



HAMPTON UNIVERSITY

Students on the campus of Hampton University, a historically Black institution.

DISCOVERING ALLYSHIP

Moving from a primarily white institution to a historically Black university led to a shift in perspective. **By Adrienne Nugent**

I have always considered myself an ally to people from marginalized groups. But my two-year postdoctoral programme in the cancer research centre at Hampton University in Virginia, one of more than 100 historically Black colleges and universities (HBCUs) in the United States, gave me an entirely new understanding of allyship. The experience was transformative. As a white person who grew up in a small town in New England with a homogeneous population, I was totally unprepared for how I would learn and develop at an HBCU.

In the first of many lessons in allyship, I realized I hadn't heard the term 'predominantly white institution' (PWI) until I arrived

at Hampton in February 2017, despite having studied at Duke University, a PWI in Durham, North Carolina, and having completed a postdoctoral programme at the US National Institutes of Health (NIH) in Bethesda, Maryland.

I started at Hampton after my husband, who was in the military, was posted at the nearby Langley Air Force Base. On my first day, I passed hundreds of people, none of whom looked like me. Over the next two years, I started to understand some of the issues some of the issues that scientists who are part of minority-ethnic populations face daily. Although my experience provided a glimpse of what it is like to be a student and researcher at a minority-serving institution, I as a white person can never fully understand

my colleagues' perspectives. But from their frank and thoughtful advice, I have learnt some things that might be useful to others.

I benefited from teaching and mentoring university students who were vocal and upfront about their struggles and solutions, and who candidly told me what being an ally means. In many ways, they mentored me. Hearing their stories first-hand made me reflect on what it must feel like to be the only Black person in a graduate-school cohort or on a grant committee, facing the expectation that you will represent your whole culture. I had heard anecdotes of principal investigators at HBCUs who'd sat on review committees on which they were the only person of colour out of 30

people reviewing grants for minority-serving institutions. That pressure must be intense, and the margin for failure, non-existent.

At most major US research institutions, it seems as though seminars occur hourly, everybody has an NIH research grant and samples are easily accessible at the university hospital. Researchers at these places are part of an institutional cycle of winning grants and creating networks, and getting access to published studies is not a problem.

HBCUs are mostly smaller liberal-arts schools, and few have major medical centres. But there, too, networking is crucial. Networks at HBCUs are even more important than they might be at PWIs, because of differences in available resources. HBCUs often lack funding to support access to most scientific literature, so researchers can find themselves spending lots of time, effort and mental energy trying to find and access articles rather than focusing on research. Yet despite these systemic barriers, the Hampton community had an incredible atmosphere and an unmistakable drive to persevere and overcome these hurdles.

One day, I asked my Hampton adviser, Luisel Ricks-Santi, a cancer geneticist, about attending an NIH conference on research that interested me. She suggested that perhaps the NIH should come to Hampton instead. That didn't happen, but the contrast it highlighted was enlightening. The culture of the scientific enterprise includes the unspoken expectation that 'everybody should come to us and learn from us'. In fact, the scientific community would benefit if people with PhDs and MDs at major institutions went to HBCUs to learn from their communities. But there would have to be a real interest in learning and not just imposing fancy new techniques, offering second authorship in collaborations or throwing money around (although more money would help). Researchers at HBCUs need to lead collaboration conversations from the initial stages of study design to data collection and analysis. The more voices we can incorporate into these discussions, the better the scientific and medical communities, and the people they serve, will be. HBCUs have been leaders in scholarship on health disparities and community relations for almost 200 years, and it's important that scientists recognize their role and empower HBCUs to guide us in our collective effort to achieve health equity.

I now work at Invitae, a genetic-health company in San Francisco, California, and have connected the company and Hampton to address inequalities in genetics. Together, we're building a career pipeline, mentoring platform and educational series to increase diversity in the science and biotech workforce.

Adrienne Nugent is a clinical genomics scientist at Invitae, a biotechnology company in San Francisco, California.

CASH BOOST FOR UNDERFUNDED BLACK UNIVERSITIES

Legal wins and federal budget proposals could address years of funding discrepancies.

By Chris Woolston

Historically Black colleges and universities (HBCUs) in the United States are set to ramp up investments in scientific research and education following a wave of new grants and proceeds from legal settlements.

Most of these institutions were created in the nineteenth century, to serve students of African descent. They are also hoping for extra funding as part of US President Joe Biden's proposed federal budget for fiscal year 2022.

There are more than 100 HBCUs in the United States. Around half are public institutions that rely mostly on government funding, but they have long been hampered by a lack of financial support, says Willie May, vice-president for research and economic development at Morgan State University, an HBCU in Baltimore, Maryland.

The extra funding should help HBCUs to increase their research output and eventually make the scientific workforce more diverse, he says. "This is a unique time. It looks like we're about to get a more equitable slice of the pie. We need to take advantage of it."

According to the US National Science Foundation (NSF), federal support for science and engineering activities at HBCUs dropped by 37% between 2009 and 2019. By contrast, overall science and engineering funding for US higher-education institutions declined by just 10% over the same period.

But in May 2021, a federal judge approved a US\$577-million settlement for the four HBCUs in Maryland, including Morgan State. A lawsuit filed in 2006 had argued that the state had unfairly supported programmes and degrees at other public universities that were in competition with HBCUs.

The settlement will be divided between the institutions on the basis of student numbers. May estimates that his university will receive between \$150 million and \$200 million over 10 years, money that should help it to fulfil a key goal: progressing from its current Carnegie Classification as an R2 research institution (a doctoral university with high research activity) to an R1 (a doctoral university with

very high research activity, the highest such classification) within the next decade. The move, he says, would boost the global profile of the university and help promote international outreach and collaboration.

In April, a legislative panel found that the state of Tennessee owed as much as \$544 million to Tennessee State University (TSU) in Nashville to remedy years of underfunding. Ebony McGee, a science-education researcher at Vanderbilt University in Nashville, says the state was essentially taking money from TSU and giving it to the University of Tennessee, Knoxville, a predominantly white institution.

Federal funding

HBCUs across the country are also hoping for a new infusion of federal dollars. On 8 September, Democrats in the US House of Representatives proposed an educational budget for fiscal year 2022 over four years that includes \$1.45 billion for HBCUs, tribal colleges (those that are owned and operated by Indigenous communities on Indigenous property) and other institutions where most students and trainees are from minority ethnic groups.

Negotiations continue, but that level of funding would represent a substantial increase to the roughly \$1 billion the US government already invests in HBCUs each year, through mechanisms including tuition grants and research contracts.

The funding boost could have been much larger. In March, the Biden administration proposed to spend \$20 billion to upgrade laboratories and infrastructure for science, technology, engineering and mathematics (STEM) research at HBCUs. However, that provision was absent from the version of the bill that was passed by the US Senate in August.

In May, the US Department of Energy announced that it would spend \$17.3 million to create research opportunities and scholarships, with a focus on students of colour; much of the money will go directly to HBCUs. Howard University, a prominent HBCU in Washington DC, will receive nearly \$400,000 to support research on converting fossil fuels to hydrogen using electromagnetic energy.

Corporations are also showing new support