



**RUSH EDUCATION
and CAREER HUB**

Increasing Access and Success for Underrepresented Students in STEM and the Health Sciences

2022 Illinois 60 by 25 Network Annual Conference
Equity First: Building Toward a Better Future and Revitalizing Learning

Wednesday March 2, 2022



EQUITY FIRST: BUILDING TOWARD A BETTER FUTURE AND REVITALIZING LEARNING

Increasing Access and Success for Underrepresented Students in STEM and the Health Sciences

Panel Introductions



Rukiya Curvey Johnson, MBA

Executive Director,
Rush Education and Career Hub
Interim Vice President,
Community Health Equity
Rush University Medical Center



Natalia Gallegos, MPH

Director, Impact and Engagement
Rush Education and Career Hub
Rush University Medical Center



Jayline Perez

REACH Alumna
College Graduate
Roosevelt University B.A.
Biology '21



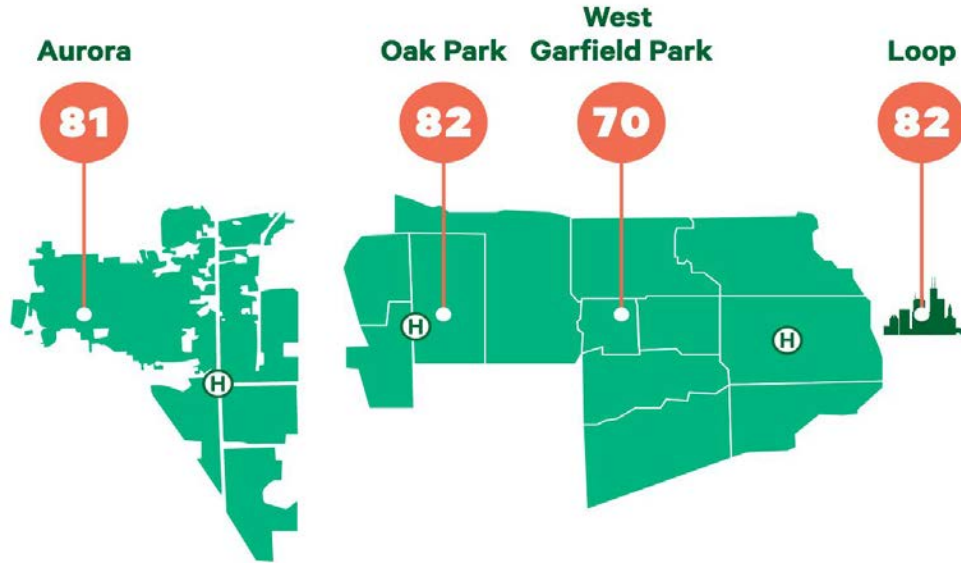
Angela Freeman, MPH

Data Analyst,
Rush Education and Career Hub
Rush University Medical Center
Moderator

OUR IMPERATIVE FOR ACTION

Economic and Health Disparities

Life Expectancy Gap



Economic disparities in Chicago

Median household income



Children who live in low child-opportunity areas*



*Chicago Department of Public Health's Child Opportunity Index = composite scores for neighborhoods' educational, health/environmental and social/economic opportunities



RUSH EDUCATION
and CAREER HUB



EQUITY FIRST: BUILDING TOWARD A BETTER FUTURE AND REVITALIZING LEARNING

THE CHALLENGE:

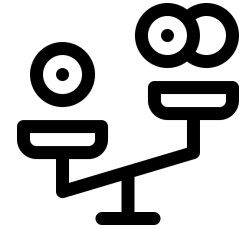
Inequitable Outcomes in Education, Health, and Wealth



Large gaps in educational attainment and aspirations



Lack of diversity among active physicians; high-skilled STEM professionals



Disparities in education, employment and earning potential affect health and economic outcomes

Source: [New Findings Confirm Predictions on Physician Shortage](#), AAMC

How Do We Create the Next Generation of **Community Problem-Solvers**; the **Healthcare Workforce of the Future?**



EQUITY FIRST: BUILDING TOWARD A BETTER FUTURE AND REVITALIZING LEARNING

MISSION



RUSH EDUCATION *and* CAREER HUB

Provide **innovative, hands-on STEM learning** for underrepresented students from cradle to career to increase postsecondary achievement and **diversity in health care and STEM professions.**



