

Brigham Clinical & Research News

Internship Program Opens the Door into the World of Genetic Counseling and Research

Last year, Soha Mohammed was in her second year of a six-year BS/MD program at Howard University when she heard about the **Genomes2People** (G2P) Research Program at the Brigham for the first time. Robert C. Green, MD, MPH, the director of G2P, was giving a genetics lecture that Mohammed attended.

"I've been interested in medicine for a long time and was taking a genetics course to get more exposure," said Mohammed. "When I heard Dr. Green speak about his research team, I started thinking more about the intersection of genetics and medicine. I thought about how, as a future physician, it would be useful to know more about genetics for treating and counseling patients."

Mohammed applied to join the team as part of a new internship program through G2P that offers paid internships for undergraduate students who are Black, Indigenous or people of color (BIPOC). She spent her summer working closely with genetic counselors, research assistants and other investigators from G2P, meeting virtually with team members and learning about the field.

"Before this internship, I didn't know there was a residency for medical genetics," said Mohammed. "As I learned about the overlap of genetics with other conditions and specialties, I became intrigued with how genetic information can be used by physicians in treating patients and promoting preventive medicine."

Opportunities and Inspiration

Another trainee, Kopika Kuhathaas, also completed her internship over the summer and has stayed on as a volunteer because the experience has been so rewarding.



“The research was so exciting to me,” said Kuhathaas. “And I’ve loved hearing from members of G2P about their career paths and their journey to what they are working on now.”

As part of her internship, Kuhathaas shadowed three clinic days with genetic counselors from G2P. She observed virtual visits with patients in the general genetics clinic and **Preventive Genomics Clinic**. In addition, she helped with data collection for the **PeopleSeq** project, a survey study of adults who have received genomic sequencing information, and is taking a deep dive on survey responses to extract results. One of the highlights of the experience for Kuhathaas was the biweekly training meetings she had with members of G2P, including Green.

“I am so grateful for these opportunities,” said Kuhathaas. “It was inspiring to be a part of a team so motivated to play a role in a trainee’s learning experience.”



Diversity, Inclusion and Equity in Research

This September, Shardae “Shaye” Williams began her internship with G2P and is currently working with team members on several projects, including phase two of the **BabySeq** project, which is focused on examining genome sequencing in 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 plans to expand genomic sequencing to a greater population of newborns, with a focus on serving under-represented minorities. Williams is helping to develop recruitment materials for Institutional Review Board approval and learning about the steps that take place behind the scenes of a clinical trial.



“In genetics research, representation truly matters,” said Williams. “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.”

Erin Drake, MA, director of operations for G2P, and Tala Berro, MS, CGC, a genetic counselor and project manager, helped launch the G2P BIPOC internship program in recognition of the importance of diversity not only in clinical trials but also in research teams.

“When we began thinking about how to increase diversity in projects like PeopleSeq and BabySeq, it catapulted a team discussion about how to do so ethically and how to make sure our research team was also recruiting and training diverse researchers,” said Drake. “We decided to focus on student researchers and to engage BIPOC trainees.”

“A lot of students may not be aware of medical genetics as a field or may have trouble getting firsthand experience in genetic counseling,” said Berro. “Especially during the pandemic, shadowing has become extremely difficult, and internships are few and far between. This is especially true for students who don’t already have a personal connection or a large network. Our goal was to offer an equitable experience — to allow students to work with us not because they know someone, but because they are qualified and interested.”

Williams is also working on a project with Berro to expand diversity, equity and inclusion efforts within G2P and the [Precision Population Health \(PPH\) Initiative](#), a collaboration between G2P and Ariadne Labs that aims to solve system challenges in adopting precision medicine in primary care.

The internship experience has been especially meaningful for Williams, who first encountered genetic counseling as a patient. Six months ago, Williams was pregnant with her first child, Gendry, when a genetic counselor called to discuss her carrier status. Williams miscarried in her second trimester.

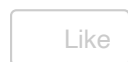
“I want this loss to mean something — I want as many people to know about Gendry as I can,” said Williams, who is contemplating going back to school to become a genetic counselor. “I’ve learned so much from my time with the G2P team, and I feel so fortunate to have gotten to be a part of this experience.”

[Home](#) | [Genomes2People](#)

Share this:



Like this:



Be the first to like this.