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Protestors flocked to support the Hungarian Academy of Sciences' battle to regain control of its finances.

ACADEMIC FREEDOM

Hungarian science struggle sparks protests

Hungarian academy says innovation ministry is unfairly taking control of its budget.

BY ALISON ABBOTT

An escalating stand-off between the Hungarian Academy of Sciences (HAS) and the nation's innovation ministry has sparked protests in Budapest after a ministry decision that academics say represents a threat to the nation's science community.

Hungary's innovation and technology minister, László Palkovics, said on 31 January that he would use the 17 billion forint (US\$60.2 million) meant to pay the academy's running costs to help finance a 27-billion-forint ministry-led call for research proposals. The call extends beyond the academy's institutes to include universities and government-run research institutes across Hungary.

The move provoked outrage among scientists and members of the academy, which is responsible for most of Hungary's basic research — and marks the latest skirmish in a

six-month battle between the academy and the nation's populist government, which scientists say is trying to take control of their budget and erode the academy's independence. Palkovics says that his department is carrying out a necessary reorganization of Hungary's research landscape to improve innovation. But the academy says it has mostly been excluded from the negotiations about the reforms. What's more, academics say uncertainty about the future of science in Hungary is driving talent away.

The academy held an emergency meeting on 12 February to decide how to respond to the ministry's decision, during which hundreds of scientists and their supporters formed a human chain around the HAS building in a gesture of protection. Academy members complain that the call, which has a deadline of 28 February, is too hasty and that the ministry has not explained how submissions will be evaluated and selected. Critics also say that

there may be no legal basis to divert money budgeted for the academy in this way.

"This was unacceptable," says László Lovász, a mathematician and president of the academy, which runs 15 independent research institutions and has more than 130 research groups in universities. "We would be competing for our own running costs — we wouldn't be able to propose spectacular science, and spectacular science is what we need to be doing."

The HAS says it has resolved to challenge Palkovics directly. At the emergency meeting, the academy decided that Lovász will collect applications from academy research institutes but pass them on to the minister only if he guarantees to return their basic running costs.

The struggle between the academy and Palkovics follows a government decree passed last summer, ordering a restructuring of the HAS's network of institutes. In December, Palkovics announced he would withhold the

running costs until the end of March, by which time a new structure should be in place — although academy members' salaries are being paid. But scientists say that he has not come up with concrete proposals for how the reform process will work in practice, and has ignored their suggestions.

DETRIMENTAL EFFECTS

The turmoil has provoked several letters of dissent, including one on 15 February from ALLEA, an umbrella group of European science academies based in Berlin.

And on 7 February, about 100 winners of the academy's prestigious Momentum awards — grants designed to encourage talented young scientists to return to or remain in Hungary — published a letter to Prime Minister Viktor Orbán expressing concern about the restructuring and complaining that the reforms are being pushed through without negotiations with the organizations involved. "It is our firm request," it says, "that the hasty and ill-founded process of restructuring the funding of Hungarian research and innovation be suspended immediately."

A politically conservative group called the Batthyány Society of Professors also stressed in an open letter to Lovász and Palkovics that institutes must have guaranteed basic funding and should not have to rely on project money awarded through contests.

In its letter, the group also proposed the creation of a foundation to run the academy institutes. The foundation's governing body would be delegated by the Hungarian government and its scientific council would comprise scientists — a suggestion that Palkovics told *Nature* he endorses. Palkovics said that reforms of the research landscape are necessary because Hungary fares poorly on innovation scoreboards. "Protests occur whenever changes are introduced," he said.

Lovász says that the foundation idea represents the first concrete proposal to move reform plans forwards. "But it could only be accepted under the conditions of freedom of research from political interference and a maintenance of the research network," Palkovics told *Nature* that he welcomed the opportunity to negotiate with academy leaders.

