

CLINAM

European Foundation for Clinical
Nanomedicine



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

European Society
for NanoMedicine

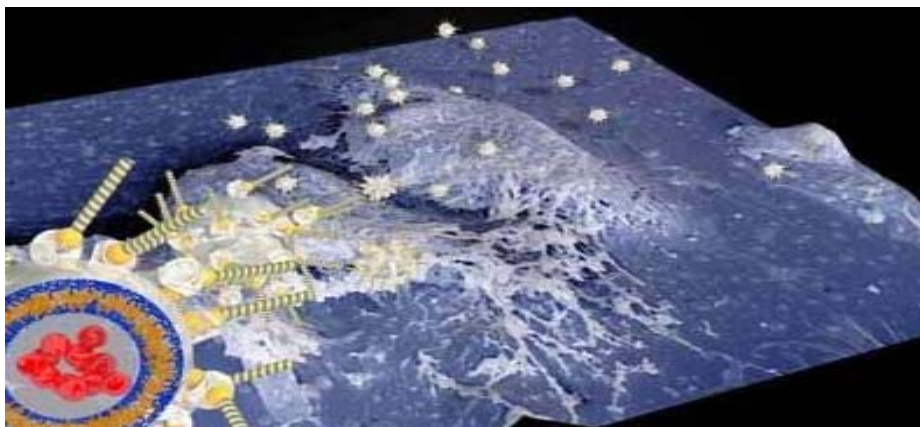
The European Joint Conference for Nanomedicine

4th European Conference for Clinical Nanomedicine (CLINAM 2011)

The Great Strides towards the Medicine of the Future

FINAL PROGRAMME

Monday, May 23, 09.00 am – Wednesday, May 25, 2011, 4.30 pm



Conference with Pioneer- and Start-up-Exhibition and "University Village"

Pre- Meetings on Sunday, May 22, 2011 General Assembly of the European Society for Nanomedicine (3 pm)
Meeting of the International Society for Nanomedicine (5.00 pm) Welcome Dinner for arrived speakers (7.45 pm)

Venue: Messeplatz 21, Basel, Switzerland
congress center | basel

Organisers Office: European CLINAM-Foundation, Alemannengasse 12, CH-4016 Basel, Switzerland
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Scientific Committee of the 4th European Conference for Clinical Nanomedicine

• **Prof. Dr. med. Patrick Hunziker**, President of the European Society for Nanomedicine, Basel (CH) (**Medical Chair**) • **Prof. Dr. Gert Storm**, Member of the Board of Trustees of the CLINAM-Foundation, Utrecht (NL) (**Scientific Chair**) • **Beat Löffler, MA**, CEO of the European Foundation for Clinical Nanomedicine, Basel (CH) (**Organising Chair**) • **Prof. Dr. Joachim Seelig**, Biozentrum, University, Basel (CH) • **Prof. Dr. Giacinto Scoles**, ELETTRA Synchrotron, SISSA and CBM, Area Science Park, Basovizza, Trieste (I) • **Patrick Boisseau** Member of the Board of the European Technology Platform for Nanomedicine, Grenoble (F) • **Prof. Dr. med. Janos Szebeni**, Head Department of Nanomedicine Bay Zoltán Institute of Nanotechnology, Budapest (H) • **Prof. Dr. med. Marisa Papaluca Amati** Head of Scientific Support and Projects, European Medicines Agency, London (UK)

International Nanomedical Gathering in Europe – CLINAM, ETPN, ESF, ESAM and EMA

The European Foundation for Clinical Nanomedicine (CLINAM) organises the 4th European Conference for Clinical Nanomedicine in collaboration with the **European Technology Platform on Nanomedicine (ETPN)**, the **European Science Foundation (ESF)**, the **European Society for Nanomedicine (ESAM)** and the **European Medicines Agency (EMA)**. The cooperation between these non-profit organizations allows to present a full state of the art in nanomedicine in Europe comprising

- the Clinical View,
- First-hand Information on Policy Issues
- the Strategic Outlook from the Industrial Point of View
- the Research Roadmap for Europe in Nanomedicine
- Regulatory Aspects in Nanomedicine
- Ethical implications of Nanomedicine.
- Societal and Environmental Impact
- The Scientific and Industrial Roadmaps of Nanomedicine,
- Policy Activities to foster the Advancement of Nanomedicine
- Industrial Opportunities and Expectations
- Regulatory aspects of Nanomedicine (2 EMA Sessions)
- Strategic Actions by Health Authorities
- Translation in Nanomedicine from research to application.

