# THIS WEEK

#### **EDITORIALS**

**PUBLIC HEALTH** Childhood vaccination programmes are missing out many kids **p.309** 

**BEAR NECESSITIES** Ancient pandas were genetically more diverse **p.311** 

CHINA Chang'e-4 mission finds minerals on Moon's far side **p.312** 

### Academia's mental-health woes

The first international meeting on postgraduate mental health opens this week, but much more is needed to tackle a toxic environment that harms too many PhD students and postdocs.

his week, the First International Conference on the Mental Health & Wellbeing of Postgraduate Researchers will take place in Brighton, UK. The goal of the two-day meeting (which is sold out) is to address a simple, urgent truth: that many PhD students and postdoctoral researchers are overworked and overstressed — and their mental health is suffering because of it.

This troubling picture has become clear from studies over the past few years. One, of a group of PhD students in Flanders, Belgium, found that they were more than twice as likely to suffer from mental-health difficulties than the highly educated population in general, and that one-third of them either had, or were at risk of developing, a psychiatric disorder. A survey of doctoral students at the University of Arizona in Tucson found that around three-quarters were under 'more than average' stress. When *Nature* has covered these issues, readers have flooded us with personal stories of frustration and distress.

The issue is gaining attention. A series of 17 projects started in March 2018 that aim to better understand the threats to well-being faced by early-career researchers, and explore what kinds of support their universities can provide. The effort is being funded to the tune of £1.5 million (US\$2 million) — originally by the Higher Education Funding Council for England and now by UK Research and Innovation. The Brighton conference will feature many of these and other research projects; Nature Research is a sponsor of the meeting.

One problem is that data are incomplete, and often apply only to an individual university or region. International data are sparse and unstandardized. More wide-scale work is needed to understand the extent of mental-health issues and how particular aspects of the post-graduate and general academic environment contribute to them.

Studies have already revealed some obvious areas of concern. Shortterm PhD and postdoc contracts can allow employers and supervisors to look the other way when it comes to a duty of care. Academia often glo-

#### "Readers have flooded us with personal stories of frustration and distress."

rifies and rewards overwork and long hours. And the power balance between early-career researchers and their supervisors is problematic. Senior scientists are expected to be both a robust support system and a stern, independent assessor of progress — a contradiction that discourages students from sharing potential

mental-health issues for fear of damaging their professional progress.

Solutions are at hand. Supervisors need comprehensive, compulsory training to identify, assist and understand researchers facing mentalhealth problems. Students could have more than one supervisor, so that they can find support without worrying about damaging their career. Universities need to make sure that the mental-health services they admirably make available to undergraduates also reach graduate students and postdocs. And academia must learn to respect the work-life balance that many researchers struggle to find.

The conference is an encouraging sign that postgraduate mental health is being taken seriously. But more must be done to protect future generations from research's ugly tendency to harm its practitioners. ■

#### ANNOUNCEMENT

## Preprints encouraged across the board

For more than two decades, *Nature* and its sister journals have supported pre-publication sharing of manuscripts on preprint servers. *Nature's* first editorial on this goes back to 1997 — although, back then, the practice was common only among physicists. By making early research findings accessible quickly and easily, preprints allow researchers to claim priority of discovery, receive community input and demonstrate evidence of progress for funders and others.

Recognizing these benefits, we are now pleased to announce an updated policy encouraging preprint sharing for Springer Nature journals (see go.nature.com/2hpn0nh). This intends to remove ambiguity on two important points. First, we now make it clear that authors may choose any licence for preprints, including Creative Commons licences. Licensing choice will not impede consideration at a Springer Nature journal, but authors should bear in mind that it could affect sharing, adaptation and reuse of the preprint itself.

Second, the updated policy provides more information about our position on author engagement with the media in response to enquiries about preprints. Authors are free to provide clarification and context, and this will not affect editorial consideration. However, in the interests of transparency, we advise researchers to emphasize in their communications that the study has not been peer reviewed and that the findings could change. We also recommend that reporters who cover such work indicate that the study is a preprint and has not been peer reviewed, a practice that we strive to follow in these pages. Finally, we stand by our policy supporting citation of preprints in reference lists of submitted and published manuscripts.

All Springer Nature journals will adopt a unified policy that encourages preprint sharing and provides further details on preprint licensing, citation and communications with the media. We are confident that preprint sharing will continue to synergize with journal-mediated peer review and curation, and we look forward to experimenting with new ways of working with preprints.