

UPSTATE

Outlook

News on Upstate's education, biomedical research & health care

VOLUME 9, NUMBER 1
SPRING 2010

The Expert Opinion Issue

Insights on
urgent issues
in health care,
from high-profile
Upstate experts:

Dr. Sharon Brangman
geriatric shortage

Dr. Richard Cantor
pediatric surge

Judith Kilpatrick RN CNS
infection prevention

Dr. James Knoll
criminal minds

Dr. Robert Shprintzen
vcf syndrome

Dr. Ziwei Huang
cancer research

Dr. David Smith
bricks and mortar

A Word to the Wise:

The senior tsunami is ready to hit shore, and our nation's physicians need more geriatric training, according to Sharon A. Brangman MD, Upstate's chief of geriatrics and president of the American Geriatrics Society. See page 8.

PUBLISHER

Wanda Thompson PhD
Associate Senior Vice President
for Operations

EXECUTIVE EDITOR

Melanie Rich
Director, Marketing and
University Communications

EDITOR-IN-CHIEF

Denise Owen Harrigan

DESIGN

Cynthia Courtney

WRITERS

Denise Owen Harrigan
James McKeever
Susan Keeter

PHOTOGRAPHY

Susan Kahn
front cover, pages 3, 8-9, 11, 16-19, 22, 24

Robert Mescavage
back cover, pages 2, 4-5, 7, 12-15

Susan Keeter
Page 34

James McKeever
Page 29, 35

Bill Mueller
Pages 28, 31

Rich Whelsky
Page 30

Upstate Outlook is published by the Office of Marketing and University Communications. Upstate Medical University in Syracuse, NY, is an academic medical center with four colleges – Medicine, Nursing, Health Professions and Graduate Studies – as well as an extensive clinical health care system that includes Upstate University Hospital and numerous satellite sites. Affiliated with the State University of New York, Upstate is Onondaga County's largest employer.

For more information, visit us online at www.upstate.edu or phone us at 315-464-4836.

For corrections, suggestions and submissions, contact Denise Owen Harrigan, 315-464-4822 or e-mail harrigad@upstate.edu

FOR ADDITIONAL COPIES

call 315-464-4836.
Upstate Outlook offices are located at 250 Harrison St., Syracuse, NY 13202

Table of Contents

- | | |
|--|---|
| 4 James L. Knoll IV MD:
Shedding Light
on Criminal Minds | 27 Upstate Cancer Center:
Building Hope a New Home |
| 8 Sharon A. Brangman MD:
Embracing the Senior
Tsunami | 28 Clinical Rites of Passage:
Three Key Stops on the Road
Toward Patient Care |
| 12 Richard Cantor MD:
A Safety Net for CNY Kids | 32 Hands-On in Haiti:
Five Upstate Medical Students
Reflect and Resolve |
| 16 Judy Kilpatrick RN, CNS:
The Checklist | 34 Dr. Sarah and Dr. Farah:
Separate Centuries,
Common Ground |
| 20 Robert Shprintzen PhD:
The Many Faces
of VCF Syndrome | 35 Kasandra Scales:
Major Investment
in Minority Health |
| 24 Ziwei Huang PhD:
On the Trail of a Clever Killer | |



It's Personal

If you like stories, I think you will enjoy this issue of *Outlook*. Technically our focus is on advanced medical insights, but you will find—embedded in each article—at least one touching, personal story. In the Pediatric Emergency Department piece, we meet a wide-eyed 5-year-old waking up after an SUV rollover. In the forensic psychiatry article, we learn more about the Binghamton mass murderer, whose refugee father long ago sought help for his son's troubled behavior. In the article on Shprintzen syndrome, we meet an extraordinary young man—and his celebrity parents—who finally found clarity in a rare diagnosis. In our "Hands On in Haiti" report, we meet an Upstate medical student who resolved as a young girl in Haiti—when she lost her mother to stroke—that she would someday have the skill to save another child's parent.

Every day at Upstate, we hear inspiring stories. In this issue, I am pleased to share a few of these stories and to introduce you to some of my extraordinary colleagues.

Wanda Thompson PhD
Associate Senior Vice President for Operations
Upstate Medical University



Bricks and Mortar:
Why They Matter

In this Expert Opinion issue of *Outlook*, we feature examples of the brilliant, committed people who help place Upstate Medical University on the map. Their influence extends across the country and around the globe. Their range of knowledge is remarkably broad. But their common ground—and first priority—is the Upstate campus, where they practice medicine, teach, conduct research and enrich our community, beyond measure.

Knowledge can be perceived as an abstract, "academic" commodity. In fact, knowledge is increasingly the engine that fuels the American economy. It's certainly the life force of our local community. And at Upstate Medical University, an unprecedented concentration of medical knowledge is driving remarkable growth.

Sir Frances Bacon wasn't kidding when he said, "Knowledge is power." Based on our expertise, Upstate is growing its way out of the economic recession—as illustrated by our ever-expanding campus footprint. The \$150 million, self-funded construction of the East Tower and the Upstate Golisano Children's Hospital (below, left) added 300 jobs to our local economy, showcased our advanced medical insights—and rejuvenated the spirit of our community.

This year, Upstate continues to invest in better facilities for the people we value. At the moment, construction of the Upstate Cancer Center (below, right) is center stage, based on the needs of our community and the caliber of our cancer services, which rank in the top 20 percent nationwide.

But the Cancer Center is only one element in our \$510 million plan to improve Upstate's infrastructure. Already we have allocated \$340 million to cancer, heart, ambulatory, research and student facilities. In this economic climate, it's rare for an academic health center to generate this level of forward momentum. But rarely does a public institution claim—as Upstate has claimed—personal responsibility for its own destiny. In the past three years, our Upstate family—7,000 members strong—has engaged in a continuous, genuine dialogue to define our strengths and determine our course.

If Upstate Medical University were a stock, I'd say it's time to buy. All the key indicators—including patient volume and satisfaction, enrollment in our four colleges, research funding and campus expansion—are at high levels. And it's not due to an outside infusion of resources from Albany or Washington DC. Our value is higher because we are working harder, working smarter, working together. And we are, more than ever, committed to the health of our region.

David R. Smith MD
President
Upstate Medical University



SHEDDING LIGHT ON CRIMINAL MINDS

FORENSIC PSYCHIATRIST JAMES KNOLL IV MD IS THE FIRST TO ADMIT THAT HE DWELLS ON THE DARK SIDE, WORKING IN THE CRIMINAL JUSTICE SYSTEM AND EXPLORING THE MINDS OF SERIAL KILLERS, MASS MURDERERS, STALKERS AND PSYCHOPATHS.

And while Knoll's work— which intersects psychiatry, law and often ethics — may seem more reactive than preventive, shedding light on dark behavior ultimately benefits both the community and citizens who suffer from mental illness.

The sometimes-paradoxical nature of Knoll's work was evident last summer, after the unfathomable Binghamton massacre of 13 people. Knoll reached out to the stunned Binghamton community and convened Upstate's first annual forensic psychiatry conference, inviting Binghamton's police chief and district attorney to join him on the panel in Syracuse. Almost 200 people attended the event, which was designed to foster community recovery, shed light on the psychology of mass murder and explore the gunman's delusional state of mind.

"We analyzed the tragedy from different perspectives," explains Knoll, who presented his soon-to-be published research comparing the Binghamton gunman, Jiverly Wong, to the 2007 Virginia Tech gunman, Seung-Hui Cho.

Both men fit the profile of the pseudo-commando — a type of mass murderer who has carefully planned the killing spree, arrives in warrior gear with a powerful arsenal of weapons, plans to die during the attack and confesses in a public manifesto.

According to Knoll, "Research suggests that the pseudo-commando is driven by severe narcissistic rage, flowing from beliefs about being persecuted or

grossly mistreated. His revenge fantasy falsely promises a powerful remedy to his shattered ego."

Despite their similarities, Knoll believes that the two gunmen exhibited very different psychopathologies. Virginia Tech's Cho, who murdered 33 students and faculty, appeared to suffer from a maladaptive personality style — his rage stemmed from long-simmering feelings of social exclusion and resentment. Wong, on the other hand, suffered from paranoid delusions and had lost touch with reality.

Community Impact

The Upstate conference looked far beyond the two gunmen. "We reviewed law enforcement response and media response. We heard from experts on survivors' stress reactions, cultural issues and security factors. We looked at Binghamton's mental health resources. We all learned from each other," Knoll reports.

One conference recommendation was that media focus on victims and community recovery efforts rather than on the perpetrator, who may be motivated by media glorification

Slim Chance

The conference also underscored the slim chance of avoiding similar tragedies. "The research on mass murder suggests that such events are extremely hard to prevent," reports Knoll.

By Denise Owen Harrigan



James L. Knoll IV MD
Associate Professor of Psychiatry
Director of Forensic Psychiatry
Department of Psychiatry and Behavioral Medicine
Upstate Medical University



“SOME DEFENDANTS HAVE MADE ME UNEASY, BUT MOST MURDERERS I HAVE MET? YOU FIND SOMETHING TO LIKE ABOUT THEM. YOU CAN’T DEFINE SOMEONE BY A SINGLE BAD ACT.”

“Of course there is the possibility of intervention,” he admits. “In Binghamton, for example, Wong was consumed with becoming an expert marksman. For years, he went to the target range and shot rounds in record numbers. He also went to the gym but only to do grip exercises, which strengthen shooting accuracy and endurance.”

Liberty vs. Security

Could these patterns be publicized as warning signs? “If you give law enforcement the wrong information — or too little information — it can be very damaging,” Knoll warns. “We live in a society that places a high value on privacy and individual liberty, sometimes at the expense of security.”

Could extreme emotional behavior serve as a red flag? “We’d like to hope,” Knoll answers, “that family members and coworkers might become more alert to alarming behavior changes.”

Yet at Virginia Tech, when Cho’s suicidal message to a roommate led to an overnight stay in a psychiatric facility, Cho was found to be mentally ill but not an imminent danger to himself or others.

In the Binghamton case, Wong’s father had taken him to a hospital — 19 years earlier — when his son appeared to suffer from visual hallucinations and paranoid delusions. Wong was evaluated and released without treatment or follow up, perhaps because of language barriers.

Knoll is not surprised that these interventions went nowhere. “The research on mass murder suggests that such events are extremely hard to prevent,” he repeats.

Given the rarity of mass murder, next year’s annual forensic psychiatry conference is likely to focus elsewhere. Knoll has a wealth of topics from which to choose. When he arrived at Upstate in 2006, his goal was to “help the community deal with a litany of legal issues related to mental disorders.”

Knoll’s interface with the legal system takes him into correctional facilities and forensic hospitals to coordinate or provide psychiatric treatment. He also

testifies regularly in criminal and civil courts. When providing psychiatric evaluations, his ultimate goal is “to develop more accuracy and objectivity in the opinions we offer the courts.”

Hard Evidence

Forensic psychiatry, he explains, is not speculative. “We base our conclusions on hard evidence, including behavioral evidence. We read police reports. We look at crime scenes and autopsy findings and compare them to what defendants tell us. We address legal questions and use statutory language.

