



March 2009

## Biotech News

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- Scientific team develops and laboratory-tests a computer program used to sort through all shapes and changes of a key antibiotic-producing enzyme, potentially a stride forward to help with the issue of antibiotic resistance.  
<http://news.duke.edu/2009/02/gramicidin.html>
- Biochemists are using high-throughput screening to identify genes that affect the structure and function of chloroplasts, to help find correlations between seemingly unrelated aspects of plant metabolism.  
<http://news.msu.edu/story/5944/>
- Group of metabolic engineers, including SBE's Managing Board Chair, Gregory Stephanopoulos, are using microbes to help solve issues related to liquid fuels, including the production of new biofuels, carbon dioxide cleanup, and improving microbe's tolerance to the toxicity of their products and the feedstocks they ferment.  
<http://web.mit.edu/newsoffice/2009/bacteria-energy-0217.html>
- International research team characterizes and compares the cellulose digesting machinery of brown-rot fungi, to understand the mechanisms by which it effectively breaks down lignocellulose.  
[http://www.jgi.doe.gov/News/news\\_09\\_02\\_05.html](http://www.jgi.doe.gov/News/news_09_02_05.html)
- American Institute for Medical and Biological Engineering (AIMBE) announced the election of the following SBE and AIChE members into the College of Fellows for their outstanding achievements in medical and biological engineering:
  - Dr. Guillermo A. Ameer, from Northwestern University
  - Dr. Stelios T. Andreadis, from the State University of New York at Buffalo
  - Dr. Gregory R. Baran, from Temple University
  - Dr. Vassily Hatzimanikatos, from Ecole Polytechnique Federale de Lausanne
  - Dr. Lee Rybeck Lynd, from Dartmouth University
  - Dr. Regina M. Murphy, from the University of Wisconsin
  - Dr. Michael E. Paulaitis, from Ohio State University
  - Dr. Mark R. Prausnitz, SBE Advisory Board member, from Georgia Institute of Technology
  - Dr. Victor G. J. Rodgers, from University of California, Riverside
  - Dr. Christine E. Schmidt, from the University of Texas at Austin
  - Dr. Ghebre Tzeghai, from Proctor and Gamble
  - Dr. Huimin Zhao, from University of Illinois

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## Society News

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**Interested in biofuels? Registration has just opened for AIChE's 2009 Spring Meeting on April 26-30 in Tampa, Florida. [Register Now](#).** Highlights will include in following:

- Developing Energy Strategies Plenary
- Biofuels – Process Development
- Government Role in Alternative Energy: Strategy and Perspective
- Advances in Biofuels Technology
- Biomass Thermal Conversion
- Coal, Biomass, and Gas Conversion
- Advances in Bioprocessing
- Establishing and Ensuring Sustainable Bio-fuels Development: A Department of Energy/ Industry Perspective
- Sustainable Energy I and II
- Biofuels Development in the United States I and II

**Mark your calendars for Tuesday March 31 from 2 to 3 pm for our upcoming webinar on "Body-on-a Chip: A Tool for Predictive Pharmacology/Toxicology,"** taught by Mike Schuler of Cornell University. [Register here](#).

**SBE is accepting applications for the 2009 James E. Bailey Award.** In memory of Professor Jay Bailey, for his many pioneering contributions to biotechnology, the award is presented annually to an individual who has had an important impact on bioengineering and whose achievements, either specific or general, have advanced this profession in any of its aspects. Previous awardees include Mike Schuler, Edwin Lightfoot, Bob Langer, Nicholas Peppas, George Georgiou and James Swartz. [Find out](#) about nominating a colleague.

The National Science Foundation is initiating a national search for an Assistant Director of Biological Sciences. [View the job description](#).

## Join Now

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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.

## Comments?

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

***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@aiiche.org](mailto:bio@aiiche.org)***