

## AHEC PROGRAM CONFRONTS DISPARITIES, AND SHORTAGES, IN THE HEALTH-CARE WORKFORCE

## STORY BY NICOLE PERADOTTO

The summer before her freshman year at Lockport High School, Darlene Volmy was among a group of teenagers invited to shadow students at the UB School of Medicine and Biomedical Sciences. It was there, in the gross anatomy lab under the tutelage of professors, that she first laid eyes on a cadaver.

In that moment, she realized she was destined to be a doctor.

"Everyone else was, like, 'Eww—this smells,'" recalls Darlene. "And I loved it. I said, 'I want to do that."

At 17, Darlene still has a ways to go to achieve her dream of becoming a plastic and reconstructive surgeon; however, thanks to a workforce initiative developed by Congress 20 years before she was born, she's already had plenty of exposure to the medical field, including an internship at Roswell Park Cancer Institute.

The initiative is known as the Area Health Education Center program, or AHEC. Its goal is to identify, motivate, recruit, train and retain a health professions workforce committed to underserved populations, primarily in rural communities and the inner city.

In New York State, where the program was launched in 1998, there are nine nonprofit AHECs based in communities from Buffalo to the Bronx. The system's statewide office, which serves as the financial administrator for the entire network of AHECs, is housed at UB and directed by Thomas Rosenthal, MD '75, professor and chair of the Department of Family Medicine.

HECS HAVE PROVEN TO BE VERY EFFECTIVE WAYS OF DECREASING THE RACIAL, ETHNIC AND GEOGRAPHIC DISPARITIES IN THE HEALTH PROFESSIONS BY BROADENING THE BASE OF STUDENTS INTERESTED IN TRAINING FOR THESE CAREERS," SAYS ROSENTHAL.

Since UB is the recipient institution for the federal and state dollars received by the statewide AHEC system, the university plays a vital leadership role in the program. Its staff is involved in everything from strategic planning and organizational support to evaluating programs and training the boards of directors for each AHEC.

To Rosenthal, it makes perfect sense that the New York State AHEC system is administered out of UB because the two entities share the goal of partnering with community-based institutions to train health professionals who often then return, or stay, to serve populations that need them most.

"I've always felt that UB takes its mission as a regional university quite seriously. Its

leaders value

individuals

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who understand the diverse populations in Western New York and who have an interest in developing the myriad programs that serve these populations," he says. "The university's president and its deans have created fertile ground upon which to establish the sponsoring unit for the statewide program."

When determining the best way to nurture a health-care workforce, the directors of the nine AHECs, working with a community-based board of directors, look closely at both the resident population and the health-care services in place.

At one AHEC, for example, much of the focus may be on retaining and retraining health-care workers who need additional skills to keep pace with advancing technologies. At another, the emphasis may be on encouraging interest in health-care careers among K–12 students—everything from presenting puppet shows for younger students to mentoring, internships and summer enrichment camps for the older ones.

"We have a statewide capacity to address workforce issues through communities, with strategies that meet local needs," says AHEC's associate director Mary Sienkiewicz. She adds that AHEC was created for and is geared to address the full spectrum of health-care professions, from pharmacists, dental technicians and medical technologists, to physical therapists, nurses and physicians.

"We're a pipeline-to-practice program. We introduce young people to health-care careers early in their academic preparation so they can develop the math and science skills necessary to be competitive in those academic programs. We work with health professions' students as they're training to give them experience in

MARY SIENKIEWICZ, AHEC ASSOCIATE DIRECTOR, LEFT, WITH SECOND-YEAR STUDENTS TIMOTHY BUCKLEY, CENTER, AND HARITA NYALAKONDA. Nyalakonda worked with John Brewer, MD, MEDICAL DIRECTOR OF THE NEW YORK STATE AHEC System, to develop the UB AHEC INTERDISCIPLINARY STUDENT-FACULTY INTEREST GROUP, WHICH FOCUSES ON WORKING WITH THE UNDERSERVED AND ON COMMUNITY-BASED LEARNING EXPERIENCES FOR STUDENTS. BUCKLEY PARTICIPATED IN AN ERIE-NIAGARA AHEC SUMMER EXTERNSHIP WITH NIAGARA FAMILY HEALTH CENTER, A UB FAMILY MEDICINE SITE THAT PROVIDES CARE TO A LARGELY POOR AND MEDICALLY UNDERSERVED COMMUNITY IN THE LOWER WEST SIDE NEIGHBORHOOD OF BUFFALO.

their field. And we provide support for practitioners in those fields with career-ladder and retraining programs in the communities."