Interdisciplinary Platform

CLINAM 2011 will highlight the joint European way of working together for a future healthcare based on a cooperative approach between leading edge technology and science, research, clinical experience, policy, politics, regulations and industry stakeholders. It is the interdisciplinary platform for problem- and solution-oriented discussion between physicians, scientists of manifold faculties, engineers and all stakeholders in Nanomedicine and unifies the fragmentation in the field of nanoscience in health including all disciplines needed for the development of nanomedicine to the benefit of mankind and particularly the patient.

Clinical Topics

CLINAM 2011 reveals the limits and horizon of the promises of nanomedical tools, techniques, and materials in the context of prevalent and unsolved medical problems. The conference starts with the clinicians, reporting unsolved problems in a variety of medical disciplines. Based on these reports nanoscience-based technologies for solving these problems will be discussed.

Focus Session 2011: Infection and Inflammation

CLINAM 2011 highlights the following **Topics**: • Molecular and cellular basis of inflammation • Humoral and cellular immunity as targets for nanomedicine • Nanostructured vaccines • Nanoscale mechanisms and targets for nanomedicine in viral, bacterial and parasitic infections. **Fields**: • Rheumatic disease • Cancer • Cardiovascular disease • Gastrointestinal/hepatic disease, • Bacterial infection, • Multiresistant bacteria, • Viral infection including HIV • Parasitic infection, • Implants, • Diabetes, • Regenerative Medicine. **Tools at hand**: • In vitro diagnosis of inflammation, • Bedside diagnosis, • In vivo diagnosis, • Molecular Imaging, • Targeted therapy of inflammation in various diseases, • Preventing infection by nanostructured surfaces, • Preventing infection by nanosilver, • Prevention and therapy of viral inflammation by nanomedicine, • Therapy of bacterial infection by nanomedicine, • Therapy of parasitic infection by nanomedicine • Nanostructured vaccines for humoral and cellular immunity.

Late Breaking and Ongoing Trials

CLINAM 2011 includes 12 late breaking and ongoing trials. They provide novel results of clinical trials and novel results on the application of nanomedicine in clinical medicine.

Target audience

The faculty includes the pioneers and opinion leaders in the fields of, medicine and nanoscience, who share their experience in an interdisciplinary and interactive manner that widens mutual understanding for both sides. The conference and the exhibition are aimed at physicians, as well as nanoscientists with a background in pharmacology, biology, physics, chemistry, biophysics, medicine materials science and engineering, This conference is also of interest for policymakers, experts from industry in the field of life sciences, developers of new tools and materials for nanomedicine, all those investigating the future potential of emerging technologies. Experts from venture companies can acquire knowledge on existing and upcoming developments and novel products in the emerging field of Nanomedicine. Government Authorities related to Health profit of the Regulator's sessions.

Final Conference Programme

Monday, May 23, 2011 (Registration from 07.45 am until 4.00 pm)

Registration is possible until May 21, 2011. On site registration is subject to a surcharge of 20%

Plenum

Hall Montreal (whole day)

09.00

1. Opening

Opening Address on behalf of the European Foundation for Clinical Nanomedicine

Beat Löffler, MA, CEO of the European CLINAM Foundation, Basel (CH)

Opening Address on behalf of the European Technology Platform on Nanomedicine

Patrick Boisseau, Head of the Business Development Nanomedicine, CEA-Léti; Board-member of the European Technology Platform on Nanomedicine Chair, WG Nanodiagnostics, Grenoble (F)

Opening Address on behalf of European Science Foundation

Prof. Dr. Marja Makarow, Chief Executive of the European Science Foundation, Strasbourg (F)

