

UPSTATE
UNIVERSITY HEALTH SYSTEM

Outlook

News on Upstate education, biomedical research & health care

Volume 8, Number 1

Summer 2009

The Picture of Health

Keeping Central New York healthy includes keeping kids active, especially kids like Matthew, whose health issues make exercise a challenge. A pilot exercise program at Upstate's Institute for Human Performance — and a new master's degree in public health — underscore Upstate's faith in the power of public health initiatives. See page 8.

Matthew, left, with
"Coach" Luis
Columna



Value-Added

In this inspiring issue of **Outlook**, we share stories of Upstate growing its way out of a recession, raising the bar in medicine, turning research into a team sport and standing watch over the health of our region.

The variety of stories reflects the diversity of our academic medical center. But there is a common thread. Each story illustrates our Upstate values in action. Respect inspires us to level the field for young people with disabilities. Innovation is the signature of University Hospital's stunning East Tower. Discovery drives our vision researchers to collaborate. Service compels our occupational health team to expand its coverage from 15 to 26 counties. And integrity fuels our nurses' commitment to putting Patients First.

Every page of this issue captures "Upstaters" engaging excellence by practicing our Upstate values. It's an honor to share their stories.

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UPSTATE Outlook

Summer 2009

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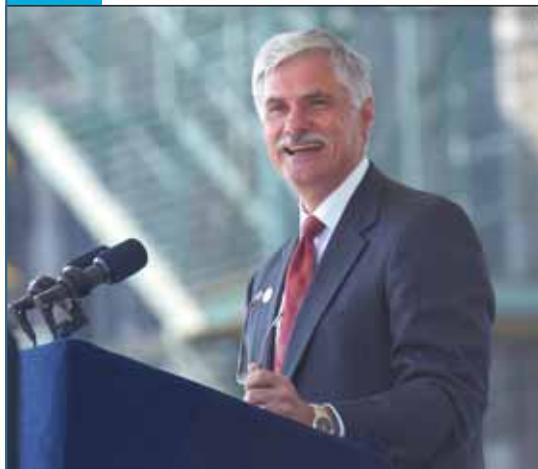
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Fluent in Pediatrics

Understanding how children communicate is critical to the delivery of world-class pediatric care.

by Denise Owen Harrigan

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Perpetually Raising the Bar

As you can see from our towering addition to the Syracuse skyline, Upstate is growing its way out of this recession.

Our growth is imperative, if we are to meet the health care needs of our region. Like much of the nation, Central New York faces serious health care shortages. Just ahead is a “Silver Tsunami” – a surge of retiring Baby Boomers who will both deplete the ranks of health care providers and increase the demand for complex health care.

When money is scarce, people are even more likely to get sick, and no less likely to have serious accidents and face chronic medical conditions. They may try to economize on health care, but that’s not good – for their health, their families, or their communities.

Upstate’s mission is to keep health care healthy. As New York State health commissioner Richard Daines MD recently told us, “Upstate is unique. It serves an entire region. It’s in a league of its own.”

In a few weeks, University Hospital will welcome the first adult patients to its new East Tower addition – an extraordinary facility with family-centered amenities.

It’s a hard feat to top, but in September we will: with the opening of the Upstate Golisano Children’s Hospital – a milestone for the entire Central New York region.

Next in line for Upstate is a long-overdue cancer center. And on the research side, a dramatic expansion of research space in the Institute for Human Performance.

These are not gifts to Upstate. New York State has given us permission to borrow money for these projects, but we pay the mortgages out of our revenues. Upstate’s growth is good for business and good for health.

Upstate is also growing academically. We now offer three new master’s degree programs: nurse practitioner in family mental health, physician assistant, and public health. Each program addresses a critical need in our health care workforce.

How is Upstate managing to grow while suffering severe cuts in New York State funding? We are simply working harder and working smarter. More than ever, we are working as a team. Like Olympians under the Upstate flag, we are driven, in our various disciplines, to perpetually raise the bar – and improve the health of the Central New York region.

David R. Smith MD
President, Upstate Medical University

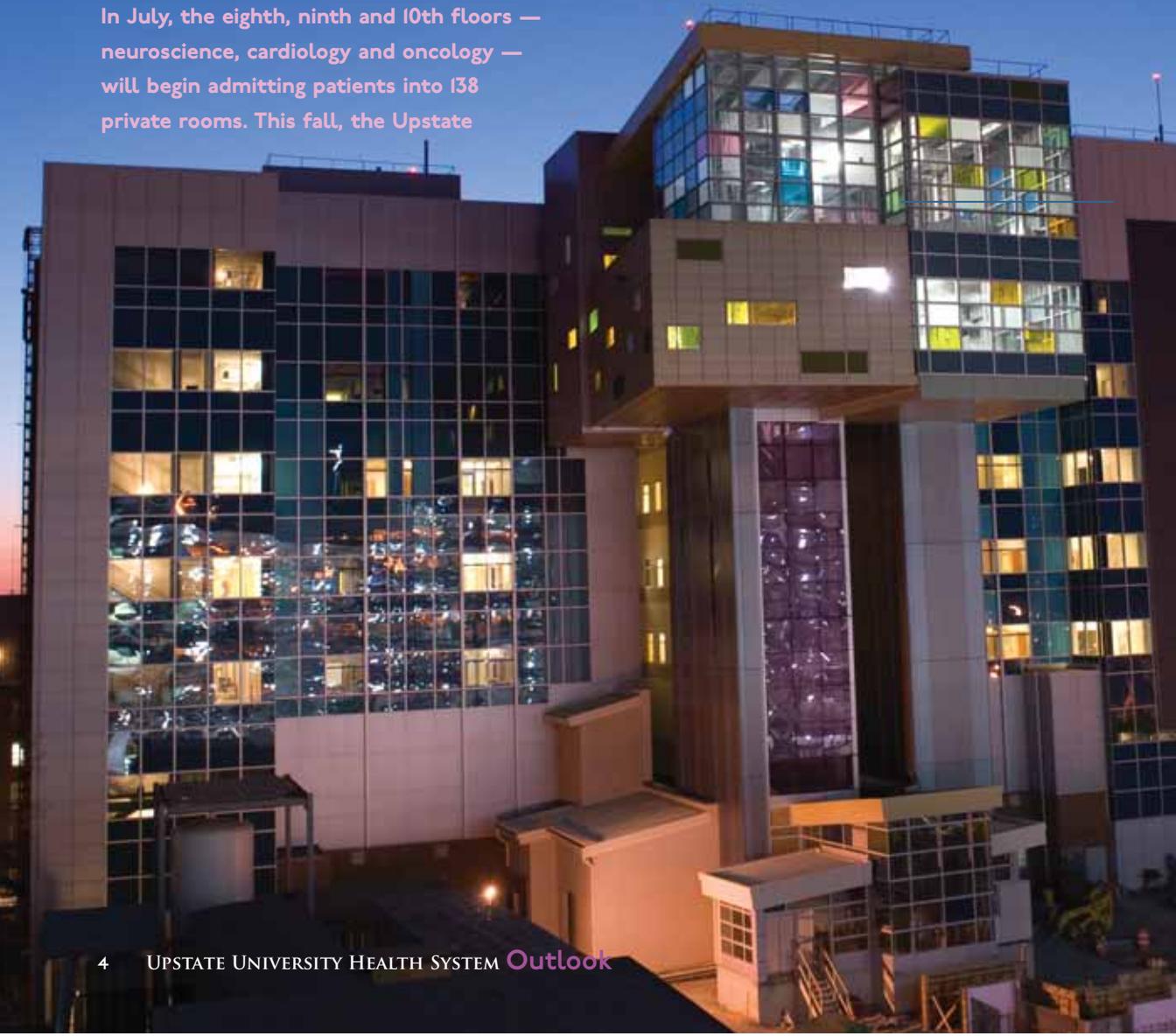
University Hospital East Tower Sneak Peek

Overlooking the City of Syracuse — and looking out for the entire Central New York region — the \$147 million East Tower addition of Upstate's University Hospital is near completion.

In July, the eighth, ninth and 10th floors — neuroscience, cardiology and oncology — will begin admitting patients into 138 private rooms. This fall, the Upstate

Golisano Children's Hospital will open its 71 private rooms to pediatric patients and their families.

In September, the Children's Hospital — the crown jewel of the East Tower — will be



open to the community that rallied for this rare resource and funded many of its extraordinary amenities, including its signature treehouse entrance.

A milestone on many levels, the East Tower addition will expand University Hospital's capacity from 379 to 409 beds, increase patient volume by at least 2000 patients a year and generate 250 new jobs.



Ninth floor nurses' station

The Best Views in Town

The new six-story East Tower addition features a palette of 43 colors "and some of the best views in town," according to Paul Seale, the chief operating officer of University Hospital. "Each patient room is private, 240-square-foot in size and equipped with more power outlets than the average home." Another standard feature is a sleeper to accommodate family members. "Due to a shortage of medical specialists in outlying areas," says Seale, "we are the safety net for all of Central New York. Half of our patients travel here from outside Onondaga County."



Children's Hospital room, under construction

Beating the Call Light

Nurses Join Forces for Hourly Patient Rounds

Megan Greenman MSN,
clinical nurse specialist at University Hospital

It's nothing new for University Hospital — nurses putting patients first. But nurses making rounds every hour, proactively addressing needs that lead patients to press the call light — that is new, and it's a win for both patients and nurses.

“The goal is to take our nursing to a new level — to go from good to great,” explains Megan Greenman MSN, clinical nurse specialist for nursing quality and patient safety.

The new system, Hourly Patient Rounds, is a choreographed approach to routine, recurring needs such as pain and positioning. Every hour during the day (and every two hours at night) a member of the nursing staff checks on every patient.

The hourly rotation is the cornerstone of the comprehensive Patients First Nursing Rounds, recently adopted by University Hospital's Department of Nursing.

“Pampered”

University Hospital surgery patient — and portrait photographer — Wendy Adams of Marathon is a big fan of hourly rounding. “The nurses are always concerned with your pain and making you feel comfortable. They check on everything and follow through on everything. They make you feel really pampered — as a mother of three, I don't often feel pampered,” she says.

