On track to tenure-track

A former South American politician once quipped that even a local election in his country resulted in more casualties than a revolution in Germany. His comments were not intended to address questionable political campaign techniques, but rather to comment on the inability of Germans to stage proper revolutions. Yet, with little attention from the public, nothing short of a small revolution is now underway at German universities.

Until recently, all universities in Germany were officially considered to be equal: it did not matter where one studied, and students often selected universities based on their attractive locale rather than on their academic reputations. However, recent initiatives—foremost the German government's Excellence Initiative—have changed things irreversibly. In particular, it encourages universities to develop focused research profiles, thus transforming the overall landscape of German universities. Of course, such differences existed before the initiative began—no university can support research in every field—but this new development means that these differences are now publicly recognized and supported.

At the Goethe University in Frankfurt am Main—in partnership with the Max Planck Institutes of Biophysics and of Brain Research—this 'focus-building' has led to the creation of the joint Cluster of Excellence Frankfurt: Macromolecular Complexes (CEF-MC), which is devoted to the investigation of macromolecular complexes. At the heart of the research cluster will be the newly established Frankfurt Institute for Molecular Life Sciences.

Universities usually establish new institutes because they want to create either new research programmes or new organizational structures that cannot be easily realized within the existing framework of departments or institutes. The Frankfurt Institute for Molecular Life Sciences was created with the intention of doing both: not only to expand new research topics in the field

of macromolecular complexes, but also to establish new organizational structures and procedures. It is here, in the realm of organizational structures, in which the academic revolution in Germany is about to begin.

Traditionally, the route to professorship in Germany has involved the 'habilitation'—essentially a second, extended thesis. Although there were once reasons for this additional step towards full professorship, the habilitation has become, by and large, an impediment that few researchers have been able to circumvent. It is basically a private contract between an older, established professor and a young investigator. Although the principle of this system is to guide a young scientist to complete independence, it has often been abused in practice. Instead of providing a route to independence, many supervisors have regarded habilitants as part of their own research group, in fact stifling their independence. These pitfalls have been recognized for a long time and have been discussed repeatedly, yet without consequence.

The second requirement for an academic appointment at a German university has traditionally been a close match of the candidate's research discipline and his or her ultimate teaching duties. As teaching programmes evolve slowly, this system has essentially cemented the German research landscape. Only academic organizations without teaching obligations—foremost the Max-Planck Society—have been flexible enough to create new research institutes in up-and-coming areas of science. This basic division between research-centred organizations on the one hand and teaching institutions on the other has attracted heavy criticism and has triggered several attempts at change since the mid-1990s. However, although junior professorships and other initiatives have so far brought little change, the Excellence Initiative has provided, for the first time, both the financial resources and the necessary competitive framework to instigate lasting changes in the organizational structures of German universities.

One of the pillars of the academic success of world-leading universities is the selection of the best professors through

the tenure-track system. Several leading German universities, including the Humboldt University in Berlin and the Gene Center of the Ludwig Maximilians University in Munich, have started to establish tenure-track procedures. Tenure-track is still the exception, however, and there are currently many different paths to professorship that include tenure-track, habilitation, junior professorships and the Emmy-Noether programme, to name only the most prominent ones, which all exist in parallel but without a common standard.

This puzzling fragmentation of the academic landscape is actually not a German problem; it is pan-European. Each European country has its own array of paths to professorship that are often not comparable with one other, let alone with programmes in other European countries. By contrast, US universities have a well-established tenure-track system that provides an established 'promotion highway', compared with the European roadmap that resembles more a tangle of dirt roads. It is often said that Europe's strength is its diversity; yet, for the creation of a strong European research community, less diversity and greater transparency could more effectively attract young scientists to academic careers in Europe. The American tenure-track system provides an excellent model for a unified European system.

The main argument against the introduction of a tenure-track system in Germany has been that, unlike the USA, Germany does not have a multi-layered university system that provides job opportunities for those who have failed to obtain tenure. This argument is certainly invalid at the Frankfurt Institute for Molecular Life Sciences, at least, because teaching-only positions are offered to those who do not obtain tenure. In fact, the system provides a certain security and sufficient incentive for scientific excellence, and might prove to be a good model for a German tenure-track system.

If successful, these changes will provide a model for the entire university system. As the South American politician noted, Germans are not famous for their revolutionary spirit, but they are known for doing things thoroughly. The hope is that once the

activation energy for an 'academic revolution' has been provided, it will lead to thorough reforms that put the entire academic system on track to tenure-track.

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