



## 2019 Annual Impact Report



**RUSH EDUCATION**  
*and* **CAREER HUB**







## Dear partners, supporters and friends:

Thirty years ago, Rush began offering science and math enrichment to students and teachers in schools on Chicago's West Side through its Science and Math Excellence (SAME) Network. In 2017, SAME became the Rush Education and Career Hub (REACH), beginning a transformational journey to develop a cradle-to-career pipeline of diverse talent for the health care workforce of the future.

The health care sector offers meaningful, well-paying jobs that can put young people on track to a brighter future — but unfortunately, educational inequality and inequitable access to these jobs persist. We know that too few African American and Latinx students are deeply engaged in science, technology, engineering and math (STEM) learning. As a result, too few of them are well prepared for high-demand health care jobs or equipped to advance into STEM careers that require higher skill levels.

Rush's strategic focus on improving health on the West Side means that we're committed to addressing the social and structural conditions, such as poverty and access to high-quality education, that contribute to health disparities and economic inequities. Our work to improve educational outcomes and prepare students for middle- and high-skill jobs in health care can change the trajectory of young people's lives, the lives of their families and the economic vitality of their communities.

Every day, we are guided by questions like: What if we could guide students through a comprehensive pathway that connects formal and informal work-based learning and development? How can we help them navigate a series of complex, sometimes disconnected environments and decision points before they transition into fulfilling careers? How do we serve students ranging from a kindergartener whose classroom lacks STEM learning materials to a high school student who aspires to be the first in her family to go to college?

Equity and opportunity are at the center of everything REACH does. Our comprehensive model includes training, engagement, advising and supports that address critical barriers and challenges for underrepresented youth from pre-kindergarten all the way through college. Since 2017, we've served more than 5,000 students and community members through academic enrichment, college and career preparation, mentorship and internships.

While we've taken incredible steps since REACH began, we know we have more work ahead. The next three years of our strategic plan include the launch of apprenticeships, developing a model for training and wraparound services to help students succeed in college, and expanded partnerships across health care systems. You'll find more about what lies ahead on page 11 of this report.

Providing quality support, training and opportunities for young people takes a village. We are grateful to Rush staff as well as our partners, supporters and collaborators who are committed to creating a brighter future and a better tomorrow. Thank you for your commitment to equity and opportunity, and for your willingness to grow with us.

In partnership and community,

Rukiya Curvey Johnson, MBA  
Executive Director, REACH

## About REACH

In 2020, Rush celebrates its 30th year of providing STEM learning experiences for students in pre-kindergarten through college and beyond. As a health system dedicated to improving the health of the individuals and diverse communities we serve, Rush supports school communities and works to increase educational equity because the research is clear: People who have more education live longer, healthier lives.

In fact, education is the No. 1 factor in increasing life expectancy. People with more education have better jobs, earn more and have better access to resources such as healthy food, transportation and health care.

REACH plays a unique role as an intermediary between youth and their future employment, providing enrichment programming that helps students build the skills they need to succeed in school and prepare for the 21st-century workforce: communication, collaboration, critical thinking, creativity and leadership.



