

SAVE THE DATES: Nanomedicines Alliance Symposium

The Nanomedicines Alliance is hosting an industry symposium 6-7 March 2013 in Rockville, MD, USA, entitled “**Nanomedicines: Charting a Roadmap to Commercialization.**”

Registration is open now. Be sure to take advantage of the early bird rates.
See page 5 of the newsletter for more details. See Page 6 for Call for Posters.
Check the website for updated information: <http://www.nanomedicines-alliance.org/>

REGULATORY AND LEGISLATIVE DEVELOPMENTS

Final ObservatoryNANO Report Issued

The ObservatoryNano project, a project funded by the EC 7th Framework Programme to analyse scientific and technologic trends of nanotechnology and ended in March 2012, has now issued its fourth and final Report on Regulation and Standard for Nanotechnologies. The report provides an overview of initiatives in more than 20 countries across the world, and includes legislation, voluntary regulation, standards, and international collaboration. It also notes the rise in momentum on nanotechnology research and dialogue, as well as a rise in awareness among stakeholders.

The final report can be downloaded here:
http://www.innovationsgesellschaft.ch/media/archive2/20120718_News_ObservatoryNano_Nanotechnologies_RegulationAndStandards_2012.pdf

Report Issued on NanoSafety by European Parliament

The European Parliament's Science and Technology Options Assessment unit (STOA) has published the final report of the “NanoSafety—Risk Governance of Manufactured Nanoparticles” project. The report focuses on the environmental and health safety and risk aspects of engineered nanomaterials. The NanoSafety project examined risk management methods for the EU and member states, as well as strategies for communicating the environmental and health safety risks of nanomaterials.

The report can be found here:
http://innovationsgesellschaft.ch/media/archive2/20120718_STOA_Nano%20Safety.pdf

NNI Launches Nanotechnology Signature Initiative on Nanosensors

The National Nanotechnology Initiative launched its fifth Nanotechnology Signature Initiative, “Nanotechnology for Sensors and Sensors for Nanotechnology: Improving and Protecting Health, Safety, and the Environment.” The NNI expects nanosensors to have revolutionary applications in healthcare, pharmaceutical, agricultural, food, environmental, consumer products, and defense sectors. This NSI will explore the following two areas: 1) Using nanotechnology and nanoscale materials to build more sensitive, specific, and adaptable sensors in order to overcome the technical barriers associated with conventional sensors, and 2) Developing new sensors to detect engineered nanomaterials across their life cycles, in order to assess the potential impact on health, safety and the environment.

The white paper detailing the NSI can be found here:

http://www.nano.gov/sites/default/files/pub_resource/sensors_nsi_2012_07_09_final_for_web.pdf

FDA's Nanotech Policies Push Food Additive Reconsideration

An article in FDA Week highlights how the recent FDA guidance on the use of nanomaterials in food ingredients and contact substances have caused stakeholders to revisit previously cleared additives and petitions, as well as focus on FDA policymaking for nanomaterials. Stakeholders such as the Pew Health Group, Center for Food Safety, the American Chemistry Council, and the Institute for Agriculture and Trade Policy, have raised questions and concern on earlier decisions by the FDA on food additives. Additionally, stakeholders urged FDA to research further how

nanomaterials are absorbed into the body and affect health.

The article can be found here:
<http://www.insidehealthpolicy.com>

Cosmetic Industry Concerns with Nano Guidance Harmonisation

Stakeholders in the cosmetic industry have expressed concern with FDA's draft guidance on nanomaterials, noting that the guidance is broader than other countries', including the European Union. In particular, stakeholders are

concerned with the inclusion of soluble particles and particles from 100 nm to 1000 nm in the definition of nanomaterial. However, other trade associations have expressed support for the inclusion of soluble particles in the definition, explaining that soluble or biodegradable nanomaterials would behave like insoluble nanomaterials after they have dissolved or biodegraded into their molecular components. The article can be found here:

