

News in focus

in a racial-profiling incident in New York City's Central Park. But in the wake of the murder of George Floyd in Minneapolis, Minnesota, the same month, more hashtags launched, including #BlackInTheVory on Twitter, which Black academics used to share their lived experiences of discrimination in academia. Over time, many of the campaigns moved beyond social media, transforming into organizations that plan events such as networking and professional-development workshops.

It wasn't a new idea, say organizers. "We've always been here," says Quincy Brown, a computer scientist in Washington DC and head of programmes at AnitaB.org, a non-profit organization that supports women in technology fields. Black scientists have been fighting for recognition for decades, and she points out that the Black In X movement's social-media advocacy stands on the shoulders of campaigns including #BLACKandSTEM, founded in 2014, and #VanguardSTEM, founded in 2015, which are still active today. But the deluge of events in mid-2020 galvanized efforts like never before.

One thing that stands out to leaders is the popularity of Black In X. "We were almost a little blindsided by the amount of people who wanted to connect with us," says Berry, a computer and electrical engineer at Rose-Hulman Institute of Technology in Terre Haute, Indiana. Berry says that soon after she and her colleagues launched #BlackInEngineering in June 2020, Black researchers interested in organizing their own Black In X events began coming to her and other campaign leaders asking for advice and guidance.

As leaders came together to share knowledge – and as the media began discussing the movement as a whole – Berry and others realized that there was an opportunity to form a larger network to collectively confront anti-Black racism in their workplaces.

Similar to earlier groups, today's Black In X organizations help Black scientists to feel connected with others, even if they are the only Black person in their university's science department, says Grandison. Virtual events also provide opportunities for participants to geek out over their research with other scientists, organizers say. "We're creating space for us to show off and highlight what we do in our technical discipline," says Brown, who is a leader of Black In Computing and Black In Robotics. "A lot of times, people want to look at us with a DEI [diversity, equity and inclusion] lens, and not as scientists, not as engineers, not as experts in our field."

The next level

Black In X leaders tell *Nature* that they are proud of how their collective efforts have helped to amplify the voices of Black scientists, but there is still much work to be done to dismantle oppression in science – work that

requires direct action by institutions. "The onus is not on us to fix racism in the academy," says Samantha Theresa Mensah, a materials chemist at the University of California, Los Angeles, and co-founder of #BlackInChem.

On 10 June last year, thousands of researchers worldwide shut down their laboratories to plan actions they and their institutions could take against systemic racism, under the banners #ShutDownSTEM and #Strike4BlackLives. Universities, professional societies, academic publishers and journals, including *Nature*, issued statements condemning racism in their organizations and promising to take concrete steps to implement anti-racist policies.

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A year later, although many organizers feel that they have support from their colleagues, "it hasn't gone beyond statements" at the institutional level, says Grandison. (In an Editorial in May, *Nature* reported on initial steps it had taken in the year after its #ShutDownSTEM commitment, and acknowledged that there is much more to be done; see *Nature* 593, 313; 2021).

Shirley Malcom, director of STEM Equity Achievement Change at the American Association for the Advancement of Science in Washington DC, agrees that institutions are dragging their feet. Malcom works to transform institutional support for historically marginalized

scientists. After four decades promoting DEI in STEM, "I've remained impatient," she says, "but I'm also mindful of the fact that change takes time." Malcom is heartened by the progress these movements have already made: "We have to celebrate every win, every milestone."

To keep making progress, Black In X leaders say they need financial support. "The more impact we can make, the more we can normalize, amplify and promote Black STEM. And to do that, we need more eyes on us and more resources," says Berry, who is working to establish non-profit status for Black In Engineering.

Funding would also help leaders to compensate organizers who volunteer their time to keep the movement going. "This culture of volunteerism takes people away from their studies, or from their area of disciplinary expertise," says Brown.

Organizers also emphasize that non-Black allies, especially those in positions of power, need to step up to lighten the burden for the Black scientists who are the target of systemic racism. Many member organizations of the Black In X Network list actions on their websites that allies can take. "Racism is a white-people problem that affects Black people," says Grandison. "For us to even have the slimmest chance of actually fixing the current system, it has to be done with the people that [control] the levers, which are not Black people at this point."

Zemen Berhe, a photochemist at the University of Massachusetts Dartmouth and a founder of Black In Swimming, hopes that the recent conference, and the success of Black in X, will inspire a new generation of Black scientists simply by demonstrating that "we are here, and we are here to stay".

KILLING AT CHINESE UNIVERSITY HIGHLIGHTS TENSIONS OVER TENURE

Academics are under great pressure to publish papers, but face uncertain futures.

By Smriti Mallapaty

The killing of a mathematics faculty member on a Shanghai campus has sent shock waves through China's research community. The motive for the fatal stabbing remains unknown – but the suspect is a researcher at Fudan University, and the tragedy has stirred up debate over what many researchers argue are flaws in China's tenure-track system.

