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WNY Wellness Works collaborators (left to right) Cassandra Hoebbel, SPHHP; Denise Paszkiewicz, People Inc.; Gabrielle Foley, SPHHP; Betty Christ, Niagara Frontier Automobile Dealers Association.  
Photo: Nancy J. Parisi

# Working well

Western New York has an unusually high rate of heart disease, cancer, diabetes and other behavior-driven chronic diseases. That's a big problem. Now the UB School of Public Health and Health Professions is part of a demonstration program that may offer a big solution.

The project is called Western New York Wellness Works. It's a partnership between the New York State Senate, State Sen. Mary Lou Rath, the University at Buffalo, and the Western New York Wellness Works board of directors, who represent a broad spectrum of community interests. The partnership has one very basic objective: use the workplace to improve workers' health.

The idea is simple. If employers can promote wellness, this will create a win-win situation. Better employee health means better quality of life for individuals—a universally desirable, effectively

priceless good. For the employers, better workforce health means fewer days lost to illness, greater productivity and lower health-care costs, benefits that have a quantifiable and positive impact.

In 2004, Sen. Rath secured \$1 million to prove the concept; this July, she announced another \$500,000 grant to continue the work.

The money is used for matching grants to selected WNY employer wellness programs and for research by the School of Public Health and Health Professions (SPHHP) to assess those programs to see what works, what doesn't, and what difference it makes.

"The data collected through this effort," according to Rath, "will help drive future public policy as we look to find creative solutions to increase health and wellness and reduce the skyrocketing price of health care."

The principal investigator for the Wellness Works project is Joan Dorn, associate professor of social and preventive medicine. In February 2005, her office sent a request for proposals to hundreds of Western New York businesses inviting them to apply for up to \$50,000 in funds to match, dollar for dollar, funds they would spend on new worksite wellness

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## Seeing the forest and the trees

**A**llow me to welcome you to this first issue of *Impact*, our new School of Public Health and Health Professions newsletter. Whether you are an alumnus, a neighbor, a client or a partner, we count you in our large circle of friends.

The School of Public Health and Health Professions was created in 2003. Here is an overview of where we are at three years old:

:: We are moving forward with our plan to establish a full complement of departments. We've added a department of health behavior (see "News," this page). Next to come is a department focusing on public health practice and policy.

:: We are developing a core curriculum for both our health professions and public-health programs. This common body of knowledge recognizes that all our programs are aspects of work in health fields that promote wellness and disease prevention—as our school motto says—for populations and individuals.

:: We established a new look for our major publications and published award-winning recruitment brochures for all of our programs.

:: We are initiating the process that leads to accreditation for the school by the Council on Education for Public Health.

The feature articles in this issue of *Impact* all involve partnerships we have—with regional employers, with a major health insurer, and with Roswell Park Cancer Institute. Partnerships are our lifeblood. We are, after all, the School of

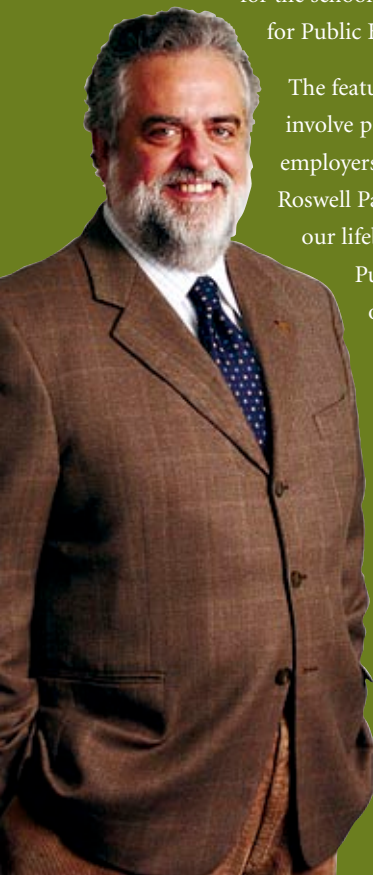
Public Health and Health Professions, so our connection with the community we serve is built right into our name.

I hope you can come along with us as we grow.

Sincerely,



Maurizio Trevisan, M.D., M.S.



