesity, hypertension, diabetes — are a triumvirate highly influenced by social conditions and human behavior. These and other chronic, noncommunicable diseases remain the leading cause of our persistent racial, ethnic and economic health disparities. A clinician prescribing the latest blood-pressure medication represents a very limited understanding of the breadth and depth of the problem.

Chronic diseases don’t have to be an inevitable consequence of aging, but they remain so today. Mortality rates for heart disease, cancer, respiratory disease and diabetes are still increasing throughout the world — while many infectious diseases are in decline. At CUNY SPH, we do large population-based studies to address how environment interacts with human behavior and to build new evidence for practices that reduce the burden of chronic diseases.

We recently completed a study in partnership with the city’s Department of Health
that contributed important data to a national study linking risk behaviors and cardiovascular outcomes. We also collaborated with the New York University School of Medicine to create the NYU-CUNY Prevention Research Center. Funded by the Centers for Disease Control and Prevention, the pioneering project integrates evidence-based interventions into community prevention, the pioneering project integrates evidence-based interventions into community medicine to reduce cardiovascular disease disparities in New York City.

### Food Nutrition and Health

MALNUTRITION and poor nutrition are at the root of most chronic diseases. To have a positive impact on population health, we need a better understanding of contemporary food systems and the influence of a powerful but under-regulated food industry.

We focus on this high-priority area through research, teaching and connecting with institutions in New York City and the world. One of our leading initiatives, the New York City Food Policy Center, develops innovative and evidence-based solutions to preventing diet-related diseases and promoting food security in New York and other cities. We offer many degrees in nutrition and food science, at all academic levels, and our nutrition graduates go on to work in health education environments, government agencies and numerous local community settings.

### Maternal, Child, Sexual and Reproductive Health

INCREASING RESEARCH indicates that our risk of chronic diseases such as type 2 diabetes, heart disease, stroke and some cancers may even start prior to birth. Lifelong cognitive and mental health issues can also be set in motion before children are out of diapers. So it’s beyond debate that society must invest in the crucial intersection of maternal, child, sexual and reproductive health.

We’re doing that by focusing on vulnerable populations and looking at how biology, culture and the needs of individuals, families and communities all play a role in understanding the risk burdens and improving outcomes. Along with our research and extensive community partnerships in this area, we offer an academic degree concentration in maternal, child, and sexual and reproductive health within the MPH degree program. Students culminate their experience with supervised fieldwork and a capstone project in this crucial area of public health.

### Immigrant and Global Health

WE’RE LIVING in an increasingly interconnected world, and few cities live and breathe this reality on a daily basis more than New York. World events have an impact here more than most other places, and our large immigrant population makes the city complex in many ways that present challenges but also opportunities for those of us involved in public health research and education.

As CUNY School of Public Health researchers, teachers, and students, we benefit from the diversity of the population that passes through New York City and the density of our immigrant population. Forty percent of our students were born outside this country and they speak nearly 200 languages. This makes us especially connected to global health issues and deepens the experience and perspective of all our students.

Our immigrant experience is not just an intersection of cultures but of biological risks of disease that have been eradicated in this country. Institutions in New York City share these complex challenges with communities throughout the world, and our connection to them helps all of us—students and teachers alike—learn directly and contribute to their solutions. It also puts us at the forefront of improving the health in vulnerable populations. The NYU-CUNY Prevention Research Center mentioned above, for instance, has a particular emphasis on New York’s ethnically diverse and immigrant communities.

### Population Informatics and Social Marketing

Public health and data have always been linked. But in recent years the process of collecting and processing evidence and disseminating that information has emerged as an essential component of public health research and practice. The challenge we have now isn’t just building new evidence but in communicating the evidence we already have.

Communication and social marketing in the public health context is about understanding the ways people think and talk about health-related behaviors, the social norms surrounding them, and how people make the choices they do. But the kind of data we rely on is often too general: We don’t know enough about individuals to understand the basis of their choices.

That’s where population informatics comes in. We’re trying to develop two-way vehicles for gathering data that’s personal but anonymous. Then we can design communication strategies that clarify the cost-benefit ratio of health choices and behaviors. Finally, we can reach people through social media and other modern communication techniques — i.e., on their cell phones — to disseminate targeted information that’s fresh, that matters to them as individuals, and that influences them to make better choices about their health.

In the pages of this edition of City Health, you’ll read about the work we’re doing in these areas and some others — how our faculty and students are having an impact on a healthier future for New York and the world.
We are optimistic that community health workers can help residents achieve real and long-lasting improvements in their health, and that this place-based project may eventually serve as a model for cities all around the world.

— World Health Organization

THE CUNY School of Public Health and the New York University Department of Population Health were recently awarded a $499,000 grant this year from the New York City Department of Health and Mental Hygiene as part of a three-year collaboration to improve the health outcomes of public housing residents in East Harlem.

The initiative will link residents with community health workers (CHWs) who have a unique understanding of the norms, values and strengths of the communities in which they work.

Earlier this year, a team of CHWs began working with residents in five public housing developments to assist residents with hypertension, diabetes and asthma to help manage these chronic diseases.

Led by the CUNY School of Public Health and NYU Department of Public Health, under the auspices of the NYU-CUNY Prevention Research Center, the initiative involves representative community surveys, focus groups, longitudinal data collection with biomarkers and data linkage to administrative datasets.

“Despite its growing economy and rich cultural identity, Harlem continues to experience some of the highest rates of chronic, non-communicable disease in New York City,” said Lorna Thorpe, professor at the CUNY School of Public Health and director of the initiative. “We are optimistic that community health workers can help residents achieve real and long-lasting improvements in their health, and that this place-based project may eventually serve as a model for cities all around the world.”

Funded last year by a five-year, $3.75 million grant from the Centers for Disease Control and Prevention, the NYU-CUNY Prevention Research Center is an innovative public-private partnership aimed at reducing health inequities in New York City, with particular emphasis on ethnically diverse and immigrant communities. The partnership’s first core research project, called Project IMPACT (Implementing Million Hearts for Provider and Community Transformation), was built on the Million Hearts national initiative, a program led by the CDC and Centers for Medicare and Medicaid Services aimed at preventing 1 million heart attacks and strokes by 2017. Project IMPACT tests the influence of integrating community health worker programs with physician-level intervention models, using electronic health record-based tools to improve hypertension control among South Asians in New York City.

