



Howard University

**Public Interest Technology
Case Studies**

Howard University

Howard University is a private, historically Black university (HBCU), classified as a doctoral university with “high research activity” (R2 university). To date, Howard, which has 13 schools and colleges, has awarded more than 120,000 degrees in the arts, the sciences, and the humanities, and has more on-campus African-American Ph.D. recipients than any other university in the United States.

Howard is a natural home for Public Interest Technology as it is a leader in Science, Technology, Engineering and Mathematics (STEM) and STEM-based professional education, and the university is dedicated to its motto: “Veritas et Utilitas” - “Truth and Service.” Howard students spend thousands of hours in service to the adjoining neighborhood of LeDroit Park, as well as around the nation and across the world. Moses Garuba, Associate Dean for Academic Affairs in Howard’s College of Engineering and Architecture, states that doing PIT is not explicit in his university’s vision and activities, “but it is part of what we do.” Garuba says, “We provide learning and research for the public interest, and specifically for Black people and communities.” The university’s commitment has been to the study of disadvantaged persons in American society and throughout the world with the aim of removing inequities related to race, color, social, economic, and political circumstances.

Given this background, we have classified the case studies below, as well as under all the PIT activities identified at Howard, under one or more of the following themes: learning, scholarship, engagement as well as Justice, Equity, Diversity, and Inclusion (JEDI).

Learning

PIT learning is about training future leaders to tackle the next century’s socio-technical challenges while advancing public values like sustainability, justice, human health, and the well-being of the planet and all of the creatures that live on it. PIT learning explores new ways of transmitting knowledge to diverse audiences according to their needs and priorities. It also develops the hard and soft skills needed to bring about positive change, creating solutions that will promote the public good, rather than (or in addition to) the private interest. PIT learning programs may be formal or informal, facilitating ends-oriented academic pathways and empowering tinkerers to create a rich PIT ecosystem of curricular and co-curricular programs. Key to such programs is promoting interdisciplinarity across STEM, the social sciences, the arts, humanities, and the professions.

Scholarship

PIT scholarship, research, and innovation can place institutions at the forefront of emerging technologies that serve the public good. PIT research covers broad and interdisciplinary perspectives, from making technologies accessible, to understanding and designing ethics and policy approaches to ensure the justice and equity of the technologies produced. Technologies exist everywhere - in our homes, our workplaces, our cities, and of course in the devices we use to shape how we interact with the world around us. Emerging technologies include artificial intelligence, gene editing, smart cities, and other areas where stakes are high, outcomes are uncertain, and in which novelty is contested. Such areas warrant discussions

to contextualize them with the public interest and public good in mind. The development of these technologies should also address societal challenges, being cognizant of their specific ethics, impacts, implications, and long-term social and political consequences.

Engagement

PIT engagement and collaboration means advancing public values that serve the community by working in close collaboration with that community. Such PIT work ideally can develop activities that improve quality of life while simultaneously cultivating knowledge and scholarship. Institutions should take responsibility for the social, economic, and cultural health of the communities that they serve. Building extensive networks between the institution and the community will intensify engagement with PIT and will help institutional actors understand how to define public interest or public values in specific circumstances. Institutions can collaborate at multiple levels of organization, and engagements can be driven either by the various communities or the institution itself.

JEDI

Public interest technology JEDI means centering and advancing Justice, Equity, Diversity, and Inclusion efforts pertaining to PIT activities across the university. By justice, we mean dismantling barriers to resources and opportunities in institutions, so that students, faculty, staff, and the community at large can live a full and dignified life of learning. By equity, we mean allocating resources to ensure that everyone has equal access to these opportunities from an institutional perspective. By diversity we mean removing barriers to ensure equal opportunities across race, gender, class, religion, disability, LGBTQ+ identity, and other potential differences and, more, acknowledging and celebrating such differences. By inclusion we mean amplifying the voices and perspectives of those who experience more obstacles due to their identities. JEDI can be enhanced across these four other categories of PIT by creating a culture of reciprocity to ensure the public good.



Case Study

Engagement/Scholarship

Social Media Technology Conference and Workshop

College/School: Cathy Hughes School of Communication - Journalism
Director of Program: Ingrid Sturgis
Email: ISTurgis@howard.edu
Website: <https://socialmediatechnologyconference.com>

How the program fits the engagement and scholarship themes

Underserved communities need to gain knowledge about new and emerging technologies so that members of those communities can play an active role in shaping their own approaches to those technologies, as well as participate in larger discussions. Little research exists on emerging technologies and their impact on minority groups. Moreover, students have begun to use these technologies - and particularly social media technologies - without understanding the implications for their lives. Howard faculty understood these concerns more than a decade ago and established the Social Media Technology Conference and Workshop in response.

