



Nanomedicines ALLIANCE

NanoMed Digest

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Join the Nanomedicines Alliance. Contact us at info@nanomedicines-alliance.org

- Meet with industry colleagues, government partners, and other stakeholders
- Help define the issues of science, regulation, and policy
- Participate in our ongoing advocacy, regulatory, and scientific efforts
- Join as a trial member for six months at half the annual fee

2015 Nanomedicines Award

In collaboration with the [European Technology Platform on Nanomedicine](#) (ETPN), the Nanomedicines Alliance is pleased to announce the results of the [Nanomedicine Award 2015](#). Two awards were granted this year: Dr. Andrea Hanefeld received the award for Best Nanomedicine Early Clinical Stage Project for a project aiming to develop a nanomedicine oncology product for mucosal therapeutic vaccination; Dr. Lawrence Mayer received the award for Best Nanomedicine Product Deal for a project focused on an anti-cancer nano-scale drug combination.

2016 GDUFA Priorities

The US Food and Drug Administration has published a list of [2016 regulatory science priorities](#) for generic drugs, including post-market evaluation of generic drugs; equivalence of complex products; equivalence of locally-acting products; therapeutic equivalence evolution and standards; and computational and analytical tools. These topics include a consideration of establishing equivalence for nanomaterials in drug products.

Innovative Medicines Initiative Call for Proposals

The Innovative Medicines Initiative (IMI), a public-private partnership between the European Union and the European Federation of Pharmaceutical Industries and Associations (EFPIA), has issued a [call for proposals](#) for development of Quantitative System Toxicology (QST) approaches to improve the understanding of the safety of new medicines, and for establishing impact of RSV (respiratory syncytial virus) infection, resultant disease and public health approach to reducing the consequences. Nanomedicines may fall into the scope of either of these initiatives. The submission deadline is January 12, 2016. The purpose of IMI is to expedite the development of innovative medicines by facilitating collaboration in healthcare research.

FDA Draft Guidance

The US Food and Drug Administration has released a draft guidance "[Liposome Drug Products: Chemistry, Manufacturing, and Controls; Human Pharmacokinetics and Bioavailability; and Labeling Documentation](#)". It focuses on unique technical aspects of liposome drug products and replaces a draft guidance of the same name from August 2002.

Reviews and Other Publications of Interest

[SiR–Hoechst is a far-red DNA stain for live-cell nanoscopy](#). Nature Communications, Vol. 6, No. 8497, October 2015. Gražvydas Lukinavičius, Claudia Blaukopf, Elias Pershagen, Alberto Schena, Luc Reymond, Emmanuel Derivery, Marcos Gonzalez-

Gaitan, Elisa D'Este, Stefan W. Hell, Daniel Wolfram Gerlich, Kai Johnsson.

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Alu element-containing RNAs maintain nucleolar structure and function. The EMBO Journal, October 2015. Maiwen Caudron-Herger, Teresa Pankert, Jeanette Seiler, Attila Németh, Renate Voit, Ingrid Grummt, Karsten Rippe.

Cell-selective arrhythmia ablation for photomodulation of heart rhythm. Science Translational Medicine, Vol. 7, Issue 311, October 2015. Uma Mahesh R. Avula, Hyung Ki Yoon, Chang H. Lee, Kuljeet Kaur, Rafael J. Ramirez, Yoshio Takemoto, Steven R. Ennis, Fred Morady, Todd Herron, Omer Berenfeld, Raoul Kopelman, Jérôme Kalifa.

Cell-based therapy in TBI: Magnetic retention of neural stem cells in vivo. Cell Transportation, September 2015. Wei-Bin Shen, Céline Plachez, Orest Tsymbalyuk, Natalya Tsymbalyuk, Su Xu, Aaron Smith, Sarah Michel, Deborah Yarnell, Roger Mullins, Rao Gulapalli, Adam Puche, J. Marc Simard, Paul S. Fishman, Paul Yarowsky.

Kinetics of small molecule interactions with membrane proteins in single cells measured with mechanical amplification. Science Advances, Vol. 1, No. 9, October 2015. Yan Guan, Xiaonan Shan, Fenni Zhang, Shaopeng Wang, Hong-Yuan Chen, Nongjian Tao.

Terahertz radiation induces non-thermal structural changes associated with Fröhlich condensation in a protein crystal. Structural Dynamics, 2015. Ida V. Lundholm, Helena Rodilla, Weixiao Y. Wahlgren,

Annette Duelli, Gleb Bourenkov, Josip Vukusic, Ran Friedman, Jan Stake, Thomas Schneider, Gergely Katona.

A Modular, DNA-Based Beacon for Single-Step Fluorescence Detection of Antibodies and Other Proteins. Angewandte Chemie, Vol. 54, Issue 45, pp. 13214 – 13218, November 2015. Simona Ranallo, Marianna Rossetti, Kevin W. Plaxco, Alexis Vallée-Bésisle, Francesco Ricci.

Conferences and Workshops

European Nanomedicine Meeting, 7 – 9 December 2015, Grenoble, France

Nanocarriers for Macromolecule Delivery
Nano and Micro-Medical Devices
Nanomedicine for Tissue Regeneration
Nanospecific Toxicological Issues
Nanomedicine and Imaging
Nanomedicine in Cancer

Infectious Diseases and Nanomedicines 2015, 15 – 18 December 2015, Kathmandu, Nepal

Cellular and Molecular Microbiology of Infectious Diseases
Epidemiology and Infectious Diseases Surveillance
Microbiome in Health and Infectious Diseases
Immune Response against Infectious Pathogens
Antimicrobials, Vaccines and Alternatives

NanoEngineering for Medicine and Biology Conference, 21 – 24 February 2016, Houston, TX

Nanolmaging
Nanoparticle-based delivery
Nano and Microfluidics

10th World Meeting on Pharmaceutics, Biopharmaceutics, and Pharmaceutical Technology, 4 – 7 April 2016, Glasgow, United Kingdom

2D and 3D printing in drug delivery
Nanoparticles
Cellular drug transport

Bionanomaterials Conference, 8 – 11 May 2016, Varna Bulgaria

Synthesis
Characterization
Toxicity
Therapeutics

Nano in Bio 2016, 31 May – 5 June 2016, Le Gosier, French West Indies

Biosensors & nanobioelectronics
Bio-inspired materials & drug delivery
Nanobiomechanics & nanomedicine
Tissue engineering & regenerative medicine
Nanotechnologies & biomedical applications

Reference Section

Nano Organizations

[National Center for Toxicological Research \(NCTR\)](#)
[National Nanotechnology Initiative \(NNI\)](#)

[Nano Science and Technology Consortium \(NSTC\)](#)

[Nano Science and Technology Institute \(NSTI\)](#)

[The Nanotechnology Institute \(NTI\)](#)

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Nano Journals

[American Chemical Society -- Nano Letters](#)

[Institute of Physics – Nanotechnology](#)

[Journal of Nanoscience and Nanotechnology](#)

[NanoTrends - A Journal of Nanotechnology and its Applications](#)

[BCC Research -- Nanotechnology Reports](#)

[Nanomedicine: Nanotechnology, Biology, and Medicine](#)

[Future Medicine](#)

[Nature Nanotechnology](#)

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.

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