“In order to submit thorough evaluations to the court, we have to be good psychiatrists,” he acknowledges. “We have to listen and ask good questions. But it’s not our role to make legal decisions. We may offer an opinion on whether or not a defendant appreciates the criminality of his conduct. But it’s not up to us to pronounce someone criminally insane. That’s for the judge to decide.”

Rare Strategy

A diagnosis of mental illness — even with a condition as severe as schizophrenia — does not equate to criminal insanity. “Defendants can be very mentally ill and yet not eligible for a criminal insanity defense,” according to Knoll. “An insanity defense is raised in only about one percent of felony trials. Even then, it’s only successful about 25 percent of the time.

“For the vast majority of crimes, the motive does not flow from mental illness,” he reports. “Untreated mental illness may occasionally lead to criminal behavior. But an everyday crime, such as assault or bank robbery? That’s not about mental illness. That’s about anger, greed, revenge.”

Nonetheless, Knoll often encounters—and advocates for—prisoners with serious mental illness. “While New York State ranks high in terms of adequate mental health services, the criminal justice system has lost its rehabilitative mode. Many individuals with serious mental illness are swept into the

corrections system. Prisons are the new state mental hospitals — and they are not conducive to mental health,” says Knoll, who is co-editor of the *Correctional Mental Health* report and editor-in-chief of the *Psychiatric Times*, the nation’s most widely read psychiatric publication.

Soapbox Issues

While Knoll has no simple solutions for preventing criminal behavior, he is adamant about keeping weapons out of criminal hands. “Gun control,” he says, “is a bit of a soapbox issue for me.”

He cites 30-year statistics from Australia, which enacted strict gun laws after a mass murder in Tasmania. In the 18 years before gun control, there were 12 mass murders. In the 12 years after gun control, there were none.

“I’ve heard all the arguments about guns in the home, that they’re needed for protection,” Knoll says. “But guns in the home are more often used against innocent victims or for suicide.”

Knoll is equally ardent about suicide prevention. As president of the Central New York American Foundation for Suicide Prevention, he joins suicide survivors to raise money for suicide research. He also protests structures — such as the interior architecture of Syracuse’s Carousel Mall — “that make suicide easy.

“Suicide is very often an impulsive act for a person in severe mental distress,” Knoll explains. “I believe that a responsible community takes steps to limit opportunity — steps such as installing barriers at the Golden Gate Bridge. If we can get people who want to hurt themselves through the moment, I believe we can save lives.” *



The Dark Side

Texas-born James L. Knoll IV MD is a third-generation physician: his father was a psychiatrist in Dallas and his grandfather was a general practitioner in rural Louisiana.

“The pressure to become a doctor was immense,” admits Knoll, who earned his undergraduate degree from the University of Texas. “But I went into medicine, at the University of Texas Southwestern Medical School, open-minded about a specialty. I came very close to selecting neurosurgery.”

Instead, Knoll chose to focus on the brain from a behavioral perspective. At a conference during his psychiatry residency, he met his future mentor, Phillip Resnick MD — “a bit of a legend in forensic psychiatry.” Resnick has been an expert witness in a long string of high-profile trials, from the Unabomber to Scott Peterson. According to Knoll, his mentor’s career “reads like a criminal-justice highlights reel.”

During a fellowship with Resnick at Case Western Reserve, Knoll was inspired to construct his career around teaching and research. He went on to direct forensic psychiatry programs at the Northwestern and Dartmouth colleges of medicine before joining the Upstate faculty. As associate professor of psychiatry at Upstate, he now trains three fellows in forensic psychiatry, in addition to teaching residents and medical students.

According to Mantosh Dewan MD, chair of Upstate’s Department of Psychiatry and Behavioral Sciences, “Dr. Knoll has literally put the Central New York Psychiatric Center-based fellowship and the Upstate Forensic Psychiatry program on the map. Through his energetic and brilliant practice, teaching and writing, he has taken — in a very short time — a good program to one that is among the 10 most recognized in the country.

“Besides being an intellectually fascinating field, forensic psychiatry is projected to be an area of high need for the foreseeable future,” says Dewan. “It is both important and impressive that Upstate has one of the best and largest forensic psychiatry training programs, thanks in large part to the forward thinking and support of the State Office of Mental Health.”

Knoll has published close to 100 articles and book chapters on topics ranging from the psychology of stalkers to the perils of isolating mentally ill prisoners. He also consults with businesses for workplace violence and threat assessments and performs ‘psychiatric autopsies’ to help determine if, for instance, a case is a suicide or homicide.

But Knoll spends most of his time in the criminal justice system, performing psychiatric evaluations, providing court reports and serving as an expert witness. “I get a bit of a rush when I’m sent a box of records,” he admits. “It’s like detective work. Can I objectively answer the question? Can I communicate it clearly to the court?”

Knoll finds forensic psychiatry most compelling when he’s interacting with law enforcement and the legal system. “It’s like cross-training,” he explains. “That’s what makes crime shows so popular on TV — everybody loves a good mystery, where the team solves the crime.”

EMBRACING THE SENIOR TSUNAMI

By Denise Owen Harrigan



Upstate's **Sharon A. Brangman MD**— president of the American Geriatrics Society— is alerting the nation: longer life expectancy and lower death rates mean a massive tide of seniors will soon need geriatric care, which is in perilously short supply.

At a sobering intersection in health-care history, Upstate's Professor and Chief of Geriatrics Sharon A. Brangman MD is stepping into a very challenging national role. This spring — as the nation's geriatric population surges to its highest point in history — Brangman takes over as president of the American Geriatrics Society (AGS).

When she pauses to think about the enormity of the phenomenon that's being called 'a silver tsunami,' Brangman shuts her eyes and shakes her head.

"This country is not ready for this challenge," she concludes. "As a culture, we are so afraid of getting older that we are in denial. It's so overwhelming, we don't want to think about it."

In the United States, life expectancy is now 78 years — an all-time high. Its death rate, meanwhile, has dropped to an all-time low, at 760 deaths per 100,000 people. Just 50 years ago, Americans were dying at almost twice that rate.

Collision of Realities

One might assume that longer life expectancy and a lower death rate would be cause for celebration. Not when the new numbers collide with soaring health-care costs, a lackluster economy, caregiving crisis and — especially distressing to Brangman and the American Geriatrics Society — an extreme shortage of geriatricians.

"The silver tsunami is especially acute in Central New York, where the elderly population is dense," Brangman notes. "The explanation is simple. The younger people leave to look for jobs. The older people stay — and need increasingly more specialized care."

The good news, for Central New York and for the nation, is that Brangman and the AGS have a straightforward strategy for addressing this crisis.

Across the Board

"We propose increased geriatric training for all medical students and residents," Brangman says. "Just as children are not just small adults, elderly patients have unique age-related medical needs — physical, cognitive and emotional. Geriatric care is a distinct specialty. The physiology of aging makes patients more vulnerable to certain illnesses and medications.

"When older patients are hospitalized, for example, they often become agitated or confused," she continues. "The common solution is to give them medication or to restrain them. But medication or restraint may only make them weaker, sicker and even more confused. *@>

“NOT EVERY OLDER PATIENT REQUIRES THE CARE OF A GERIATRICIAN,” SAYS BRANGMAN. “BUT AN ESTIMATED 30 PERCENT OF AMERICANS OVER THE AGE OF 65 NEED THIS CALIBER OF CARE, IN ORDER TO PROPERLY MANAGE THEIR CHRONIC AND COMPLEX CONDITIONS.”

70 million

projected elderly population in the year 2030, when the last Baby Boomers turn 65

50 percent

increase in total elderly population since 2000

5.4 percent

decrease in number of board-certified geriatricians since 2000

7,345

number of board-certified geriatricians in 2009

15,766

number of geriatricians needed to meet current demand

167

number of residents who entered geriatric medicine fellowship programs in 2003

91

number of residents who entered geriatric medicine fellowship programs in 2007

“If a 3-year-old were screaming and agitated, how would you react?” asks Brangman. “Sometimes a small change in environment can make a big difference. Sometimes an elderly patient needs to talk, to be touched, to be soothed. Other patients may need our time. We have to go back to the basic reason we went into medicine — to help people.”

Brangman also suggests that physicians get hospitalized seniors out of bed, moving around and out of the hospital as soon as possible. And, as a last resort for delirious patients in their later years, geriatricians can recommend an appropriate tranquilizer.

“Medical schools and hospitals — the places where physicians train — must make medical students and residents more aware of basic geriatric principles,” Brangman says. “At Upstate, we have some geriatric exposure in each year of medicine, but still not enough. Every resident — surgical, orthopedic, psychiatric, every specialty except pediatrics — also needs an understanding of the elderly and their unique medical needs.”

Unique Skill Set

Geriatrics has been a board-certified medical specialty for more than 20 years. “In 1988, I took the first exam given to be board-certified in geriatrics,” Brangman reports. “The AGS was first organized to advocate for good care for older adults. Then it recognized that this is a defined set of skills and set about to define the criteria for good geriatric care.

“Not every older patient requires the care of a geriatrician,” Brangman adds. “But an estimated 30 percent of Americans over the age of 65 need this caliber of care, in order to properly manage their chronic and complex conditions.

“Geriatric medicine looks at the entire patient — and the patient’s environment — rather than at one disease or organ,” she explains. “Geriatrics is very time-intensive and labor-intensive. A primary-care physician generally has seven to ten minutes to evaluate a patient. At Upstate University Geriatricians, we take at least an hour to do a thorough, family-based assessment. So we can’t simply increase the volume of patients we see. It takes a long time to do an evaluation of an older patient —



Sharon A. Brangman MD is no stranger to geriatric advocacy. In 2005, she testified before the US Senate’s Special Committee on Aging (left).

and then to coordinate care in the community.

“Our health-care system today is helping patients live longer but ignoring the implications — the complex care and multiple services they require,” Brangman concludes. “Our system doesn’t adequately support or reimburse for the time-consuming primary care that older people need. But one of the many benefits of comprehensive geriatric care is that it actually saves money, by keeping elderly patients out of the hospital.

Moving Target

“The AGS has always been focused on the medical needs of older adults,” notes Brangman.

“But the AGS also has to address the issues affecting geriatricians, because we may soon be extinct.

“Geriatrics is the specialty with the lowest reimbursement rates, so we attract fewer new graduates,” she reports. “That’s unfortunate, because it’s a very gratifying field of medicine. Patients and their families are very appreciative of our efforts.”

Will health-care reform improve the appeal of geriatric practice? “At this stage,” says Brangman, “there are proposals to improve reimbursement for cognitive specialties such as geriatrics. But the pie isn’t getting any bigger. It’s just getting sliced differently.” *

“OUR HEALTH-CARE SYSTEM TODAY IS HELPING PATIENTS LIVE LONGER BUT IGNORING THE IMPLICATIONS — THE COMPLEX CARE AND MULTIPLE SERVICES THEY REQUIRE.”



