

Correspondence

Heed a decade of calls for antibody validation

The use of poorly performing antibodies in research leads to misleading papers, waste of donated human samples and an estimated annual loss of more than US\$1 billion of US taxpayers' money (J. L. A. Voskuil *et al. MAbs* **12**, 1794421; 2020). For more than a decade (see K. Colwill *et al. Nature Methods* **8**, 551–558; 2011), there has been a need for rigorous validation of commercial antibodies – and it is becoming increasingly desperate.

We reiterate calls to research-funding agencies to support programmes that include systematic antibody characterization and widespread data sharing (see go.nature.com/3yrtaen; go.nature.com/3ovzcwd; and go.nature.com/3s4enkb).

An analysis of more than 600 commercial antibodies designed to target 65 human proteins reveals that an estimated 50% of the human proteome can now be targeted by high-quality, renewable antibodies (R. Ayoubi *et al.* Preprint at bioRxiv <https://doi.org/knq7>; 2023). Such data underscore the feasibility of identifying validated antibodies for the entire proteome and the importance of making characterization data publicly available and readily accessible.

Richard A. Kahn Emory University, Atlanta, Georgia, USA.
rkahn@emory.edu

Harvinder S. Virk University of Leicester, Leicester, UK.

Peter S. McPherson McGill University, Montreal, Canada.

Land sparing must protect common species too

Ian Bateman and Andrew Balmford contend that sharing land with agriculture for conservation purposes promotes only common bird and insect species, whereas judiciously sparing some lands from agriculture would be more effective for rarer species (*Nature* **618**, 671–674; 2023). But any agricultural conservation scheme must also protect common species that are crucial for food production.

About one-third of agricultural land globally is occupied by food crops that depend on wild pollinators (M. A. Aizen *et al. Curr. Biol.* **18**, 1572–1575; 2008). These include bees, which are already in decline. Bees' foraging range is limited to a few hundred metres (A. Gathmann and T. Tscharrntke *J. Anim. Ecol.* **71**, 757–764; 2002), so combining larger fields under a land-sparing policy could further undermine pollination services. And common birds such as the barn owl (*Tyto alba*), which control agricultural pests and depend on traditional farming, might also be affected (S. M. Kross *et al. Agr. Ecosyst. Environ.* **223**, 167–174; 2016).

Magdalena Lenda, Piotr Skorka
Institute of Nature Conservation,
Polish Academy of Sciences,
Krakow, Poland.
skorasp@gmail.com

Abolish ageism in early-career research awards

Early-career academic awards and prizes should recognize outstanding scientific potential. But eligibility can often depend on biological age, representing an outdated system that is biased against women and young parents and so carries an implicit penalty for parenthood. This could be negated by using career-age criteria instead – say, within seven years of active research after completing a PhD. Applicants with periods of research inactivity would then still be eligible.

Globally, women are more likely than men to experience delays in their career progression because of parenthood (A. C. Morgan *et al. Sci. Adv.* **7**, eabd1996 (2021); V. Valian *Nature* **619**, 244–246 (2023); C. R. Sugimoto and V. Larivière *Equity for Women in Science* (Harvard Univ. Press, 2023)). As gender norms continue to shift towards men's greater involvement in raising their children, biological-age-based eligibility stands to exclude even more potentially remarkable researchers from recognition.

Adopting career-age criteria would preserve the early-career focus of these awards, while preventing unfair competition from established researchers.

Fariba Karimi Vienna University of Technology, Vienna, Austria.
karimi@csh.ac.at

Aaron Clauset University of Colorado Boulder, Boulder, Colorado, USA.

HOW TO SUBMIT CORRESPONDENCE

Please consult the full author guidelines and policies at go.nature.com/cmchno before e-mailing your submission to correspondence@nature.com. It should not be sent as an attachment.

The following cannot be considered: technical comments on peer-reviewed research papers; responses to articles published in journals other than *Nature*; contributions that present primary research data; and submissions that do not comply with the section's strict length and style requirements. Submissions must not be under consideration elsewhere.

Please make clear in your proposed text its pertinence to *Nature's* global readership. Ensure that you include a link to any article under discussion and references or links for fact-checking of all statements, in addition to the limited number of references necessary for publication.