

Paul Smyth | EMERGENCY WORK

AS THE EMERGENCY MEDICAL SERVICES MANAGER FOR Syracuse University Ambulance (SUA), Paul Smyth never knows what to expect on any given day. Amid ambulance calls for broken bones, the flu, and car accidents, he may find himself at a reception recruiting incoming students for SUA, taking an ambulance in for maintenance work, or sifting through the paperwork covering his desk. Such is life for Smyth, who oversees daily operations at SUA—dispatching ambulances, responding to emergency calls, transporting patients, and training and supervising student emergency medical technicians (EMTs). “Emergency work is what I have been doing for 20 years,” Smyth says. “You can’t be in this job too long if you don’t handle stress well.”

Last August, Smyth took over the position at SUA, a Health Services-based organization that involves more than 70 students who are trained as EMTs and dispatchers. They are the first-responders on campus to more than 1,500 medical emergencies each year, ranging from minor injuries to serious illnesses and accidents. When he joined SUA, Smyth set goals he hoped to accomplish. In less than a year, he has achieved six of eight tasks on his checklist. One change he instituted was the use of glucometry, which allows EMTs to test a patient’s blood sugar. For another, he collaborated with SU Information Technology and Services to replace handwritten patient reports with electronic records that provide clear, detailed information, enabling them to easily track patients’ medical histories. “I want to make the organization neat and well-organized,” Smyth says. “And I’m glad everything is running smoothly so far.”

Prior to joining the SU staff, Smyth worked as a paramedic at the North Area Volunteer Ambulance Corps (NAVAC) in North Syracuse for 16 years, including three years as the director of operations. He provided a range of services, from delivering babies and treating car-accident victims to taking care of people with cardiac disease or who suffered heart attacks. When patients came to say “thank you,” it meant a lot to him, he says.

Smyth credits NAVAC’s executive director for teaching him management skills that helped him handle the transition to his SUA duties. He finds it refreshing to work with a group of college students interested in the medical field and dedicated to SUA. When he responds to emergencies, especially if the patients are nervous or scared, the veteran paramedic takes a few minutes to explain to them how the process works and often jokes with them to ease their tension. “I try to get people comfortable,” he says. “Let them know everything is taken care of, and we’re here to help.”

Professional know-how earned Smyth the Emergency Medical Services Advisor of the Year award from the National Collegiate Emergency Medical Services Foundation. He received the recognition at the foundation’s conference in Baltimore in February. When he heard his name announced, he was surprised to learn SUA students had nominated him for the honor. “I had no idea they wrote all the recommendation letters to support me,” Smyth says. “I felt honored they recognized me, even though I’ve just been here for a short time. Now all I’m thinking about is what I’ll do next.”

Smyth says he enjoys working at SUA and finds it rewarding to see student volunteers graduating with emergency medical experience. “I look forward to continuing to provide good emergency medical services to the SU community,” he says. “We’ll be there if anyone needs us. And I’m always ready to help.” — *Yuhan Xu*





Carla Lopez | GLOBAL INTERESTS

ONE OF THE FIRST LIBERAL ARTS COURSES CARLA Lopez '13 took at Syracuse University featured a photo of Istanbul's magnificent Hagia Sophia—once a mosque, then a cathedral, now a national museum. Lopez was awestruck by the remarkable beauty and majesty of the structure. The colossal edifice was an even more breathtaking sight when she stood gazing up at its massive, ornate dome during an SU Study Abroad trip to Turkey. "I could not believe I was there," she says. "It was such a magical moment—a dream come true."

A dream realized could also describe Lopez's life at Syracuse University as an international relations and political science major in the College of Arts and Sciences and the Maxwell School of Citizenship and Public Affairs. A native of Honduras, Lopez, now 20, arrived in the United States when she was 12 years old, speaking little English. Fluent in Spanish and the Black Carib language Garifuna, she attended bilingual schools in the Bronx, where all of the courses were taught in English. Her high school teachers recommended she include Syracuse University on her list of potential colleges, and a visit to

the SU campus for a multicultural weekend quickly made up her mind. "I love the diversity here," she says. "There are so many international students, and I am interested in learning about other cultures."

The high quality of SU courses was another reason why Lopez decided to come to Syracuse. "I think of education as the key that will open the doors I wish to open in the future," she says. "Education will never leave me, which is why I seek it. I have to get educated, so I can give my mom, who works as a home attendant, a better life."