A native of Syracuse and graduate of Upstate Medical University, Sharon Brangman MD first focused on geriatrics while she was a resident at Montefiore Medical Center in the Bronx. She realized these patients had rich experiences to share — and a universal desire not to become a burden. After a geriatrics fellowship at Montefiore, Brangman joined the Upstate faculty and University Geriatricians in 1989. She is also widely recognized as director of the CNY Alzheimer’s Disease Assistance Center (ADAC), which serves 13 counties.



By Denise Owen Harrigan

A SAFETY NET FOR CNY KIDS

A PATIENT SURGE IS NO OBSTACLE FOR THE SYMPHONY OF UPSTATE EXPERTS PRACTICING THE FLUID ART OF PEDIATRIC EMERGENCY MEDICINE.

By any standard, it's a showstopper — that signature, spectacular tree-house entrance to the Upstate Golisano Children's Hospital. But when young patients are admitted, they often take a less-scenic but personally escorted route, through the Pediatric Emergency Department (PED) on the ground floor of Upstate University Hospital.

For decades, Upstate's dedicated PED has been the hub, and heart, of the region's pediatric emergency services. With the opening of Upstate's new Children's Hospital — 10 floors above — the PED is treating children in record numbers and generating the majority of admissions to the Children's Hospital.

"I guess that makes us the back door to the children's hospital," quips Richard Cantor MD, Upstate's director of pediatric emergency medicine. "More than 60 percent of pediatric inpatients are admitted through our department."

Beacon Effect

Last year, PED volume topped 23,000 visits — 2,000 more than in 2008. The increase was anticipated, according to Cantor. "Children's hospitals have a lot more clout — and a lot more visibility — than regular hospitals with children in them. Once that big Children's Hospital sign went up above Route 81, even more families came streaming in."

A dedicated pediatric emergency room is a rare community resource. Nationwide, about 80 percent of acute pediatric patients are treated in general emergency rooms. As a rule, only children's hospitals offer pediatric emergency rooms. But — decades before opening its Children's Hospital — Upstate dedicated an emergency department exclusively to children. "It's not just a separate space. It's a different approach to care," says Cantor, an early and ardent believer in the children-are-not-just-small-adults credo.

"Kids have specific medical, social and psychological needs," he explains. "Our special accommodations range from pediatric sedation — so kids don't experience or remember pain — to scaled-down IV needles and cervical collars. We're all trained in the emotional and developmental needs of children. We also have child-life specialists, who are miracle workers when it comes to distracting kids and reassuring families."

As Richard Cantor MD observes from the doorway (beyond camera range), a medical student, fellow and resident examine a young patient with an eraser lodged in his ear. "As an academic medical center, we're always training and providing hands-on opportunities," Cantor says. "But anyone in training talks to an attending before doing anything. Every move is supervised. On every case, the child is seen — the case is closed — by a board-certified emergency medicine or pediatric emergency medicine physician."



Director of Pediatric Emergency Medicine Richard Cantor MD examines a patient with third-year fellow Linnea Widdick MD. "This job involves constant juggling," Cantor says. "Personally, I think it's a calling, although medically it's very interesting. There are a thousand things you need to know, from advanced life support to pediatric psychology. When we took our team to the American Academy of Pediatrics College Bowl, we won the national competition."

"We package our care for families, not just kids," Cantor explains. "No one wants to be in the emergency department. But once we demonstrate concern — by asking, 'How can we help?' — 99 percent of families are cooperative. They respond to the way we take care of their kids."

Families also appreciate information, he adds. "If you come in with a routine problem on a really busy night, you may have to wait. But here are two flavors of waiting: explanation — and no explanation."

"What we have here is a phenomenal team," Cantor says of the symphony of physicians, nurses, child-life specialists, social workers, technicians and spiritual care professionals who assemble in response to each case.

"We have 27 nurses who specialize in pediatric emergencies. They're the constant. We could not function without them. We also have five attendings who are board-certified in pediatric emergency medicine."

"In Buffalo, where they have triple the patient volume, there are only seven board-certified or board-eligible pediatric emergency physicians," Cantor notes. "It's huge to have five in our little hamlet of Syracuse."

Growth Spurt

It wasn't always that way. Before Cantor came to work at Upstate in 1982, the Pediatric Emergency Department was staffed by interns, with no attendings. The 'department' consisted of two exam rooms, connected to the adult ED. "Now we have 10 dedicated pediatric rooms, plus a trauma room," Cantor reports.

More critical than space is the department's three-year fellowship program in pediatric emergency medicine. "Nationally, we just don't train enough of ourselves," says Cantor. "But Upstate has graduated seven fellows, four of whom now work for our department."

"With fewer than 50 of these training programs nationwide, Upstate has its pick of great candidates. That's the beauty of having our own fellowship. We grow them, and we keep them," reports Cantor, who directs Upstate's fellowship program. He also holds the highest post in the field — chair of the national subboard that designs the fellowship curriculum and develops the annual certification exam, through the American Board of Pediatrics and American Board of Emergency Medicine.



Taking her turn at the triage station, Cassandra Griffin RN, center, conducts the initial evaluation on a young patient with a cough. "Triage means 'to sort,'" she explains. "In under five minutes, we check out the patient and establish an Emergency Severity Score of one to five. Five is the most serious. Those kids go first. But we don't turn anybody away." Griffin, a six-year veteran of Upstate's PED, had the flu twice this winter. "But it's a great job," she says. "You help kids."



As a relieved dad looks on, Cantor prepares to release a 5-year-old boy, who arrived by ambulance after an SUV rollover. “God bless car seats and appropriately belted children,” says Cantor.



Demonstrating the department’s signature grace under pressure, Nicholas Internicola RN, patient service leader, stands at the hub of the PED command station. “I guess I’m kind of a conductor here,” he says. “I coordinate the activity, which changes from moment to moment. My job is to make sure that we take care of the kids in the order of their illness.” Cantor refers to Internicola — who joined the staff in 1993 — as the mayor of the evening shift. “He runs this place.”



Cantor and Widdick work with a three-generation family, including a baby with a high fever. “Young babies are very vulnerable. The stakes are high. This is a good place for them to be,” says Cantor, editor of the recently published textbook, *Neonatal Emergencies*. “Our approach is very family-centered. Without family support, kids won’t get the care they need.”



Reassuring a young patient, fourth-year medical student Emily Hollywood follows Cantor’s advice to approach at eye level. Hollywood plans to specialize in pediatric emergency medicine. “You have to roll with the punches and have a good sense of people. There’s a difference between treating people and treating the diseases they come in with,” she’s learned. “Some people don’t like that you don’t know what’s coming next. You have to enjoy the uncertainty of it.”

ON A RECENT MONDAY EVENING,

THE PEDIATRIC EMERGENCY DEPARTMENT WAS PACKED WITH INJURED AND ILL CHILDREN, SURROUNDED BY WORRIED FAMILIES. The most urgent cases filled the 10 pediatric exam rooms. The next flight of cases — in distress, but no immediate danger — lined the hallways. The rest of the children filled the waiting room, playing with toys, squirming in chairs or sleeping in their parents’ arms.

The PED staff rates it a “good night,” with no severe trauma cases. (When young patients arrive in critical condition, the pediatric emergency staff shifts to the Level 1 Trauma room, just steps away in the Adult Emergency Department.)

On this particular evening, the team remains on the pediatric unit, responding to a steady stream of new arrivals: A 14-year-old wrestler with neck pain and tingling in his arm. An infant with a high fever. A 6-year-old with an eraser in his ear. A 3-year-old who’s been coughing for months. A 5-year-old who arrives by ambulance, after a

rollover in his family’s SUV. A college student with vision changes. Every few minutes, a new name appears on the white board at the nurses’ station.

Cardinal Rule

“The sickest go first. That’s the cardinal rule in emergency medicine,” explains Cantor. To establish urgency, a triage nurse intercepts every patient on arrival. According to the Emergency Severity Score, every patient is assessed at a level from one to five, with five being the most serious.

“The variety of cases we see is never-ending, although it can be sadly predictable,” Cantor says. “There’s a rhythm to when these kids are going to come in and with what injuries. Accidents happen at certain times of the day, certain times of the year.

“First thing in the morning, we see the kids who are having convulsions or whose fevers have spiked. We see toddlers burned by coffee spills and ambulances from rush-hour accidents.

“If school is in session, we might have a brief, mid-morning lull, which we use to update community pediatricians whose patients we’ve treated. People tend to think of emergency care as episodic, but in this department, we close the loop with a report or referral on every case.

“Then it’s lunch-time, which means we see playground accidents. That’s the downside of school. For the most part, I love school. It keeps kids alive. The safest place for kids is in school, or in bed.

“After school we see another wave of accidents — kids hurt walking home or riding bicycles. At dinner time, we start see the kids whose doctors’ offices have closed for the day, plus accidents from the evening rush hour or from kids playing outside at dusk.

“I catch only the bad endings of these things,” Cantor admits. “Where other people see fun — in swimming pools, on trampolines — I see danger.”

Primary Use

Anytime of day or night, says Cantor, “We get kids who show up for primary care, not emergency care. We never say no, we never ask why.

“With our new electronic tracking system, we can see that about 35 percent of our patients visit us about once a month.” he reports. “While nothing would be better for this country than universal, anticipatory primary care, it’s not happening. So we’re here for those kids. We don’t prescreen. Our lights never go out. We are the ultimate safety net for the kids in this community.”

Compared to the new Children’s Hospital upstairs, the PED looks “a little bruised and battered,” Cantor admits. “But in terms of the care we give kids, we are a jewel. We just keep ticking, and start again the next day. We do it for the kids.” *



Cantor celebrates “a Hallmark moment” with a playful 3-year-old who’s had a three-month cough. “Let’s face it,” Cantor says, “We’re all here because we love the kids.”

OFF THE CHARTS

WITH AN ICU CHECKLIST IN PLACE—
AND TEAMWORK ALL THE WAY—
CENTRAL-LINE INFECTIONS PLUMMET.

One year ago, Upstate University Hospital stood face-to-face with a critical issue: a well-above average bloodstream infection rate in patients with central intravenous lines, which deliver medication or fluids directly to major veins.



Judith Kilpatrick RN, CNS illustrates the leadership potential of the CNS, a versatile graduate degree that equips nurses to address complex clinical issues. In Upstate's College of Nursing, nurses in the clinical nurse specialist program specialize in a variety of diseases, populations and problems. To learn more, see www.upstate.edu/con/ms/ms_cns.php

The infection rate was largely attributed to ICU patients, who are highly susceptible to infection. But the rate was unacceptable nonetheless.