Program description

The Social Media Technology Conference and Workshop is an annual conference run by Howard University in collaboration with Bowie State University. The conference and workshop bring together scholars and professionals in the area of social media to share their perspectives on the shifting paradigm in academia, government and non-governmental organizations orchestrated by digital and social media in this era of apparent technological determinism.

Program details

The Social Media Technology Conference and Workshop was established to raise awareness among Black academics as well as to inform a wider audience about the value of social media technology. The two-day, intensive conference combines panel discussions, poster sessions, roundtables, and hands-on workshops designed to enlighten scholars and practitioners about social media and provide them with the knowledge to create and effectively use social media in different contexts. Professor Ingrid Sturgis, director of the program, says, “When we started the conference more than 10 years ago, we were one of the few academic institutions that was convening such a conference that linked social media and Black communities and people of color.” Professor Sturgis explains that at that time, in fact, many scholars did not know much about Twitter. The conference has examined a variety of social media issues, including the Arab Spring, voices at the margins, and social media’s impact on privacy issues, among others.

Each year, a committee of faculty from the Department of Journalism within the Cathy Hughes School of Communication, including Professor Sturgis, meets to discuss the most pressing issues in the news that relate to social media and technology, and subsequently to announce the theme for the conference. The team then invites academics, industry professionals, and graduate students to submit proposals which are then curated to create the

conference. As with standard conferences, the workshop accepts submissions in the categories of papers, panels, workshops and student submissions. The organizers arrange the proceedings of the conference in a collective report.

Program history

The conference was started by Howard University professors Dr. Kehbama Langmia and Dr. Tia Tyree, and Dr. Pamela O'Brien from Bowie State in 2009. Ingrid Sturgis joined them a year later, and Dr. Langmia, Dr. Tyree, and Dr. Sturgis have continued to serve as the conference organizers. The program has attracted between 50 to 75 participants each year, with 2021 going virtual due to COVID-19 and the inability to meet in person. The conference attracts African-American attendees, including people of the African diaspora and of Afro-Caribbean descent, as well as participants of other ethnic backgrounds.

In 2021, after a one-year hiatus due to the COVID-19 pandemic, the conference resumed in an online, two-day format. The theme focused on dissecting disinformation campaigns that targeted Black people. One panel explored real-world instances of systemic racism that served to discourage Black participation in COVID vaccination protocols. Other panels looked at voting, the debates about police power following the murder of George Floyd, and how social media algorithms drive people into bubbles designed to convince them of certain misconceptions. Professor Sturgis says, "Real problems arise when algorithms convince social media users that elections have been stolen and lead to Jim Crow-era mob violence like we saw at the Capitol on January 6, 2021."



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Program Officer for the Office of
Naval Research in Arlington,
Virginia

Google Training by Maggie Farley
of the Google News Initiative

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- Hands-on workshops
- Google training
- Learn social media's best practices and more!

Outputs and outcomes

Over its decade of operation, hundreds of scholars and students have participated in various talks, workshops, and proceedings offered by the conference. Working with past presenters and other researchers, the conference co-founders edited two social media books. The first was published in 2014 and entitled *Social Media: Pedagogy and Practice*. Edited by Kehbama Langmia, Tia C. M. Tyree, Pamela O'Brien, and Ingrid Sturgis, it is available on Amazon and the Rowman & Littlefield website. The second book was published in December 2016 through Lexington Books and is also available on Amazon and Rowman & Littlefield; it is titled *Social Media: Culture and Identity*.

Limitations

Many programs at Howard, and specifically in the journalism concentration, have limited funding available. However, Professor Sturgis and her colleagues hope that the addition of Pulitzer-prize-winning journalist Nikole Hannah-Jones, who will be serving as the newly created Knight Chair in Race and Journalism, will bring added visibility and opportunity.



