

the EU produced a 585-page document that marks their joint attempt to set the terms. It's a draft of a deal, and the current alternative to a 'no-deal' scenario. The British public got to see it only after a fractious meeting of members of the ruling Cabinet had approved the wording — only for some Cabinet members to then promptly resign.

Anyone brave enough to read the full tome will find few references to science (and few were expected). It largely covers the thorny matters of Britain's divorce bill and a political and trading mechanism to avoid having to reinstate a hard border with Ireland. It leaves most of the key issues that are important for scientists — including immigration and access to funding — to form part of a future agreement on the EU–UK relationship. On this, the government released only a meagre outline. On the downside, this prolongs the uncertainty and unrest that is already affecting researchers. But for those determined to seek positives, it does mean that much remains in play — and that means scientists and their advocates must keep on keeping on about how Brexit is bad for them and for UK research, and how policymakers must find ways to limit the damage.

Among the continuing uncertainties, we still do not know whether UK-based scientists will be able to continue to draw grants from big-money EU research-funding programmes. Nor do we have any details on the likely shape of Britain's future immigration system, and thus how easily highly skilled EU citizens, including scientists, will be able to come to work in Britain. Freedom of movement between the EU and the United Kingdom, which has proved a boon to science in both directions, was not part of the deal, but in the days after its publication, Prime Minister Theresa May reiterated that, in the long term, EU citizens would enter on an equal footing with migrants from the rest of the world. (That EU citizens already in the United Kingdom should be able to remain was one welcome detail that the agreement did spell out and one that should

ease the anxieties of many researchers and their families.)

Needless to say, this journal argues that skilled scientists should be able to move to the United Kingdom after Brexit with few restrictions, and the evidence that this will benefit science should make it a political priority. A briefing document published alongside the agreement text does hint at provisions for some visa-free travel between Britain and EU countries. This is encouraging news for researchers who are used to travelling for collaborations and conferences.

The draft agreement text does place one field of British science and technology on firmer post-Brexit ground. It confirms that Britain will leave Euratom, the pan-EU nuclear regulator, and that responsibility for issues such as ensuring non-proliferation will pass to the control of the United Kingdom's own regulator. But the text adds nothing on issues that concern UK nuclear-fusion scientists, such as whether an independent Britain will be able to negotiate continued membership of the ITER fusion experiment in France.

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Brexit is due at the end of March 2019. Before then, the agreement text must overcome a series of hurdles, not least a vote in the UK Parliament next month. The political landscape is highly volatile — Britain is already on its third Brexit minister since July, and hard-line Brexit supporters could yet trigger a leadership challenge to May, and possibly a general election. Meanwhile, there is growing support for a 'people's vote' on any agreement passed by Parliament — effectively, a second public referendum.

Much remains at stake. Scientists must continue to lobby for a Brexit settlement that protects and promotes research. There is still time to have a voice. ■

Protect postdocs

A survey of young scientists in the United States highlights the exploitation of visa holders.

Most of the research and analysis on the fate and experiences of young scientists focus on PhD students. This is probably because these students, in theory at least, have a broader spectrum of opportunity. Many postdoctoral researchers tend to have chosen a path to an academic career. What determines the outcome? And what happens to those who choose a different route? Better information and tracking would help to inform those making this decision.

Some useful — and worrying — research on this issue was published last month by two US academics in the journal *Research Policy*. The study is based on interviews with 97 postdocs from 5 major US research institutions, as well as 35 principal investigators (PIs), university administrators and industry employers (C. S. Hayter and M. A. Parker *Res. Pol.* <http://doi.org/cw62>; 2018). The interviews were conducted in 2016 and 2017. More than half of the postdocs (52.6%) worked in the life sciences.

Many of the issues these postdocs report are familiar: chiefly, how hard it is to land a tenured full-time position in academia. But the research also revealed a new — and alarming — complaint from a handful of these young scientists. Some PIs are exploiting the fact that overseas scientists rely on them for continued visas. The responses suggest that senior scientists are using this reliance to force postdocs to work longer hours and endure unacceptable conditions.

The following was said to the study's authors by a postdoc at a leading US university: “When I arrived at [the university] my PI explained to me that he approved my visa renewal ... he then told me

he was going to pay me 70 per cent of the salary he promised before I got here ... when I asked him if this is normal, he just asked me if I was serious about working [at the university].”

And this came from another: “Our PI creates this pressure cooker environment in our lab ... you see the foreign postdocs sleeping on the floor of the labs, working 100-plus hours a week ... PIs know what they are doing ... they take advantage of these guys.”

Here is the view of a university administrator: “I see something bad almost every week and it seems to be getting worse ... postdocs come into my office and ask me if this or that seems wrong to me ... the visa issue is a big one because foreign postdocs are afraid to report their PIs ... these are small scientific communities and PIs will blackball their postdocs if you cross them.”

The paper labels such behaviour as socially irresponsible, but that seems too mild. It is exploitation. It is unacceptable. And it must stop. These are anecdotal reports, and we have no way of knowing how large the problem is, or whether the increased political scrutiny of foreign visitors to the United States has changed the situation.

Most estimates agree that about half of the postdocs working in the United States are overseas visitors who rely on short-term visas. Institutions typically sponsor the renewals and extensions. This is largely done by individual departments and lab heads, with universities' central administrations having little formal role in the recruitment and experiences of postdocs. This puts senior scientists in a position of power. None should use this as leverage against less senior colleagues — many of whom are far from home and vulnerable. Colleagues who see such actions should report them.

Future assessments and surveys of postdocs should probe this issue further. “This was a qualitative study, so it's important to recognize that our findings are not generalizable to broader populations of postdocs,” the study authors told *Nature*. Let's hope not. Everyone should agree with the postdoc who told the interviewers: “[I] realized that students can really be taken advantage of and this left a bad taste in [my] mouth with academia.” ■