



PROGRAM

**BioNanoMed
2010**

International Congress

NANOTECHNOLOGY IN MEDICINE & BIOLOGY

2 - 3 NOVEMBER 2010, KREMS/AUSTRIA


TECHCONNEX
High-Tech Promotion



BioNanoMed 2010

2 - 3 November, Krems/Austria

Invitation

BioNanoMed 2010 will provide a forum for clinical physicians, nanoscientists, industry experts as well as educational, governmental and non-governmental institutions to discuss current, emerging and future trends of the converging fields of Nanotechnology, Biotechnology and Medicine.

Exciting lectures and invited talks given by leading international scientists as well as poster presentations will offer delegates a good opportunity to discuss pioneering developments and also to initiate cooperation projects.

BioNanoMed2010 will focus on the following topics:

Nanotechnology: New Frontiers in Medicine & Biology

- Nanoparticles / Nanocarriers
- Nanostructured Materials
- Nanotoxicology
- Synthetic Biology

SPECIAL SESSION

- **Nanostructured Implants and Cellular Responses**

Organised by ESAO - European Society for Artificial Organs

ROUND TABLE SESSION

- **The Future of Nanomedicine: Current Status and Future Prospects of Nanomedicine**

Organised by Miltenyi Biotec GmbH

PANEL DISCUSSION

- **Promises kept? Where are the Products for Medical Application?**

Organised by Fresenius Medical Care Deutschland GmbH

BioNanoMed 2010 will be held at the **Danube University Krems** in Krems/Austria, from 2 - 3 November 2010. **BioNanoMed 2010** is jointly organised by the Danube University Krems and Techkonnex – High-Tech Promotion.



Information

Congress Language

English

Important Deadlines

Poster contributions: Submission deadline 17 October 2010, limited spots

Registration closing: 29 October 2010

Congress Fees

Registration: € 290,- (after 8 October 2010 € 350,-)

Graduate students: € 175,- (after 8 October 2010 € 200,-)

Congress Dinner: € 35 for all participants (prices incl. VAT)

Congress Dinner Partner Tickets are available!

Participation for Students

The student fee applies to full-time students only (please send a letter with signature and stamp from the University Professor to office@bionanomed.at).

Registration

Online at www.bionanomed.at

Registration is required for **all** congress participants!

Credit - (CME/DFP) Points

For attending the BioNanoMed 2010 - Congress participants will get Credit - (CME/DFP) points which are just processed.

Congress Dinner & Discussion

On 2 November 2010 an optional Congress Dinner will take place at a „Wachauer Heurigen“ . Transport will be available for guests to and from the dinner venue. For this event we will charge € 35,- per person from all participants including students.

Join the Speaker's Round Table

Participants can choose to join speakers/professors at their round table during dinner as an open forum for people to establish communication and collaborations in an informal environment.

Erwin Schrödinger Society Poster Awards

Erwin Schrödinger Society Awards 2010 are intended to recognize outstanding research presented. Awards are granted to the best three poster contributions (€ 300 for the first, € 200 for the second and € 100 for the third place).

Accommodation

Participants are requested to book their accommodation by themselves. Information on accommodation you can find on our congress-website www.bionanomed.at.

Program - 2 November 2010

8.00 Registration

8.40 Opening and Welcome

Chair: **Dieter Falkenhagen**, *Danube University Krems, Austria*
Eleonore Fröhlich, *Medical University of Graz, Austria*

9.05 **Nanotechnology Enables Personalized Medicine**

Mauro Ferrari, *President of the Alliance for NanoHealth Houston, The Methodist Hospital Research Institute, University of Texas, Houston (USA)*

9.50 **Recent Advances in Applications of Nanobiotechnology in Management of Cancer**, **Kewal K. Jain**, *Jain PharmaBiotech, Basel (Switzerland)*

10.15 Coffee Break

10.45 **Elucidating the dynamics of particle-cell interactions**, **Franz Gabor**, *Faculty of Life Sciences / Department of Pharmaceutical Technology and Biopharmaceutics, University of Vienna (Austria)*

11.10 **The nanoparticle protein corona confers a biological identity mediating nanoparticle interactions with living systems**

Kenneth A Dawson, *Centre for BioNano Interactions, University College Dublin (Ireland)*

11.35 **Rapid Liposome Quality Assessment using a Lab-on-a-Chip**

Gerald Birnbaumer, *AIT Austrian Institute of Technology GmbH, Health & Environment Department, Nano Systems, Vienna (Austria)*

11.55 **Biocompatible composite nanocarriers with on-demand**

triggered drug release, **Anna Musyanovych**, *Max Planck Institute for Polymer Research, Mainz (Germany)*

12.15 Lunch Break

13.15 **Lysosomes as potential targets for chronic toxicity of nano-**

particles, **Eleonore Fröhlich**, *Center for Medical Research, Department of Internal Medicine, Division of Endocrinology and Nuclear Medicine, Medical University of Graz (Austria)*

13.40 **Anti α v Integrin Antibody modified Nanoparticles against**

Melanoma Cells, **Sylvia Wagner**, *Fraunhofer IBMT, St.Ingbert (Germany)*

14.00 Nanotoxicology: an interdisciplinary challenge to support the sustainability of Nanotechnology, **Peter Wick**, *Materials- Biology Interactions Lab Empa, Swiss Federal Laboratories for Materials Science and Technology, St. Gallen (Switzerland)*

14.25 Coffee Break Poster Session I

15.25 Panel Discussion: **The Future of Nanomedicine: Current Status and Future Prospects of Nanomedicine**

Chair and organised by: Kai Pinkernell, Miltenyi Biotec GmbH (Germany)

Dieter Falkenhagen, *Center for Biomedical Technology, Danube University Krems (Austria)*

