



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

Highlights

National Nanotechnology Initiative Strategic Plan

On September 12, the US National Nanotechnology Initiative released a draft of its 2016 Strategic Plan for public comment. The document focuses on “creating an ecosystem that supports all aspects of the nanotechnology enterprise from fundamental discovery to commercial products.” The plan also stresses the need for collaboration among nanotechnology stakeholders to advance goals. Among other organizations that participated in the NNI stakeholder workshop, the Nanomedicines Alliance is recognized as a significant contributor to NNI’s 2016 strategy. The announcement and the link to the strategic plan [may be found here](#).

Reviews and Other Publications of Interest

[Combinatorial Polymeric Conjugated Micelles with Dual Cytotoxic and Antiangiogenic Effects for the Treatment of Ovarian Cancer](#)

Chemistry of Materials, Vol. 28, Issue 17, August 2016. Deepa A. Rao, Gyan Mishra, Bhuvana Shyam Doddapaneni, Sergiy Kyryachenko, Igor H. Wierzbicki, Duc X. Ngyuen, Vidhi Shah, Adel M. Al Fatease, Raid G. Alany, Adam W. G. Alani.

[Homogeneous Entropy-Driven Amplified Detection of Biomolecular Interactions](#)

ACS Nano, Vol. 10, Issue 8, pp. 7467 – 7475, July 2016. Donghyuk Kim, Omai B. Garner, Aydogan Ozcan, Dino Di Carlo.

[Biomimetic Hybrid Nanocontainers with Selective Permeability](#)

Angewandte Chemie, Vol. 55, Issue 37, pp. 11106 – 11109, September 2016. Lea Messenger, Jonathan R. Burns, Jungyeon Kim, Denis Cecchin, James Hindley, Alice L.B. Pyne, Jens Gaitzsch, Giuseppe Battaglia, Stefan Howorka.

[PEG-lipid micelles enable cholesterol efflux in Niemann-Pick Type C1 disease-based lysosomal storage disorder](#)

Scientific Reports, Vol. 6, Article No. 31750, August 2016. Anna Brown, Siddharth Patel, Carl Ward, Anna Lorenz, Mauren Ortiz, Allison DuRoss, Fabian Wiegardt, Amanda Esch, Elsje G.

Otten, Laura M. Heiser, Viktor I. Korolchuk, Conroy Sun, Sovan Sarkar, Gaurav Sahay.

[A Salmonella nanoparticle mimic overcomes multidrug resistance in tumours](#)

Nature Communications, Vol. 7, Article No. 12225, July 2016. Regino Mercado-Lubo, Yuanwei Zhang, Liang Zhao, Kyle Rossi, Xiang Wu, Yekui Zou, Antonio Castillo, Jack Leonard, Rita Bortell, Dale L. Greiner, Leonard D. Shultz, Gang Han, Beth A. McCormick.

[Graphene-augmented nanofiber scaffolds demonstrate new features in cells behavior](#)

Scientific Reports, Vol. 6, Article No. 30150, July 2016. Jekaterina Kazantseva, Roman Ivanov, Michael Gasik, Toomas Neuman, Irina Hussainova.

[Edible ginger-derived nanoparticles: A novel therapeutic approach for the prevention and treatment of inflammatory bowel disease and colitis-associated cancer](#)

Biomaterials, Vol. 101, pp. 321 – 340, September 2016. Mingzhen Zhang, Emilie Viennois, Meena Prasad, Yunchen Zhang, Lixin Wang, Zhan Zhang, Moon Kwon Han, Bo Xiao, Changlong Xu, Shanthy Srinivasan, Didier Merlin.

For further information, or if you have any questions about the Nanomedicines Alliance, please contact the Nanomedicines Alliance Secretariat at info@nanomedicines-alliance.org.

Mechanism of hard-nanomaterial clearance by the liver. Nature Materials, August 2016. Kim M. Tsoi, Sonya A. MacParland, Xue-Zhong Ma, Vinzent N. Spetzler, Juan Echeverri, Ben Ouyang, Saleh M. Fadel, Edward A. Sykes, Nicolas Goldaracena, Johann M. Kath, John B. Conneely, Benjamin A. Alman, Markus Selzner, Mario A. Ostrowski, Oyedele A. Adeyi, Anton Zilman, Ian D. McGilvray, Warren C. W. Chan.

Magneto-aerotactic bacteria deliver drug-containing nanoliposomes to tumour hypoxic regions. Nature Nanotechnology, August 2016. Ouajdi Felfoul, Mahmood Mohammadi, Samira Taherkhani, Dominic de Lanauze, Yong Zhong Xu, Dumitru Loghin, Sherief Essa, Sylwia Jancik, Daniel Houle, Michel Lafleur, Louis Gaboury, Maryam Tabrizian, Neila Kaou, Michael Atkin, Té Vuong, Gerald Batist, Nicole Beauchemin, Danuta Radzioch, Sylvain Martel.

Glyceride-Mimetic Prodrugs Incorporating Self-Immolative Spacers Promote Lymphatic Transport, Avoid First-Pass Metabolism, and Enhance Oral Bioavailability. Angewandte Chemie, August 2016. Luojuan Hu, Tim Quach, Sifei Han, Shea F. Lim, Preeti Yadav, Danielle Senyschyn, Natalie L. Trevaskis, Jamie S. Simpson, Christopher J.H. Porter.

DNA condensation in one dimension. Nature Nanotechnology, August 2016. Günther Pardatscher, Dan Bracha, Shirley S. Daube, Ohad Vonshak, Friedrich C. Simmel, Roy H. Bar-Ziv.

Single Particle and PET-based Platform for Identifying Optimal Plasmonic Nano-Heaters for Photothermal Cancer Therapy. Scientific Reports, Vol. 6, August 2016. Jesper Tranekjær Jørgensen, Kamilla Norregaard, Pengfei Tian, Poul Martin Bendix, Andreas Kjaer, Lene B. Oddershede.

Conferences and Workshops

European Technology Platform on Nanomedicine 2016 Annual Event, 12 – 14

October, Heraklion, Greece

Nanomedicine from bench to bedside
Translation tools
Quality-by-design
Interfacing KETs for healthcare

Applied Pharmaceutical Nanotechnology, 19

October 2016, Cambridge, MA

Nanotechnology and Diagnostics
Theranostics and Personalized Medicine
Nanotechnology and Immunotherapy
FDA / Regulatory Guidance
Nanotechnology in Preclinical and Clinical Development

International Conference for Nanotechnology in Medicine, 7 – 9 November 2016, Warsaw, Poland

Tissue engineering and biomaterial science
Nanoscale tissue scaffolds
Nanoscale biomaterial surface modification
Enzyme responsive tissue scaffolds
Guiding stem cell differentiation
Biosensors

World Summit on Nanotechnology and Nanomedicine Research, 28 – 30 November 2016, Dubai, UAE

Regenerative medicine
Translation
Toxicology
Carbon nanotubes

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 \(NTI\)](#)

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](#)

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Contact

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