Patients First has long been a universal sentiment at the hospital, according to Greenman. “The new rounding system puts our philosophy into action. It creates a culture that emphasizes exceptional customer services, in addition to quality care.”

“We've always been constantly in and out of our patients' rooms, checking on patients,” notes Shoshanna Reed RN of 7B, a 32-bed medical/surgical unit. “Hourly Patient Rounds is simply more regimented.”

Team Effort

“Instead of telling patients, ‘Here's your call light, press it if you need me,’ our nurses work together to anticipate patient needs,” explains Reed.

“It supports a sense of teamwork,” says Greenman. “Rather than each nurse working solo, we are assigned to patients as a unit. A nurse who's ahead helps a nurse who's behind.”

In units using hourly rounds, call light use has dramatically decreased, resulting in a calmer environment. “Now when we see the call light,” Greenman says, “we ask ourselves, ‘What did we not anticipate? What can we learn from that call?’”

Evidence-Based

Research in a recent *American Journal of Nursing* linked hourly rounds to improved patient satisfaction — the same trend seen at University Hospital. “According to Press Ganey Patient Satisfaction ratings, many of our scores have soared to higher than 90 percent of comparable hospitals,” reports Greenman.

University Hospital's hourly patient rounding is also associated with decreased falls and pressure ulcers. “By consistently focusing on little things like patient positioning, we prevent big things such as pressure ulcers,” explains Reed.



Shoshanna Reed RN of 7B, a 32-bed medical/surgical unit.

Power of Words

“Communication is a key part of the strategy,” according to Greenman. “We tell patients what we’re doing and what to expect. On every round, we use scripting to address the 5Ps: Pain, Potty, Positioning, PO (fresh drink) and Possessions (in reach). For pediatric patients, we add Parent and Play.

“Before leaving the room,” she adds, “we ask, ‘Is there anything else I can do before I leave? I have time.’ Then we tell the patient when someone will be back.

“When patients hear this regularly, it registers,” reports Greenman. “The staff can see, in patients’ eyes, an increased level of trust and confidence in their care.”

To seasoned staff, the scripting may sound – well, scripted. But it ensures clarity and consistency. “We take care of 18,000 patients year,” says Greenman. “With scripting, every patient understands that we’re committed to providing very good care.

“Even if we’re already providing good service, it’s important to put a name on it. It is also important to ask patients what ‘very good care’ means to them. This helps us to prioritize and meet their expectations.”

Grass-Roots

At University Hospital, the adoption of hourly patient rounding “has been more like a spread than a launch,” according to Greenman. “It began in 2007, when the Department of Nursing committed to a culture of rounding. Then we encouraged the hospital units to individualize and introduce the practice.

“This places decision-making in the hands of the bedside nursing staff. They often have the best ideas,” Greenman

says. “First 7B implemented hourly rounding, then 5B. Now all the medical/surgical units are on board.

“Each unit approaches hourly rounding a little differently. We began by developing aids such as bedside posters, clocks, magnets, and other visual tools,” she reports. “Creativity is encouraged. The oncology unit made its own video and threw a kickoff Super Bowl party with their neighboring pediatric surgery unit – proving you can have fun applying research to practice.”

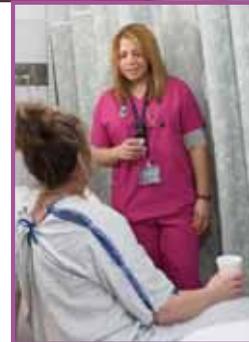
Weekly Rounds

At least once a week, nursing leaders and managers make their own patient rounds, to gauge the new system. “We’re getting great feedback on all levels,” reports Greenman. “When a patient praises a nurse, we turn it into a thank you note. It’s a great opportunity to say ‘You’re making such a difference with patients.’

“This is a culture change,” she notes. “Nurse rounding is a nurse-driven, evidenced-based initiative – not something the administration has told us to adopt. It’s a great example of applying research to change practice and improve patient care.

“Good nursing is about quality care and excellent service,” she continues. “We’ve always been really good at the care. With Patients First Nursing Rounds, we’re maximizing the service and improving patient satisfaction.” ■

–Denise Owen Harrigan



Different Strokes



Patient Julia, left, with volunteer Miranda Lustig.

Upstate looks beyond medicine to meet Central New York's health challenges.

Good medicine is just one aspect of good health. Social and sports opportunities play key roles, especially for pediatric patients with special needs.

Case in point is this winter's weekly – and wildly successful – sports night for families touched by spina bifida.

“Every week, our patients could come with parents and siblings for a family dinner and a night of fun in the pool or gym,” reports Nienke Dosa MD, MPH, associate professor of pediatrics and medical director of the Spina Bifida Center.

“It was great for the patients to share their activities with their families, and it was a great social networking opportunity for the adults.”

The innovative, six-month program was a collaborative effort by Upstate's Spina Bifida Center, SUNY Cortland's Department of AdaptED Physical Education, community volunteers and Move Along Inc., founded by Greg Callen of Liverpool.



An innovative monthly sports program at the Institute for Human Performance brings together patients, families, clinicians, students and community volunteers.

m.p.h. in Action

The term “public health” suggests issues of epidemic proportions. But Upstate clinicians also focus their public health skills on specific patient populations.

Many major initiatives — such as pandemic planning, preventing diseases and ensuring water safety — fall under the umbrella of public health. And public health training tends to be big-picture oriented, with its emphasis on statistics, epidemiology and public policy.

But — as in medicine — public health experts often specialize, as illustrated by these Upstate clinicians with master’s degrees in public health.

Nienke Dosa MD, MPH Associate Professor of Pediatrics

Nienke Dosa — who helped to create the innovative sports program above — is continuously scanning for opportunities to address her patients’ unmet needs. Dosa was inspired to pursue the MPH because of her earlier research on intensive-care admissions of children with chronic conditions and disabilities.



“Many were tragic stories,” she reports. “Their illnesses were foreseeable and therefore may have been avoidable.”

Dosa said her MPH from the University of Rochester gave her the skills to do something about it. “With training in statistics and epidemiology, you speak the same language as the policy people,” she said. “I’ve been able to write grants to pilot model programs and try a different way of doing things.”

In 2006, for example, Dosa obtained funding to form the New York State Institute for Health Transition Training at SUNY Upstate (www.healthytransitionsNY.org). The institute strives to help young adults with developmental disabilities gain access to health care.

“A major barrier is lack of insurance or being under-insured,” Dosa explains. “Thirty percent of 18- to 24-year-olds don’t have insurance, and that’s a big deal if you have a disability. They land in the adult ED with no cohesive summary of past pediatric history. The result is tests and treatments that may not be appropriate, avoidable morbidity and unnecessary hardship.”

Continued on page 10

MPH in Action — Continued from page 9

Donna Bacchi MD, MPH
Director, Department of Public Health and Preventive Medicine



Donna Bacchi entered pediatrics to help families make healthy choices. Her first patients — families of migrant workers in Brownsville, Tex. — made her realize that unhealthy choices were not always choices.

“I knew I could continue to see 40 to 50 patients a day in the clinic, or I could work for change that could impact hundreds of thousands. To do that, I needed new tools.”

In 1987, Bacchi earned an MPH at Johns Hopkins University. She has since held high-profile advocacy posts, including president of the American Heart Association in Texas. She continues to campaign against secondhand smoke, folic acid deficiency and other issues that endanger children. Her current focus is Upstate’s new MPH program, offered in collaboration with Syracuse University’s Maxwell School. “It takes the best and brightest minds,” says Bacchi, “to protect and improve the public’s health.”

Michael Lax MD, MPH
Professor of Family Medicine
Central New York Occupational Health Clinical Center



Even as a kid, Michael Lax remembers being intrigued by workplaces. “They’re such a big part of our lives,” he says.

In medical school, when Lax learned about occupational medicine, he knew it would be a good match for him. “I could see individual patients with problems that might be related to work. At the same time, I could have an impact on policy and prevention,” he says. “The MPH gives you the tools to analyze situations and put information together in a way that you wouldn’t be able to otherwise.”

“You have the opportunity to intervene at different levels: the workplace, policy, education — all those sorts of things that you don’t get to do with clinical.”

Lax, who earned his MPH while completing his occupational health residency at the University of Illinois, often advocates for workers by testifying at public hearings, writing op-ed pieces — and conducting research studies. *The New York Times* recently cited Lax’s research in its investigation of the state’s Workers’ Compensation system.

Bonnie Braddock MPH
Certified Genetic Counselor
University Hospital



Bonnie Braddock helps patients and their families understand a genetic condition, the risk of it occurring or recurring and their options for dealing with that risk.

“We discuss how information from the family history or genetic testing may be used,” says Braddock. “Then it is up to individuals to decide what information is right or not right for them.”

Braddock says her MPH training at UCLA gave her a broad perspective of overall health care and the increasing role genetics plays in more common diseases, including certain cancers and heart disease.

Gregory Liptak MD, MPH
Professor of Pediatrics



Supplementing his Duke medical degree with an MPH from the University of North Carolina was an obvious choice for Gregory Liptak, director of Upstate’s Pediatric Center for Behavior, Development and Genetics.

“I have always been interested in advocacy, public education and community involvement. With an issue such as lead poisoning, I could treat one child — or I could work on community intervention and have a lot more impact.” One of Liptak’s clinical research interests is autism diagnosis. “It should theoretically be recognized between the ages of 2 and 3, but diagnosis is often delayed, especially in African American and Latino communities,” says Liptak, who recently helped revise the national guidelines for autism diagnosis.

Jana Shaw MD, MPH
Assistant Professor of Pediatrics



Jana Shaw, a specialist in pediatric infectious diseases, recently led a study that showed that invasive MRSA infection remains low among pediatric admissions in Central New York.

“I was the mentor for the fellow and residents (co-authors) and oversaw the study design, data collection and manuscript preparation,” Shaw reports. The study has been submitted to the *Journal of Pediatrics*.

