ABE UK News

November 2026



Welcome by Dr Eddie Orija

As 2026 draws to a close, it feels like an appropriate moment to reflect on the extraordinary reach and impact of the Amgen Biotech Experience across the UK. Every kit loan, training session, classroom practical and student success story contributes to something much bigger: helping young people experience the excitement of authentic biotechnology and discover where science might take them in the future.

In this issue, we celebrate some of the many ways our community continues to grow and innovate. You'll find updates on the use of MiniOne in an evolving educational landscape, opportunities for students to engage with real-world challenges through the AMR-AI Schools Challenge, and new ways for teachers and students to share their ABE stories. We also highlight the importance of the post-loan feedback that helps us demonstrate the collective impact of ABE, both here in the UK and across the global programme.

As the festive season approaches, I hope you find a moment to celebrate the achievements of your students and colleagues, and perhaps take some well-earned time to recharge before the new year begins.

Thank you for being part of the ABE UK community. We look forward to working with you in 2027.

With best wishes, Eddie

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Scientific Discovery for the Classroom
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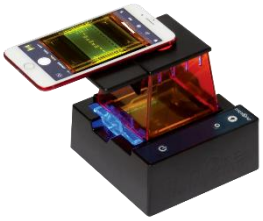


One of the advantages of the MiniOne system is that it encourages greater student engagement by allowing learners to photograph and analyse their own electrophoresis gels using dedicated tablets or laptops. This supports authentic data collection and scientific discussion without relying on personal mobile phones.

This is particularly relevant as legislation and guidance around mobile phone use in schools continue to evolve. Government guidance, which became statutory in 2026, expects schools to be mobile phone-free environments by default, with pupils unable to access phones during the school day. Schools can decide how this is enforced, but mobile phones should not form part of Bring Your Own Device (BYOD) schemes.

Tablets and laptops currently remain permitted for educational use, including BYOD arrangements, provided they are covered by the school's ICT and acceptable use policies. MiniOne therefore offers a practical way to enhance student participation while remaining aligned with current expectations on mobile phone use in schools.

The eagle-eyed among you may be looking at our photograph and noticing the presence of blue light. A reminder, while we advise that blue light should normally remain OFF during loading and electrophoresis, it is switched on here briefly to capture the image of the DNA fragments (as bands) on the gel, with protection from the blue light being given by the orange filter/hood.



How does your school handle mobile technology? Does this present any problems for you as users of MiniOne? Let us know if there is something we can do to ensure that images can be captured easily following electrophoresis.
(MiniOne photo courtesy of MiniOne Systems)

Photo upload



We are trialling a photo upload facility, which you may find useful during or after your kit loan. You will need a Google account to use this feature. If you would like to upload a maximum of five photos for us to see, please use this **photo upload form**. Photos may be uploaded to celebrate results or for troubleshooting, please include your contact details when submitting if you'd like us to get back to you.

CLEAPSS

We encourage schools to explore the support available through this trusted practical science advisory service. CLEAPSS offers expert guidance on delivering practical activities safely and confidently, including resources, training and specialist advice. Many schools are already members through their local authority or academy trust, so it is worth checking with your science department, school business manager or health and safety lead to find out whether your school already has access. **https://www.cleapss.org.uk/Membership.aspx**

AMR-AI Challenge 2027 for UK students aged 14-18

ABE UK are happy to share this opportunity for students aged 14-18 who may be interested in antimicrobial resistance.

Organised by charitable educational initiative FutureBiotechnologists.org, this challenge is targeted at state-funded, non-selective schools and students from less advantaged backgrounds, so if this describes your students, we encourage you to join the pilot.

THE AMR-AI CHALLENGE 2027

Inspiring students to tackle a global health challenge with responsible AI

The **AMR-AI Schools Challenge** invites young people aged 14-18 to address antimicrobial resistance (AMR), a pressing global health threat. Guided by experts, the students will tackle the issue with the help of the latest machine learning and artificial intelligence tools (AI).



Using open datasets and accessible AI tools, students will investigate AMR, evaluate evidence and develop ideas to prevent infections and the spread of resistance. For example, they might create an interactive regional or worldwide map to monitor antibiotic use and resistance, a data-driven visualisation dashboard to identify infection risks or design a public health tool to challenge misconceptions about antibiotics.

The challenge is designed for students across the whole curriculum. This is because AMR raises questions about society, ethics and behaviour, alongside biology and technology. A core part of the Challenge is to improve teamwork, digital literacy and communication skills and to teach students how to question AI-generated answers. It will also provide a window into the wide range of careers in life sciences, healthcare and AI.

