



December 2006

Biotech News

- SBE member, Cornell Professor Kelvin Lee, in collaboration with a team of scientists, discover how Alzheimer's disease is identifiable through a specific pattern of proteins found in cerebrospinal fluid. Professor Lee will be presenting a paper "Engineered Protein Hypersecretion via mRNA and Protein Expression Profiling at SBE's 1st International Conference on Biomolecular Engineering. See below for more details or [register now](#).
<http://www.news.cornell.edu/stories/Dec06/kelvin.lee.alzheimers.aj.html>
- Researchers discover two pathways that regulate the organization of a cell's nucleolus to maintain genome stability in the fruit fly. The *Drosophila* pathways may also apply to human genetic regulation and thus help the understanding of genomic aberrations that can cause birth defects or cancer. <http://www.lbl.gov/Science-Articles/Archive/LSD-cell-architecture.html>
- SBE Managing Board member and MIT Professor Gregory Stephanopoulos, MIT post-doc Hal Alper, among others have engineered a new strain of yeast that can tolerate elevated levels of ethanol and glucose to enable faster production of ethanol. Hear both speak at SBE's 1st International Conference on Biomolecular Engineering. See below for more details or [register now](#).
http://www.wi.mit.edu/news/archives/2006/qf_1207.html
- Engineers study forisone as a biomimetic using a novel microfluidic device that enables inspection at many liquid-liquid interfaces.
<http://news-info.wustl.edu/tips/page/normal/8329.html>
- Cell biologists discover a gene in yeast, fruit flies, round worms, and rats which regulates the movement of proteins and thereby offsets the effects of excessive alpha-synuclein (contributing to Parkinson's disease in humans) when overexpressed by adding more copies.
<http://web.mit.edu/newsoffice/2006/print/lindquist-print.html>
- Iowa releases its report on how the state can continue its leadership role in renewable fuels. <http://www.iastate.edu/~biorenew/06/summit/summit.shtml>

Student Corner

Students from all over the country will converge on the campus of the University of California, Los Angeles, on Saturday, January 20. They will learn how to start up a student SBE chapter from each other and from SBE members. Industrial leaders will also be speaking about career opportunities at their companies. Sponsors of this event include Amgen, Bristol-Myers Squibb, Danisco, Genentech, and Merck. If you would like to attend to learn how to start up a student chapter, email us at bio@aiiche.org.

Meetings Update

Register Now to Attend SBE's 1st Conference on Biomolecular Engineering in

Coronado, California from January 14-18, 2007

This conference is receiving overwhelming support from scientists working to engineer functional biomolecules, molecular interactions, and intracellular pathways. Keynote speakers include:

- J. Craig Venter, CEO and founder of the J. Craig Venter Institute who let Celera Genomics to sequence the human genome
- Willem "Pim" Stemmer, CEO and founder of Amunix, who invented DNA breeding
- David Baker of the University of Washington, who explores the underlying protein folding and protein-protein interactions.

[Register now](#) to enjoy this conference.

Call for Papers Ends December 30 for SBE's 1st Conference on Accelerating Biopharmaceutical Development in March 19-22, 2007.

This conference focuses on delivering cost-effective, robust processes and methods quickly and efficiently. Keynote speakers include:

- Helen Winkle, Director of the Office of Pharmaceutical Science at the FDA's Center for Drug Evaluation and Research
- Roger Perlmutter, VP of Research, Amgen
- Tony Lubiniecki, VP of Development, J&J/Centocor.

A complete roster of invited speakers is available [here](#). Submit your abstract at www.aiche.org/AcceleratingBio.

Save the Date

SBE is holding its 3rd International Conference on Bioengineering and Nanotechnology (ICBN 2007) on August 12-15, 2007 in Biopolis, Singapore. Find out more at www.aiche.org/icbn.

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, ACS and IBE members, or \$5 for undergraduates. Join now at <https://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 our 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 various 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 <mailto:bio@aiiche.org>