Expanding the boundaries of research, teaching and patient care
We live the teacher-practitioner model every day

In our classrooms, clinics, labs and the communities we serve, the Rush University College of Health Sciences (CHS) lives our values of collaboration and care. With more than half the U.S. health care workforce in an allied health field, the need for exceptional professionals in the health sciences is constantly expanding — and our 15 programs prepare students to succeed as practitioners, managers and leaders.

The CHS is centered on Rush’s teacher-practitioner model, which ensures students learn from active clinicians who excel in their professions. We integrate didactic study, patient care, research and service in the context of a world-class medical center, and our faculty and students regularly join forces with colleagues from other departments and colleges to further knowledge and improve patient outcomes. Read on to learn how our CHS programs are helping to lead the way in cancer and neuroscience education, research, and patient care.
Community service is an integral part of our students’ educational experience at Rush University. At the College of Health Sciences, we require each student to complete at least 16 hours of community service prior to graduation, but often, students go above and beyond this requirement. Some may even accrue more than a hundred hours before they graduate.

Our 2019 graduating class accumulated more than 4,432 community service hours working at health fairs, offering community health screenings, providing community health education and assisting with professional service and continuing education activities. Most students do not get involved just to fulfill a graduation requirement. Instead, they want to apply their skills and compassion to make an impact in the communities they serve, on the West Side and beyond.

Often, our students are inspired by our dedicated faculty, who model what it means to be committed to the community through their research, clinical activities and outreach. These faculty leaders truly adhere to Rush’s teacher-practitioner model, demonstrating what it takes to serve others each and every day.

In this issue of Impact, we highlight some of the caring and innovative work that our students and faculty are doing to build health awareness, support those in need, improve health equity and create better futures for all. By sharing their stories, we hope to inspire others to use their skills and passion to make an impact.

Charlotte Royeen, PhD, OTR/L, FAOTA, FASAHP, FNAP
Dean, College of Health Sciences

The Bachelor of Science in Health Sciences program “I think that’s why students choose to really go above and beyond, because they know one day these people in the community are going to be their patients. So if we can start having that relationship with people in the community now, I feel like it creates that trust factor. And students see value in that.”

— Tatiana Wilczak, CHS Student Government Association president and second-year student in the Bachelor of Sciences in Health Sciences program, who has accumulated hundreds of community service hours while at Rush

Charlotte Royeen, PhD, OTR/L, FAOTA, FASAHP, FNAP
Dean, College of Health Sciences

More Numbers to Know: Rush University College of Health Sciences

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747 active students
122 CHS students celebrated MLK Day in 2020 by volunteering across Chicagoland

*2019 Summer and Fall matriculants who self-designated as African American/Black, Hispanic/Latino, Hawaiian/Pacific Islander or American Indian/Alaska Native.
Pathways to opportunity
Rush builds better futures and its talent pipeline

Even though Joel Zavala, clinic coordinator at Rush University Family Physicians has enjoyed working with patients from behind the desk for the past three years, he has wanted to have a more hands-on role helping patients and supporting primary care providers. So in September 2018, Zavala took advantage of an innovative program that helps him become a medical assistant in two years, with all expenses paid.

Also supporting Zavala along his career journey are his coworkers and his supervisor, Ana Rubio, BSN, RN, clinical operations manager. Rubio says she has seen Zavala become even more excited and curious at work since entering the pathway program.

“I think the program is important because it encourages promising employees who understand the Rush culture and are committed to quality patient care to explore other opportunities within the Rush system,” Rubio says. “If we have people who are great with patients and work well with our team, why would we not encourage them to grow?”

Such support and encouragement is essential because the pathway program is challenging. “I had to be a full-time employee and a full-time student at the same time,” Zavala says.

But the rewards are worth it. After Zavala earns his certification, he hopes to work as a medical assistant in his clinic and continue his education and career advancement. “When I started working at Rush, my five-year goal was to be some type of medical assistant or technician so I could help patients,” says Zavala, who grew up on the South Side. “Now I’m looking out another five years, and I hope to continue my education to become a registered nurse.”

Opportunity that creates equity
Zavala is the ideal example of how the pathway program helps those in non-clinical, entry-level positions obtain their career goals and become members of the direct patient care team, says Nicole Gilson-Barmore, PhD, manager of talent development and adjunct faculty in the Health Systems Management (HSM) Program, which is ranked in the top five programs in the country by U.S. News & World Report.

“Opportunity creates equity, and this program ensures everyone has access to opportunity by providing individuals with all of the tools and resources that they need to be successful,” she says. “It’s not just about getting them a job. It’s about moving them into a career and helping set the stage for them to continue to grow at Rush.”

Rush has actively recruited clinic coordinators, food service aides and other entry-level employees for its third cohort of future medical assistants. In total, more than 15 Rush employees are on track to become medical assistants through the pathway.

Rush offers another all-expenses-paid pathway, in partnership with Malcolm X College and the nonprofit organization Skills for Chicagoland’s Future, for unemployed and underemployed young adults to become patient care technicians. Participants work at Rush while completing an eight-week course to earn their basic nursing assistant certification. So far, more than 15 young adults have been recruited into the patient care technician pathway program.

Beyond providing a pathway to better career opportunities, this program also serves as a recruitment pipeline for patient care technician vacancies. Recently, more than 18 patient care technicians from the program have been hired by Rush, in half the time it usually takes to fill these positions, Gilson-Barmore says. In fact, the program has been so successful that Rush has been sharing its model with other local hospitals.

