

Success Stories in Mathematics

What does it mean to be a successful mathematician? What is involved in a successful mathematical career? The LMS Success Stories project aims to celebrate the diversity of successful careers and mathematicians. We are always interested in new profiles! If you have an idea, or would like to submit your own profile, please email Success.Stories@lms.ac.uk.

Name: Helen Webster

Job: Senior scientist in atmospheric dispersion & air quality, Met Office



I loved mathematics from an early age, relishing the academic challenge and being absorbed by its beauty and logical structure. Choosing to pursue a Mathematics degree at Oxford University was,

therefore, an easy decision. After my degree, I completed a PGCE in Secondary Mathematics before studying for a PhD in Applied Mathematics at the University of Kent in Canterbury.

At the Met Office, I am able to conduct scientific research and to see the practical benefits to society. As a research scientist in atmospheric dispersion, I seek to improve our ability to give good advice and predictions of the atmospheric transport of poten-

tially hazardous substances in the atmosphere. My work is interdisciplinary and involves applying my mathematical knowledge alongside physics, meteorology, environmental science and computing, to name but a few. I love the variety in the work and the fact that I am always learning new things. I also have the opportunity to present my work at scientific conferences and to publish in refereed journals. Recently, I spent four months on a secondment based at the US Geological Survey, collaborating with volcanologists to improve our modelling of volcanic ash clouds.

Aside from my day job, I am also a STEM ambassador which enables me to inspire young people and to promote STEM subjects by sharing my enthusiasm for my job and for mathematics. Outside of mathematics, I am a keen water skier and am actively involved with my local church.

Name: Allison Henrich

Job: Associate Professor of Mathematics, Seattle University



I feel like I am successful because I've had amazing support and guidance from colleagues, collaborators, mentors, and professional development organisations. Without fail, my colleagues have advocated

for me, to help me earn promotion and tenure, to help me win a national teaching award (the MAA's Alder Award), and to help me feel like I'm supported in general on a day to day basis. My collaborators across the world have been a constant source of inspiration for new research ideas. They've kept me excited about making time for my research, despite

the demands that teaching, service, and administration place on my time. My mentors have also been an invaluable resource. They have taught me how to win grants (like an REU grant from the National Science Foundation), how to mentor undergraduate researchers, and how to become more connected in the math community. I have been inspired to become a better teacher, mentor, and colleague through my involvement with the Mathematical Association of America, Project NexT, the Council on Undergraduate Research, and the Academy of Inquiry-Based Learning. This is all to say that nobody can become successful alone. I am constantly in awe of my good fortune, as I have been able to surround myself with people who support the work I do and help me push my own limits of success.