<http://www.insidehealthpolicy.com>

REVIEWS AND OTHER PUBLICATIONS OF INTEREST

Tracking Mesenchymal Stem Cells with Iron Oxide Nanoparticle Loaded Poly(lactide-co-glycolide) Microparticles. Nano Letters, 8 August 2012, Vol. 12, No. 8, pp. 4131-4139. Chenjie Xu, David Miranda-Nieves, James A. Ankrum, Mads Emil Matthesen, Joseph A. Phillips, Isaac Roes, Gregory R. Wojtkiewicz, Vikram Juneja, Jens Roat Kultima, Weian Zhao, Praveen Kumar Vemula, Charles P. Lin, Matthias Nahrendorf, and Jeffrey M. Karp. <http://pubs.acs.org/doi/abs/10.1021/nl301658q>

Single Step Isolation and Activation of Primary CD3* T Lymphocytes Using Alcohol-Dispersed Electrospun Magnetic Nanofibers. Nano Letters, 8 August 2012, Vol. 12, No. 8, pp. 4018-4024. Kwanghee Kim, Hyo Jin An, Seung-Hyun Jun, Tae-Jin Kim, Seon Ah Lim, Gayoung Park, Hyon Bin Na, Yong il Park, Taeghwan hyeon, Cassian Yee, Jeffrey A Bluestone, Jungbae Kim, and Kyung-Mi Lee. <http://pubs.acs.org/doi/abs/10.1021/nl301388d>

Negligible Particle-Specific Antibacterial Activity of Silver Nanoparticles. Nano Letters, 8 August 2012, Vol. 12, No. 8, pp. 4271-4275. Zong-ming Xiu, Qing-bo Zhang, Hema L. Puppala, Vicki L. Colvin, and Pedro J. J. Alvarez. <http://pubs.acs.org/doi/abs/10.1021/nl301934w>

Graphene Oxide Used as a Carrier for Adriamycin can Reverse Drug Resistance in Breast Cancer Cells. Nanotechnology, 7 September 2012, Vol. 23, No. 35. Jing Wu, Yin-song Wang, Xiao-ying Yang, Yuan-yuan Liu, Jin-rong yang, Rui Yang, and Ning Zhang. <http://iopscience.iop.org/0957-4484/23/35/355101>

Selected Peer-Reviewed Articles from International Conference on Advanced Nano Materials (ANM 2010). Journal of Nanoscience and Nanotechnology, August 2012, Vol. 12, No. 8, pp. 6145-6871. Editors: Jose Gracio, Elby Titus, Victor Neto, Paula Marques, Duncan Paul

Fagg, Manoj Kumar Singh, Margarida Coelho, and Joana Mendes. <http://openurl.ingenta.com/content?genre=article&issn=1533-4880&volume=12&issue=8&spage=6599&epage=6601>

Bioactive Silica-based Nanoparticles Stimulate Bone-forming Osteoblasts, Suppress Bone-resorbing Osteoclasts, and Enhance Bone Mineral Density In Vivo. Nanotechnology, Biology, and Medicine, August 2012, Vol. 8, No. 6, pp. 793-803. George R. Beck, Shin-Woo Ha, Corinne E. Camalier, Masayoshi Yamaguchi, et al. <http://download.journals.elsevierhealth.com/pdfs/journals/1549-9634/PIIS1549963411005235.pdf>

Nanomedicine: Shake up the Drug Containers. August 2012, Vol. 7, No. 8, pp. 481-544. Yechezkel Barenholz. <http://www.nature.com/nnano/journal/v7/n8/pdf/nnano.2012.132.pdf>

REVIEW: Gold Nanoparticles: the Importance of Physiological principles to Devise Strategies for Targeted Drug Delivery. August 2012, Vol. 8, No. 6, pp. 804-814. Madhusudhan R. Papasani, Guankui Wang, Rodney A. Hill. [http://www.nanomedjournal.com/article/S1549-9634\(12\)00015-9/abstract](http://www.nanomedjournal.com/article/S1549-9634(12)00015-9/abstract)

REVIEW: Challenges in Neuroprotective Nanomedicine Development: Progress Towards Noninvasive Gene Therapy of Glaucoma. Nanomedicine, July 2012, Vol. 7, No. 7, pp. 1067-1083. Samih Alqawlaq, J. torin Huzil, Marina V. Ivanova, Marianna Foldvari. <http://www.futuremedicine.com/doi/pdf/10.2217/nmm.12.69>

REVIEW: Advances in Nanotechnology-based Delivery Systems for Curcumin. Nanomedicine, July 2012, Vol. 7, No. 7, pp. 1085-1100. Min Sun, Xun Su, Buyun Ding, Xiuli He, Xiuju Liu, Aihua Yu, Hongxiang Lou, Guangxi Zhai. <http://www.futuremedicine.com/doi/pdf/10.2217/nmm.12.80>

SPECIAL REPORT: Essential Parameters to Consider for the Characterization of Optical Imaging Probes. Nanomedicine, July 2012, Vol. 7, No. 7, pp. 1101-1107. Kam Leung, Arvind

Chopra, Liang Shan, William C. Eckelman, Anne E. Menkens.

