A Message from Biogen Foundation

We are in the midst of a powerful historical moment - activated by the murder of George Floyd, but driven by a historical legacy of racial inequity. As our Biogen CEO Michel Vounatsos reiterated earlier this week [Read the full message here], prejudice, racism, and intolerance have no place at Biogen, and the Biogen Foundation.

While voices from all walks of life are joining together to demand a more just society, this movement is being driven largely by young people - predominantly, young people of color. The Biogen Foundation is both proud of and humbled by the work our STAR grantees are doing to support, nurture, and provide opportunities for our most marginalized young people, whose futures are at the heart of the movement for justice around the U.S. and across the world.

We are pleased to launch this newsletter dedicated to sharing stories, successes and lessons learned from Biogen Foundation’s STAR Initiative. Through a 4-year, $10 million investment, STAR is strengthening local STEM education ecosystems in Cambridge and Somerville, Massachusetts. Given the unprecedented challenges presented by COVID-19 and the spark of a powerful movement for racial justice, we want to use this platform to introduce and uplift the vital work STAR grantee organizations are doing, in collaboration with Cambridge and Somerville public schools. Their ability to reach and serve some of our most vulnerable students and families is more critical now than ever.

We all are asking “what can we do?” The Biogen Foundation is committed to: listening to the communities and stakeholders we serve, understanding how we can further leverage our work to better society and taking action with the goal of ensuring we drive positive change. The Biogen Foundation will continue to serve as a driving force for positive change and we, alongside our STAR collaboration partners, will continue to stand for equity in all that we do.

For more information, visit biogen.com/foundation
An Introduction to STAR

Launched in 2018 by the Biogen Foundation through a 4-year, $10 million commitment, the STAR Initiative aims to strengthen local STEM education ecosystems in Cambridge and Somerville, MA. Through STAR (Science, Teacher support, Access & Readiness), Biogen Foundation is investing in high performing nonprofits and coordinating a multi-stakeholder network serving public school students grades 6-12 in both school districts, with a focus on serving students historically underrepresented in STEM—notably, students of color. STAR grantees coordinate with each other and schools to provide expanded learning opportunities for students, and improve inter-city learning and collaboration.

As a member of the science capital of the east coast, Kendall Square, the Biogen Foundation is committed to increasing STEM learning opportunities for young people in the communities in which we work and live. Together with our grantee and school district collaboration partners, and guided by network facilitator Root Cause, we are working to build dynamic STEM ecosystems in Cambridge and Somerville with the common goal of supporting and inspiring students to become the STEM professionals of tomorrow. Each quarter, this newsletter will shine a light on the power of this collective action initiative and, most importantly, on the STEM learning opportunities that STAR unlocks for young people across the districts every day.

In Year 1, STAR grantees served an additional 729 students through new and expanded programs and, in total, 1,541 students benefited from deepened programming and experiential learning. Now in Year 2, the STAR Initiative continues to help more students develop and sustain their interest in STEM, gain necessary STEM exposure and enrichment.

Citizens Schools students at East Somerville Community Schools learning to program Ozobots with volunteers from Fidelity.

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STAR Grantees Respond to COVID-19

STAR grantees deliver programs that help prepare students for STEM education and career paths, and support STEM teacher training and curriculum development. Collectively, these six organizations serve students in middle and high schools across Cambridge and Somerville. Throughout these times of great uncertainty, STAR grantees have taken great care to identify and address the immediate needs of their students (food, shelter, safety) while designing new ways to continue programming and community building in online spaces.

Many of these adaptations have been made possible by Biogen Foundation’s ongoing support. During these unprecedented times, Biogen Foundation has made all funding unrestricted for the rest of Year 2 in order to best support grantees in their emergency responses.

Originally, this newsletter was meant to simply introduce our superSTAR grantees. We want to take this time now to highlight the excellence in programming across the STAR grantees by sharing a bit about their virtual adaptations and student support efforts. STAR grantees have demonstrated the resilience and strength of the network in their quick collaborations that have enabled programs to reach and support more students throughout this prolonged period of school closure. Please visit individual program websites to learn more about their programs and what you might be able to do to support them during these times.
**Breakthrough Greater Boston** prepares students for success in college by providing them with academic support, including STEM subjects, from middle school through high school. During COVID-19, Breakthrough Greater Boston has implemented a case management model to check in with groups of their students every week and is continuing to provide academic, social-emotional and college access support. They are in the planning phase for different scaled back and/or virtual versions of their summer program. [CLICK HERE TO LEARN MORE](#)

