AMGEN® Biotech Experience

Scientific Discovery for the Classroom

February 2026

ABE UK newsletter

Welcome

By Dr Eddie Orija, director, UH Centre for STEM Education

Welcome to our spring newsletter and first of 2026. Following a record number of ABE Master Teacher Fellowship (MTF) applications from ABE sites across the globe, the maximum 12 fellowships were announced and we were thrilled that three UK ABE applicants have been selected as Master Teacher Fellows, including the first ever ABE Science technician MTF , completely unprecedented! This is all such an exceptional achievement for ABE UK, and we are proud to finally have UK MTFs; Alison Jayne Ackroyd, Patricia Hess, and Sam Ward.

I am delighted that so many of you have taken the opportunity to register for our Cutting-Edge Biotechnology Day on 18th March 2026 at the Wellcome Genome Campus, Cambridge. This event is now full, but you can join our waiting list by emailing us.

UK ABE Programme Impact – 2025

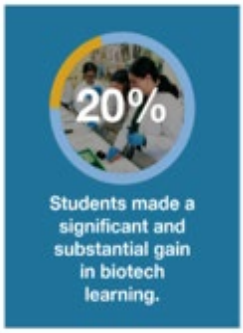
2025 was a milestone year for the UK ABE Programme! We proudly reached **5,750 students**, supported by **142 dedicated teachers and technicians** across **71 schools**. Adding to this momentum, **11 new schools** joined the ABE community, welcoming **25 new teachers and technicians** - a fantastic step forward in expanding opportunities and strengthening our network.

Spreading the news

As part of our outreach and dissemination efforts, we have been glad to talk about the ABE programme at both a live (free) industry insights workshop via zoom for the Education Training Foundation, and, more recently at the Association for Science Education (ASE) 2026 conference at the University of Nottingham.

Here's a snapshot of centre director Eddie Orija in action at ASE, photo credit goes to our very own Phil Smith, who co-presented with Eddie.

ABE is effective



The ABE Program is a global initiative, working with teachers in 17 countries around the world (and still growing). The latest Global Teacher Survey closed in October 2025, but you might like a reminder of the findings from the previous survey, with some great results regarding the effectiveness of ABE.

Independent evaluation data found that students exposed to ABE gain significant and substantial learning in biotechnology and increased interest and confidence in doing science and biotechnology

Master Teacher Fellowship update

You may have spotted this in our social media – we couldn't wait to share the news that our UK programme has made an impact in this year's Amgen Biotech Experience Master Teacher Fellowship. Meet this year's MTF cohort and hear below from Alison Ackroyd, Patricia Hess and Sam Ward about what inclusion in the programme means to them and how things are progressing so far

Alison Ackroyd

Science Lecturer and Amgen Biotech Experience (ABE) Hub Lead

MidKent College

A short bio

I am a post-16 science educator specialising in T Level Science with a focus on authentic, industry-aligned practical work. My work centres on supporting teachers to design high-quality biotech experiences that develop technical competence, professional behaviours and confidence in laboratory practice. I am particularly interested in widening access to real-world bioscience for students and educators across further education.

Brief description of MTF proposal

My Master Teacher Fellowship project will support T Level and other Level 3 science teachers to explicitly develop technical knowledge, skills and behaviours in the biosciences. Through targeted CPD, shared resources and hub-based collaboration, I aim to strengthens teachers' confidence in embedding industry-relevant practice, quality assurance thinking and professional laboratory behaviours.

A short bio

From ABE Hertfordshire, Patricia is a biology teacher at St George's School with 14 years of experience and a strong academic background that includes a PhD and postdoctoral research at Harvard Medical School. For the past 12 years, she has integrated the ABE program into her teaching, using hands-on molecular biology experiences to inspire and challenge her students. Patricia is passionate about bringing fresh, creative ideas into the classroom and nurturing the next generation of scientists through practical inquiry and high-quality scientific practice.

Patricia Hess

Teacher of Biology

Currently at St George's School Harpenden but moving to St Albans High School for Girls in April

Brief description of MTF proposal

So far, we only met once so we have not had time to discuss our projects. I have an idea focused on learning about gene editing and the bioethics implications, which would involve the use of the LabXchange portal.

