



Brigham Clinical & Research News

A Meaningful and Personal Career Transition

Next Generation is a Brigham Clinical & Research News column penned by students, residents, fellows and postdocs. If you are a Brigham trainee interested in contributing a column, email us. This month, we bring you a special, alumni-themed edition of Next Generation, with a column written by Shardae “Shaye” Williams, a former research trainee in the Division of Genetics, who is now the operations coordinator and diversity, equity and inclusion lead with Genomes2People, a research program at Brigham and Women’s Hospital, Broad Institute and Harvard Medical School that conducts cutting-edge empirical research in translating genomics into health.

I was a teacher for eight years before joining Genomes2People (G2P). Introduced to genetic counseling as a prenatal patient, I thought it was a wonderful profession, but I hadn’t been exposed to it previously, despite having a degree in public health and a transcript brimming with health and communications courses. As I contemplated making a career switch due to the profound impact that my genetic counseling experience had on me, I was also hoping to gain some exposure to the profession so I could make an informed decision on whether I should become a genetic counselor.

In September 2021, I began an internship with G2P’s newly launched Diversity in Genomics Research Training Program. In a 2021 interview for a *Brigham Clinical & Research News* column published when I was a trainee, I am quoted saying, “In genetics research, representation truly matters...we want clinical trial results that are reflective and accurate for people of different backgrounds, which means we need to encourage more diversity and equity in trial recruitment.”



Shardae “Shaye” Williams

As a G2P trainee, I gained exposure to the landscape and opportunities within the field of genetic counseling, including current challenges facing the profession and growing initiatives towards change. I became involved with the communications working group at G2P, which helps translate big-picture concepts into digestible bites for the lay public through social media and blog posts and highlights the scientific achievements of the group across various platforms. At its core, it’s a strategic group bringing together people with backgrounds in international public reactions, development and communications.

I later was encouraged to write a [blog article](#) published on the G2P Medium page. In a nutshell: While the movement towards personalized medicine is an exciting prospect, building trust with historically medically marginalized groups means having representation at all levels of care. One concern with genetic testing is that not everyone will share equitably in the associated benefits. Genetic counselors receive specialized training in two-year master’s degree programs and help patients navigate intimate conversations about their health and the health of their family as test results can bring relief or uncertainty. The profession is experiencing rapid [growth](#) and is expected to expand by 100 percent over the next 10 years. The genetic counselors who discuss genetic findings with patients should resemble said patients’ diversity

and that of the population at large. But a 2021 North American [survey by the National Society of Genetic Counselors \(NSGC\)](#) found that 94 percent of respondents identified themselves as female and 90 percent were white and non-Hispanic.

This needs to change, and I hope the growth the field is expected to see in the next decade will address the low level of diversity in the field we see today.

After my training experience concluded, I realized that I loved the research operations aspects of the work and decided to make that my focus. I accepted a full-time position as an operations coordinator with G2P. One of the absolute joys of this experience has been my involvement in our genetics training program, which is now receiving 80 to 100 applicants each year. I am part of the team that reviews applications and interviews and selects candidates. Each year, we award several fully funded internships to exceptional candidates from underrepresented groups in STEM fields, many of whom come from our partner institution, Howard University, one of the nation's HBCUs (Historically Black Colleges and Universities).

A career transition like the one I made is never without its growing pains, but over the past year I have become more proficient in managing the administrative aspects of research projects. Daily, I must determine the best course of action for administrative processes, strategic communications products and development goals. I've developed a suite of new skills specifically related to working for a lab that operates in a competitive and fast-paced research environment and adapted my skills in education to approach tasks in a novel way.

I am currently working with team members on several projects, including phase two of the BabySeq Project, which is focused on examining genome sequencing in a diverse cohort of healthy newborns. The original BabySeq Project was a clinical trial created to measure the utility of using genomic sequencing in routine newborn screening. In phase two, the team is expanding genomic sequencing to a larger population of newborns, with a focus on serving underrepresented minorities in an expanded set of locations. As a trainee, I developed recruitment materials for Institutional Review Board approval and learned about the steps that take place behind the scenes of a clinical trial, never imagining I'd be an official member of the team today a year or so later.

Just this month, I was an author on a paper published in *JAMA Network Open* entitled, "[Perspectives of Rare Disease Experts on Newborn Genome Sequencing.](#)" In many ways, this paper captures my experiences at BWH.

In early 2023, our team nominated me for the [Brigham Way](#), which recognizes employees who foster a culture of excellence, respect and professionalism by going above and beyond their duties to create an exceptional Brigham Experience for our patients and colleagues. I've also been a research subject in the PeopleSeq Study and can proudly be counted among the first 50 people of African descent to have elective genome sequencing in the world. Looking forward, I hope to be more involved on the research side of things and even (gulp) learn how to prepare a successful National Institutes of Health grant.

I have learned that when research operations are done exquisitely, they 'disappear' behind a swirl of national conferences and platform presentations, journal publications with innovative findings and patients receiving outstanding care by incredible genetic counselors. At the center of it all is our Executive Director Robert Green, MD, MPH, a visionary with the goal of saving a million lives using genomic screening.

There is an infectious "backstage" energy that comes with supporting and being a part of such dynamic research as part of the operations team and I am so grateful for my experiences as both teacher and trainee. Being a part of the G2P research operations team at Brigham and Women's Hospital has been a career-affirming moment for me as there is such a strong culture of inclusion and belonging on my team.

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