

**1. Upcoming conferences and seminars in nanoscience and nanotechnology:**

**Spring 2009 Symposium Series**  
**"Bridging the River through Nanoscience and Nanotechnology"**

**NNI@UI**

in collaboration with

**the Institute for Clinical and Translational Science (ICTS)**

<http://research.uiowa.edu/nniui/symposium.html>

Thursday, February 19, 2009

12:30-5:00pm

2117 MERF

**Keynote speaker:**

Dr. Samuel Wickline, Washington University, St. Louis

<http://cardiology.wustl.edu/details.aspx?NavID=599>

*"Targeted Nanoemulsion Theranostics for Cancer and Cardiovascular Disease"*

**Other Speakers Include:**

· Sarah C. Larsen, NNI@UI Associate Director, Professor of Chemistry

*"Development of Porous Nanomaterials for Applications in Drug Delivery and Imaging"*

· Kevin Rice, Professor and Division Head, Medicinal & Natural Products Chemistry  
Professor, Pharmaceutics

*"Design Principles of Nano-Scale Gene Delivery Polyplexes"*

· Clark Stanford, Associate Dean for Research, Centennial Fund Professor, Director,  
Office for Clinical Research

*"Osseous Response to Nanoscale Topographical Features on Medical Devices"*

**To Register for Symposium & Poster Session, please go to:**

<http://research.uiowa.edu/nniui/symposium.html>

- **TMS 2009 Annual Meeting and Exhibition**  
February 15-19, 2009  
San Francisco, CA  
<http://www.tms.org/meetings/annual-09/AM09home.aspx>
- **4<sup>th</sup> Annual Greener Nanoscience Conference & Program Review**  
***Nanoscience for a Sustainable Future***  
Safer Nanomaterials and Nanomanufacturing Initiative (SNNI)  
March 2-3, 2009  
Eugene, OR  
<http://oregonstate.edu/conferences/greenernano2009/>
- **Bacterial Interactions with Engineered Nanomaterials**  
Continuing Spring 2009 Symposium Series, "Bridging the River Through  
Nanoscience and Nanotechnology"  
Patricia Holden, Professor of Environmental Microbiology  
Bren School of Environmental Science & Management  
University of California Santa Barbara  
March 5, 2009      4:00-5:00pm      3321 SC  
Seminar Reception, 3:30-4:00 (3501 SC)  
University of Iowa, Iowa City, IA
- **Advances in Translational Science**  
March 11-13, 2009  
Tucson, AZ  
<http://www.tms.org/meetings/annual-09/AM09home.aspx>

## 2. Upcoming National Science Foundation Research Experiences for Undergraduates (NSF-REU) Program in Nanoscience and Nanotechnology:

The Nanoscience and Nanotechnology Institute at the University of Iowa (NNI@UI) will host a summer undergraduate research program funded by the National Science Foundation Research Experiences for Undergraduates (NSF-REU) program. This is the second of three years for the NNI@UI REU program. The program will start on May 26, 2009 and will end on July 31, 2009.

The REU program will provide eight rising junior or senior undergraduate students with research experience in cutting edge topics related to environmental and health aspects of nanoscience and nanotechnology. REU participants will have the opportunity to work with faculty mentors from the departments of Chemical and Biochemical Engineering, Civil and Environmental Engineering, Chemistry, Pharmacy, and Occupational and Environmental Health.

[http://research.uiowa.edu/nniui/reu\\_2008/index.html](http://research.uiowa.edu/nniui/reu_2008/index.html)

## 3. Upcoming grant opportunities and funding requests in nanoscience and nanotechnology:

- **Discovery Research K-12 (DR-K12)**

National Science Foundation

Solicitation: 08-1788

Full Proposal Deadline: February 15, 2009

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5260&org=NSF&sel\\_org=NSF&from=fund](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5260&org=NSF&sel_org=NSF&from=fund)

- **Technology Innovation Program (TIP)**

Call for White Papers

TIP is seeking white papers to help shape the Programs' collaborative outreach and competitions in the future.

Deadlines: March 9, May 11, July 13, 2009

[http://www.nist.gov/tip/frn\\_seeking\\_whitepapers.pdf](http://www.nist.gov/tip/frn_seeking_whitepapers.pdf)

- **NanoThermal Interfaces (NTI)**

Department of Defense

Funding Opportunity Number: DARPA-BAA-08-42

Closing Date for Applications: May 21, 2009

<http://www07.grants.gov/search/search.do;jsessionid=L1wK3gQVwKFJNITCSMLfBYcGBpp5yF9812Y6GN1ST0f1tnTms59v!293637734?opId=41766&flag2006=false&mode=VIEW>

## 4. Highlights of some new interesting nanoscience and nanotechnology research and articles:

- **Polymer Nanoparticle for Oral Anticancer Drug Delivery**

One of the problems that cancer patients face is that many of the most potent anticancer therapies can be administered only by injection, which means that cancer patients must travel to receive their medication. But thanks to a new type of nanoparticle developed by researchers at the Johns Hopkins University School of Medicine, future cancer patients may be able to receive their medication in pill form.

[http://nano.cancer.gov/news\\_center/2009/jan/nanotech\\_news\\_2009-01-16f.asp](http://nano.cancer.gov/news_center/2009/jan/nanotech_news_2009-01-16f.asp)

- **Booze-powered cars coming soon**

**Nanotech catalysts promise ethanol fuel cells for green cars**

Forget heavy, expensive lithium-ion batteries, the next generation of eco-vehicles could be using alcohol-powered fuel cells. Scientists at the US Department of Energy's (DOE) Brookhaven National Laboratory have developed a new nanotechnology catalyst that could make booze-powered fuel cells possible for the first time.

<http://www.techradar.com/news/world-of-tech/booze-powered-cars-coming-soon-513666?src=rss&attr=newsall>

- **Building walls with bottom-up nanotechnology**

Among the many challenges that researchers have to overcome in developing bottom-up nanotechnology fabrication techniques and processes, the requirement for extremely precise, nanometer-scale control of positioning and shaping of objects is one of the most vexing. New work by a team of scientists in Korea demonstrates the position- and shape-controlled growth of nanoarchitectures using the selective growth of nanowalls with conventional lithography and catalyst-free metal organic vapor-phase epitaxy (MOVPE).

<http://www.nanowerk.com/spotlight/spotid=9020.php>

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## About NANO @ IOWA Weekly

NANO @ IOWA Weekly is a weekly electronic newsletter to inform faculty, staff, and students about important news and events in nanoscience & nanotechnology. This newsletter is provided as a service of The Nanoscience and Nanotechnology Institute at UI (NNI@UI).

If you have news for NANO @ IOWA Weekly, please send an e-mail to [NNI@uiowa.edu](mailto:NNI@uiowa.edu) or call Jackie Jensen at 319-384-3292.

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