

The Biochemical Society Scientific Outreach Grant feedback:

Our aim was to establish a primary school outreach project called Microscopes 4 Schools run by the University of Manchester. This scheme would engage pupils in hands-on use of microscope equipment and be accompanied by a virtual session explaining how biologists at the University use microscopes and the career path of a scientist. The funds were used to purchase the initial microscope equipment and branding stickers. Savings were made on the original proposed expenditure by using a refurbished laptop provided by IT services free of charge rather than purchasing new. These savings were reinvested in a second microscope (more details below).

The initial project set up was achieved by late spring 2024. This involved appropriate risk assessments, producing instructions and suggest activity documents as well as practice sessions with local teachers. This allowed us to trial the project in two primary schools in June/July. These initial loans provided good feedback to launch the scheme fully at the start of the 2024/25 academic year. To date we have engaged 7 primary schools, with 2 more confirmed and the search to include more ongoing. In total over 500 pupils have had the opportunity of hands-on experience with the microscopes. Most of these children have also enjoyed the *Meet the Researchers* video call with scientists from the University of Manchester (two schools declined the offer). These sessions have taught the pupils about how scientist use microscopes at work and informed them about science as a career. The questions asked by the children have been amazing, from wanting to know the costs of our microscopes, to the costs of the most expensive microscope we've ever used, and also about how cells grow and what is our favourite thing about being a scientist.

Inspired by the program, the Manchester Cancer Research Centre have helped us purchase a second microscope. This was used as part of their stall at the New Scientist Live outreach event, contributing to an educational piece called *Under the Microscope: What's the Cancer Risk?* Across the 3 day event, over 1000 people visited the stall. This second microscope is now available for use with schools, doubling our capacity with this project. This has proved particularly important for the larger schools in Greater Manchester where up to 120 pupils sharing one microscope would not be tenable.

The outreach scheme has certainly benefited the schools, pupils and teacher that we have engaged. Beyond this, the opportunity for researchers at the University to speak to children about their work and careers has also been well received. All of those who have contributed to the *Meet the Researchers* sessions have enjoyed seeing the response and excitement of the teachers and children. The project will continue for the foreseeable future, with the aim to engage as many local primary schools as possible. Now that we are more established, we are switching our focus to engage schools from areas of deprivation and where access to similar outreach schemes has been poor. The long-term goal remains to enable wider participation in the sciences across Greater Manchester.



Two images taken by pupils during their use of the microscopes in their classrooms.



The microscope equipment at the Manchester Cancer Research Centre's New Scientist Live stall in October 2024.