## New chairs, curriculum gift, Presidential fellow

### Chair for new Department of Health Behavior



Kozlowski

SPHHP's new Department of Health Behavior will be chaired by nationally prominent behavioral health scientist

Lynn T. Kozlowski. He comes to UB from the College of Health and Human Development at Penn State. Kozlowski is a leading authority on human tobacco use.

### Freudenheim, Burkard named department chairs



Freudenheim

Jo L. Freudenheim has been named chair of the Department of Social and Preventive Medicine where she has served as interim chair since 2003. A UB Distinguished Professor, she is a leading authority in cancer epidemiology. Her research focuses on genetic factors that interact with diet to influence disease risk. She is also professor in the Department of Cancer Pathology and Prevention at Roswell Park Cancer Institute.

Robert F. Burkard has been named chair of the Department of Rehabilitation Science, where he has served as adjunct professor since 2004. A professor in the departments of communicative disorders and sciences, and otolaryngology, Burkard is also an adjunct associate professor in the psychology department and continues to conduct research through UB's Center for Hearing and Deafness.

### Albert and Linda Rekate gift supports new core curriculum

Albert C. Rekate, professor emeritus of medicine, founding chair of the Department of Rehabilitation Medicine and former acting dean of the School of Health Related Professions, and his wife, Linda H. Rekate, have earmarked more than \$47,000 to date to help develop a new core curriculum for SPHHP. Linda is retired from a 25-year tenure at UB, most recently as clinical assistant professor and director of UB's Speech and Hearing Clinic formerly located in Park Hall.

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### Harvard's Kessler to give 2006 Perry Lecture

Ronald C. Kessler, professor of health-care policy at Harvard Medical School, is principal investigator of the National Comorbidity Survey, the first nationally representative survey of psychiatric disorders in the United States. He also directs the World Health Organization's World Mental Health Surveys, a series of epidemiological surveys in 28 countries.



October 13, 3:30-5 p.m., Lippes Concert Hall, Slee Hall, UB North Campus. Poster presentations, 1 to 3 p.m., Center for the Arts Atrium.

Kessler

# Lower-cost weight loss

Health-care insurance company BlueCross BlueShield of Western New York is funding a landmark \$5 million, five-year research project at the UB School of Public Health and Health Professions comparing non-surgical and surgical treatments for severe obesity.

The study, called the Health Improvement Project (HIP), is designed to develop a sustainable weight-loss program for people who are severely, or morbidly, obese. Nearly 5 percent of American adults are severely obese, with 100 pounds or more of excess body weight.

## Intensive interventions

The HIP study is the first long-term clinical trial to compare the health-care costs of bariatric surgery to the costs of intensive, non-surgical management of severe obesity.

Bariatric surgery refers to operations intended to reduce weight, including gastric bypass procedures that reduce the size of the stomach or divert the passage of food in the gastrointestinal tract.

The HIP study will employ a combination of weight-loss interventions: a rigorous diet of low- or very-low-calorie meal substitutes, behavioral counseling, monitored medication and moderate physical activity. Few if any other studies on severe obesity have used all four interventions applied in this manner for this length of time. Many weight-loss programs do not include a behavioral intervention.

Participants in a six-month pilot phase are being treated at

SPHHP's Center for Preventive Medicine, recruited from BlueCross BlueShield of Western New York's customer roster.

Over the course of the study, which lasts three years with two years of follow-up counseling, up to 280 participants will be randomly assigned to one of four different weight-loss approaches: low-calorie diet and behavioral therapy; very-low-calorie diet and behavioral therapy; a low-calorie diet, behavioral therapy and medication; and a very-low-calorie diet, behavioral therapy and medication.

All participants also will be encouraged to walk and use resistance exercises.

An appetite suppressant and a fat absorption inhibitor are to be administered to specified groups. UB also will enroll a comparison group of 70 people who receive only bariatric surgery.

## A unique methodology

Because it is the first study to compare the costs of surgical and non-surgical weight-loss methods, HIP should be able to provide BlueCross BlueShield of Western New York with previously unavailable health data.

"Working with UB's School of Public Health and Health



Showing off their "HIP" frisbees in UB's Center for Preventive Medicine are (left to right) Ellen Grant, LCSW, Vice President for Behavioral Health, Wellness and Health Promotion at BlueCross BlueShield of Western New York; study director Michael Noe; and nurse Andrea Casselberry.