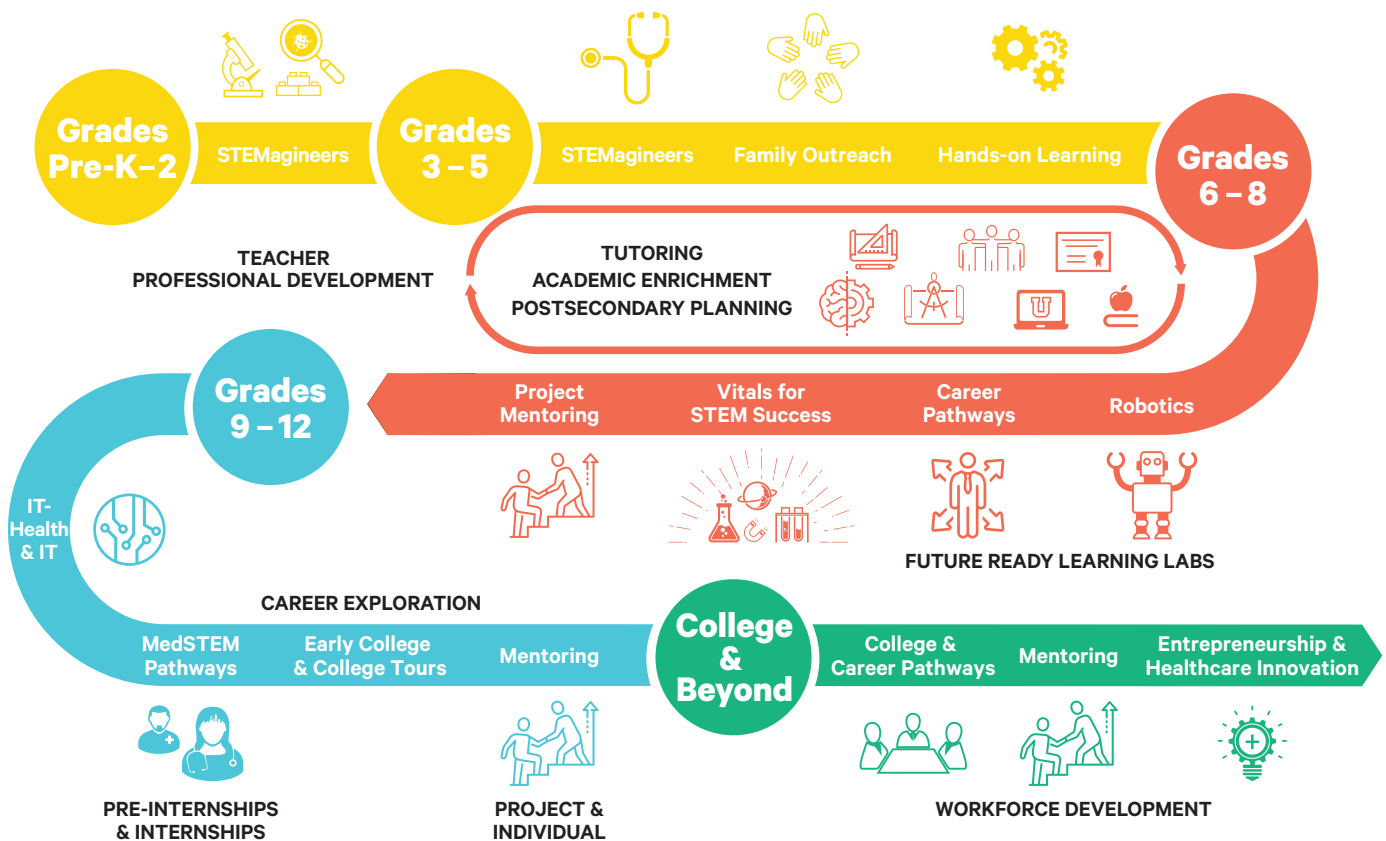
Education is  
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**Our mission** is to support education from cradle to career by providing innovative, hands-on STEM learning to underrepresented youth so they can reach their academic and professional potential. We aim to boost their enrollment in postsecondary education and interest in health care and STEM careers.

**Our vision** is to develop a diverse talent pipeline for the health care workforce of the future.

As we work toward our mission and vision, we help to build stronger, healthier communities.

**REACH's programs integrate learning experiences along a pipeline that runs from cradle to career.**



You'll read more about these programs in this document, the first-ever REACH impact report, featuring our 2018-19 school year and summer programs.



## In 2018-19, REACH:



reached **4,000+** students, parents, educators and community members



helped **8** Chicago Public Schools graduates get training they needed to work in Health IT at Rush



helped **88%** of MedSTEM Pathways interns and **100%** of pre-interns earn one or more of the following certifications: CPR, first aid/basic life support, ECG technician



inspired **89%** of its high school interns to say that the program showed them the next steps to take into STEM and health care careers

served mostly African American and Latinx students in its programs



was awarded **\$1.2 million** in grant funding to launch new courses and mentoring programs aligned with the labor market, and to build out an evaluation framework



launched a service day and scholarship in honor of Reginald “Hats” Adams, Rush’s longtime director of community affairs and founder of REACH’s predecessor, the SAME Network





Brain and skills-building experiences early in life are critical for child development, and high-quality early STEM experiences can support children's growth across areas as diverse as executive function and literacy development. ...Just as the industrial revolution made it necessary for all children to learn to read, the technology revolution has made it critical for all children to understand STEM.

**The Joan Ganz Cooney Center at Sesame Workshop, "STEM Starts Early," 2017**

# Elementary School Enrichment

## STEMagineers

**Age:** Pre-K-Grade 5

**Students served:** 2,000

**Family and community members served:** 1,500

**Teachers served:** 370

REACH aims to build kids' interest in STEM and health care careers from the moment they start preschool.