Gilson-Barmore says the medical assistant and patient care technician pathways are an important component of Rush’s multipronged Anchor Mission strategy to improve health outcomes within West Side communities. By developing local talent, leaders at Rush aim to reduce a major contributor to chronic disease: poverty.

She credits the HSM faculty for building bridges in the community with partners like the City Colleges of Chicago and other health systems in the West Side United collaborative (which also includes education providers, faith organizations, businesses, government and others) that are establishing similar pathways around Chicago. She also commends Rush leaders, faculty members and students for the knowledge they share with pathway participants. One HSM student, Monroe Chen, has worked closely with those in the Medical Assistant Pathway Program as an intern on the Talent Development team. “To work and be successful in health care, we have to think beyond just the quality metrics and finances because the real magic happens when we focus on the people and our connection to them,” Chen says.

Opportunity creates equity, and this program provides individuals with all of the tools and resources that they need to be successful.”

— Nicole Gilson-Barmore, PhD, manager of talent development and adjunct faculty in the Health Systems Management Program
One of those clinicians is Jessica Vlaming, MS, PA-C, associate program director and director of clinical education in the Department of PA Studies. Every year since 2013, Vlaming has spent a week abroad volunteering her services in the Dominican Republic or Haiti.

On the past two mission trips to the DR, Vlaming has led a team of about a dozen attending and resident physicians, advanced practice providers, nurses, patient care techs, medical assistants, a global health fellow and students from a variety of disciplines. During each weeklong trip (which is organized by Rush and Community Engagement), Vlaming’s team has partnered with local physicians to treat 600 to 900 adults and children in Villa Verde with a variety of complaints, from diabetes to malaria to orthopedic issues.

The team primarily focuses on health education and preventative care. “We really try to empower the patients and empower community leaders as well to be a resource for their community members,” Vlaming says. They also identify patients who might benefit from surgery provided for free by Rush surgeons who make several trips to the DR each year. “People are getting surgeries that they otherwise absolutely would not be able to afford or have access to,” she says.

For Vlaming, returning to Villa Verde each year to see familiar faces is especially rewarding. This past September, Vlaming followed up with some of the patients she referred for surgery, including a man who had a mid-femur fracture repaired after it had been untreated for months. “There’s lots of success stories like that,” she says. “People have an injury at work or home, and they can’t use their limb, and then they get the surgery and it is life-changing.”

Before volunteering in Villa Verde, Vlaming joined a Rush team that made several mission trips to another town in the Dominican Republic called Peralta, which has since developed its own permanent primary care clinic and pharmacy with help from Rush and Community Engagement.

Beyond giving her a chance to provide direct patient care where it is desperately needed, the missions offer Vlaming an opportunity to lead an interdisciplinary team. “Everyone functions on the same level, and everyone is relying on each other’s strengths,” she says.

Vlaming, who graduated from Rush’s innovative 30-month PA program (ranked in the top 50 in the country) in 2013, recently received a grant through the PA Foundation to establish a diabetes screening program in the Dominican Republic. To set up the screenings, she plans to travel to the DR three times in 2020.

“There’s lots of success stories like that,” she says. “People have an injury at work or home, and then they get the surgery and it is life-changing.”

— Jessica Vlaming, MS, PA-C, associate program director and director of clinical education in the Department of PA Studies.
Listening to the community’s needs

Rush audiology student Gabrielle Rakidzich understands that hearing is essential for children’s academic success. So for the past two years, she has jumped at the chance to provide free hearing screenings to Chicago school kids before they head back to the books.

“Participating in outreach events such as the school health fair allows us to engage with our community not only by providing these hearing screenings, but also by promoting awareness about the importance of hearing health and conservation,” says Rakidzich, who is in her third year of Rush’s Doctor of Audiology program, which is ranked in the top 10 in the nation.

This past July, Rakidzich and her fellow audiology students screened about 50 children ages 3 to 18 at the back-to-school fair. They used otoscopes to check kids for signs of ear infection or blockage and provided hearing screenings under the supervision of a faculty member. If the audiology students identified problems or if parents had questions, a clinical audiologist was available to offer counseling or support. Rush students also educated parents on hearing conservation and provided special foam earplugs for families to use at concerts or other loud events.

Every summer Rush hosts the RU Caring back-to-school fair, where students like Rakidzich join Rush faculty and staff to offer free vision and hearing screenings, immunizations, physicals and dental exams to local youth.

Improving access to audiology abroad

Rush students don’t just make an impact in Chicago. Each year, aspiring audiologists take mission trips to help improve access to care in countries with limited resources.

This past August, five audiology students traveled to Guatemala, where audiology services are scarce. While there, they volunteered with Sonrisas que Eschucan (Smiles That Listen), a non-profit based in Guatemala City that is led by the country’s only two audiologists. During their week-long trip, the third-year students provided hearing screenings to children and teachers in Guatemala City and fit hearing aids on those in need. They also traveled to a rural hospital in Quiche to train nurses on how to screen newborns and identify hearing loss in patients of all ages. In total, they screened about 950 children and adults.

“It’s very, very rewarding to fit people with hearing aids and see the look on their faces when they hear sounds that they have not heard for many, many years—or kids that have never heard before,” says Rachel Hammond, one of the students who organized the mission trip and raised $800 to donate to the non-profit group in Guatemala.

