IRELAND

# Scientists Still Waiting For Promised Reforms

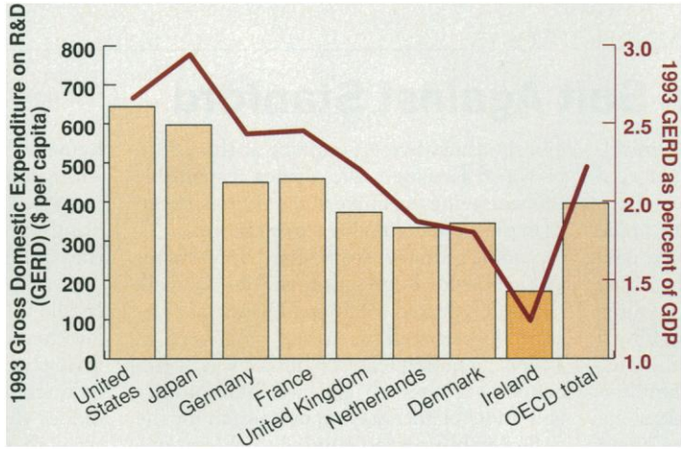
DUBLIN—In July, Ireland took over the presidency of the European Union (EU), a post that passes to a different member country every 6 months. Prime Minister John Bruton says he will put negotiations over the EU's research and development programs—which are up for renewal in 2 years' time—high on his agenda. Back home, Ireland's own basic researchers wish they could be so lucky. They have been waiting in vain for more than a year for a sign that the government has put their concerns high on its agenda.

Early last year, the government promised to issue a white paper outlining its policies for Ireland's science and technology. The document was supposed to be the official response to a sheaf of recommendations—including proposals for a sharp increase in funds—that had been put forward by a high-level panel. But so far, the silence has been deafening and researchers are running out of patience. "I think it's less and less likely we will see anything," says physicist David Fegan of University College Dublin, president of the Irish Research Scientists' Association (IRSA), a lobbying group. "There seem to be no votes in science," he sighs. Adds Anita Maguire, a chemist at University College Cork, "The importance of science and technology to the economy has not yet been fully recognized."

The research community's central complaint is that Ireland spends a mere $3.5 million a year on basic research, and its total spending on R&D is low compared with its neighbors—accounting for 1.2% of its gross domestic product compared with an average of 2.2% for all member countries of the Organization for Economic Cooperation and Development (OECD). In some European countries graduate students are paid more than $15,000 a year to study for a Ph.D., but until this year Ireland paid some of its students one-tenth that amount. Such privations have led to a steady flow of bright and talented scientists abroad.

Three years ago researchers decided to take matters into their own hands: They formed IRSA and mounted letter-writing campaigns and a media onslaught. The effort was remarkably successful. "I think the government was genuinely surprised by the ferocity of scientists' feelings," says Fegan. The government reacted in 1994 by appointing a committee to look at all aspects of science and technology policy—the first time this had been done in more than 20 years.

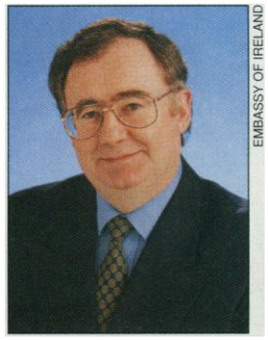
The Science, Technology, and Innovation Advisory Council (STIAC) was headed by industrialist Dan Tierney and contained a strong contingent of academic researchers. Its report, published last year, outlined wide-




SOURCE: OECD

spread reform of the management and coordination of research and development both in business and in the public sector, but the crux of its recommendations was the need for substantially more cash—a minimum additional funding of $37 million was needed just to begin to implement its proposals.

Shortly before STIAC issued those recommendations, a general election brought Bruton's coalition government to power. The STIAC report could have been forgotten, but the new government set off on the right foot: Bruton appointed Patrick Rabbitte as the country's first Cabinet-level minister for science, and Rabbitte quickly welcomed the STIAC report. He set up a task force under John Travers, head of the government's science policy agency, Forfás, to study how the STIAC recommendations might be implemented. The STIAC report made more than 160 recommendations including a boost in basic research funds to $9 million per year, a $7.5 million university equipment program, and wide-ranging restructuring of government management of science including a new Cabinet committee to determine priorities for research and a new science council to provide independent expert advice.



