

unequal access to education; conscious and unconscious discrimination in promotion, funding, peer review, citation and more; unequal pay; and, often, a disproportionate burden of domestic responsibilities. All of that can help to explain why women still make up only around 30% of professional researchers. It is encouraging to see the many entries from women who are successful researchers and who are also determined to help others and to inspire the next generation. One route towards equality in science is to offer positive role models to young people.

Some of the most impressive prize entrants focus on countries and locations in the global south, working with particularly impoverished and underprivileged communities. This often comes with additional challenges — sometimes, just reaching remote locations to mentor girls and encourage them to pursue science requires serious commitment. For example, one project, Cielo y Tierra, organizes outreach efforts in rural South America and Africa.

Obviously, not all of the girls and young women reached in this way will end up pursuing science in their studies or careers. But awakening their curiosity and nurturing their ambitions is still worthwhile.

It turns out that mentorship and support over long distances can be highly effective. One scheme has successfully matched researchers with young girls from low-income communities as penfriends. Working with US schools and with scientists around the world, 'Letters to a Pre-Scientist' fosters a love for science, offers support and provides personal experiences. Scientists are encouraged to write at least once every few months, and to give instances of how science has, for example, taught them to persevere or to learn from

failure. It's a simple and effective way to demystify science by creating personal connections. Perhaps you should try it.

For students already in the university environment, gaining access to female scientists might still be difficult. Therefore, many award applicants have set up visiting female researchers' programmes, lecture series focused on female speakers, or social events that enable networking with prominent female researchers.

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In the global north, many of the efforts focus on girls and young women from minority ethnic groups. Others target communities of refugees, the children of female prison inmates and those who live in orphanages.

Many of these projects, the prize entrants told us, are driven by the entrants' own experiences as women in science. For example, some scientists who are also mothers are working to improve childcare provision at scientific conferences. Others have overcome particularly strong local cultural constraints, under which women are rarely seen in public, let alone in science and education.

All of the entrants believe that women should have the opportunity, agency and support to become researchers. We agree. (And we appreciate that gender is neither binary nor necessarily fixed.) Together, these examples show the enormous range of ways to inspire girls and young women, and they offer lessons for all. The full longlists for the two prizes — the Inspiring Science Award and the Innovating Science Award — are available at go.nature.com/2jmri9z. The winners will be announced in October. ■

Publish not perish

Conservationists have a new tool for weighing up the risks and benefits of open data.

From 2013 to 2017, listening to the gentle 'ding ding' of the night parrot was forbidden. Long feared extinct, when the bird (*Pezoporus occidentalis*) was rediscovered, officials in Australia decided to restrict both location data and recordings of its signature call for fear that poachers and enthusiasts might use the information to track and disturb the creatures. Yet when the recordings were declassified and shared last year, conservationists were delighted by what followed: at least three new populations have since been discovered by people using the call to recognize the birds.

Since the bird's rediscovery in 2013, the Australian government has put in place proper conservation safeguards, such as making it illegal to approach the creature's habitat. It's a good example of authorities weighing up the risks and benefits of publicizing the discovery of a rare species and then reaching a sensible compromise. That kind of decision process is increasingly in demand, as data sources and sharing proliferate beyond conventional academic audiences in ways that risk, for example, helping hunters and illegal wildlife traders to track down target species.

In a Perspective published this week in *Nature Ecology & Evolution* (A. I. T. Tulloch *et al.* *Nature Ecol. Evol.* **2**, 1209–1217; 2018), conservation experts offer a way to help scientists and officials to decide when to publish such sensitive information — and when not to. It's the latest development in an ongoing debate that pits advocates of open data against those who take a harder line and want more restrictions. The authors warn that a default position in which location data are withheld if a species is identified as being of high biological significance and under high threat — as recommended by the Global Biodiversity Information Facility — risks missing out on the benefits of data sharing.

To aim for a more balanced approach, the scientists drew up a decision tree to help people judge what to do with information gained from

wildlife monitoring and surveys. A series of steps asks questions such as “Could data be used to mitigate threats to species?” and “Would sharing location data increase risk of species decline through increased visitation?” In some cases — fish spawning locations for one, because the fishing industry would love to target them — the recommendation is to keep everything from the name of a species to its location under wraps. But in other cases, the need for secrecy is trumped by the possible benefits of transparency. Open data could help local communities fight to protect a habitat when development is threatening a species.

Ayesha Tulloch, an environmental scientist at the University of Sydney in Australia who led the analysis, says her team was surprised by the low number of examples they tried that produced a 'don't publish' decision. That, she adds, could help scientists to get funding for projects that might otherwise be rejected because of the restrictions expected to be placed on the eventual results. Several government departments in Australia and New Zealand — including those who have historically kept data from the public — have already said that they are interested in using the decision framework to help set policy.

Such discussions are timely. Scientists are poised to launch a satellite-tracking project that will massively increase the number of species worldwide whose locations can be traced in near-real time. Earlier this year, a satellite antenna called ICARUS — International Cooperation for Animal Research Using Space — was attached to the International Space Station. Combined with lightweight animal tags, it will allow researchers to follow the long-range movements of much smaller species than has previously been possible. For some species, that information could place them at greater risk. There are already concerns that unethical safari guides and hunters have hacked into the biotagging systems used to keep tabs on endangered animals such as lions (S. J. Cooke *et al.* *Conserv. Biol.* **31**, 1205–1207; 2017).

About one in six of the threatened species listed by the International Union for Conservation of Nature are classed as data-deficient, which means conservationists and scientists face a struggle to perform basic analyses such as population modelling and to work out which habitats must be preserved. Data bring power. But they also bring responsibility. This new decision-making tool could help to generate the former while respecting the latter. ■