In 2020, Hammond plans to visit the Dominican Republic with a fellow audiology student for another mission trip. After she graduates from the doctoral program and becomes a clinical audiologist, she hopes to continue these missions to bring greater awareness to the need for audiology services abroad. As she puts it, “Audiologists have a bigger place in the world.”
In November, more than 150 professionals from facilities across the Chicago area and even abroad came to Rush to learn more about these policies and procedures at the Third Annual MRI Safety Day. Attendees included radiographers, MRI technologists, radiologists, physicians, nurses, medical radiation therapists, medical physicists, researchers and students.

“Creation of a safe MRI environment for our patients and staff requires an interdisciplinary approach,” says Laura P. Vasquez, PhD, MS, RVT (ARDMS), RT (R), (MR), (ARRT), MRSO (MRSC™), chairperson of the Department of Medical Imaging Sciences and program director of the Imaging Sciences Program. “We’ve enhanced our MRI safety education by collaborating with leading industry experts who are in tune with advances in medical imaging and best practices. As medical imaging educators, we are preparing the next generation of imaging professionals who will continue to improve patient care and fortify our medical imaging profession.”

MRI Safety Day, which is co-hosted by the Imaging Sciences Program and Rush University Continuing and Professional Studies, allows health care professionals to receive continuing education credits while learning vital safety information that they can bring back to their facilities to help keep patients safe.

“At a time when we are seeing a rapid evolution in imaging technology, there is also a need for educational models where individuals are afforded lifelong learning,” says Vasquez, who is a triple Rush University graduate (earning a BS in vascular ultrasound, an MS in perfusion technology and a PhD in health sciences). “Our audience had the opportunity to advance their critical thinking skills, an important proficiency that allows them to become more effective decision-makers and problem-solvers, ultimately adding to improved patient outcomes.”

MRI Safety Day draws professionals from multiple disciplines

Even though millions of magnetic resonance imaging (MRI) scans are performed safely in the United States each year, adverse events like burns and magnet-related injuries occur annually, according to the Food and Drug Administration. Many of these adverse events could have been avoided if standardized policies and procedures had been followed.
Helping hearts in the OR and beyond

First-year student supports homeless neighbors

One of Nerina Balić’s earliest experiences as a volunteer was serving as a medical interpreter for her family and neighbors. It’s a role that Balić, now a first-year cardiovascular perfusion student at Rush, embraced after her family emigrated from Bosnia to Grand Rapids, Michigan, when she was nine.

Like Balić, many students come to Rush with a love of community service and seek out opportunities to make an impact in Chicago. The university makes it easy for students to find plenty of opportunities to serve others through the Rush Community Services Initiatives Program. But sometimes, students like Balić seek out additional volunteer opportunities on their own.

When Balić first enrolled at Rush, she searched online for volunteer groups and came across Helping Hearts of Bosnia and Herzegovina, a Chicago-based group that conducts homeless outreach and other philanthropic activities here and abroad.

As a volunteer with Helping Hearts, Balić helps make lunches one Sunday a month that the group distributes to local homeless shelters and less fortunate neighbors. They also distribute clothes, blankets, tents and portable heaters, all purchased through donations. On a typical Sunday, Balić and her team of volunteers might distribute 100 food and necessity packages to individuals on the West and South Sides of Chicago.

She finds the work especially gratifying because she has an opportunity to talk with homeless individuals and learn their stories. The work also reminds her of how fortunate her own family was to receive help from churches and other organizations when they came to the United States as refugees. “It helps me feel a lot more grateful for the things that I have,” she says.

Balić is also taking her volunteer work abroad. In January, Balić journeyed to Bangladesh for her first medical mission. She assisted a cardiac surgeon and another perfusionist during heart surgery, helping more than 20 adult and pediatric patients during the two-week mission.

Before coming to Rush, Balić worked in the OR and cath lab at a Michigan hospital. But she was drawn to the cardiovascular perfusion master’s degree program at Rush because she thought supporting open-heart surgical teams would be challenging and exciting.

“I’ve always felt that the OR atmosphere fit my personality really well,” she says. “I like being placed in stressful situations and working in a team of different health care professionals to take care of patients.”

Sharing the gift of generosity

Cardiovascular perfusion students at Rush had a chance to play Santa Claus this past year when they helped organize and wrap Christmas gifts for 60 children in Mosinee, Wisconsin. The gifts, which included books, dolls, sports equipment, games and other toys, were distributed through a local food pantry.

Former Mosinee resident Julie Collins, CCP LP MS, cardiovascular perfusion program director at Rush, coordinated the giftwrapping event. “I try to tell the students about the different ways that they can impact their community — not only in the profession, but also in their personal lives,” she says.

For the past two years, every cardiovascular perfusion student at Rush also has spent an afternoon making summer activity bags with books, toys and games for 60 deserving kids in Mosinee.

Collins pays for all of the summer and holiday gifts with her own funds because she wants children in her hometown to know the excitement of receiving a present when their families are struggling. It’s a feeling she can relate to because her own family faced a financial setback after her father passed away when she was young. “I think it’s important that all children, no matter what their economic status is, have something they can be excited to open under the tree for Christmas,” she says.
Buying locally to improve community wellness

To help keep dollars and jobs in the community, Rush adopted a local procurement initiative to buy and source more goods and services from Chicago’s West Side vendors. It is part of Rush’s Anchor Mission initiative, a multipronged strategy to address the social determinants of health, such as employment, education and neighborhood safety affecting West Side residents, says Shweta Ubhayakar, MBBS, MS, manager, Community Anchor Mission and Health Systems Management (HSM) alumna.