EMBASSY OF IRELAND

**Waiting game.** Science Minister Patrick Rabbitte.

That was 18 months ago, and the promised white paper has not appeared. Scientists are now becoming increasingly anxious that the government's enthusiasm for change has run out of steam. "I'm pessimistic about whether they will do anything further," says Kingston Mills, an immunologist at Maynooth College in County Kildare. "I think a vital opportunity has been lost," adds Fegan. Some extra money has been provided: an additional $6 million spread across a number of programs, announced in March this year; Ph.D. salaries on one key government scheme were increased from $1500 to $3000; and an extra $750,000 was added to the basic science budget. But reaction was cool. "It's just a token gesture to the STIAC report," says Mills.

Rabbitte, whose junior position gives him a voice but not a vote in the Cabinet, apparently faces a tough task persuading his colleagues to pay more for science and technology. Rabbitte told *Science* that he still hopes a policy statement on science will emerge, and in a speech made in Cork last week he assured researchers that a draft white paper had been circulated within government and that he hoped to be able to publish it within weeks.

The long delay has, however, come as a great blow to the morale of researchers. Over the past few years, the government's positive attitude has encouraged a number of prominent Irish researchers to return home from posts abroad—with the additional incentive of increasing access to funds coming into Ireland from overseas. Mills, who had been working in the United Kingdom before returning to his present post, says: "I came back to a modern, well-equipped laboratory funded by grants from the European Union. Otherwise I wouldn't have dreamt of coming back." These returnees are now finding conditions difficult, and the constant search for foreign money is seen as vital to prop up inadequate national funds. In the biomedical field, foundations such as Britain's Wellcome Trust are providing a lifeline. The trust spends $9 million per year supporting research in Ireland.

Researchers have also become skilled at

obtaining research funds from the EU, which usually requires collaboration with laboratories in other countries. The EU now provides about two-thirds of all direct science funding in Ireland. "We've become expert internationalists," says University College Cork's Maguire. "I estimate I pay more in taxes on my overseas research income than I receive in grants from the Irish government," says Mills. Some scientists are also resorting to shifting their work toward applied research to get funding from the government. "I'm doing research I wouldn't have done in the U.K.," says Mills. Although many researchers welcome the challenge, others worry that applied research may threaten their ability to compete internationally in basic research in the longer term.

Although the prospects of extra funding look ever dimmer to researchers, the government's science and technology agency, Forbairt, has won some plaudits by overhauling its grants procedure. In the past, Forbairt has tended to spread its funds as widely as possible, and as a result grants would only be partially funded. Now, following suggestions made by STIAC, it is trying to allocate its tiny budget for basic research on the basis of excellence and relevance. Biochemist Luke O'Neill of Trinity College Dublin, who returned from the United Kingdom 5 years ago, says that his application for $75,000, which is large by Irish standards, was almost fully funded. "The review procedures have become much more open, and the changes are welcome," he says. Researchers are also encouraged by a strengthening of the review procedures at the Health Research Board, which supports biomedical science.

In the face of all the current uncertainty, however, scientists are again examining their career prospects. Although Mills does not regret returning home to Ireland, he worries about the future. "I would still have come back knowing all the problems, but I just wonder how long I can keep it all going," he says. And if the STIAC report turns out to do little more than gather dust on ministerial shelves, prospects look bleak. "It's more depressing than 3 years ago," says Fegan. "It's time for scientists to take to the streets again."