Opening Address on Behalf of the the European Medicines Agency, (EMA) London

Prof. Dr. med. Marisa Papaluca-Amati, Head of Scientific Support and Projects European Medicines Agency, London (UK)

Opening Address on behalf of the University of Basel

Prof. Dr. med. Peter Meier-Abt, Vice Principal and Head of Research, University of Basel, Basel (CH)

09.25

Chair

2. From Knowledge to Practice

Beat Löffler, MA, CEO of the European Foundation for Clinical Nanomedicine (CLINAM), Basel (CH)

Scientific Introduction to CLINAM 2011

With Nanomedicine towards Personalised Medicine - Now and Future

Prof. Dr. med. Patrick Hunziker, Deputy Head of the Intensive Care Clinic of the University of Basel and President of the European Society for Nanomedicine, Basel (CH)

09.45

Keynote Lecture

The Engineering of Nanostructures with Applications from Civil Engineering to Medical Science

Prof. Dr. Sir Harold Kroto, Nobel Laureate, Department of Chemistry and Biochemistry, Florida State University, Tallahassee, Florida (USA)

10.40

Break

11.10

Chair

3. Unsolved Medical Problems Waiting for Nanomedical Solutions (1)

Prof. Dr. med Matthias Pfisterer, University Hospital Basel (CH)

Statement 1

From Less Effective to Personalised Medicine

Dr. med. Vincenzo Costigliola, President of the European Medical Association (E.M.A.) and President of the European Association for Predictive and Preventive & Personalised Medicine, (EPMA), Brussels (B)

Statement 2

Unsolved Problems in Diabetes

Prof. Dr. med. John Pickup MA, BM, BCh, DPhil, FRCPATH, Professor of Diabetes and Metabolism, Kings College, London (UK)

Statement 3

Unsolved Problems in Implantation

Prof. Dr. med. Enrique Gómez Barrena, Cirugía Ortopédica y Traumatología, Hospital "La Paz" Universidad Autónoma de Madrid, Madrid (SP)

Statement 4	Unsolved problems in Neurology – Alzheimer and Parkinson Prof. Dr. med. Jörg B. Schulz , Head of Department of Neurology, University Hospital Aachen, Aachen (D)
11.50	Questions and Debate
12.20	Lunch
13.45 Chair	4. Nanoscience Technologies for Solving Medical Problems (1) Prof. Dr. Gert Storm , Institute for Pharmaceutical Sciences, Utrecht University, Utrecht (NL)
Statement 1	Nanotechnologies for Overcoming Cancer Resistance Prof. Dr. Patrick Couvreur , Director UMR CNRS 8612, Physico-chimie, Pharmacotechnie et Biopharmacie, University of Paris-Sud, Chatenay-Malabry (F)
Statement 2	Targeted Photo Dynamic Therapy Using Nanocarriers Patrick Boisseau , Head of the Business Development Nanomedicine, CEA-Léti; Board-member of the European Technology Platform on Nanomedicine Chair, WG Nanodiagnostics, Grenoble (F)
Statement 3	Reducing Inflammation by Nanopyramids on Bone Implants Prof. Dr. Bert Müller , Thomas Straumann Chair for Materials Science in Medicine, Director of Biomaterials Science Center, University of Basel, Basel (CH)
Statement 4	Gene Activated Matrices for Bone and Cartilage Regeneration in Arthritis (GAMBA) Prof. Dr. Christian Plank , Institute for Experimental Oncology and Therapy Research of the Technical University of Munich, Munich (D)
Statement 5	Nanotechnology Based Novel Joint Bio-lubricant and Wear Reducer: Summary of Pre-clinical Studies Prof. Dr. Yechezkel Barenholz , Head, Lab of Membrane and Liposome Research Department of Biochemistry, Hebrew University - Hadassah Medical School, Jerusalem (IL)
Statement 6	The Use of Nanotechnology in Neurodegenerative Diseases, Emphasis on Parkinson Prof. Dr. Kostas Kostarelos , School of Pharmacy, University of London, (UK)
Statement 7	Thermosensitive Magnetoliposomes for MRI-guided Drug Delivery Dr. Marie-Edith Meyre , Chemistry Researcher, Nanobiotix (EU project Sonodrugs Image-controlled Ultrasound-induced drug delivery, Paris (F)
Statement 8	Nano-immune Toxicology: Unmet Needs in Safety Prediction Prof. Dr. med. Janos Szebeni , Head Department of Nanomedicine Bay Zoltán Institute of Nanotechnology, Budapest (H)
Statement 9	Mucosal Targeting of Nanomedicines in Inflammatory Bowel Diseases Prof. Dr. Claus-Michael Lehr , Head, Department of Drug Delivery (DDEL), Helmholtz-Institute for Pharmaceutical Research Saarland (HIPS), Saarland University, Saarbrücken (D)
15.15	Questions and Debate
15.50	Break
16.30 Chair	5. Late Breaking and Ongoing Trials in Nanomedicine (1) Prof. Dr. med. Patrick Hunziker , Deputy Head of the Intensive Care Clinic of the University of Basel (CH)
Statement 1	Abraxane® in Pancreatic Cancer Treatment Dr. Neil P. Desai , Senior Vice President, Global Research & Development, Abraxis BioScience LLC, Los Angeles (USA)