A key component of this mission is identifying opportunities to buy from local vendors to support jobs on the West Side. In early 2019, Rush outsourced its cafeteria services to local vendor Fooda and created an opportunity for area restaurants to have “pop-ups” in Rush’s West Side Food Hall. The academic medical center also partnered with medical/surgical product distributor Concordance Healthcare Solutions, signing an innovative contract that requires the company hire West Side residents for its warehouse. The Business Diversity Team at Rush, which includes several HSM graduates, also has identified several preferred local vendors that employees are encouraged to use for catering, printing, promotional items, transportation and other services.

Ubhayakar, an instructor in the Department of HSM, believes the real benefits are years in the making. “In the long term, the way it’s going to benefit Rush is through benefiting the community,” she says, adding that the goal is to improve health outcomes and reduce the gap in life expectancy. “It’s not something that will be done in two years or five years. But down the road, it should help improve the health of individuals.”
One of the students who volunteered at the PD support group for the past two years is Lauren Richard from Bradenton, Florida. She studied classical voice in college before pursuing a career in speech-language pathology.

Under the supervision of faculty, Richard and her fellow students gave patients trials of different foods and beverages to check for dysphagia (difficulty swallowing). Because patients with Parkinson's disease may develop softer voices, the students also evaluated patients' vocal quality during conversations.

"Often patients might not be aware of how typical their symptoms are of Parkinson's disease," says Richard, who was serving her final internship at UChicago Medicine at the time of the interview. She says working with the support group was rewarding because she helped make patients and their families aware of options to reduce their symptoms and improve their quality of life.

The experience also gave Richard a chance to practice relating to patients and families. "It was a great opportunity to connect with patients and learn how to have those one-on-one conversations so we can be better clinicians," she says.

"We train our students to not only be good clinicians, but also to have a conscience and care."

— Emily Wang, PhD, CCC-SLP, associate professor and chair of the Department of Communication Disorders and Sciences

Supporting patients and families affected by Parkinson’s disease

Parkinson’s disease (PD) can have a profound impact on a person's ability to swallow and speak directly — two functions that healthy people often take for granted. To identify swallowing and speech problems in patients with PD, students from the Master of Science in Speech-Language Pathology (SLP) at Rush offer their services to a Parkinson’s disease support group at Rush Oak Park Hospital each year. This past November, 32 SLP students provided free clinical swallowing evaluations to about 50 patients while under supervision of four Rush SLP faculty.

The SLP program at Rush, ranked in the top 25 in the country by U.S. News & World Report, prepares students to work with patients with complex neurological disorders like Parkinson’s disease, says Emily Wang, PhD, CCC-SLP, associate professor and chair of the Department of Communication Disorders and Sciences. During the two-year SLP program, students complete five semester clinical rotations so they can work with a variety of patients in different settings, she adds.

"We often find that our students well exceed the number of volunteer hours they need to complete. I love that our students see such benefit in giving back."

— Doreen Kelly Izaguirre, MA, CCC-SLP, SLP clinical education manager

Saturdays at the shelters

For one Saturday a month, speech-language pathology (SLP) students at Rush University spend a few hours with kids at local homeless shelters to read books, help out with homework or work on art projects.

The SLP students have also used their creativity to host a weekly reading camp at Rush for more than two dozen local students in partnership with the Boys & Girls Clubs of Chicago. At this unique summer camp, Rush students helped kids write stories and work on their vocabulary, reading comprehension and other literacy skills.

All Rush students are required to complete at least 16 community service hours prior to graduation — which is not a hurdle for most students, says Doreen Kelly Izaguirre, MA, CCC-SLP, SLP clinical education manager. As a volunteer for the Chicago marathon, she gets help from SLP students eager to support athletes with disabilities in the race.

"We often find that our students well exceed the number of volunteer hours they need to complete," she says. "I love that our students see such benefit in giving back."

"We train our students to not only be good clinicians, but also to have a conscience and care."

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Speech-Language Pathology

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Impact Rush University College of Health Sciences

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Meet Henry, a chaplain’s best friend

While not an official Rush student or faculty member, Henry could certainly be considered a big man on campus — make that big dog on campus. The three-year-old Cavalier King Charles Spaniel is a certified therapy dog owned by Amy Tracy, a resident chaplain in the Clinical Pastoral Education (CPE) program, part of the Department of Religion, Health & Human Values.

About two Saturdays a month, Henry and Tracy support the palliative care team, providing comfort to patients and families disrupted by pain, hospitalization and disease. “We bring a lot of joy, as well as the normalcy of everyday life for patients, which they miss in the hospital,” Tracy says.

When she’s not volunteering with Henry, Tracy provides spiritual care for patients in the medical ICU who are seriously ill or in the dying process and for families in crisis. Despite the challenges of her role as chaplain, Tracy happily returns to Rush to volunteer with Henry on the weekends. “I may have worked 40-plus hours, but seeing Henry in action with patients and staff energizes me on every level,” she says.

Henry is the ultimate icebreaker with patients and their families. “People want to talk about their dogs, the ones they had in the past and the ones they have now, and that leads into conversations about their life, their fears and their hopes,” she says. “Henry is a key that unlocks that door. As a chaplain, my challenge is to find out where that key is when I don’t have him.”

Tracy, who graduates from the CPE program in September, plans to stay in the Chicago area but also may spend time in India where she is called to help rural people living with AIDS. She earned her master’s degree in divinity from Fuller Theological Seminary before entering the CPE program, which is celebrating its 50th year at Rush. She describes the program as “completely life-changing on every front.”