Now in its second year, the NYU-CUNY Prevention Research Center also was awarded three Special Interest Projects, including a one-year, $200,000 grant to SPH professors Christian Grow and Elizabeth Kelvin to study seroadaptive behaviors among gay and bisexual men.

In addition, the Prevention Research Center recently hosted a wide-ranging educational forum on the critical challenge of integrating community health workers into the health care system nationwide. The one-day forum brought together dozens of researchers, policymakers and practitioners to discuss best practices, model programs and innovations related to the integration of community health workers into the workforce.

For the past decade, Nevin Cohen’s wide-ranging research has explored the roles cities can play in making food systems healthier, more just, and ecologically sustainable. An expert on urban food policies at the CUNY School of Public Health, Cohen has maintained a particular focus on the practice of urban agriculture. Associate Professor Cohen was the lead analyst on a recent study that examined the multiple impacts of urban agriculture on New York City. This project identified policy strategies and measurement tools to strengthen the role of urban agriculture in improving health, economic development, environmental protection and social welfare. It also led to a multi-year community-based participatory research project to quantify the benefits of urban agriculture.

Building on this research, Associate Professor Cohen and Kristin Reynolds, a colleague at the New School, studied urban agriculture activists who use their gardens and farming activities to address complex upstream determinants of health and well-being, such as structural racism, gender inequity, and economic disparities. Their research led to a forthcoming book, Beyond the Kale: urban agriculture and social justice activism in New York City, which profiles the activists and leaders, many of them people of color and women, whose strategies have often been underrepresented within the food movement. Cohen’s research also has examined the potential for city governments to improve the food system by engaging in “strategic practice management,” intervening in everyday food practices—such as shopping, cooking, disposal—that structure and support seemingly entrenched socio-technical systems like food. Working with colleagues at the New York City Food Policy Center at Hunter College, city agencies and community activists, Cohen has participated in a variety of research projects, including: evaluating 15 years of changes to the food environment in East Harlem; identifying policies to improve access to healthy food by improving jobs in the food sector; and devising methods to measure and mitigate the impacts of land use planning on local food environments.
Research & Awards

PUBLICATIONS
Public vs. Private Schools of Public Health

The United States has long held a pluralistic approach to public health education, with institutions from the private and public sectors competing for students, faculty and funding. In their article, “Keeping the ‘Public’ in Schools of Public Health,” published in a special 2015 issue of the American Journal of Public Health, several CUNY SPH authors compare the characteristics of public and private programs, highlighting the distinctive contributions publicly funded schools can make toward educating the nation’s public health workforce.

The authors — professors Nick Freudenberg and Susan Klizman, Dean Ayman El-Mohandes and doctoral student Catherine Diamond — point out that publicly funded schools enroll a higher proportion of black and Hispanic students, helping to achieve the benefits from a more diverse future workforce. Some evidence suggests that professionals who have lived in such minority communities may be better equipped to meet the social, cultural and health needs of these populations, the authors say.

Among the other potential benefits of publicly funded schools:
• Faculty at private institutions spend a greater portion of their time on research than many public schools, which require a higher percentage of faculty time devoted to teaching — presenting an opportunity for public schools to take a leadership role in innovative approaches to public health education.
• Because public schools depend less on federal grants, particularly National Institutes of Health research funding, they have greater flexibility to pursue strategies for lower-cost, more sustainable research projects with other public agencies and philanthropies.
• Public schools may be better able to align their research with their public service missions and conduct research that contributes directly to better public health practice.

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Spotlight on Countries’ Antipollution Efforts

Toxins have become the leading cause of death in the world, responsible for one in seven deaths, according to the World Health Organization. The 9 million deaths a year attributed to air, soil and water pollution exceed deaths from war, tuberculosis, malaria and AIDS combined, yet relatively little money is spent on fighting pollution — so little that the organization last year decided to applaud the few countries that are improving their efforts with some success.

The new report — “The Top Ten Countries Turning the Corner on Toxic Pollution 2014” — marks a departure from WHO’s previous reports on the 10 worst pollution-control countries.

At the top of the list of most-improved pollution-fighting countries was Kyrgyzstan, followed by the former Soviet Union, Ghana, Senegal, Vietnam, the Philippines, Indonesia, Peru, Uruguay and Mexico.

Jack Caravans of the CUNY School of Public Health has echoed the report’s plea for more pollution-control investment by the international community. He told the Huffington Post last year that the Global Fund to Fight AIDS, Tuberculosis and Malaria raised $20 billion, while only $100 million was spent on pollution.

Published by the CUNY School of Public Health
GOING GLOBAL
At Home and Abroad

By Ronald E. Roel
NAME: James Sherry

COLLEGE: CUNY School of Public Health

TITLE: Professor of immigrant, refugee, and global health.

FOCUS: He now leads a core of prominent faculty in building the Center for Immigrant and Global Health at the school — the first of its kind in New York City.

James Sherry in Jackson Heights, Queens
WENTY-FIVE YEARS AGO, the largest group of global leaders ever assembled spent two days in New York City in impassioned conversation about the future of the world’s children. The unprecedented event, called the World Summit for Children, also convened dozens of high-level city and state officials at the United Nations. One afternoon following the proceedings, Matilda Cuomo, the wife of New York’s Gov. Mario Cuomo, invited the state’s department heads to lunch at the governor’s mansion in Albany with James Sherry, then chief of health at UNICEF. Cuomo wanted to spur a conversation about what was going on in the rest of the world, Sherry recalled recently. “She was an active listener,” he said. “She wasn’t just making the case for, ‘New York does this and New York does that.’ She was saying that we should also look around and see where there are things we can learn from elsewhere in the world and bring them back home. She was a bit ahead of the curve... It was a very exciting dialogue, and I think it defined a continuing process for all of us.”

Decades later, that memorable conversation still captures Sherry’s philosophy of the way the United States should approach global health: It’s a dynamic learning process, a two-way street. “People from the great cities around the world will learn from us,” he says, “and if we’re open-minded and modest enough, we’ll learn from them as well.”

Earlier this year, Sherry, an innovative and widely acclaimed figure in the field of global health, joined the CUNY School of Public Health as professor of immigrant, refugee, and global health. He now leads a core of prominent faculty in building the Center for Immigrant and Global Health at the school — the first of its kind in New York City. The new interdisciplinary center blends programs in health and social sciences, including research and policy advocacy work focusing on reducing inequities in health, and will offer students a Ph.D. degree in immigrant and global health.

