

Uncertain times for Italian science

Given the improbable conditions in which they have to work, the fact that Italian scientists have managed in the last decade to increase their share of the world's highly cited scientific publications can only be applauded.

Latest figures show that this proportion increased from 3.32% in the years 1993–1997, to 4.31% in the 1997–2001 period (*Nature* 430, 311–316; 2004). Yet this has been a time of increasing uncertainty and decreasing funding for research. A drama of wearisome tragicomedy continues to be played out for the frustrated scientific community. Its actors are an ever-changing cast of politicians and academic power brokers, its plot is a never-ending series of reforms of scientific organizations and its genre is perhaps best described as 'mystery'.

A high point in expectations came with the centre-left coalition government elected in 1997 and led by Romano Prodi. That government set the reform ball in motion, instituting evaluations of all research organizations and funding mechanisms, notoriously riddled with cronyism and lack of selectivity. Most notably, the organization of Italy's CNR (its National Research Council), which runs basic research institutes and had developed into a stultifying bureaucracy, was completely overturned.

The ink was barely dry on the first round of reforms when the right-wing government of Silvio Berlusconi began to reform the reforms, and to pull down the very Italian veil of opaqueness that the Prodi government had tried to lift. All research organizations, including the CNR, were put into the hands of commissioners during whose mandate virtually all sources of grant money dried up. Earlier this summer, the commissioners completed their work. The government named new presidents who will operate the new rules worked out by the commissioners, including the confusing transfer of some scientific disciplines into the CNR and some out of it. The details of the new rules are not yet clear, adding to the uncertainty caused by these big structural changes and the uncertainty over where grant money will now come from and who will distribute it.

Materials scientists are among those most affected by the change. The INFM (Italian Institute for the Physics of Matter), which was formed only in 1994 and grew to include 2,500 scientists, mostly university professors, is being dismantled. Some INFM centres, located in universities, will be absorbed into the newly created CNR department called 'Science of Matter'. Around 800 INFM scientists will thus become CNR scientists. These scientists worry that the CNR's heavy bureaucracy — despite the years of continuous reform, the number of CNR administrators has hardly decreased — will impinge on their flexible style, which the light INFM structures had encouraged. They also worry about how they will fit into the structure generally, given the CNR's traditional hostility to the universities. Other INFM scientists will, of course, continue working as university professors, but wonder where they will now turn for research funding.

What annoys Italian scientists most is the general lack of transparency, which they fear is becoming institutionalized. One highly unpopular new rule, for example, allows the heads of research organizations to be nominated by the government rather than elected by the scientific community. And the only new money the universities have seen this year is going towards the creation of an MIT-like elite university called the Italian Institute of Technology (IIT), whose gestation is being guided by the accountant general of the Italian state with the help of a consultancy company.

Italian scientists want an end to uncertainty, an end to the lack of transparency and an end to the lack of funding. This year only a tiny amount of money — even less than usual — for competitive basic research grants

has been made available. The community is awaiting the publication this month of the first draft of the 2005 budget, which they hope will clearly define new sources of research money and fair methods for their distribution. Italy's long tradition of science has served it well in its struggle against adversity. But it is time for the drama to draw to a close, for a stable and transparent system to take its place, and for a reasonably stocked pool of competitive grant money to be made available to Italian scientists who have demonstrated their resourcefulness for so long. Even a strong tradition can collapse if neglected for too long.

DIFFERENT STYLES: SILVIO BERLUSCONI (RIGHT) DIVERTED THE SCIENCE REFORMS BEGUN BY ROMANO PRODI (LEFT).

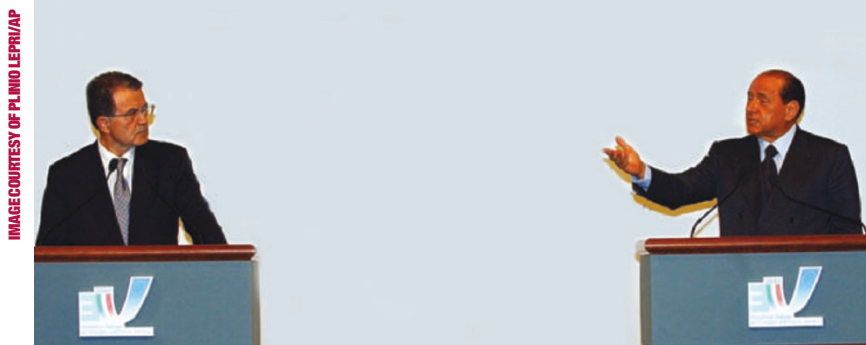


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