OPPORTUNITY: CHICAGO'S WEST SIDE

Cross-Sector Collaboration for Education, Health, and Tech



- Google
- Groupon
- 1871
- mHub

- City Colleges of Chicago - Malcolm X
- Univ. Illinois- Chicago
- Rush University



Who We Serve



80%
Black & Latinx



72%
Female



70%
Low-Income



65%
1st Generation College

OUR APPROACH:

Supports Occupational Identity Development in STEM & Healthcare



Access to **high quality STEM learning** experiences from PreK-to College



Paid work-based learning experiences paired with **professional & personal development**



Articulated **career pathways** **aligned to labor market** demand and ability to **earn industry-recognized credentials**



Wraparound supports and mentoring to facilitate student and family participation and engagement

WHAT WE PROVIDE

Cradle-to Career Pipeline of STEM/Healthcare Programs



Early Exploration in STEM and Career Awareness

Key Outcomes:

- Interest in STEM
- Foundational academic skills
- Awareness of own interests
- Early career aspirations
- Enrichment experiences

Programs

Early Childhood & Primary

- STEMagineers
- Community OutREACH
- Educator Learning Labs



Grades 6-8

Career Awareness, Skill and Attitude Building

Key Outcomes:

- Ability to collaborate
- Planning, goal setting
- Career awareness, aspirations
- Connections between school and work
- College-going attitude

Middle School

- Future Ready Learning Labs
- Vitals for STEM Success
- Future Health Professionals (HOSA Jr)



Grades 9-12

Career Exploration, Exposure, Strengthening Skills

Key Outcomes:

- Employability and life skills
- College preparatory
- Self-efficacy
- Occupational identity

High School

- MedSTEM Explorers
- MedSTEM Pathways & Mentoring
- MedSTEM Careers * (New)



College & Beyond

Career Pathway Training and Development

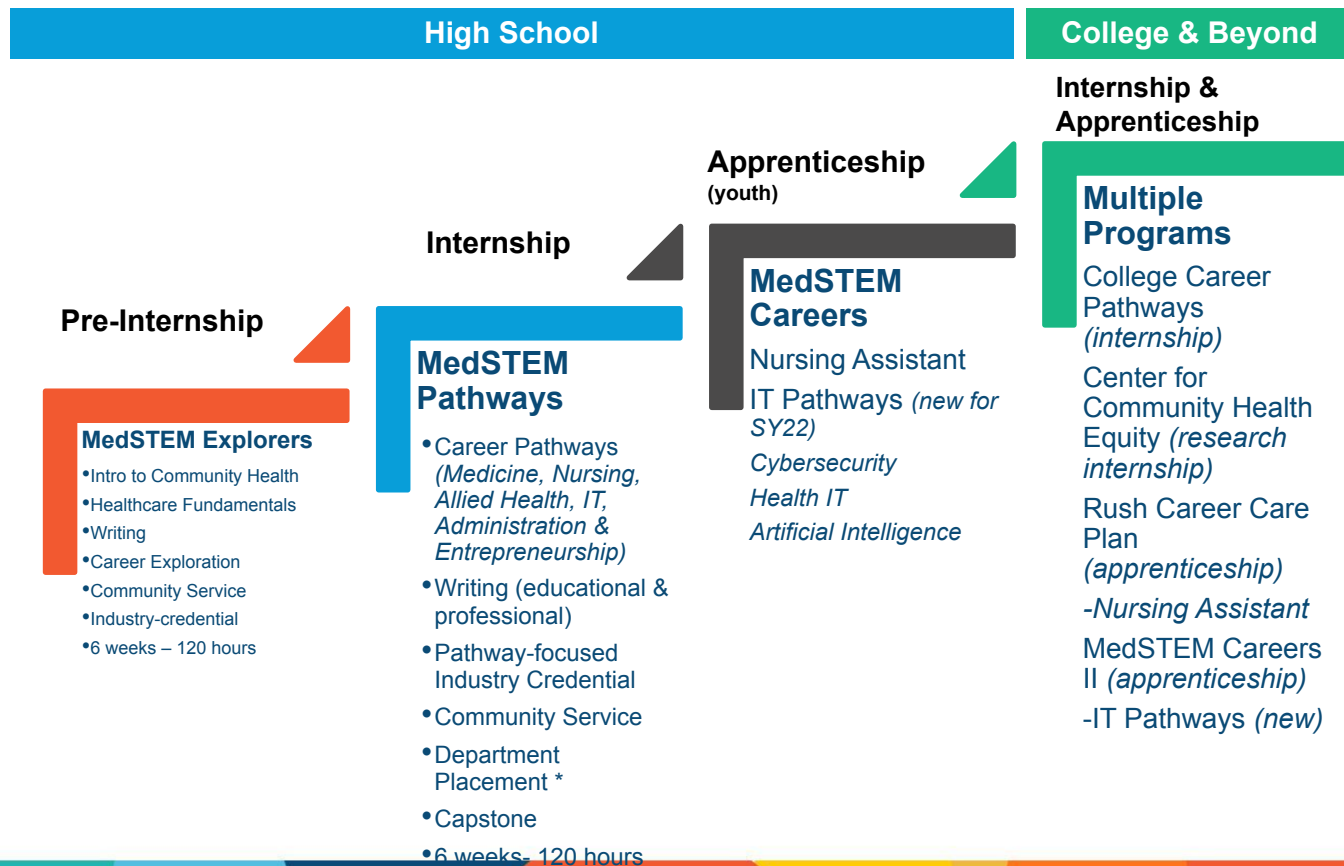
Key Outcomes:

- Technical training
- Workplace experiences
- Social capital
- College persistence and graduation
- Employment in healthcare or STEM

College & Beyond

- College Career Pathways
- Community Health Equity
- Rush Career Care Plan
- MedSTEM Careers (new)

Multiple Entry Points for Career Exploration & Immersion



REACH Career Pathways

REACH Career Pathways (2 -4yrs)	Industry Credentials provided by REACH & Partners*	Entry-Level Job*** (based on Certifications earned + HS)	Postsecondary Degrees (2 or 4 year)	Typical Jobs
Medicine/ Pre- Professional	CPR, First Aid BLS, Phlebotomy, EKG Tech	EKG Tech Phlebotomist	Bachelor's Degree Graduate/ Professional	Family Physician Pediatrician Anesthesiologist Surgeon
Nursing	CPR, First Aid BLS Phlebotomy EKG Tech Certified Nursing Asst.,	Nursing Asst. Medical Asst. Phlebotomist EKG Tech Patient Care Tech	Registered Nurse (AAS) Registered Nurse (Bachelor's)	Licensed Practical Nurse Registered Nurse Nurse Practitioner
Allied Health	CPR, First Aid BLS, Phlebotomy, EKG Tech, Community Health	Phlebotomist EKG Tech Patient Care Tech	Respiratory Therapy (AAS) Medical/ Radiology Tech (AAS) Pharmacy	Respiratory Therapist Physical Therapist Pharmacist
IT/ Health IT** (in development)	CPR, Apple Swift, CompTIA+, CompTIA IT Fundamentals+ CompTIA Security+, EPIC (Healthcare Software)	IT Tech Support Analyst EPIC Trainer	Applied Computer Science (AAS) Computer Science (AS) Web Development (AS) (Bachelor's Degree)	Software Developer User Support Specialist Security Analyst
Health Administration & Innovation	CPR, Medical Office Assistant, Microsoft Office Specialist, Community Health Worker Certificate	Medical Office Asst. Community Health Research Coordinator	Associate's Degree Public Health, Health Sciences, Finance, STEM (Bachelor's Degree)	Health Services Manager Health Administrator

*These credentials are offered via MedSTEM Pathways and College Career Pathways programs

