Although the number of young men and women studying mathematics at university is balancing out, it is still the case that fewer than 10% of mathematics professors in the UK are female. To inspire young women to consider a career in research mathematics, Demi Allen, Abigail Bown, Catherine Bruce, Elizabeth Buckingham-Jeffery, and Louise Walker organised the first "Women in Mathematics Research" day for local year 12 students in the School of Mathematics in June 2018. To showcase successful female role models, all of the speakers and volunteers at the event were female mathematicians. The event included plenary talks by Professor Victoria Gould (York) on "My Career as a Mathematician" and Dr Isobel Falconer (St Andrews) on "Female Mathematicians Throughout History", and concluded with a keynote talk by Dr Helena Stage (Manchester) on "Rationalising Chaos". In addition, there were several parallel workshops run by local and external mathematicians at different stages of their careers relating to aspects of their research. The students were free to choose which workshops to attend and time was also factored in to the workshops for the mathematicians to say a bit about their careers so far and allow students to ask them questions.

How Demi, Abigail, Catherine, Elizabeth, and Louise have made a difference

This event inspired (particularly female) students that a career as a research mathematician is something they can aspire to. In addition to learning about areas of mathematics not encountered at school, the students really appreciated "being able to ask lots of individual questions" due to small group sizes. When asked what the most useful aspect of the day was, one student said "hearing about women who have achieved something in worse conditions than we have nowadays has inspired me to handle being in a male dominated job" while another commented on "meeting all these amazing mathematicians" and the "empowering atmosphere!".