Whichever way you look at it, women are still alarmingly under-represented in academic science and senior positions across many professions. Christina Maurice talks to Professor Dame Athene Donald – known for her work on gender equality as much as her research in physics – to find out what still needs to happen to achieve gender equality in the workplace.

Aside from her groundbreaking work in soft-matter physics, Professor Athene Donald has been an outspoken champion of gender equality in the sciences – chairing initiatives, organisations and forums, aimed at advancing the career progression and representation of women in STEM subjects. Not to mention picking up a casual damehood along the way.

“One of the reasons the issue of women in science has received so much attention is because the numbers start off so low,” the professor notes. Still only around 20-25 per cent of A-level entrants to physics are women. What’s contributing to this gender imbalance before young women even enter the professional world? “The problems start at school,” believes Professor Donald. Gender imbalance across certain subjects “reflect – at least to some degree – societal attitudes that boys and girls pick up from an early age. A recent study from the US indicated that already, by the age of 6 or 7, girls believe that boys are smarter than them.” And they don’t seem to grow out of it, “these childish beliefs appear to be having a significant impact on later choices,” continues Professor Donald.

And the numbers of women continue to decrease at every level of seniority. Professor Donald believes that unconscious bias is one such issue;
“there is evidence that papers by women are less likely to be cited than those with a male first author.” Why isn’t clear but it appears to be one manifestation of unconscious gender bias. “Such actions matter,” she notes, as the number of citations a scientist’s work receives is used as a judge of academic prowess – clearly impacting job appointment or promotion.

Other evidence has found men and women are described differently in letters of reference, an issue applicable to professions across the board. A distinct lack of “stand-out words such as brilliant or world-leading,” is found, instead, “faint praise such as hard-working, a team player or pleasant to have around,” are used, explains the professor. These actions appear to be largely unintentional, but shining a light on such issues is important in order to raise self-awareness with the hope of combating these tendencies.

When Professor Donald had small children, her husband was the one to give up work to become the primary carer, she acknowledges, “at the time this was very unusual for a man.” But the reality is, although more common these days, it is still rather unusual. “I’d like to think – particularly now there is the opportunity for shared parental leave . . . that it will become much more usual for childcare not simply to be seen as the mother’s problem.” As part-time working continues to disproportionally affect women, Professor Donald strongly believes people should be judged by the quality of their
If you get discouraged every time you throw your hat into the ring, you may well become risk-averse. Are women inherently more risk-averse? I think not necessarily.

Societal views about the roles of women have no doubt changed, with more women and mothers in the workplace than decades gone by. Yet the very existence of the irrefutable gender pay gap reminds us that, despite progress, the days of gender equality are unfortunately yet to come. “Cultural change is hard because it is often the intangible that has to be changed but it’s time society made that leap,” asserts Professor Donald. “I do think there is some shifting in attitudes but there are plenty of young men who seem as
entrenched in their beliefs about male superiority as past generations. You only have to read Twitter to notice that.”

So what needs to change? “Senior management has a key role to play in overturning outdated expectations and ensuring processes properly factor in the changing norms and beliefs,” maintains the professor. “It will require men to step up and call out bad behaviour, not just assume it’s a woman’s problem.”

Change is happening – and with the help of role models like Professor Donald raising awareness about the causes of gender inequality in the sciences, it’s certainly not all doom and gloom. With many lessons from her work applicable to countless professions, the future looks bright. What would her advice be to ambitious young women aspiring to be successful in their chosen fields? “They need to be confident that the world is changing and that they should follow their dreams. Ambition is not a dirty word for women to possess and they should use their talents to get as far as they can.” Sounds like we don’t have to start burning our bras just yet. ♀