Photo: Nancy J. Parisi

Professions, we are setting out to develop a gold-standard, best-practice model of alternative treatments, because we found that none exists," says Alphonso O'Neil-White, president and CEO of BlueCross BlueShield of Western New York.

Last year, BlueCross BlueShield of Western New York spent a total of \$4.5 million on bariatric surgical procedures, at a cost of up to \$25,000 per operation. While surgery is an attractive option for many with severe obesity, it is not without complications, and long-term effects remain under study. For many others, surgery is not an option for personal or medical reasons.

"What's interesting is that out of all the people who qualify for the study in terms of their BMI, a majority don't want bariatric surgery," says Michael Noe, SPHHP associate dean for community relations and clinical affairs and head of the study.

Noe expects HIP's long-term results to compare favorably with bariatric surgery. "I believe participants' risk factors for cardiovascular disease, diabetes and other conditions will significantly improve."

He also hopes that the study will lead to creation of a weight-loss management facility as well as new treatment guidelines.

—Lauren Newkirk Maynard



# By the numbers

UB's School of Public Health and Health Professions and Roswell Park Cancer Institute share people and ideas in the fight against cancer. Some of the partnerships are so close that whether a person works at one place or the other depends on the day of the week.



Alan Hutson, (*right*), chair of both SPHHP's and Roswell Park Cancer Institute's departments of biostatistics, with UB colleague Daniel Gaile, (*center*) and RPCI colleague Gregory Wilding, at UB's New York State Center of Excellence in Bioinformatics and Life Sciences. Photo: Nancy J. Parisi

A lot of what we know about health comes from information that can be reduced to numbers.

Epidemiology—the study of disease in populations—is all about numbers.

Cancer prevention is all about numbers, too. Smoking is the most obvious example. Epidemiologists found the connection between smoking and cancer in the early 1950s by tracking the smoking habits and mortality of 35,000 doctors.

Bioinformatics—combining computation, biology and statistics—stands on a foundation of numbers.

Working with the numbers that underlie health and the life sciences makes for a natural partnership between the epidemiologists and biostatisticians at the School of Public Health and Health Professions (SPHHP) and at Roswell Park Cancer Institute (RPCI). Scientists at the two institutions teach in each other's faculties,

conduct research together and, in the case of their biostatistics departments, share a department chair.

The UB-RPCI connection is as old as RPCI. Roswell Park was a UB professor of surgery in 1898 when he founded the laboratory that grew into the research complex that bears his name. Today, the university and the cancer center are literally connected in adjoining research buildings on the Buffalo Niagara Medical Campus (see sidebar, page 5).

“Traditionally, epidemiologists have worked seamlessly between Roswell and UB, with a focus on the epidemiology of cancer,” according to Maurizio Trevisan, dean of SPHHP. He says that UB's legacy of research leadership in epidemiology, dating from the 1960s, was intertwined with RPCI, which recruited the researchers, including Abraham Lillienfeld and Saxon Graham, who later established UB's reputation in epidemiology.

James Marshall, RPCI senior vice president for cancer prevention and population sciences, is a former UB faculty member and RPCI's chief of epidemiology. Christine Ambrosone, earned her degree at UB as did RPCI epidemiologists Susan McCann and Kristen Moysich.

“There is a great deal of collegueship between UB and Roswell,” Marshall says. He points to his continuing research work with Jo Freudenheim, chair of SPHHP's Department of Social and Preventive Medicine. Marshall was involved when Freudenheim was hired and has watched her become, in his words, “one of the strongest nutritional researchers involved in cancer epidemiology in the world.”

"We work together a great deal," Marshall says. "If you check Jo's CV, you'll see that she and I are coauthors on probably 15 to 20 papers."

Trevisan says that in addition to epidemiology, SPHHP and RPCI have strong collaborations in health behavioral science and biostatistics.

Michael Cummings, director of the health behavior department at Roswell, has a joint appointment at UB; Gary Giovino and Andrew Hyland, two leading researchers in the Roswell department, also have Ph.D.s from UB. The connection recently paid a big dividend for the school.

### A big catch

As it builds out a full complement of public health departments, the school is adding a department of health behavior. UB's close connections with the Roswell program played an important role in the recruitment from Penn State of Lynn Kozlowski, an authority on smoking cessation, to be the first chair for the new department (see "News," page 2).

