

# iGEM 2009

INTERNATIONAL GENETICALLY ENGINEERED MACHINES COMPETITION

THE UNIVERSITY OF  
CHICAGO





# WHAT IS iGEM?

The International Genetically Engineered Machines (iGEM) competition was founded at MIT in 2004 with the goal of training new leaders in the field of synthetic biology. Every summer teams of undergraduates, graduate students, faculty members and occasionally high school students design original projects in synthetic biology. Research culminates at the iGEM “Jamboree,” hosted by MIT every November where teams present their results and vie for the BioBrick grand prize. With over 100 teams from more than 20 countries participating in iGEM today, there is no doubt such innovation will only continue to thrive.

## WHAT IS SYNTHETIC BIOLOGY?

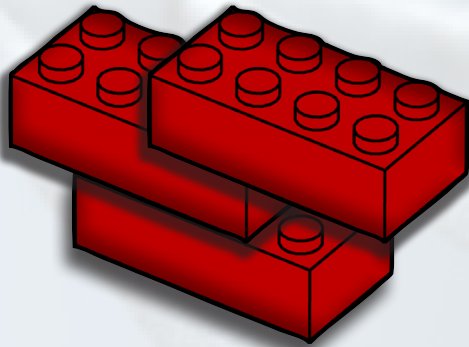
Synthetic biology is an innovative new field at the cross-roads of genetic engineering and bioinformatics. **The fundamental goal of synthetic biology is simple: to create an open-source biological programming language that transforms genetic information into standardized code.**

Synthetic biology aims to move towards a scalable engineering framework through the abstraction of genetic code into basic, interchangeable parts known as “Bio-Bricks.” Multiple biobricks can be put together to form devices, systems and ultimately entire organisms designed towards a specific function.

Already, synthetic biology is being used for everything from programming bacteria to produce important medical drugs to engineering new sources of renewable energy. As the number of parts increases we hope to one day build entire organisms, piece-by-piece, that can help us even greater improve life. With a little creativity, there is no end to what synthetic biology will be able to accomplish in the future.

# INTERDISCIPLINARY EDUCATION:

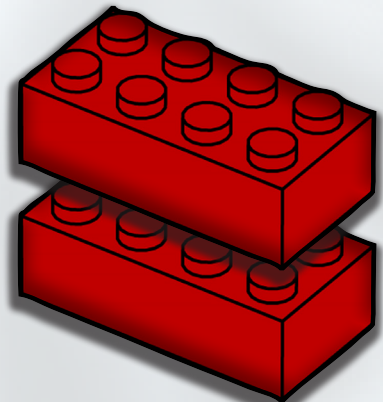
## INNOVATION



The iGEM competition is a unique interdisciplinary opportunity for science students of all interests. In ten weeks of intensive research over the summer, students have the chance to both apply their classroom knowledge and flex their creative ability in a supportive and rewarding environment. A premier educational institution at the forefront of science, the University of Chicago is host to hundreds of world-class biologists, physical scientists, mathematicians and computer scientists. Through UChicago iGEM team, we hope to inspire greater interaction across the sciences, and foment interest in engineering. We look forward to expanding the efforts started by the Ad Hoc Faculty Committee on Molecular Engineering and the hope open door to future biological engineering classes and professional research at the University.

## LEADERSHIP

Through UChicago iGEM, students are given a chance to do independent research on the undergraduate level. Team members are driven by the motivation of their own particular project: to be successful, students learn to manage their own time, ask the right questions, and seek advice from experts around the world. Such global collaboration is a persistent theme in the iGEM competition, and every year new teams across the world build upon the work of their international peers through open-source wikis, lab notebooks, protocols and meeting reports. With access to state-of-the-art University of Chicago faculty and facilities, and backed by top-notch education, UChicago iGEM team is poised to step out as a leader in this international community.