In essence, Sherry points out, the center exemplifies the University’s broader strategy of becoming “Global CUNY.” In a recent policy address, Chancellor James B. Milliken envisioned CUNY as a “leader in research, education and engagement that addresses grand challenges in an increasingly urbanized global population.”

Sherry notes the School of Public Health is already globally connected through both faculty and students. Many faculty members are spending significant parts of their careers overseas, he says, “and it’s becoming much more the norm for junior faculty.”

CUNY students, too, reflect a global perspective through their diverse backgrounds. More than 40 percent of undergraduates were born outside the United States and about 44 percent are first-generation Americans. Indeed, CUNY is a microcosm of the challenges and promises of a Global New York, providing a unique opportunity to explore how immigrant populations both use and contribute to urban health care.

At the same time, Sherry says, there is a strong desire by some immigrant students for learning opportunities far beyond the city limits. “They may be from some place but not necessarily have worked in that place, so they’re looking for those opportunities,” he says. Other immigrants, however, may want an opportunity to understand the diverse global cultures already here. “With any gift, there is a contributing side and a receiving side,” he adds.

“The same is true with an immigrant population.”

Growing up in Detroit as part of a big Midwestern family — and the son of a Canadian father — Sherry knew little about public health early on. “What kid wants to grow up and be a public health specialist?” he said. “I was interested in science.” He earned a doctorate in biochemistry and then went on to medical school, getting his clinical training in pediatrics. “I thought medicine was public health,” he said. “I learned along the way it wasn’t.”

Through a few “accidental deviations,” Sherry found his way into the arena of public policy, first working for Sen. Ted Kennedy’s 1980 presidential campaign, then serving as chief of staff for Michigan congressman Sander Levin. He began to form his own sense of public health as a field between two posts, science on one side, public policy on the other. “Between these two posts there was this big space, which I thought was the most interesting, the most impactful,” he says. “I learned later what it was called: public health.”

Over the years, Sherry amassed an extensive resume of job posts, including 17 years as a senior United Nations official with broad-ranging responsibilities at UNICEF, UNAIDS (coordinating global action on the HIV/AIDS epidemic) and the World Food Program. Among other initiatives, he supported the establishment of the Children’s Vaccine Initiative; the re-establishment of basic health care services in postwar Rwanda; the negotiation of global health policy by the UN General Assembly and Security Council, and the design of REACH (Renewed Efforts Against Hunger and Undernutrition).

A former professor of global health and international affairs at George Washington University, Sherry continues to serve as director of the TRAction (Translating Research into Action) project of the U.S. Agency for International Development (USAID).

“Jim is an icon of public health,” says Lyndon Haviland, a leading international public health expert and chair of the Dean’s Advisory Council at the CUNY School of Public Health. “He’s worked with all the major players. And bringing him to CUNY affirms our commitment to a global perspective — with a boots-on-the-ground approach.”

Sherry also brings to CUNY a progressive vision of how global health should be taught in today’s classrooms, adds Haviland. Whereas global and domestic public health issues used to be treated separately, Sherry treats them “as a single good,” where global health combines the spheres of “a healthy CUNY, a healthy city and a healthy planet.”

Still, studying and providing health care to immigrants in a global city presents interesting challenges—especially for New York. While many American cities have substantial populations comprising one or two immigrant groups, New York is the intersection of a multitude of cultures.

“How do we identify the commonalities of these groups without stereotyping them?” says Dr. Ayman El-Mohandes, dean of the CUNY School of Public Health. Some immigrant groups have very different backgrounds from others, yet have similar health needs. In other instances, health risks like Hepatitis C or alcoholism may be more prevalent in particular populations. “When it comes to immigrants, the social determinants of health may be very different for different populations in different areas. It’s a very complex formula that requires a great deal of intentionality.’”

— Dr. Ayman El-Mohandes

Despite such challenges, New York City provides a great opportunity to learn what protective health measures are helpful or harmful — for particular communities. The national debate may focus on the Affordable Care Act, but “the front line of the battle for better health care outcomes is still at the community level,” Sherry says. “As Tip O’Neill [the late Speaker of the U.S. House of Representative] said, ‘All politics is local.’ The same is true with public health — it’s also intimate.”

Sherry points to concerns over Ebola as an example of how public health officials can approach protective health measures. “We can take an institutional or clinical perspective [of containment], or take the community per-
Sherry says, As an example, he points to immunization record-keeping processes established in countries such as Mexico years ago, which were better than the systems used in any state in this country. “We learned a lot about the concept of social mobilization as it relates to global immunization efforts,” he says. “If you’re without good public infrastructure, there’s no alternative strategy. It is the strategy . . . You bring that together with a good infrastructure, like good public lavatories, and you’re going to get some very positive results. That’s something we can build on.”

Another way for CUNY to build the effectiveness of global public health, Sherry says, is by forging partnerships with institutions like the New York City Department of Health. “Being a public university provides a lot of latitude with other public institutions,” he says. “If you look at the mission and the makeup of the institution, it’s much closer to serving as a contributor to public health. We’re interested in getting all the actors involved in public health, but at the end of the day, a public university has communities no one else is reaching and priorities no one else is addressing.”

Partnering with other institutions will also enable Sherry to test the expertise he has developed in initiatives like TRAction, the USAID project focused on “implementation science” related to maternal, newborn and child health in low- and middle-income countries. Simply put, implementation or “delivery science” is the science of getting things done — transferring what we know works in one area into another area. This “let’s just get it done” attitude may offer bold new ways for the School of Public Health and its partners to connect policy analysts and practitioners, Sherry says.

Pondering how things will get done in future generations of public health, Sherry points to the dramatic shift in population from rural to urban areas across every continent, and how that will require cities to undergo some degree of reinvention. “I think the challenge of reinventing urban health is a real global challenge, and it’s a New York challenge, too,” Sherry says. “The city now needs to say: ‘All right, what does a healthy New York look like, 50 or 100 years from now? What does that mean for institutions we rely on, the workforce we create, the opportunities we grow?’ I think it’s going to be an exciting time.”

“The front line of the battle for better health care outcomes is still at the community level. As Tip O’Neill said, ‘All politics is local.’ The same is true with public health — it’s also intimate.’