Case Study

Scholarship/JEDI

Project ReFocus

College/School: Department of Communication, Culture and Media Studies and UCLA Fielding School of Public Health's Center for the Study of Racism, Social Justice & Health
Director of Program: Monica Ponder
Email: monica.ponder@howard.edu
Website: <https://projectrefocus.com>

How the program fits the scholarship and JEDI themes

The current crisis of the COVID-19 pandemic has highlighted the relationship between racism and public health. Projects need to center issues of justice while tackling the pandemic, as well as improve wellness while developing community as in normal times. Project ReFocus is centered around this dynamic.

Program description

Project ReFocus is a collaboration between Howard University's Department of Communication, Culture and Media Studies and the Center for the Study of Racism, Social Justice and Health at the University of California, Los Angeles (UCLA). The project addresses how the health crisis intersects with racism by providing educational resources for public health practitioners and a real-time crisis monitoring system.

Program details

Project ReFocus offers a crisis monitoring system that provides the comprehensive data needed to monitor social stigma and support disproportionately affected populations during crises. The project began with the realization that there were no mechanisms in public health sensitive enough to detect signals of stress and trauma related to health issues. Dr. Monica Ponder, epidemiologist and director of the program, says, "I'm of the belief that some cultural groups are in a constant state of crisis, and our methodologies (in public health) are very traditional in terms of surveillance. So when you have a pandemic, and public health cannot keep up with the public need, we need to rethink how to monitor social stigma and to support trauma in relation to the pandemic." Project ReFocus provides tools and resources so that public health practitioners, journalists, and community leaders can better understand the drivers of social stigma.

These tools are necessary to adequately monitor the presence of social stigma and support historically marginalized and disproportionately affected populations during a public health crisis such as COVID-19. Racism negatively affects the mental and physical health of millions of people, preventing them from attaining their highest level of health. Therefore, to detect the impacts of racism on a given population, practitioners need tools to monitor, detect, and interpret related data. Such tools are essential to the planning, implementation, and evaluation of public health practice.

The program expands data collection and social listening protocols that monitor in real time the impacts of social stigma on the population, as that stigma relates to COVID-19 mitigation and prevention practices. From these data, Project ReFocus develops model communication materials to respond to the stigma. The project then distributes the information to the community, providing tools, technical assistance, and education to frontline workers who work, live in, and represent the communities disproportionately affected by COVID-19. Finally, the program engages media outlets and journalists to share best practices for delivering messages that center the views of the community and reduce social stigma.

Program history

The project began in September 2020 as a response to the COVID-19 pandemic. With funding from the Centers for Disease Control and Prevention (CDC), project members responded to the compounded issues of rising racial unrest and the differing impacts of the pandemic on communities of color. Phase one was about conceptualizing methods to better monitor health disparities as they relate to communities of color.

Phase two began in 2022, when a pilot for the methodology in the form of a dashboard was rolled out to seven diverse communities. These communities range in size from large ones in New York City to smaller ones in Albany, Georgia. Project members hope to gather data back from the communities to improve on the surveillance data, as well as amplify this information back to the communities.

Outputs and outcomes


Project ReFocus aims to develop different model communication materials and recommendations to respond to the stigma often associated with monitoring systems of specific communities. The project is still in its initial stages, and thus far its leaders have developed a rapid community assessment methodology with a matching digital dashboard. The next phase was rolled out in the beginning of 2022 - testing the dashboard and its content within

different communities to monitor its efficacy. The project is also monitoring the level of community engagement taking place and will make adjustments accordingly.

Limitations

According to Dr. Ponder, the current models for public health are tailored to a Westernized and paternalistic model that is not culturally humble or sensitive to different communities' context and potential trauma. Changing a medical model and predictions to incorporate such nuances is not an easy process, even among the team that is Black but trained in Western frameworks. As a team, ReFocus is designing the model as they go, since there is no blueprint. Their intention is not to create a flashy website, but rather to have a dashboard that truly prioritizes the community's concerns, including mental health issues.

Another limitation is making sure that once they have an appropriate website that is usable, with the representative layers, that people in fact engage with it and feel that it is indeed a useful tool and not another surveillance mechanism meant to suppress their communities.



"I think of systemic racism in America, and my own emotional trauma that I've been through, just growing up as a young person, as a young Black person, and as a young Black gay man."

