

THIS WEEK



EDITORIALS

WORLD VIEW The ungainly snowball fight that is university metrics **p.255**

SAND Smashing grain collisions drive severe desert storms **p.256**

BEHAVIOUR Demonstrator skill helps birds get the worm **p.257**

Beyond headscarf symbolism

Turkey's scientists show they no longer want to expend their energy on political confrontation, but political volatility is threatening their efforts to work in peace.

This spring in Istanbul, a hundred or so faculty members and students held a lunch-time demonstration in one of Koç University's elegant courtyards. They were protesting against the administration's failure to protect the jobs of the university's service workers. It was peaceful. No one tried to stop them.

This is one side of Turkey. The other side is more visible — the violent response of police to the Taksim Square protests against unchecked city development a few weeks later, for example. And the long jail sentences dished out earlier this month to some former university rectors, dogmatic opponents of their country's ban on headscarves in public institutions (see *Nature* **500**, 129–130; 2013). The headscarf ban, and the reaction to it, is a telling and useful guide to how Turkish universities and Turkish science could yet flourish amid such political volatility.

Koç University is private, so the ban does not apply. Free to choose, only a single head was covered among the protestors. With reasonable budgets, reasonable student numbers and a reasonable absence of ideology, Koç University has little to worry about. Its three-year-old medical faculty has already attracted a European Research Council grant holder.

A few kilometres farther south, the cash-starved, public Boğaziçi University is required to apply the headscarf ban, but the occasional defiant student who chooses to cover her head tends to go unnoticed. As elsewhere in Turkey, most academics and scientists just don't want to expend energy on fights about headscarves any more.

That is a U-turn in mentality, and an encouraging one. The headscarf ban has been the symbol of a decades-long struggle between secularists who see covering the hair as a slippery slope towards a breakdown of Turkey's constitutional separation of state and religion, and those who would like to see a greater presence of Islam in daily life.

Scientists tend increasingly to see this stand-off for what it is — less about religion than about power, and they are worried more about the ascension of ignorance than of fundamentalism.

Turkey's economic growth and expanding cities have created a powerful new middle class with strong religious roots. Ten years ago they helped to elect Prime Minister Recep Tayyip Erdoğan with his 'mildly Islamic' government, and Erdoğan supporters now hold key positions at institutions such as the Turkish Academy and TÜBİTAK, Turkey's research funding agency. Critics say that these individuals are not always qualified for the posts, and that some may even have abused their positions to take revenge on those who stood in their way in the past.

TÜBİTAK has made a series of poor decisions in recent years. Most notorious was in 2009, when it demoted Çiğdem Atakuman, the editor of its magazine *Bilim ve Teknik*, after she objected to its censorship of an article celebrating Charles Darwin. She has since challenged TÜBİTAK's investigations in three separate court cases, which she won. More recently, the organization declined to fund a workshop on evolutionary biology, saying that evolution is controversial. Anti-evolutionism is a religious stance, and with this argument TÜBİTAK shows a failure to understand science and its processes.

Against this alarming backdrop, Turkey's small, mostly foreign-trained research community is trying to do science as it would be done in the countries where its members trained. They frequently succeed in small pockets, as at Koç and Boğaziçi. But even at Koç, scientists complain about a lack of critical mass that threatens their long-term future. The current less-confrontational mood will help them to focus their energy. But they won't be secure until the government acknowledges that science, just like a headscarf, is not a political toy. ■

In addition

Conflicts of interest and gaps in data contaminate US oversight of food additives.

A chef who crafts a delicacy for sale in the United States can choose from more than 10,000 food additives to garnish the dish. Of these chemicals, 43% are labelled 'generally recognized as safe' (GRAS) and need not be approved by the US Food and Drug Administration (FDA).

The system has weaknesses. A manufacturer is responsible for assessing whether an additive it has developed is GRAS. Once that is done, the manufacturer is asked — but not required — to notify the FDA. There are no data to evaluate compliance systematically, but the FDA found during a 2010 crackdown on caffeinated alcoholic drinks that four out

of four manufacturers queried had not done the required checks.

Even when manufacturers do submit GRAS determinations, there are concerns about the quality of the assessment. An ongoing project at the Pew Charitable Trusts in Washington DC reveals discomfiting gaps in the data. A search of three toxicological databases, including that of the FDA, showed that fewer than 38% of GRAS claims were backed up by FDA-recommended toxicology studies in animals (T. G. Neltner *et al. Reprod. Toxicol.* <http://dx.doi.org/10.1016/j.reprotox.2013.07.023>; 2013). The same team has published an analysis of 451 GRAS notifications submitted to the FDA. To avoid conflicts of interest, assessments should be done by an independent expert panel, but none had been; in fact, 22% had been performed by an employee of the manufacturer (T. G. Neltner *et al. JAMA Intern. Med.* <http://doi.org/nd5>; 2013).

The FDA told *Nature* this week that it plans to issue guidance on how to fulfil GRAS requirements. One suggestion, proposed by Pew, is to take conflict-of-interest policies used to select FDA advisers, and apply them to GRAS determinations. The FDA should seize the opportunity to protect public health and boost confidence. ■