INFRASTRUCTURE

Labs not ready for disasters

Facilities need to protect equipment and animals.

BY SARA REARDON

When Hurricane Sandy hit New York City in 2012, it destroyed scientific equipment worth more than US$20 million at New York University's (NYU's) Langone Medical Center. Five years later, many research institutions in the United States are still unprepared for disasters, according to a 10 August report by the US National Academies of Sciences, Engineering, and Medicine.

The report examined what happened to research facilities during past disasters, asked people how they had changed their policies and procedures, and consulted with disaster and risk-management experts. It recommends that universities and scientists protect biomedical research from emergencies on all scales, including natural disasters, cyberattacks and terrorism (see go.nature.com/2wihzko).

Biomedical research is especially vulnerable, says lead author Georges Benjamin, executive director of the American Public Health Association, a non-profit organization in Washington DC. Insurance companies may cover expensive machinery, but resources such as strains of engineered mice and cells are irreplaceable, and it is hard for the companies to quantify their value. Researchers at NYU lost 751 lines of genetically modified animals that existed nowhere else.

The report recommends that institutions appoint a "chief resilience officer" who can handle contingency plans for various scenarios and institute mandatory training for staff to prepare them for emergencies.

Researchers should take responsibility for protecting their own work by ensuring that the most critical data, samples and resources are duplicated and stored at other locations, says Benjamin. It is also important that institutions re-evaluate whether their current risk assessments are accurate in the light of threats such as climate change, he adds.

The report says that funders such as the US National Institutes of Health should do more to help pay for equipment and infrastructure redesigns and preparedness efforts. Institutions are becoming better about such preparation, says report co-author Bradford Goodwin, former animal-facilities director at the University of Texas Health Science Center in Houston. But most people still think it will never happen to them, he says. "We've got to change that attitude." ■

JAGADEESH NV/EPA/REX/SHUTTERSTOCK

Students and researchers rally for more science funding in Bangalore, India.

INDIA

Thousands march in support of science

Protestors in India demand respect for research.

BY T. V. PADMA, DELHI

Thousands of scientists, university students and science enthusiasts gathered in dozens of Indian cities to march in support of science on 9 August — lamenting their country's low levels of funding for research, and complaining about government promotion of 'unscientific ideas'.

But several scientists *Nature* spoke to said they had stayed away, either because they had been asked not to attend or because they feared repercussions from higher authorities. These researchers included some at the Institute of Genomics and Integrative Biology (IGIB) in Delhi, who said the institute had sent an e-mail directing them not to take part in the march, without specifying a reason.

The Indian demonstrations come four months after the global March for Science on 22 April, which saw people gather in at least 600 cities around the world to support scientific research and evidence-based policymaking. On that day, only two Indian cities, Hyderabad and Coimbatore, took part. "We felt that the global march was more to do with the [US President Donald] Trump administration's anti-science perspective, and not related to Indian science problems," says Satyajit Rath, an immunologist at the Agharkar Research Institute in Pune who attended a march in his city on 9 August. "In retrospect, we should have participated more keenly in the global march," he says.

Some 40 cities across India saw marches last week, says the Breakthrough Science Society, an advocacy group headquartered in Kolkata that coordinated the events. More than 1,000 people marched in the southern city of Bangalore, the society said. In Delhi, India's capital, some 200 people took to the streets, carrying placards with messages such as "Defend science, not defund science". Asked why IGIB scientists had been told not to attend, institute director Sanjay Kumar said that it was a safety measure.

The March for Science events focused attention on India's stagnant investment in research and development. Successive governments have promised to raise investment to 2% of gross domestic product (GDP), but the proportion invested has remained around 0.9% for the past decade. March organizers say the government should invest 3% of GDP in research. But Ashutosh Sharma, secretary of India's Department of Science and Technology (DST), disagrees in part with the complaints. Funding for India's ministry of science and technology (which allocates cash to the DST among other agencies) has risen by double-digit percentages annually since 2014–15, he points out — outstripping the country's economic growth.

The marchers also protested against the government's support for what they call unscientific ideas. Rath cites a government push for research institutions to investigate the health benefits of cow products such as milk and urine, apparently motivated in part by religious groups' veneration of the cow as a sacred animal. "It is incumbent upon the representatives of the government to acknowledge that scientific knowledge is based on free and open enquiry," Rath says. "Research should not be used for validation of prejudices and ideology." ■