Living on campus, away from her close-knit family and neighborhood for the first time, has given Lopez the opportunity to explore her own personality. "It was here that I got a chance to know who I am," she says. "I was finally alone to start defining myself. I found out I'm a hard worker who can be a perfectionist to the point of being too demanding of myself."

Energetic and driven, Lopez is involved in a number of extracurricular activities, serving as vice president of the South Campus Organization for Programming Excellence, and as a global ambassador for SU Abroad. She was a member of the Maxwell School's 2012 National Model United Nations team, representing Gabon at a week-long conference during which more than 5,100 students from around the world competed to take top honors. This year, for the first time, the SU team received the first-place award as the outstanding delegation. Lopez was chosen as the team's most enthusiastic member.

An adaptable and seasoned traveler, Lopez will visit China, which has begun strengthening ties with African nations. She plans to learn more about this nascent relationship and to understand its impact on world politics. Eventually, she hopes to earn a doctorate in Pan-African studies with the goal of working for the United Nations or the African union. "In Honduras, I dreamed of becoming a medical doctor," she says. "Now I want to work to unify the African countries. I want to go there, live there, and be part of the group that continues to help transition the African continent into becoming united and influential in international relations."

—Paula Meseroll



Katherine McDonald | FULL PARTICIPATION

AS A YOUNGSTER GROWING UP IN SYRACUSE, Katherine McDonald visited refugees' homes, volunteered at church, and was involved in community issues with her family—experiences that shaped her awareness of social justice. It was, however, her time spent among friends at a Syracuse L'Arche community that defined McDonald's professional interest in community psychology and changed her life. The Syracuse site is part of the larger L'Arche international federation of communities in which people with and without disabilities share a home and everyday life. So moved by the people she met there, she spent another two years at a L'Arche community in Switzerland following her graduation from Cornell University with a B.S. degree in human development and family studies in 1998. "Those experiences—seeing marginalization up close and how positive relationships transform people's place in the world—sparked my passions," says McDonald, a public

health professor in the Falk College of Sport and Human Dynamics and a Faculty Fellow at the Burton Blatt Institute (BBI) since August 2011.

McDonald's interests have fueled a research career geared toward inclusion, eliminating disparities, and empowering people with disabilities to be full participants in educational, employment, and social opportunities. "I wanted to do work that was about how we change people's relationship with their environment, how we change attitudes, and how we change policies to be more inclusive," says McDonald, now active with L'Arche International. "I got really lucky because I just kind of found my field, found my place."

After returning from Switzerland, McDonald pursued master's and Ph.D. degrees in community and prevention research psychology at the University of Illinois at Chicago. The specialized field looks at human beings in the context of their political, religious, school, and community environments. She became interested in inclusive research practices as part of the university's institutional review board, a federally regulated board that monitors research involving human participants. "I started to learn about how the same issues in terms of community participation outside these walls—exclusion and overprotecting rather than allowing the dignity of risk—happened in terms of research participation," she says. "We need to have processes that offer safeguards in the least restrictive manner."

In pursuit of those answers, McDonald did her dissertation on—and continues to study—the research participation of people with developmental disabilities. Her goal is to create materials that would inform researchers about people with disabilities, and materials and strategies that would allow them to participate in studies.

In another area of investigation, McDonald conducts participatory action research with community-based organizations and community members on health, education, and employment disparities among people with disabilities. She has a longstanding collaboration with the Academic Autistic Spectrum Partnership in Research and Education in which project leadership is shared between an academic and an autistic adult. "The work is more socially relevant because it's inclusive of the community perspective," McDonald says. In June, she was honored for her work by the American Association on Intellectual and Developmental Disabilities with its 2012 Early Career Award, after a nomination by a close colleague and mentor, the late Western Oregon University professor Hank Bersani Jr. G'73, G'82, a leading expert in the field.

McDonald's research also put her in contact with Peter Blanck, BBI chairman and University Professor, and led to her position that helps connect the work of BBI with the University. In her Disability and Health course, students look at the legal rights and service provisions for people with disabilities, along with disparities in health care and promotion—and their perspectives about their environments shift. "While it won't necessarily be their specialty, as public health professionals, it's a population they will serve, interact with, and care about," McDonald says. —*Kathleen Haley*

Theodore Williams | HANDS-ON APPROACH

FOR THEODORE WILLIAMS '12, EXPERIENCE IS THE key. And it shouldn't come as a surprise that Williams, who received a bachelor's degree in environmental engineering from the L.C. Smith College of Engineering and Computer Science (LCS), is an inveterate tinkerer. In high school, he earned money by fixing computers. Lately, he's been repairing his car—both for the challenge and to avoid costly bills. "I like practicality," he says. "Give me something to do. I'm a hands-on type person."

