

# The diversity challenges in STEM

Despite ongoing efforts over the last few decades, there remains a significant lack of diversity in Science, Technology, Engineering and Mathematics (STEM) careers, with women, people from ethnic minorities, disadvantaged backgrounds and those with disabilities still not making up a representative proportion of the STEM workforce.<sup>1</sup>

Earlier this year, the UK Government announced its ambition to transform the UK into a life sciences superpower,<sup>2</sup> with Prime Minister Boris Johnson recently launching The Office for Science and Technology Strategy. However, there is a shortage of necessary STEM skills in the UK, which has been estimated to cost businesses £1.5bn per year in terms of recruitment, temporary staffing, inflated salaries and additional training costs.<sup>3</sup> Without ensuring the full potential spectrum of the future workforce feels empowered and interested in pursuing a STEM career, we cannot futureproof this vital UK industry.

Following the publication of the 'Future of Science' survey (July 2021), which further highlighted barriers to entry in STEM careers, Ipsen convened a steering committee of representatives from STEM Learning, the Association for the British Pharmaceutical Industry (ABPI), The Diversity Trust, the British Science Association (BSA) and Teach First. The committee agreed four key areas of focus where they feel progress could be made to help increase interest in STEM careers amongst young people and foster greater diversity in the future.

## 1. Increase diversity of STEM role models

From a young age, children need to be able to recognise STEM role models from all backgrounds, encompassing diversity of gender, ethnicity, socioeconomic background, disability, and geography.

## 2. Showcase the variety of STEM careers

You do not need to be a scientist or engineer to work within the STEM industry – there are many roles from legal, to marketing, to HR, and more. There is opportunity for the life sciences industry to better showcase the variety of roles available through virtual careers fairs and talks, reaching more young people and showing them the breadth of career choice available.

## 3. Influence the influencers

Encouragement and celebration at home can have a powerful effect and there is an opportunity to leverage the influence of parents and guardians, shifting their attitudes to improve young people's pursuit of STEM subjects and careers.

## 4. Continuing to listen and learn from one another

In order to address the lack of diversity in the life sciences industry and encourage more young people to pursue STEM, it is vital that relevant organisations and interested parties continue to convene and, further, offer a seat to more diverse representatives to ensure all voices are heard.

The steering committee meeting followed the publication of findings from the 'Future of Science' survey, which was commissioned by Ipsen Ltd. in collaboration with New Scientist to understand 7- to 21-year-olds' current perceptions of careers in science. Ipsen is a significant life sciences employer in the UK with an ongoing commitment to promoting careers in science.

The survey of 797 people aged 7 to 21 showed young people are interested in science and medical careers, heightened by the Covid pandemic, however, the research also unearthed a number of barriers that may prevent young people from pursuing a future in science:<sup>4</sup>

**Two in five (40%)** young people felt science and medicine related jobs are not equally accessible to people from all ethnic backgrounds and genders.

This belief increased with age, rising to over half of 16- to 21-year-olds (51%).

35% of 16- to 21-year-olds said they have not had a conversation about university courses or career options in medical and life sciences at school.

**17%** of young people were put off a career in science because they don't trust the pharmaceutical industry.

Following the steering committee meeting, Ipsen is considering its commitments to furthering the STEM agenda and will announce its plans in the first half of 2022.

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## Comments from steering committee members:

“From both industry and teachers, there is so much positive intent when it comes to STEM. The challenge will be funnelling these good intentions into helpful and focused endeavours that support the great work teachers are already doing. Teachers have a huge burden of responsibility already and anything we can do to support them in forging young people’s interest in STEM needs to be a priority.”

*Reuben Moore,  
Executive Director for Programme Development, Teach First*

“The world has changed as a consequence of the COVID-19 pandemic, but perhaps one shining light has been the media’s shifting view of science. Some scientists have become celebrities; Professor Dame Sarah Gilbert, one of the architects of the Oxford vaccine, has become a household name. We have new, positive role models for science that children can grow up with. It is important we preserve this celebratory status while simultaneously highlighting and championing our fabulous everyday role models (STEM Ambassadors) who inspire the next generation in schools.”

*Ajay Sharman,  
Regional Network Lead, STEM Learning*

“‘If I don’t see myself in you, you’re not for me’ – representation is vital for young people. They have to be able to see people like themselves working in STEM careers. At the moment, the opportunities are just not visible to many young people and so they can’t pursue them.”

*Berkeley Wilde,  
Executive Director, The Diversity Trust*

“There is a huge misconception that you need to be a scientist to have a career in science. People forget about the lawyers, the marketeers, the human resources team. So many individuals need to come together to make the science industry work and it’s important that young people realise the breadth of opportunities the STEM sector provides.”

*Andrew Croydon,  
Skills @ Education Policy and Examinations Director, ABPI.*

“Early years intervention is the most powerful tool we have. By the age of 10, children will have decided whether or not science is something they are interested in, so we must focus our efforts on encouraging the interest of young people in science and giving them practical opportunities to learn from an early age.”

*Panagiota Letsou,  
CREST Product Manager, BSA.*

“Learning from the insights provided by this expert group has been incredibly valuable but we are all cognisant of the fact that we need to bring more people round the table to progress our conversations. We need to hear from more diverse representatives who have lived experience and collectively identify practical solutions.”

*Ian Weatherhead,  
Head of Corporate Affairs, Ipsen UK @ Ireland*

1. All-Party Parliamentary Group for Diversity and Inclusion in STEM. The State of the Sector: Diversity and representation in STEM industries in the UK. Available: <https://bit.ly/2TUNdEF>. Accessed: January 2022.
2. GOV.UK. Hancock: Transforming the UK into a life sciences superpower. Available: <https://bit.ly/3pUcT26>. Accessed: January 2022.
3. EMSI. Focus on the demand for STEM jobs & skills in Britain. Available: <https://bit.ly/2TJKDbf>. Accessed: January 2022.
4. Ipsen Data on File ALL-UK-001361