“The program teaches you how to read human beings and how to be wise to people in crisis so you can care for them spiritually and emotionally as part of their healing process,” Tracy says. She believes it is her calling to help people at their most vulnerable, when hospitalization makes them feel disconnected from their typical roles. “They feel alienated from who they are in everyday life, and as a chaplain, I can come in and provide help and relief at a time when they really need it.”

― Amy Tracy, a resident chaplain in the Clinical Pastoral Education (CPE) program
Daring to dream

“Double-grads” make a difference in their communities

Leaders at Rush understand that changing the face of the health care workforce requires more than adding words like “diversity” and “inclusion” to the mission statement. It takes action. So in 2013, the College of Health Sciences launched an innovative program to prepare nontraditional candidates for careers in health care.

The Bachelor of Science in Health Sciences (BSHS) program at Rush gives students who are typically older and from minority groups the foundation to pursue graduate degrees in areas such as nursing, physician assistant studies, medicine, public health, social work and biomedical sciences.

Here, we profile three graduates from the first class who completed their BS in health sciences and then earned graduate degrees at Rush. Today, these dedicated providers are delivering much-needed care to vulnerable populations in the city they call home.

Setting an example for her son

Natalia Wright, MSN, RN, grew up down the street from Rush University. Inspired to pursue a career in health care by her cousin, a nurse practitioner, Wright took some college classes but had to stop so she could work to support her family.

Wright did find a job she loved, helping previously incarcerated individuals transition back to the community. But in 2011, she was laid off, as she was the only staff member who didn’t have a college degree. “I promised myself that it would never happen to me again — I wouldn’t lose a job because I didn’t have a college education,” she says.

She admits the transition to the BSHS program was challenging at first. “I hadn’t been to school in a mighty long time, and Rush is really competitive,” she says. “I was scared at first — like, can I really do this?” However, she found support from her professors, especially Douglas Kuperman, PhD. “He always had time to speak with me,” she says. “He had a true open-door policy.”

In 2015, Wright became the first in her family to graduate from college while juggling the responsibilities of parenting her son, Jayzon, on her own. Then she entered the Generalist Entry Master’s (GEM) nursing program at Rush and earned her master’s degree. “If I didn’t go to the BSHS program, I don’t think I would have made it through the GEM program,” she says. “The BSHS program gave me the foundation that I needed to be successful.”

Today, Wright works at PCC Community Wellness Center on the West Side. This year, she’ll begin a program to become a psychiatric nurse practitioner. She dreams of having her own center for those struggling with mental illness and addiction — two issues that have deeply affected several family members.

Looking back, Wright says her academic achievements were important not only for her but also for Jayzon. “I wanted my son to be proud of me and to know that you can absolutely change your trajectory with the things you do,” she says.

Staying in the game

Vic Speedwell, PA-C, who grew up in a working class family in Stockton, California, took gifted and talented classes starting in elementary school. But her parents hadn’t gone to college, and she didn’t know she was “supposed” to pursue higher education.

As an adult, she found work in many areas that interested her: politics, community organizing, environmental studies, plant taxonomy, forestry and skilled woodworking. But financial and educational roadblocks were common. Eventually, she became interested in physical therapy and enrolled in classes at Malcolm X College. “I was already in my forties, so I took a couple of trial classes to see if I could do it,” she says. A professor there told her about the BSHS program at Rush, which he described as a bridge for nontraditional students to get into health care.

“I wanted my son to be proud of me and to know that you can absolutely change your trajectory with the things you do.”

— Natalia Wright, MSN, RN
Daring to dream

“Do not think that bad grades or bad decisions that you wish you hadn’t made will rule you out or disqualify you from the future you want.”

— Vic Speedwell, PA-C

Speedwell had been told her arrest record for violations like trespassing and disorderly conduct in her younger years would disqualify her from pursuing a career in health care. She learned from an attorney that she could still become a licensed provider in Illinois, as long as she was upfront about her past.

“The Bachelor of Science in Health Sciences program somehow became available to me at exactly the time when I needed it,” Speedwell says.

At Rush, Speedwell and her fellow BSHS students developed a sense of connection and collaboration that helped them adjust to the demands of the program. “We helped each other see things differently, and we kind of shattered each others’ expectations,” she says.

This sense of collaboration and willingness to learn from peers helped set her up for success in Rush’s physician assistant (PA) studies program. Today, Speedwell provides care for the homeless, poor and underserved at several sites in Chicago through Heartland Alliance Health. But she hasn’t ruled out more school, additional studies and another advanced degree.

To others who worry that an imperfect past might hamper their goals, Speedwell offers this advice: “Don’t think that bad grades or bad decisions that you wish you hadn’t made will rule you out or disqualify you from the future you want.”

Advocating for acceptance and focusing on the future

Thirty years ago, Milton Aguilar dos Santos, MSN, RN, was a boy in El Progreso, Honduras whose family expected him to take over their corner store. Back then, he couldn’t imagine his future today: leading mental health care teams at one of the most highly respected psychiatric hospitals in the country—Northwestern Medicine’s Stone Institute of Psychiatry.

Aguilar dos Santos moved to Chicago at age 16 and then to North Carolina to serve in the military. After working a government desk job for four years, he knew he couldn’t spend the rest of his life working in a cubicle. He returned to Chicago and took classes at Malcolm X College to become an emergency medical technician. “I wanted to leave something behind or have some kind of impact on someone’s life,” he says.

A professor at Malcolm X encouraged him to enroll in the BSHS program, which he did at age 30. Initially, he considered a career in medicine but ultimately chose the GEM nursing program at Rush. After earning his master’s degree in 2018, he became a nurse at the Stone Institute.