Project **RE[FOCUS]** Reimagining Public Health Surveillance. Supporting Resilient Communities. For more information, visit www.projectrefocus.com

Case Study

Scholarship/JEDI

The Interview Access Gap for Black Engineers

College/School: College of Engineering and Architecture
Department of Electrical Engineering and Computer Science
Director of Program: Legend Burge and Katherine Picho-Kiroga
Email: lburge@howard.edu and katherine.picho@howard.edu
Website: <https://cea.howard.edu/articles/new-research-karat-and-howard-university-sheds-light-access-challenges-facing-black> and <https://karat.com/company/brilliant-black-minds>

How the program fits the themes of scholarship and JEDI

According to the US Bureau of Labor Statistics, Black engineers comprised just 6% of all computer programmers in the United States in 2020. The lack of diversity requires an active process to ensure more engineers of color participate in STEM careers. This research shines a light on both the challenges and the opportunities that exist to improve representation.

Program description

Howard University and Karat, the world's leader in technical interviewing, collaborated in research exploring the key factors that can help more Black software engineers enter the technology industry and excel in their careers. Three hundred Black computer science students and alumni from Howard University, Morehouse College, and The University of North Carolina at Charlotte participated. Howard and the program at Karat called "Brilliant Black Minds" produced a document called The Interview Access Gap for Black Engineers.

Program details

The Interview Access Gap for Black Engineers research identified a number of socioeconomic and systemic barriers young Black engineers face to get jobs in the technology industry. The research is co-authored by two faculty at Howard University: Dr. Legend Burge, Professor of Computer Science, and Dr. Katherine Picho-Kiroga, Assistant Professor of Educational Psychology.

The key finding of the research was that three important factors - structural inequities, lack of strong professional networks, and not having practiced for an interview - hinder Black engineers from starting their careers. Structural inequities included lack of access to a personal computer and delayed exposure to computer science education. Professional networks of Black computer engineers are very limited, with nearly 75% of survey respondents reporting that they knew fewer than five people working in big tech, and more than 25% reported knowing none. Finally, not having done any practice interviews decreased participants' confidence in succeeding in a technical interview; however, taking three practice interviews doubled the participants' confidence in succeeding.

These findings yielded recommendations that included adding more transparency to the hiring process and building methods for underrepresented software engineering candidates to practice technical interviews.

Program history

Following the Black Lives Matter movement and the racial reckoning in the US in 2020, Karat decided to reinforce its commitment to Black Americans by setting up a program called "Brilliant Black Minds." The program focused on empowering a new generation of Black software engineers, who are underrepresented in the field because of barriers to access as well as more systemic bias. In particular, the program identified one crucial step in the process of getting a job, namely, the interview process. Karat then began partnering with different organizations and institutions that serve Black software engineers and decided to approach Howard University.

Outputs and outcomes

Karat focuses on two main targets in its future roadmap: access and bias. In terms of access, Karat provided \$1M of technical interview practice for Black software engineers to fill the need identified through research conducted by HBCUs like Howard. Karat also plans to focus on further research on more inclusive technical interview formats that broaden the criteria used to make hiring decisions. This work is at its beginning stages, and the real impact on the industry and on the lives of Black engineers will take a while to be felt.

Limitations

From a research perspective, the pandemic significantly changed things. Gathering qualitative responses from the focus group was a challenge for the study. Scheduling also proved difficult, as the protocol required four interviews to be done, and not all participants were able to attend all of the interviews. Drumming up student engagement was yet another challenge. This challenge, however, enabled the researchers to understand some further barriers in this process, providing a basis for additional improvements in future research.



The Interview Access Gap for Black Engineers

Read the full report >

The Interview Access Gap for Black Engineers



Case Study

Learning/JEDI

Truth Be Told

College/School: Cathy Hughes School of Communication
Director of Program: Ingrid Sturgis and Yanick Rice Lamb
Email: ylamb@howard.edu
Website: <https://truthbetold.news/tag/howard-university>

How the program fits the themes of learning and JEDI

Journalism students need to learn how to navigate truths and facts, especially in a time of rampant disinformation. However, it is not always easy for such students to know what strategies they should use to uncover the truthful stories of their communities. Professors in Howard University's Cathy Hughes School of Communication created the "Truth Be Told" course for precisely this reason.

Program description

In today's media-saturated world, it can be hard to tell what information you can trust. "Truth Be Told" aims to empower students against misinformation and manipulation, through a course and an online platform that give them the intellectual foundation and the analytical tools to deconstruct news stories and to judge the reliability of news accounts, sources, and other information.