Shaw says the MPH program at Johns Hopkins University taught her to make sure data are collected, analyzed and interpreted correctly. “That’s an experience you don’t get in depth in medical school,” she notes. ■

—James McKeever

For information about Upstate’s new master’s degree in public health, visit www.upstate.edu/cnymph



Bridge-Building



For Leola Rodgers, an MPH brings priceless perspective to hospital administration.

Leola Rodgers MPH, Associate Administrator, Upstate Golisano Children's Hospital

Leola Rodgers blazed her own trail to a master's degree in public health — and to a career in hospital administration. Growing up with four younger brothers in a blue-collar Detroit family, she assumed her career options were factory or office work — and set her sights on the latter. But when it was time to apply to secretarial school, her guidance counselor wouldn't cooperate. "You're an A-student," he insisted. "You're going to college." With his help, Rodgers won a four-year scholarship to the University of Detroit. She graduated with a business degree in finance and administration — the first in her family to earn a college degree.

Rodgers had her first glimpse of hospital administration through a summer job grant from the National Association of Health Service Executives. The business side of health care was an excellent fit — she had a big heart and a good head for numbers. Forging on to graduate school, she won another scholarship — to the University of Alabama at Birmingham — and deliberately chose to study public health instead of health administration.

"I didn't have a science background, and I thought that

public health would complement my math and business skills — and help me see health care from a global perspective," she explains. "I always sensed a disconnect between hospital operations and budgeting.

"My MPH helps me to build bridges," says Rodgers.

"I ask a lot of questions of nurses and physicians, who are natural teachers. There's always a lot to learn, if you listen."

These days, Rodgers is focused on the opening of the Upstate Golisano Children's Hospital. "This is a once-in-a-career opportunity," admits the multi-skilled administrator, whose fast-track career has included leadership posts at Boston University Medical Center and Shands Hospital in Jacksonville, Fla.

When Rodgers arrived at Upstate in 1999, she was surprised by the absence of a children's hospital. "Upstate was training — and keeping — great pediatric specialists," she says. "But their physical space did not reflect the caliber of their work."

Rodgers soon became a key player in reviving and realizing the community's long-abandoned dream of a children's hospital. The ambitious final project reflects Rodgers' signature skills, both home-grown and MPH-honed: the ability to forge ahead, think big, manage details, listen closely — and always put the patient first. ■



Win-Win

Project Search offers special youth job training at University Hospital

Graduation should be a time for celebration, but for many high school students with disabilities, it can look like the beginning of a future with “nowhere to go.” These young adults join the ranks of the 2.4 million working-aged Americans with disabilities, 63.3 percent of whom are unemployed.

Thanks to Project Search at Upstate, the future is brighter for a group of local high school students. Upstate’s University Hospital is the first New York hospital to serve as a host for this year-long educational program. Five students from the Syracuse City School District – Emmanuel Bautista, Meltwan Blake, Derek Moore, Charles Murfitt and Angelo Panzardi – were accepted in Project Search and are on campus, receiving job training from a host of Upstate employees who serve as mentors. Project Search interns work along side their mentors, delivering packages, moving equipment, working in the food and linen services, doing housekeeping and landscaping and assisting with other integral hospital services.

One of many Project Search supporters is Thomas Welch MD, chair of pediatrics, who saw the mutual benefits of the program at the Children’s Hospital Medical Center of Cincinnati, where it began. “The people who were trained, and eventually hired, through Project Search were placed in hard-to-fill jobs,” explains Welch. “At Cincinnati, we had a host of jobs, like stocking supplies and transporting specimens, that had been plagued by high turnover and absenteeism. The Project Search employees were reliable and really liked their jobs.”



Emmanuel Bautista, above, is the first Project Search student to be hired as an Upstate employee. Pictured at top, left to right: Project Search interns Meltwan Blake, Derek Moore and Angelo Panzardi.

Developmental pediatrician Nienke Dosa MD, MPH, considers Project Search important, both for its practical advantage and societal impact. “I often meet parents when their infant is diagnosed with a developmental disability,” Dosa explains. “They are trying to comprehend what the future will bring for their child. Just think what it would mean to them to see an employee with Down Syndrome assist with hospital registration, or an adult with spina bifida employed as a social worker.”

“By adopting Project Search,” Dosa concludes, “the Upstate community is ‘walking the talk’ to improve not just medical but also social outcomes for our young adult patients.”



Charles Murfitt, 18, (right) of Henninger High School is completing a year-long vocational internship at University Hospital, thanks to Project Search. He is working for the Physical Plant Department with one of his mentors, Mike Dahlin.



Stacey Karasinski begins Project Search in Fall 2009.

School to Work

Emmanuel Bautista, 18, of Fowler High School was one of Upstate's first Project Search students, and the first to be hired as an employee at Upstate. After completing the program's nine-month, three-rotation vocational internship, Bautista used Upstate's Health Sciences Library to create a resume and apply on-line for hospital jobs. His mentors at Upstate, including hospital attendant Harry Claffin, describe him as a conscientious worker who has a great rapport with patients and staff.

There is another 'plus' on Bautista's resume: he speaks Spanish and English, a real asset to the patient-first atmosphere at University Hospital. Recently, this skill proved invaluable when Bautista 'visited' with an elderly patient in Spanish, the language of her childhood.

In April, Bautista began a part-time position as a unit service technician with the orthopedics services at University Hospital.

Project Search is a collaboration of SUNY Upstate Medical University and the Syracuse City School District in partnership with Arc of Onondaga, CNY Developmental Disabilities Services Office and the NYS Vocational and Educational Services for Individuals with Disabilities (VESID). Upstate's 2009/2010 Project Search program is filled. For more information, contact Patty Brecht, Human Resources, 315.464.4938, brecht@upstate.edu ■

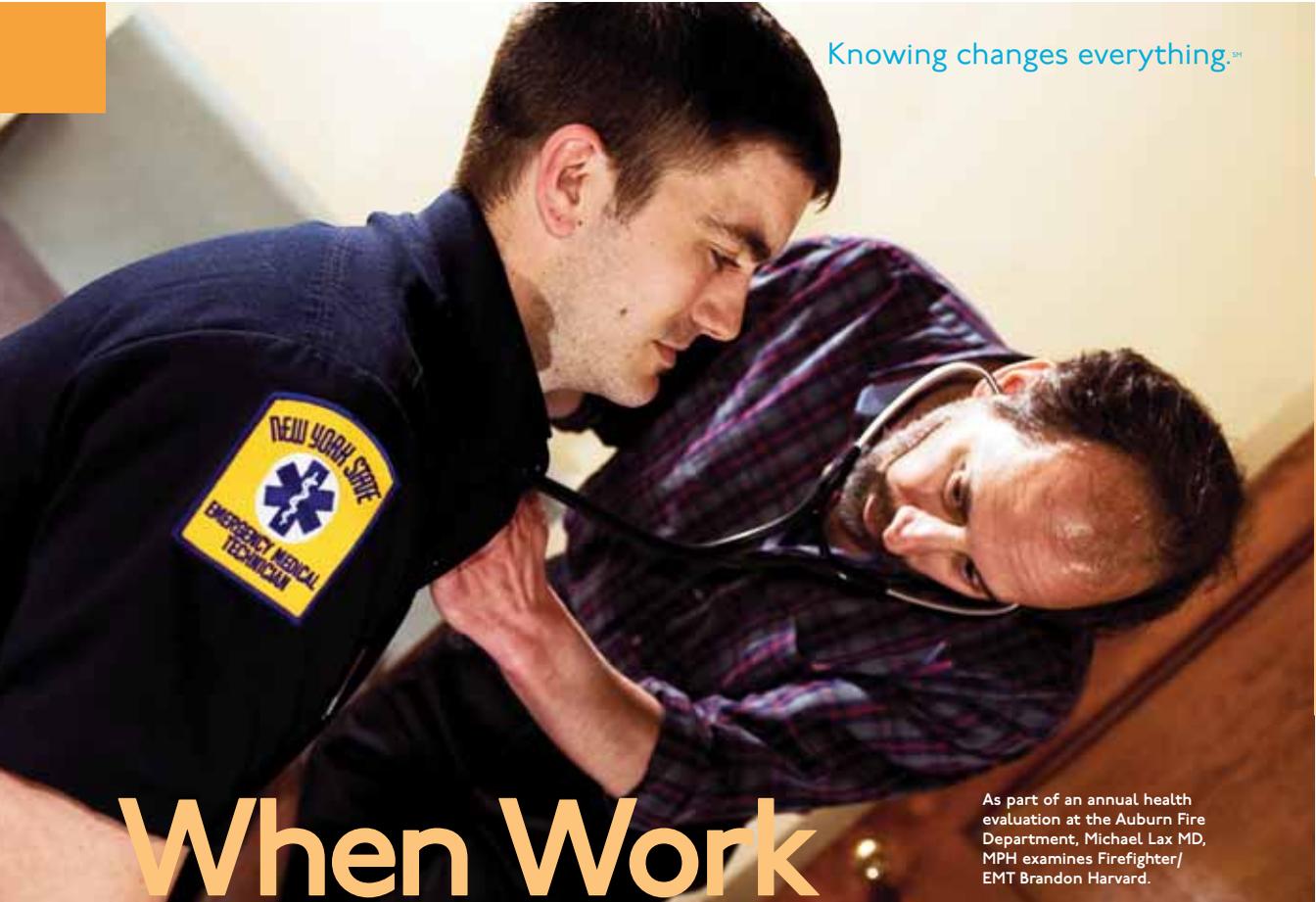
-Susan Keeter

Looking Forward

In September 2009, Upstate's Project Search will double in size. Among the 11 new interns will be Stacey Karasinski, 20, a student at Henninger High School in Syracuse. Stacey had her first contact with SUNY Upstate at 4 months of age, when she had open heart surgery to repair a heart abnormality associated with Down Syndrome. Stacey was very sick that first year, according to her parents, but has been in good health ever since.

Stacey brings energy and skill to her Project Search internship: She is an athlete who competes in volleyball, softball and floor hockey in the Special Olympics; a bowler on her high school team; and assistant manager of a 12-and-under softball team coached by her father. Stacey also camps, hikes and loves to read.

After her applicant interview with SUNY Upstate and Syracuse City School District administrators, Stacey shared these thoughts on Project Search: "It's about the hospital. There are jobs bringing patients to families, cleaning up and working in the mail room. And, we get to see the helicopter pad."