**We engaged students from pre-K through grade 2** via hands-on learning activities that make STEM fun. For example, at Josiah Pickard Elementary School, children learned about the five senses by using tools like binoculars, a digital recorder and a digital microscope, and doing themed math and art activities. And at Melody Child Parent Center, the STEM lab transformed into a fitness center for learning about different kinds of exercise, how parts of the body work during exercise and how healthy food fuels a healthy body.

**We engaged students in grades 3-5** through problem-solving exercises related to issues they encounter every day, as well as hands-on use of lab equipment and discussions that help them explore humans' impact on ecosystems. Fourth-graders at five REACH partner schools got to conduct an investigation of an owl pellet that prompted them to consider questions about owls' habitat, prey, food webs and more as they learned about how all living things interact in the environment.







### **We engaged families and community members**

— so families feel more confident helping their kids learn about STEM — through outreach events such as STEM fairs, school open houses, family nights and community service projects that offer learning experiences, career awareness and information on topics such as healthy eating and financial literacy.

**We engaged teachers** at five partner elementary schools by providing professional development workshops with curriculum and materials for helping them build their students' science, math and literacy skills through interactive learning experiences. This year, 370 teachers attended workshops on topics such as foundational math concepts for early childhood, merging math and science for primary grades, and strategies for fostering cooperative learning and boosting student engagement. REACH educators also support classroom teachers through co-teaching and lesson development, curriculum and materials, including STEM-focused readings, games, supplies and models.

**Our partner elementary schools maintained their Level 1+ rating or improved their school rating levels from the previous year.**



REACH community educators' knowledge, expertise and collaboration with teachers has helped build a school culture that values student inquiry and discovery. REACH has also provided excellent professional development for teachers and highly regarded health and wellness workshops for our parents. Many of our STEM resources for hands-on investigations have been provided by REACH, allowing our school to enrich and enhance its science curriculum.

**Anne Berenguer**  
Instructional coach  
Josiah Pickard Elementary School

**In 2010, the President's Council of Advisors on Science and Technology prepared a report that underscored the importance of motivating students to learn STEM content in the elementary and middle grades: Before eighth grade, many students dismiss STEM as boring or too challenging — but those who express interest in STEM in eighth grade are up to three times more likely to pursue STEM degrees later in life than students who aren't interested.**

# Middle School Enrichment

## Future Ready Learning Labs

**Age:** Grades 6-8

**Students served:** 75

This year, REACH launched Future Ready Learning Labs to expand its career exploration programming for middle schoolers. An enrichment elective that's incorporated into the school day at two partner schools, the labs include classroom learning, field trips, interviews and research projects that help build awareness of STEM and health care careers, develop learning skills and support the transition to high school. Students explore careers in STEM and health care by learning about common human diseases and conditions, strengthening their understanding of scientific content and research tools, and learning how to map the route to the careers they want. Students especially love their visits to Chicago-area colleges, Illinois Medical District facilities and the Interprofessional Simulation Hospital at Malcolm X College, where they get to talk with health care professionals and learn about their educational and career paths.

**After participating in Future Ready Learning Labs, the percentage of students interested in health care careers rose from 67% to 75%, and 80% reported feeling more confident as students. Middle school students also saw double-digit growth in their reading skills.**



## Vitals for STEM Success

**Age:** Grades 6-8

**Students served:** 15

Vitals for STEM Success (formerly known as CPEP) is a series of 10-week, outside-of-school sessions for highly motivated students who are interested in STEM fields. Each cohort of students came to the Rush University campus twice a week for tutoring, hands-on labs and visits with health care professionals such as phlebotomists and respiratory therapists; they also took field trips to local STEM-focused institutions such as the Museum of Science and Industry and the Museum of Surgical Science. In addition, students prepared for STEM-related competitions like regional science fairs and the Google Science Fair.



Interns get to see nurses at work, see doctors doing rounds, see physical therapists working with patients, and help with patients and animals when pet therapists come in. All those interactions are helpful to get them thinking, 'Do I want to be a therapist helping people get their muscles back — helping them learn to comb their hair and wash up again? Maybe I want to be a nurse who helps bring all the care together. Maybe I want to be a doctor.' You can see them getting past what they see on medical TV shows and getting a more realistic view.

