



October 2007

Biotech News

- Researchers discover that maize mini-chromosomes (MMC) can introduce entire cassettes of novel genes into embryonic plants where they are expressed, duplicate, and pass on to the next generation. This technology can increase yields and cut the time by one to two years to realize a transgenic project.
<http://www-news.uchicago.edu/releases/07/071018.genetics.shtml>
- Biologists identify microbes that are present in a plant's roots that take a short cut by quickly consuming a plant's newly made sugars from photosynthesis. Increasing this pathway could help remove more carbon dioxide from the atmosphere.
<http://www.york.ac.uk/admin/presspr/pressreleases/hungrymicrobes.htm>
- Innovative technological platform increases the speed and output of bioprocessing from cell culture to final purification.
<http://www.genewscenter.com/Content/Detail.asp?ReleaseID=2699&NewsAreaID=2&MenuSearchCategoryID=9>
- Metabolic engineering team increases hydrogen yield from formate in *E. Coli* to its theoretical limit.
<http://www.aiche.org/uploadedFiles/SBE/Publications/ArticleOfInterest.pdf>
- Scientists discover that adult tendons contain a rare subset of stem cells that can be isolated, grown in the lab, and then used to generate tendon-like tissues in mice. This may hold future promise for people with torn tendons.
http://www.nih.gov/news/research_matters/september2007/09172007tendon.htm

AICHE Annual Program

This year, SBE is trying to make it simple to navigate through the bio-related program at AICHE's Annual Meeting. If you click on <http://www.aiche.org/SBE/Events/National.aspx>, you can find all of the bio-programming in one place. We have included downloadable pdf's of the entire bio-program as well as each day's sessions, talks, speakers, and abstracts. A list of authors is also available. Scan the documents and print out what you need before you get to Salt Lake City. You will then be prepared to enjoy yourself.

Don't forget to add the following special events to your agenda:

- SBE's James E. Bailey Award, endowed by Cytos Biotechnology, and given this year to Professor George Georgiou for his advancements in protein engineering and therapeutics. Dr. Georgiou will give his award lecture, entitled "Engineering the Next Generation of Therapeutic Proteins," on Monday, November 5 at 6-7pm in the Grand Ballroom A/B/C/D of the Salt Palace Convention Center.
- SBE's Hospitality Suite, sponsored by Merck Research Laboratories, from 9-11pm on Monday, November 5 in the Marriott Grand Ballroom D. This suite is free for SBE members. Get your friends to join SBE so they can enjoy the refreshments by directing them to www.aiche.org/apps/ecommerce/bio/index.asp.

- The AIChE Institute Lecture on Wednesday, November 7th at 11:15am in the Grand Ballroom A/B/C/D of the Salt Palace Convention Center. Nicholas Peppas, a former Bailey Award recipient, will be giving the AIChE Institute lecture. His talk is entitled "Le Plus Ça Change...Nanotechnology and Bioengineering in an Evolving Chemical Engineering World."

SBE Events

Registration is now open for **SBE's 1st International Conference on Stem Cell Engineering** on January 20-23, 2008 in Coronado, CA. This conference will focus on the important engineering challenges associated with stem cell development, growth, and scale-up. Confirmed, invited speakers include:

- [Mick Bhatia](#), *McMaster University*
- [Sangeeta Bhatia](#), *MIT*
- [Christopher Chen](#), *University of Pennsylvania*
- [George Daley](#), *Children's Hospital Boston*
- [Sheng Ding](#), *Scripps Research Institute*
- [Dennis Discher](#), *University of Pennsylvania*
- [Fred Gage](#), *Salk Institute*
- [Douglas Lauffenburger](#), *MIT*
- [Ram Mandalam](#), *Cellerant Therapeutics*
- [Irving Weissman](#), *Professor, Stanford University*
- [Peter Zandstra](#), *University of Toronto*

Submit a paper to attend (<http://aiche.confex.com/aiche/sce08/cfp.cgi>) or find out more about this exciting new conference at <http://www.aiche.org/StemCellEng>.

Call for Papers now Open – **SBE's 4th International Conference on Bioengineering and Nanotechnology** will be held on July 22-24, 2008 at the University College Dublin, Ireland. Conference co-chairs are Nicholas Abbott of the University of Wisconsin, Madison and Gil Lee of Purdue University. Topics will include nanosystems for drug delivery, nanomaterials for cellular engineering, and nanotools for bioengineering. Find out more at <http://www.aiche.org/icbn>.

A complete bio-event calendar can be found at <http://www.aiche.org/SBE/Events/index.aspx>

Join SBE

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 and ACS BIOT members, or \$5 for undergraduates. Join now at <https://www.aiche.org/apps/ecommerce/bio/index.asp>.

Comments?

SBE's e-Connections is edited by Adrian Andrew Fay, Web Science Editor, with input from various SBE staff. Contact us at bio@aiche.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 <mailto:bio@aiche.org>*