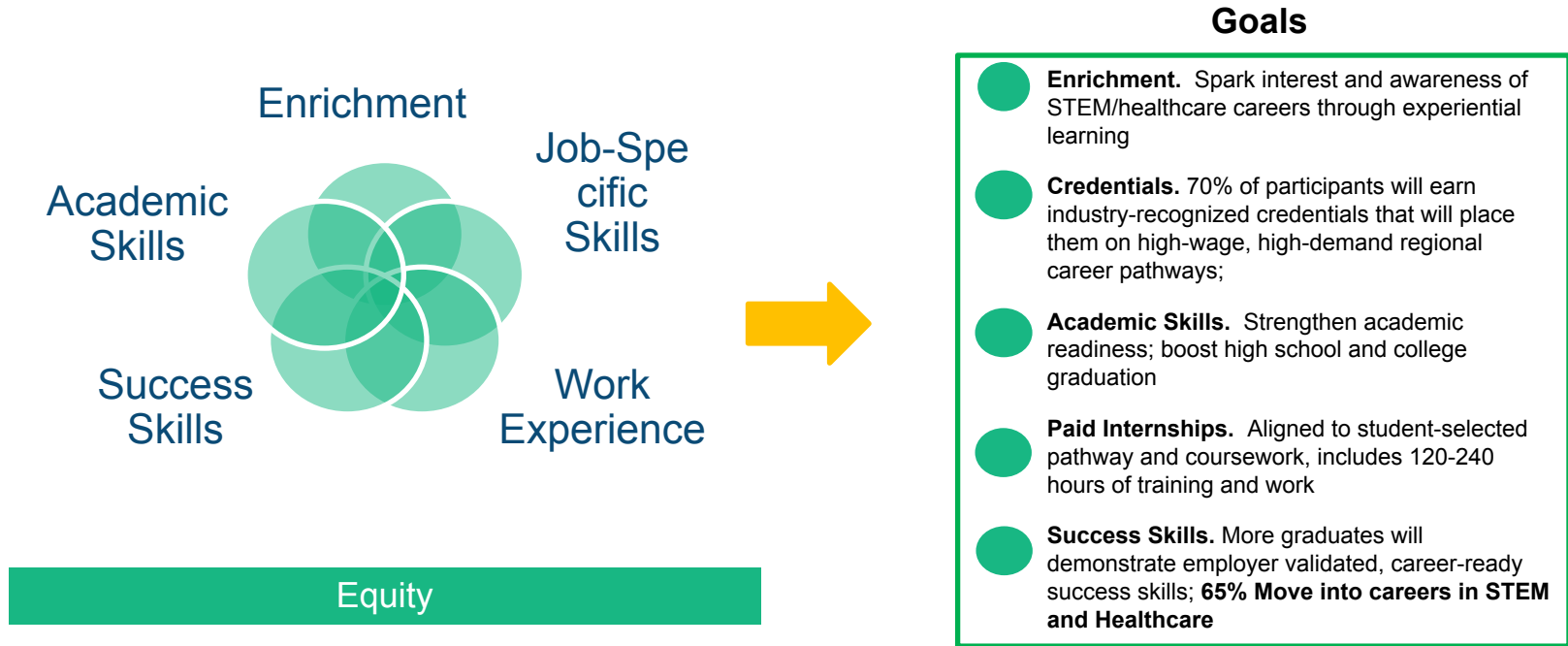
**IT Pathways is in development to include multiple apprenticeship options for select scholars (EPIC, Cybersecurity, IT Tech Support)

***REACH scholars have internships of 6-10 weeks each year of participation. All scholars are positioned and supported with identifying entry-level jobs to gain additional experience and financial support. Some scholars may qualify for apprenticeship opportunities, which are for 2 years in conjunction with postsecondary studies.



EQUITY FIRST: BUILDING TOWARD A BETTER FUTURE AND REVITALIZING LEARNING

BALANCED EFFORTS to REACH OUR GOALS



PARTNER FOR IMPACT

Strength through Collaboration



3,000+ students,
teachers, and
families through
programming and
outreach in
school
communities



WEST SIDE UNITED: Building Blocks
to Better Health

**PREPARING
YOUNG PEOPLE
FOR SUCCESS IN
STEM AND
HEALTHCARE
FIELDS**

SPOTLIGHTS PROGRAMS

VIDEO INTRODUCTION

Rush Education & Career Hub

MedSTEM Pathways (COVID19 Update) -

<https://youtu.be/gA34dPWWoRI>

COVID-19 UPDATE - REACH shifted programming to provide virtual learning experiences for Summer 2021 – Impact #: 180

Wraparound supports



REACH provided a Health Equity Assessment to understand its students' needs

Shift to virtual environment



REACH converted its programming to virtual

Changes in curriculum



REACH shifted some of its curriculum to ensure it is relevant and engaging for students in the new environment.

Staff support



REACH provided staff virtual training and ongoing support through weekly staff meetings and newsletters.

Exposure to the field



REACH provided students field exposure through career pathways speaker panels and postsecondary planning with college experience and financial aid panels.