**Shirley Ambutas, MSN, DNP**  
**Clinical nurse specialist, Rush Rehabilitation**



# High School Enrichment

## MedSTEM Pathways

**Age:** Rising sophomores through recent graduates

**Students served:** 250

MedSTEM Pathways, an intensive academic enrichment and career development program, introduces high schoolers to STEM and health care careers through paid opportunities for six weeks during the summer or 10 weeks during the school year. Pre-interns and interns, most of whom attend West Side schools, explore a range of careers, connect with Rush employees, plan for college, and develop skills for succeeding in college and the workforce. Pre-interns are rising sophomores and juniors who attend classes and workshops and earn first aid/CPR certification as they build the skills they need to return as interns. Interns — rising juniors and seniors and recent graduates — gain work experience in many departments as well as complete a capstone research project. One-on-one mentoring was a new program component this year, as was the opportunity to start working toward certifications such as certified nursing assistant (CNA), ECG technician and phlebotomy technician — all high-demand positions that can help students secure well-paying part-time employment during college. These stackable credentials lay a foundation for students to become qualified for high-demand jobs.



**I've always wanted to go into the medical field and one day be a doctor, but that seemed like such a far-away reality. But with the college preparation work I've done in this internship and my involvement in the highly sophisticated hospital setting, I see myself more as a capable, talented individual who will head off to college soon and make this dream a reality sooner than I realize.**

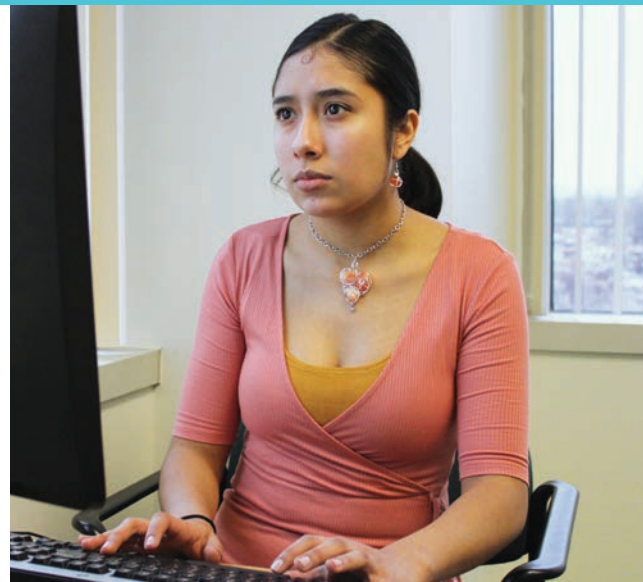
**Summer 2019 MedSTEM Pathways intern**

## REACH Annual College Tour

**Age:** Grades 9-12

**Students served:** 30

The REACH Annual College Tour exposes high school students to higher education institutions. Each year, 30 students visit a mix of colleges including historically black colleges and universities (HBCUs) to learn more about their program offerings, financial aid availability and requirements for admission. Students also visit cultural institutions in the tour destination areas. Over the past two years, students have visited several colleges in Atlanta, including the Atlanta University Center area that's home to four HBCUs, as well as the Smithsonian National Museum of African American History and Culture in Washington, D.C.



## Health IT Pathways: Marketable skills for high-demand careers

Forty students from Richard T. Crane Medical Prep High School near Rush University Medical Center participated in this year's Health IT Pathways program, a partnership of the Rush Community Service Initiatives Program (RCSIP) and the Rush Information Services department. Students learn the fundamentals of health care information technology and earn certification to work in the Epic electronic health record system and develop mobile apps using Apple Swift. After graduation from Crane, participants spend the summer interning at the Medical Center; many of those who don't leave Chicago for college continue working there while completing associate degrees at nearby Malcolm X College. The program positions students to finish college debt-free and equipped with in-demand skills for well-paying jobs.

# Post-High School Programs

## College and Career Pathways

**Age:** 18-24

**Students served:** 18

College and Career Pathways supports underrepresented young people beyond high school for immersive work-based learning experiences in targeted career paths. The program includes a mix of paid internships and college and career advising — including information about Rush's Physician Assistant Studies program — as well as professional and technical skills training and help finding jobs with STEM and health care employers. Interns learn skills in several Rush University Medical Center departments, including labor and delivery, the surgical ICU, outpatient psychology and pathology. Among the most popular activities: a weekly anatomy lab during which students participate in a cadaver dissection, getting hands-on experience with medical tools and taking close-up looks at the heart, brain and joints.