— James Sherry

James Sherry
MENTAL HEALTH PROBLEMS, substance abuse and alcohol consumption are among the most negative factors affecting the lives of New Yorkers and the city, making it critical that their impact on everything from longevity to tax dollars is understood. At the city’s Bureau of Epidemiology, Sungwoo Lim finds creative statistical methods of ferreting out the numbers that explain these public health impacts — facts that are used to improve city policies and city lives.

Lim, who graduated in 2014 as the CUNY School of Public Health’s first DrPH in epidemiology, is director of research and evaluation at the bureau, part of the city’s Department of Health and Mental Hygiene. His role is multifaceted as chooser, creator, fine-tuner and user of the right methodologies to analyze city data and understand New York’s public health problems.

“My main focus is developing and identifying the scientifically sound approach . . . to find a valid result using the messy data we have,” Lim said. While the methodology required to best analyze each problem may be different, Lim said, part of his job is to “find the best practices in statistics” and apply them to the problem.

Lim is involved in multiple projects at the division’s Long Island City offices. One of them, funded by the federal government, is researching the impact of alternatives to hospital interventions for people with schizophrenia or psychosis. Instead of sending them to emergency rooms, Lim said, they are referred to “hospital alternatives” which include “crisis respite centers” or their own homes where they can be visited by city Mobile Treatment Teams trained to help people in crisis.

Using data from Medicaid, Lim said, the research has found evidence that the unconventional intervention is more cost-effective than hospital treatment. The findings, he said, “made a huge contribution to make the program more permanent rather than just a research project.” The program’s funding by the federal Centers for Medicaid & Medicare Services ended by June 2015, but New York state has decided to fund it after July 2015. “It’s really exciting,” Lim said.

In another project, Lim evaluated the cost-effectiveness of providing “supportive housing” for people at risk of homelessness, such as drug abusers, the mentally ill, and those infected with HIV. Supportive housing is permanent, affordable housing where tenants receive mental health and other services “to help them live more stable and productive lives,” he explained.

“We looked at the different type of government subsidies for people at risk of homelessness, and there were some cost savings in providing supportive housing,” Lim said, “but not in every population.”

Born in South Korea, Lim arrived at CUNY SPH in the fall of 2010 after earning two master’s degrees in the United States — the first in international trade and investment policy at George Washington University’s Elliott School of International Affairs, the second in theoretical statistics-oriented survey methodology at the University of Michigan.

Lim’s first job after Michigan was as a statistical analyst at the university’s dental school, where he researched dental health in Detroit — his first exposure to the public health field. In 2008 he moved to New York City for a job as a city health department research scientist. “I was very interested in applying...”
NAME: Sungwoo Lim

TITLE: Director of Research and Evaluation at the Bureau of Epidemiology of the city’s Department of Health and Mental Hygiene

FOCUS: His role is multifaceted as chooser, creator, fine-tuner and user of the right methodologies to analyze city data and understand New York’s public health problems.
Just the Stats
Continued from Page 10

theoretical statistics for real-world application,” he said.

As he developed more statistical expertise in public health, Lim felt he needed “a DrPH education.” The CUNY School of Public Health-Graduate Center program appealed because it offered the flexible schedule he needed to continue working in his city job. “The other reason was the professors,” he said. One was Lorna Thorpe, a CUNY SPH professor and researcher who was then the Health Department’s deputy commissioner. Thorpe directs the school’s epidemiology and biostatistics program, and Lim admired her dedication to collecting local data rather than relying on national statistics. “She’s also really good at interpreting data, making a great impact on policy,” Lim said. “That really gave me the inspiration to apply for the program.”

Lim studied with Thorpe and SPH professor Mary Schooling, and he says that meeting Graduate Center sociology professor Mary Claire Lennon was a turning point in his development as a public health statistician. “I happened to read one of her papers,” he said, “which gave me a very solid understanding, and inspiration for my dissertation idea.”

Lim’s doctoral research involved finding the methodology through which he could analyze the “revolving door” of incarceration and homelessness among people in New York City who are jailed and in shelters. The methodology Lennon proposed, Lim said, allowed him to discover the repeated pattern of incarceration and homelessness [distinct trajectories of jail incarceration and homelessness], using city registry data on 15,000 individuals who were in city jails or shelters between 2001 and 2003.

“I found there was a group of people who exhibited the pattern of frequent incarceration and homelessness [sporadically experienced brief incarceration and shelter stays],” he said. In addition, focusing on individuals staying briefly in jails and shelters, and using the same methodology [using standardized mortality ratios and marginal structural modeling], “I basically looked at their risk of death [during two-year follow-up time] and found out those in the revolving-door pattern were more likely to die” — in general or from a drug overdose or HIV infection — compared with people in the general population as well as adults experiencing persistent shelter stays.

After his CUNY graduation, Lim moved to a position with the Division of Mental Hygiene. He says his diverse background and interests helped him look at problems more creatively. “Even if there’s no direct connection with current international affairs, it’s helped me look at different aspects of public health in this city, and helps me contemplate the problems in a big-picture context and come up with out-of-the-box solutions.”

Among the “really cool techniques” he uses to analyze government data that aren’t collected for research purposes are methods he developed to tease out differences between treatment groups and control groups. “This gives you confidence that you’re comparing apples with apples … and basically finding out the answers that can help other people and the general public in New York City.”

Besides doing his own analyses, Lim embraces his role as director of research and evaluation in the epidemiology bureau of the Health Department. “I want to continue to train and help analysts to do more serious research using the data they have, to help the public,” he says. “What’s really unique about the Health Department is you can actually see your findings applied.”

Nursing a Poor Neighborhood to Health
THE BROWNSVILLE SECTION of Brooklyn is known for poverty, violent crime, mass incarceration and a high diabetes mortality rate. One CUNY professor says the key to a brighter future in that neighborhood and others like it lies in social services that marry education and health care.

Determined to reduce health disparities among New Yorkers, New York City College of Technology nursing professor Kathleen Falk teaches wellness to families in Brownsville. A veteran of 35 years in clinical practice who holds a doctorate in nursing, she says embedding health care in education is a way to help break generational patterns of poverty.

Students who drop out of high school are likely to develop chronic illness at an earlier age, Falk says, and Brownsville is a community where only 30 percent of adult residents hold high school diplomas. “Health and education go hand in hand,” she says. “You can’t have a well-educated child who is sick. As a clinician and researcher, I find it frustrating that few studies blend education and health care together. . . . When I look at the research, a big causative factor in health disparities is poverty and lack of preventative health care.”

