



Results of the iGEM 2015 Giant Jamboree

Published on Friday October 9, 2015

View online : <https://www.france-science.org/Results-of-the-iGEM-2015-Giant.html>

On September 24-28, 2015, over 2,700 students, professors and researchers from around the world gathered at the Hynes Convention Center in Boston, MA, to attend the **12th annual jamboree event of iGEM**, the world's premier synthetic biology competition. Over five days, 259 teams from 39 different countries defended their project in front of an international jury of experts. For the first time since its introduction in 2011, high school teams were invited to present their project in the main competition, along with collegiate teams.

iGEM (*international Genetically Engineered Machine*) is an international synthetic biology competition aimed at undergraduate university students, as well as high school and graduate students initiated at the Massachusetts Institute of Technology (MIT) in Boston. For over a decade, it has inspired thousands of students around the world to discover and innovate in the field of synthetic biology, a new growing field of science that combines molecular biology, bioinformatics and engineering, in order to conceive and construct new complex systems and biological functionalities that do not exist in the nature. This new "science" can be applied to many fields : environment, health and medicine, food and nutrition, manufacturing, information processing, ...

Student teams have around 6 months to modify bacteria, or any other type of cell, by inserting DNA fragments in order to give rise to new functionalities. The iGEM competition is not bounded to scientific achievements but also bolsters students to familiarize with other principles of synthetic biology (standardization of DNA parts, open source, sharing, collaborations, safety concerns and regulation, ...).

Results of the iGEM 2015 Giant Jamboree

Undergraduate Division	
Grand Prize	William and Mary "Measurement of Promoter-Based Transcriptional Noise for Application in Gene Network Design"
1st Runner-up	Czech Republic "The IOD BAND"
2nd Runner-up	Heidelberg "Catch it if you can"
Overgraduate Division	
Grand Prize	TU Delft "3D micro(be) printing with do-it-yourself K'NEX printer"
1st Runner-up	BGU Israel "The Boomerang system – engineering logic gate genetic device for detection and treatment of cancer"
High School Track	
Grand Prize	TAS Taipei "To Granzyme B or Not to Granzyme B: Protecting Extracellular Matrix Proteins"

France was the third most represented European country, with the participation of eight teams: Aix-Marseille, Bordeaux, Evry, IONIS Paris, Paris-Bettencourt, Paris Saclay, Pasteur Paris et Toulouse; who received support from the Office for Science and Technology of the Embassy of France in the US through the annual grant "[Life Sciences: inventing - creating - having fun](#)".

During their visit in Boston, the Consul General of France in Boston, Mr. Valéry Freland, invited the French teams at the Residence of France for a reception in their honor. That way, they were able to become more acquainted with the actions of the OST and met with a few actors of the biotechnology industry in Boston.

Credits: Consulate General of France in Boston

[Results of the French teams at iGEM 2015](#)

Aix-Marseille  

2nd participation

CHEW FIGHT to eliminate chewing gum pollution

Degradation of chewing gums residues in the streets with enzymes produced by bacteria.

Bronze Medal



Bordeaux  

4th participation

Cur'd vine

Eco-friendly alternative to treat grapevine downy mildew by producing curdlan in *S. cerevisiae* and *E. coli*, a sugar biopolymer that stimulates the plant natural defenses.

Gold Medal



Evry 

4th participation

The YEasT Immunotherapy project (YETI)

Cheap, fast and personalized immunotherapy solution to treat cancer.

Silver Medal



IONIS Paris  

1st participation

THE BIO CONSOLE: BactMan's Adventures

Creation of a bioconsole to popularize synthetic biology.

Médaille d'or



Paris Bettencourt  

9th participation

Ferment It Yourself

Fight against malnutrition by fermenting rice with genetically modified yeasts to enrich food with vitamins and essential amino acids.

Gold Medal

3 nominations (Best Food and Nutrition Project, Best Integrated Human Practices / Overgrad, Best Presentation / Overgrad)



Paris Saclay  

4th participation

SafetE.coli

Conception of a biosecurity system to prevent dissemination of genetically modified organisms.

Bronze Medal



Pasteur Paris  

1st participation

PlastiCure, or the unexpected virtue of bottles

Plastics recycling with *E. coli* to synthesize medical drugs.

Bronze Medal



Toulouse  

3rd participation à l'iGEM

Beware Varroa: ApiColi is guarding the beehive

Fight against *Varroa destructor* (an external parasitic mite that attacks the honey bees *Apis cerana* and *Apis mellifera*) with *E. coli*.

Gold Medal

1 nomination (Best Applied Design / Undergrad)