As part of an annual health evaluation at the Auburn Fire Department, Michael Lax MD, MPH examines Firefighter/EMT Brandon Harvard.

When Work Works Against Us

Upstate's occupational health team entrusted with workers in 26 counties

With a bleak economy — and once-secure jobs in jeopardy — workers today would seem less likely to red flag questionable working conditions. Yet the tide of workers seeking treatment for occupation-related illness and injury is rising, not retreating.

“They have no choice but to seek help. These workers are at the end of their ropes,” explains Michael Lax MD, MPH, professor of family medicine and medical director of the Occupational Health Clinical Center (OHCC). “The gravity of their illness has reached the point where many can no longer work.”

Tip of Iceberg

In 2008, Upstate's OHCC diagnosed or treated more than 1,400 patients for respiratory, musculoskeletal and other work-related illness and injuries. “And that's the tip of the

iceberg,” says Lax. “In New York State, 5,000 to 6,000 people a year are dying, and 30,000 are sick with work-related cancers and lung disease.

“Occupational illness is generally under-reported and under-recognized,” according to Lax. “But based on the estimates, occupational disease is the fourth most frequent cause of death in New York State.”

It's not surprising, he says, when you consider that we spend one-third of our lives at the workplace — “an environment we often don't control.”

Shirtwaist Fire

In certain regards, New York State has been a pioneer in occupational health. In 1914, in response to the infamous New York City “Shirtwaist Fire” that killed 148 garment workers, it passed the nation's first Workers' Compensation



“Occupational health is actually a hopeful area of medicine. These conditions are man-made, so they can be prevented.”

-Michael Lax

law. The system provided medical coverage and wage compensation to victims of occupational-related injury or illness.

Little was done, however, to treat and monitor these conditions. In 1987, New York* addressed these shortfalls by creating a statewide network of occupational health clinics, funded by a surcharge on Workers' Compensation premiums. Upstate Medical University promptly stepped forward to join the network. In 1989, it opened its Occupational Health Clinical Center, initially serving 15 counties in Central New York. Twenty years later, the OHCC provides care to the largest geographic area in the network, extending to the Pennsylvania and Canadian borders and serving a swath of 26 counties.

“Expanding into the region has taken so much hard work and strategic planning,” admits Rosemary Klein NP, director of clinical services for OHCC. “But we have a good mission.”

Klein, the self-proclaimed ‘gadget freak’ of the group, is never without her iPhone® and is excited about OHCC’s plans to adopt electronic medical records and videoconferencing. “We’ve used teleconferencing, and it’s useful,” Klein says. “But high-definition videoconferencing feels like face-to-face communication.”

Occupational vs. Industrial Health

Occupational and industrial health are often confused but very different. Industrial health clinics serve employers through contracted services that often focus on acute injury care, drug testing and physical examinations.

Occupational health services, on the other hand, are public-health oriented. “We advocate for the worker,” explains Lax. “We address illnesses that usually result from chronic exposure or trauma. Our typical patient is the steel mill worker with lung disease or the auto plant assembly worker with a repetitive motion injury.”

Continued on page 16



*including Syracuse, Buffalo, Rochester, Cooperstown, New York City, Long Island and Albany



Occupational health staff, from left: Beverly Hurst LPN, assistant nurse case manager; Theresa Wilson LCSW, social worker; Donna Valentino, secretary; Antoinette Longo, administrator; and Amy West LPN, assistant nurse case manager

“The origin of occupational disease may not be obvious, even to physicians.”

Work – continued from page 15

“But hazards exist in all occupations,” Lax warns. “Teachers, office workers and health care workers are at risk. OSHA actually lists nursing homes as one of the most hazardous work places, because of the repetitive, physical strain of transferring patients.”

At OHCC, most medical conditions fall into three categories: musculoskeletal, respiratory and hearing loss. “Officially we are diagnostic,” reports Lax, “but we often treat patients or refer them to other specialists, especially for treatment of musculoskeletal problems.

“Hopeful”

Occupational health is actually a hopeful area of medicine, says Lax. “These conditions are highly preventable. They are caused by man-made conditions, so they can be prevented through modifications. Some of our patients could continue to work if workplace changes were made.

“Ideally we go in and educate,” he says. “Our goal is preventing injuries to larger groups of employees, so we generally try to work with the employer and the patient.”

Ergonomic and indoor air assessments are among the services offered by the OHCC. “Part of the treatment is often making changes in the patient’s workplace,” explains certified industrial hygienist Gregory Siwinski, MS.

It takes diplomacy to go to employers, evaluate worksites and successfully recommend changes, Siwinski admits. But he is committed to his mission. In the 1980s, while working at a steel mill, Siwinski saw workers exposed to toxins and decided to earn a master’s degree in environmental and occupational health.

Teamwork

The OHCC staff has 14 members and each feels integral to its mission. “We are lifesavers for many patients,” says secretary Donna Valentino, who is often first to greet patients.

“They are often overwhelmed when they come to us. They are sick. They may be losing their livelihood and losing their homes.”

“By the time they find us, a lot of patients are in a lot of pain,” agrees secretary Judy Jones. “The workers’ compensation system makes them go through a lot of hoops.”

“We reassure them that they’ve come to the right place,” says Amy West LPN, an assistant nurse manager. “We spend a lot of time with our patients.”

Administrator Antoinette Longo says the teamwork is tangible at OHCC – and patients reap the benefits. “Everyone on our team is included in meetings and valued for their expertise and their ideas,” she reports. “We treat patients as we are treated – with respect.”

Enlighten

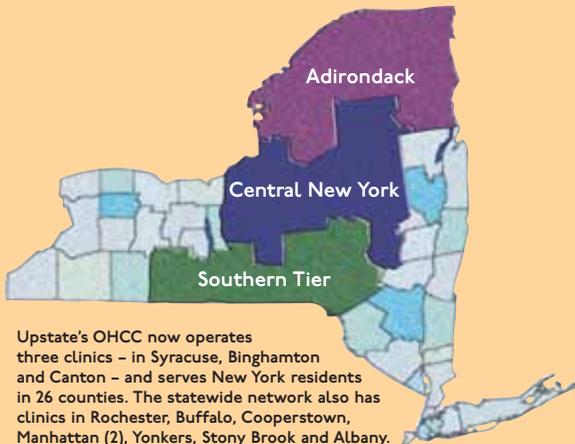
Operating under the umbrella of SUNY Upstate Medical University gives occupational health much needed exposure, according to Lax. “We are a residency site for internal medicine,” he explains. “As part of their ambulatory care requirement, residents spend two days in our clinic. For many, it’s an eye-opening experience.

“They often come in with the expectation that patients are trying to fool us. More often, these patients are frustrated by their conditions and eager to know, ‘When will I be able to return to work and under what circumstances?’

“By the time the residents leave,” says Lax, “they understand that there is often no safety net for these patients.”



Occupational health staff, from left: Patricia Rector, outreach/education coordinator; Gregory Siwinski MS, industrial hygienist; and Carol Hodgson RN, nurse case manager



Upstate's OHCC now operates three clinics – in Syracuse, Binghamton and Canton – and serves New York residents in 26 counties. The statewide network also has clinics in Rochester, Buffalo, Cooperstown, Manhattan (2), Yonkers, Stony Brook and Albany.

Questionable Origin

Because the OHCC serves 26 counties, Lax is often on the road, making presentations at community hospitals and in other venues. Afterward he is likely to see a spike in referrals. “The origin of occupational disease may not be obvious, even to physicians,” he says. “While a back injury might logically be linked to work strain, adult-onset asthma might not be considered occupational asthma. Workers might not link nervous system changes to lead exposure or relate gradual hearing loss to noise at work. Just think of janitorial staff in old buildings with no ventilation. They might develop symptoms, yet be completely unaware that their chemical exposure is contributing to their illness.

“We are always educating – patients, the community, employers,” Lax explains. “On the employers’ part, occupational disease is usually not intentional. It’s more likely a lack of knowledge.”

Unions also steer workers toward the clinics. “When we opened the clinic in 1989, the unions drove zinc and talc miners from the North Country to Syracuse, to be checked for dust inhalation and back injuries,” remembers Beverly Hurst LPN, an assistant nurse case manager. “Up north, there was no one with occupational health experience. In February, we were able to open a North Country clinic.”

All-Inclusive

The complexity of occupational disease was one of the first themes to emerge in the center’s early days. “We realized we needed nurse case managers to help patients find services and guide them through the workers’ compensation maze,” says Lax. “The bureaucracy is often sluggish. When you’re in pain, that glacial pace is not your friend.”

Continued on page 18



Clinical Director Rosemary Klein NP draws blood from Captain Jeff Dygert of the Auburn Fire Department.



Occupational health staff, from left: Dina Bristol, billing; Judy Jones, secretary; Susan Greetham NP, nurse practitioner; and Tina Krishock, secretary

Work – continued from page 17

Nurse Case Manager Cheryl Hodgson BS, RN joined the OHCC 16 years ago, as a patient advocate. “I quickly saw the need to educate patients on the Workers’ Compensation system and the challenge of coordinating referrals for the services they need,” she says. “It has become increasingly difficult finding providers that accept Workers’ Compensation referrals.”

Counseling and support groups are also crucial, reports social worker Theresa Wilson LCSW. A chronic illness often leads to alienation and isolation. “And if you didn’t have anxiety to begin with,” says Wilson, “you will have it by the time you go through this system.”

Changing Gears

The diversity of occupational health conditions, and the challenge of preventing them, make the field a magnet for versatile clinicians – professionals who, like Lax, are comfortable in the clinic, the workplace, the courtroom and in the policy arena. “I like that a patient comes in with an individual problem, and we can explore the larger issue of prevention and impact on policy,” he says. “For every patient who comes to see us, there may be many other workers with the same problem. Every patient potentially represents a sentinel health event.”