Statement 2 **Anticancer Agents Incorporating Polymer Micelles under Clinical Evaluation. Phase II: Lessons Learned from Early Clinical Trials**
Prof. Dr. med. Yasuhiro Matsumura, Chief, Investigative Treatment Division, Research Center for Innovative Oncology, National Cancer Center Hospital East, Kashiwa City (J)

Statement 3 **The Development of Lipid Nanoparticle Formulations for siRNA-Based Drugs**
Dr. Ian MacLachlan, *Executive Vice President and CSO, Tekmira Pharmaceuticals Corporation*, Burnaby, British Columbia (CDN)

Statement 4 **Thermal Treatment with Magnetic Nanoparticles**
Dr. rer. nat. Andreas Jordan, CSO, magForce Nanotechnologie AG, Berlin (D)

Statement 5 **New Development of Doxorubicin Transdrug in Hepatocellular Carcinoma**
Dr. med. Pierre Attali, COO, Bioalliance Pharma, Paris (F)

17.20 **Questions and Debate**

Panel & Debate

17.50 **6. EMA SESSION 1 Challenge: The Existing Regulation Environment in Relation to Nanomedicine**
Chair **Prof. Dr. Marisa Papaluca**, Head of Scientific Support and Projects European Medicines Agency, London (UK)

Introduction

Nanotechnology is a most promising novel approach towards a modern, patient-centred therapy. It will yield tools to promote health and optimise treatment of diseases, and address unmet medical needs. Enabling nanotechnology applications to health products, finding their pathway to translation and on to the patient's bedside is an essential Regulators' task as part of their function to protect and promote Public Health. As debated in this conference, it is expected that in the long term nanotechnology will profoundly change the approach to healthcare, with an anticipated shift of paradigms and behaviours long established in the industry, authorities, clinicians and patients. - Whilst the knowledge and the potential applications evolve, it is essential to support progress and manage uncertainties with a holistic science-based approach encompassing: • fundamental and translational research, • transparent communication with healthcare stakeholders and the civil society • adaptation of risk management approaches as part of an integrated health strategy. - The evolution of the existing regulatory standards shall take in to account that nanotechnology applications encompass established as well as completely revolutionary products likely to lead – in the long term - to integrated systems that address health management as well as disease prevention, monitoring and care. Experts in regulatory matters, members from European, American, Canadian and Japanese regulatory authorities will discuss current initiatives relevant to Nanomedicine in their Regions, with focus on pathways towards translatability of nano-science in health products, and key regulatory issues for the future of Nanomedicine.