Falk and a team of three faculty members and 30 students in City Tech’s RN to BS program — a baccalaureate degree designed for registered nurses — go into schools in Brownsville to work with parents of children aged 6 weeks to 5 years. The biggest health issues facing the children are asthma and childhood obesity, but the curriculum covers a wide range of topics about personal health that bear on the public health.

The nurses teach separate classes for parents and children.

Above, Nurse Christopher Dubissette is a role model in his community. By Lenina Mortimer

‘When I tell people I’m a nurse, they’re proud to see a young black man is in my position.’

— Christopher Dubissette

‘When I tell people I’m a nurse, they’re proud to see a young black man is in my position.’

— Christopher Dubissette
nursing a poor neighborhood to health

Continued from Page 13

“Health and education go hand in hand,” says nursing professor Kathleen Falk (above with Brownsville students).

Falk herself conducts a weekly class for pre-K kids at P.S. 184. “We teach the children activities to help them with their developmental skills and basic things to help them stay healthy like, how do you wash your hands, cough into your elbow, learn to tie your shoes. And we teach yoga to babies as young as 1 year old. This teaches children how to regulate their emotions and develop self-care behaviors.”

Falk also forged a pilot project in partnership with FirstStepsNYC, an early intervention and education center for high-risk infants and preschool-age children and their families. The nurses in the City Tech RN to BS program teach parenting classes and follow-up with individual families on home visits. “The nurses sign on for one academic year,” Falk says. “We do this so they’ll form a bond and a mentoring relationship with the children and the families.” Falk and her students, who also include social services interns and dental hygiene students, provide services for 120 center-based and 44 home-based families.

Among the nurses on Falk’s team is Christopher Dubissette, a senior in the RN to BS program who began his career in Brownsville 22 years ago expecting to work there just a few years. He stayed, he says, because he saw an absence of male role models in the community. “When I tell people I’m a nurse, they’re proud to see a young black man who is in my position,” Dubissette says. Going into schools has given him “an opportunity to talk to kids about the importance of education,” Dubissette says, “and now I see myself as a community resource. It’s very encouraging that I can go there and make a difference in a person’s life and tell them there’s something else besides crime and getting locked up.”

Falk says it’s important for her students to learn how to reach out and care for communities that are heavily burdened with poverty, poor educational outcomes and chronic illnesses at young ages. “It’s one thing to read about health disparities but it’s another thing when you see it,” she says. “When six out of 10 infant boys show early asthma symptoms, and you see how humans are experiencing disparities, it changes your perception.”

Falk has long worked with populations underserved by health care. In 2012, she was awarded a Jonas Scholar for Nursing Leadership Fellowship for her development of a model for nurses working with children of incarcerated parents. “Every nurse initially goes into nursing to make a difference and you get something out of providing care to other people,” she says. “I would like to do more research in terms of bringing health care and education together and past that on to the next generation. I don’t think it’s by accident that I was a clinician for so many years and now I’m in education.”
Sex health info ASAP? There’s an app for that

By Margaret Ramirez

Sonia González can still remember when she heard her calling to a career in public health.

At 17, while attending the University of Texas at Austin, she volunteered at a drop-in center for homeless and runaway youth. There, she provided sexual health education and HIV prevention to gay and lesbian teens, as well as drug-addicted youth.

Often, González worked on the streets, passing out condoms at nightclubs or counseling homeless teens on needle-sharing and substance abuse. In those moments, she knew this was where she belonged.

“I was 17 years old and really thrown into the fires of frontline public health work. And I was good at it,” she said. “I was good at reaching people … and I liked the power that I thought education could offer.”

Since then, González has held several different roles in Texas and later at the Red Hook Community Justice Center in Brooklyn, educating young people on sexually transmitted diseases and HIV. But, as cell phones and mobile devices have become vital for teens, González has recognized that technology is another important avenue to communicate with young people about health issues.

“Through working with young people, I found that New York City youth are constantly connected to their phones and mobile devices,” González said. “We need to find a way to reach our clients where they are.”

Now, González, 38, a doctoral candidate at the CUNY School of Public Health, is working to create a unique sexual health app, specifically targeted to young African-American and Latina women in New York City.

The new app, known as “GURHL Code” or Guide to Understanding Reproductive Health for Ladeez, is capable of immediately connecting young people to health educators and clinics. In addition, the GURHL Code app will include health education features such as how to properly put on a condom, and podcasts of personal stories on sexual education.

González, who is Mexican-American, said her decision to focus on black and Latina women stems from the high rate of HIV transmission and sexually transmitted disease in that population. According to the Centers for Disease Control and Prevention, in 2012 new HIV infections in the U.S. were higher among young black women and Latinas compared to white women. Moreover, low STD testing rates among young women of color leave them susceptible to transmitting their infections and to long-term consequences such as pelvic inflammatory disease.

“The data show elevated rates of chlamydia among 18- to 25-year-old young women, particularly young women of color,” she said. “Connecting them to services early on could really help curb that.”

To get that message out, cellphones are most effective. According to a survey by the Pew Internet and American Life Project, cellphone users who are Latino or African-American are more likely to gather health information from their phones. Some 19% or nearly one-fifth of smartphone owners have at least one health app on their phone, researchers reported.

Though several sexual health apps are already available, González said the GURHL Code app is expected to stand apart due to the input she received from focus groups and a 10-member advisory committee comprised of five health experts and five young women under age 25.

Among the biggest complaints from young women in the focus groups was that most sexual health apps were difficult to understand. In addition, González said that in the app she used specific content and language suggested by young women, such as “Oops, Condom Broke” and “Did You Know?”

“The problem with the sexual health apps out there right now is that kids think they’re corny or too instructive,” said Jennifer Irwin, administrative director of the Peter Krueger AIDS Center at Mount Sinai Beth Israel Hospital who is on the app advisory committee. “If the app is too clinical or sterile, it’s not going to be interesting to young people. They’ll drop it like a hot potato if it doesn’t grab them.”

Such input is necessary to improve app design and interactivity, experts say. A recent study published in the Journal of Medical Internet Research found most available HIV/STD apps have failed to attract users and positive reviews. The study cited low average download numbers and low user ratings, typically 3.7 out of 5 stars.

“Providing HIV/STD prevention and care services through mobile phone apps shows great potential for growth, both in improving the acceptability and adoption of existing apps, and creating new HIV/STD apps,” researchers wrote. “Future HIV/STD app development could be informed by the principles of social marketing to build appropriately tailored, interactive apps.”