Dr Samantha Ward RSci Tech

Senior Science Technician

Thomas Alleyne Academy

A short bio

I have a background in molecular and cell biology, with a BSc and MSc in Biomedical Sciences. After graduating, I worked as a Research Assistant at the Institute of Neurology (UCL), investigating genetic alterations in paediatric glial tumours, specialising in rare ependymomas. My work involved DNA extraction, PCR, CGH analysis, gene sequencing, and establishing short-term cell cultures. During this time, I completed my PhD. I moved into education, initially as a science technician, and joined Thomas Alleyne Academy in 2016. I first became involved with the ABE programme in 2017, sharing my passion for molecular biology with students and highlighting the wide range of careers in the field. In 2020, I trained as an ABE facilitator, leading outreach workshops for technicians and schools.

Brief description of MTF proposal

I am honoured to have been selected as an ABE Master Teacher Fellow, becoming the first science technician to receive this recognition. As part of my fellowship, I plan to lead a biodiversity project with Year 12 students working towards a Gold CREST Award, combining field ecology with DNA barcoding to explore how land use impacts biodiversity on our school site, supported by partners at the National Education Nature Park and the Natural History Museum.

Kit loan – the essentials

If you have not yet submitted your School Planning Form for 2025/26 to request a kit loan, please do so to secure a kit for this academic year, subject to spaces being available at your hub. You can contact your local hub or email stem@herts.ac.uk to check availability.

The signed Health & Safety and Insurance Advice Form must be returned before borrowing the kit.

Please ensure that you have access to the standard laboratory equipment needed to run the ABE practical activities. Reviewing the equipment list in advance will help ensure the sessions run smoothly once the kit is loaned.

Each kit is fully equipped to support 12 pairs of students. Additional reagents and consumables can be supplied, allowing the activities to be run multiple times to accommodate larger cohorts.

If you have already borrowed your kit and have not yet provided feedback, we kindly request that you take a moment to complete it. Your feedback helps us ensure the kits and practicals continue to meet the needs of both teachers and students, making the ABE experience as engaging and smooth as possible. Please use the links and QR codes below to submit your feedback.

ABE kit loan 2025-26 feedback

ABE student feedback 2025-26

Cutting Edge Biotechnology– waiting list

We've had such a wonderful response from you regarding this event taking place in March at the Wellcome Genome Campus.

Was it the talks on cutting edge science, the case studies, the networking opportunities, the campus tour or the free lunch that tempted you? Regardless, we're delighted that so many of you have registered for this event. If you have not yet had confirmation of your place, do not despair as our partners at Wellcome Sanger will soon be in touch.

We are now operating a waiting list for the event, so please if for any reason in the days and weeks leading up to the event your circumstances change and you will be unable to attend, do let us know so that someone else can benefit from this amazing event.

This conference is free to you but comes at a cost to both ABE UK and Wellcome Sanger, so let's fill the room with like-minded, innovative teachers and technicians and make this day really special.

To join our waiting list, email stem@herts.ac.uk

Summer 2026 CPD

We're pleased to share dates of summer 2026 CPD. Teacher and technician training across our hubs in June and July 2026 will enable participating schools and colleges to take up kit loan in the 2026-27 academic year.

Course 1 - Introduction to DNA manipulation (day 1 for teachers and technicians, day 2 for technicians)*

Location	Date	Time
University of Hertfordshire, College Lane Campus, Hatfield, AL10 9AB	23-24 June 2026	9:30 to 15:30
University of Hull, Hardy Building, Kingston upon Hull, HU6 7RX	9 July 2026	9:30 to 16:30
Teacher Scientist Network, John Innes Centre, Colney Lane, Norwich, NR4 7UH	2-3 July 2026	9:30 to 15:30
MidKent College, Medway Campus, Medway Road, Gillingham, ME7 1FN	15 June 2026	9:30 to 16:30
Cambridge Regional College, Cambridge Campus, Kings Hedges, Cambridge, CB24 2QT	22-23 June 2026	9:30 to 15:30