Mauro Ferrari, *Alliance for NanoHealth Houston, University of Texas, Houston (USA)*

Eleonore Fröhlich, *Medical University of Graz (Austria)*

Beat H. Walpoth, *Geneva University Hospital (Switzerland)*

Peter Wick, *Swiss Federal Laboratories for Materials Science and Technology, St. Gallen (Switzerland)*

16.30 Special Session: **Nanostructured Implants and Cellular Responses**

Chair and organised by ESAO - European Society for Artificial Organs, Heinrich Schima, President of ESAO, Medical University Vienna (Austria)

Scaffolds, Tracers and Reservoirs: Nanotechnologies in Biomedicine

Birgit Glasmacher, *Gottfried Wilhelm Leibniz Universität Hannover, Institute for Multi-phase Processes, Hannover (Germany)*

Nanostructured Vascular Scaffolds: Effect Of Porosity on Graft Healing

Helga Bergmeister, *LBC for Cardiovascular Research, Division of Biomedical Research, Medical University, Vienna (Austria)*

Nanostructured polyelectrolyte multilayers on biomaterials for control of cell behavior, **Thomas M. Groth**, *Biomedical Materials Group, Institute of Pharmacy & Center for Nanotechnology, Martin Luther University Halle-Wittenberg (Germany)*

Macroscopic orientation of electrospun fibers by avoiding jet's Bending instability, **Matthias Arras**, *Medical University Vienna (Austria), Friedrich Schiller University, Faculty for Physics and Astronomy, Jena (Germany)*

17.45 Lab Tour Center for Biomedical Technology - Danube University Krems Poster Session II (optional)

18.40 Departure to the "Wachauer Heurigen"

Program - 3 November 2010

Chair: Wolfgang Knoll, *Scientific Managing Director of AIT Austrian Institute of Technology GmbH, Austria*
Viktoria Weber, *Danube University Krems, Austria*

9.00 Nanoscale Engineering for the Biosciences, Gero Decher, *Université Louis Pasteur in Strasbourg, International Center for Frontier Research in Chemistry (France)*

9.25 Nanostructured Materials for Cardiovascular Applications Beat H. Walpoth, *Cardiovascular Research Service of Cardiovascular Surgery Geneva University Hospital (Switzerland)*

9.50 Stem cells, Biomaterials and Nanotechnologies in Treatment of Brain and Spinal Cord Injury, Eva Sykova, *Institute of Experimental Medicine, EU Centre of Excellence, Prague (Czech Republic)*

10.15 Coffee Break

10.45 The role of biomaterials in chondrocyte transplantation Stefan Nehr, *Danube University Krems, Center for Regenerative Medicine, Krems (Austria)*

11.10 Design of fluorescent nanosensors for pH, saccharides and nucleotides, Gerhard Mohr, *Fraunhofer Research Institution for Modular Solid State Technologies EMFT, Regensburg (Germany)*

11.35 Ultra-sensitive detection of unlabeled DNA in a microfluidic device, Jan Hesse, *Center for Advanced Bioanalysis GmbH, Linz (Austria)*

11.55 A new method for production of biocompatible, nanostructured high-performance titanium alloys, Maciej Krystian, *AIT Austrian Institute of Technology GmbH, Health & Environment Department, Biomedical Systems, Wr. Neustadt (Austria)*

12.15 Lunch Break

13.15 Synthetic Biology: A long way to go Uwe B. Sleytr, *Department of NanoBiotechnology, University of Natural Resources and Life Sciences, Vienna (Austria)*

13.40 Synthetic Biology for Materials Science Wilfried Weber, *BIOSS - Centre for Biological Signaling Studies, Albert-Ludwigs-University Freiburg (Germany)*



14.05 **Combination of Polymers and Membrane Proteins: Tight junction Proteins embedded in triblock-copolymerbased membranes**, **Eva-Kathrin Sinner**, *IMRE, material Research Institute (Singapore)*

14.30 **Take Advantage of your 50/50 Chance for Subsidies in the Research Support in Austria**, **Matthias Bruck**, *ABA - Austrian Business Agency, Vienna (Austria)*

14.40 Coffee Break Poster Session III

15.40 PANEL DISCUSSION Promises kept? Where are the Products for Medical Application?

Chair and organised by: **Jörg Vienken**, *Fresenius Medical Care Deutschland GmbH, Bad Homburg (Germany)*

Dieter Bögel, *CEO of BÖGEL & Associates GmbH - The Medexpert Group, Bad Homburg (Germany)*

Birgit Glasmacher, *Gottfried Wilhelm Leibniz Universität Hannover, Institute for Multi-phase Processes, Hannover (Germany)*

Werner Kexel, *CEO of Institute for Certification and Testing GmbH, Darmstadt (Germany)*

Norbert Windhab, *Head Strategic Projects, Pharma Polymers, Evonik Röhm GmbH, Darmstadt (Germany)*

16.40 **Introduction: Master of Science Course “NanoBiosciences & NanoMedicine”** – a Cooperation of Danube University Krems, Vienna University of Technology and University of Natural Resources and Life Sciences, Vienna
Dieter Falkenhagen, *Center for Biomedical Technology, Danube University Krems (Austria)*

16.45 Poster Award Ceremony

17.00 End of the Congress!



BioNanoMed 2010

2 - 3 November, Krems/Austria

Venue

Danube University Krems
Section A, Audimax

Dr. Karl Dorrek Str. 30

3500 Krems/Austria

Information and Registration

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Organiser

Danube University Krems
Department for Clinical Medicine and Biotechnology
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Techkonnex - High-Tech Promotion
Margit Malatschnig
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www.bionanomed.at

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Fresenius Medical Care



Miltenyi Biotec



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