



## REGULATORY AND LEGISLATIVE DEVELOPMENTS

### **Nanotechnology Impact on Global Development**

A new report from the Nanotechnology Industries Association (NIA) entitled "Closing the Gap: The Impact of Nanotechnologies on the Global Divide" highlights the potential for nanotechnology to impact global development. The report also analyzes the possibilities for nanomedicines to address issues in developing countries and addresses some problems nanotechnology might face in reaching certain populations and the potential for risks in nanotechnology.

[http://www.nanotechia.org/sites/default/files/files/20131126\\_NIA\\_Closing\\_the\\_gap.pdf](http://www.nanotechia.org/sites/default/files/files/20131126_NIA_Closing_the_gap.pdf)

### **ETP Nanomedicine Translation Hub**

The European Technology Platform on Nanomedicine (ETPN) has developed the idea

of a "translation hub" to provide support and advice at all stages of nanomedicine research and development to smaller innovating European companies. The ETPN hopes to improve the innovative work of the nanomedicinal sector in Europe.

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2519-nmp-09-2014.html>

### **Progress in Nanovaccines**

A team of researchers at Iowa State University (ISU) have launched a three-year project for the research and development of nanovaccines. The team plans to focus on diseases such as tuberculosis, malaria, biodefense pathogens and cancer. The researchers plan to take a "systems" approach to the project in order to encompass all aspects of the vaccines' development and deployment.

<http://www.news.iastate.edu/news/2013/12/02/nanovaccines>

## REVIEWS AND OTHER PUBLICATIONS OF INTEREST

**Thermodynamic Basis for Engineering High-Affinity, High-Specificity Binding-Induced DNA Clamp Nanoswitches.** ACS Nano, November 2013, Vol. 7, No. 12, pp. 10863 – 10869. Andrea Idili, Kevin W. Plaxco, Alexis Vallée-Bélisle, Francesco Ricci.

<http://pubs.acs.org/doi/abs/10.1021/nn404305e>

**Sol-gel synthesis, characterization, and neurotoxicity effect of zinc oxide nanoparticles using *gum tragacanth*.**

Elsevier: Ceramic International, December 2013, Vol. 39, Issue 8, pp. 9195 – 9199.

<http://www.sciencedirect.com/science/article/pii/S0272884213005324>

**Cancer Nanomedicine: From Drug Delivery to Imaging.** Science Translational Medicine, December 2013, Vol. 5, Issue 216, p. 216rv4. Edward Kai-Hua Chow, Dean Ho.

<http://stm.sciencemag.org/content/5/216/216rv4>

**Bioinspired Helical Microswimmers Based on Vascular Plants.** Nano Letters, November 2013, Vol. 14, Issue 1, pp. 305 – 310. Wei Gao, Xiaomiao Feng, Allen Pei, Christopher R. Kane, Ryan Tam, Camille Hennessy, Joseph Wang.

<http://pubs.acs.org/doi/abs/10.1021/nl404044d>

**Transformations during Sintering of Small (Dcore < 2 nm) Ligand-Stabilized Gold Nanoparticles: Influence of Ligand Functionality and Core Size.**

The Journal of Physical Chemistry C, 2013, Vol. 117, No. 47, pp. 25127 – 25137. Beverly L. Smith, James E. Hutchison.

<http://pubs.acs.org/doi/abs/10.1021/jp408111v>

***In vivo* performance of a drug-eluting contact lens to treat glaucoma for a month.**

Biomaterials, Volume 35, Issue 1, January 2014, pp. 432–439. Joseph B. Ciolino, Cristina F. Stefanescu, Amy E. Ross, Borja Salvador-Culla, Priscila Cortez, Eden M. Ford, Kate A. Wymbs, Sarah L. Sprague, Daniel R. Mascoop, Shireen S. Rudina, Sunia A. Trauger, Fabiano Cade, Daniel S. Kohane.

<http://www.sciencedirect.com/science/article/pii/S0142961213011150>

**Nanoparticle-detained toxins for safe and effective vaccination.** Nature Nanotechnology, December 2013, Vol. 8, pp. 933 – 938. Che-Ming J. Hu, Ronnie H. Fang, Brian T. Luk, Liangfang Zhang.