According to Fudan University, Wang Yongzhen, 49, the secretary of the Communist Party of China at the School of Mathematical Sciences and a former deputy dean, was killed on the university's Shanghai campus in the afternoon of 7 June. The police identified the suspect as a 39-year-old man named Jiang, who, they announced on 21 June, had been charged with "suspicion of intentional homicide".

Fudan University later issued statements "expressing deep condolences for the tragic



Fudan University, where a faculty member was killed on 7 June.

murder of Comrade Wang Yongzhen". Wang was hired by Fudan University as an associate researcher in 2007, and held several senior administrative roles there.

In a 17 June statement, the university fully named the suspect as Jiang Wenhua, a researcher in the school's department of probability, statistics and actuarial sciences, who has published several papers on statistics. Jiang is on a tenure-track employment scheme, which some of China's leading universities have modelled on that of US universities.

Examining tenure system

A video that has circulated online, from an unverified source, reportedly shows Jiang at the scene of the crime, kneeling on the ground while being questioned by police. The filmed suspect informs the police that he had been treated badly.

Fudan University did not respond to requests for comment on possible issues with China's tenure-track system. But researchers say that, irrespective of what motivated the stabbing, the incident highlights the stressful tenure process and shows that the system needs to be examined.

Fudan University says Jiang was hired in September 2016 on a three-year contract, with the chance of a second three-year contract following a review – and the prospect of gaining permanent employment, or tenure, at the end of the six years.

This 'three-plus-three' scheme is common at Chinese universities, say researchers. Similar systems are in place at US institutions, where tenure is typically granted after about six years, and include annual evaluations with three-year contracts.

However, Fudan University says Jiang's initial three-year contract was not renewed

because he had not met contractual obligations – details of which have not been made public. The university says it agreed to give Jiang two extensions, each for one year: the first in July 2019 and the second in November 2020. However, before the incident on 7 June, the university says, it had made no decision to end Jiang's contract. But this hasn't stopped speculation online that the motive for the crime was related to the potential loss of his employment.

Precarious employment

Researchers say Jiang's precarious employment situation is not uncommon at Chinese universities. In one widely cited example from Wuhan University, only 3% of tenure-track

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candidates there passed their first 3-year assessment. By comparison, 50–60% of tenure-track candidates at many US institutions typically succeed, although rates vary and the proportion of tenured US faculty members is declining overall.

The problem is not with the tenure-track system as such, but with its discretionary implementation at particular institutions, argues Rao Yi, a neuroscientist and president of Capital Medical University in Beijing. The three-year review is intended to support junior faculty members on their path to tenure, and the majority of candidates should pass this assessment, he says.

Even candidates who meet all their

requirements for tenure are often not successful because positions are limited, says Shu Fei, a bibliometrics scientist at Hangzhou Dianzi University in China and the University of Montreal, Canada, where he is based. Universities often over-recruit and push young researchers to publish lots of papers, which helps to drive up their rankings, says Shu. “Chinese universities try to abuse the tenure-track system to their advantage,” he says. “Many Chinese young scholars are very angry.”

Failed candidates typically have to accept administrative roles or must find employment elsewhere. Furthermore, many “are not fully informed of the tenure process and the low tenure rate”, so the loss of their employment can come as a shock, he says.

Inconsistent criteria

Researchers also say that decisions to renew contracts or grant tenure are often based on personal connections rather than on academic merit, which has generated “a strong sentiment of unfair treatment”, says Joy Zhang, a sociologist at the University of Kent in Canterbury, UK, who says she has heard similar complaints during her many years of research in China.

One recent blogpost by an anonymous Chinese academic about problems with the tenure-track system at domestic universities says the suspect's actions, although indefensible, should teach universities a lesson that “young people must not be bullied”.

“Universities should make more efforts to build a stronger mentorship system, especially for young and newly recruited faculty members,” says Futao Huang, a researcher in higher education at Hiroshima University in Japan.

Although China has adopted the criteria of the US tenure-track system in theory, “in practice, there are often large disparities among how these criteria are applied”, says Zhang.

Rao argues that, in places where the system has been applied as intended, it has proved “far better than any of the other alternatives previously used”, in which researchers were either guaranteed lifetime employment on arrival or had to undergo annual reviews. He gives the examples of Tsinghua University and Peking University, both in Beijing (Rao previously served as dean at the latter).

The tenure system was designed to give tenured academics financial security and academic freedom to pursue research of their choosing. Chinese universities began adopting the system several decades ago.

In theory, the system should be fair because all positions are recruited through open competition, not by internal appointment, adds Rao. But “the tenure system has effectively functioned in only a few Chinese universities so far”, he says.

A full police investigation of the incident at Fudan University is under way.