A native of Kingston, Jamaica, who attended high school in the Bronx, Williams gained significant practical experience working for three years at SU's Center for Environmental Systems Engineering. Most notably, he collaborated with the Syracuse-based Upstate Freshwater Institute on a study involving the role of zebra mussels in sequestering mercury in the Seneca River. The invasive species has long been considered a nuisance for disrupting native aquatic ecosystems and clogging pipes. But, according to Williams, their research revealed a positive impact of the mollusks' presence: Areas populated by the zebra mussels contained lower concentrations of mercury. Through their filter-feeding process, the mussels accumulate the contaminant in their tissues and shells, but while tissues biodegrade and release mercury, the shells do not break down easily. "The zebra mussels are, indeed, capturing and sequestering mercury long-term through their shells," he says. For Williams, the research led to conferences and presentations, including earning a first-place award for his poster presentation at the 2011 Emerging Researchers National Conference in Science, Technology, Engineering, and Mathematics. He also co-authored a paper pending publication, "Zebra Mussels: A Nuisance or A Valuable Asset to Aquatic Systems?"

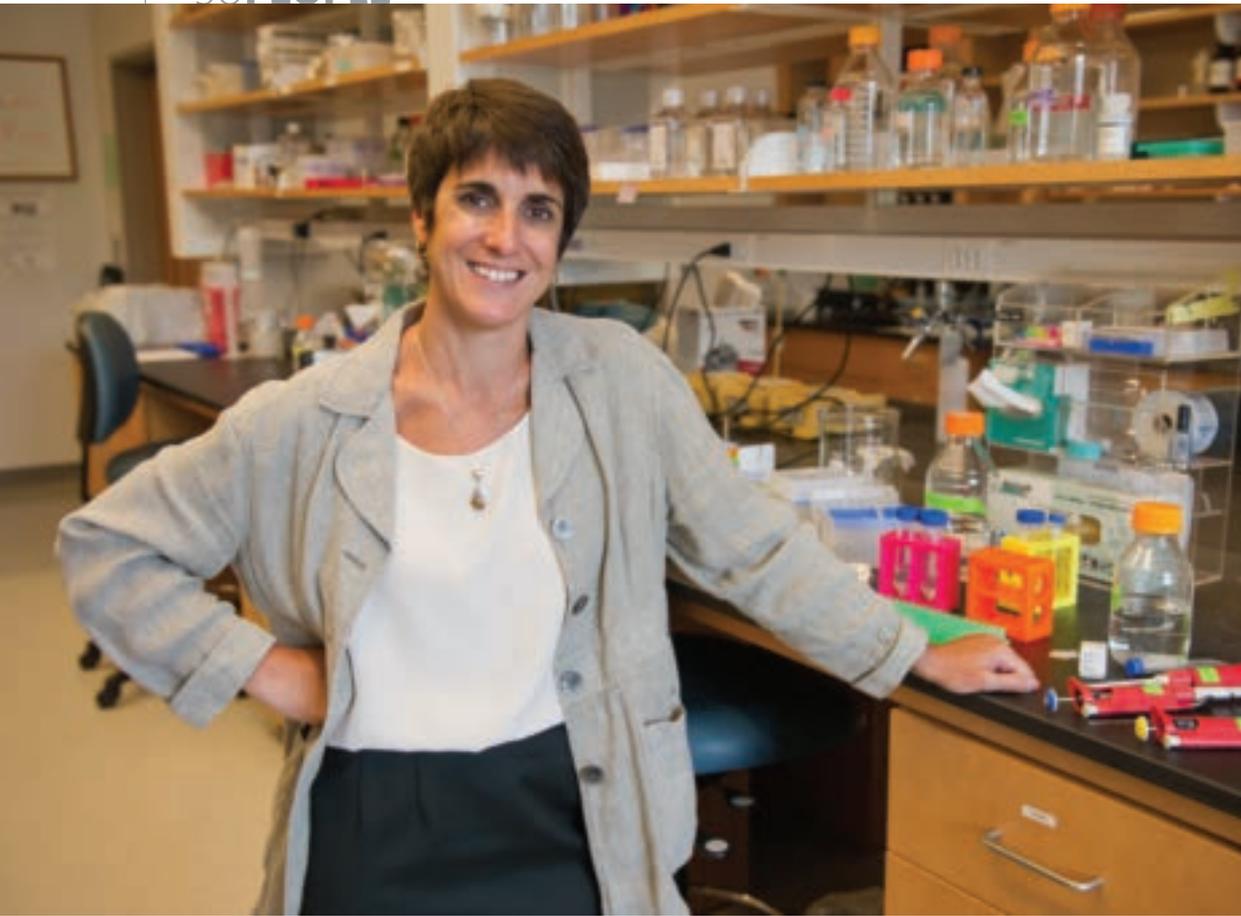
Williams, who minored in policy studies and worked summers at a Manhattan law firm, also logged time in a New York City Department of Environmental Protection lab, evaluating wastewater and sludge samples. Last fall, he expanded his educational focus, joining a nanoparticle research project in the Department of Chemical and Biomedical Engineering, where he plans to pursue a master's degree this fall. Shifting gears from one activity to another is commonplace for Williams. An Our Time Has Come-Corning Scholar, he co-founded and served as president of the Society of Environmental Engineers at SU, earned certification as a scuba diver, volunteered as a tutor in the Wilson Park after-school program, and, as an LCS ambassador, conducted science experiments at Danforth Middle School. "It's impressive to see how smart some of the kids