Participants

Prof. Dr. Marisa Papaluca, Head of Scientific Support and Projects European Medicines Agency, London (UK)
Dr. Kumiko Sakai-Kato, National Institute of Health Sciences, Tokyo (J)
Dr. Jim Gallivan, Ph.D Manager Marketed Biologicals, Biotechnology and Natural Health Products Bureau Marketed Health Products Directorate Health Canada, Ottawa, (CND)
Dr. Philippe Martin, Principal Administrator, European Commission, Directorate-General for Health and Consumers Emerging Technologies - Risks - R&D – Nanotechnologies, Brussels, (B)
Prof. Dr. Rogério Gaspar, Nanomedicine & DDS group, iMed.UL and Faculty of Pharmacy, University of Lisbon, Lisbon (P)
Dr. med. Daniel Schultz, F.A.C.S, Senior Vice President, Greenleaf Health LLC and Former FDA Center Director, Washington DC, (USA)

18.50 **Debate with the Audience**

19.20 **End of First Day**

20.15 **The Official CLINAM Evening Event: Flying Dinner, Dragons and “The Nanomedicine Take Off”, a ballet of the “Cathy Sharp Dance Ensemble”** (leaving 20.00 from the Lobby of Swissôtel Le Plaza)

Tuesday, May 24, 2011 (Registration from 07.45 am until 4.00 pm)

The CLINAM 2011 Focus Sessions on Inflammation and Infection

Plenum

Hall Montreal

- 08.30
Chair
- 7. Unsolved Medical Problems Waiting for Nanomedical Solutions (2)**
Prof. Dr. med. Hans Myhre, Surgeon at the University Hospital, Oslo (N)
- Introduction Lecture**
Inflammation: A Process at the Heart of Disease-Development and Body Defences
Prof. Dr. Fabio Martinon, University of Lausanne (CH)
- 08.50
Statement 1
- Cancer Stem Cells and Inflammation – Friend or Foe?**
Dr. Christoph Ginestier, Research Investigator, Marseille Research Cancer Center, Marseille (F)
- Statement 2
- Inflammation in the Gastrointestinal Tract: Basics and Potential Therapeutic Interventions**
Prof. Dr. med. Bernhard Sauter, Partner GastroZentrum Hirslanden, The Hirslanden Private Clinic Group Zurich, (CH) and Adjunct Assistant Professor of Gastroenterology and Liver Diseases, Mount Sinai School of Medicine, N.Y. (USA)
- Statement 3
- SIRS – The Inflammatory Killer Disease in Intensive Care Medicine: Challenges Ahead**
Prof. Dr. Didier Payen de la Garanderie, Head Département d'Anesthésie-Réanimation-SMUR, Hospital Lariboisière, Paris (F)
- Statement 4
- The Mysteries of Autoimmune Diseases in Rheumatology**
Prof. Dr. med. Ulrich Walker, Department Rheumatology, Felix Platter Hospital and University Basel, Basel (CH)
- Statement 5
- The Discovery of Plasmodium by Alphonse Laveran (1880) and Today's Global Fight Against Malaria**
Prof. Dr. med Blaise Genton, head of the tropical diseases, Polyclinics of the University of Lausanne Hospital, Lausanne, (CH) (invited)
- Statement 6
- Arteriosclerosis – A Life Threatening Inflammatory Disease**
Prof. Dr. med. Patrick Hunziker, President of the European Society for Nanomedicine; Deputy Head of the Intensive Care Clinic of the University of Basel, (CH)
- 09.50
- Questions and Debate**
- 10.40
- Break**

2 Parallel Sessions

Hall Montreal Session A

- 11.15
- 8. ETPN SESSION 1 Nanomedicine: Strategic Vision, Future Research, Needs for Funding and Policy Initiatives, Scientific and Industrial Roadmaps to the Advancement to the Benefit of the Patient**
Chair Patrick Boisseau, , Head of the Business Development Nanomedicine, CEA-Léti; Board-member of the European Technology Platform on Nanomedicine Chair, WG Nanodiagnostics, Grenoble (F)

Introduction

It is to be expected that the field of "Nanomedicine" and particularly the involved industry will undergo major challenges and changes. On the one hand new research results show the potential of nanotechnology in medicine for delivering novel effective treatments; on the other hand the translation from bench into product and to bedside is still slow and at times hindered by the different mindsets in industry, academia and clinics. Moreover, the European industry is facing competition with that from other areas of the world where public authorities often support the development of new Nanomedicine and Nanotechnologies for medicine much more generously than in Europe. This session elucidates the industrial perspective on "Nanomedicine" and provides some overview on necessary future

actions in the area with the aim of also keeping Europe at the forefront of Research and Development in “Nanomedicine”.