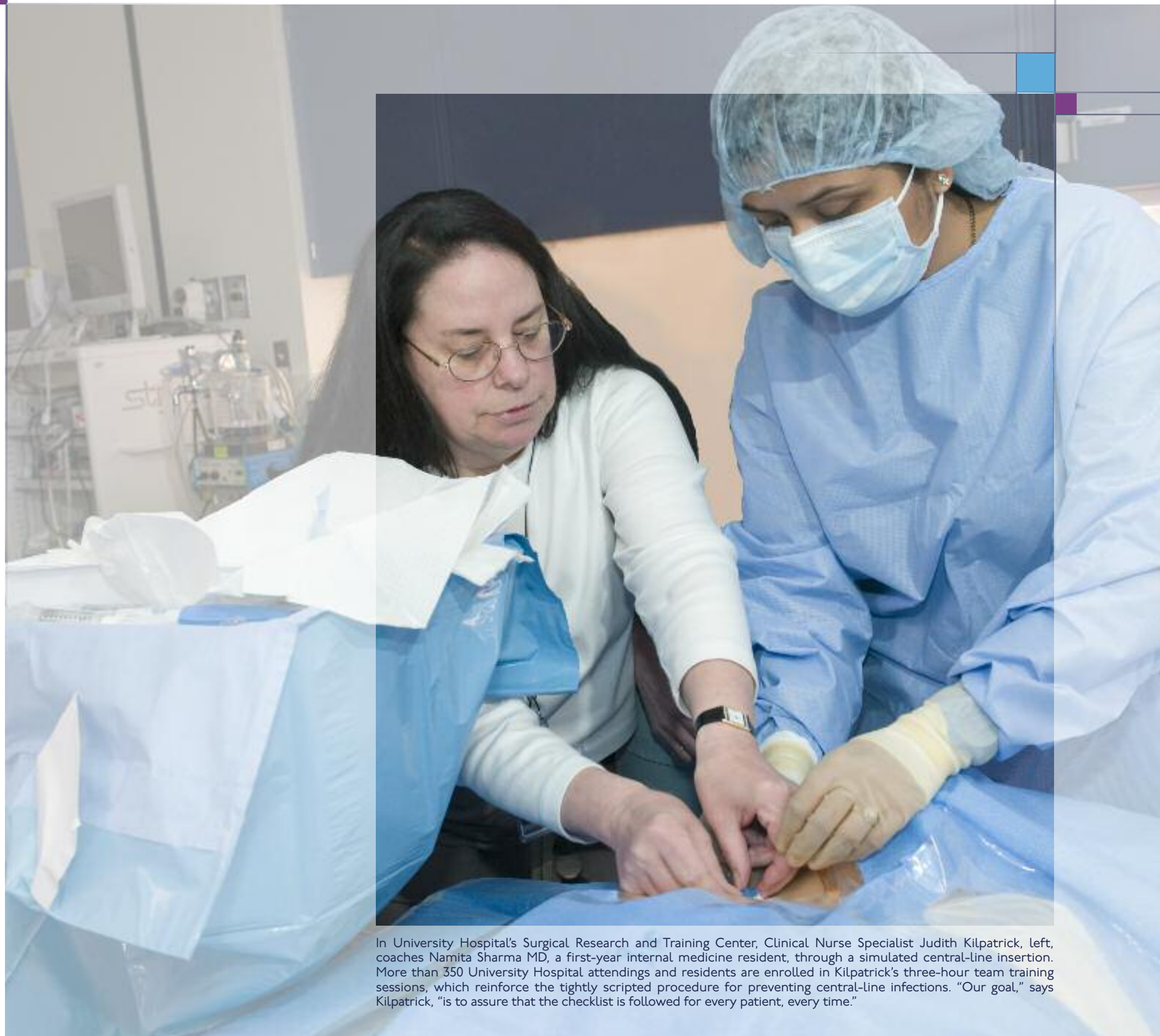
Enter Clinical Nurse Specialist Judith Kilpatrick RN, CNS, a 41-year University Hospital veteran and critical-care pioneer. "My current job is to examine quality measures and help determine what the hospital can do to improve bedside care," explains Kilpatrick, who promptly convened a 12-member interdisciplinary team to address the central-line infection issue.

The Research

With hospital infections ranking as the nation's second highest cause of hospital morbidity, Kilpatrick was already following the research of Peter Pronovost MD, MPH at Johns Hopkins' ICU, where the central-line infection rate was also unacceptable.

Inspired by aviation checklists used to clear planes for takeoff, Pronovost had identified five steps critical to preventing infection during central-line insertion. These included proper hand washing; wearing full sterile attire; properly cleaning then covering the patient's skin; applying sterile dressing after insertion; and questioning — on a daily basis — the need to continue the central line.

Pronovost's research showed at least one of these steps was skipped at least one-third of the time. His solution was to give the checklist to the ICU team, along with the hospital's permission to alert (and record) anyone who cut corners. *C>



In University Hospital's Surgical Research and Training Center, Clinical Nurse Specialist Judith Kilpatrick, left, coaches Namita Sharma MD, a first-year internal medicine resident, through a simulated central-line insertion. More than 350 University Hospital attendings and residents are enrolled in Kilpatrick's three-hour team training sessions, which reinforce the tightly scripted procedure for preventing central-line infections. "Our goal," says Kilpatrick, "is to assure that the checklist is followed for every patient, every time."



Participants in a recent central-line insertion simulation at University Hospital include, above, from left: **First photo:** Colleen O’Leary MD, professor of anesthesiology; Shalinee Jha MD, first-year internal medicine resident; Ioana Amzuta MD, pulmonary critical care attending; **Third photo:** Jha and O’Leary **Fifth photo:** Amzuta, Emily Lazzari MD, third-year resident in internal medicine, Kilpatrick and Namita Sharma MD, first-year internal medicine resident



Every item needed for a central-line insertion is “bundled” in advance and stored in dedicated carts, which are stocked and delivered by University Hospital’s Central Distribution Department.

With everyone adhering to the checklist, the central-line infection rate in Johns Hopkins’ ICU dropped from 11 percent to zero.

On Board

Inspired by Pronovost’s outcomes, Kilpatrick, Medical Director David Duggan MD and the entire Upstate team reviewed best practices and adopted a checklist for inserting as well as maintaining central lines. “It was a partnership,” reports Kilpatrick. “Our goal was to ensure that the checklist was followed for every patient, every time.

“Right away, we realized that our system wasn’t making it easy for the practitioner to do the right thing,” notes Kilpatrick. “For example, the 10 items necessary to insert a central line were often found in several locations.

“For efficiency, we now ‘bundle’ the supplies first and have them ready on a dedicated cart,” she says. “It’s like assembling ingredients for a recipe in advance, instead of running to the store or substituting ingredients.”

Once the checklist was implemented, the results were dramatic. From June through December 2009, the central-line infection rate plummeted to zero, where it has remained in 2010.

Within the year, use of the checklist spread from the ICU throughout the hospital and saved an estimated \$2.45 million.

All Present

Having the entire team present and prepared to insert the central line is key. “It requires everyone’s full attention,” according to Kilpatrick. “Before, the nurse might have been running back and forth between two patients. Now, a sign is placed outside the door, to prevent anyone from coming in without full protective gear. It’s much more like a procedural department, where we proceed step-by-step, according to the agreed-upon checklist.”

“It’s a bedside procedure, but we approach it as if we’re in the operating room,” notes Duggan, the hospital’s quality officer. “As a result, we saw an immediate, dramatic improvement in our central-line infection rate—which is now among the best in the U.S.”

“WHEN A CENTRAL LINE IS INSERTED AT THE BEDSIDE, WE APPROACH IT AS IF WE’RE IN THE OPERATING ROOM AND ESTABLISH A COMPLETELY STERILE FIELD.”

David Duggan MD
Medical Director, Quality Officer
University Hospital

Investing \$250,000 in ultrasound machines to improve accuracy of the insertion site – plus fastidious culturing and continually questioning the need to insert or maintain a central line—have likewise contributed to the dramatic drop in infection rates.

A three-hour workshop on central-line insertion protocol—conducted in the Surgery Department’s simulation lab—is also mandated for the 350 physicians and advanced-practice nurses who insert central lines.

Change Agent

Put perhaps the biggest shift is cultural, according to Kilpatrick. “This has been one of best projects to change the hospital’s culture. We are all working together as a team to keep infection rates down. We feel very comfortable challenging each other on techniques. I’ve heard a nurse say to a physician, ‘I think your hand just touched something that isn’t sterile.’

“Nurses have played a major role in setting and adhering to these standards,” adds Kilpatrick. “As nurses, we have always promoted best practice. But we are not police—we are partners on the same team with our physicians. We also have an academic role – we are helping both nurses and physicians learn aseptic technique.”

The checklist solution is just one example of an interdisciplinary quality initiative at University Hospital. An award-winning wound-care team is generating pressure-ulcer rates among the lowest in the nation. Another proactive team is developing an early-warning-system algorithm that will help anticipate—and prevent—crises in high-acuity patients.

When applauded for these efforts, a forward-focused Kilpatrick responds, “That’s good. But what else could we be doing?”

~ by Denise Owen Harrigan

What’s the Score?

Down every Internet alley, someone seems to be keeping score on health care.

Even the most reliable of these scorecards can be challenging to access and interpret.

For the sake of simplicity – and transparency – Upstate University Hospital has a website that reports the most respected, and most recent, hospital quality data, from reliable sources such as the Centers of Medicare and Medicaid Services (CMS) and the University Health System Consortium. The website also posts our patient satisfaction scores—which recently showed the largest increase of any academic medical center in the nation.

Not every hospital posts this data on its public website. “But we aim to be open and transparent about our efforts to meet and exceed quality measures,” says David Duggan MD, medical director of Upstate University Hospital and associate vice president and associate vice dean of clinical affairs at Upstate Medical University.

“While it’s hard to draw conclusions from quality measures alone, they often provide useful information—and inspiration,” notes Duggan. As the central-line infection checklist illustrates, a negative score can be a powerful motivator.

“The website is just one part of a comprehensive quality plan that provides the road map for our quality goals,” Duggan reports. “There is a lot of attention paid to quality at University Hospital. Our Quality and Patient Safety Council has more than 20 dedicated committees reporting through its structure. One dozen physician quality officers and five dedicated administrators provide oversight and continuous updates.

“At the same time,” adds Duggan, “every member of our hospital staff is charged with contributing to ongoing quality improvement and bringing forth initiatives that enhance the patient experience.”

To view the hospital’s quality measures website, see: <http://www.upstate.edu/healthcare/quality>

THE
MANY FACES
OF

SHPRINTZEN SYNDROME



Thirty-five years after Robert J. Shprintzen PhD first focused on the complex genetic disorder that would carry his name, he reports dramatic advances in diagnosis, research and treatment. Yet Shprintzen is no less determined to reach more families—and further unravel the mysteries of Velo-Cardio-Facial Syndrome (VCFS), also known as Shprintzen syndrome.



“Velo’ stands for velum, the Latin term for soft-palate,” explains Shprintzen. “‘Cardio’ is obviously for heart defects, and ‘facial’ refers to the characteristic facial appearance. Not abnormal, just characteristic. These children look more like each other than they look like their parents and siblings.”

While classified as a rare disorder, VCFS strikes every three hours or once in every 2,000 births, according to estimates. Only Down syndrome is more prevalent among multiple-anomaly syndromes.

Traced to a deletion of an estimated 40 genes from chromosome 22, VCFS is associated with a cascade of anomalies. The cascade can be a trickle or a torrent, with as many as 190 abnormal findings linked to the DNA deletion.

