

## Background

More than half of employers have reported difficulty recruiting into careers in STEM roles (The Open University, 2019). This is demonstrated in pathology where a Royal College of Pathologists workforce census (2018) showed that only 3% of histopathology departments reported sufficient staffing levels to meet clinical demand, with an impending retirement crisis.

Restrictions due to the COVID-19 pandemic made it impossible for pathology laboratories to provide on-site work experience opportunities for students. Engagement with secondary school students to raise awareness of careers available in pathology is vital to encourage recruitment with the correct skills from a diverse range of backgrounds.

The Nuffield Foundation (2020) created the Nuffield Future Researchers scheme to enable students from widening participation backgrounds to complete a virtual work experience project during the summer holidays.

## Virtual Work Experience Project

The healthcare science education team at Great Ormond Street Hospital supported two secondary school students from the Nuffield Future Researcher's Scheme. Each student carried out a learning needs analysis to identify the STEM engagement needs of UK secondary school students. The project was designed in order to give students an experience of mixed methods research and to learn how to more effectively engage with school students about pathology careers.

Students developed a survey in conjunction with their supervisor which was distributed through a variety of social media channels to recruit as many secondary school students as possible. As 4% of UK households lack internet access (Office of National Statistics, 2020) that the survey may fail to reach a target group of lower income households, however, it was not considered practical to carry out in-person surveys during the pandemic.

## Survey Results

In total the survey received 159 responses from UK secondary school students including a wide range of locations and ethnic backgrounds. Responses showed that the most commonly checked social media sites that were checked were TikTok (90.2%), YouTube (87.5%) and Instagram (84.8%) highlighting these as the most useful sites to engage with students.

Less than half of the students who responded had engaged with the STEM careers events at their school, and only a third of students were aware of a STEM careers engagement programme at their school.

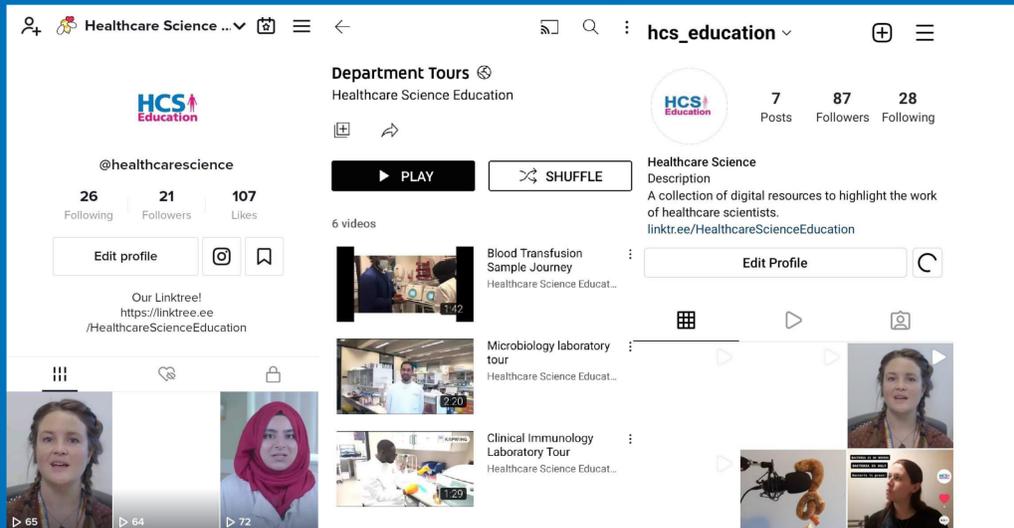


Figure 1. Social media accounts developed as a result of the project



Figure 2. Information videos created in response to survey results.

## Survey Recommendations

Survey respondents were asked to watch a previously produced career video and give feedback. Over half of respondents in each survey (56.3% and 65.8%) stated that the videos were engaging, however, only 33.3% stated that they would investigate healthcare science careers further.

There were general themes from survey responses on ways in which future careers videos could be more engaging. These included:

- ✓ Longer video to provide more information
- ✓ Provide links for follow up information
- ✓ Explanation of day to day role, career progression and salary prospects
- ✓ Diagrams on the screen to explain scientific concepts

## Response to Survey Results

The information gathered in this project has been used to improve the student engagement work undertaken by the healthcare scientists in multiple Trusts. The healthcare science education at Great Ormond Street Hospital have developed YouTube, Instagram and TikTok channels (Figure 1) in order to engage with students.

Recommendations from this survey have been used to influence social media strategy and content (Figure 2), including during the recent #PathologyROAR campaign, funded by the ACB, IBMS, NSHCS and RCPATH, with videos gaining 15,000 impressions on Twitter.

## Conclusion

This project gave two secondary school students the opportunity to complete a research project in spite of COVID-19 restrictions. The project provided a wealth of information that has been used to shape public engagement policy and develop more effective digital pathology career resources that can be used to raise the profile of pathology careers and support workforce recruitment.

## Acknowledgements

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## References

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