Lax has led Upstate’s occupational health care team since the OHCC was established 20 years ago. “His contributions to occupational health extend far beyond his medical care,” says Patricia Rector, the outreach coordinator at OHCC. “His influence extends into how its conceptualized, treated and remedied. His data and recommendations have caused a lot to happen. His research was recently cited in a *New York Times* investigation into New York’s Workers’ Compensation system. He’s a leader within the state and within the field, in terms of policy issues and what needs to happen in prevention. He understands the values that drive decision-making, and he is viewed as an agent of change.” ■

–Denise Owen Harrigan



Michael Lax MD, MPH,
Medical Director,
Occupational Health
Clinical Center

Patient Story: Serious Problems from Simple Tasks

Constant customer turnover at the Department of Motor Vehicles made Brenda Earl’s clerical job seem anything but routine. But as the years passed, the tasks she cheerfully performed for each customer took a toll on her health – especially her hands. The process of entering information into the computer, then printing, stapling and signing forms, gradually made her wrists painful and her hands numb. “I once handed a burning hot plate to my young son, because I had no feeling in my hands,” explains Brenda. “I had to give up softball and volleyball – sports I had played since high school.”

In 1994, after 20 years at the DMV, Brenda was referred to Dr. Michael Lax at the CNY OHCC in Syracuse. He recognized – and nerve conduction tests confirmed – that Brenda had bilateral carpal tunnel syndrome, caused by years of repetitive motions. “In the mid-1990s,” Lax reports, “we saw an explosion of these musculoskeletal problems, often related to computerized offices, but also linked to industries such as meat packing. Over time, awkward positions and forceful motions take a serious toll.

“Yet carpal tunnel – despite its prevalence – is not included in federal calculations of occupational disease,” reports Lax.

Still, Brenda was grateful for a medical diagnosis and relieved to learn that her pain was real – and work-related. The CNY OHCC sent its industrial hygienist to her DMV worksite for an ergonomic review. “The ergonomics of my work setup were not good from the beginning,” remembers Brenda, “so we made the recommended modifications. I began to use a headset, electric stapler and ergonomic chair. They adjusted my work station to a new height and repositioned the printer.”

“In the mid-1990s, we saw an explosion of musculoskeletal problems, often related to computerized offices.”



Rosemary Klein NP, Clinical Services Director,
Occupational Health Clinical Center

Brenda eagerly returned to work, but the pain persisted and her diagnoses multiplied to include chronic pain, shoulder impingement, neck strain and a bulging disc. “I wanted to work,” she says, “but I was all messed up. My pain, out of a possible 10, was at least 7 to 8.”

Eventually Brenda had carpal tunnel surgery. For her neck and shoulder pain, she had physical therapy, water therapy and massage. “That kept me going for five more years,” she reports, “until Workers’ Compensation insurance stopped covering it.”

“I only had a year and a half to go before I could reach 30 years and retire,” Brenda says. “But three months after I stopped therapy, I couldn’t lift my head above the pillow. That’s when Dr. Lax put his foot down and said, ‘You can’t go back in there.’”

Brenda stopped working and applied for Social Security Disability. “They warned me to be ready for a fight — some people misuse the system,” she reports. “But my application was approved the first time through. They also acknowledged that this pain was real.”

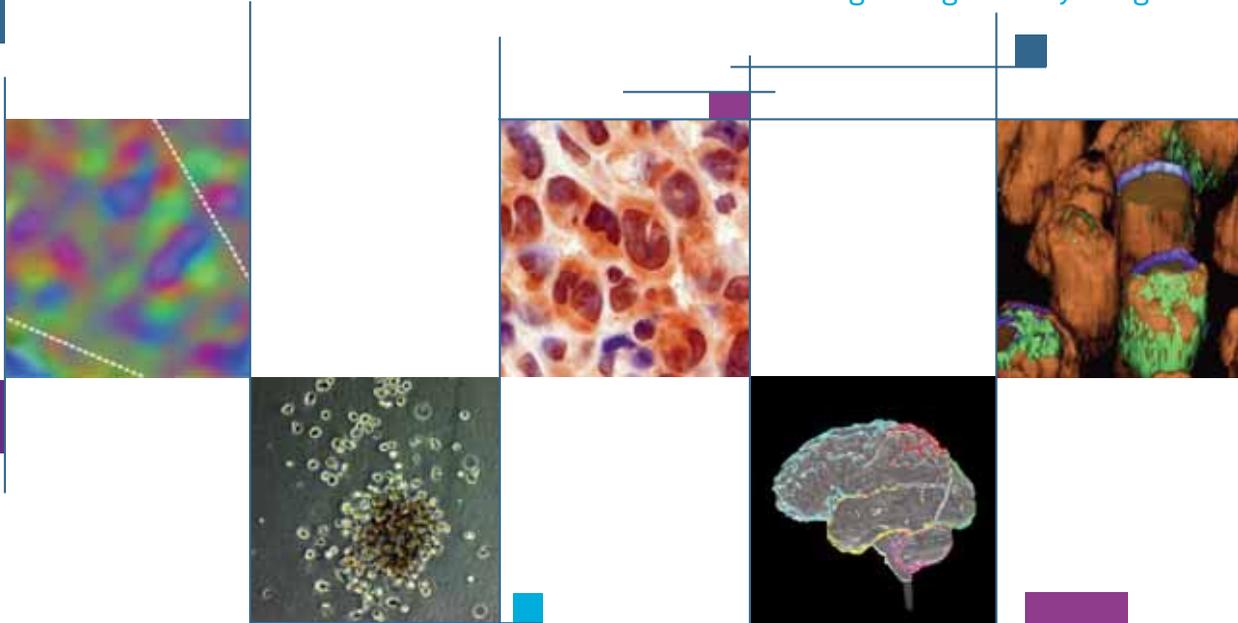
But for Brenda, the outcome is far from ideal. “I’m 55 years old, and I don’t want to be retired. I’ve always been very independent. It’s hard for me to ask for help.

“But it kills me to carry laundry up and down the stairs. It hurts me to drive. I can’t rake my leaves. I have to take multiple medications for pain, and I force myself to go out and walk my Westies.

“At the same time,” she says, “the OHCC has been a godsend. If it weren’t for Dr. Lax and nurse practitioner Rosemary Klein, my life could be much worse. A lot of my coworkers have similar problems, but they don’t want to rock the boat.” ■



Brenda Earl



Research:

A Team Sport

Upstate's Interdisciplinary Teams Ahead of Curve

The research enterprise at SUNY Upstate Medical University is undergoing a cultural change, reports Steven Goodman PhD, vice president for research.

Goodman, who joined SUNY Upstate last year, credits President David Smith MD and university leadership for understanding that strategic change “must occur for us to be a successful research enterprise.”

“We have very strong research faculty and department chairs who are willing to help make these changes occur,” says Goodman.

Research Pillars

The first change was creating four disease-focused research pillars — cancer; infectious diseases; disorders of the nervous system; and diabetes, metabolic disorders and cardiovascular diseases. The new structure is designed to stimulate cross-departmental collaboration and interdisciplinary research.

“SUNY Upstate researchers remain departmentally based,” Goodman says, “but their work can now be thought of in the context of one or more of the pillars or in the foundational sciences such as structural biology, stem cell biology, proteomics, genomics and bioinformatics.”

Global Reach

Other changes, including SUNY Upstate's role in a proposed international research consortium, are in the works.

The most far-reaching vision is Upstate's role in the proposed International Institute of Biomedical Sciences and Technology, now under development.

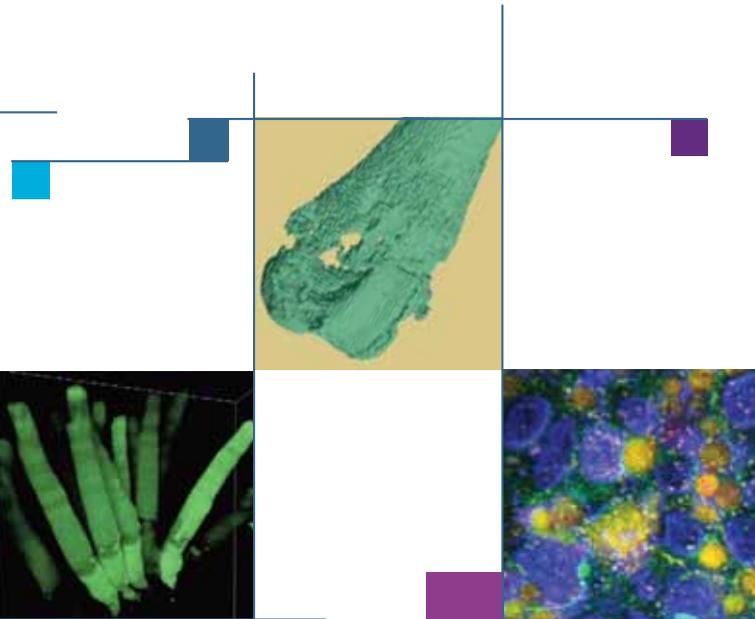
The plan calls for Upstate to join two other biomedical research centers — the Technion in Israel and the National Cheng Kung University in Taiwan — as the epicenters of collaborative research that is truly global.

“It will bring Upstate front and center, and out of isolation,” Goodman says.

Faculty Growth

On campus, Goodman hopes the next decade will bring 50 to 60 new basic and clinical research faculty to Upstate.

That's under way, with the successful recruitment of Empire Scholars William Kerr PhD from the Moffitt Cancer Center in Florida; Francesca Pignoni PhD from Harvard University Medical Center; and George Holz PhD from New York University School of Medicine (see story about these Empire Innovation Program researchers on page 22).



Above: Rendering of expansion of Upstate's Institute for Human Performance; Above right: concept for Kennedy Square site redevelopment, featuring the CNY Biotechnology Research Center

Steven Goodman PhD
Vice President for Research
Dean of the College of Graduate Studies

Capital Steps

Upstate's research enterprise also will benefit from several capital projects.

The university is a partner in the Central New York Biotechnology Research Center, which has a tentative completion date of December 2010 — and incubator space for faculty who want to spin off a business. According to Goodman, the biotechnology center will attract companies making products in such fields as biotech, biodevice, stem cell, and small and large molecule therapeutics.

Upstate's plans to expand its Institute for Human Performance (IHP) include "open format" laboratories structured by research needs, not along departmental lines. The IHP expansion is targeted for completion in 2011.

