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Biotech News

- Engineers, including past James E. Bailey winner Robert Langer, develop surface with nano-scale patterning to induce endothelial progenitor cells to form tubular structures aligned in a specific direction that could eventually act as blood vessels.
<http://web.mit.edu/newsoffice/2007/vascular-1217.html>
- Scientists find that a family of three TAM receptor tyrosine kinases is able to stop the body's immune system from mounting an out-of-control inflammatory response. Manipulating this switch could potentially benefit patients with autoimmune diseases such as multiple sclerosis.
http://www.salk.edu/news/news_press_details.php?id=190
- Researchers develop a quicker, cheaper technique to sort stem cells using electrical charge. http://today.uci.edu/news/release_detail.asp?key=1712 This work will be discussed at SBE's 1st International Conference on Stem Cell Engineering in January 20-23, 2008 (<http://www.aiche.org/StemCellEng>).
- U.S. and China to Cooperate on Biomass Research and Development
http://www1.eere.energy.gov/biomass/news_detail.html?news_id=11481
- **SBE Special Section** in the AICHE magazine *Chemical Engineering Progress*. Articles include:
 - "Engineering Organs: Heart and Esophagus" by Buddy Ratner
 - "Bioprinting: Directed Tissue Self-Assembly" by Vladimir Mironov, Vladimir Kasyanov, and Roger Markwald
 - "Conducting Polymers: A Bridge Across the Bionic Interfact" by Gordon Wallace and Geoffrey Spinks.

You can access these articles [here](#).

SBE Events

Now is your last chance to register for SBE's 1st International Conference on Stem Cell Engineering on January 20-23, 2008 in Coronado, CA. The deadline closes on January 15th. Some of the world's leading experts in this new field of technology will be speaking, including:

- George Daley, *Children's Hospital of Boston*
- Fred Gage, *Salk Institute*
- Douglas Lauffenburger, *MIT*
- Irving Weissman, *Stanford University*.

View our program and register 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 of Dublin, Ireland. Topics will include nanosystems for drug delivery, nanomaterials for cellular engineering and nanotools for bioengineering. Keynote and invited speakers include:

- Jérôme Bibette, *ESPCI, France*
- Frank Caruso, *University of Melbourne*
- Adam Cohen, *Harvard University*
- Kenneth Dawson, *University College Dublin*
- Dennis Discher, *University of Pennsylvania*
- Yves Dufrene, *Université Catholique de Louvain, Belgium*
- Ruth Duncan, *Cardiff University, U.K.*
- Nikolaj Gadegaard, *University of Glasgow*
- David Gracias, *Johns Hopkins University*
- Kevin Healy, *University of California, Berkeley*
- Jeffrey Hubbell, *Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland*
- Darrell Irvine, *Massachusetts Institute of Technology*
- Igor Medintz, *Naval Research Laboratory*
- David Mooney, *Harvard University*
- Paul Nealey, *University of Wisconsin at Madison*
- Tae Gwan Park, *Korea Advanced Institute of Science and Technology*
- Robert Prud'homme, *Princeton University*
- Christine Schmidt, *University of Texas at Austin*
- Samuel Stupp, *Northwestern University*
- Matthew Tirrell, *University of California at Santa Barbara.*

Find out more at <http://www.aiche.org/icbn>.

Save the Date

SBE is proud to announce the 2nd International Conference on Biomolecular Engineering in Santa Barbara, California on January 18-22, 2009. Professor Ryan Gill of the University of Colorado and Dr. Sachdev Sidhu of Genentech will be chairing the event. Stay tuned for more information.

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 membership, \$25 for graduate students, \$10 for AIChE and ACS BIOT members, or free 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@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>*