In July, González began a feasibility study by recruiting 110 young women — through Facebook, OKCupid and word of mouth — who will use the app for a few months to determine its impact. Broader release of the app is anticipated in 2016.

While the app’s content has been a primary focus, González said another controversial issue
is privacy. However, when the question came up in focus groups, González was surprised at the reaction.

When asked if the app should be protected by a passcode to prevent others from accessing information, the young women said that wasn’t necessary since their phones already had a passcode. But, as a follow-up, González asked what if a younger family member accidentally stumbled on the sexual health information? The young women said that would be good, since it would lead to better conversations about sex than they had with their own elders.

“I think there’s an old guard and a new guard, and the old way of talking about and framing things doesn’t work,” González said. “It makes it taboo. It makes things secretive. And there’s a lot of shame around sex and sexuality, and that results in unhealthy behaviors. Whereas if you are open and are able to have conversations about things, then that promotes healthier choices.”
Civil Rights, the Women’s Movement and a Change of Heart (Disease)

By Margaret Ramirez

TRAINED AS AN HISTORIAN and an epidemiologist, CUNY School of Public Health professor Gerald M. Oppenheimer brings a distinct perspective to the study of disease in American life. His books on the HIV/AIDS epidemic explored the ethical, clinical, and social implications of a health crisis in the United States and South Africa.

Oppenheimer now turns his attention to writing the history of the U.S. heart disease epidemic in the mid-20th century. His forthcoming book, The Republic of Heart Disease, focuses on how epidemiologists’ research of the number one killer of both men and women in the United States has been influenced by political and social change.

While researching his book, Oppenheimer studied historic hearings in 1977 that pitted the Senate Select Committee on Nutrition and Human Needs, chaired by Sen. George McGovern, against the meat industry. His in-depth analysis of those hearings was published in the American Journal of Public Health in 2014 and was selected as one of the publications’ best articles of the year.

Oppenheimer spoke to CityHealth about the impact of the 1977 hearings, the evolution of smoking from “sexy” to “smelly,” and his forthcoming book.

CityHealth: What impact did those movements have on heart disease?

Oppenheimer: Initially, coronary heart disease — defined as heart attacks, angina and sudden death — was perceived to occur primarily in white middle-aged men. Epidemiologists held that women and African-Americans or non-whites were at lower risk of that disease. So the focus of the pioneering studies, like the Albany and 7 Countries studies, was on men. As there was increasing pressure in the late 1950s and early 1960s to desegregate hospitals, medical schools, internship programs, it began to affect to some extent medical research . . . By the early 1980s, a growing number of epidemiological articles underscored that African-Americans, both men and women, have high rates of coronary heart disease, that what should have been obvious the entire time was that heart disease was the leading cause of death in blacks as well as in whites.

One really important change was the role of a small but increasingly influential number of black cardiologists and cardiovascular epidemiologists. They examined population and clinical data and
began to publish work and sit on federal advisory committees that stressed the impact of heart disease on African Americans. Once that point was made with data, the National Heart, Lung, and Blood Institute realized that it had been blind . . . and they immediately began to make heart disease in blacks a new priority, and to begin in the 1980s and 1990s to underwrite major epidemiologic studies that included blacks and other minority groups as well.

CityHealth: So the book is the story behind the heart disease numbers and what was studied and not studied?

Oppenheimer: Yes. What was seen and not seen. And the same thing with women. Women were perceived as really not suffering from heart disease, even though many epidemiologists recognized that older women did have heart disease.

My sense is that as these groups become visible politically and socially through struggle and politics, and become more fully citizens and enter the professions, their medical issues also begin to be recognized and studied, and the government underwrites that. So I’m tentatively calling this book, The Republic of Heart Disease because once African-Americans and women are more fully recognized as citizens and have greater equality, they are allowed to enter into the republic of this most American of diseases.

CityHealth: Here in New York and nationwide, contentious debates persist on government enforcement of smoking bans, big drinks, cholesterol and salt guidelines. What role should government play in protecting public health?

Oppenheimer: I tend to be on the side of the government playing more of a role in public health, particularly if the science is there. But we must always be skeptical here; science is provisional and subject to contingencies, as I try to show in my work.

The data on big soda, that solely banning large sugary drinks will reduce population obesity, is still weak. But what public health is trying to do there, for better or for worse, is to create a new normative mindset, as was the case with tobacco. Despite the strong epidemiological evidence that smoking was harmful, smoking cigarettes remained popular. To change mass behavior, public health required additional evidence (the danger of secondhand smoke) and successfully stigmatizing smoking as anti-social. That normative change can be recognized in an olfactory response.

When I was a kid, we thought of the smell of burning cigarette and pipe tobacco as “aromas.” They were sexy. They had a certain character. Now we think of cigarette smoke, as Allan Brandt characterizes it, as a “stink.”

I ask my students whether they hold their breath when they pass people who smoke cigarettes, and many of them do. I think you’re trying to institute the same thing with drinking soda. You’re starting to turn it into a negative, so that people will ultimately see it as uncool as well as contrary to good health to take in gobs of sugar. But for the moment, by making large soda drinks less available, public health wants to “nudge” them, as Cass Sunstein advocates, to make the right choice.
SCIENTISTS began sounding the alarm about obesity and overweight in the United States more than three decades ago, when the problem affected about one in four Americans. The government spent billions in response, trying to curb the problem. And today, roughly two out of three Americans are obese or overweight.

The problem, in other words, has gotten worse. Terry T-K Huang, an obesity researcher and professor at the CUNY School of Public Health, has had a field marshal’s view of the obesity war over the past decade, both as a public health scholar and government policy planner.

He served as a program director for pediatric obesity research at the National Institutes of Health, as chairman of the department of health promotion at the University of Nebraska Medical Center; and has been a leading advocate for integrating national public health efforts on obesity into a broader campaign for social justice.

As he sees it, the lack of progress so far owes to the absence of a crucial player in the obesity fight, as it is in every public health campaign. The public itself.

Huang spelled out his professional critique and call to action earlier this year in an article in The Lancet, a British medical journal, which has been widely circulating in the public health world amid a growing consensus about the need to rethink the obesity fight. In the article, “Mobilisation of public support for policy actions to prevent obesity,” (Vol 385, June 13, 2015), Huang and several co-authors call for “engaging, mobilizing and coalescing the public” to confront a broad array of entrenched corporate, social and political forces standing in the way of progress.