Statement 1 **The ETP Nanomedicine – Guiding the Strategy for Nanomedicine in Europe - The Need for Consolidated Action**
Patrick Boisseau, , Head of the Business Development Nanomedicine, CEA-Léti; Board-member of the European Technology Platform on Nanomedicine Chair, WG Nanodiagnostics, Grenoble (F)

Statement 2 **An Industry View on Technology Integration Gaps and Bridges Towards Nanomedicine Products**
Dr. Bernd Riebesehl, Principal Fellow, Technical Research & Development, Novartis Pharma AG, Basel

The Challenge of Nanomedicine for Targeted Delivery – Translating from the Lab to Patients
Dr. med. Richard Peck, Global Head Clinical Pharmacology, F. Hoffmann-la Roche Ltd. , Welwyn Garden City, (UK)

Panel & Debate

12.00 **9. ETPN SESSION 2 The Industrial Perspective of Nanomedicine 2011 - 2020**
Chair **Dr. Sebastian Lange**, Managing Director ETP Nanomedicine, VDI/VDE-IT, Berlin (D)

The Questions

- What are the Challenges and Hurdles in developing Nanomedical Components and Devices?
- How will they come to market and when?
- Why are there despite of the fact that a large number of nanoparticles for medical use are investigated so few nanomedicines approved?
- Just another “novel technology” or is Nanomedicine the key to targeted drug delivery?
- What are the needs for implementing the industrial roadmaps in Nanomedicine?
- Will “Open Innovation” change translation and the way of industrials development of Drugs?
- How can the global market come to the “Competitive Together” to further Nanomedicine?
- What change of mindset is needed from academia to help industry to survive and vice versa?
- Are the ETPN proposed measures strong enough for Nanomedicine to be a dominant issue in the Framework- and Funding-Programmes of Europe?

The Participants

Dr. Laurent Lévy, CEO, Nanobiotix and Co-President of the French Technology Platform on Nanomedicine Paris (F)
Dr. rer. nat. Andreas Jordan, CSO, magForce Nanotechnologie AG, Berlin (D)
Dr. Heinrich Rohrer, Physicist, Nobel Laureate, Wollerau
Dr. med. Richard Peck, Global Head Clinical Pharmacology, F. Hoffman-la Roche, Welwyn Garden City, (UK)
Dr. Neil P. Desai, Senior Vice President, Global research & Development, Abraxis BioScience, Los Angeles (USA)
Prof. Dr. med. Christoph Alexiou, Head Division for Experimental Oncology and Nanomedicine at the Department of Oto-Rhino-Laryngology, Head and Neck Surgery, University Hospital Erlangen (D)
Dr. Bernd Riebesehl, Principal Fellow, Technical Research & Development, Novartis Pharma AG, Basel (CH)

13.00 **Lunch**

Hall Singapore Session B

11.15 **10. Nanoscience Technologies for Solving Medical Problems (2)**
Chair **Prof. Dr. Lajos P. Balogh**, Editor-in-Chief, “Nanomedicine, Nanotechnology, Biology and Medicine” (Elsevier) and Member of the Executive Board, American Society for Nanomedicine, Amherst (USA)

Statement 1 **Perspectives of Nanotechnology Based in Vitro Diagnostics in Inflammation**
Dr. med. Laszlo Takacs, PhD, D.Sc., CSO and Director General of BioSystems, Evry (F)

Statement 2 **Diagnostics of Infection by Array-Technology**
Prof. Dr. Martin Hegner, Nanobiotex group CRANN; The Naughton Institute; School of Physics, Trinity College Dublin, Dublin (IRL)

