

Commonwealth Fund — ranked it top, above the health-care systems of Australia, Canada, Germany, New Zealand and the United States.

Scientific research has been a core goal of the NHS since its foundation — but one might be forgiven for not knowing it. For years, the funds for research have been distributed within the regional health-care deliverers in a system that might have been designed to obstruct collaboration with universities and drugs companies. All credit, then, to the NHS's director-general of research and development, Sally Davies. With the creation of the National Institute for Health Research (NIHR), a virtual body within the NHS, Davies has dragged the funds into the daylight. By 2011, these are expected to amount to about £1 billion (US\$2 billion).

In its attention to researchers' careers, networks and collaborations, and to transparent indicators of achievement, Davies' Best Research for Best Health programme is helping to transform the research landscape. Plans include virtual organizations to link universities, hospitals and industry; ten 'academic health centres' resembling US university hospitals, through which researchers will be able to conduct studies on patients more easily; and somewhere between 15 and 50 'health innovation and educational clusters', which the government hopes will speed up procedural innovation, promising better funding for academics who get involved. Meanwhile, NIHR collaboration

with the Medical Research Council, after a fractious start, is beginning to make progress.

Perhaps the most significant move for biomedical science at the NHS lies in opening up the ocean of patients' data that the organization has collected over the decades. Public consultations are now beginning that, favourable soundings suggest, will lead to ways by which researchers can readily find appropriate patients for research and clinical trials, and can gain access to data whose sources are anonymized but traceable subject to the patient's permission. In particular, the national extent and depth of those data will provide researchers in academia and industry with a globally unique resource for highly targeted studies and clinical trials — a key element of translational medicine.

Such an information system will rightfully evoke worries about privacy. In the future, those concerns will become more sensitive as genetic testing becomes more predictively powerful. Yet, at the same time, as that era blossoms, it will bring the risk-pooling benefits of universal health-care to the fore. As long as people do not have to share genetic data with private insurers, as is the case in the United Kingdom until at least 2014, those who anticipate bad health will do well to buy insurance cover. The genetically lucky, meanwhile, might as well save money and rely on the state. This will squeeze private insurers, suggesting that the NHS's golden period may be yet to come. ■

Does the past have a future in Berlin?

Not unless a research institution's managers recognize its value.

Most museums have so little space that they hold the majority of their collections in storage. But the Berlin Medical Historical Museum has problems that border on the absurd. Its overflow is piled up in entirely unsuitable make-shift accommodation, including a former stable that is prone to flash flooding, and a ramshackle lean-to under a railway arch that shakes when trains thunder by, redispersing thick layers of dust and dirt.

The museum used to face directly onto the Berlin Wall, but it now has a fine view across the Spree to the spanking-new central station and the chancellery of united Germany. It belongs to the Charité, the city's historic medical school, which was reconstituted five years ago in a painful merger between the medical faculties of East Berlin's Humboldt University — the original Charité — and West Berlin's post-war Free University.

The ascendancy of the Charité over the western faculty is in part thanks to its long — if interrupted — reputation, having nurtured such scientific giants as Rudolf Virchow, the nineteenth-century pathologist who conceived the cellular basis of disease. Indeed, in the nineteenth and early twentieth centuries, Berlin was a hot-bed of modern science in all disciplines, with the likes of Hermann von Helmholtz, Carl von Siemens and Emil Fischer pushing all possible frontiers. This has bequeathed Berlin many important collections of instruments, specimens and other historic scientific items.

When the Charité was reconstituted it had a mandate to establish scientific excellence — which it has in good part done — with a shrinking budget. But what of its heritage? It has done a marvellous job in restoring the lovely old building housing the Medical Historical Museum, which now has a fine display of the cream of its collection — not to mention an extraordinary meeting room called 'The Ruin', comprising an area bombed out in the Second World War, now simply glassed around. Unfortunately this big investment is not enough. Its archived collections need a safe home. As do the collections of old DDR instruments acquired after the Wall fell, which share the same primitive lodgings. They are invaluable for historians of twentieth-century technology.

To balance its books, the Charité is selling its off-campus buildings, many of historical as well as financial value. One of the most attractive is the 1877 building on the Dorotheenstrasse, with its beautiful glass-roofed anatomical lecture theatre, where pioneering microbiologist Robert Koch announced his discovery of the tuberculosis bacillus. There are additional important collections in some of these buildings, including the physiological instruments that are this week's Hidden Treasure (see page 31). These also need new permanent homes.

To attract the best scientists, the Charité must be able to offer them generous lab space — contemporary science has, of course, to be the top priority. But heritage must not be the default victim.

The Charité will have a new management team in the autumn that would be wise to guarantee a tiny proportion of its budget to protecting the school's illustrious past — which did, after all, give it the upper hand after the reunification of Germany. The year 2010 is the 300th anniversary of the Charité, as well as the 200th anniversary of the Humboldt University and the 100th anniversary of Koch's death. This triple celebration should be a time to remember the debt to the past. Let it not be wiped out. ■