“The most serious cases involve about 40 of these findings,” reports Shprintzen. “About 70 percent of patients have congenital heart disease, and 75 percent have palate and speech problems. Nearly all have vascular problems, almost all have some type of learning disability and a high percentage have psychiatric disorders.”

First Encounters

Shprintzen first encountered this troubling yet undocumented pattern of anomalies in 1974, as a young speech pathologist at Montefiore Medical Center. “I started to see kids with cleft palate or severely abnormal speech who all had congenital heart disease and looked similar to one another,” he

remembers. “Clearly it was some kind of genetic-based disorder, but the field of clinical genetics was in its infancy.”

Shprintzen believes it was “beshert”—the Yiddish term for destiny—that not long afterward he attended a lecture by David W. Smith MD, “the father of clinical genetics.” Soon Shprintzen was training under Smith in Seattle and networking with physicians who were forging the genetic links to human diseases and disorders.

In 1978, Shprintzen published the first paper describing VCFS. He has since published seven books, multiple book chapters and 95 of his 200 papers on VCFS—and treated thousands of patients with the syndrome. In 1997, he relocated from Albert Einstein College of Medicine to Upstate Medical University, where he established the VCFS International Center, the most comprehensive clinical program in existence.

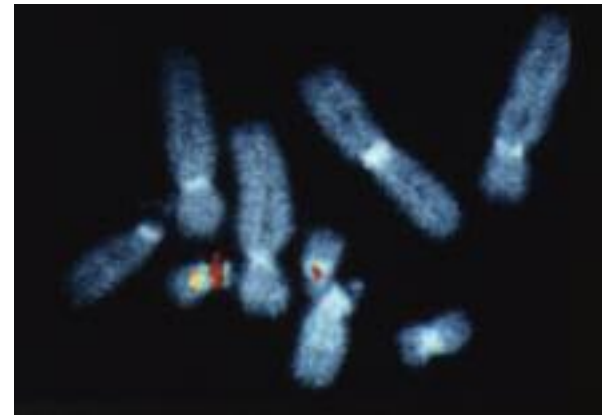
Just as the syndrome involves a multitude of anomalies, its treatment entails a staggering array of services. Shprintzen’s Upstate team now includes more than 30 medical and other professionals—from more than 20 disciplines.

Destination

Patients come from around the world and may spend weeks at Upstate. After a rigorous evaluation, which takes a minimum of two days, each patient receives a unique treatment plan. “We essentially

“A MOTHER WHO IS OPTIMISTIC
AND A FATHER WHO IS REALISTIC —
THAT’S A GOOD ONE-TWO PUNCH
FOR A CHILD WITH VCFS.”

Robert J. Shprintzen PhD,
Professor of Pediatrics
Professor of Otolaryngology
and Communication Sciences,
Director, Communication Disorder Unit
Upstate Medical University.



treat our patients one problem at a time—and we often follow them for life,” explains Shprintzen, who currently treats about 500 patients on a day-to-day basis, many through teleconferencing.

“We’re really good at fixing the physical problems,” reports Shprintzen. “Our success rate there is really high. But with learning and psychiatric issues, it’s more challenging.”

Nonetheless, Shprintzen says, “Almost all our patients can lead normal lives, given proper support and understanding. People with VCFS are not so far outside the norm that they don’t fit in anywhere. The challenge is to find that place.”

He is especially encouraged by progress on the psychiatric front, especially the NIH-funded research with his Upstate colleague, Wendy Kates PhD, who studies biomarkers for schizophrenia in VCFS patients.

“The study of VCFS has produced the first hard evidence of a genetic link to mental illness,” Shprintzen reports. “Research has shown that the deletion of this part of the genome makes one more susceptible to schizophrenia and other psychiatric conditions. The risk of psychosis has been estimated to be as high as 25 percent in VCFS patients, as opposed to one percent in the general population.”

But based on its research, Upstate’s VCFS Center will soon begin clinical trials of promising new treatments for psychosis.

Stress Reduction

The Center also encourages families to make appropriate lifestyle adjustments. “You can have a strong predisposition for mental illness yet not develop full-blown symptoms,” Shprintzen says, “if you manipulate the environment to avoid the stressors.

“For example, VCFS patients, with their learning disabilities, don’t typically do well in big cities,” he explains. “We counsel families to set up a low-stress lifestyle for these kids.

“We try to give parents an appropriate attitude adjustment. Our culture’s extreme emphasis on academic achievement can send a very negative message to kids with VCFS.”

Global Campaign

In the past 35 years, Shprintzen has circled the globe, sharing his VCFS insights with colleagues, patients and families. In 1994, he established an educational foundation that has enlisted thousands of members (including the world’s leading VCFS researchers). The VCFS Educational Foundation also conducts large international meetings, raises funds and receives more than 300,000 website hits a year.

Research remains high on Shprintzen’s priority list. He and his Upstate colleagues have received millions of dollars in NIH and other grants. With scientists around the world, they continue to study how a DNA deletion cascades into all these problems.

“The submicroscopic deletion on chromosome 22 happens randomly, in an instant, during DNA recombination in reproductive cell formation,” Shprintzen explains. “We have no ability to reconstruct it experimentally. It has nothing to do with a parent’s age or lifestyle.



“We focus instead on trying to figure out why some kids get very extreme cases while others are so mild as to be undetectable. In genetics we call this ‘variable expression,’ because the same set of genetic circumstances leads to different results in different people.

“If we could figure out the molecular mechanisms of what makes each symptom occur genetically, we might be able to figure out how to reverse them,” Shprintzen says. “Some defects occur so early it might be difficult. But other things—the cognitive issues, the psychiatric difficulties—we could figure out how to reverse some on a genetic level or at least render them negligibly functional.

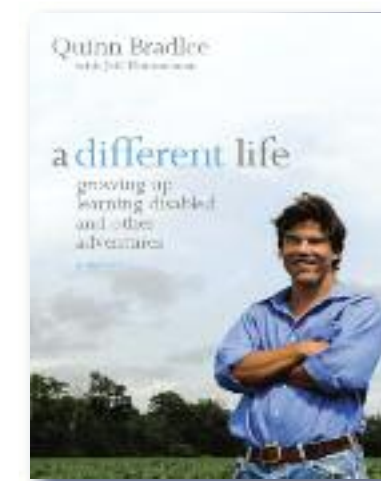
“My goal for the Upstate VCFS Center,” Shprintzen concludes, “is to find these answers—and one day close our Center.”*

Breaking News

Treating children with celebrity-status parents is nothing new for Robert Shprintzen PhD, who is appropriately tight-lipped about patient identity. So Shprintzen wasn’t expecting headlines when Washington DC-journalists Sally Quinn and Benjamin Bradlee brought their son, Quinn, to Upstate for a consult.

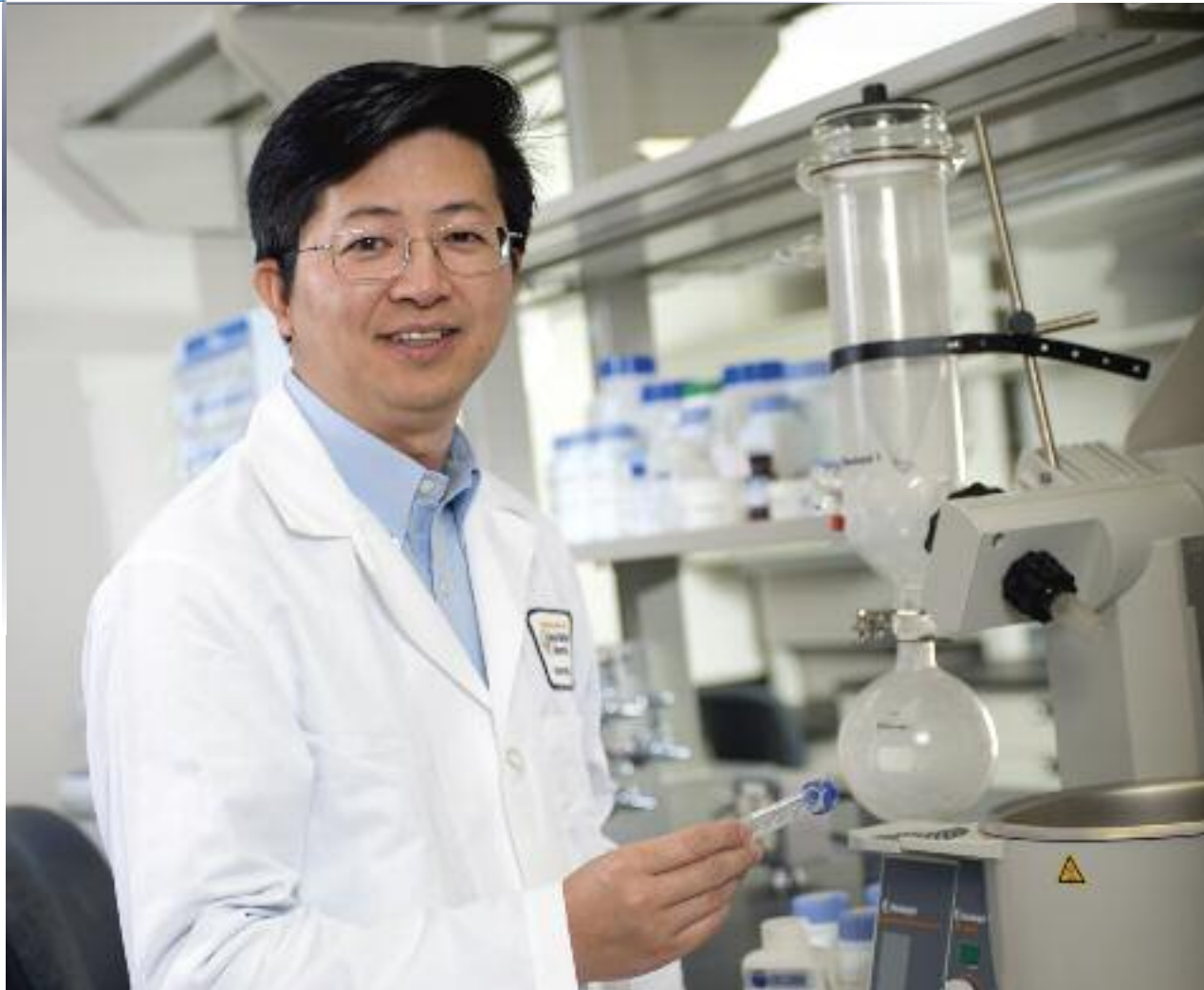
After years of trying to connect his multiple medical problems, the family was very grateful for Shprintzen’s VCFS diagnosis—and for his ongoing guidance. Young Quinn wanted their experience to help others: “So many children have this, there has to be more awareness,” he says. In 2007, Quinn arrived in Syracuse with a video production crew to make a video about the syndrome. Last year, he published a book, “A Different Life,” about his experience with VCFS and learning disabilities.