<http://www.nature.com/nnano/journal/v8/n12/full/nnano.2013.254.html>

*For further information, or if you have any questions about the Nanomedicines Alliance, please contact the Nanomedicines Alliance Secretariat at 1-202-230-5653.*

## CONFERENCES AND WORKSHOPS

### ASME 2014 3rd Global Congress on Nanoengineering for Medicine and Biology, February 2-5, 2014, San Francisco, CA, USA

Therapeutics and Drug Delivery  
Regenerative Medicine and Tissue Engineering  
Modeling and Materials in Physiology, Disease, and Treatment  
Nanotoxicology

<http://www.asmeconferences.org/NEMB2014/>

### NanoPortugal 2014 International Conference, February 12 – 14, 2014, Porto, Portugal

Nanomedicine  
Modeling  
Nanotubes  
Nanoinstrumentation

<http://www.nanopt.org/14EN/topics.php?m=c&s=to>

### BioNanoMed 2014, March 26-28, 2014, Krems, Austria

Nanomedicines innovation  
Diagnostics and therapy  
Regenerative medicine  
Imaging technology  
Nano safety

<http://www.bionanomed.at/index.php?id=26>

### American Society for Nanomedicine 4th Annual Scientific Conference, March 28 – 30, 2014, Rockville, MD, USA

Target drug delivery  
Toxicology  
Nanoimaging  
Therapeutics

<http://amsocnanomed.org/conference-info>

### Nanotechnology for Health Care Conference, April 2-4, 2014, Petit Jean Mountain, Arkansas, USA

Disease Diagnostics  
Therapeutics  
Prevention

<http://arkansasnanohealth.com/>

### SCT-SF Nano Joint Meeting, April 8, 2014, Paris, France

Drug delivery  
Targeting and activating  
Pharmacokinetics  
Pharmacodynamics

[http://www.lidorganisation.com/v2/produits.php?langue=english&cle\\_menus=1238915758](http://www.lidorganisation.com/v2/produits.php?langue=english&cle_menus=1238915758)

### NANOSMAT USA 2014, May 19 – 22, 2014, Houston, Texas, USA

Carbon-based nanomaterials  
Nanocomposites  
Self-assembly  
Modeling  
Interactive nanomaterials

<http://www.nanosmat-usa.com/default.asp>

### Nanotech: Advanced Materials and Applications, June 15 – 19, 2014, Washington, DC

Bio nanomaterials  
Drug and gene delivery  
Cancer nanotechnology  
Biosensing, diagnostics, and imaging

<http://www.techconnectworld.com/Nanotech2014/>

### 11th International Conference on Nanosciences and Nanotechnologies, July 8 – 11, 2014, Thessalonica, Greece

Nanofabrication  
Self-assembly and self-organization  
Clinical Applications  
Nanobiotechnology

[http://www.nanotexnology.com/index.php?option=com\\_content&view=article&id=48&Itemid=54](http://www.nanotexnology.com/index.php?option=com_content&view=article&id=48&Itemid=54)

## REFERENCE SECTION

### Nanobio- and Nanomedicine Companies

Listed alphabetically:

[http://www.nanowerk.com/nanotechnology/nanomaterial/nanobiomedicine\\_a.php](http://www.nanowerk.com/nanotechnology/nanomaterial/nanobiomedicine_a.php)

### Nano Organizations

National Center for Toxicological Research (NCTR):

<http://www.fda.gov/AboutFDA/CentersOffices/NCTR/default.htm>

National Nanotechnology Initiative (NNI):

<http://www.nano.gov/>

Nano Science and Technology Consortium (NSTC): <http://www.nstc.in/>

Nano Science and Technology Institute (NSTI):

<http://www.nsti.org/>

The Nanotechnology Institute (NTI):

<http://nanotechinstitute.org/>

**Nano Journals**

American Chemical Society -- Nano Letters:  
<http://pubs.acs.org/journal/nalefd>

Institute of Physics – Nanotechnology:  
<http://iopscience.iop.org/0957-4484/>

Journal of Nanoscience and Nanotechnology:  
<http://www.aspbs.com/jnn/>

NanoTrends - A Journal of Nanotechnology and  
its Applications: <http://www.nstc.in/journal/default.aspx>

BCC Research -- Nanotechnology Reports:  
<http://www.bccresearch.com/index/category/code/nanotechnology>

Nanomedicine: Nanotechnology, Biology, and  
Medicine: <http://www.nanomedjournal.com/home0>

Nanomedicine:  
<http://www.futuremedicine.com/page/about.jsp>

Nature Nanotechnology:  
[http://www.nature.com/nnano/focus/highlights/index.html?WT.mc\\_id=NM1110CT01](http://www.nature.com/nnano/focus/highlights/index.html?WT.mc_id=NM1110CT01)

**CONTACT**

For further information, or if you have any questions about the Nanomedicines Alliance, please contact the Nanomedicines Alliance Secretariat at 1-202-230-5653 or [info@nanomedicines-alliance.org](mailto:info@nanomedicines-alliance.org).

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