"This is a big catch for us," Trevisan says. "It's an example of collaboration with Roswell attracting a star."

Alan Hutson, chair of the biostatistics departments at both RPCI and the School of Public Health and Health Professions, was interviewing with both in 2002 when he decided to accept the position at UB, where he earned his undergraduate and master's degrees.

As he built up the biostatistics department at UB, Hutson was also involved in work at RPCI providing biostatistical support for its core cancer center grant and for the National Institute of Health's Gynecologic Oncology Group, which is located at RPCI.

When the chair of biostatistics at RPCI moved on to the American Cancer Society, Candace Johnson, RPCI senior vice president for translational research, asked him to consider adding the position to his UB duties, in her words, as he remembers them, "Why don't you give it a shot." He started wearing both hats officially in August 2005.

"The timing couldn't have been better," Hutson says. "There are six UB biostatistics faculty affiliated with Roswell part-time now. For biostatistics, cancer is one of the hot places to be. There's a lot of funding in the area and cancer is one of the most important problems to work on."

Running two departments at once is a good fit for the field. "Biostatistics is, by its nature, collaborative," Hutson says. His assistant chair at RPCI, Gregory Wilding, also holds a UB faculty appointment.

UB biostatisticians have established a presence where RPCI and UB come together for bioinformatics research (see sidebar, right).

So it is fitting that researchers from both institutions can now walk through each other's doors without leaving the building.

—Judson Mead



UB's New York State Center of Excellence in Bioinformatics and Life Sciences on the Buffalo Niagara Medical Campus is connected to Roswell Park Cancer Institute's Center for Genetics and Pharmacology (*far right*).

Photo: Douglas Levere

## Building critical mass

The New York State Center of Excellence in Bioinformatics and Life Sciences is a kind of mega-partnership linking researchers from UB, Roswell Park Cancer Institute (RPCI) and Hauptman-Woodward Medical Research Institute in a spectacular new complex of research buildings on the Buffalo Niagara Medical Campus.

UB's School of Public Health and Health Professions is involved with the center's research initiatives on three fronts.

SPHHP biostatisticians, particularly Dan Gaile and Jeff Miecznikowski, conduct research on the mathematics of basic genetic and proteomic science. Their work developing statistical techniques for analyzing huge amounts of interacting data is at the heart of bioinformatics research that may lead to new understandings of human diseases. The proximity of UB's Center for Computational Research, located in the center, facilitates collaboration around this work.

Maurizio Trevisan, dean of the school, is a member of the center's cardiovascular research core. He will have an office in the center, where he's looking forward to seeing his research colleagues in real—as opposed to virtual—space.

Trevisan says the best ideas can come from chance encounters. "Drinking coffee together or eating lunch together is more productive than saying, 'Meet me at 11:00 to do science,'" he says. He likens these impromptu exchanges to the kind of brainstorming sessions typical in advertising agencies.

Finally, in a major initiative, SPHHP is developing a dedicated cancer epidemiology group that will be housed at the center, close to researchers working on cancer genetics and literally down the hall from their colleagues at RPCI.

[“Working well” continued from page 1]

programs tailored to the employees’ health needs.

Twenty-six firms responded. Seven reviewers evaluated the proposals without knowing what companies they were from and selected 13 proposals to receive funding. After one year, 11 programs remain in the study (see sidebar below).

Dorn says that assessment of the programs will use three markers to rate effectiveness: individual employee risk factors, an employer’s wellness promotion environment and its health-care costs.

“We’re hoping to answer the question, ‘Does this type of program have an effect on employee wellness, and has it resulted in lower employee health-care costs?’” Dorn says.

Evidence collected on programs that prove successful can be used



**State Sen. Rath announces new funding at a July 27 wellness event.** Photo: John DellaContrada

to promote such efforts to other employers. Programs that don’t meet goals will be studied to see why they didn’t work.

When the projects kicked off, participating employees completed questionnaires on their health risk factors. Employers were evaluated on such measures as administrative support for wellness activities, access to healthy foods and opportunities for physical activity.

After two years, employees and employers will be surveyed

again. Company health-cost data, including hospitalizations, doctor visits and prescription and rehabilitation costs will also be analyzed.

