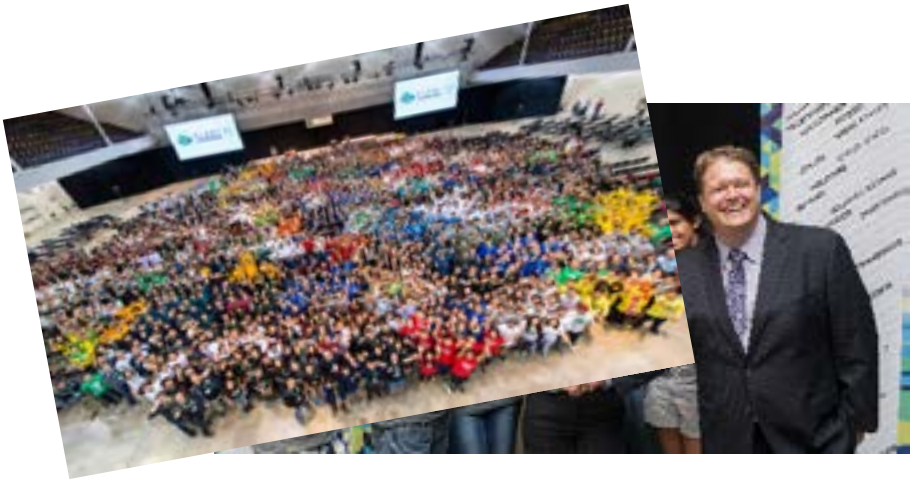
ITB_Indonesia x Manchester

iGEM

FOR

DUMMIES®

What is iGEM?



iGEM is an international competition held by the International Genetically Engineered Machine (iGEM) foundation based in the United States of America. The sole purpose of this competition is triggering the advancement of synthetic biology as well as the development of an open community and international collaboration among students who are keen to learn more about synthetic biology. The competition is annual and it is held world-wide for undergraduate students. High school and graduate students may also register. The team which consists of multidisciplinary students will have to work on a project to design and build a genetically engineered living system using standard biological parts called BioBricks provided by the foundation. The project consists of lab work as well as outside the lab to indulge and contribute more to the communities around the world and bring changes.

Why join iGEM?

In addition to gaining a number transferrable skills and significant lab experience, iGEM gives you with an opportunity to contribute to the rapidly developing field of synthetic biology. By joining this competition, you are put in the forefront of cutting-edge scientific research, formulating and executing projects that could potentially change the world and shape the future. You can also get your projects published on PLOS, an open-source scientific journal (like an actual scientist!). Moreover, due to the interdisciplinary and multifaceted nature of this competition, this may be your chance of learning new and useful skills that you may have never even thought about picking up, such as web design and mathematical modelling among others.

For those with a more business-oriented outlook, iGEM allows you relatively free reign over your project, meaning that you may approach it from an entrepreneurial angle. This has led some projects to spin out and become start-ups, two examples being UK-based CustoMem and Bento Bio.

Last but not least, the experience that you gain by joining iGEM is great for your CV, as the competition will test and develop your teamwork, creativity, and interpersonal skills.

For registration, you must first assemble your team and just go register on the website by following these 2 simple steps:

1. Learn more of the process
This includes registering users and teams, maintaining team rosters, distinguishing the instructors, distinguishing the PI or person in charge of the team, registering for the jamboree, as well as receiving the DNA parts used to design the genetically engineered system.

2. Create and update your account
Creating an account managed by the PI of a team will allow you to be able to gain access to all the registry tools, parts and wiki editing for each team, as well as updates from the competition.

For more info, you can simply click on http://2017.igem.org/Main_Page

How to join iGEM

Tips and Tricks o

There is no exact rule on how to assemble the ideal iGEM dream team. Generally, all your team members must be committed to the project, prepared to sacrifice their time (even summer holidays) for the competition. It would also be helpful a have team members coming from fields other than biology, as they could bring different perspectives and skills that may be instrumental in certain areas of the competition, such as wiki design or human practices. Lastly, an iGEM team should be flexible. Team members must be ready and willing to take on multiple roles, both outside and inside the lab. This ensures that the team runs like a well-oiled machine, able to finish project goals and keep up with deadlines without a hitch.

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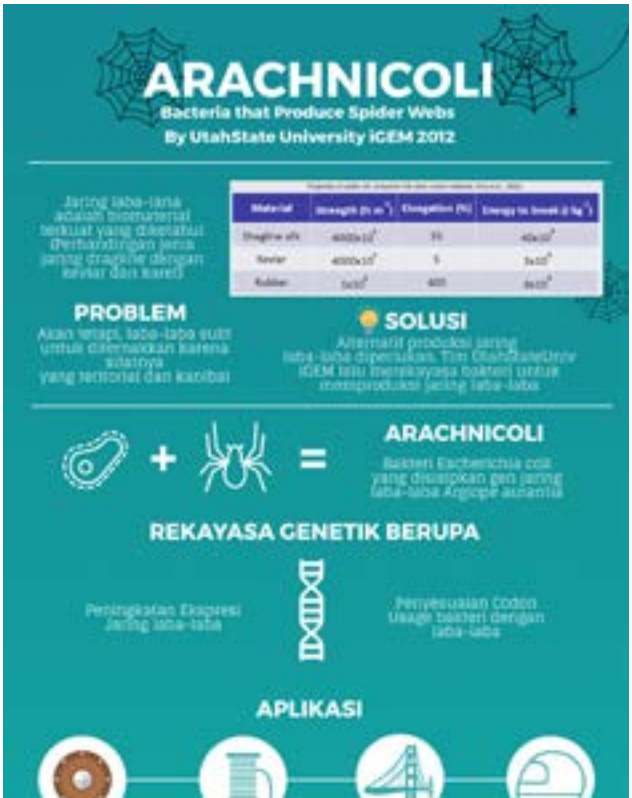
Tips and tricks on Project

Again, there are no rules when trying to come up with iGEM project idea. Gather together with your team and start brainstorming. Make a note somewhere of all your ideas, as this may be helpful to future teams. Remember: There are no bad ideas when brainstorming!

A good iGEM project must be useful and novel; useful for iGEM and the synthetic biology community and unique enough to distinguish itself from other project. An iGEM project may also build upon previous teams'projects, improving them or approaching them from another angle. A good tip to decide your iGEM project is to look at previous winners' projects and to see why they worked so well.



How to Get Sponsors on iGEM project?

To look for sponsors, begin with those that are already affiliated with iGEM. Some of these give freebies which may be useful for your project such as free DNA synthesis and software. The 2017 sponsors can be found at: http://2017.igem.org/Sponsors.

For financial sponsors, ask your academic institutions, friends and family to help you get contacts or look for sponsorship programs that may be interested in funding your project in your area.