Med+STEM pathways

Program Goals:

- ✓ Increase awareness of and interest in STEM/health care career options
- ✓ Achieve positive impact in youth development, identity development, achievement, and social capital
- ✓ Provide youth with hands-on practical experience that will help prepare them to pursue careers in health sciences, IT, and other STEM-related fields.
- ✓ Provide youth with opportunities to earn industry-recognized credentials
- ✓ Increase postsecondary success in college and career for health care and STEM-related fields

MedSTEM Target Impact #: 150 Youth (HS Students)

- 6-8 week- Paid internships (120-140 hrs)
- Industry-recognized credentials (ECG Tech, Phlebotomy, Cybersecurity)
- Articulated career pathways/ Academic enrichment
- Mentoring (peer and professional)
- Professionalism/success skills
- Community service



High School





College Career Pathways

College

Program Goals:

- ✓ Gain hands-on learning and training by working alongside medical students, nurses, and doctors
- ✓ Strengthen identity development, achievement, and social capital through mentoring with STEM and healthcare students and professionals
- ✓ Provide community engagement experience through volunteering and health equity research field visits and com
- ✓ Provide young people with hands-on practical experience and industry-recognized certifications that will prepare them to pursue careers in health sciences, IT, and other STEM-related fields.
- ✓ Increase postsecondary success in college and career for health care and STEM-related fields for Black and Latinx students
College Career Pathways Target Impact #: 30 (College Students)
 - Work-Place Experience: 8 week-Paid internships (256 hrs)
 - Professionalism/Work-Readiness(E CG Tech, Phlebotomy, Cybersecurity)
 - Weekly Seminars (faculty presentations, book club, career panels)
 - Mentoring (peer and professional)
 - Personal/Career Development (college & career advising)
 - Community service



**MAKING AN
IMPACT**

**KEY PROGRAM
OUTCOMES**

2020–2021 Impact

180+

High School and College students with paid work-based learning and internships



85+%

Participating High School students earned industry recognized certification

4000+

Students and community members impacted by REACH programming



100% of REACH high school graduates enrolled in college, compared to **83%** of **CPS graduates**

95%

College students with STEM/Healthcare majors

95%

College Persistence

Secured Phase II – Building Equitable Pathways grant from The Bill & Melinda Gates Foundation

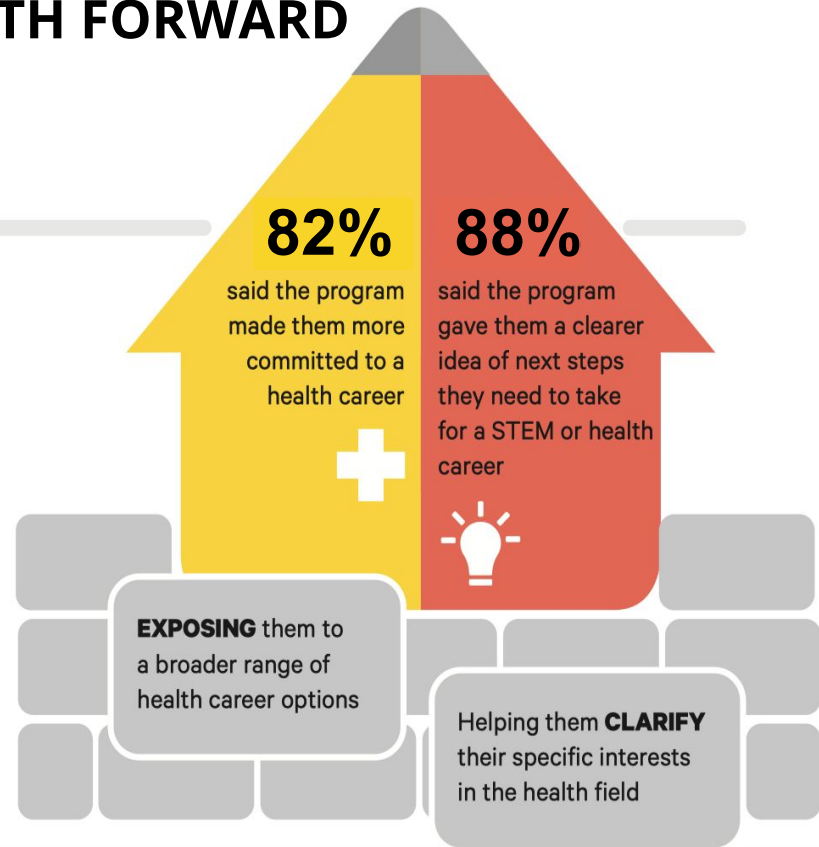


CLARITY ABOUT INTEREST AND PATH FORWARD

Developing Occupational Identity

Strengthened commitment to health careers

Most students started their internship already strongly interested in a health career. By giving students exposure to the range of health careers and clarifying their specific interests, the REACH internship made most students even more committed to working in health care.