Young scientists in Hungary contacted by *Nature* are wary of speaking on the record, because they fear it could damage their careers. One Momentum grant winner who is seeking a job abroad told *Nature* that he was finding it increasingly difficult to recruit foreign or Hungarian postdocs and PhD students to his lab because of the deteriorating political situation — even though he has a large grant that allows him to pay internationally competitive salaries. It is getting harder to carry out high-level research in Hungary, he says: the "ill-considered restructuring of the academy" spurred his decision to look for jobs elsewhere. ■

PUBLISHING

Payment-for-papers plan rattles scientists

Researchers say Indian policy could intensify misconduct.

BY GAYATHRI VAIDYANATHAN

Indian scientists are criticizing a proposal by the government to pay graduate students who publish in select journals. They fear that it could degrade the quality of research and lead to an increase in scientific misconduct, by incentivizing publishing rather than good science.

Under the proposal by a central government committee, PhD students who publish in "reputed" international journals would receive a one-time payment of 50,000 rupees (about US\$700), while students who publish in select domestic journals would earn 20,000 rupees. The cash bonuses for publishing are more than a typical graduate student's monthly stipend.

The committee says their recommendations are designed to improve the value and quality of doctoral research. Various pay-to-publish schemes have been reported in other countries, such as China, South Korea and South Africa.

India's government has yet to accept the proposal, but academics there say evidence suggests these schemes will not improve the country's issues with research quality.

QUALITY ISSUES

Papers published by scientists in India are cited much less frequently than papers from China or the United States, according to a 2014 analysis by the publishing company Elsevier for the Department of Science and Technology (see go.nature.com/2scg0c9q). Indian funding agencies closely track such metrics when assessing scientists for grants, promotions and fellowships.

One of these systems, managed by the University Grants Commission, India's higher-education regulatory and funding agency, is used to assess academics' performance. It places considerable weight on the number of research publications, says Gautam Menon, a computational biologist at The Institute of Mathematical Sciences in Chennai.

This reliance on metrics has pushed some scientists to game the system by publishing frequently without regard to the quality of their research, says Arunan Elangannan, an inorganic chemist at the Indian Institute of Science in Bengaluru. Papers by Indian scientists are retracted at about twice the rate of papers from the United States, according to an analysis using data from Retraction Watch, a blog that tracks academic misconduct.

A pay-to-publish scheme will exacerbate these problems, says Mukund Thattai, a computational biologist at the National Centre for Biological Sciences in Bengaluru. Incentives for publishing could push some scientists to engage in fraud and plagiarism, says Thattai. "This is an absolute incentive to game the system," he says.

But Ashutosh Sharma, the secretary of the Department of Science and Technology in New Delhi, says the scheme is about incentivizing quality research, as reflected in a paper. Publications are one of the few indicators on which a PhD student's work can be judged, says Sharma. "This is about encouraging [and] motivating students who are doing quality work"

Indian scientists are also critical of the committee's recommendation to reward manuscripts in international journals with

higher payments than papers in Indian titles. This implies that Indian journals are less prestigious, and that reputation might in turn cause them to attract only sub-standard manuscripts that would further degrade the journals' quality, says Subhash Lakhota, a zoologist at Banaras Hindu University in Varanasi. The proposed scheme could damage India's scientific publications overall, he says.

The incentives could also make it harder for Indian scientists to publish in international journals, says Thattai. Some editors are already wary of submissions from the country because of the number of retractions and misconduct cases, he says. Incentives that increase the number of submissions could make editors more cautious about Indian papers, he says.

A 2011 study of nations that offer cash incentives found that although the number of article submissions to the journal *Science* increased following the introduction of these policies, the acceptance rate of papers from those countries dropped (C. Franzoni *et al.* *Science* 333, 702–703; 2011).

Sharma says the government has set up a second committee to consider the publishing proposal. Menon and other scientists would rather the government funded more PhD research and increased the number of permanent positions for scientists in state-funded universities before introducing cash bonuses for publications. ■

"This is an absolute incentive to game the system."