

► The messages are part of Mexico's broader reckoning with sexual harassment and assault, which in recent years has spilt onto social media with hashtags such as #MiPrimerAcoso ('My first harassment'). The latest tweets also contribute to science's #MeToo moment — a growing awareness of sexual misconduct in research settings, and the harm it causes.

The outpouring in Mexico has prompted a fierce public discussion about the prevalence of sexual harassment and assault in the country's universities, and the part that educational institutions should play in confronting and preventing such behaviour. Some researchers are pushing universities to take stronger action against sexual misconduct in laboratories and classrooms, and at scientific meetings.

But change must also come from scientists themselves, says Antígona Segura, an astrobiologist at the Nuclear Sciences Institute of the National Autonomous University of Mexico (UNAM) in Mexico City. Those who harass or assault others "should feel that we're going to condemn them for doing these things", says Segura, an outspoken voice in the debate over sexual harassment in Mexican science. "That we consider the lives of young students so important that we will not allow anyone from our community to ruin them."

Research by Ana Buquet, director of UNAM's Research Center for Gender Studies, and her colleagues suggests that Mexican academia has far to go. The team last year published results from its survey of the steps that 40 universities and research centres have taken to ensure gender equality — including policies to prevent, monitor and punish sexual harassment and assault. The institutions, spread across Mexico, scored an average of just 1.5 points out of 5.

"We have serious problems in dealing with gender-based violence in higher-education institutions," says Buquet, who plans to update the survey each year. "The authorities can no longer shun the issue."

Even some of the universities that ranked highest in the survey have faced criticism over their policies. In 2016, UNAM — a giant of Mexican higher education, which enrolls about 340,000 students across roughly 20 campuses — implemented its first protocol to address gender violence. (The term is widely used in Mexico to refer to sexual harassment, assault and abuse.) The original version of the policy gave adults who had been the subject of such behaviour up to one year after an incident to file a complaint, a condition that UNAM eliminated in March in response to an outcry from students.

The latest version of the protocol says that UNAM made the change after it "evaluated the strengths and weaknesses of the instrument". The university declined to comment further on the rationale for the switch. But it says that the protocol has prompted a spike in gender-violence complaints: 485 in less than three years, compared with just 396 from 2003 to 2016.

But telling people who have been harassed or assaulted in academic settings to report what happened is not enough by itself, says Socorro Damián, a feminist lawyer at the Metropolitan Autonomous University in Mexico City. Although Mexico's criminal code and federal laws prohibit anyone in a position of power from sexually harassing or assaulting subordinates, she says, officials at the country's

universities often discourage students from reporting incidents — and in some cases, actively delay ongoing investigations.

"It's always a question of protecting the prestige of the university at the expense of the human rights of students," says Damián.

UNAM's general counsel, Mónica González Contró, rejects any suggestion that her university does not adequately evaluate claims of sexual harassment and abuse. Since UNAM put in place its protocol for handling complaints in 2016, the university has sought to ensure that victims of sexual harassment and abuse can "file a complaint without re-victimization, and with legal and psychological support during the procedure", she says.

Others want universities to work harder at preventing sexual misconduct, not just punishing it. María Ávila, a population geneticist, underwent mandatory training on reporting and preventing sexual harassment in 2014 as a new postdoc at Stanford University in California. At first, she was sceptical, but now, as a researcher at UNAM in Querétaro, Ávila sees value in such training. "It's important for the community to have that agreement," she says. "To know what's right, and what isn't."

But such changes in Mexican academia might come too late for some. After her experiences at the conference where she presented her research, Dana abandoned hopes of a career in science and dropped out of university. "I didn't feel worthy of being in a good lab with a good researcher," she says. "I was dying of shame."

Now, years later, Dana is planning to start her own business. She also often thinks about filing a harassment complaint against her former adviser with the university where he still works. "I don't hate him," Dana says. "I just want it known that he's a pig." ■

RESEARCH CULTURE

Max Planck conducts huge bullying survey

Thousands of employees took part in a social study after high-profile bullying scandals emerged last year.

BY ALISON ABBOTT

Most of the scientists who work for one of the world's richest and most prestigious basic research organizations, the Max Planck Society (MPS) in Germany, have pride and trust in their institutes. However, cases of sexual discrimination and bullying occur regularly, and nearly half of foreign scientists working

for the MPS don't feel that they fit in.

These are some of the findings of a huge survey of the society's staff and its working culture, which analysed answers from more than 9,000 people, or 38% of MPS staff, at the society's 86 research institutes. The society commissioned the survey after two high-profile bullying scandals last year involving research directors. The draft conclusions were presented at the MPS annual meeting on 27 June in Hamburg.