Statement 3	Measuring Inflammation in Atherosclerotic Plaques Using Paramagnetic Nanoparticles and MRI Dr. Alessandro Maiocchi , Bracco Research Centre, Bracco Imaging spa, Colliero Giacosa (I)
Statement 4	Therapeutic Targeting of Inflammation in Chronic Inflammatory Disorders Prof. Dr. Gert Storm , Institute for Pharmaceutical Sciences, Utrecht University, Utrecht (NL)
Statement 5	Therapeutic Targeting of Infection: Design of Nanovectors for the Targeted Delivery of Antimalarials Dr. Xavier Fernàndez-Busquets , Institute for Bioengineering of Catalonia, Barcelona Science Park, Barcelona (E)
Statement 6	Prophylactic and Therapeutic Modes of Topical Photodynamic Ultradeformable Archaeosomes against Leishmania Brasiliensis in Mice and Guinea Pig Prof. Dr. Eder Lilia Romero , Director of the Nanomedicine Research Program (NRP), Universidad Nacional de Quilmes, Buenos Aires (RA)
Statement 7	Simulation of Tailored Physical Chemical Properties of Bio-Molecules PD. Dr. Wolfgang Wenzel , The Institute of Nanotechnology, Karlsruhe Institute of Technology, Karlsruhe (D)
12.25	Questions & Debate
13.00	Lunch

Plenum

Hall Montreal

14.15	11. The Politicians Statements to Nanomedicine
Chair	Beat Löffler, MA, CLINAM Foundation and Dr. Sebastian Lange, ETP Nanomed
Statement 1	The Regards of the City of Basel Dr. Guy Morin , President of the Government, Department of Presidential Affairs of the Canton Basel-Stadt (CH)
Statement 2	Statements on Nanomedicine from the Swiss Government Dr. Mauro Dell'Ambrogio , State Secretary for Education and Research of Switzerland, Berne, (CH)
Statement 3	Statements on Nanomedicine from the European Union Dr. Rudolf Strohmeier , Deputy Director General of the DG for Research, Brussels (B)
Statement 4	ETPN's Statement: Vision Towards the Take Off of Nanomedicine in Europe Patrick Boisseau , Head of the Business Development Nanomedicine, CEA-Léti; Board-member of the European Technology Platform on Nanomedicine Chair, WG Nanodiagnostics, Grenoble (F)
15.15	Questions and Debate
15.40	Break

3 Parallel Sessions

Hall Montreal Session A

16.15	12. Nanoscience Technologies for Solving Medical Problems (3)
Chair	Prof. Dr. Marcus Textor, ETH Zurich, BioInterfaceGroup, Laboratory for Surface Science and Technology Department of Materials, Zurich, (CH)
Statement 1	CriPec: Translation of a Micellar Drug Delivery Platform into Pharmaceutical Products Dr. Cristianne JF Rijcken, Pham , CEO, Cristal Delivery BV., Utrecht, (NL)
Statement 2	Challenges in Manufacturing and Application of Nanoparticles as Diagnostic Tool Prof. Heinrich Hofmann , EPFL, Institute of Materials, Powder Technology Laboratory, Lausanne (CH)

- Statement 3 **The Powerful Link between Photodynamic- and Nanomedicine**
Prof. Dr. Heinrich Walt, Group Leader, Oral Oncology Research and Vice-President of the European Platform for Photodynamic Medicine (EPPM) University Hospital Zürich, Dep.of Cranio-Maxillo-Facial Surgery, Zürich (CH)
- Statement 4 **Nano-Tonometry: a New Measure for Structural Reorganization of the Eye Caused by Glaucoma**
Prof. Dr. Rutledge Ellis-Behnke, Director of the Nanomedicine Translational Think Tank Department of Ophthalmology, Medical Faculty Mannheim, Ruprecht-Karls-University, Heidelberg (D)
- Statement 5 **Smart Nanostructured Active Implants for Tissue Engineering Applications**
Dr. Nadia Jessel, PhD, HDR, Research Director, DR2 Inserm Active Biomaterials & Tissue Engineering (French National Institute for Health and Medical Research) Strasbourg (F)
- Statement 6 **Microfluidic System for High-Throughput Synthesis and Screening of Nanoparticles for Cancer**
Pedro M. Valencia, Senior Scientist, Department of Chemical Engineering, Langer Research Laboratories, Koch Institute for Integrative Cancer Research Cambridge, MA (USA)
- 17.15 **Questions & Debate**
- 17.45 **Short Break**