In May 2006, aggregate results from the 2,800 initial participant health surveys were released. The average age of participants is 43 years for women and 41.6 for men; their collective health risk profile shows that while 83 percent report exercising at least once a week, and more than 25 percent exercise four or more times a week, 61 percent are overweight to extremely obese.

When the two-year program period ends, participants will answer the same survey questions. All participating employees will take away a thorough personal health risk evaluation spanning two years.

Employer scorecards on a survey called Heart Check Plus showed that only two worksites rated 60 percent or above. These employers have fewer participants who are overweight and these employers reported fewer days lost to illness.

While the employers aren’t competing with each other, People Inc. is using competition as a motivational tool. Teams use pedometers to log how far they walk.

“Once you put the pedometer on,” says Nicole Watson, a People Inc. employee, “you’re looking at how much you walk. You start making decisions not to drive somewhere. Some of us walked outside in the winter.”

That sounds like one-half of the win-win formula.

—Judson Mead

## Wellness Works programs

:: **Better Baked Foods of Westfield**—An “affirmative action” campaign for employees and their families promoting healthy lifestyles.

:: **Mark IV Industries, Inc., and Wilson Central Schools** in conjunction with BlueCross BlueShield of Western New York—Lifestyle and behavior modification programs for the employer groups targeting physical activity, nutrition and weight management, stress management and smoking cessation.

:: **Clymer School District**—A staff wellness program focusing on improving fitness and nutrition.

:: **Daemen College**—A Campus Health Improvement Program for employees, involving physical fitness training, a Team Walking program, a Stair “well” Challenge and a Healthy Cooking and Eating program.

:: **Erie Community College**—A Wellness Department that will work with consultants to assess

each employee’s health and design individualized improvement programs

:: **Jamestown School District**—Wellness assessment, educational seminars, motivational activities, cardiovascular conditioning and weight management for administrators and support staff.

:: **Greater Buffalo Savings Bank**—“Healthy Me, Healthy Us” programs and additional fitness equipment for its 1,300-square-foot Wellness Center.

:: **Independent Health**—A “Total Health Program” centered on interventions to improve cardiovascular health.

:: **Niagara Frontier Automobile Dealers Association**—An exercise and healthy eating program.

:: **People Inc.**—Healthy People Wellness Program, involving team-based competition surrounding daily physical activity and healthy nutrition.

:: **Greatbatch Inc.**—The WellFlex™ program with a dedicated Wellness Team to enhance overall health.



[“News” continued from page 2]

Planners are considering “every possible teaching approach” within four content areas—evidence-based practice, population health and wellness, communication and professionalism, and disability and rehabilitation—in building a core curriculum that provides common knowledge and skills for all SPHP students, no matter what their career paths. The adoption process, which we will follow closely in this newsletter, is expected to take an additional three years.

### Trynosky named Presidential Management Fellow

Congratulations to **Stephen K. Trynosky, J.D./M.P.H. '06**, who recently completed a dual degree in law and public health—the only program of its kind in New York State—on his selection as a 2006 Presidential Management Fellow. He will start work in late August with the Undersecretary for Legislative and Intergovernmental Affairs in the Department of Homeland Security on legislative issues.



Photo: Brian Smistek, Kaleida Health / WCHOB

### Women and Children's Hospital to implement ENS mentoring program

(left to right) Jennifer Trillizio, B.S. '06; Barbara Howard, on-site clinical supervisor at Women and Children's Hospital of Buffalo; and patient Jonathan Hackett. Trillizio received the Outstanding Senior Award from the exercise and nutrition sciences (ENS) department in part for creating a mentorship program for children with cystic fibrosis and asthma at the hospital. Along with Howard and Michelle McCarroll, UB clinical assistant professor of ENS, Trillizio will help implement a trial program next year where ENS undergraduates mentor chronically ill children, on an inpatient basis, as part of a semester-long internship. She mentored Hackett while developing the program during her senior year.

## Technocratic thermostats

Two innovative research programs at UB's Rehabilitation Engineering Research Center on Technology Transfer (T<sup>2</sup>RERC), are putting assistive technology into the hands of people with—and without—disabilities. T<sup>2</sup>RERC is located at SPHP's Center for Assistive Technology.

