NOVEMBER 2017 **IGEM AMSTERDAM** 

# **IGEM AMSTERDAM**

### **NEWSLETTER**

The last two months have been very busy as we fly off to Boston November 6th. We have been doing a lot of different things; finishing up in the lab, working on big public engagement events and creating our webpage!

### Boston

#### **USA HERE WE COME**

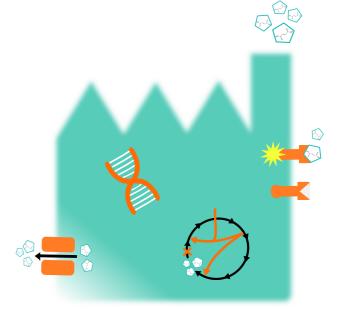
The time has finally come, we will make the big trip across the Atlantic Ocean to Boston. At MIT, we will compete in the manufacturing category together with teams such as Harvard and Stanford Brown. Friday morning, the 10th, we will present our results in front of a big audience, full of students, scientists and judges: fingers crossed! The next three days, we will present our results at poster presentations. We are very excited to see what the other teams came up with, so we will watch a lot of presentations of our competition and conspire with the brightest students in synthetic biology about new ways to solve problems of the 21sth century with biology. The winners will be announced on Monday the 13th!

### Science

### THE CELL FACTORY IS RUNNING

Our goal was to create a cell factory that can produce fumarate under industrial settings, contributing to a biobased economy. We now have a cyanobacteria that can stably produce fumarate during the day and night! On top of that, we have identified a transporter system and we characterized a fumarate biosensor able to accurately detect fumarate.

Combined this led to the first fumarate producing cell-factory: Photosynthetic Magic!























IGEM AMSTERDAM NOVEMBER 2017

### Outreach

#### **PUBLIC ENGAGEMENT**

In September we attended the Climate Marathon, a 6-hour conference in De Balie, hosting experts from a broad range of fields to share our point of view on climate change. We told people about our project and let them write their name using cyanobacteria. Most importantly, we asked the attendees about their opinion on genetically modified organisms (GMO's) and made a movie out of this! As we are fascinated by the challenges and solutions GMO's bring to our society, we have also made a podcast about GMO's. We invited three experts; Zoë Robaey, expert in the ethics of biotechnology, Peter Mooij, algae researcher at the TU Delft and autor of the book de Dikke Alg (the Fat Algae), and Korienke Smit, biosafety expert who works at the Dutch Institute of Health and Environment (RIVM). All our guests talked about different aspects of GMO's and how they influence the future prospective from their field of expertise.



We also attended the Knowledge Parade, an initiative from the RIVM, where visitors learned about how to consume healthy, sustainable and safe nutrition. We introduced the public with our project and children could write their name in cyanobacteria: real photosynthetic magic! We hope we inspired the new generation to get interested in microbiology!

Folia, a magazine written by students from the UvA, interviewed us and published a five-page article. We talked in depth about our project, our experiences on the iGEM competition and how we worked as a team throughout the whole project.



















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### Wiki

### WE ARE ON THE WORLD WIDE WEB

We are making great progress on our website, so check it out! It is a detailed report of everything we did along the way and it is one of the main points reviewed by the iGEM jury. You can find a detailed description of all the projects on there, along with all the other things we did during the course of the competition.

## Thank you!

### SPECIAL THANKS TO OUR KIND SUPERVISORS

We want to thank all the people who helped us with our project. The Molecular Microbial Physiology Lab who housed us and all the supervisors that had the patience to assist us during the whole process. We are also very grateful to our sponsors, who made the project and the trip to Boston possible. And let's not forget our loved ones, who had to put up with us during this experience;. Without them, this was never possible!



Science Park 904 - 1098 XH Amsterdam www.facebook.com/igem2017amsterdam igem17.ams@gmail.com









Yuki Esser:



Josine oude Lohuis: +31 627175660

Bram van de Putte:



+31 639269736

+31 623871221











