nature

Celebrate women in science - today, and every day

International Women's Day can serve to bring hope, highlight progress and inspire research communities to continue their efforts to push hard for true gender equality.

nternational Women's Day falls on 8 March; it aims to draw attention to women's achievements and the fight for gender equality. The day has its critics: too performative, say some; an opportunity for institutions to put on a facade of change by doing a photo shoot, say others, or to load over-burdened women in their organizations with yet more duties. But they are wrong. There is a need to raise awareness. Women in science still, on average, publish less and win fewer grants and promotions than do men. Harassment, assault and marginalization drive promising researchers out of science, especially those whose race, ethnicity, disability or sexual orientation makes them targets for discrimination.

Activism and action can engender change - if the systems that have long oppressed researchers who are not male can be made to shift. Part of achieving that goal involves raising awareness of what is possible if barriers are broken down. "We don't need another massively shiny campaign," says less Wade, a physicist at Imperial College London and a campaigner for gender equality. "We actually need to support the women scientists that we have."

It's in that spirit that Nature asked six women researchers how they will be celebrating International Women's Day. Martina Anto-Ocrah is an epidemiologist at the University of Pittsburgh in Pennsylvania who researches sex and gender disparities with an emphasis on women's health and global health, particularly in sub-Saharan Africa. Anto-Ocrah says she wants to celebrate the contribution of social scientists to the advancement of gender equality. Social scientists "are the people who highlight all the cultural issues in our society that hold women back", she says. One example is how, during the COVID-19 pandemic, publication rates for women scientists dropped more markedly than did those for men – confirming that women shouldered a greater share of responsibilities during that time, such as caring for families, leaving less time for research (E. B. Madsen et al. eLife 11, e76559; 2022).

Sandra Díaz is an ecologist at the National University of Córdoba in Argentina and one of the leaders of IPBES, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Díaz wants to celebrate women as science leaders. Although they make up far from half of the researchers running major laboratories or winning big awards, women are increasingly realizing It takes courage for women to enter into and persist in the scientific workforce."

that they can be at the cutting edge of discovery and knowledge production, Díaz notes. "More and more women take leading roles in coming up with groundbreaking ideas, spearheading really risky scientific endeavours, or leading large science-policy bodies." She says girls are learning that, for a woman, engaging in a scientific career does not necessarily mean working in the shadows as a follower.

Wade will be lauding the success of programmes designed to support early-career researchers, such as the Rising Stars scheme at the Massachusetts Institute of Technology (MIT) in Cambridge, and the many similar schemes it has inspired around the world. Rising Stars offers mentoring and support for researchers from historically marginalized or under-represented groups, as they move through their careers. The programme is a direct result of the work of MIT biologist Nancy Hopkins, who showed the institute's male leadership that women had less lab space, lower salaries and fewer grants compared with men. This activism led the institute down a path of change, as a new book, The Exceptions by Kate Zernike, describes. Wade also writes and edits Wikipedia articles on scientists from historically marginalized groups. She finds that, when she creates or edits a page for a US-based scientist, very often they will have gone through a Rising Stars-style programme.

Tanya Monro, Australia's chief defence scientist, will be celebrating courage. "It takes courage for women to enter into and persist in the scientific workforce," says Monro, who works in a field that is more male-dominated than most. "It takes courage for women to speak out when they are expected to shoulder the brunt of changing scientific workplaces, so that the girls and women that follow them have better odds of thriving," she adds. "Women and girls in science need every ounce of that courage for themselves, to overcome the lingering confidence gap many of us carry through life. And I'm glad that these women persist, because it is that courage that allows them to contribute to creating the knowledge and impact that shapes our world."

Gihan Kamel, a physicist at SESAME, the Synchrotron-light for Experimental Science and Applications in the Middle East, based in Jordan, will also be celebrating breaking barriers. "There is progress," she says. "Not least in breaking the extremes in cultural and religious traditions and rules that are made by society and forced on women – usually inherited from one generation to another."

Aster Gebrekirstos, a senior scientist at the World Agroforestry Centre in Nairobi, will be marking women who have succeeded in their roles despite facing significant challenges. These challenges include wars and conflict, says Gebrekirstos, who is from Tigray, a region of Ethiopia that has been at the centre of a devastating conflict. The United Nations Economic Commission for Africa has published Earth, Oceans and Skies (www.africanwomenscientists. com), an open-access anthology of writing from and about African women scientists (including Gebrekirstos). The book is honest about the hardships women have endured "to reach where we are", Gebrekirstos says. Take a moment to acknowledge those hardships and to advance equity today, tomorrow and every day after that.