Using its Supply Push program, T<sup>2</sup>RERC works with other universities, inventors, researchers, small companies and community partners, such as the Western New York Independent Living Center, to deliver marketable technologies that make life easier. The latest is a “talking” thermostat, called Kelvin, for people who have impaired vision or who cannot physically access the device.



Kelvin evolved out of a complex “technology transfer” between UB and Action Talking Products LLC, a company formed by the patent holder, Scott Flood, and Independent Living Aids, Inc. Endorsed by the National Federation of the Blind, Kelvin's voice-operated design lets people control their homes' temperature with just the sound of their voices, or by using its large, ergonomic buttons.

UB's Fortune 500 program helps the country's largest corporations modify their mainstream product lines to address the needs of the elderly and people with disabilities. T<sup>2</sup>RERC provides clients with free primary market research and uses a practice called “Participatory Development” to involve all consumers in all phases of product design and development.

The result of a decade of transferring and licensing various prototypes, the 90 Series Blue Thermostat was developed by T<sup>2</sup>RERC and White Rodgers, a division of Emerson Electric Co. The ergonomic thermostat is marketed to mainstream consumers, and a production model was approved in January after extensive feedback from focus groups.



Upcoming Fortune 500 projects include product design collaborations with the Eastman Kodak and Whirlpool Corp. Independent Living Aids is also interested in providing a version of the Kelvin to the hotel and motel industry.

T<sup>2</sup>RERC, located at SPHP's Center for Assistive Technology, is now in its third year of a \$4.75 million five-year grant from the National Institute on Disability and Rehabilitation Research.

For more information, visit [www.cosmos/buffalo.edu/t2rerc](http://www.cosmos/buffalo.edu/t2rerc).

# Reading the diet research headlines

When research results are published on a subject that is relevant to people's lives—such as the connection between diet and disease prevention—and the results do not confirm preconceived ideas, the story will get extra attention. That was especially the case with the Women's Health Initiative (WHI) study on diet and certain diseases.

The *New York Times* ran a report about our research on the front page under the headline "Low-Fat Diet Does Not Cut Health Risks, Study Finds."

I think the results of the study were actually more positive than portrayed in the media.

Any really large study—and this is especially true of the Women's Health Initiative studies—that is long and complex, with many results and many findings, is difficult to report fully in a single 6,000-word scientific article with a handful of charts.

Reducing that to 500 words in the press makes it even more difficult to report the findings meaningfully. And taking all 12 years of the study, with its thousands of potential studies and sub-analyses and boiling that down to 20 or 30 seconds of

airtime makes it impossible to communicate the results with any kind of nuance.

As scientists, we ask ourselves how we can do a better job of explaining to the media the information we report in journal articles. We have to balance communication and precision. We don't want to overstate what we've found, so our "headlines" may end up black and white and not reflect all the shades of grey within the results.

A case in point is that in the association of diet and breast cancer, most of us felt there were encouraging findings on breast cancer prevention. The study just missed the criterion for statistical significance, so that's what we reported and that's what the headlines said. Hence, the reasons for optimism about prevention were lost, because it's hard to get the level of subtlety we'd like into a headline.

If a low-fat diet reduces breast cancers by 9 percent—which is what the study showed—that can mean thousands of cases of prevented breast cancer. If you carefully read the paper that reports the study, you will find results that are somewhat promising. And for

heart disease there is at least a suggestion in the data that women who reduced the amount of saturated fat in their diets had some benefit.

There is a lot of interest in looking at different kinds of diets, such as the Mediterranean diets or low-carb diets. Solid data on their efficacy for disease prevention is lacking. What has been reported is their impact on intervening measures, such as cholesterol level or weight, not their long-term effects. The WHI study importantly looked at hard outcomes; it produced evidence that we can use in future research on the connections between diet and disease, not just their impact on disease markers.

*Jean Wactawski-Wende, associate professor of social and preventive medicine, is a coauthor on the three papers reporting results from the WHI diet studies.*



Wactawski-Wende

Photo: Douglas Levere

Improving health for populations and individuals  
**impact**

The University at Buffalo is a premier public research university, the largest and most comprehensive campus in the State University of New York system. The School of Public Health and Health Professions is one of 12 schools that make UB New York's leading public center for graduate and professional education and one of five schools that constitute UB's Academic Health Center.

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