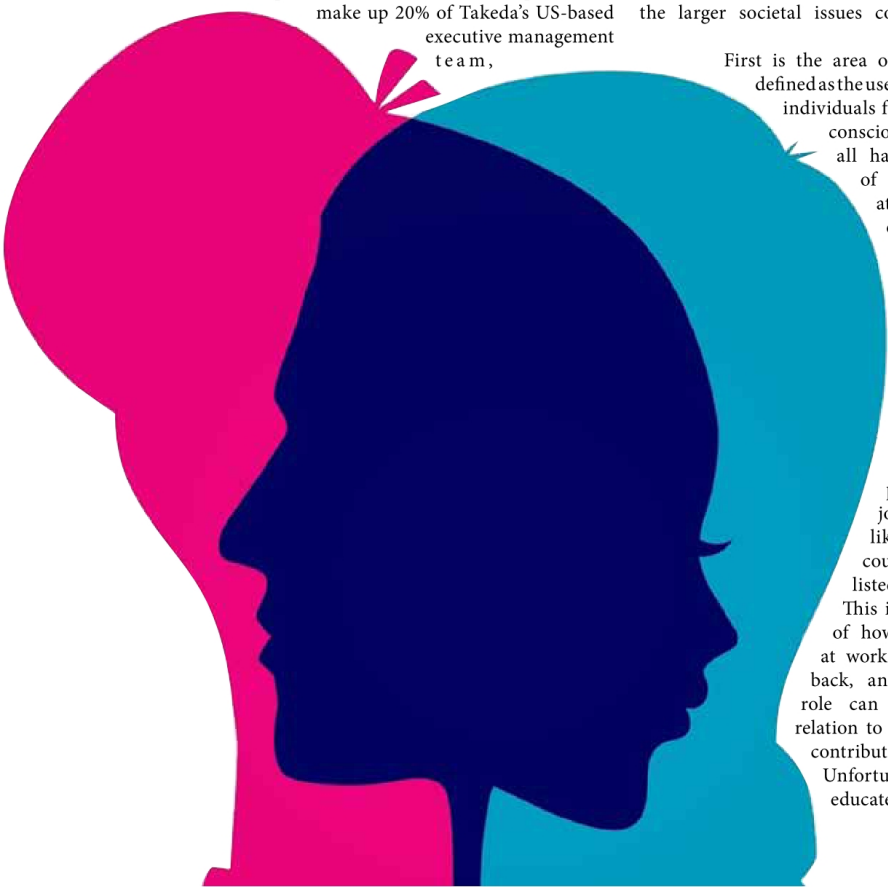
Enough talk: Action is required to achieve parity in biotech

Liz Lewis, Chief Counsel & Head of Patient Advocacy at Takeda Oncology tackles the crucial and topical issue of diversity within life sciences and beyond, and why the benefits of pushing for greater representation reach far beyond stamping out harassment and prejudice

At this year's JP Morgan Healthcare Conference, the largest gathering of the biopharmaceutical industry, one of the most talked about articles came from two industry journalists pointing out men named Michael outnumbered female CEOs presenting at the conference. This is not an issue unique to drugmakers – several years ago, an Ernst & Young report calculated that fewer large companies are run by women than by men named John.

In their simplicity, these statistics are a reality check that our industry has not done its part to promote diversity and inclusion. In fact, the Healthcare Businesswomen's Association reports only 17% of senior management jobs at pharmaceutical, healthcare, and biotechnology companies are currently held by women. I am proud to work for a company as diverse as the patients we serve, one that understands the importance of female leadership. Women make up 20% of Takeda's US-based executive management team, including myself, which puts us slightly ahead of the industry standard.



We are making strides, but our work is far from over. While the widely documented statistics highlight the serious disparity between women and men in senior and executive leadership positions in the industry, they do nothing to move the needle. The current dynamics will not change until tangible actions are taken by those in the life sciences in all settings, from industry-wide initiatives to corporate commitments, all the way down to the efforts of individuals.

What's wrong with this picture?

Anyone who reads the news these days is acutely aware of a plethora of issues facing women across all industries and for which life sciences offers no exceptions. There are a few areas in which we are a microcosm of the larger societal issues coming to the fore.