Today, many patients that Aguilar dos Santos treats are transgender and face extreme prejudice, even from members of the health care community, he says. That’s why he makes it his mission to treat these patients with respect and set an example of compassion and leadership for his colleagues. “A lot of my coworkers have met my husband, and I feel embraced because Northwestern is a very LGBTQ-friendly hospital,” he says.

Looking back at where he came from, he is awed by what he has been able to accomplish. “For a boy from a Third World country to end up where I am right now, it’s just, I can’t believe it sometimes,” he says.

Soon, Aguilar dos Santos hopes to achieve even more. He recently applied to the doctorate of nursing program so he can become a psychiatric mental health nurse practitioner. “I was the first one in my family to go to high school, the first one to graduate from undergrad, the first one to have a master’s degree and hopefully I’ll be the first one to get a doctorate,” he says.

He encourages others to pursue their ambitions, even if they feel like their time has passed. As he puts it, “There is no deadline for following your dream.”

— Milton Aguilar dos Santos, MSN, RN

Education that breaks down barriers

Health care professionals from underrepresented groups are desperately needed to address disparities in care that continue to exist in many Chicago neighborhoods and around the country, says Mary Jo Guglielmo, MPH, assistant dean of the College of Health Sciences. Through the Bachelor of Science in Health Sciences (BSHS) degree program, Rush University aims to address that need.

Two-thirds of BSHS students identify as minorities, representing Rush’s most diverse student population. “Many BSHS students go back to work in the communities that they came from, including the West Side,” says Guglielmo, who is also BSHS program director. “It’s one of the ways that Rush can make an impact on our community. We’re changing students’ lives, and they’re going to change the lives of their patients.”

During their 21 months at Rush, BSHS students discover a wide range of careers by shadowing health care professionals from various disciplines. “They usually walk in the door saying that they want to pursue one career in health care,” Guglielmo says, “and then they walk out pursuing another career in health care that is what their heart wants them to do.”

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— Milton Aguilar dos Santos, MSN, RN

Impact Rush University College of Health Sciences
After John’s suicide, Pierobon traveled to the Illinois State Capitol with the American Foundation for Suicide Prevention (AFSP) to advocate for passage of the “red flag” law. The policy, which became state law in 2019, allows friends and family members to petition a court to suspend a person’s right to own or buy a firearm if they pose a danger to themselves or another person.

Pierobon, a student in the online PhD program in Health Sciences and part-time physical therapist at Rush, continues to volunteer to help prevent suicide when she is not studying or teaching. As an adjunct faculty member at Midwestern University, she has incorporated mental health awareness into her PT guest lectures. She walks in the AFSP’s “Out of the Darkness Walk” in Chicago each year and is active in a support group for those affected by a loved one’s suicide.

“It has been a very tragic loss, but I’m trying to create as much awareness and light from it as possible because my brother was, and continues to be, my guiding light.”

— Elizabeth Pierobon, PT, DPT,
students performed spirometry tests and provided smoking cessation counseling for the women who often suffered from chronic obstructive pulmonary disorder (COPD), asthma or both.

Lachowicz taught the residents about the triggers that made their conditions worse. She also provided coaching to improve medication adherence, with the goal of preventing flare-ups that could lead to emergency department visits. “It was about making sure that they had all the tools, all the knowledge that they could, to help improve their quality of life,” she says.

The students helped many women make positive changes. When Lachowicz returned to Sanctuary Place for her second day of service, a few residents were eager to share their success stories. “They remembered who I was, and they were excited to tell me about all of the changes that they had made, including quitting smoking,” she says.

Lachowicz, who grew up in the Chicago suburbs and is now a respiratory therapist at Rush, was drawn to respiratory care because she has asthma herself. She especially liked Rush’s master’s level program because of its uniquely designed curriculum and small class size. She says being a part of community outreach activities added depth to her educational experience. “We were able to take everything that we were learning in school and apply it to real life — not just in a hospital, but in a community and make a difference,” she says. Ellen A. Becker, PhD, RRT, RRT-NPS, RPFT, AE-C, FAARC, professor in the Department of Cardiopulmonary Sciences, agrees that community engagement activities enrich students’ own educational experience by giving them a chance to educate others.

“At first, we’re a faculty member to watch their enthusiasm in teaching, but it also makes the content they’re learning very real,” Becker says.

Under the supervision of a licensed therapist, the students provide respiratory health screenings and education at Sanctuary Place, a housing development for homeless women who may have been previously incarcerated or have a chemical dependency or mental illness. The housing is supported by Facing Forward to End Homelessness, a housing-first program for women on Chicago’s West Side and a community partner of Rush.

As a respiratory care student, Ashley Lachowicz, MSc, RRT, RRT-ACCS, RRT-NPS, AE-C, worked with residents at Sanctuary Place twice before she graduated from Rush in 2016. She and her fellow...
A recipe for collaboration

Rush faculty and students teach healthy eating habits at local senior centers

For nearly 20 years, Kristin A. Gustashaw, MS, RDN, CSG, LDN, an advanced level clinical dietitian at Rush, has provided free nutrition education and one-on-one counseling to older adults at local senior centers as part of a subsidized wellness initiative with the City of Chicago. The goal is to improve the health of older adults, especially minorities, who are disproportionately affected by chronic disease. Through her monthly visits to the senior centers, Gustashaw has helped older adults make positive health choices and manage chronic conditions like diabetes and osteoporosis that are affected by diet.