Obesity-prevention needs a political identity of its own, they argue — complete with a set of clear-cut policy demands — forged in the crucible of “citizen protest and engagement, and development of a receptive political environment,” the authors wrote. Among other things, that means community organizing, savvy media messaging, and getting public health-friendly politicians elected to office.

Chockablock though it is with esoteric academic terminology like “multiple-streams framework” and “punctuated equilibrium theory,” the paper is as plainspoken as any political campaign whitepaper. (Huang was its lead writer.)

Public health professionals need training not only in epidemiology and nutrition science, but also in the principles of campaign coordination, community organizing, consumer protection and media strategy. Their expertise is needed not only in government agencies and universities but in lobbying organizations, financial institutions, political campaigns and business groups — any institution, in other words, with the capacity to promote public health and challenge the current, “pervasive marketing of unhealthy food and beverages.”

“There has been too much emphasis on the top-down approach,” he said in a recent interview in his CUNY office.

The top-down solutions imposed so far — including various bans on junk food in schools, controls on children’s advertising, soft drink taxes, calorie labeling — should be rigorously studied to determine which work and which don’t.

In the meantime, Huang says, public health professionals should try “getting into the trenches.”

“We teach students that poverty and income disparity are root causes of health disparities,” he added by way of illustrating the current norm, “but we don’t teach them the skills for doing something about it.”

Huang pointed to the campaign for marriage equality as a paradigm for nutrition and health advocacy. “The gay marriage initiative didn’t just come out of the blue,” he said. “It was 30 years of very intense grassroots campaigning, to systematically change people’s views, and to systematically get politicians elected who supported” the movement’s goals.

Huang received his B.A. in psychology from McGill University in Montreal in 1998, and his Master’s degree in public health and Ph.D. in preventive medicine over the next four years at the Keck School of Medicine at the University of Southern California.

He came of age as a scientist when policymakers were first seriously joining the battle against obesity in the United States. That was in the late 1990s, when a decade’s worth of demographic research by the Centers for Disease Control and Prevention had started to emerge, showing dramatic and sustained increases in obesity across the country, beginning in the late 1970s.

In 2001, Surgeon General David Satcher labeled obesity-prevention a “new national epidemic,” and warned that overweight and obesity, which is linked to heart disease, diabetes and a host of other medical problems, threatened to “overtake tobacco as the chief cause of preventable deaths in the United States.”

Early on, public health officials focused the bulk of their efforts to curb obesity on changing the
behavior of individuals, convinced that overeating and obesity — for most people at least — was a public health problem that had to be overcome one person at a time.

The more holistic and nuanced view now embraced by Huang and his cohort in the field counts individual choice as just one of a host of factors influencing a person’s health and diet. And most of those other factors — including genetics, farm policy, food pricing, socioeconomic, social norms and global marketing — fall outside the sphere of any individual’s control.

Changing food habits in such a complex environment will require a big-tent approach, Huang says, with contributions from every sector of society, including business.

Especially food and beverage companies. He considers them powerful potential allies in the battle against obesity, and believes that healthier products and conscientious advertising will ultimately improve the corporate bottom line.

(In that spirit, Huang recently undertook a study in partnership with a major food industry-backed nonprofit called the Healthy Weight Commitment Foundation. The foundation, which is backed by major corporations including General Mills, the Coca-Cola Company and PepsiCo, selected the CUNY School of Public Health in January, under Huang’s direction, to assess the performance and impact of community-based obesity and hunger initiatives funded by the food industry. The first report is due early in 2016.)

Coming to New York from the University of Nebraska last year, Huang said he has been fascinated, familiarizing himself with the city’s sprawling and historic infrastructure of public health institutions — from its 200-year-old health department to its constellation of renowned medical schools.

But in the process he has also been reminded of the problems facing his particular arc of the public health sector: There are at least three university-based research programs in the city focused on studying obesity. Huang knows them all, considers their work exemplary, and has communicated with their research scientists for years.

It’s only since arriving in New York, though, that he has realized something else about his New York colleagues. “No one talks to each other,” he said with a subdued smile.

He is trying to think of ways, he said, to start bringing them together.

NAME: Terry T-K Huang

TITLE: Obesity researcher, professor, Ph.D. Preventive Medicine, MPH, Epidemiology/ Biostatistics, CPH

FOCUS: His aim is the integration of national public health efforts on obesity into a broader campaign for social justice.
discovery

Levi Waldron, Bioinformatician
ABOUT 2,900 miles from the off-the-grid log cabin where he grew up, Levi Waldron is describing his journey from the map speck called 100 Mile House, British Columbia to this city of 8 million and the CUNY School of Public Health. “Growing up in the woods has something to do with why I was drawn to as big a city as possible,” says Waldron, an assistant professor of biostatistics whose career has taken him from a Ph.D. in wood physics to large-scale, computer-driven analyses of the genetic profiles of large populations of people and of how, and why, they get sick.

With a background in cancer genomics acquired during postdoctoral study at the University of Toronto and Harvard University’s School of Public Health, Waldron, 41, employs a mathematical approach to analyzing how genes and the environment intersect to change cells, making different people and population groups ill or not, responsive to treatment or not.

He cuts through forests of cell data from public genomics databases and designs algorithms to pioneer new methods of unraveling, sorting and identifying the data to simplify the analysis.

“I describe myself as being in bioinformatics, which is the analysis of large biological and public health data sets for understanding disease causes and outcomes,” explains Waldron, a faculty member in Hunter College’s Epidemiology and Biostatistics Program and at the Graduate Center, since August 2013. “I do analysis of gene expression and other genomic assays [sets of data from tissue samples] in order to, in essence, understand differences in what otherwise look like clinically homogenous diseases.”

“The most vexing example” of the problems Waldron investigates: “Why you can have two cases of cancer that present essentially in the same way in the clinic, and yet one person responds to therapy and survives and goes into complete remission, and the other one doesn’t respond at all — and dies shortly after diagnosis without any efficacy of treatment.”

Waldron studies the cancer genome using public data sets of cell information collected from tumor samples given at hospitals in the United States and elsewhere. A genome is defined as one’s entire collection of DNA. But cancer changes the genome into “a combination of what the person was born with and also the changes that occurred during the development of cancer,” he explains.