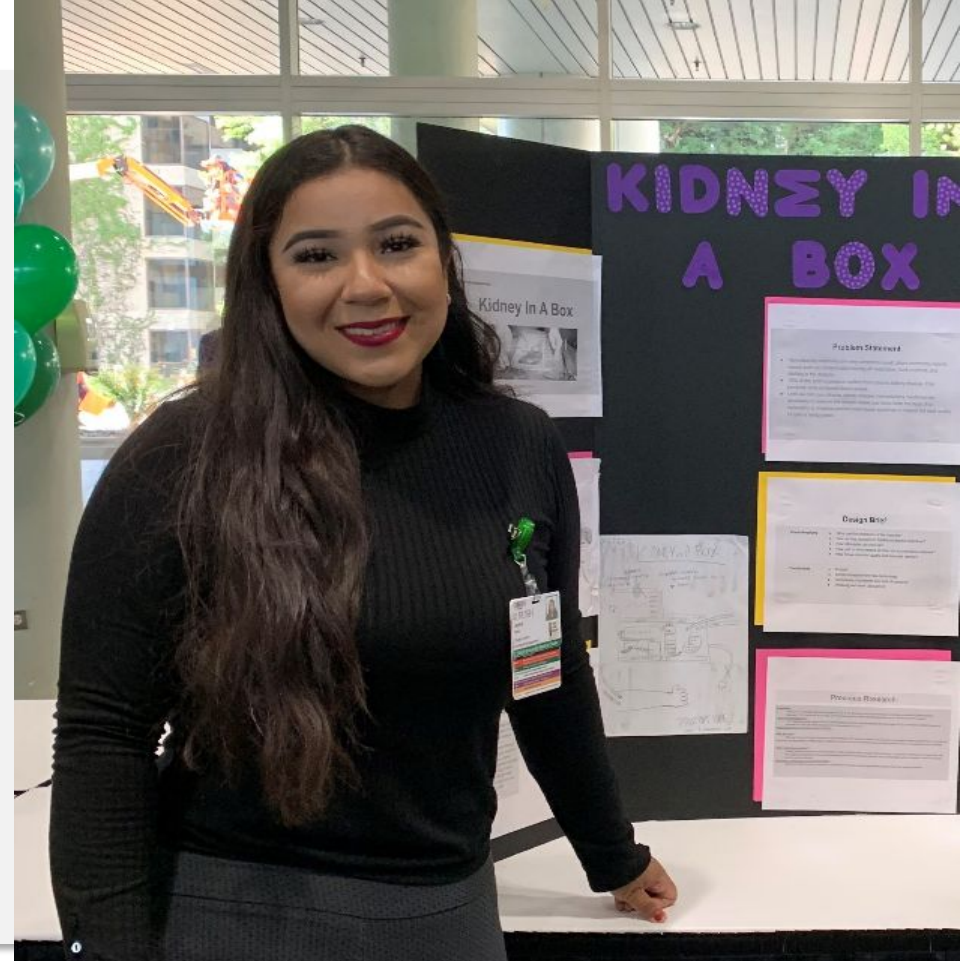




Empowering Minds & Creating Opportunities

Jayline Perez

"I brag so much about the support system, the learning opportunities, and the mission of the internship itself. I realized who was my fuel to continue my career path in medicine. It is REACH, MedSTEM Pathways, my cohort, Rush University Medical Center. I cannot describe the life changing impact [REACH has had on] me and all of the other REACH students. I tear up every time I speak about REACH, it literally changed my life."



**MAKING AN
IMPACT**

KEY TAKEAWAYS

GUIDANCE FOR IMPACT

Comprehensive counseling and post-secondary planning

- Active research and engagement of programs focused on career exploration and post-secondary success

Engage advising models that incorporate non-traditional approaches

- Advising for post-secondary success in changing environments
- Alignment with labor market and industry demand

Leverage school-based resources to support college and career readiness

- Resources to explore and access educational and employment opportunities (*career fairs, career days, industry partnerships*)
- Understanding career pathway entry points and methods for connecting students with resources to start them on their journey



For more information, please contact:

Natalia Gallegos

Director, Impact and Engagement

Natalia_A_Gallegos@rush.edu

Rukiya Curvey Johnson

Executive Director

Interim Vice President

Rukiya_CurveyJohnson@rush.edu

