

## The plight of the precari

On the heels of a new law, scientists in Italy are facing precarious times yet again.

On October 15, the Italian lower house of Parliament passed legislation that will block the permanent hiring of nearly 2,000 contract-based research scientists, collectively known as ‘precari’. The bill (which is to be further considered in 2009), intended to curtail public expenditure by shrinking the civil service, affects many scientists in Italy who are considered to be civil servants. This comes on top of legislation passed in August that seeks to reduce state financing for the public university system by nearly a billion euros between 2009 and 2012 and that limits the hiring of staff to permanent research positions to one new hire for every five lost until 2012. The latest myopic salvo by the Italian government, coming on the heels of these existing budget cuts, reflects a profound ignorance of how the scientific system works and further threatens the research career of the many non-tenured Italian scientists who form the backbone of Italian science. These laws are bound to further exacerbate the ongoing exodus of Italian scientists.

In Italy, research scientists are considered to be precari when they join universities or research institutions on a fellowship or a yearly contract on finishing their undergraduate or graduate degrees. This pool of young scientists is quite large. For instance, about 50% of the 1,700 research scientists in the Pisa campus of the Italian National Research Council (CNR), the largest of the 11 CNR research campuses in Italy, draw salaries that are based on temporary contracts from government sources and are therefore considered to be civil servants. Many precari stay suspended in this ‘temporary’ state for years, finding themselves without scientific independence or job security.

This latest legislation further erodes job security for these junior scientists, who, as in most research institutes and universities around the world, do the bulk of science research. Faced with a permanent hiring freeze in research institutes across Italy, the previous government had passed a ‘stabilization’ package in 2006 that would have allowed temporary public-sector employees, including precari, to be hired on a permanent basis. The current law specifically reverses this previous legislation, further demoralizing scientists and severely limiting their job prospects.

The new law also creates added complications, given that this is not the first time that Italian governments have attempted to ‘reform’ the academic system. In 2005, Italian administrators decided to phase out tenure-track positions roughly equivalent to assistant professors, called *ricercatori*. *Ricercatori* make up roughly one-third of the approximately 60,000 permanent staff and were designed to serve as a stepping stone toward a tenured associate professor position. Previous administrators proposed replacing these permanent *ricercatore* positions with temporary adjunct-professor positions (*aggiunto*), who would have once-renewable 3-year contract positions (after this point, scientists could apply for a tenured associate professor position). There were already fears that this would delay tenure for many scientists. This

latest decree from the government would label these *aggiunto precari* and further hamper the career trajectory of many scientists.

Italy is not the first European nation to adopt cost-cutting tactics aimed at academic scientists, but the Italian scientific establishment, already reeling from a lack of funding and bogged down by bureaucratic hurdles, is less able to weather these short-sighted changes. In 2002, for instance, Germany imposed a 12-year cap on the time junior scientists spend working in publicly-funded contract-based positions after the start of their doctoral research. This was theoretically aimed at weeding out scientists who were deemed unproductive. However, the average junior scientist in Germany has many more research venues to pursue and there is more nongovernmental funding available that can be used to compensate those who have surpassed the time limit for government funding. The German government also recently doled out €1.9 billion to select universities in the so-called ‘Excellence Initiative’, which has helped to create new positions for junior scientists and fostered a sense of cautious optimism. Italy, in contrast, does not have substantial numbers of private institute or corporate research positions, and funding from nongovernmental sources is scarce. To foster science in Italy, the research community needs a substantial infusion of public funds. Already, an estimated 6,000 Italian scientists leave the country every year for opportunities elsewhere; without more encouragement from the government, this brain drain is only going to accelerate.

Fundamentally, the current Italian administration has embraced the misguided attitude that scientific research should be treated as a purely business endeavor rather than as an academic one. It has also advocated privatization of universities into foundations without considering the ramification that basic science research may be passed over in favor of those with more applicable and practical purposes.

To foster a vibrant scientific community, Italian policymakers must stop regarding non-tenured scientists as dispensable pawns and must give their universities and research institutions more autonomy to hire and retain their employees. Fundamentally, the government has failed to recognize that to nurture science in Italy, there needs to be a healthy ratio of permanent to temporary positions; simply eliminating the number of temporary positions to cut costs would be like throwing the baby out with the bath water. Lumping these scientific precari in with the mass of Italian civil servants, without any understanding of their unique role or responsibilities, is absolutely unwarranted. There are undoubtedly ways to make universities more efficient—universities should be held accountable for their expenditures and must use transparent and objective criteria to hire and promote young researchers—but indiscriminate cuts such as the ones proposed by the government unjustly target young scientists who have toiled for years in aspiration of a university position. Short-sighted attempts to cut costs are only going to cost the country much more in the longer term. ■