Upstate will also expand its stem cell processing laboratory and severe combined immune deficient (SCID) mouse research center. Stem cells can regenerate or grow into different kinds of cells, creating potential treatments for

various diseases and spinal-cord injuries. Genetically engineered SCID mice lack an immune system. When transplanted with human stem cells, they develop a "humanized" immune system, making them important in viral and cancer research.

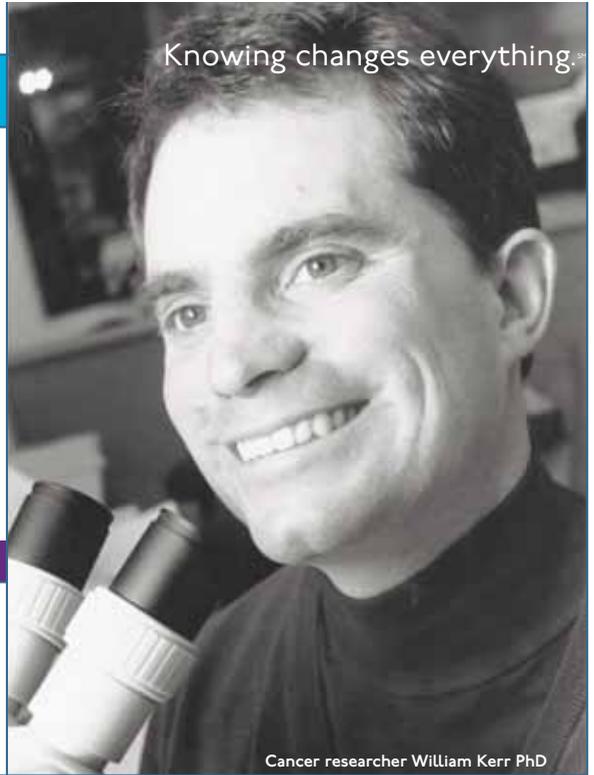
"All the stars are aligned for us to be successful at Upstate," reports Goodman. "We have enlightened leadership, a strong base of current researchers and a desire to hire outstanding new researchers. I see great promise for thoughtful and strategic growth of our research enterprise." ■

For additional information about SUNY Upstate's "Strategic Plan for Strengthening Research" see: http://upstate.edu/research_admin/stratplan.php

Research images, courtesy of, from left: Daniel Tso PhD; Gerold Feuer PhD; Robert Hutchinson MD & Sandra Hudson PhD; Wendy Kates PhD; Barry Knox PhD (2); Timothy Damron MD; Gerold Feuer PhD



Vision researcher
Francesca Pignoni PhD



Cancer researcher William Kerr PhD



Diabetes researcher George Holz PhD

Brain Gain

Empire Scholars Enrich Upstate's Research Faculty

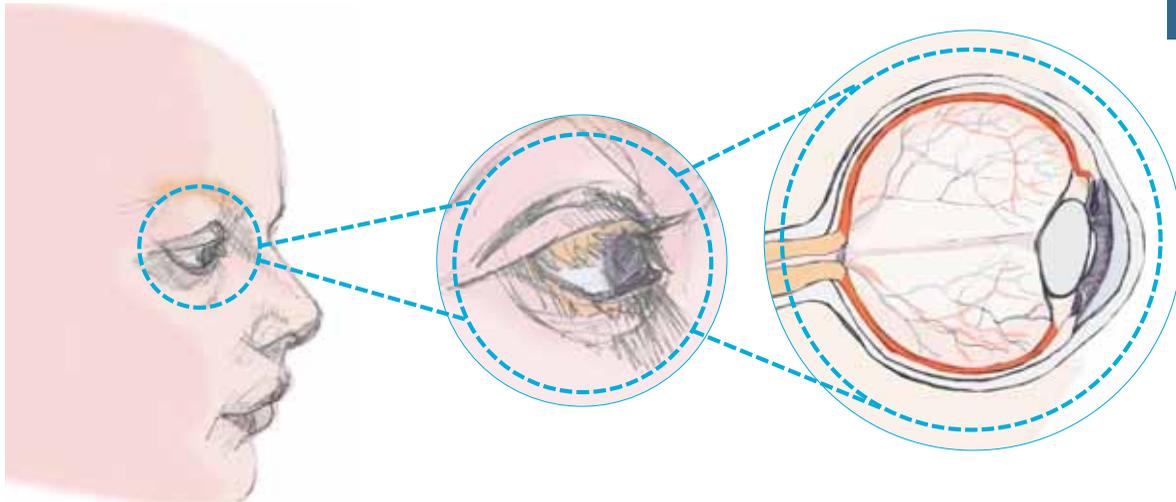
As a result of SUNY's Empire Innovation Program — aimed at attracting the country's most talented faculty researchers to SUNY — Upstate will soon have a trio of "Empire Scholars" in its research enterprise.

Diabetes researcher George Holz PhD, Upstate's first Empire Scholar, joined the faculty more than a year ago. Cancer researcher William Kerr PhD arrived this spring from the Moffitt Cancer Center in Florida. Expected this summer is Francesca Pignoni PhD from the Harvard University Medical Center.

Holz studies the beneficial effects of "incretin mimetics" in the treatment of type 2 diabetes. Mimetics are a class of blood glucose-lowering agents that mimic the action of a natural hormone (GLP-1) and stimulate the secretion of insulin from the pancreas. Unlike administered insulin, these mimetics are less likely to produce hypoglycemia, or abnormally low blood sugar.

According to Vice President for Research Steven Goodman PhD, Kerr is "a true joint hire" with appointments in the departments of Microbiology & Immunology and Pediatrics. He has more than \$3.8 million in NIH grant funding and was the Newman Scholar of the Leukemia and Lymphoma Society. Kerr studies the role of genes in the function of blood-forming (hematopoietic) stem cells and the role of a novel gene (LRBA) in cancer cells, in particular breast cancer and immune cells.

Pignoni, who will join the Center for Vision Research, holds NIH-funded grants totaling more than \$3 million. "Her research holds promise in better understanding the causes of retinal diseases such as macular degeneration and related conditions," says Robert Barlow PhD, professor and director of the Center for Vision Research in Upstate's Department of Ophthalmology.



Full Speed Ahead

Center for Vision Research Exemplifies Upstate's Team Approach

Already one of SUNY Upstate's success stories, the Center for Vision Research isn't about to stop now. "We never take our foot off the gas," says director Robert Barlow PhD, professor of ophthalmology. "We distinguish ourselves by the quality of the research."

The Center for Vision Research (CVR) has built a reputation as a leader in blinding diseases research. Since its founding in 1997, it has brought more than \$17.5 million to SUNY Upstate from public and private funding sources.

"People recognize that this place is growing in its research and that our stature is growing nationally and internationally," says Peter Calvert, a CVR researcher. "We're in a very healthy position to continue growing. Bob Barlow and Barry Knox are great scientists in their own right, and their interactions with people have put this place on the map. They built this Center, along with Ophthalmology Chair Dr. John Hoepner, who has been incredibly supportive."

The Center concentrates on diseases of the retina, the membrane at the back of the eye that senses light and sends impulses through the optic nerve to the brain. Researchers in the Center have different areas of expertise, and collaborate often on projects and publications. SUNY Upstate's vision researchers work as well with other vision scientists throughout the world.

"Seldom do you get a real diverse group of researchers like these, who have a common goal," says CVR member Michael Zuber. "Because of that, we all get along very well and understand each other. We're all trying to understand vision, retinal development and what goes wrong when vision is lost."



Robert Barlow PhD, professor of ophthalmology

Those efforts benefit from having Barlow, an internationally known figure in vision research, at the helm.

As a scientist, Barlow has broken new ground in such areas as the roles that blood sugar and biological clocks play in vision. He's made these discoveries by working with horseshoe crabs, Japanese quail, mice and even Air Force pilots.

As CVR's director, Barlow has been able to attract Nobel laureates and other prestigious guest lecturers to Upstate.

"Their visits have made a world of difference for young faculty," Zuber reports. "It's also a fantastic environment for students."

On the following pages, a look at the Center for Vision Research scientists and their work under Barlow.

Center for
Vision Research

Retina- Focused Researchers Find Common Ground

**Peter Calvert PhD,
Assistant Professor
of Ophthalmology**



When he began studying the visual system, Peter Calvert was astounded by the sensitivity and sophistication of the eye.

The retina contains millions of photoreceptors, either rods (nighttime vision) or cones (color recognition and light intensity sensors). Rod photoreceptors are remarkably sensitive. They can respond to a single photon, or light particle.

“Perhaps because of that sensitivity, rods are prone to problems that arise from mutations in genes that encode proteins responsible for sensing light,” Calvert explains.

By studying those proteins with a special microscope he helped develop, Calvert wants to determine how those genetic mutations ultimately lead to retinal degeneration and loss of sight.

“To alleviate suffering is incredibly important from the human side of this,” he says. “But we absolutely know we wouldn’t be able to understand disease if we didn’t understand how these things work in the first place.”

**Barry Knox PhD,
Professor of Biochemistry
& Molecular Biology**



Barry Knox became interested in the retina as a post-doctoral fellow at MIT in the late 1980s when he read research papers on light-sensitive proteins.

“The thing that really got me interested,” Knox remembers, “was the basic question, ‘How do these cells absorb light and respond to it?’”

Knox has been probing that basic question ever since. Along the way, he has built an international reputation in part by pioneering the use of “transgenic” frogs (adapted frog embryos) to identify and study genetic mutations and how they relate to eye disease.

Knox, who came to SUNY Upstate in 1990, also is helping to develop the next generation of vision researchers by mentoring younger faculty members, post-doctoral fellows and graduate students.

“The things that really moved me as a young researcher, we’re doing now,” he said. “I can see that we’ll get to some of these answers.”



**Eduardo Solessio PhD,
Assistant Professor of Ophthalmology**

Eduardo Solessio’s original scientific interest was in prosthetic devices for the arm, and how they could be controlled. But his interest shifted to the eye when he studied neuroscience for his doctorate at Syracuse University.