First is the area of unconscious bias, defined as the use of social stereotypes individuals form outside of their conscious awareness. We all have committed acts of unconscious bias at some point in our lives. A recent research letter published in *JAMA* discussed results of a cross-sectional analysis of original research articles, which found female co-first authors of articles published in clinical journals were less likely than their male counterparts to be listed first in the byline. This is a perfect example of how unconscious bias at work is holding women back, and how a woman's role can be minimised in relation to a man's despite her contributions being equal. Unfortunately, the highly educated and homogenous biotech industry isn't doing enough to understand the impact of these biases, or making coordinated efforts to encourage greater participation of women and minorities.

The second is the area of harassment. As highlighted during the recent US House of Representatives' Subcommittee on Research and Technology hearing on sexual harassment and misconduct in science, this industry is not immune to the #MeToo movement; many brilliant women may have been lost to the STEM fields because of overt or subtle forms of harassment. Progress in the sciences, specifically at the graduate and postdoctoral level, hinges on good recommendations from professors, invitations to work on senior investigators' grants, and access to big data sets or expensive lab equipment, often controlled by an overwhelmingly male senior faculty, some of whom take advantage of those positions of power.

In fact, a 2015 report found one in three female science professors surveyed reported sexual harassment. Efforts towards expanding gender diversity in the sciences often include discussions of how to keep women in the pipeline, but this line of reasoning fails to account for a major leak in that metaphorical pipeline – women are sometimes harassed out of the field, giving up lifelong earning capacity, and stifling productive careers.

Beyond these headline-making issues, there is a subtler impact that a lack of diversity and opportunity has in our industry – the detriment to corporate performance. Organisations that lack diverse management teams are proven to be less innovative, less profitable, and far less successful.

Research on the relationship between gender diversity and company performance is a fast-evolving field. A University of Pennsylvania analysis of peer-reviewed research concluded that having women in executive roles had "small but dependably positive associations" on long-term company value. Many studies have demonstrated that diverse corporations outperform homogenous ones. A 2015 report by McKinsey & Co examined 366 public companies in the United States, Canada, Latin America, and the United Kingdom, and showed companies in the top quartile for ethnic diversity are 35% more likely to have financial returns above their national industry medians.

Financial returns aside, the dearth of diversity among research and development teams can create

a tunnel vision that unintentionally results in higher priority being given to health issues more likely to affect men. Furthermore, innovation does not stem from scientists operating insularly and always drawing on the same ideas in the same way – it comes from finding new ways to solve problems, which requires the divergent perspectives of diverse teams.

At their core, the management models of biotech companies focus on replicating sameness. Executives of both genders say the industry is intrinsically competitive and risk-averse. Drug development teams are built around those who have successfully taken products through regulatory approval and to the market. This practice of promoting from within the industry ranks creates a hierarchy that is tough for anyone to navigate, let alone underrepresented women and minorities. Unconscious biases also come to play here, as senior managers tend to make final hiring and promotion decisions with an implicit belief that it will be easier to align strategies behind people with backgrounds similar to theirs, resulting in a tendency for men to put other men in leadership positions.

What's the solution?

There is cause for optimism about the future as more and more companies and trade organisations are committed to building more diverse workforces and fostering the development of female leaders. Like most complex issues, there is not one easy solution but rather a multitude of ways individuals and groups within the industry can chip away at the problem. Here are just a few.

It starts at school

It is easy to chalk up the lack of diversity in biotech to a pipeline problem – that there are simply not enough properly skilled women and minorities for hire. But that feels like an oversimplification of the problem and instead we need to go a little farther back and look at the source.

One way to increase biotech's diversity is to diversify the biomedical researcher pipeline that feeds it. Increasing the number of women and minority instructors at universities may soften the stereotype threat for students and facilitate relationships where mentors better understand these students' experiences as they move through their programmes. Professors and principle investigators can foster diversity and inclusion by making concerted efforts to invite and include underrepresented students to participate in their research.

Importantly, we need scientists and researchers in power across the industry – in both university and corporate settings in biotech – to examine and change the broader culture surrounding science to stop harassment in its tracks. This includes taking measures to prevent and ameliorate problems. A case in point: the National Science Foundation recently instituted an initiative to set up a database where students and faculty members can report misconduct, but they should also include better training for bystanders to step in, and a more transparent reporting process to protect victims from retaliation.