* Course 1 runs over 1 day, for both teachers and technicians, at University of Hull and MidKent College

Course 2- Extending practical work (1-day course for teachers and technicians with follow-up 1-hour online session the following day from 16.00- 17.00)

Location	Date	Time
University of Hertfordshire, College Lane Campus, Hatfield, AL10 9AB	25 June 2026	9:30 to 15:30
University of Hull, Hardy Building, Kingston upon Hull, HU6 7RX	10 July 2026 TBC	9:30 to 15:30
Teacher Scientist Network, John Innes Centre, Colney Lane, Norwich, NR4 7UH	8 July 2026	9:30 to 15:30
Cambridge Regional College, Cambridge Campus, Kings Hedges, Cambridge, CB24 2QT	25 June 2026	9:30 to 15:30

Please share these details among your networks – new schools are always welcome!

Feedback on your feedback

You'll be no stranger to our requests for feedback – you are asked at every kit loan, every CPD, and often in-between, to let us know how the programme works for you, why it is important to your students, and how we can make the programme even better. We're exploring this because in the period between September 2025 and December 2025, from 19 kit loans across 4 hubs, only 4 schools have provided feedback!

We know you have busy lives and that the days where you attend our CPD or are organising and delivering your planned ABE sessions in the classroom can be spectacularly busy, but this feedback is part of our commitment to ABE and part of why we are funded to provide this amazing programme to you at no cost. Other than asking you to attend CPD at least once every 3 years and to look after the kit during your kit loan and return it in good condition, it's the only thing we ask of you.

Earlier in this newsletter you will see our feedback QR codes. Do you find it easy to collect student feedback? Do you have any suggestions for changes or improvements? Please let us know if we need to adjust how we gather student feedback to make it more effective. Let us know what inhibits you and your students from providing this feedback. We'd be very grateful if you could email us just a short note to help us both do better.

How else can you feedback your experiences?

Schools implement the Amgen Biotech Experience in different ways. We are always delighted to hear about your experiences of ABE and its impact at your school or college.

If you would be willing to share a short case study (500 words and a photograph) of an ABE activity at your school for use on our website, in a future newsletter, or as a basis for discussion then we'd love to hear from you. Please email us. It's really helpful for our centre staff and other schools to hear real-life feedback.

Social media

We love to see your social media posts about the ABE programme, please tag @AmgenFoundation and @STEM_UH in your social media so that we can celebrate with you. The ABE Foundation is the funder of this wonderful programme. Please don't tag Amen Corp or other variants as they have different foci and remits.

And finally – a word from Dr Phil

(Dr. Phil Smith, MBE)

Is February too late to say Happy New Year everyone? No "New Year, new start", nonsense from me 🤣, just a hope that you have a healthy and successful year ahead.

The ABE New Year kicked off with a trip to Nottingham for the ASE Annual Conference where Eddie and I spoke about the programme to a diverse audience who had travelled from as far afield as Bulgaria and Wales.

In preparing for the talk, which included an element highlighting connections with 'real-world' science, I came across this policy briefing document exploring 'Future Food' from colleagues at Nottingham Uni. Although written in 2019, it is still relevant today as it clearly illustrates the cross-curricular nature of this challenge, the important role of biotech, and how our teaching in siloes fails to prepare students for some of the 'grand challenges' ahead. I think it would make an inspiring article to share with 6th formers considering biosciences as a future career to highlight some of the future developments (and its 4 pages long!).

The ASE conference was also a chance to network with other colleagues supporting STEM education and it was useful to cross-paths with the teams from both MiniOne and CLEAPSS, who are most interested in the development of the project. CLEAPSS are, of course, our guiding light for Health and Safety around the project.

By now, all hubs should be providing 1 x TAE buffer, as opposed to SB buffer and we hope this transition is having no negative impacts on your gel results. Do contact us or your hub technicians if you want to check anything.

I look forward to seeing many of you in Cambridge and then it won't be long before the summer training events roll into town ... the year soon flies round.