Newsweek, CBS News and other national media covered the story of Quinn, Shprintzen and the Upstate VCFS Center. “Dr. Shprintzen, with his incredible dedication and determination, saved our lives really, he became my security blanket,” according to Sally Quinn. According to Shprintzen, Quinn is great spokesperson for VCFS, and his parents’ support is exemplary. “A mother who is optimistic and a father who is realistic. That’s a good one-two punch for a child with VCFS,” says Shprintzen.



OUTWITTING A CLEVER KILLER

IF CANCER CELLS WERE CRIMINALS, THEY WOULD BE WISE TO WATCH THEIR BACKS.



IN CLOSE PURSUIT IS A RELENTLESS TEAM OF UPSTATE INVESTIGATORS, DOCUMENTING THEIR EVERY MOVE AND PLOTTING THEIR DEMISE.

Leading the hunt is an internationally acclaimed Upstate recruit: Ziwei Huang PhD, professor and chair of pharmacology and founding director of the new Upstate Cancer Research Institute (CRI). For the past 15 years, Huang and his colleagues have been at the forefront of cancer drug discovery.



Historic Weiskotten Hall, headquarters of the new Upstate Cancer Research Institute, is equipped with state-of-the-art research facilities and technology.

New Institute, New Paradigm

The multi-phase mission of the new Upstate Cancer Research Institute, housed in Weiskotten Hall, is to conduct cutting-edge cancer research and translate this research into potential cures and diagnostics as well as products and technologies for commercialization. Realization of this vision will involve close partnerships with the Upstate Cancer Center, where clinical applications will be studied, and the Upstate Biotechnology Research Center, which will help develop drugs for the biopharmaceutical industry. Ultimately, the Upstate Cancer Research Institute will enhance Upstate's reputation for research and patient care, while boosting the bio-economy of Syracuse and Central New York.

This paradigm's tremendous potential is demonstrated by the work of Huang and his large multidisciplinary team of scientists and collaborators throughout the country. Their collaboration has produced a drug in clinical trial; many patents and drug candidates in the preclinical pipeline; and more than \$30 million in total grant funding—as well as three biotechnology companies involved in marketing these technologies and products. *

UPSTATE CANCER RESEARCH INSTITUTE TEAMS

- CANCER BIOLOGY
- STRUCTURAL AND CHEMICAL BIOLOGY AND BIOINFORMATICS
- VIRAL ONCOLOGY
- STEM CELL RESEARCH
- DRUG DISCOVERY AND TRANSLATIONAL RESEARCH

Team Effort

At Upstate, Huang now leads a multidisciplinary institute that organizes and integrates Upstate's basic, clinical and translational research activities on cancer. "With a significant number of Upstate's researchers involved in cancer-related studies, our new venture represents a joint effort across many basic science and clinical departments," according to Huang. "We are working in teams to detect, prevent and cure the disease that is this country's second-leading cause of death."

"Cancer is a very elusive target," concedes Huang, who has spent decades investigating its intricacies. "Cancer doesn't stand still to be caught. It migrates. It mutates to resist treatment, by putting on a mask or developing a shield. It gets very sophisticated."

But Upstate researchers have long been in pursuit. "Based on our research we start with a very good description of our suspect—a three-dimensional picture of a cancer cell's protein structure. Once we understand how cancer cells operate, we search for specific molecules to disarm them," he explains.

Protein Shield

One of Huang's research studies is focused on the protein Bcl-2, which is highly expressed in cancer cells and works to prevent the programmed cell death (or apoptosis) of cancer cells.

"It works like a shield to protect the cancer cells from treatment," Huang explains. "If we could destroy this shield, we could increase the efficacy—and decrease the toxicity and side effects—of traditional chemo and radiation therapies."

At Upstate, Huang continues his search for pharmaceutical agents to target and turn off the Bcl-2 protein, thus lowering cancer cells' resistance to treatment.

"Over the years, we have been continually developing better and better compounds," he reports. "Instead of randomly screening hundreds of thousands of compounds, we have used computers with compound databases—and our knowledge of the protein's three-dimensional structure—to speed up our search." *<

While Huang and his colleagues focus on cancer cell apoptosis and migration, other Upstate research teams study aspects such as proliferation, cell signaling, cancer stem cells and cancer-causing viruses. Their diverse efforts are organized and unified into focused research programs and teams within the Upstate CRI (see page 25).

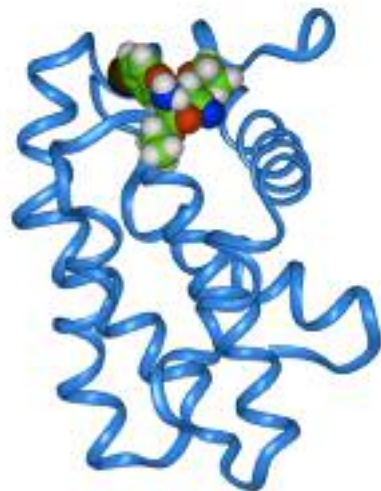
Puzzle Pieces

“By working together, the picture of our suspect –cancer– will come together, like a puzzle,” says Huang.

“At Upstate, we have the research infrastructure and clinical resources. We also have a strong commitment to developing synergies, maximizing our output – and developing new diagnostics and cures.

“Syracuse and Central New York need this Cancer Research Institute,” Huang adds. “SUNY Upstate Medical University, which generates \$40 million annually in research funding and serves almost one-third of New York State, is the obvious home for this rare resource.”

“Without research, we lose momentum—and hope,” stresses Upstate President David R. Smith MD. “The Upstate Cancer Research Institute is vital to our clinical and educational programs and to our future as the region’s cancer epicenter.” *



A small molecule drug scientists and collaborators shuts down Bcl-2 (in blue ribbon), a protein shield employed by cancer cells to defend themselves against conventional chemo and radiation therapies.

UPSTATE ESCALATES ASSAULT ON CANCER

BOLD NEW STRATEGIES INCLUDE A DRAMATIC OUTPATIENT FACILITY

On the clinical front of its campaign against cancer, Upstate has announced the construction of the visionary Upstate Cancer Center, connected to Upstate University Hospital. Scheduled to open in the fall of 2012, this 90,000-square foot facility will be region’s most comprehensive resource for the diagnosis and treatment of cancer and related disorders.

Upstate’s cancer care – already ranked in the top 20 percent of cancer programs nationwide – has repeatedly secured the prestigious seal of approval from the American College of Surgeons Commission on Cancer. In Syracuse, only Upstate University Hospital carries this select designation. Last year alone, more than 16,000 patients received cancer-related services through Upstate University Hospital, which is home to an ever-evolving arsenal of treatment strategies, cancer-focused technology, research studies and support services.

Integration

With the new Upstate Cancer Center, this impressive spectrum of services will be integrated into a single facility. Once dispersed entities – such as diagnostic imaging, infusion services and radiation oncology – will be delivered in a single, convenient, patient-focused environment.

Architecturally and philosophically, the Upstate Cancer Center reflects Upstate’s interdisciplinary patient-focused approach to cancer care, which can compress weeks of individual consultations into a single session. In addition to convenience, patients benefit from the critical mass of expertise assembled to evaluate, treat and monitor their care.

Patient Partners

At the heart of the Upstate Cancer Center is a reverence for patients and a partnership approach to defining their goals, designing their care and collaborating with their families.

Bedrock

The foundation for the Upstate Cancer Center is Upstate’s elite corps of cancer specialists, finally working in an environment that reflects their expertise. The world-class cancer team at Upstate currently includes 90 board-certified physicians, including surgeons, medical oncologists, radiation oncologists, pathologists and other medical specialists. These physicians work in interdisciplinary teams beside hundreds of additional cancer

specialists from nurses to scientists, nutritionists, therapists, social workers, epidemiologists, spiritual care providers and more.

The Upstate Cancer Center will serve more than 1.8 million Central New York residents from 17 counties – a region that stretches from Albany to Rochester and from the Canadian border to the Pennsylvania state line.



Special Features

- Multidisciplinary care space
- Natural light-filled interiors
- 27 private (plus communal) infusion areas
- Four-season, rooftop healing gardens
- Meditation room
- Family resource center
- Dedicated space for children’s cancer services
- Children’s play areas and infusion areas staffed with child life specialists
- Separate spaces for genetic, financial and other counseling services
- Valet parking



Ziwei Huang PhD
Scientist, Synergist, Entrepreneur

Progress on the Upstate Cancer Research Institute took a dramatic leap forward with the 2008 arrival of its founding director, Ziwei Huang PhD, who was recruited from the acclaimed Burnham Institute for Medical Research and the University of California (UC) at San Diego.

According to Upstate leaders, he is the ideal person to promote synergy. “Dr. Huang is a catalyst who leads scientists in exciting new directions and stimulates and inspires them to work together,” says Steven Scheinman MD, Upstate’s senior vice president and dean of the College of Medicine.

“He is an energetic and entrepreneurial leader, in addition to an outstanding scientist,” adds Steven Goodman PhD, vice president and dean of research.

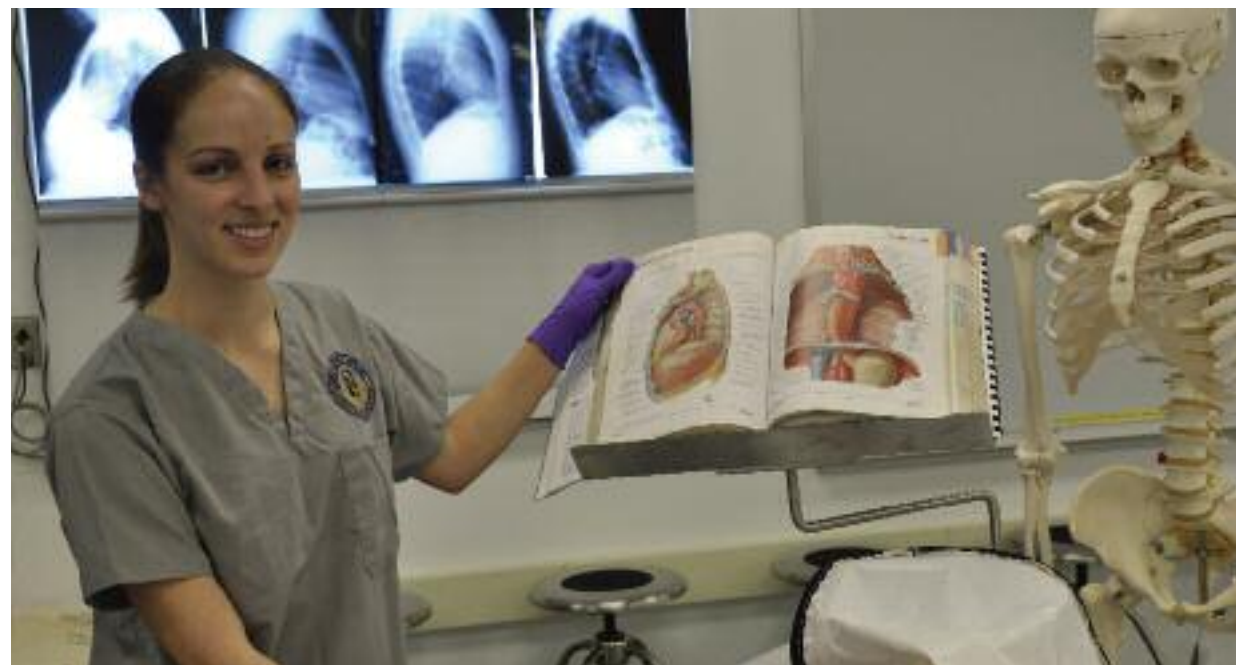
Huang’s impressive resume includes a doctorate in chemistry from UC San Diego and two years of post-doctoral research at the University of California, San Francisco. He worked in the laboratory of Stanley Prusiner MD, who received the 1997 Nobel Prize in Medicine.