Solessio’s research includes a study showing Vitamin A deprivation not only decreases light absorption in the eye but causes changes in the rods and cones resulting in metabolic stress on cells.

“To cope with the lack of pigmentation, the cell needs to consume a lot more energy to respond,” Solessio says.

His next study deals with diabetic retinopathy, a leading cause of blindness in American adults. It is caused by changes in the blood vessels of the retina brought about by diabetes. Solessio hopes to determine the connection between inflammatory factors and abnormal metabolism that may contribute to the disease.



“We’re very diverse in our approaches and interests, but what brings us together is the desire to solve these problems. The diversity is the key to our success.” – Michael Zuber

**Andrea Viczian PhD,
Assistant Professor
of Ophthalmology**

Andrea Viczian didn’t plan to be a research scientist studying the eye. “I started out as an artist, and one of the worst things I could possibly imagine was losing your vision,” she says.



But Viczian pursued her PhD in neuroscience at UCLA, and became intrigued by how the eye receives images and colors and sends signals to the brain. She is investigating how embryonic cells in the developing retina become either rod cells or cone cells, and how to replace those cells when they die.

“Our goal,” Viczian says of the CVR, “is to be nationally recognized as a top-tier eye research group.”

Viczian and Michael Zuber are part of the Retinal Stem Cell Consortium, an international collection of vision scientists that includes a MacArthur “Genius Award” Fellowship winner, Sally Temple, who heads the New York Neural Stem Cell Institute in Albany.

**Michael Zuber PhD,
Assistant Professor
of Ophthalmology**

Michael Zuber studies the coordinated action of seven genes that work together to generate retinal stem/progenitor cells and, ultimately, the eye.



Working with frog retinas, which are similar to human retinas in many respects, Zuber has induced a third eye to grow in a frog embryo.

Doing so provides a powerful tool for identifying the genes needed to produce retinal stem/progenitor cells. Zuber’s goal is to understand how the normal eye develops and to decipher what goes wrong in genetic disorders that result in abnormal eye formation.

“It’s like a puzzle,” Zuber said of retinal formation and function. “My place is to figure out how all the pieces work together.” ■

–James McKeever

Fluent in Pediatrics

Pediatric Fellow Nicholas Bennett teaches medical students the power of positive communication.

Whether you're mastering medicine or communication, practice makes perfect. That's what inspires a dozen medical students to gather once a week in a conference room at University Hospital. Their mission: to rehearse conversations they might some day have with patients. Coaching the students are seasoned pediatricians and child life specialists — veterans at delivering difficult news to young patients and their families.

The third-year medical students are encouraged to discuss communication issues cropping up in their pediatric clerkship. "It's great when you can deliver good news," observes one student. "The patients like you. They're happy. You're happy. But with unhappy news, you don't know what to expect. Will they be sad? Angry? Blame the doctor?"

"Good news is easy," agrees Nicholas Bennett MB Chir (the Cambridge University equivalent to the American MD), who created and teaches this unique communications course for Upstate's Department of Pediatrics.

"Bad news takes practice. As students and residents, we don't have much opportunity to practice. We have to be prepared for these discussions."

To illustrate the futility of postponing bad news, Bennett tells a story. "I once had a 3-year-old patient who transferred from another ED, with a likely diagnosis of leukemia. I asked his parents what they'd been told about the transfer. 'We were told our son's white blood count was low,' they answered, 'probably from allergies.'

"While it's uncomfortable for us to make the family feel sad," Bennett tells the students, "we can't avoid these discussions. As physicians, we have to prepare the family. We have to communicate clearly."



Special Needs

The pediatric population presents unique communication challenges. "At every age, a child's capacity to learn is a little different," Bennett says. "We have to gauge how open to be and tailor our communication to that stage."

Parents of pediatric patients also require special understanding. "Their child is their number-one priority," explains Bennett, "and their child's outcome may be unclear. We as physicians are trained to deal with uncertainty. For parents, that's a very uncomfortable place."

While honesty is paramount, he says, sometimes bad news is best delivered piecemeal. "Either we don't have all the news, or the family can't absorb it all at once."

Conflicted

Parental anxiety is a big concern for the medical students. "I've already had patients who are very anxious and keep pressuring me for reassurance," reports one student.

"There's a limit to how reassuring you can be," advises John Andrade MD, associate professor of pediatrics and a regular at the morning sessions. "These are often uncertain situations, and we can never say never. But we can tell the family, 'We've had a lot of patients with this condition, and this is how we're going to treat it.'"

“At every age, a child’s capacity to learn is a little different.”

“Cancer, for instance, is not the diagnosis it used to be,” he continues. “We can offer survival statistics. We can reiterate, ‘We’re going to get you through this.’”

Scaffolding

“False hope is a hard trap to avoid,” admits Colleen Baish, one of the child life specialists who helps coach the medical students. “Gradually, parents learn to be more comfortable in limbo. In the meantime, we have to find the balance between supporting the family and recognizing the medical outcome. We build scaffolding to prepare the patient and parents.”

Often, parents seek advice on how to share a diagnosis with a sick child – and how much information to share. “In the past decade, parents have become more forthcoming about bad news,” reports Bennett. “Our goal in pediatrics is to strongly advocate that knowledge be shared with the kids.”

“It’s been shown that children as young as 3 years have a sense of death,” according to Baish.

Four Rs

While the medical students propose topics for their weekly meetings – “You have to teach learners what they want to learn,” says Bennett – the guidance they receive is evidence-based. And the course is carefully structured.

“We practice the four Rs – rehearse, role play, reflect and repeat,” Bennett explains. “We watch the students role playing, then we make suggestions. Then the students try it again – so they’re getting immediate feedback and a do-over.”

New Age

The course complements the standard model of medical communications training, where students learn by observing physicians and residents. Unfortunately, traditional medical training can undermine communication skills, according to Bennett.

“Watching is not the same as doing,” Bennett warns. “It’s like telling a student to ‘Go play the violin.’ We have to give them the opportunity to practice. We have to observe them and give feedback.”

Evidence-Based

Solid research supports Upstate’s investment in patient communication skills. “It’s not just about making patients more comfortable,” notes Bennett. Good communication skills translate into better outcomes: shorter illness duration, less pain, improved hypertension control and increased diagnostic accuracy, according to published research.

“Good communication is the biggest factor in patient compliance, which makes perfect sense,” Bennett reports. “Patients also like you if they perceive you as a good communicator.”



Teachable Skills

“Communication skills – such as not interrupting, active listening, showing empathy and even body language – may seem intuitive, but they can be didactically taught, observed and measured,” Bennett says. “It’s a myth that you either have good bedside manner or you don’t.”

“I am living proof,” reports Bennett. “I entered medical school at Cambridge as a nerd, with poor communication skills. I volunteered for a pilot program in communication skills – England, at the time, was training good diagnosticians who had terrible bedside manner.”

“When I came to Upstate, I became known for my communication skills, and I was encouraged to teach them,” says Bennett, who developed the Pediatric Communication Skills Guide and piloted his course in 2006. A year later, it was officially added to the pediatric curriculum, and he has presented it at national pediatric meetings.

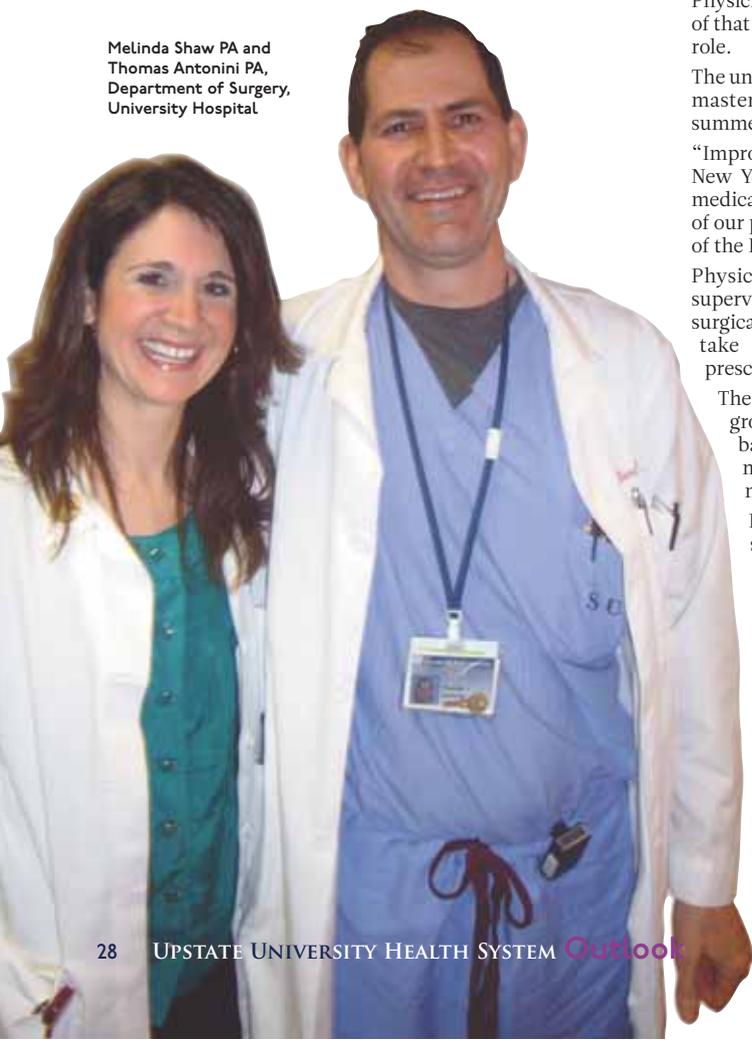
Predictably, the students who have taken Bennett’s elective self-report improvement in their communication skills. They also show a strong preference for practicing pediatrics. Of the students who did not take his course, 19 percent chose pediatrics as a specialty. Of the students who took the course, 29 percent chose pediatrics – strong testament to the power of positive communication. ■

–Denise Owen Harrigan

Physician Assistant:

New Degree Addresses Gap

Melinda Shaw PA and Thomas Antonini PA, Department of Surgery, University Hospital



Even though the number of physicians in New York continues to grow, the supply won't keep pace with the demand, a state report shows.