Through computerized sorting of the data, Waldron investigates alterations to a person’s DNA in different cells — changes that occur during development of the cells and of the person. “When you do genomic profiling, there are several very comprehensive assays that you can collect — assays for DNA sequencing, for RNA sequencing [RNA is the messengers that get copied from DNA and are turned into proteins], there are assays for regulatory alterations to the DNA that can occur during cancer development.”

“It’s really an overwhelming amount of data that are now being collected routinely on cancer tumors for genomic research,” he says. “For one person, you could collect upwards of 10 different assays on that one tumor and each one of those would give you thousands or even into the hundreds of thousands of measurements. The challenge is to look at this huge amount of data and try to say which alterations matter. … This is what my methodological work is about: ways of separating those differences that are meaningful and that aren’t.”

Public health-wise, Waldron says the work “has implications not only for understanding the outcome but to understanding the origin of the diseases and how they developed. Presumably there is a difference in the genes that make some grow more aggressively that can be traced back to the development of the disease. Certainly there are differences in outcome for different socioeconomic and racial groups, but it’s not clear in those different populations how much is due to environment and treatment versus the genome.”

Waldron has embraced living and working in New York City, an environment 180 degrees from the Canada woods where his parents, looking for “somewhere beautiful and quiet,” moved from Denver in 1976. “They moved to the middle of nowhere,” he says. “I grew up in a house without electricity or indoor plumbing. I still love to visit, but I can’t imagine living outside the city now.”

His parents planted trees in summer to replenish forests cut for timber, and later became teachers. Young Levi was homeschooled for three years but needed more. “I was too social, and I got bored, refused to do my work, and forced them to take me to a school,” he says. His first was a one-room elementary school.

His bachelor’s from the University of British Columbia and his master’s from University of Waterloo, Ontario, were in physics, and his Ph.D. from the University of Toronto was in wood physics. But he “wanted more direct societal relevance, especially relating to health.” At Toronto, through a project involving gene expression in trees, he was introduced to genomics. He discovered bioinformatics as a post-doc at Toronto and Harvard. “I got involved in cancer research and microbiome research,” Waldron recalls. “As soon

Please Turn to Next page
**Levi Waldron, Bioinformatician**

*Continued from Previous Page*

as I got into bioinformatics I collaborated with physicians, statisticians, computer scientists, biologists and public health professionals."

The breadth of Waldron’s interests is reflected in his current projects. He recently joined a five-year project, funded by the National Cancer Institute, in a team developing software that will make NCI’s complex genomic data — 10 to 15 types of genomic data for each of 33 cancer types sampled from 11,000 patients — "more analyzable." The software will also be used for the International Cancer Genome Consortium’s "Cancer Cell Line Encyclopedia," an MIT-Harvard collaboration.

"There are a lot of uses of such rich data sets," Waldron notes. "One is to identify more targeted therapies, one is to learn about genetic subtypes of a cancer type, one is to learn about the biology of cancer and understand the different ways in which cells become cancerous, and one is to be able to be able to provide patients with more accurate prognosis."

One CUNY project Waldron is collaborating on, with the New York City Department of Health and Mental Hygiene, is profiling "the oral microbiome [all microorganisms and their collective genetic material in the mouth] of New York City residents" through saliva samples, "to understand the variability that exists in our diverse population" — for example among different races, ethnicities and socioeconomic groups — "and how the microbiome might be a factor in health outcomes and health disparities."

"We’re looking at diabetes, obesity and inflammatory markers [indicators of poor health]. We’re looking at smoking … What happens to the commensal germs that live in your mouth, a normal part of your own ecosystem, when you smoke?" Waldron is working on the project, part of the New York City Health and Nutrition Examination Survey (NCHS) with fellow Hunter Epidemiology and Biostatistics researchers, a doctoral student and two City Tech undergraduate interns.

Other Waldron projects include a joint CUNY-New York City Department of Health and Mental Hygiene project to evaluate the effectiveness of a comprehensive care program, run by the Ryan White Centers, that identifies and serves HIV patients at risk of not complying with their medication and treatment plans. He is also analyzing electronic health records through his supervision of CUNY doctoral students who plan to use them to predict risk of post-surgical infections and adverse drug reactions.

"All of the projects I’m working on are characterized by complex data sets where standard statistical analysis methods are inadequate due to the volume and complexity of the data," says Waldron, who devises algorithms and data structures to organize the data and to simplify the analysis.

Waldron, who teaches introduction to biostatistics and advanced applied biostatistics, says, "I’ve been able to attract the interest of a lot of our students who were looking for something like this — this intersection of computer science and statistics."

— Levi Waldron, THE CUNY SCHOOL OF PUBLIC HEALTH

'They’ve been able to attract the interest of a lot of our students who were looking for something like this — this intersection of computer science and statistics.'

— Levi Waldron, THE CUNY SCHOOL OF PUBLIC HEALTH

**Students Help Students With Health Care**

I’S NOW MUCH EASIER for CUNY students to enroll in the New York State health plan marketplace with the help of their peers. CoverCUNY, a student-driven initiative at Lehman College, and Hostos and Bronx Community Colleges, is on a mission to get all students who are eligible for health insurance covered.

This education and health insurance enrollment project is a collaboration between the University Student Senate, the School of Public Health and Seedco — a non-profit organization that advances economic opportunity for people, businesses and communities in need.

"I’m in the position to educate students about health topics. Many students don’t know about nutrition, exercise and safe sex," says CoverCUNY co-program director and Lehman College senior Melissa Carreño. "I’m helping them understand how to balance school, work and personal health and health insurance plays a big part," adds Carreño.

A team of 35 student ambassadors and six certified application counselors are behind the enrollment drive at the three campuses in the Bronx. The ambassadors are volunteers responsible for spreading the word about the initiative through flyer campaigns and on-campus events. The CACs are paid and must complete a rigorous three-day training where they learn about the health insurance marketplace and the Affordable Care Act, commonly referred to as ObamaCare.

"Students don’t know about ObamaCare. So they come with a lot of concerns about the fine," says certified application counselor and Lehman junior Jhatmmarys Alvarez. "We’re trying to protect students from getting fined by the federal government. You spend money on books, tuition and then you get hit with a fine. That’s a no-no," says Alvarez. "We are students helping other students. We need to help each other to grow," she adds.

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In late 2015, the CUNY Board of Trustees voted to restructure the School of Public Health as the CUNY Graduate School of Public Health and Health Policy. This move will now allow faculty and students to more effectively build our school's reputation as a leader in global health, health equity and health policy.

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