From 1995 until 2008, Huang conducted his research and taught at the Kimmel Cancer Center of Jefferson Medical College in Philadelphia, the University of Illinois at Urbana-Champaign and the Burnham Institute for Medical Research at San Diego.

Huang lectures around the world and has published more than 100 research articles, book chapters and reviews. He is editor-in-chief of the book *Drug Discovery Research: New Frontiers in the Post-Genomic Era*.

CLINICAL RITES OF PASSAGE

AT UPSTATE, THE LONG ROAD TO BECOMING A PHYSICIAN INCLUDES THREE KEY INTRODUCTORY PASSAGES — THROUGH THE TRADITION-STEEPED **HUMAN ANATOMY LAB**, THE INNOVATIVE **CLINICAL SKILLS CENTER** AND THE HIGH-TECH **SIMULATION CENTER**.



Human Anatomy Lab

First Encounters: Human Anatomy Lab

Learning human anatomy by studying and dissecting cadavers has been part of medical education for centuries.

At Upstate, the first-year medical curriculum includes one semester of Gross Anatomy—five sessions a week in the newly renovated cadaver lab in Weiskotten Hall, complemented by lectures, clinical demonstrations and radiology case studies.

Despite the volume of detailed work involved, Upstate students routinely cite the anatomy course as a favorite.

“There are so many direct clinical correlations, and the faculty does a great job of making sure that the students see the relevance of what we are learning,” says Catherine Dickinson (above), a first-year student who took the course last fall.

In her Practice of Medicine course, Dickinson had to check for a potentially enlarged spleen by palpating the abdomen in a certain way. In the Anatomy Lab, Dickinson saw a cadaver’s spleen and the ligament it rests on. It became clear to her that an enlarged spleen expands horizontally because the ligament directly below it prevents it from dropping lower in the body.

“That makes sense,” Dickinson says. “When you are examining a patient for an enlarged spleen, you understand why you should start in the center of the abdomen.”

A former soccer player at Wilkes University in Pennsylvania, Dickinson saw in a cadaver some of the structures commonly injured by her teammates, such as the anterior cruciate ligament and meniscus in the knee.

She began to see the underlying pathologies of diseases she will treat as a physician – by feeling the stones inside an enlarged gall bladder, or by

clin • i • cal: pertaining to the observation and treatment of patients

observing the distinct texture and accumulation of plaque that develops with atherosclerosis.

“For me, it wasn’t until that first day in the anatomy lab that I really felt like a medical student,” Dickinson says. “Even though we had a White Coat induction ceremony, the reality didn’t hit until we were studying the body.”

Susan Stearns PhD, associate professor of cell and developmental biology, says that in the Anatomy Lab, students learn to work as a team and start to communicate in the “language of medicine.” They see the pathology in their cadavers and begin to understand the anatomical results of diseases.”

In the Anatomy lab, a team of six students is assigned to a cadaver for the semester. Dickinson says students often develop an emotional connection to the person whose donation helps them learn how the human body works.

While she had little trouble getting used to dissecting, Dickinson says some students can be stunned by the emotional power of certain features, such as cadaver’s hands. “Sometimes, a woman will have nail polish on. That’s such a personal touch.”

“For many students, this is the first time that they are confronted with death and, perhaps, the contemplation of their own mortality,” notes Stearns. “This course goes beyond the didactic material – it is about the profession of medicine and students being touched by the lives of patients they never knew yet have interacted with in a very personal, intimate way.”

Face-to-Face: Clinical Skills Lab

Before they become licensed physicians, medical students must demonstrate their clinical knowledge and clinical skills.

For Upstate students, that means a lot of time in the Clinical Skills Teaching Center, which opened in 2007 in the Setnor Academic Building. The center includes 22 exam rooms, closed-circuit monitoring

and state-of-the-art medical equipment. It is here that students refine their diagnostic skills and shape their “bedside manner” with the help of standardized patients – community members trained to portray patients with various symptoms and conditions.

The standardized patients allow students to practice taking medical histories and perform exams. The sessions are videotaped for review by students and faculty.

During their four years at Upstate, medical students probably have 30 to 35 encounters with standardized patients, who also provide feedback, reports Steve Harris, director of the Clinical Skills Center. A standardized patient can tell an aspiring physician, “This is what it felt like to be your patient today.”

Christopher Geddes (above right with standardized patient David Baker), a third-year medical student who has seen about 20 standardized patients, agrees that their feedback is crucial. “You may do something wrong and you don’t realize it until the patient tells you,” he says.

Geddes remembers the time he finished examining a male standardized patient, opened the door and left the room before the patient put his shirt on. “If it had been a female patient, that never would have happened,” Geddes says. “I realized I have to think of male and female patients the same way.”

While having the clinical knowledge to make a correct diagnosis is important, there’s more to good medicine—including empathy, sensitivity and attentive listening.

“The key is learning the process to get to the right diagnosis, and making the patient feel they are the



Clinical Skills Teaching Center



EM-STAT Director Elliot Rodriguez MD, at right, observes emergency medicine residents Mandeep Dhaliwal MD, left, and Brian Kloss DO, JD, as they intubate a mannequin.

“The Sim Center”

Upstate’s Emergency Medicine Simulation Technology and Training Center (EM-STAT) has become an integral part of the training of Upstate physicians.

The center, at 550 E. Genesee St., opened in 2005 and is the only one of its kind in Central New York. The use of simulation centers at academic medical centers has become more common in the past decade.

Here, medical students and residents can practice handling medical emergencies in a risk-free environment.

“You get to replay and slow down your mistakes,” explains Gary Johnson MD, chair of the Department of Emergency Medicine. “We work hard to not make mistakes, but you can learn from them.”

EM-STAT, also known as “the Sim Center,” has programmable mannequins (adult, youth and infant); a multi-media setup that allows for simulated emergencies; and a simulated operating room, plus conference rooms where recorded scenarios are reviewed.

“All the residents ask for harder simulations,” Johnson reports. “They’re not looking for easy success.”

The Sim Center is also utilized by anesthesiology and internal medicine residents; first- and second-year medical students in Practice of Medicine courses; and third-year students in clerkships.

most important patient you’ll see that day,” Harris explains.

While standardized patients focus more on the interpersonal exchange, Upstate faculty who view the encounters evaluate the line of medical questioning. They also make sure the student is using correct techniques when performing a physical exam.

The point is to get meaningful feedback from every encounter.

Geddes describes his first few encounters as “nerve-wracking,” especially because of the time limit (usually 15 minutes with each simulated patient) and the fact that video cameras are rolling.

Some encounters are especially challenging. Geddes once had to tell a standardized patient that she had terminal cancer. The woman started crying. “You feel like it’s real while you’re doing it,” Geddes reports.

Upstate views the Clinical Skills Center, and working with standardized patients, as crucial to the training of physicians. “We’re about to send them out into the real world,” Harris explains. “We owe it to them, and we owe it to the literally thousands of patients they will see out there.”

High Stress, Low Risk: Emergency Medicine Simulation

As an attending physician in the Emergency Department at University Hospital, Jay Brenner MD relies on the skills he developed in dozens of sessions at Upstate’s Emergency Medicine Simulation Technology and Training Center.

Two years ago, when he was a third-year resident in emergency medicine, Brenner and several colleagues participated in a simulated emergency at the “Sim Center” on East Genesee Street.

The “patient” – a computerized mannequin that can be programmed to simulate a variety of symptoms – had injured his back and fallen while lifting a heavy object. The concern was whether the patient, an older male, had damaged his spine.

The patient, via Sim Center medical director Elliot Rodriguez MD at a microphone in an adjacent control room, was able to describe his symptoms – some of them intentionally misleading.

“You look at the most life-threatening possibilities first,” Brenner explains. “What tipped me off was the history of hypertension that had been poorly managed, medications that weren’t working and high blood pressure. He didn’t seem to be in pain, and there was no tenderness in his vertebrae. I thought something else was going on.”

There was. In a matter of moments, Brenner and the other residents determined – just as they suspected – that the patient had an abdominal aortic aneurysm. That’s a “weak spot” in the aorta, one of the large arteries that carry blood from the heart to

the rest of the body; if an aortic aneurysm ruptures, it can be catastrophic.

Yes, this is all simulation, but to the residents practicing on the mannequins, it’s very real. Proof?

“Dr. Rodriguez attached us to monitors, and the physiological stress in the simulation lab is equivalent to the real emergency room,” Brenner says. “We have to make decisions under stress, but we don’t have the same consequences.”

Mandeep Dhaliwal MD, a first-year resident in Emergency Medicine, agrees. “It all helps, from the basic to the dramatic cases,” she says.

In December, Dhaliwal and six other residents took part in a simulated emergency in which the “patient,” a 29-year-old with partial paralysis, was going into septic shock as an infection from an open sore spread into his muscles and abdomen.

Rodriguez was again at the control console, and Louise Prince MD, associate professor of emergency medicine, posed questions to the residents in the examining room. Dhaliwal and her colleagues interpreted symptoms and lab results, evaluated a CT scan and discussed potential diagnoses and treatments.

Dhaliwal has gone through numerous simulated scenarios in her first year of residency, and this patient was worse than the others. According to the case scenario, he would have died without surgery.

Even though it’s a simulation, “You have to be on your toes,” Dhaliwal says. “It’s one of the big draws in coming here for my residency. This is where you can ask questions. The second- and third-year residents can share what they know, and it opens you up to diagnoses you may not have considered.” *

by James McKeever

UPSTATE PIONEERS PERFUSION SIMULATION

Upstate’s Cardiovascular Perfusion students are among the first in the nation to use an interactive simulator as they learn to operate heart-lung machines and other equipment used in cardiopulmonary bypass procedures.

The Orpheus Perfusion Simulator was installed last year in Silverman Hall, home of the College of Health Professions.

With the Orpheus, Upstate’s instructors can recreate clinical scenarios “so realistic that our students will not be simulating bypass, they will be doing bypass on a simulated patient,” explains Bruce Searles, associate professor and chair of Upstate’s Department of Cardiovascular Perfusion.

Ed Darling, associate professor in the department, says the simulator also lets instructors introduce uncommon but realistic clinical scenarios and evaluate students’ performance objectively.

Upstate’s Cardiovascular Perfusion program, offered through the College of Health

Professions, is one of only 17 schools of its kind in the nation and one of the oldest programs in existence.

