

February 2006

### Biotech News

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- Scientists discover method to create long-stranded human collagen in the lab.  
<http://www.news.wisc.edu/12147.html>
- Synthetic biologist and Chem E discovers technique to evolve enzymes towards a desired outcome. <http://www.lbl.gov/Science-Articles/Archive/PBD-molecular-evolution.html>
- K-Ras cancer promoting protein can be manipulated to cause cell necrosis.  
[http://www.med.nyu.edu/communications/news/pr\\_161.html](http://www.med.nyu.edu/communications/news/pr_161.html)
- Engineers create wrinkled lipid membranes as a novel drug-delivery system.  
<http://www.news.uiuc.edu/news/06/0213membranes.html>
- New technique can multiply an adult stem cell 30-fold, giving promise to treatments such as bone marrow transplants.  
[http://www.wi.mit.edu/news/archives/2006/hl\\_0123.html](http://www.wi.mit.edu/news/archives/2006/hl_0123.html)
- Hard-shelled ocean dwellers inspire engineering of artificial bone.  
<http://www.lbl.gov/Science-Articles/Archive/MSD-artificial-bone.html>
- DOE announces \$160 million to help build biorefineries.  
<http://www.energy.gov/news/3246.htm>

### SBE Highlights

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**SBE has formed a consortium** of leading pharmaceutical and biotechnology companies to advance cell line research that could facilitate drug discovery and increase efficiencies for production for life-saving medicines. Through SBE, the members of the consortium will provide \$2 million to the University of Minnesota and the Bioprocessing Technology Institute in Singapore to further the development of genomic research tools for Chinese Hamster Ovary (CHO) cell lines. This work is considered especially significant to facilitate the use of CHO cells for drug discovery and to increase production efficiencies of diagnostics and medicines for fighting certain cancers, controlling bleeding disorders, treating central nervous system diseases, and boosting blood cell production. For more information, [click here](#).

**SBE's February BioSupplement.** Robert Langer of MIT and Ali Khademhosseini of MIT, Brigham and Women's Hospital, and Harvard Medical School describe the use of nanotechnology in tissue engineering and drug delivery for SBE's February BioSupplement to CEP. To read the entire article, [click here](#). [Join SBE](#) now so that you can receive these semi-annual BioSupplements.

**Don't forget to submit an abstract for SBE's Upcoming conference – [the 2nd International Conference on Bioengineering and Nanotechnology](#).** The deadline for oral and poster presentations is April 30, 2006. Abstracts should be submitted as a Word file attachment via email to [ICBN@aiiche.org](mailto:ICBN@aiiche.org) and should be no longer than 300 words. All abstracts should clearly state the title, author's name, affiliation and address. Graduate students should include their advisor's name and title.

## Meetings Update

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### [Distributed Diagnosis and Home Healthcare](#)

*Cosponsored by SBE in conjunction with the Biotech Council*

Bringing together industry, academia and government leaders to discuss the current status, important components/ingredients, their enabling technologies, and policies for future distributed, home healthcare delivery.

April 2-4, 2006

Arlington, VA

### [AIChE Spring National Meeting](#)

Special topical includes a panel on measuring industrial biotech productivity and sessions on green engineering and the business case for sustainability.

April 23-27, 2006

Orlando, FL

### [ECI's Cell Culture Engineering X](#)

*Cosponsored by SBE*

April 23-28, 2006

Whistler, BC, Canada

### [SBE's 2nd International Conference on Bioengineering and Nanotechnology](#)

September 5-7, 2006

Santa Barbara, CA

Mark your calendar now for

*[SBE's 1st International Conference on Biomolecular Engineering](#)*

January 15-18, 2007

San Diego, CA

A complete listing of events can be found at <http://www.aiiche.org/SBE/Events/index.aspx>

## Career Central

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**Check out SBE's new job website** — with listings for industrial and academic professionals. The site contains biological engineering positions from companies such as Abbott, Boehringer-Ingelheim, Bristol-Myers Squibb, SAFC Biosciences, and Schering Plough. More jobs are at <http://www.aiiche.org/SBE/Careers/Find.aspx>.

**Opportunity for Female and Underrepresented Minority Undergraduates.** Worcester Polytechnic Institute in Worcester, MA, has opportunities for 8 undergraduates to participate in a 10 week bioengineering program. Its objectives are to provide:

- Research opportunities for undergraduate students in bioengineering
- Personal and professional development training
- Involvement in outreach to middle-school students.

The application deadline is March 17. For more information, go to <http://www.wpi.edu/~terrific/REU.html>

## Join SBE

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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 \$5 for undergraduates. Join now at <https://www.aiche.org/apps/ecommerce/bio/index.asp>.

### Member benefits include:

- Free subscription to SBE's monthly e-Connections.
- 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.

Find out more at <http://www.aiche.org/SBE/index.aspx>

SBE's e-Connections is edited by Adrian Andrew Fey, Web Science Editor, with input from various SBE staff. Comments? 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 <mailto:bio@aiiche.org>*

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