From Sienkiewicz's vantage point, having AHEC's central office at UB is a plus for the university, the community and the state.

"The University at Buffalo benefits from the New York State AHEC system through quality applicants who apply to its health-professions programs. Further, AHEC initiatives are consistent with UB's commitment to the communities—not only of Western New York, but all of New York State," she says.

"Conversely, the community linkages that are integral to AHEC help the students because they keep them in touch with the needs of communities by anchoring them in the real world."

THE "BRILLIANT B'S"
At the Erie-Niagara AHEC—one
of two AHECs in Western New
York—president Mary Craig and her
staff devote much of their energy to
identifying and nurturing promising high school students in Buffalo
and Niagara Falls. Craig refers to this
group, which includes Darlene Volmy,
as the "Brilliant Bs."

"We're trying to discover how we can best spend our money and maximize the use of our dollars," she explains. "So we've focused primarily on students whom people weren't really paying attention to. These are kids who are doing well in school and who could easily be getting A's if there weren't things in the way—life issues, things going on at home and other responsibilities.

"These are kids from challenging neighborhoods and communities," she continues. "For the most part, they are students who could easily be overlooked. They're finding out about these health-career opportunities late, so they really have to step up to the plate. But they have such a strong desire to succeed, if you give them a little help, they do."

Craig points out that these students are often inclined to stay in the area, another reason it's so important in through the Erie-Niagara AHEC include extracurricular health-career clubs and camps that use a model designed by the Medical Academy of Science and Health, better known as MASH camps. At these hands-on camps, which are conducted year round, students learn what health professionals do by participating in activities that highlight their job duties.

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to encourage them in their studies and careers. "They have, for the most part, a strong loyalty to where they live and to people who help them. This is what we're talking about: encouraging people who, if given an opportunity, would like to stay here

Summer Health Academy, a weeklong event at UB that introduces students from urban, suburban and rural communities to the university's five health-sciences schools: medicine and biomedical sciences,

A similar concept is the



T'S A TYPICAL DAY IN EACH OF THESE SCHOOLS," Craig says, noting that the high school students even sleep in the dorms. "They go to class, and instructors and students from the different schools come in to talk to them about their experiences. They are given a snapshot of what a class in college is all about." In the evening the students learn different strategies for college survival, such as budgeting their money and healthy eating.

Established four years ago, the Erie-Niagara AHEC is one of the state's newer AHECs. According to Craig, more than 30 students who have passed through the program are now attending college, with over half of them pursuing careers in health care. "Some are in premed, some are in nursing, some are going to be scientists. They're all over the place, but the point is they're there."

What's more, they're proof that AHEC is succeeding in its mission, Craig says. "We're trying to level the playing field so people in these com-

"AHEC helped solidify my choices," says McCov. "It was the experience of looking at other fields of study—like shadowing dental students—that let me know that I didn't want to go into those fields of study."

In the fall, McCoy will be starting his freshman year at Canisius College, where he intends to major in psychology and education/administration.

## GOING THE DISTANCE

At the oldest and largest of the nine statewide AHECs, Kenneth Oakley, PhD, and his staff are committed to job retraining, as well as to improving health information technology—including promotion of the use of telemedicine, electronic health records and distance education throughout its 14-county region.

"We see that the health workforce shortage isn't going to improve significantly anytime soon and it may even get worse," explains Oakley, chief executive officer of the Western New York Rural AHEC, located in Warsaw,

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> For Derrick McCoy, a 17-year-old senior at Niagara Falls High School, getting involved in the Erie-Niagara AHEC has helped him narrow down his field of prospective careers to child psychology after having carefully weighed a list that once included physical therapy, dentistry and sports medicine.