But she’s not alone in providing nutrition support. Rush dietetic interns join Gustashaw during her visits to the senior centers and lead free educational seminars as part of their training on community nutrition.

“A lot of these students don’t live near older adult relatives, and sometimes this is their first opportunity to see what an active senior looks like,” Gustashaw says. She adds that the experience boosts students’ confidence and helps them learn how to customize nutrition information to specific populations. One student who presented at a Chicago senior center this past year is Melissa Morales-Perez. Originally from Bogotá, Colombia, Morales-Perez moved to Chicago as a child and began her career in clinical research. But it was her passion to help improve the health of minority populations that drove her to enroll in the combined master’s degree and dietetic internship program at Rush.

During her internship, Morales-Perez led an informative talk on cancer and nutrition for residents at one of the senior centers. For her discussion, she created a handout and discussed some of the myths about nutrition and cancer. She also talked about some of the ways that seniors can reduce their risk for cancer through good nutrition. She ended by offering recipes for a healthy soup and shake, as well as a crossword puzzle to reinforce the learning.

She believes her talk made an impact because the seniors chatted with her for 20 minutes afterward. “They were asking questions and giving anecdotes, and they weren’t afraid to speak up,” she says.

Morales-Perez, who hopes to work in an oncology clinic when she becomes a registered dietitian, is grateful for her mentors at Rush who have given her the skills and confidence to work with all types of patients. “We have amazing preceptors, amazing dietitians to look up to, whether it’s Kristin in the community setting or others in the clinical setting,” she says. “I’m leaving Rush with the best memories, the best impression and the best preparation. They teach you how to not only be the best clinicians, but also to be really good leaders in the community, in hospitals and in the research world.”

— Melissa Morales-Perez, Rush dietetic intern and master’s degree candidate
At the heart of every research project is a question, and getting to that question is rarely a simple process. At Rush, medical laboratory science (MLS) students learn this lesson firsthand by leading their own yearlong research project to answer their own question, which often evolves over time, says Nadine Lerret, PhD, MLS (ASCP)CM, assistant professor and director of research in the Department of Medical Laboratory Science.

“The question might be centered on improving a patient experience with the laboratory or making a test more efficient or less expensive,” Lerret says. “Often these projects are looking at aspects of the lab that can be improved for community benefit.”

As part of their research projects, MLS students get to work with principal investigators (PIs) and researchers at major academic medical centers across Chicago, including Northwestern Medicine, UC Medicine, Lurie Children’s Hospital, UI Health, and, of course, Rush. Students are matched with their PI in the spring of their first year. They collect data over the summer and then analyze it and write a manuscript the following winter and spring. Once their manuscripts are complete, the students submit their abstracts to a conference to share their findings and network.

Receiving mentoring from leading researchers in Chicago provides a unique opportunity for students to make valuable connections that could lead to reference letters or even future job positions, Lerret says. For most MLS students, the project is their first experience conducting research. “They come out of it a little more confident,” Lerret says. Some also acquire sought-after skills, such as molecular testing, through their research.

Testing the possibilities
MLS students connect with researchers across Chicago

Many students’ projects are designed to help achieve the Triple Aim: improving the quality of care and the patient experience while reducing costs. For his research project, second-year MLS student Martin Kuczak looked at unnecessary utilization of three lab tests under the mentorship of Lerret. “This trend has been drawing a lot of attention lately, especially as health care costs are rising,” he says. He found that, over two years, physicians ordered a volume of potentially unnecessary tests large enough to cover the salary of another pathologist. One solution might be the integration of a diagnostic management team that could help promote more appropriate laboratory utilization and reduce costs to patients, Kuczak says.

Another second-year MLS student, Leanne Horvath, worked with Nicholas Moore, PhD, MLS (ASCP)CM, assistant professor of MLS, on her project to examine whether susceptibility testing could be used to determine if three new antibiotics were susceptible to multidrug resistant organisms. Once her project is complete, Rush’s microbiology laboratory will review her results as part of a broader organizational effort to decrease antimicrobial resistance. “It’s important that accurate susceptibility results are given to doctors so they can prescribe the correct antibiotics to patients,” Horvath says. “Otherwise, they could actually exacerbate the problem.”
A precious resource

Rush grad’s award-winning research conserves blood for the community

Blood has no substitute, and reducing its overuse can help keep communities safe from potentially critical shortages. That’s why Colleen Hinrichsen, MT(ASCP) SBBCM, DLMCM chose to focus on unnecessary use of blood for her research project while enrolled in the online Master’s in Clinical Laboratory Management (CLM) Program.

“Sometimes, you might have enough blood on your shelf for all of your needs for two weeks, and sometimes you might only have a day’s worth of blood on your shelf,” says Hinrichsen, who is blood bank supervisor at Penn Medicine Princeton Medical Center in Plainsboro, New Jersey. “We have to make sure our patients can get it when they need it.”

For her research project, Hinrichsen examined the effectiveness of her hospital’s real-time blood utilization program, which aims to reduce unnecessary transfusions. During the two-year study period, she found that the program decreased blood utilization by 17 percent.

In March, Hinrichsen’s research project was awarded first place at the Clinical Laboratory Management Association’s KnowledgeLab 2020 meeting in Louisville, Kentucky. The event marked her first time presenting at a major industry conference.

“I really have Rush to credit for it because had I not been a student at the time, this would have just been a project for my lab,” she says. “Now I get to share it with others, and hopefully people will learn from it.”

