

## Synthetic Biology

### Newsletter #2, November 2007

#### Dear Synthetic Biologist

Welcome to our second EMERGENCE newsletter on Synthetic Biology. We would like to take the opportunity to inform the community about recent activities in Synthetic Biology such as the *iGEM jamboree* in the beginning of November 2007.

If you have any comments, suggestions or maybe job offers, please let us know and contact us via

[SB-Newsletter@ethz.ch](mailto:SB-Newsletter@ethz.ch)

If you would like to subscribe to our newsletter, please send us an email to the address above.

For more information about the EMERGENCE project, please visit us at

<http://www.emergence.ethz.ch>

Kind regards, the EMERGENCE Team

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#### iGEM 2007

The *International Genetically Engineered Machines (iGEM)* competition is an annual, worldwide competition that involves undergraduate and graduate students in synthetic biology. It differs radically from most high-level educational experiences in that the participants often begin with limited backgrounds in science (many are first- or second-year undergraduates).

The procedure is as follows: Student teams are given a kit of biological parts at the beginning of the summer. Working at their own schools over the summer, they use these parts and new parts of their own design to build biological systems and operate them in living cells. During the first weekend of November, they present their work at the iGEM Competition Jamboree at MIT and have a chance to win prizes. They add their new parts to the Registry of Standard Biological Parts for the students in the next year's competition, [more information](#).

The iGEM competition has grown rapidly, from five teams in its first year (2004) to 34 teams in 2006 and 54 teams in 2007.

And it was a great success! 750 students from around the world spent their summer engineering novel biological machines using and creating BioBrick standard biological parts, then gathered in November at the 2007 Championship Jamboree to share, celebrate and compete with their projects

The 2007 iGEM Jamboree officially concluded on Sunday November 4. The team from the National Yang Ming University (NYMU) won the grand prize. Their project could help diabetics improve their quality of life and was titled 'GlucOperon': An auto-regulated system with both feed-forward and feed-back controls."

Among the finalist were the teams from UC Berkeley, Ljubljana, Paris, UCSF, and USTC Gold medals won the teams from Alberta, Edinburgh, Paris, Tokyo Tech, Bangalore, ETHZ, Peking, Tsinghua, Berkeley, Freiburg, Penn State, UCSF, Bologna, Glasgow, Princeton, USTC, Brown, Harvard, Rice, Valencia, Calgary, Imperial, Southern Utah, Virginia Tech, Caltech, Lethbridge, St. Petersburg, Ljubljana, Cambridge, Melbourne, Taipei, Davidson-Missouri, MIT, and Tianjin.

**Important: Next year's jamboree will be on November 8<sup>th</sup> to 9<sup>th</sup> and the registration opens on April 4<sup>th</sup>, 2008!**

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### Upcoming Events in Synthetic Biology

- Fourth International Conference on [Synthetic Biology SB4.0](#), October 10 - 12, 2008, Hong Kong University of Science & Technology.
- Advances in Synthetic Biology, Cambridge (UK), March 6-7, 2008
- Synthetic Biology – Molecular Bioengineering for the 21<sup>st</sup> century, Cambridge Philosophical Society, Dec 2007, [more Information](#).

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### Open Positions

#### PhD in Synthetic Biology

The Bioprocess Laboratory at the ETH Zurich, Switzerland, has currently one PhD position available and is looking for:

A process/chemical engineer with a flair for advanced numerical simulations and model-based experimental analysis, and interest in the description and manipulation of multi-enzyme reaction networks. More information can be found [here](#).

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### Imprint

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