<http://www.futuremedicine.com/doi/pdf/10.2217/nnm.12.79>

CONFERENCES AND WORKSHOPS

3rd International NanoMedicine Conference, July 2-4, 2012, Sydney, Australia

Target delivery
Sensing
Diagnostics
Regenerative medicine
Imaging
Translational medicine
Safety

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

9th International Conference on Nanosciences & Technologies, July 3-6, 2012, Thessaloniki, Greece

Nanotechnology in biology
Nanostructures for medical applications
Cell/Nanomaterial interactions
In-vitro and in-vivo diagnostics
Targeted drug delivery
Regenerative nanomedicine
Nanotoxicity, risk assessment, and ethics
Nanomedicine commercialization

http://www.nanotextology.com/index.php?option=com_content&view=article&id=48&Itemid=60

Working Safely with Nanomaterials. July 6, 2012, Edinburgh, Scotland.

Nanomaterials categories
Nano toxicology/hazard banding
Nano controls/monitoring
Nano health surveillance

<http://www.bohs.org/Events/WorkingwithNanomaterials/>

77th Prague Meetings on Macromolecules: Polymers in Medicine. July 8-12, 2012, Prague, Czech Republic

Polymers for Nanomedicine
Stimuli responsive polymers
Polymers for Advanced Drug Delivery
Polymers for Biomedical Applications
Biomaterials for Tissue Engineering

<http://www.imc.cas.cz/sympo/pmm2012/>

Need for New Biological Assays for New Nanomaterials, July 10-11, 2012, Dublin, Ireland.

Cytotoxicity
Biological assays
Immunosafety

<http://www.nanosafetycluster.eu/news/57/66/NanoToes-Need-for-new-biological-assays-for-new-nanomaterials.html>

Colloids and Nanomedicine 2012. July 15-17, 2012, Amsterdam, Netherlands.

Biomaterials
Tissue engineering and regenerative medicine
Drug delivery
Biosensors
Toxicology and risk assessment of nanomedicine systems
Proteins and peptides at interfaces
Soft matter, surfactants, polymers in biological systems
Novel phenomena and techniques

<http://www.colloidsandnanomedicine.com/index.html>

Drug Carriers in Medicine & Biology, August 12-17, 2012, Waterville Valley, NH

Vascular delivery, targets and barriers
Translational studies, clinical trials, and combination therapies
Local, pulmonary, GI, and CNS delivery
Emerging technologies, materials, carriers, and mechanisms
Carriers for vaccines and antigen delivery
Intracellular delivery, trafficking and cellular barriers
Biological response to delivered drugs and genes

<http://www.grc.org/programs.aspx?year=2012&program=druqcarr>

First International Symposium on Nanomedicine in Drug Delivery and cancer Diagnostics, August 16-17, Delaware, MD

Principles of Nanomedicine
Nanotechnological advances and potential medical applications
Benefits of nanomedical tools versus traditional techniques
Therapeutic applications of nanotechnology and nanomaterials
Drug delivery using nanoparticles

<http://www.udel.edu/nanomedicine/presenters.html>

IEEE Nano 2012 Conference, August 20-23, 2012, Birmingham, UK

Nanobiomedicine
Nanosensors
Nanoplasmonics

http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=19746

European Congress of Molecular Spectroscopy, August 26-31, 2012, Cluj-Napoca, Romania

Spectroscopic methods and techniques
Computational and theoretical approaches
Structure and dynamics of molecular systems

<http://www.nanowerk.com/nanotechnology-event.php?eventid=3484>

Fifth Annual Nanotechnology and Nanomedicine Symposium, September 21-22, 2012, Louisville, Kentucky

