



January 2009

Biotech News

- AICHE member Nicholas Kotov creates artificial bone marrow that can continuously make red and white blood cells, a development could lead to simpler pharmaceutical drug testing.
<http://www.ns.umich.edu/htdocs/releases/story.php?id=6910>
- Biologists learn the atomic structure and have proposed a mechanism for a "molecular motor" that packages DNA into the head segment of some viruses during their assembly, an essential step in their ability to multiply and infect new host organisms.
<http://news.uns.purdue.edu/x/2008b/081224RossmannMotors.html>
- Researchers create a new family of fluorescent probes called hydrocyanines that can detect and measure reactive oxygen species, which are implicated in a variety of inflammatory diseases including cancer.
<http://gtresearchnews.gatech.edu/newsrelease/hydrocyanines.htm>
- Team of biologists develops methodology to calculate forces of biomembranes, providing insights into the detailed mechanisms underlying the internal scaffolding of the cell.
http://www.wi.mit.edu/news/archives/2008/pw_1204.html

Society News

With the change in leadership, the American Institute of Chemical Engineers is currently seeking to hire a new Executive Director to its team to lead the programs associated with the Society for Biological Engineering and New Technical Initiatives. Responsibilities Include:

- Building membership within these entities
- Developing and implementing new meetings, publications, education services, technical projects and industrial alliances.
- Creating business plans and managing budgets
- Developing and implementing fund raising activities
- Working with SBE's Managing and Advisory boards to generate and implement program concepts

Requirements:

- 15 years experience in developing new products and services;
- Technical degree in chemical/biological engineering or another science or engineering discipline
- MBA or equivalent training preferred
- broad knowledge of chemical engineering and the bio-processing, biomedical and bio-molecular fields

Interested candidates should send a letter of interest, including salary requirements and

resume to recruitment@aiiche.org.

SBE Events

The early bird registration deadline is February 1, 2009 for SBE's 2nd International Conference on Accelerating Biopharmaceutical Development

March 9-12, 2009 at the Marriott Coronado Island Resort in Coronado, CA.

[Register Now](#)

This conference will focus on recent developments (particularly new, "disruptive" technologies) that will be key to accelerating the pace and productivity of biopharmaceutical development. 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 and Invited Speakers Include:

- **Janice Reichert**, *Senior Research Fellow*, Tufts Center for the Study of Drug Development, Boston, Massachusetts USA
- **John Carpenter**, *Professor of Pharmaceutical Biotechnology, Co-Director*, Center for Pharmaceutical Biology, University of Colorado Denver
- **Rob Garnick**, *Senior Vice President*, Regulatory, Quality and Compliance, Genentech.

Register now at <http://www.aiiche.org/AcceleratingBio>.

Systems Biology Webinar: Open Challenges and Opportunities for Chemical Engineers

Wednesday, January 21 at 2:00-3:00 p.m. EST

Learn about roles for chemical engineers in systems biology. Two biomedical examples will be used to highlight challenges in the field: circadian timekeeping in neurons and the insulin resistance underlying type 2 diabetes. The Webinar leader is Dr. Francis J. Doyle III, Associate Dean for Research in the College of Engineering at UC, Santa Barbara

[Register Now](#)

AIChE Spring Meeting

April 26-30, 2009 at the Tampa Convention Center in Tampa, FL

The AIChE Spring National Meeting is the year's key technical conference for practicing chemical engineers. A wide range of subjects relevant to the current needs of industry is covered.

Visit <http://aiiche.confex.com/aiiche/s09/preliminaryprogram/index.html> to view the preliminary program.

SBE also supports AIMBE and its 18th Annual Meeting

February 11-13, 2009 at the National Academy of Sciences and the J.W. Marriott in Washington, D.C.

The theme is "Translational Research for Medical and Biological Engineering: Bringing Technology to Life." Among the many exciting events, it will include sessions on innovations in biomedical engineering, a lecture by Benjamin S. Carson, Sr., M.D., Director of Pediatric Neurosurgery at the Johns Hopkins Medical Institutions and a panel discussion on strategies for encouraging research.

Visit the [AIMBE website](#) for the updated agenda, registration and hotel information.

Subscribe

Click [here](#) to subscribe to SBE Connections and stay up to date with the latest in biotechnology and society news.

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 and ACS – BIOT 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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