Colleen Hinrichsen, MT(ASCP) SBBCM, DLMCM
Bringing Occupational Therapy into the community

Group project helps students find their inner leader

The valuable services that occupational therapists (OTs) provide to help people develop or regain their skills are often unavailable to many community-based agencies, which lack the resources to keep OTs on staff. But through its community partnerships, Rush is bringing occupational therapies to people who need them while training students to become better clinicians.

For more than a decade, the OT program at Rush, ranked in the top 25 programs in the country by U.S. News & World Report, has been partnering with community-based agencies so students can provide group-based OT activities where they are desperately needed. But through its community partnerships, Rush is bringing occupational therapies to people who need them while training students to become better clinicians.

Leading and learning

At the clubhouse, Engel put that creativity to work for adult clients coping with traumatic brain injuries or strokes.

The clubhouse is just one of several community sites across Chicago where Rush OT students have been returning for more than a decade to learn how to lead group discussions and activities. Other sites include:

- Facing Forward, which provides permanent supportive housing for the homeless
- Deborah’s Place, which offers housing to homeless women
- The Self Help Home, a community for older Jewish adults
- Path to Academics, Community and Employment (PACE) a college alternative for young adults with multiple intellectual, learning and developmental disabilities
- Ray Graham Association, which aims to empower people with disabilities
- Urban Autism Solutions, a transitional program for individuals with autism
- St. Leonard’s Ministries, which serves those released from prison

When the students get into the community, they begin to understand how they have to be flexible,” Crisp says. “They also get to practice being frugal and creative with their resources.”

Those were just some of the lessons learned by Erica Engel, OTS, a second-year student who participated in a six-week group leadership project with clients at the Midwest Brain Injury Clubhouse this past spring. Engel, a single mother of two who returned to school to earn her doctorate, was attracted to OT because it’s a holistic care approach that requires creativity. At the clubhouse, Engel put that creativity to work for adult clients coping with traumatic brain injuries or strokes.

“Leading and learning

At the clubhouse, Engel and two other students led a group of about 10 clients once a week. Taking direction from clients on what they wanted to focus on most, Engel and her teammates used music, dance and games like bingo to encourage social participation among the group.

Through the project, Engel learned more about her own leadership style. She found she enjoyed providing a wrap-up at the end of each activity with key takeaways that clients could apply in their everyday lives. The project also challenged her to be more comfortable thinking on her feet.

Beyond learning the nuts and bolts of running a group, Engel says she gained a much better perspective of what it is like for clients to cope with a brain injury. “Sometimes when we’re learning in school, it’s easy to get caught up in the diagnosis and medical aspect of a disease,” says Engel, who eventually wants to work with clients affected by violence and environmental trauma when she graduates in 2021. “But seeing how people wanted to be involved and figuring out how to do that was really challenging, and I feel like it will serve me very well.”

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— Linda Olson, PhD, OTR/L, FAOTA chairperson and program director for the Department of Occupational Therapy
Cross-country learning

Clinical rotations help students gain skills, confidence

Unlike some vascular ultrasound programs that place students at just one site during their clinical rotation year, the 20-month Bachelor of Science in Vascular Ultrasound program at Rush gives second-year students the opportunity to rotate at up to four different facilities across the country.

“Some are community hospitals, some are bigger university hospitals and some are private practices,” says Jacqueline Ortiz, MA, RVT, assistant professor and program director of the Vascular Ultrasound Program. “We think that just makes them stronger all-around.”

The different rotations allow students to work with a multitude of credentialled technologists and learn various protocols and scanning techniques with different types and brands of equipment used in vascular ultrasound examinations. Students also get to work with diverse inpatient and outpatient populations. “We do that intentionally because we feel like they’re just going to be that much more prepared to walk into any type of setting and be able to start scanning,” Ortiz says, adding that many students eventually get job offers from the sites where they completed a rotation.

“We’re putting out technologists who can work independently and have a really strong foundation and base of knowledge,” says Cassandra Huynh, a second-year student from Elgin, Illinois, was completing a 10-week rotation at the University of Michigan after finishing rotations at UChicago Medicine and Rush. She says the rotation at UChicago Medicine was especially challenging because the complex patients suffered from advanced disease. Huynh says the vascular ultrasound program at Rush has helped her build her confidence and discover how rewarding it is to help others. “I very much enjoy being able to help patients so that they can receive the proper diagnosis and care,” she says. “It’s a great feeling when a patient comes back for a follow-up and they’ve improved so much since the last exam because they’ve had such quality care.”

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— Jacqueline Ortiz, MA, RVT, assistant professor and program director of the Vascular Ultrasound Program

### Vascular Ultrasound Clinical Rotation Sites, Active Affiliations

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<td>Louis A Weiss Memorial Hospital</td>
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<td>Chicago, IL</td>
<td>60640</td>
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</tbody>
</table>
This is a close-knit organization, full of supportive, helpful colleagues who are always willing to help our students.”

— Jacqueline Ortiz, MA, BS RVT

Rush’s teacher-practitioner model works — and it sets our program apart.”

— Amy Winston, AuD, CCC-A
The Rush College of Health Sciences
is creating tomorrow’s leaders in

Audiology
Blood Bank Technology
Cardiovascular Perfusion
Clinical Nutrition
Clinical Laboratory Management
Health Sciences
Health Systems Management
Imaging Sciences
Medical Laboratory Science
Occupational Therapy
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Religion, Health and Human Values
Respiratory Care
Speech-Language Pathology
Vascular Ultrasound

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