Nanoparticulate drug delivery systems
Nano education and intellectual property
Nano medicine/nano toxicology
Nano fabrication and Characterisation
Manufacturing & Mechanical Properties of Nanomaterials

<http://www.sullivan.edu/pharmacy/NANO-index.asp>

2012 Workshop on Nanoinformatics for Biomedicine, October 4-7, 2012, Philadelphia, PA.

Nanomaterial-biological interactions
Translational nanoinformatics
Ethical and social issues

<http://workshops.i-a-i.com/nanoinfo2012>

Nanosafe 2012, November 13-15, 2012, Grenoble, France

Exposure assessment
Characterisation, detection, and monitoring
Nanomaterials life cycle
Toxicology
Environmental impact
Nanoparticle release from consumer products
Personal protective equipment
Secure industrial production
Safety parameters evaluation
Standardisation, regulations

<http://www.nanosafe.org/scripts/home/publigen/content/templates/show.asp?P=121&L=EN&ITEMID=65>

REFERENCE SECTION

Nanobio- and Nanomedicine Companies

Listed alphabetically:

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/home>

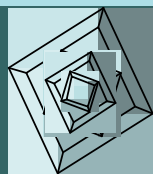
Nanomedicine:
<http://www.futuremedicine.com/page/about.jsp>

Nature Nanotechnology:
http://www.nature.com/nano/focus/highlights/index.html?WT.mc_id=NM1110CT010

CONTACT

For further information or questions about the Nanomedicines Alliance, please contact the Nanomedicines Alliance Secretariat at 1-202-230-5607 or info@nanomedicines-alliance.org

This newsletter is provided as a public service and resource to the scientific and regulatory community interested in nanomedicines. The mention of any organizations, conferences or other events in this newsletter IS FOR INFORMATIONAL PURPOSES ONLY and does not represent an endorsement by the Nanomedicines Alliance or any of its members.



Nanomedicines Alliance

www.nanomedicines-alliance.org

Save the Date and Invite your Colleagues!!

Nanomedicines Alliance Industry Symposium **NANOMEDICINES: CHARTING A ROAD TO COMMERCIALIZATION**

Wed-Thurs, 6-7 March 2013

Hilton Washington DC/Rockville, Maryland USA

Symposium will address:

- Designing nanomedicines
- Preclinical pharmacology
- Chemistry, Manufacturing, and Controls
- Toxicology/ADME
- Clinical Studies

through

- Podium presentations
- Breakout sessions
- Poster sessions

You will benefit from this Symposium if you work in

- Pharmaceutical industry
- Biotech industry
- Regulatory agency

Or are interested in

- Industry perspectives
- Manufacturing nanomedicines
- Future of nanomedicines
- Networking

To Register: <https://www.signmeup.com/86831>

Early Bird (To take advantage of the Early Bird Rate, please register by
October 31, 2012):

- \$500 (industry)
- \$400 (academia)
- \$250 (government)

Please contact the Alliance Secretariat at dede.godstrey@dbr.com or
+1-202-230-5607 for more information

**NANOMEDICINES ALLIANCE**WWW.NANOMEDICINES-ALLIANCE.ORG**CALL FOR POSTERS****NANOMEDICINES ALLIANCE
2013 SYMPOSIUM****6-7 March 2013**

The Nanomedicines Alliance is inviting abstract submissions for posters for its 2013 Symposium: *Nanomedicines: Charting a Road to Commercialization* to be held on **Wednesday—Thursday, March 6-7, 2013**, in Rockville, Maryland, USA (<http://www.nanomedicines-alliance.org/events.html>).

Individuals and groups interested in presenting posters should e-mail an informative abstract to dede.godstrey@dbr.com **before December 7, 2012**, with the words 'Poster Abstract for Nanomedicines Symposium' in the subject line. A final decision about acceptance or non-acceptance of a proposed poster will be communicated to the corresponding author by **December 17, 2012**.

Posters should convey sound scientific work within the scope of the Symposium as reflected in the Symposium's title. Sample topics of interest include designing nanomedicines, preclinical pharmacology, chemistry, manufacturing & controls, clinical studies and toxicology/ADME.

For poster abstract guidelines, see:
(<http://www.nanomedicines-alliance.org/events.html>)

Questions: Contact the Nanomedicines Alliance Secretariat
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