Hall Singapore Session B

Panel & Debate

- 16.15 **13. Ethics, Sustainability in Nanomedicine**
 Chair **Prof. Dr. med. Bernice Elger, PhD, dipl. theol.**, Medical University Center, Geneva (CH)
- Statement 1 **Ethics of Long-term Developments and Sustainability in Nanomedicine**
Beat Löffler, MA, CEO of the European Foundation for Clinical Nanomedicine, Basel (CH)
- Statement 2 **How to keep Ethics in Nanomedicine within Daily Life and Work Routine**
Dr. Klaus-Michael Weltring, Director, Network Bioanalytik, Münster (D)
- Statement 3 **What's the Good of Nanomedicine – and Should it Lead the Enhancement?**
Dr. Donald Bruce, Edinethics Ltd., Edinburgh, Scotland (UK)
- Statement 4 **More than Human: The Transhumanist Agenda of Transforming Humans into Posthumans**
Prof. Dr. Martin Erdmann, Professor of Biblical Studies, Wil (CH)
- 17.00 **Questions and Debate**
- 17.30 **Break**

Hall Rio Session C

- 16.15 **14. Nanoscience Technologies for Solving Medical Problems (4)**
 Chair **Prof. Dr. Hans Joachim Güntherodt**, Honorary President of NCCR Nanoscale Science and Swiss Nanoscience Institute (SNI), Basel (CH)
- Statement 1 **Complement Attack on Block Copolymer-coated Long Circulating Nanoparticles**
Prof. Dr. SM Moein Moghimi, Professor of Nanomedicine, Director, Centre for Pharmaceutical Nanotechnology and Nanotoxicology, Department of Pharmaceutics and Analytical Chemistry and NanoScience Center, University of Copenhagen, Copenhagen (DK)
- Statement 2 **In-vivo Molecular Imaging of Rheumatoid Arthritis Using Optoacoustic techniques**
Dr. Marc Fournelle, Fraunhofer IBMT, Group Biomedical Ultrasound Research, Sankt Ingbert (D)

- Statement 3 **Thermosensitive Polymeric Micelles for Targeted Drug Delivery**
Prof. Dr. Cornelius F. van Nostrum Department of Pharmaceutics, Utrecht Institute for Pharmaceutical Sciences
 Utrecht University, Utrecht (NL)
- Statement 4 **Alginate/Chitosan Nanoparticles for Oral Delivery of Biopharmaceutical Drugs**
 Dr. Mateja Cegnar, New Delivery Systems, Lek Pharmaceuticals, Sandoz Development Center, Ljubljana (SI)
- Statement 5 **Targeting the Immune System with Biodegradable Nano-Engineered Capsules**
Dr. Ir. Bruno De Geest, Laboratory of Pharmaceutical Technology, Department of Pharmaceutics, Ghent University,
 Ghent (B)
- Statement 6 **Functionalized Gold Nanoparticles and the Blood Brain Barrier**
Dr. Silke Krol, Fondazione IRCCS Istituto Neurologico "Carlo Besta" European Center for Nanomedicine, Milano (I)
- 17.15 **Questions & Debate**
- 17.45 **Short Break**

Plenum

- Hall Montreal**
17. 50 **15. Late Breaking and Ongoing Trials in Nanomedicine (2)**
 Chair Prof. Dr. med. Dr. h.c. Fritz R. Bühler, IMI PharmaTrain, Basel (CH) and Prof. Dr. med Janos Szebeni Head
 Department Nanomedicine, Bay Zoltán Institute, Budapest (H)
- Statement 1 **Nanomedicine for Development of Therapeutic Vaccines against Infectious Diseases, Immunological
 Disorders and Cancer**
Prof. Dr. Julianna Lisiewicz, President, Genetic Immunity, Budapest (H)
- Statement 2 **Clinical Impact of Albumin on Drug Delivery**
Dr. