

Greetings,

I would like to propose the creation of an iGEM team from the Marburg University for the 2023 iGEM competition. If you are interested in genetic engineering, international experiences and would like to advance science, this might be for you!

What is iGEM?

The International Genetically Engineered Machine is a competition that brings together thousands of students from all around the world every year. Each team develops a synthetic biology project that aims to solve societal issues and advance science, then, projects are evaluated by a panel of judges and awarded a variety of prizes in a event in Paris. Projects range from the [detection of fish pathogens with lateral flow tests](#) and the [synthesis of violet fragrance in yeast](#) to [beer production with genetically engineered, caffeine producing yeast](#) (brought to you by the TU München). It not only is a great opportunity for learning new skills and diving into the world of SynBio, but it also makes a great addition to the CV!

In 2021, the Marburg team was awarded the competition's Grand Prize for the "OpenPlast" project, a chloroplast cell-free system developed with the intention of speeding up plant synthetic biology research.

iGEM 2023

Now, I would like to find people interested in forming a new team for the 2023 competition.

There is already one project idea I have been thinking about:

Agrobacterium tumefaciens is widely used in plant biology for its ability to alter the genome of plants. However, the process of engineering it is still held back by the lack of a genetic toolbox designed specifically for *Agrobacterium*. As an iGEM project, we could identify and characterize a library of promoters, terminators and UTRs to achieve greater control of gene expression in *Agrobacterium*. This would assist, for instance, in the fine tuning of the expression of *vir* genes to improve host transformation efficiency, or even achieve stable transformations in new organisms. Such regulatory elements could be standardized in a MoClo compatible toolbox and made available to the community inside and outside iGEM.

What do you think? Can you imagine yourself participating in a team in the next year? Do you have other ideas for a project? If so, let me know!

Kindly,
Yasoo Morimoto
morimoty@students.uni-marburg.de