



February 2009

Biotech News

- Bio-engineer David Mooney shows that small plastic disks impregnated with tumor-specific antigens and implanted under the skin can reprogram the mammalian immune system to attack tumors thus demonstrating a potential cancer vaccine. <http://harvardscience.harvard.edu/engineering-technology/articles/implants-mimic-infection-rally-immune-system-against-tumors>
- Researchers synthesize the first RNA enzymes that can replicate themselves without the help of any proteins or other cellular components, where – unlike previous efforts – the process proceeds indefinitely, providing hints as to how life on earth may have first begun. http://www.scripps.edu/newsandviews/e_20090112/joyce.html
- Multi-university engineering team creates new stretchable electrodes, on which cell cultures can be grown, to study how cardiac muscle cells, neurons and other cells react to mechanical stresses from heart attacks, traumatic brain injuries and other diseases. <http://news.uns.purdue.edu/x/2009a/090122ZiaieStretchable.html>
- DOE and partners publish the sequence and analysis of the complete genome of sorghum, which is prized for its drought resistance and high productivity and is the second most prevalent bio-fuels crop in the U.S. http://www.jgi.doe.gov/News/news_09_01_28.html

Society News

Last chance is rapidly approaching to register for SBE's 2nd International Conference on Accelerating Biopharmaceutical Development on March 9-12 in Coronado, California.

If you are working on the development and manufacture of biopharmaceuticals such as antibodies, vaccines or therapeutic proteins, you should attend to learn how you can improve your productivity. Keynote Speakers include:

- **John Carpenter**, Professor of Pharmaceutical Biotechnology, Co-Director, Center for Pharmaceutical Biology, University of Colorado Denver. *"Protein Aggregation: Causes, Consequences, Control and Challenges."*
- **Rob Garnick**, Senior Vice President, Regulatory, Quality and Compliance, Genentech. *"Recent Developments in Biosimilars."*
- **Janice Reichert**, Senior Research Fellow, Tufts Center for the Study of Drug Development, Boston, Massachusetts USA. *"Development Trends for Biotherapeutics."*

[Click here](#) to read about the full program

[Register Now](#)

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".

The course will be taught by Cornell University's Dr. Michael Schuler, the James and Marsha McCormick Chair of the Department of Bio Medical Engineering and the Samuel B. Eckert Professor of Chemical Engineering.

[Click to read more](#)

Biotechnology Progress is an official, bimonthly publication of the AIChE's SBE. The journal features peer-reviewed research articles, reviews, and descriptions of emerging techniques for the development and design of new processes, products, and devices for the biotechnology, biopharmaceutical and bioprocess industries. **To read about Uwe Gottschalk's research on "Bioprocesses in Antibody Manufacturing," [Click here](#).**



You can submit your manuscripts today at: <http://mc.manuscriptcentral.com/biotechprog/>.

For more details on the journal visit: www.biotechprog.com

[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.

[Comments?](#)

SBE's *e-Connections* is edited by Adrian Andrew Fay, Web Science Editor, with input from SBE staff. Contact us at 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***

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