are," he says. "Chemistry is cool, and I was happy to show them experiments to get them interested in science."

Williams attributes his interest in science and engineering to his passion for developing ideas and building things. Two years ago, he had his laptop ripped off, but out of that experience came an idea for creating a software application that would activate a camera on a stolen



laptop, alerting the owner with an e-mail and pictures of the location. The idea earned him a \$1,000 grant in LCS's 2011 Invention and Creativity Competition, and he is now collaborating with two LCS graduate students who are developing the programming. As Williams talks about the project, more ideas pour forth. Like many people with innovative minds, he's restless, ready to tackle more projects. "When I was a kid, I wanted to be a farmer because I liked watching plants grow," he says. "Engineering has that aspect to it—you get to watch things grow and develop over time."
—Jay Cox



**BEVERLY
PETTERSON BISHOP
PROFESSORSHIP IN
NEUROSCIENCE**

Recipient:

Sandra Hewett,
Department of Biology,
College of Arts and
Sciences

Background:

Charles Bishop '42, G'44
endowed the professorship
in honor of his late wife,
Beverly '44, a nationally
recognized neuroscientist
and physiology profes-
sor who was the author
of *Basic Neurophysiology*
(1982) and more than 150
scholarly articles. The
endowment supports the
activities, research, and
teaching of the Bishop
Professor to promote the
study of neuroscience.

Sandra Hewett | NEW HORIZONS IN NEUROSCIENCE

WHEN YOU TALK TO HER COLLEAGUES, TWO WORDS come up again and again when describing College of Arts and Sciences neuroscientist Sandra Hewett: energy and enthusiasm. “Your heart rate goes up 25 beats a minute when she enters the room,” biology professor John Russell says. “The energy and enthusiasm is real. And as far as I can tell, now that she’s been my colleague for a year, it never runs down.”

Both Russell and biology department chair Ramesh Raina say that energy and enthusiasm, coupled with an international reputation as a top-flight scientist and successful, well-funded researcher, made Hewett the perfect choice as the department’s inaugural Beverly Petterson Bishop Professor in Neuroscience. After 15 years at the University of Connecticut Health Center, she and her husband, fellow neuroscientist James Hewett, joined the biology department faculty last fall, packing up and moving to Syracuse with their young son, Oliver.

Neuroscience is by nature an interdisciplinary field, drawing on biology, chemistry, psychology, and even mathematics, physics, and computer science. Hewett is charged with pulling together scientists and scholars from across campus and beyond, shepherding a joint neuroscience Ph.D. program with SUNY Upstate Medical University and working with Russell to revamp the undergraduate integrated learning major in neuroscience. “I love my science,” Hewett says, smiling. “I’m happiest when I’m in my lab. But the Bishop Professorship offered me an opportunity to do something

new: to build a neuroscience program, build coalitions and work with new people and different resources.”