Program details

The course aims to empower students to participate as credible, trustworthy publishers, using the 21st century tools of blogs and social media such as Twitter, Instagram, Facebook, and YouTube. The course is also connected to the first collegiate fact-checking site called truthbetold.news. In partnership with PolitiFact, Howard University has created the website to focus on news and information about African Americans. The fact-checked data are featured in a variety of forms, and content ranges from political to humorous.

Students in the course develop their journalistic skills by examining claims about the Black community in public debate. The course serves as a fun-but-serious learning environment to teach about advanced reporting techniques in a way that engages them on platforms they are already familiar with. The students are typically required to produce at least one in-depth, fact-checked article with the intention of being published on truthbetold.news; two shorter, quick-hit fact-checks, or other content for publication on the site; and four short quizzes on current events, as well as class notes. Sometimes students work on a group project. In fall 2021, for example, students worked on a story and podcast entitled "Blackfishing" on the impact of companies that market themselves as black companies but are not black-owned.

Program history

The course started in 2015 as one of 11 winning projects selected by the Online News Association (ONA) for its Challenge Fund for Innovation in Journalism Education. ONA awarded funding from five foundations including the Knight Foundation and the Democracy Fund, which support new ventures in journalism and education. The course has two versions: a one-credit section and a three-credit section, which are cross-listed and meet at the same time. The one-credit course can qualify as one of three co-curricular courses that journalism students need to take. The three-credit course is an elective, which also encourages students to be involved in the public sphere of correcting information in real time on different social media platforms as well as to research and write journalistic fact-checks. The course has been taught over the years by a number of faculty, including: Shirley M. Carswell, Ron Nixon, Yanick Rice Lamb, Ingrid Sturgis, Jennifer C. Thomas, Fredric Kendrick, Hazel Trice Edney, and Ron Harris.

The website truthbetold.news launched in Fall 2015. It was created to teach students advanced techniques in interviewing, research, and writing and to provide a public service by examining cultural, political, and social claims made about the African-American community through journalistic fact-checking.

Community engagement

The course rose from the need to tell untold stories, to make online news content more diverse, and to correct misinformation and disinformation. Dr. Lamb states that often people of color are left out of the content and discussions. The course was intended to educate people, including peers - since many seem to have blinders on - about more in-depth issues. For example, environmental issues will impact different people, like Latinx or Indigenous people, in different ways, but often they get lumped together.

Outputs and outcomes

The course has attracted 150 students over its 8 years. Students taking the course have included journalism, audio and film majors. Many of the students taking the course will eventually publish on the website truthbetold.news, after an intensive review process. To date, there have been about 200 articles of various lengths produced on

the website, which has an annual average of 16,000 page views. Professor Lamb states that many of the facts posted get picked up by national media. To date, there are many pages of content on the website spanning 6 different themes: news, elections, fact-checking, art, entertainment, and enduring myths. The website provides one of the few fact-checking sites specifically focused on issues affecting the African-American community. Given its significance, it was awarded the 2015-16 Challenge Fund for Innovation in Journalism Education award.

Students have received instructional support and training from PolitiFact, the American Press Institute and Bloomberg, including a visit to Bloomberg's offices during spring 2022. They have also won awards from the Society of Professional Journalists and the National Association of Black Journalists. In addition, truthbetold.news has been presented to international delegations of journalists through the US State Department, a fact-checking summit at the National Press Club and social media, technology and journalism conferences.

Limitations

Disinformation is not easy to uncover, and there is only so much that students can do to really track and follow a story. Furthermore, even if courses like this one are preparing students of color with the tools to uncover more truthful stories about BIPOC communities, they don't always have the widespread outlets to enable such stories to have broad enough impact.

Acknowledgments

This work was supported by a generous grant from the PIT University Network Challenge, which is funded through the support of the Ford Foundation, Hewlett Foundation, Mastercard Impact Fund, with support from the Mastercard Center for Inclusive Growth, The Raikes Foundation, Schmidt Futures and The Siegel Family Endowment. We would also like to thank Dr. Wei Sun, Associate Dean for Research Academic Affairs, School of Communication, and Dr. Noha Hazzazi Assistant Professor, College of Engineering and Architecture, from Howard University, for their assistance.

“There has to be direct dialogue and communication from non-white medical professionals to educate and answer questions, especially from marginalized populations and those who have been intentionally deceived in the past by the medical profession.”





Suggested citation

El-Sayed, S. and Guston, D.H. Public Interest Technology Case Studies: Howard University.
School for the Future of Innovation in Society, ASU, Tempe, AZ, 2022.

