



June 2010

## ▼ Biotech News

- Researchers at the J. Craig Venter Institute successfully constructed the first self-replicating synthetic bacterial cell, synthesizing the 1.08 million base pair chromosome of a modified *Mycoplasma mycoides* genome.  
<http://www.jcvi.org/cms/press/press-releases/full-text/article/first-self-replicating-synthetic-bacterial-cell-constructed-by-j-craig-venter-institute-researcher/>
- Researchers created the first 3-D tissue structure from human embryonic stem cells, an eight-layer early stage retina with the potential of developing transplant-ready retinas to treat eye disorders such as retinitis pigmentosa and macular degeneration.  
[http://today.uci.edu/news/2010/05/nr\\_retina\\_100526.php](http://today.uci.edu/news/2010/05/nr_retina_100526.php)
- Researchers at MIT identify a method for splitting a water molecule by copying photosynthesis, using sunlight to initiate a reaction that separates oxygen atoms from water molecules more efficiently.  
<http://web.mit.edu/newsoffice/2010/belcher-water-0412.html>
- Researchers develop a sensor based on carbon nanotubes wrapped in a polymer that is sensitive to glucose concentrations which can be used to create an "ink" of nanoparticles and then injected under the skin like a tattoo for glucose monitoring in diabetes management.  
<http://web.mit.edu/newsoffice/2010/glucose-tattoo-0528.html>
- The Ohio State University Medical Center is collaborating with the Institute for Systems Biology (ISB) to establish a new innovation consortium, P4 Medicine Institute (P4MI), to provide more precise, cost-effective and higher quality of health care.  
<http://medicalcenter.osu.edu/mediaroom/Pages/release.aspx?newsID=5634>

The banner features the SBE logo on the left. In the center, there are three bullet points: 'Stay up to date in research by attending SBE Monthly Webinars', 'All webinars focus on relevant biological engineering topics', and 'Interact and network with your peers'. Below these is the text 'The webinar is free for SBE members and \$49.00 for non-members.' On the right, a circular graphic contains the text 'Join SBE today and attend webinars for free!'

## ▼ Society News

Last Call for Nominations – **SBE's James E. Bailey Award for Biological Engineering!** In memory of Professor Jay Bailey for his many pioneering contributions to biotechnology, the award is presented to an individual who has had an important impact on biological engineering. Deadline is June 15th, 2010.

**Register Now!** for SBE's June Webinar on "**Modular Biocatalysis**" being presented by **Dr. Chaitan Khosla** from Stanford University on **Tuesday, June 29th** from **2-3pm EDT**. Click [here](#) for more information!

## ▼ Membership Spotlight

SBE wants to congratulate Eleftherios (Terry) Papoutsakis, who is a member of the SBE Advisory Board and Eugene du Pont Chair of Chemical Engineering at the University of Delaware. Terry has been named the recipient of the 2010 International Metabolic Engineering Award. For more info, [click here](#).



**Five (5) Excellent Reasons to Join SBE**

- Access to an international professional network
- Free monthly webinars
- Discounts on Conferences, Events and Publications
- Free monthly e-newsletter and biannual CEP Biosupplement
- Career services

## Conference Updates

**Register now!** The 5th International Conference on **Bioengineering and Nanotechnology (ICBN)** will take place in Biopolis, Singapore from **August 1-4, 2010** and chaired by **Jackie Ying**. For more info, [click here](#). See you in Singapore!

**Call for Papers!** The 3rd International Conference on **Biomolecular Engineering (ICBE)** will be co-chaired by **Jeff Varner** (Cornell University) and **Kurt Deshayes** (Genentech) and held at the Grand Hyatt San Francisco on **January 16-19, 2011**. Keynote speakers include: **Lee Hood, Roger Tsien, Vishva Dixit** and **Frances Arnold**. For more info, [click here](#).

## Student Affairs

**Congratulations** to Aniruddha Sahasrabuddhe at the University of Massachusetts, Lowell for correctly identifying SBE's May "What protein am I?", DNA Polymerase! Take a shot at the June protein [here](#).

## Interested in starting an SBE Student Chapter at your school?

Contact Jonathan Monk at [jonam@aiche.org](mailto:jonam@aiche.org).

## Comments?

SBE's e-Connections is edited by Adrian Andrew Fay, Web Science Editor, with input from SBE staff. Contact us at [bio@aiche.org](mailto:bio@aiche.org).

## Join Now

**Not a current SBE member?** It's never too late to join or renew. Costs are \$75 for regular members, \$25 for graduate students, \$10 for AIChE, ACS and IBE members, or free for undergraduates. Join now at <http://www.aiche.org/apps/ecommerce/bio/index.asp>.

## Member benefits include:

- Subscription to SBE's semi-annual BioSupplement to Chemical Engineering Progress.
- Discounts on leading biological engineering conferences including SBE and SBE cosponsored meetings and courses.
- Access to online membership directory.
- A voice in education, employment and technology advancement topics.

*The Society for Biological Engineering (SBE) is a new technological community of AIChE. Its mission is to promote the integration of biology with engineering and realize its benefits through bioprocessing, biomedical, and biomolecular applications. For comments and contributions to SBE Connections, email [bio@aiche.org](mailto:bio@aiche.org).*

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