the registry of standard biological parts

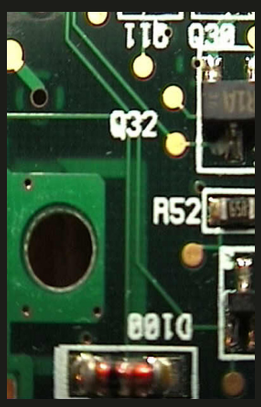
MIT's Registry of Standard Biological Parts is a database of standardized sequences of DNA. Using these standardized sequences as building blocks, synthetic biologists can build new biological sysems. The Registry enables researchers by standardizing assembly and conceptualization. Every year, MIT distributes its entire registry to iGEM teams around the world.

Learn more about the registry:
http://parts.mit.edu

synthetic biology

biofuels

pharmaceuticals



cell logic

Synthetic Biology combines engineering and biology in order to understand and build new biological tools and systems. Think ethanol-making algae, cancer-invading cells, or lead-detecting genes. These are some of the new technologies that synthetic biologists are developing. Advances in our knowledge in biology and the falling price of gene synthesis are allowing the construction of complex systems to become a reality.

igem projects of the past

treatment for sepsis inflammation
ljubljana

cellular arsenic detector
edinburgh

banana/wintergreen scented bacteria
mit

bacterial freeze tag
brown

nand logic gates
ucberkeley

cell surface targeting
harvard

stem cell differentiation pathway
princeton

cellular oscillator
imperial

http://openwetware.org/wiki/IGEM:Brown/2007

why igem?

undergraduate-led
research means that students imagine, design and implement their own projects.
interdisciplinary means thats we use concepts from biology, engineering, computer science, and mathematical modelling.
revolutionary. in the past, biology research mainly focused to understand biological systems. igem seeks to train the first wave of scientists to build new and novel systems.

what is igem?

igem is the international genetically engineered machines competition that takes place every summer at mit. igem's focus is the cutting edge field of synthetic biology and we aim to use the biobrick parts sent to us by the registry of standard biological parts to create molecular machines.
in 2007, we are seven undergraduate team members from diverse backgrounds in science and engineering we are mentored by brown graduate students, postdocs and faculty from across the university. with support from a team utra, we will be working in the multidisciplinary lab over the summer and preparing our entries for the annual jamboree at mit on nov 3rd and 4th 2007.

team 07(left to right): tito jankowski, rohan maddamsetti, adam emrich, deepa galaiya, jeff hofffman, norris hung, kyle schutter

IGEM007
The international genetically
engineered machines competition
BROWN

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www.brownigem.com

THE INTERNATIONAL GENETICALLY ENGINEERED MACHINES COMPETITION