Meanwhile, in her lab, she will pursue the elusive goal that has kept her working passionately, if not obsessively, for two decades: a neuron-protective treatment for stroke. For generations, scientists thought neurons, the excitable brain cells that enable us to move, speak, and think, were the only cells that really mattered in the brain. In recent years, Hewett and others have shown that astrocytes, the most abundant brain cells once thought to serve as inter-neuronal glue, are critically important to brain function. In addition to providing nutrients and maintaining proper pH, ion, and water balance in the brain, astrocytes remove glutamate, a key neurotransmitter, from the synapses between neurons. But in the setting of stroke, astrocytes are activated to release glutamate that floods the synapses, and neurons literally excite themselves to death. “It’s called excitotoxicity,” says Hewett, who holds a Ph.D. degree in pharmacology from Michigan State University. She has homed in on a protein that transports glutamate; if she can slow down the transport, perhaps with a drug, she believes she can break the destructive cycle that leads to progressively more brain damage. She thinks the same mechanism is at work in traumatic brain injury, ALS, and brain tumor growth; colleagues are working to prove this. “I’m so excited!” Hewett says, and you believe her. “This is all new; new to the world, new to me.”

—Jim Reilly

Kola Owolabi | THE MUSIC OF HIS LIFE

WHEN 13-YEAR-OLD KOLA OWOLABI ENTERED A PRESTIGIOUS annual songwriting competition in his native Toronto, he drew from the musical era he knew best—16th-century Renaissance. It was an admittedly unconventional choice for a youngster, but the finished work—*Hodie, Christus Natus Est*—won, heralding Owolabi as a rising star in the contemporary classical music scene. “I think the judges were shocked to find this kid writing in 16th-century style,” says Owolabi, a professor in SU’s Setnor School of Music who also holds the title of University organist. “It sounded like it was written 400 years ago. But that was what I was singing on a daily basis in the cathedral choir at St. Michael’s Choir School in Toronto. I didn’t know it was ‘16th-century style’; it was just what was in my ear.”

Two decades later, Owolabi has easily lived up to that early promise, distinguishing himself as a gifted composer and award-winning musical force whose tastes and repertoire today span both centuries and genres. Since that first work—an antiphonal motet for double choir still performed today—he has composed 20 other pieces, from four-part anthems to larger concert works. He won second prize and audience prize in the 2002 American Guild of Organists National Young Artists Competition in Organ Performance, and has performed throughout the United States, and in Canada, Mexico, and Jamaica.

Owolabi began his music training in his father’s home country of Nigeria, where his family lived from the time he was 5 until he turned 10. “It was a culture where everybody learns music by ear,” he says. At age 7, he began private piano lessons and learned to read music. When the family returned to Toronto, he began studies at St. Michael’s, where he also participated in daily choir rehearsals and piano and violin instruction. At age 12, he added organ lessons, and it soon became clear to him he had found his passion. “My family was devout Catholic,” he says, “so I spent a lot of time in church, where I fell in love with the sound of the organ. I loved its wide variety of ‘colors.’ It’s like a painter choosing a color palette—that ability to choose different sounds and blend them in different ways. I always wanted to explore the whole range and scope of the instrument.” After earning a bachelor’s degree in organ performance from McGill University, he received a master’s in organ performance and choral conducting from Yale, and a doctorate in organ performance from the Eastman School of Music. While at Yale, he also served as organist at the University Chapel and directed the Yale Divinity School chapel choir.

In 2006, he came to SU, where, in addition to teaching, he accompanies the Hendricks Chapel Choir; plays for weddings, convocations, and Sunday morning worship; and coordinates the Malmgren Concert Series. Next year he’ll begin a two-year term as dean of the Syracuse chapter of the American Guild of Organists. He also performs solo recitals with the nationally



acclaimed, Grammy-nominated Seraphic Fire and its Firebird Orchestra, which features his work on a recording of Vivaldi’s *Four Seasons*, scheduled for release next summer.

While his whirlwind of commitments and variety of gigs inform his own growth, Owolabi says he also wants to ensure that his students appreciate the full scope of possibilities in organ repertoire today. “There’s a wide range of styles being written today for the organ—styles that are more modern, more accessible,” he says. “And there will always be a need for highly skilled, classically trained organists. As long as we have highly trained organists, they will *always* have value.”

—Carol L. Boll