## Center for Community Health Equity (CCHE) Scholars

**Age:** College juniors and seniors

**Students served:** 4

The CCHE Scholars program offers a paid, eight-week summer internship at Rush University Medical Center for four highly motivated college juniors and seniors who have a strong interest in research, health disparities and community relations. The internship mixes workshops and instruction in research methods with field trips to sites that include Cook County Hospital, the Sue Gin Health Center that Rush operates at the Oakley Square mixed-income residential complex, the DuSable Museum of African American History and Garfield Park. Students who complete the internship gain an understanding of historical structural inequities that have an impact on health outcomes; they also learn how to conduct research that engages with community members and develop a team-based research project centered on education equity.





# What's next:

As we look ahead in 2020, we plan to focus on the following:

- Refining and implementing REACH programming — including opportunities to earn stackable professional credentials — that prepares students to succeed in high-demand jobs that pay not just a living wage, but a family-supporting wage.
- Expanding our partnerships across health systems and higher education, including youth apprenticeship programs, to ensure that students continue to receive training and work experiences that position them for rewarding careers.
- Developing a strategy and system for providing services that help students succeed after they get to college.
- Continuing our evaluation of REACH programming to see how our work affects academic performance, college acceptance and persistence, career choices and attitudes toward learning.



## REACH graduates are:

- Accountable
- Adaptive problem-solvers
- Collaborative
- Curious
- Effective communicators
- Empathetic
- Innovative
- Resilient and persistent

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Building a pipeline of leaders means providing young people with learning experiences that will challenge their thinking, expand their horizons and develop their technical and soft skills — and it means asking them to do what they dare not dream.

**Rukiya Curvey Johnson, MBA**  
REACH executive director

# Thank you

**REACH wouldn't exist, let alone thrive, without the support and partnership of the following people, schools and organizations:**

## At Rush

The community, faculty, students and staff — especially the Office of Community Health Equity and Engagement team — who support REACH's mission, volunteer their time and engage with students and teachers from our community

David A. Ansell, MD, MPH, senior vice president of community health equity, Rush University Medical Center, who pushes us to dream big in service

Larry J. Goodman, MD, former chief executive officer, Rush University System for Health, who championed our work and created a spirit that made REACH a reality

Darlene Oliver Hightower, JD, vice president of community health equity, Rush University Medical Center, who provides unwavering support and leadership as we work together to support our most vulnerable community members and lay the groundwork for change

Omar B. Lateef, DO, chief executive officer, Rush University Medical Center, for his continued leadership and push toward excellence

Peter Ziarno, associate vice president, corporate real estate services, Rush University Medical Center and former board member of the SAME Network, who supported our transition and continued growth

## Partner schools

Benito Juarez Community Academy  
Genevieve Melody STEM Elementary School  
Helen M. Hefferan STEM Elementary School  
Instituto Health Sciences Academy  
Josiah Pickard Elementary School  
Michele Clark Magnet High School (Early College STEM)  
North-Grand High School  
Richard T. Crane Medical Prep High School (Early College STEM)  
Robert Nathaniel Dett Elementary School  
Washington Irving Elementary School

## Funders

Bill and Melinda Gates Foundation  
Citi Foundation  
Dow Chemical  
Michael Reese Health Trust  
Rush University Medical Center  
The Woman's Board of Rush University Medical Center

## Partner organizations

After School Matters  
Chicago Public Schools  
City Colleges of Chicago  
Malcolm X College, City Colleges of Chicago

## REACH team

**Rukiya Curvey Johnson, MBA**  
Executive director

**Natalia A. Gallegos, MPH**  
Program manager, strategic initiatives

**Allison Weidman**  
Program coordinator

**Angela Freeman, MPH**  
Impact analyst

**Nia K. Benton**  
Program development associate

**Kimberly Bailey**  
Community education associate

**KanDace Curtiss, MPH, MHE**  
Community education associate

**Olayinka Mohorn-Mintah, MEd, MEd**  
Community education associate

**Ellen Vigil**  
Community education associate

**Kristy Liu**  
Project assistant









## RUSH EDUCATION *and* CAREER HUB

Empowering Minds & Creating Opportunities

[www.reachatrush.org](http://www.reachatrush.org)



Office Of Community Health Equity & Engagement