Another way we can ensure the biomedical pipeline is flush with female leaders who are prepared to rise to the challenge of addressing tomorrow's business problems is by supporting STEM education at the K through 12 level. Many of my colleagues in leadership positions at Takeda are actively involved in STEM education in our local schools to encourage and nurture a love of science in young women.

> **"Our legacy depends on our ability to make life sciences an industry of true equality"**

Towards a more equal workplace

At a corporate level, policy changes can be made and organisational initiatives can be implemented to drive progress towards achieving diversity and equality in the industry. Current management models favour drawing talent from within the industry, and although it's true that hiring executives from a pool of familiar candidates is the path of least resistance, companies should instead seek to draw talent from other industries where female executives are more prevalent or from professions that are traditionally female-dominated.

Companies within the biopharma industry should take a close look at the recommendations from groups such as the Healthcare Businesswomen's Association, BIO, or the partnership between MassBIO and Liftstream for approaches they can implement to address the gender gap and engage women and minorities throughout their organisations.

Takeda is an active member of the industry and community, and is focused on supporting women in the life sciences industry even outside our walls. To that end, we announced our support of the launch of the MassNextGen initiative, a five-year, $1 million programme anchored by Takeda and matched by the Massachusetts Life Sciences Center (MLSC). This highly competitive programme is focused on supporting women-led or controlled early-stage biotech companies.

As a company, Takeda is also taking strides toward gender parity and sustainable diversity and inclusion by creating various Employee Reference Groups (ERGs), which consist of individuals with shared characteristics and life experiences as well as their advocates and allies. These groups work to enhance both career and personal development of members in addition to contributing to positive business outcomes.

Even without supporting these initiatives monetarily, companies can implement programmes and practices that help foster gender equality. For example, requiring executive training to spot and reduce unconscious bias, and holding individuals accountable for their actions, would go a long way to create an atmosphere more welcoming to women and minorities. These programmes can help brand a workplace as female-friendly and communicate outwardly that an organisation is committed to creating a supportive environment for women and promoting a diverse workplace.

Be the change

On an individual level, those of us who have entered the pharmaceutical, biotech, and life sciences industry can attract and retain top female and minority talent by actively engaging in mentorship. Mentorships have been proven to help employees climb the corporate ladder and I am so lucky to have had several mentors throughout my career who challenged my thinking, pushed me in new directions, and helped shape me into the professional I am today. Now, I actively mentor (both formally or informally) many young women within the organisation to help them on their path to take on new challenges to advance their careers and meet their goals.

Women have so much to offer one another professionally, and sometimes personally. We have job and life experiences to share that may be of tremendous benefit to others if we simply take the time to invest – just as others did for us. It is especially important for young women in STEM to see women in executive roles in the industry. Increased visibility of these female leaders both at the individual level through mentorship, and on a larger scale, will attract more young women to STEM careers and the bioscience industry.

While the importance of fostering female mentoring relationships cannot be understated, it would be a mistake not to involve men, especially given the gender imbalance at the higher ranks. Men should be encouraged to mentor and advocate for women in the workplace, perhaps looking to the United Nations' HeForShe programme as a template. HeForShe is a solidarity movement for the advancement of women with the goal of achieving equality by driving men of all ages to be agents of change. The campaign was founded on the simple premise that gender equality is an issue that affects all people, not just women.

Cause for hope

While our work on this is far from over, we can celebrate the current efforts to accelerate a transformation that will lead to the advancement and retention of more women in the life sciences industry. We can also proudly support organisations that align with our own mission and operate with the goal of offering every employee the opportunity to thrive, develop, and grow based on merit and ambition regardless of gender.

Implementing the recommendations outlined, among others, can and will affect change. Diversity can be an uncomfortable topic, but it is up to us to continue having the tough conversations to address and rectify gender imbalance. A collective commitment from all settings in the industry across multiple levels is required to foster the development of diverse workplaces and to champion the growth of female leaders. And then that commitment needs to turn into concrete actions. Our legacy depends on our ability to make life sciences an industry of true equality. If we hope to see this idea realised, the change must happen now. Our daughters – and our sons – will thank us.