



April 2009

## Biotech News

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- Researchers develop new procedure to reprogram human skin cells from Parkinson's patients into induced pluripotent stem (iPS) cells that removes their potentially cancerous transforming genes without loss of embryonic stem-cell-like properties, for then creating dopamine-producing neurons.  
[http://www.wi.mit.edu/news/archives/2009/rj\\_0305.html](http://www.wi.mit.edu/news/archives/2009/rj_0305.html)
- Scientists open up new perspective on RNA regulation by discovering that RNA binding protein NOVA plays an essential role in regulating motor neuron firing.  
<http://newswire.rockefeller.edu/?page=engine&id=904>
- Engineering team uses Lab-on-a-Chip to study how cancer cells break free from neighboring tissue to spread the disease to other parts of the body.  
[http://www.jhu.edu/news/home09/mar09/cell\\_detachment.html](http://www.jhu.edu/news/home09/mar09/cell_detachment.html)
- Biomedical engineers develop a new self-assembling hydrogel made up of small, woven protein fragments that can successfully carry and release proteins of different sizes, and are capable of continuous and controlled delivery of drugs such as insulin and Herceptin.  
<http://web.mit.edu/newsoffice/2009/drug-delivery-0309.html>

## Society News

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In memory of Professor Jay Bailey for his many pioneering contributions to biotechnology, SBE's James E. Bailey award is presented annually to an individual who has had an important impact on bioengineering and whose achievements have advanced this profession in any of its aspects. You can nominate your colleague by following the instructions [here](#). The deadline for 2009 nominations is June 1, 2009.

**Interested in biofuels? [Register Now](#) for AICHE's 2009 Spring National Meeting on April 26-30 in Tampa, Florida.** 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

If the demands on your time and organizational imperatives mean you can't leave the office, consider registering for a webcast. AICHE will stream webcasts from select sessions from seven of the most highly anticipated subject areas from the 2009 Spring National Meeting and the entire 5th Global Congress on Process Safety. You can register for individual subject areas, the entire Global Congress on Process Safety or all available webcast sessions. For multi-person teams, site licenses are available. [Complete details are available here.](#)

**Interested in bioengineering?** The [AIChE Annual Meeting](#) will be the place to discuss a wide range of subjects relevant to the latest research and the newest technologies in the field of bioengineering. This year's meeting will be at the Gaylord Opryland Hotel in Nashville, TN from November 8 -13. Topics of interest to SBE members are:

- [Advances in Algal Biorefineries](#)
- [Advances in Metabolic Engineering](#)
- [Bio and Pharmaceutical Process Design](#)
- [Biobased Fuels and Chemicals](#)
- [Biomass Processing to Liquid Biofuels beyond Ethanol](#)
- [Biomaterial-Cell Interactions in Tissue Engineering](#)
- [Biosensors, Bioprocess Monitoring and Control](#)
- [Engineering the Stem Cell Niche](#)
- [Gene Delivery from Tissue Engineering Scaffolds](#)
- [MEMS and Biosensors](#)
- [Metabolic Engineering for Tissues and Organs](#)
- [Self Assembled Biomaterials](#)
- [Systems Biotechnology](#)

To share your research, please [submit an abstract](#) before May 11, 2009. [View all session topics here](#).

**Mark your calendar! SBE's next webinar is scheduled for April 22 from 2 to 3 PM EST**

Greg Stephanopoulos, Professor of Chemical Engineering at MIT and SBE chair, will present a course on the "Grand Challenges of Biofuels Production". The course will discuss directions to guide research into creating competitive processes for fuel production from renewable resources. [Click here for more information](#).

Check out some other options for bio-related Training/Continuing Education this summer. [Learn more](#)

**Save the date!** SBE's 2nd International Conference on Stem Cell Engineering will be held at the Hyatt Harborside Hotel in Boston, MA from May 2-5, 2010. This Gordon-style conference will emphasize how efforts in stem cell biology and engineering can combine to aid in the development of stem cell therapeutics and bioprocesses. Co-chairs will be:

- Peter Zandstra from the University of Toronto
- George Daley from Harvard University

[Find Out More](#)

Or you can Join our [Stem Cell Conference Mailing List](#) to keep up to date as details firm up.

## 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@aiche.org](mailto:bio@aiche.org)***

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