The Challenge is targeted at state-funded, non-selective schools and students from less advantaged backgrounds. Judging will take into account the level of mentoring and resources available to the students.

The Challenge is organised by FutureBiotechnologists.org, a charitable educational initiative.

For more information contact Dr Lara Marks on lara@futurebiotechnologists.org

Stories and storytelling

Every ABE experience has a story worth telling. What's yours? We are inviting schools, colleges, teachers and students across the UK to share their Amgen Biotech Experience stories. Whether it's a student's excitement at mastering a new technique, a successful classroom collaboration, a challenge you overcame, a new teaching approach that worked particularly well, or an example of biotechnology making a real-world impact, we'd love to hear about it. Stories can be big or small, and we especially welcome diverse experiences and perspectives from across our ABE community.



By sharing your story, you'll help demonstrate the impact of ABE on students, teachers and local communities, while inspiring others across the UK and the wider global ABE network. Photos, videos and quotes are welcome (with appropriate permissions), and submissions can be made through the ABE Story Submission Form. Help us celebrate the achievements of our schools and showcase the difference biotechnology education is making in classrooms every day.

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for the Classroom

📢 Share your ABE story today by **following this link**. (Responses to questions marked with an asterisk (*) are required.)

SPECIAL NOTE: Are you a teacher in contact with a current or former student who would like to tell their unique story about how ABE has impacted their education and career choices? Please nominate that student using this **Student Story Nomination Form**.

Social media reminder



We love getting a name check - when posting about the ABE experience, please use #BiotechExperience, and tag us via our X handle (@ABE_UK_TSN) or tag the Teacher Scientist Network (TSN) on LinkedIn. Needless to say, @ABEProgOffice and @AmgenFoundation would very much like a name check too!

If you are active on LinkedIn, you can follow us on: https://www.linkedin.com/company/https-tsn.org.uk-/posts/

In case you missed it, we celebrated this term's teachers and technicians on both X and LinkedIn recently:
https://x.com/ABE_UK_TSN/status/2118687450717397363?a=Pd5Gsk8GIYOazE64MQo&s=20

https://www.linkedin.com/posts/https-tsn%2Eorg%2Euk-_abeabruk-stem-education-activity-7524462873281024001-7POn?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAOwMBUBA8K4bbXZmAD0w-7Xd8BHBYBYw48

From local hubs to global impact

Each year, the ABE Program Office synthesizes the annual implementation data that each site submits in July (which is supplied to them via a data form that depends on **your post-loan feedback**). They review the information about participating schools so they can be included in their global map, check and verify teacher and student totals, and aggregate data about under-resourced school participation. A summary of program reach for the year is then shared with the Amgen Foundation (who ultimately fund the programme).

During the 2025–26 program year, the ABE program globally:

- Reached a total of 100,899 students
- Supported 1,706 teachers, including 575 (34%) new to ABE
- Engaged 1,042 schools, including 278 (27%) new to the program
- Reported that 36% of participating schools were under-resourced, up from 29% in 2024–25.

Operating through hubs in 5 locations in the UK, the map below represents the geographic spread of schools who have engaged with ABE UK since 2014. Our hub model has meant that this term alone almost 1,000 students have had hands-on experience of research grade lab equipment, which we think is rather wonderful and worth shouting about.



And finally ... by Dr Phil Smith, MBE



ABE is not the only project TSN manages or supports. Overall, our focus is on real-world curriculum connections. ABE is intimately connected to the Biotech industry of course, and to draw this newsletter to a close, and with Christmas fast approaching here is a little **GIFT** – to share with colleague. GIFT27 will take place in Vienna between 4th and 7th April. **G**eoscience **I**nformation **f**or **T**eachers is an annual, pan-European, geoscience workshop for teachers that takes place in parallel with the European Geosciences Union general assembly (or Annual Conference). It is a rich, subject-knowledge focussed workshop featuring leading speakers and hands-on experiences.

TSN has managed applications from UK teachers for over 20 years. Please share **details** with Geographers, Physicists or Environmental Science and Geology teachers in your schools. **Application deadline 27th November, event fully funded.**

And that's not all – the **Norfolk Science Teaching Conference** has set a date for its 3rd edition - 4th March 2027, no passport required, you are all welcome for a day of free CPD and subject enhancement.





Please do share our information with colleagues in other schools who may want to know more about the ABE experience – pictured here are some very happy faces from a recent outreach day in Bishop's Stortford.