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**Citizen Schools** closes opportunity and achievement gaps for middle school students by expanding the school day with project-based learning; 21st century, social-emotional, and STEM skill-building; and high school, college, and career preparation. During COVID-19, Citizens Schools is working in partnership with current schools, corporate partners, and returning volunteers to adapt their existing programs to virtual spaces. They have successfully virtualized their apprenticeships, academic supports, and clubs and community building activities and have created opportunities for volunteers to continue to support their students. [CLICK HERE TO LEARN MORE](#)

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**Enroot** empowers immigrant youth by providing academic support, including STEM subjects, and inspiring out-of-school experiences such as internships in STEM-related businesses. During COVID-19, Enroot is working first and foremost to support the basic needs of their students. They have adapted much of their academic and social-emotional support online and are working with Somerville and Cambridge Public Schools to coordinate their efforts. They have virtualized mentoring, tutoring, and internship/career exploration and are continuing to provide their students with online community gatherings. [CLICK HERE TO LEARN MORE](#)

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Breakthrough Greater Boston 8th grade students take part in weekly trips within the community to build their understanding of real-world applications of STEM and explore potential career paths.

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Lesley University trains teachers to increase student engagement, particularly in STEM subjects, by designing and using more hands-on learning activities with students. During COVID-19, Lesley University has activated on all fronts to adapt their programming to online space. Lesley University is connecting broadly with science educators and out-of-school time providers to help equip them for adapting science education to virtual spaces. Lesley University is working with teachers in Cambridge and Somerville, creating training modules for educators and students for online, at-home learning, and when possible, moving workshops online, like their Climate Action Workshops. **CLICK HERE TO LEARN MORE**

**uAspire** ensures that all young people have the financial information and resources necessary to find an affordable path to and through college. Being in the STAR grantee network enables uAspire to better connect with and serve students interested in STEM education and career pathways. During COVID-19, uAspire has been able to continue and expand their virtual model, which they had already implemented in several schools in the Greater Boston Area in the fall of 2019. They use a mass texting service to reach many students and provide ongoing social-emotional support and much needed guidance in applying to, assessing, and selecting financial aid options for their postsecondary choices. uAspire is helping students address many new financial challenges that are coming up as a result of COVID-19. **CLICK HERE TO LEARN MORE**

**The Young People’s Project** uses Math Literacy Work to develop the abilities of elementary through high school students to succeed in school and in life, and in doing so involves them in efforts to eliminate institutional obstacles to their success. During COVID-19, YPP has successfully adapted several key pieces of their programming to online spaces. They have virtualized their computational programming projects in Cambridge and Boston and are working with students on a daily basis to solve different math prompts. YPP’s Math Playbook continues as planned completely online. Finally, YPP is working with developers and college and high school students to design and launch a virtual Flagway tournament that can potentially include students from across the country. **CLICK HERE TO LEARN MORE**

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The Biogen Foundation STAR initiative was designed based on research of what’s working in STEM education nationally. STEM ecosystems cultivate relationships across stakeholders and maximize each stakeholder’s unique contribution. Typically, these networks have one backbone organization, or network manager (Root Cause in the case of STAR), that facilitates collective action amongst stakeholders, which can include: schools and districts, out-of-school-time programs, leading STEM institutions (i.e. higher education, industry leaders, science centers, etc.), the private sector, other community-based organizations, young people, and their families. A highly functioning coordinated network has the potential to provide a seamless pathway for ALL students to have equitable access to STEM learning opportunities that prepare them for STEM careers—something that is virtually impossible to achieve when stakeholders work independently from one another. Biogen Foundation has made a visionary commitment through STAR. There is no better place poised to lead the way in building a strong local STEM education ecosystem than the Greater Boston area, home to Kendall Square—one of the world’s most powerful life sciences and technology hubs.

Root Cause is a purpose-driven consulting group that exists to enable more people and families to achieve lifelong success. Root Cause partners with foundations, nonprofit organizations, businesses, school districts, and public agencies to develop, implement, and measure strategies that improve people’s lives. Since 2004, the Root Cause team has pioneered evidence driven approaches to strategy, measurement, learning and improvement, and collective action to ensure more people achieve lifelong success. We have helped more than 200 partners improve people’s health and well-being, increase education and youth development outcomes, and strengthen the economic security of people and families nationwide. Learn more at rootcause.org.

We’d love to hear from you! Please reach us at BiogenSTAR@rootcause.org with questions, comments or ideas and we’ll get back to you as soon as possible.