

THE CRAZY ADVENTURES OF iGEM REACHING BEYOND THE LIMITS

It all started right before Christmas. We received the email announcing our selection for this year's iGEM TU Delft team. Then, shortly after the holidays, the team sessions commenced: we would meet all our excited teammates and brainstorm for hours in the company of our supervisors.

We did our best to gather as many crazy ideas as possible. The sky was the limit: bacteria that made self-healing materials, produced rocket fuel or powered bio-batteries... We even thought of bacteria that could actually detect and quantify radiation!

However, our team came across the issue of antibiotic resistance and how it, besides being a worldwide problem, currently poses one of the biggest challenges to the agricultural sector of the Netherlands. We felt that it was a topic in which we could really make a difference and accomplish a social impact. Accordingly, we agreed on developing a diagnostic tool so simple and user-friendly that it could be utilised on the spot by farmers: a disposable microfluidics paper containing Cas13a that would activate upon presence of

antibiotic resistance genes in the sample and subsequently cleave all kinds of surrounding RNA, triggering an optical readout. This way, farmers could know which antibiotics will have an effect and thus employ them more specifically.

That being said, detailed research is not the only thing we do at iGEM. We need to ensure that companies and the general public are familiar with our project. For this reason, we participated in the NBC-17, Museum Night in Leiden and even TEDxDelft.

Furthermore, we are organising a European iGEM meetup this summer in which teams from all over the continent will come to Delft to share their projects and arrange collaborations. So far, more than 150 attendants have been confirmed!

The best is yet to come. Stay tuned via:

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You can always drop by at our office E0.120.

