Empowering students from the lowest income backgrounds to achieve their potential and progress to STEM careers.

‘It was an amazing experience and journey providing me with real and first hand experience that STEM is the future!’

‘Without the in2scienceUK placement I would never have felt as confident as I do now about applying to universities

Completed by Dr Leanne Grech leanne@in2scienceuk.org
Foreword from our Founder Dr Rebecca McKelvey

**Why We Exist.**

In2scienceUK was founded in 2011. Since then we have supported over 1000 young people progress through our STEM focused programme. Promoting diversity and attracting the brightest regardless of background is vital to drive innovation and success in the scientific community.

However, 60% of academics and life science professionals and over 50% of scientists come from privileged backgrounds. For doctors the figure sits at 73%. In contrast, less than 15% of academics, 10% life science professionals, 15% of scientists and 6% of doctors are from working class backgrounds (Insights from The Labour Force Survey, 2017).

A good education is key to progressing to top STEM jobs but bright young people from low income backgrounds remain under-represented at our universities, particularly our top institutions.

Access of A-level Students to University (DfE, 2015)

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<th>% of A-level students</th>
<th>Free school meal</th>
<th>Privately educated</th>
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<td>44%</td>
<td>92%</td>
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Access of A-level Students to a Russell Group (DfE, 2015)

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<th>% of A-level students</th>
<th>Free school meal</th>
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<td>5%</td>
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**How does in2scienceUK work?**

Having high science capital (work experiences, knowledge, role models and high quality science career guidance) is crucial in raising attainment, interest and career decision making (POST, 2013; Wellcome Trust, 2013).

We support young people from low income backgrounds gain insights into STEM careers and deliver a high quality programme of university access support and employability workshops.

UCAS analysed the in2scienceUK data set to show that our programme ‘significantly increases’ the numbers of students progressing to top and middle tariff universities compared to students from a similar socio-economic background, attainment, ethnicity and address.
In 2017, we received more than **1700 applications**. Following applications, students were shortlisted and interviewed before being offered a placement. We held around **280 interviews for 250 places** on the in2scienceUK programme, ensuring students met the requirements for entrance to all universities.

This year, we have also expanded our catchment area to the city of Oxford. Overall, 30 placements were held at the University of Oxford *(please refer to the Oxford Impact Report for more details)*. The rest of the placements took place around top universities in London.

When combined, 100% of students were from a disadvantaged background.
2017 Cohort: Pre- and Post-Placement Surveys

Pre- and post-placement, participants were asked to complete a number of questions. Outlined in the report are the findings from these surveys (n=180 for pre- and n=189 for post-placement). Imperial College London students are not included in these surveys, whereas Oxford students are not included in the pre-placement surveys.

**Before the Placement:**
- 97% of students were excited at the prospect of doing a science degree.

**After the Placement:**
- Students were asked to rate their experience on a scale of 1 to 5, 5 being “excellent”.

- 66% Strongly agree
- 28% Agree
- 6% Undecided
- 6% Disagree
- 6% Strongly disagree

- However, 37% did not understand the content and structure of a range of science / STEM degrees.

- They had more confidence knowing that there is a large range of science careers.

- In addition, 59% did not know what makes for a high quality UCAS personal statement.

- 77% have drafted their personal statement for the UCAS application.

- 23% have written a high quality UCAS personal statement
- 77% have written a high quality UCAS personal statement
- 23% have not written a UCAS personal statement
Overall, the in2scienceUK placements motivated the students to attend a highly selective university (left). University College London was the top choice when participants were asked to state five universities that they would apply to (right).

Students were also asked which degree area(s) they are thinking of applying to study at university. 93% will choose a science degree.
In this section, we will explore the benefits gained from the placements (n=189).

94% of participants would recommend a placement to other A-Level students. In addition, through their placements, students were able to:

- meet a scientist who is not their science teacher (86%)
- visit a science museum (85%)
- attend a university open day (82%)
- attend a lecture on science outside of school (78%)
- give a presentation on a science/STEM topic (69%)
- read a paper which a scientist has written about their own research (65%)

87% of students would not have had this opportunity without in2scienceUK.

![Image of a student in a lab](image.png)
The Abcam Scholars programme

This year, we collaborated with Abcam to launch an innovate programme which supports local young people in the Cambridge area gain work placements and mentoring enabling them to working alongside Abcam employees in departments across the business from the wet lab to logistics, marketing and HR.

"The highlight was being able to work with state of the art equipment that I hadn’t been exposed to during college or school. The staff at Abcam were really reassuring, and motivated me to pursue my career goals ”

*Tristan from Long Road College studying Applied Biology BTEC.*

The Abcam Image Competition

Abcam has also supported the in2scienceUK public engagement competition which saw all of our in2scienceUK students enter images taken during their work placements into one of three categories. Science down the microscope, the faces of science and science through the lens. The next page shows some of our entries.
The Abcam Image Competition
2017 Cohort: About the Placement

Students’ Comments...

David Adu-Gyamfi: “Absolutely loved it; something I will definitely recommend to anyone and everyone considering a STEM subject. What in2scienceUK are doing is amazing!”

Louis Kashari: “It may be challenging. You may be nervous and question yourself at times, however; you will grow and evolve - as a scientific mind, dreamer, an innovator.”

Lucas Liorancas: “I kept saying to myself ‘No, it’s too much effort. No, I will not have time’ but I’m so glad I climbed over those barriers and now I’m a step closer to my goal.”

Emre Dogan: “I don’t know what I would have done without in2scienceUK. My placement not only taught me a lot about the world of STEM, but it also helped me grow as a person. I have met many wonderful people during my placement, some of which I still stay in contact with. in2scienceUK is one of the best programmes I have ever been on.”

Marion Lattie: “Finding scientific work experience is much easier thanks to in2scienceUK.”

Sinthuja Muthulingam: “It was an amazing experience where I got to meet scientists who love their job and make a real impact in the field of research.”

Victoria Tawiah: “I feel so lucky to have had this opportunity. This placement has not only boosted my confidence but also given me a real idea of what science could be like as a career.”
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