

# Correspondence

## Don't put US–Cuban research at risk

As neuroscientists based in Cuba and the United States, we find last month's allegations of 'sonic weapon' attacks on US and Canadian diplomats in Cuba implausible (see [go.nature.com/2apsvyg](http://go.nature.com/2apsvyg)). Moreover, they could pose serious risks to US–Cuban scientific interactions.

The idea of weaponizing sound is limited by the physical properties of acoustic-wave propagation. Any direct and long-lasting effects on brain form or function, unless applied close to the head, seem to us to be highly unlikely.

US scientific visits to Cuba have been increasing since 2015 (M. S. Cohen *et al.* *Proc. Natl Acad. Sci. USA* **112**, 5859–5861; 2015 and M. Jarvis *Science* **357**, 1364–1365; 2017). Furthermore, the US treasury department last year approved several US–Cuban biomedical-research projects of international importance (see [go.nature.com/2atojwj](http://go.nature.com/2atojwj)).

We now feel that scientific collaboration between our two nations has been dealt a major blow from a US administration that seems to be gaining a reputation for weaponizing credulity for partisan gain.

**John D. Van Horn\*** *University of Southern California, Los Angeles, USA.*

[jvanhorn@usc.edu](mailto:jvanhorn@usc.edu)

\*On behalf of 9 correspondents (see [go.nature.com/2zncsb2](http://go.nature.com/2zncsb2) for full list).

## PhD jobs: revamp funding structures

If more PhD students are being trained than the system can support (*Nature* **550**, 429; 2017), I suggest that funding structures need to be changed to create more long-term roles in research.

*Nature's* PhD survey found that 52% of respondents want to stay in academia (*Nature* **550**, 549–552; 2017), even though many need side jobs to make ends meet (*Nature*

**549**, 297–299; 2017). Urging supervisors to spend more time preparing students for the day they must leave academia seems unnecessarily defeatist.

I agree that society benefits if, as you write in your Editorial, "a sizeable number of well-educated and well-trained scientists spread to other sectors, and take with them healthy scepticism and respect for evidence". However, such skills can also be learned in good undergraduate or master's degree programmes.

Awarding fewer, better-funded PhD studentships and investing more in long-term research posts could offer a less wasteful solution. For example, the UK Natural Environment Research Council's annual report for 2016–17 notes that it spent about £25 million (US\$33 million) funding some 1,300 PhD students and about £7 million on 84 postdoctoral fellowships (each lasting 5 years). Doubling the number of fellowships, at the expense of 400 or so studentships, would open the door for many more young scientists.

**Richard B. Sherley** *University of Exeter, Penryn, Cornwall, UK.*  
[r.sherley@exeter.ac.uk](mailto:r.sherley@exeter.ac.uk)

## PhD jobs: support beyond academia

Most PhD students are all too aware of their limited career prospects in academia and its dearth of permanent jobs. To imply that they are not (*Nature* **550**, 429; 2017) goes against the results of *Nature's* Careers survey, which reports that 55% of respondents are worried about their career path and 49% are concerned about the number of research jobs available (*Nature* **550**, 549–552; 2017).

Simply directing PhD trainees to career services is not enough. In our view, supervisors should discuss career goals with their students throughout their degrees, while helping them to develop career-oriented skills

(such as management, teamwork and communication) that are mutually beneficial. Mentors can also encourage students by familiarizing themselves with campus professional-development services and by celebrating the career successes of alumni outside academia.

The 14% of survey respondents who have unsupportive advisers might face discrimination after voicing their wish to pursue different careers. Students should consider approaching other mentors — in industry, for example.

Many US student groups are spearheading a movement to broaden careers training beyond academia. Supervisors and administrators must step up too.

**Jasmine H. Hughes, Katherine E. Scheibel, Andrew W. Bremer** *University of California, Berkeley, USA.*

[jasmine.hughes@berkeley.edu](mailto:jasmine.hughes@berkeley.edu)

## PhD jobs: explore posts abroad

PhD recipients who are unable to secure an academic post in their home country (*Nature* **550**, 429; 2017) should consider postdoctoral, teaching and research jobs in universities abroad, where their skills are in high demand.

Universities in the Middle East, China and southeast Asia are recruiting research talent from outside those regions. Many offer perks such as tax-free salaries, research grants and housing. To promote local research, some countries also host campuses of British, US and Australian universities.

For example, several US universities have campuses in the Qatari capital Doha (Carnegie Mellon, Texas A&M and Northwestern); in the United Arab Emirates (New York University); in China (Duke University); and in Singapore (Yale University). China hosts the Technion Israel Institute of Technology in Guangdong

province, as well as some UK institutions (the universities of Edinburgh and Nottingham, for example). The University of Nottingham also has a campus in Malaysia, as do two Australian institutions (Swinburne and Monash universities).

In return, new postdocs who move to work in these countries will broaden their outlook in a different and hospitable culture.

**Biswa Prasun Chatterji** *Ajeenkya D.Y. Patil University, Pune, India.*  
[biswaprasun@gmail.com](mailto:biswaprasun@gmail.com)

## When Marie Curie went to Brazil

The Polish–French chemist Marie Skłodowska Curie (1867–1934) was the first woman to win a Nobel prize and the only woman so far to win it twice. Less well known is that she paid a visit to Brazil in 1926 that boosted the country's nascent feminist movement.

On her 1,600-kilometre train trip, she talked to scientists at the universities of Rio de Janeiro, São Paulo and Minas Gerais (M. Curie, I. J. Curie and E. D. Curie *Lettres: Marie Curie et ses Filles*; Pygmalion, 2011). Her visit to the University of Minas Gerais helped to make the medical school's radium institute better known and respected.

She was accompanied throughout by a committee of important women in science and politics; they belonged to the Brazilian Federation for Female Progress. The attendant publicity reinforced the status of women in Brazil and encouraged their participation in the professions.

Women in Brazil were granted the right to vote only in 1934. As a remarkable exception, however, they were permitted to vote in 1926 in one Brazilian state as a tribute to their eminent visitor.

**Cassius Klay Nascimento, João Pedro Braga** *Federal University of Minas Gerais, Belo Horizonte, Brazil.*  
[jpbraga@ufmg.br](mailto:jpbraga@ufmg.br)