With the Orpheus connected to a mannequin model using standard patient leads, the device realistically recreates a variety of rhythms and outputs and permits display of ECG and arterial waveforms as well as body temperature.

A secondary touch-screen display allows students to monitor the patient’s condition and administer appropriate medications. The software also allows simulation of a range of equipment failures -- from power failures to kinking of the arterial line. These are uncommon, yet possible, events.

The Orpheus system was purchased by the College of Health Professions with support from the Office of the President at Upstate and the Advocates for Upstate Medical University.

The simulator is raising the profile of Upstate’s perfusion program. Last June, Searles and Darling traveled with the



Orpheus to New Orleans to conduct simulation modules at the American Society of Extracorporeal Technology’s Best Practice meeting. In December, Searles was an invited speaker at the First European Perfusion Simulation Workshop in Berlin, attended by perfusion program directors from 12 European countries.

HANDS-ON IN HAITI

JUST BEFORE HAITI'S JANUARY 12 EARTHQUAKE, FIVE UPSTATE MEDICAL STUDENTS — INCLUDING THREE NATIVE HAITIANS — RETURNED FROM A VOLUNTEER MEDICAL MISSION TO AN ALREADY-FRAGILE NATION, WITH POIGNANT MEMORIES AND A DEEP RESOLVE TO AID ITS RECOVERY.



Upstate students Brian Buckley, Farah Daccueil, Nate Herr, Claudy Zulme and Marvinia Charles (shown in these photos) help administer medical care to the Haitian people.

Even before the earthquake that caused so much death and destruction in Haiti, medical care in the Caribbean nation was far from ideal. After volunteering there in late December, five second-year Upstate medical students have a deeper perspective on what it will take to rebuild Haiti's fragile health care system.

Farah Daccueil, one of three Haiti natives in the Upstate group, tells of the ingenious methods of a "very humble" physician at General Hospital in the capital city of Port-au-Prince.

Physician Olivier Calixte used rocks and duct tape to redistribute the body weight of a patient with a broken femur until the patient could be scheduled for surgery – a week later. And this was before the earthquake of Jan. 12 killed an estimated 200,000 and damaged or destroyed thousands of homes and buildings, including hospitals and clinics.

"It did alleviate the pain," Daccueil says of Calixte's treatment. "To be a doctor in Haiti, you need to improvise everything. We learned how to think on our feet."

The Upstate students went on rounds with Calixte in his hospital for a week, including Christmas Day. (Daccueil was able to contact Calixte after the earthquake.)

Marvinia Charles, another Upstate student from Haiti, says the lack of basic equipment and supplies was all too apparent.

"We could see how much they do with so little," she says. "Just for taking blood, the doctors have to buy

their own gloves. They have so little there, but they are willing to work with what they have."

Claudy Zulme, the third Haiti native in the group, returns to his homeland every two or three years.

"Lately things keep on declining," he reports. "I was in medical school in Haiti for one year, but I came to the U.S. to get a better education."

Zulme envisions himself working as a physician in the United States, but spending some time each year working in Haiti.

"My plan is to have some kind of clinic down there, and recruit some other doctors so that clinic always has a doctor," Zulme says. "The problem there is that doctors want to help patients, but they don't have the materials. It's very frustrating."

In addition to delivering medical supplies and volunteering at hospitals in and around Port-au-Prince, the Upstate students spent time at some of Haiti's many orphanages (where they delivered 67 sets of pajamas collected at Upstate).

"To bring a smile to a child's face just for one day, it was very moving," says Daccueil. But in Haiti, the term "orphanage" doesn't mean what one might expect.

"A lot of kids at the orphanages, they still have moms and dads," explains Charles, "but they couldn't afford to feed them and just dropped them off."

After leaving an orphanage one day, Upstate student Nate Herr visited a nutrition center where more than 100 malnourished children were being cared for. Herr wrote on his blog (<http://www.naterr.com/wordpress/?p=957>) about holding and comforting one baby for two hours, only to see and hear the child's distress when he had to let go and leave.

Brian Buckley, the fifth student who made the trip, wants to focus on global health after medical school. He is pursuing a master of public health degree as well as a medical degree at Upstate. He would like to return to Haiti and do what he can to help.

"The intensity of my drive to go back there couldn't hold two candles to that of my friends," says Buckley, nodding toward Charles and Daccueil, who were working at the Haiti Relief table in Upstate University Hospital a few days after the earthquake. "Haiti's going to need a lot of help for a long time."

—by James McKeever and Susan Keeter

Editor's Note: Since the earthquake, the three medical students from Haiti have learned that their immediate family members survived the quake, but most lost their homes.



COMMON GROUND:

DR. SARAH AND “DR.” FARAH



This semester, second-year medical student Farah Daccueil was named Upstate Medical University's eleventh Sarah Loguen Scholar. Well over a century separates their medical studies at Upstate, but Dr. Sarah Loguen (1850-1933) and the soon-to-be Dr. Farah Daccueil have much in common.

Both women have strong ties to Hispaniola, the Caribbean island that is home to Haiti and the Dominican Republic. Daccueil was born and raised in Port Au Prince, Haiti. A century earlier, Loguen was the first woman to practice medicine in the Dominican Republic.

Loguen, an 1876 graduate of what is now Upstate's College of Medicine, was one of our nation's first African American women physicians. Born, raised and educated in Syracuse, she moved to the Dominican Republic in 1883. After passing rigorous medical exams—in Spanish, at the University of Santo Domingo—Loguen made house calls on horseback and cared for women and children in Hispaniola for close to 20 years.

Both Loguen and Daccueil were drawn to medicine after losing their mothers at an early age. Loguen was 17 when her mother died from tuberculosis, a disease that was untreatable in the 19th century. Daccueil was just 12 when her mother died in Haiti from a stroke, unable to reach a hospital in time for treatment. Daccueil's decision to study medicine was also inspired by the doctors' extraordinary kindness at the time of her mother's death.

In 2002, with her father, Daccueil moved to Hempstead, NY. Prior to beginning her medical studies at Upstate, she earned an undergraduate degree and master's degree in biophysics at SUNY Stony Brook.

One of the criteria for the annual Sarah Loguen scholarship is that the recipient share Loguen's commitment to “never see a person in need and not be able to help.”

Daccueil most recently demonstrated this helping spirit by devoting her winter break to a medical mission in Haiti, returning to Syracuse just prior to the January earthquakes.

Daccueil and four other Upstate medical students – Brian Buckley, Marvinia Charles, Nathaniel Herr and Claudy Zulme – flew to Haiti in December. They delivered donated medical supplies to the General Hospital in Port au Prince and children's pajamas to St. Marc Clinic in a rural village an hour's drive away.

The five Upstate students spent two weeks volunteering at the hospital and clinic. Daccueil was deeply impressed by the “extraordinarily devoted and resourceful” doctors and nurses who showed her how to “do so much with so little.”

Even in pre-earthquake Haiti, Daccueil encountered a “tremendous need for public health.” A host of obstacles, including difficult travel, limited access to electricity and a lack of money, make health education difficult.

As a result, Haitians are often very sick by the time they get to doctors. For example, diabetes is rampant in Haiti. But according to Daccueil, few Haitians recognize the symptoms. By the time they seek medical treatment, the disease tends to be advanced and debilitating.

Following in the footsteps of Sarah Loguen, Daccueil hopes to return to Haiti this summer, to participate in another medical mission. Once she completes her medical degree at Upstate, Daccueil plans to devote some of her work life to developing patient education programs and more efficient processes for medical care in Haiti.

- by Susan Keeter

A MAJOR INVESTMENT IN MINORITY HEALTH

YET TO DECIDE ON A MEDICAL SPECIALTY, HIGH-ACHIEVER KASANDRA SCALES MPH IS COMMITTED TO MARGINALIZED POPULATIONS

Kassandra Scales made SUNY Upstate history in 2009 when she became the first Upstate medical student to receive an American Medical Association Foundation Minority Scholar Award.

Scales and 11 other medical students nationwide each received a \$10,000 scholarship at the AMA Foundation celebration in Chicago last June.

“It was a nice surprise,” especially at the end of a stressful year of med school, according to Scales.

The AMA Foundation awards recognize scholastic achievement, financial need and personal commitment to improving minority health. First- or second-year medical students from groups defined as historically underrepresented in the medical profession are eligible.

Less than seven percent of U.S. physicians come from those groups—African-American/Black, American Indian, Native Hawaiian, Alaska Native and Hispanic/Latino, according to the AMA Foundation.

Scales—on track to earn her MD from Upstate in 2012—is considering a career in primary care, endocrinology or perhaps academic medicine. She also earned a master of public health degree from Columbia University in 2007.

This academic year for Scales includes classroom work and a research fellowship working with Upstate professors Paula Trief PhD and Ruth Weinstock MD, PhD on two diabetes studies funded by the National Institutes of Health.

“Kassandra has quickly become a key member of our research team,” notes Trief. “She is organized, intelligent and creative, and a pleasure to work with.”

Scales' interest in medicine goes back to the 11th grade, when her father suffered a heart attack. “Not being able to help was problematic for me,” she recalls. “I said to myself, ‘Next time I want to be able to help.’”

Enroute to medical school, Detroit-native Scales earned a bachelor's degree in human physiology from Michigan State University.

She spent a year working for the Delta Research and Educational Foundation, a Washington, D.C. not-for-profit organization supporting scholastic



achievement, public service programs and research initiatives for African-American women.

Scales traveled the country teaching parents how to spark their children's interest in science, technology, engineering and math by using items commonly found in the home.

While working for the Delta Foundation, Scales listed her medical career options – and realized that public health was a common denominator.

“I like to fight for the marginalized populations,” Scales explains. “I still wanted to do medicine, but I wanted to have a skill set that would take it a step further.”

Scales enrolled in Columbia's Mailman School of Public Health in 2005. While there she founded Gulf Coast Recovers, a community-based initiative aimed at helping survivors of Katrina.

Her master's thesis, “After the Rain: Celebrating Memories and Supporting Mental Health,” was a traveling exhibit of photographs and narratives. The idea was to “create a safe space for survivors, family, and friends to commemorate and express their grief for their losses,” according to the group's web site, <http://www.gulfrecovers.org/aftertherain/>

In 2007, Gulf Coast Recovers became the first student organization at Columbia to win the university's John and Kathleen Gorman Public Health Humanitarian Award.

While Scales still isn't sure what field of medicine she will focus on or where she wants to settle, this much she knows: it will be somewhere with an underserved population that needs quality health care. “That's where I want to set up shop,” she says.

- by James McKeever



AT THE HELM

Known to be both visionary and detail-oriented, John McCabe MD, chief executive officer of Upstate University Hospital, has stepped into a pivotal national role: chair of the American Board of Medical Specialties (ABMS) Board of Directors. The ABMS, which oversees the certification of 24 primary medical specialties and 145 subspecialties, is considered the gold standard in medical credentialing. To learn more about Dr. McCabe, who is also internationally renowned as professor and former chair of Upstate's Department of Emergency Medicine, see <http://www.abms.org/>