

tion of IRSA, was a funding crisis that—even by recent Irish standards—can only be described as extreme. In May of last year, with its budget for basic science down to a mere \$3 million, Eolas announced that it couldn't fund any new research projects. The government relented in August and gave Eolas \$240,000 to launch some new projects, but by then IRSA's campaign against the government's "anti-science" attitude had gained momentum, forcing science onto the Irish political agenda.

A letter-writing campaign orchestrated by IRSA and targeting newspapers piqued the interest of the press, leading to news reports and editorials documenting the plight of Irish science. The government responded in September when Seamus Brennan, Minister for Commerce and Technology, announced that STIAC was to be formed to review science policy and make recommen-



Center of excellence. Trinity College Dublin, one of Ireland's top research universities.

dations. Its report, due at the end of the year, will be the first comprehensive review of Irish science in more than 20 years. After it is submitted to Brennan, he is expected to produce a white paper, or policy document, outlining the government's future science strategy.

Although confident that the report will show the government that their complaints are justified, basic researchers are aware that there's no guarantee that any additional funding will end up in academic labs. Indeed, Ireland's main applied research lobby, the Industrial Research & Development Group (IR&DG), has begun its own media campaign to argue for continued emphasis on industrial research. "The chance of a huge breakthrough from a small economy like Ireland's is fairly slim," argues IR&DG's Dick Kavanagh. For that reason, he wants to see Ireland's spending on science focus on adapting current knowledge rather

than hoping for homegrown innovation.

The government, which has already promised \$154 million for industrial research over the next 6 years, is likely to be receptive. Indeed, since Ireland is currently suffering from a crippling 15% unemployment rate, it is widely expected that it will continue to emphasize research as a way of creating new jobs and increasing industrial competitiveness.

Hopkins and his IRSA colleagues are planning to keep up the pressure for basic research when they meet with STIAC this week. "We have a strong export-led economy, a well-educated and well-trained workforce. The only weakness is high unemployment and the fact that most of our best and brightest young people emigrate annually," he says. Pharmacologist John Donovan of University College Dublin agrees: Doing research in Ireland, he says, is "a little like driving a Ferrari in first gear. The driver will never know what it can do." Irish scientists are waiting to see if Brennan's white paper will provide a long-overdue shift of gear.

—Lisa Seachrist

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FRENCH SCIENCE

CNRS Head Orders a Brief Freeze

PARIS—The heads of the 1350 laboratories that make up the Centre National de la Recherche Scientifique (CNRS)—France's largest public research agency—got a nasty shock when they returned from their August holidays last week. On their desks was a letter from CNRS's new director-general, Guy Aubert, directing them to suspend all orders of supplies and equipment during the month of September.

Aubert said the freeze, which applies to research funded by CNRS and to contracts from other agencies administered through the organization, was prompted by the fact that the agency appears to be in the red. Some estimates have put the deficit at about \$50 million. The problem, he said, is CNRS's incoherent accounting system, which authorizes its scientists to spend a certain amount of money each year but then does not guarantee that the funds are actually in the bank. Aubert indicated that the freeze is a temporary measure until he completes a review of this system.

Aubert, a physicist who earned high marks in his previous post as director of the prestigious Lyons Ecole Normale Supérieure, was appointed in July to replace immunologist François Kourilsky, who had been an outspoken advocate of increased research spending. His appointment was widely regarded as a sign that the government wanted somebody more in tune with the need to

limit public expenditures. However, he insisted in the letter, and in an interview with *Science*, that the directive should not be seen as a harbinger of future cuts. Nevertheless, the announcement has sent tremors of dread through the ranks of CNRS scientists. "Some people around here are panicking," says Richard D'Ari, head of the microbiology department at the Jacques Monod Institute in Paris.

The threat of budget cuts "hangs like a sword of Damocles over our heads."

—Guy Aubert

Already, 8% of the 1994 French research budget has been withheld, with no indication as yet of if and when the funds will be released. And many researchers fear that the 1995 budget will contain more bad news. Aubert is trying to obtain additional funds to help wipe out his agency's deficit. But he acknowledges that the current pressure to control public spending means that the threat of cuts "hangs like a sword of Damocles over our heads."

That's particularly worrisome for small CNRS labs, many of which have not found funding from industry or other research agencies to supplement their CNRS income. And even those with alternative funding sources are worried about the future. "If they block the credits for a while, we can live with that," says Anne-Marie Duprat, director of the Center for Developmental Biology in Toulouse, which is run jointly by the city's university and CNRS, receiving only 30% of its funds from the research agency. "But if this is followed by cuts, that would be dramatic," she says.

In taking steps to get a handle on CNRS's finances, Aubert is doing what the conservative government hired him to do—and the reward, he hopes, will be that CNRS escapes the harshest of the government's austerity measures. As for his future plans, leading French scientists speculate that Aubert will next turn his attention to what is widely seen as an imbalance in the organization's spending: 76% of its \$2.2-billion budget is eaten up by salaries, squeezing funds for research. For now, Aubert declines to discuss his plans in detail, but CNRS scientists can expect changes ahead. He promises "a quite significant reorganization" of the way CNRS conducts its research. "I didn't come here to stand by the door and hold the keys."

—Michael Balter

Michael Balter is a science writer in Paris.