# THE UCHICAGO TEAM



The UChicago iGEM team is officially recognized by the University, the Biological Sciences Collegiate Division. It is supported by a fellowship from the Program in Physical and Chemical Biology, generous donations from the University of Chicago Alumni Fund, and a grant from University of Chicago Uncommon Fund.

iGEM team members are required to participate in spring brainstorming sessions, a two-week training workshop in June, and ten weeks of intensive research during the summer (July 6-September 10). In addition, students must travel to MIT in November to attend the 2009 Jamboree.

## **UChicago iGEM members include:**

**Undergraduates:** Nora Yucel, Rob McConeghy, Damon Wang, Parijata Mackey, Brandon Lee, and Annie Kang

**Faculty:** Professor Steve Kron and senior lecturer Chris Schonbaum

## COMMUNITY INVOLVEMENT

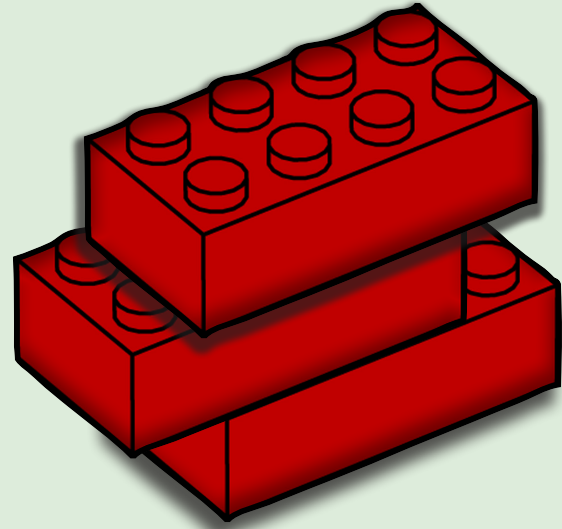
Community involvement is an important component of the iGEM competition. As the registered student organization (RSO) Synthetic Biology, UChicago iGEM will reach out to the student body and surrounding community to spread awareness and address public concerns surrounding synthetic biology.

Throughout the year, the Synthetic Biology RSO will host lectures and student-run seminars on topics such as bioethics, systems biology and engineering. Additionally, time, the team will maintain a blog for visitors to offer their thoughts and keep updated on the team's progress. Published articles, and essays written by team members will inform discussion, as will student surveys and feedback from seminars.

For more more information feel free to contact UChicago iGEM at [synbiochiago@gmail.com](mailto:synbiochiago@gmail.com), or visit the team website at [openwetware/wiki/IGEM:University\\_of\\_Chicago/2009/](http://openwetware/wiki/IGEM:University_of_Chicago/2009/)

# HOW YOU CAN HELP

UChicago iGEM is looking for sponsors to help fund the 2009 competition. Out an estimated \$35,000 needed for student stipends, research material, travel costs and registration fees, current funding covers approximately \$14,000. In the past, universities such as MIT and Caltech have relied heavily on donations to support their iGEM teams. A financial contribution from your company will be used to directly fund undergraduate research over 10 weeks, as well as a two-week training workshop at the beginning of the summer.



This is an excellent opportunity to increase the visibility of your company amongst students and faculty the University of Chicago as well as members of the international iGEM community. With your donation, you will be recognized as an official sponsor for the UChicago 2009 iGEM team and receive considerable attention at the competition Jamboree.

## SPONSORSHIP LEVELS

Acknowledgement	Gold 10,000+	Silver 5,000+	Bronze 1,000+	Sponsor
Corporate logo on team website and blog	X	X	X	X
Corporate logo on team T-shirts	X	X	X	X
Corporate recognition at local events	X	X	X	
Corporate logo on competition poster	X	X		
Sponsorship highlighted during team presentation at MIT	X			
Sponsorship highlighted in interviews and media publications	X			

Please contact Nora Yucel at [norayucel@uchicago.edu](mailto:norayucel@uchicago.edu) or 612 804 7134 for more information on donating. All checks should be made out to University of Chicago (subject: iGEM) and sent to

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