"I wanted to get a picture of the general mood in the society so that we can base our responses to any problems on a more thorough understanding of how the society works," says MPS president Martin Stratmann. The survey was conducted independently by sociologists at the Berlin-based Center for Responsible Research and Innovation, part of the Fraunhofer Society, Germany's main applied-research organization.

BULLYING AND HARASSMENT

Overall, 76% of staff members who responded said they were proud to work at their organization and 84% said they would go above and beyond to support their institute's success.

But about 10% said they had experienced bullying in the past 12 months, and 17.5% said they had done so over a longer period — figures similar to those found by surveys in countries including the United States. The incidence of gender-based discrimination or sexual harassment — reported by nearly 4% of respondents in the past 12 months — was below that found in other similar surveys (see 'Working culture').

SOURCE: MAX PLANCK SOC.

That doesn't excuse any case, says Stratmann, adding that he is committed to a zero-tolerance approach to both issues. The survey comes as the international academic community grapples with issues of bullying, which have emerged in the past year or so. However, many academic institutions have not had formal bullying policies or definitions of the behaviour. Stratmann says that the MPS is creating a code of conduct for bullying in response to the results, and is rolling out mandatory training.

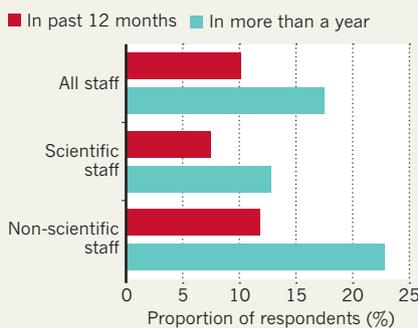
The survey also found that more non-scientific staff members than scientific ones felt that they had been bullied — 23% compared with 13%. And 14% of women said they had experienced sexual harassment in a period longer than the past 12 months. But unexpectedly, says Stratmann, women in leadership positions reported experiencing sexist behaviour at a higher rate than others — 26% of directors and group leaders, compared with 23% of postdocs and 25% of PhD students.

“The Max Planck survey shows an

WORKING CULTURE

The Max Planck Society in Germany conducted a huge social study of its staff and received more than 9,000 responses. The results will inform the development of policies on topics including bullying.

Have you been bullied?



apparently lower level of bullying than other academic surveys — but what really matters is that they say that the level they

observe is unacceptable, and plan to do something about it,” says Loreleigh Keashly, an occupational psychologist at Wayne State University in Detroit, Michigan, who specializes in workplace bullying.

Different people — for example, those from different cultures — might not consider the same types of behaviour to be bullying. So the survey asked respondents whether they had experienced particular behaviours that are indicated in the social-science literature to be bullying, such as having opinions ignored or being unfairly blamed, publicly humiliated or shouted at. Around 60% reported having experienced one or more such behaviours.

The MPS's international make-up was another focus of the survey: 36% of research directors there are from outside Germany, as are 75% of postdocs. But 45% of the non-Germans working at MPS institutes felt excluded. “We have to be really worried about this,” says Stratmann, who speculates that one reason for this could be language barriers. ■

PUBLIC HEALTH

US opioid crisis is driving a spike in infectious diseases

Researchers around the country are scrambling to understand and identify the outbreaks.

BY SARA REARDON

Opioid addiction kills tens of thousands of people in the United States every year, and the trend shows no signs of slowing. Now, public-health officials are worried about a surge in bacterial and viral infections linked to opioid misuse that threatens to compound the crisis.

The surge includes an unprecedented rise in bacterial infections — including those caused by *Staphylococcus aureus*, a bacterium that's frequently resistant to antibiotics — and a spike in new cases of HIV and hepatitis associated with opioid use that risks undoing decades of progress against these diseases.

Research groups around the country are working to understand, identify and treat the outbreaks. But the lack of solid data on the number of new cases, and where they'll crop up next, as well as the stigma associated with drug use that can prevent people with infections from seeking early treatment, is hindering efforts.

“This is like HIV all over again,” says Judith Feinberg, an infectious-disease physician at West Virginia University in Morgantown, comparing the current crisis to the HIV epidemic

that dominated US public-health efforts in the 1980 and 1990s. “People are stigmatized; they don't feel they deserve to live. They hear people say it's a lifestyle choice.”

Over the past 20 years, the use of opioids, including prescription pain medications, heroin and synthetic drugs such as fentanyl,

has skyrocketed in the United States. In 2017, there were roughly 15 opioid-overdose-related deaths per 100,000 people in the country, compared with 3 per 100,000 in 1999, according to estimates from the US Centers for Disease Control and Prevention.

One type of opioid-related infection that ▶



Misuse of opioids such as heroin has led to a surge in diseases including HIV, risking years of progress.

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