In a March 2009 report, *New York Physician Supply and Demand Through 2030*, the Center for Health Workforce Studies projects a statewide shortage of as many as 17,000 physicians two decades from now.

Physician assistants are expected to fill some of that gap, and SUNY Upstate is taking a lead role.

The university has added a physician assistant master's degree program that starts this summer.

"Improving health care access in Upstate New York, where 17 of the 19 counties are medically underserved, is the primary focus of our program," says Sandra Banas PA, chair of the Physician Assistant Studies program.

Physician assistants practice medicine with physician supervision in many settings and in various medical and surgical disciplines. 'PAs,' as they're called, are trained to take medical histories, perform physical exams and prescribe medications, among other responsibilities.

The physician assistant profession is one of the fastest growing careers in the country and includes people with backgrounds in nursing, emergency medicine, the military, sports medicine, exercise physiology and many others.

PAs find career opportunities in primary care offices, such as family practice, pediatrics, and internal medicine; hospitals; emergency rooms; urgent care centers; nursing homes; and medical and surgical sub-specialty offices.

Banas is excited about SUNY Upstate's 27-month PA program getting started this summer, after a lengthy startup process.

"The mission of the program is to educate competent and compassionate PAs who are dedicated to serving the rural and medically underserved communities of the state," she says. "It is anticipated that our graduates will return to rural communities to establish practice and will become an economic force within these communities." ■



Sandra Banas PA

“I Understand How It Feels.”

Respiratory Therapy student has a close call — and even more empathy.

Benjamin Dankwah was about to start in SUNY Upstate’s respiratory therapy program in 2007 when he nearly drowned in a swimming pool. His own experience as a patient — and the death of a friend from an asthma attack — convinced him to pursue respiratory therapy as a career.

“I know how it feels to be on a ventilator for six days,” Dankwah says. “So when I’m on my clinicals, I have that desire to help patients. When a patient is taken off a ventilator, that’s the best feeling they can ever have.”

Dankwah was born in Ghana on the west coast of Africa and came with his family to the United States in 2003, settling in the Bronx.

He is scheduled to graduate from SUNY Upstate in 2010 with a B.S. in Respiratory Therapy. Dankwah hopes to start his career near his family at either Columbia Presbyterian Hospital or Montefiore Medical Center.

“I want to use the knowledge I acquire at SUNY Upstate to educate people in my community,” he says. ■

Room To Grow

Career prospects for respiratory therapists are solid, according to the Federal Bureau of Labor Statistics (BLS). Job opportunities should be very good, especially for respiratory therapists with cardio-pulmonary care skills or experience working with infants, according to the bureau’s 2008-09 Occupational Outlook Handbook. Most respiratory therapy jobs will continue to be in hospitals, but a growing number of openings are expected in other sites, including doctors’ offices.

The demand for respiratory therapists is expected to coincide with the growth in the middle-aged and elderly population. Older Americans suffer most from respiratory ailments and cardio-pulmonary diseases such as pneumonia, chronic bronchitis, emphysema and heart disease, according to the BLS.

The BLS also foresees an expanding role for respiratory therapists in case management; premature infant care; disease prevention; emergency care for heart attack and accident victims; and the early detection of pulmonary disorders.

The Department of Labor reports the average annual salary for respiratory therapists in 2007 was \$50,930.





Wisdom in the Sand

Sand tray therapy helps children express feelings they can't articulate.

A toddler shrieks at anyone in a white coat. A teenager is angry, and ashamed, about the loss of her hair. A parent feels helpless when chemotherapy ends and the next MRI is weeks away.

How does a family cope with the experiences and emotions that accompany the long journey of medical treatments for a child with cancer or a blood disease like sickle cell?

For patients and families at the Waters Center for Children's Cancer and Blood Disorders at Upstate, one option is sand tray therapy with Ruth McKay MA, MFT.

Her office is lined with shelves of miniature toys and objects, organized in categories. There are super heroes and angels, jewels and sea shells, palm trees and rocking chairs, tiny plastic IV poles and hospital beds. In the center of these shelves is a sand tray, a table-sized sea-blue bin, with a layer of sand inside. It sits on a wooden stand, just the right height for a wheelchair.

What may look like simple play equipment is a highly respected therapeutic tool that is the subject of books and professional workshops.

It demonstrates Psychologist Carl Jung's belief that "Often the hands know how to solve a riddle with which the intellect has wrestled in vain."



McKay is a licensed marriage and family therapist, one of two dedicated to pediatric services at Upstate. McKay sees families at the time of diagnosis, through referrals from nurses or doctors, and whenever a patient or family member asks for an appointment. Sand tray therapy is suitable for almost all ages, beginning with children as young as age 3. Patients may benefit from one session or engage in multiple sessions over longer periods of time.



Jackson with Ruth McKay, medical family therapist at Upstate's Waters Center for Children's Cancer and Blood Disorders

"Sick kids have such intense feelings – fear, rage – and they don't have the cognitive skills to express those feelings," McKay explains. "A child may use the sand tray to act out a large animal devouring a tiny one, for example. The child doesn't have to understand the symbolism for the experience to help her feel better."

Jackson's Story

Jackson was two when MRIs showed cancerous tumors in the base of his skull and on his spine. A year and a half of surgeries, chemotherapy, tests and hospitalizations have left him believing "hospital, bad."

When Jackson creates a sand tray picture, it is no surprise that he gravitates to cars and trucks. But, he may put a car inside a toy ambulance and tell Ruth McKay that it has to go to the hospital. Or, he may line up a group of cars named 'Mommy, Daddy, Jack-Jack and Gabriel' (his baby brother) so they can take trip to the hospital.



As his therapist, McKay may simply 'witness' Jackson's play; interact if he wants her to; ask questions to help guide his play; or help him digest the significance of his choices.

Sand tray therapy has helped Jackson gain control over his experiences with cancer treatment and has helped him see the hospital as a safe place.

Loss of 'Normal'

And, for parents, sand tray therapy can help them cope with stress and express hidden feelings, such as grief over the loss of 'normal.' Like soldiers and police officers, parents and children in treatment for life-threatening illnesses can develop post-traumatic stress symptoms (PTSS) caused by their lengthy 'battle' with disease.

Sand tray therapy is one of several therapeutic services offered by McKay and her colleagues to provide assistance with anxiety, stress, pain, relationships and communication. Sand tray therapy will be available at Upstate's new Golisano Children's Hospital, thanks to a grant from Paige's Butterfly Run. ■

-Susan Keeter



Naomi's Fire & Sand

An excerpt from an essay about sand trays written by Naomi Mae, at age 17, six months after her cancer diagnosis. She is now 18.



“Sometimes it's easier to see what you're feeling than to think what you're feeling...

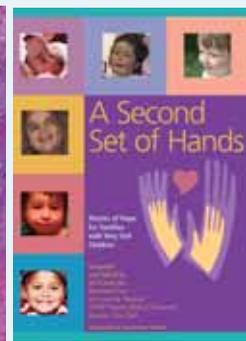
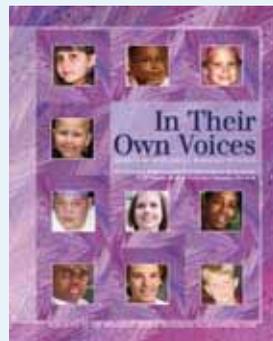
They told me I had cancer, but it didn't hit me until I saw it (in my sand tray picture).

(Making a sand tray picture helps) you see what's going on inside of you. It paints a better picture. Things are running through your mind and (your sand tray picture) helps you explain (your thoughts and feelings) to yourself.

When Mom and Dad (did the sand trays), it helped me know how they were feeling. It got deep inside them, too. You may not be able to explain, 'It was scary,' but when you see a ghost (in the sand), it clicks. They put a family of lions (in the sand) that showed 'we're sticking together.'

I put fire in the sand. It was consuming. Then the water came and washed it away.

You don't realize you have the hope, but then you see it.”



Voices of Experience

Two new books, published by Upstate's Center for Spiritual Care, offer readers a series of intimate and inspiring profiles of young people with serious illnesses. The books were conceived by two fathers to honor the young people and chronicle their experiences after diagnosis.

"In Their Own Voices," published this spring, is written by Eric Kingson PhD based on his interviews with 14 Upstate pediatric patients, ages 5 to 21.

Among the biographical essays is the story of Natividad, a 15-year-old cancer survivor who describes the significance of the fence, ambulance and angels in the sand trays that she created.

"Voices" also includes artwork and writings by some of those profiled, including Brooke (see back cover) and Bri who created a self-portrait in which she 'slays the dragon' of Crohn's disease.

"A Second Set of Hands," now in its second printing, was written by parents and caregivers. The idea for the book came from the Reverend Wes Fleming, and it includes his essay on his love for his daughter, Beth, and his anger at the tumor that damaged her vision. Upstate's Ran D. Anbar MD, contributed "Perspectives of a Physician-Parent," a candid essay in which he describes his newborn daughter's heart abnormalities and subsequent open-heart surgery.

The Reverends Terry Culbertson and Louise Tallman Shepard of Upstate's Spiritual Care Center were instrumental in the creation of the books. These 'stories of hope' are available at Upstate's hospital gift shop, 315.464.4713, and through the Center for Spiritual Care, 315.464.4687. Proceeds benefit pediatric spiritual care at Upstate.

Foot Note

What a Story To Tell!

Brooke, 7, of Springfield, Pennsylvania, was busy signing autographs at a party hosted by Upstate Medical University in honor of the new book, **In Their Own Voices**, which features Brooke and 13 other patients of Upstate's Golisano Children's Hospital. Brooke's story, *Snuggle with Your Mom*, offers a child's eye view of her four-year battle with leukemia and a brain tumor, and is illustrated with Brooke's drawings of her time spent in the hospital.

"These are extraordinary children who have shown strength, perseverance and humor in the face of frightening illness," writes author Eric Kingson PhD. "Their insights are a light in the darkness for children facing illness, and guidance for those who care for them."

In Their Own Voices was published by Upstate's Center for Spiritual Care, with support from the Weedsport Winter Wanderers Snowmobile Club. More on page 31.



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