New York. "So we're very involved with telemedicine and other technology solutions—getting enhanced primary care services, dental services, psychiatric services and others—out in the rural communities."

In addition, the staff at the Western New York Rural AHEC is cultivating the health-care workforce of the future—in some cases, the health-care workforce of the more distant future.

"We start with kids in kindergarten," Oakley says. "We use a series of puppet shows that introduces them to different health-care professions." In one show, for example, a child who falls out of a tree is tended to by emergency medical technicians before being transported to the hospital for care by a physician, nurse, physical therapist and other 'puppet' professionals.

"That's the fundamental premise of an AHEC: to deal with workforce disparities, both present and future," he continues. "And it starts with growing your own. That's why we want to work with kids right here in our own rural communities, because these are the kids we have the best shot at recruiting back as adults."

To that end, the Rural AHEC also offers after-school enrichment for elementary and middle school students, all designed to expose these students to health-care careers as early as possible and to keep them interested in and excited about math and science.

"If you're going to lose them, you're going to lose them as early as sixth grade," Oakley says. "One of the big frustrations we face is that kids get to be juniors and seniors in high school, and they haven't done the preparatory work that a lot of healthcare [college] programs require. It frustrates the students and places them at a distinct disadvantage.

"We know that kids don't make career decisions too early. But, by the same token, if we know they have an initial interest in a given career path, we can help steer them to the coursework they'll need for future college admission."

For health-care students in college or graduate school, the rural AHEC offers subsidized or rent-free accommodations at residences it rents or owns in Westfield, Hornell and Warsaw. The setup entices students to take internships and externships in rural and underserved communities.

"From a rural perspective, it's not enough for people to say they want to be a health-care professional—we have to also get them to experience health care and life in general in a rural area," Oakley reasons. "That's really important because we know that students will be far more likely to pick underserved rural locations for adult practice if they come from one or if they have experienced it in their training."

Michael Ludwig, a physician's assistant, personifies this rationale. In 2001, during his senior year at Daemen College, he was offered a rotation at Family Health Medical Services in Mayville, New York. Then a single father with two children, Ludwig knew he couldn't afford the expense of commuting between Buffalo and Jamestown, much less the time it would take away from his studies and children. Furthermore, he couldn't afford to continue paying rent on his Buffalo apartment while also renting in Mayville. Then he learned that he was eligible for free room and board in Westfield through an arrangement with his college and AHEC. Although he never had contemplated serving or living in a rural community, Ludwig knew he couldn't pass up the opportunity. To his surprise, he found that he loved it.

"When I set foot down here, this place was awesome," he says. One rotation turned into three, and when he graduated in 2002, a job offer was waiting for him. He's been working at Family Health Medical Services ever since.

"When I experienced the community and how the office worked, I knew this was where I was meant to be," he says. "I say to my patients, 'I'll see you in three months' and then I see them the next week when I'm picking up a pizza.

"Working in this setting just brings your understanding of your patients to a whole new level," he adds. "It's not just the seven minutes you spend with a patient in the office. You see them in their environment, and you can then better understand their lifestyle and how you can educate them on ways to improve their health."

To be sure, Ludwig never envisioned himself settling down in rural America. He never imagined that he'd work in a practice where one of his patients—an Amish man—once offered to build a horse-and-buggy hitching post outside the office in exchange for medical care.

And he wouldn't have it any other way.

SINCE 2000. AHEC has received "I wouldn't be here if it weren't for \$13 million from New York State, AHEC," he says. "I could quit today \$21.5 million in federal funds, and and make more money, but nearly \$10.8 million in local community that's not what I want. It's and private foundation funding. not about the money. It's about the people."



BY THE NUMBERS



SINCE 2000, AHEC has worked with nearly 17,000 medical and healthprofessional students at the college and graduate levels and more than 81,000 students, kindergarten through grade 12, and undergraduate college students.

SOME 41,000 HEALTH-CARE PROFESSIONALS have been retrained or been involved with continuing education and career ladder programs sponsored by AHEC.