**–Nigel Williams**

INDIRECT COSTS

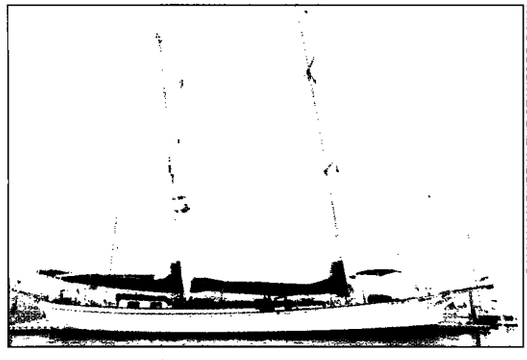
# Judge Dismisses Suit Against Stanford

Stanford University stumbled into an unwelcome spotlight 6 years ago when it was forced to admit having billed a 72-foot yacht—Jacuzzi and all—to taxpayers. A bitter scandal ensued, but Stanford survived repeated government investigations, which found nothing more than accounting errors. Now it is sailing past the last remaining legal obstacle. On 26 August, a federal judge in San Jose, California, mailed out a ruling dismissing a multimillion-dollar suit filed by Paul Biddle, a federal accountant who first raised concerns about Stanford's billings.

The dismissal, which Biddle is appealing, could bring to an end one of the most costly and rancorous disputes ever between the government and a major research institution. The billing scandal ultimately led to the resignation of Donald Kennedy, Stanford's president, and cost the university nearly $40 million in accounting and legal fees, not to mention tens of millions more in slashed funding. Universities nationwide were affected by the fallout in Washington. "Unfortunately, I think the whole incident left the feeling that there was something wrong at Stanford and, by extension, all universities," says Cornelius Pings, president of the Association of American Universities. Now, he says, "we know by hindsight that there was nothing wrong at Stanford."

The dispute involved indirect, or overhead, costs of research, such as utilities, libraries, general administration, and building maintenance. From 1981 to 1992, the years in dispute, Stanford received $813 million in overhead. The university encountered only routine disputes over its billings until 1989, when Biddle, a rumpled, sometimes ferociously combative accountant at the Office of Naval Research, the agency responsible for overseeing the university's billings, began to express concerns about overcharges.

Biddle's charges were seized upon by investigators for Representative John Dingell, the widely feared Michigan Democrat. The scandal bloomed with the discovery of *Victoria*, a sailing team yacht that was depreciated as a research expense. Stanford accountants blamed a computer glitch for the $184,286 billing and pointed to at least one



DAMIAN MARHEFKA/*THE STANFORD DAILY*

**Accounting error.** Stanford's mischarged yacht became a symbol of an exaggerated problem.

even larger amount that it had failed to charge the government. Nevertheless, Dingell aides anonymously asserted that the yacht was part of a broad pattern of fraud involving $200 million or more. Dingell held a scorching hearing in March 1991, and Kennedy later stepped down as president.

Federal auditors followed in January 1992 with a claim that Stanford might owe as much as $300 million if the university's billing agreements with the government were fraudulent. But the Department of Justice announced in December 1993 that it could find no evidence of fraud, and the Navy separately said a year later that its own review found no "fraud, misrepresentations, or other wrongdoing." The university ended up paying only $1.2 million to settle with the Navy, bringing to $3.4 million the total returned to the government.

Stanford's trials were not over, however. Biddle filed suit in September 1991 under a law that allows private citizens to bring legal action in cases of alleged fraud in government contracts and to keep a portion of any money that is reclaimed. Biddle potentially stood to gain tens of millions of dollars. But District Court Judge Ronald Whyte dismissed the suit last month on the grounds that Biddle, who was assigned by the Navy to oversee Stanford's billings, was simply doing his job and deserves no special recompense for finding potential fraud.

Timothy Rastello, one of Biddle's attorneys, notes that Whyte did not address specifically whether overcharges occurred and says "Stanford got away with more than $200 million that it shouldn't have gotten." But the university's current president, Gerhard Casper, released a written statement after the decision's release expressing regret that "the reputation and integrity of individuals and institutions have been sullied" by the "sensationalism that characterizes so much of our public life."

Nobody took more satisfaction in the judge's ruling than Kennedy, who is now a professor of biological sciences. "On every one of [the major] issues, Stanford has prevailed," Kennedy says. Still, he notes that these victories may not erase memories of the initial furor: "The fact of life is that settlements and ultimate judgments get carried on page 17 when the accusations got carried on page one."

**–Jock Friedly**

*Jock Friedly is a writer in Arlington, Virginia.*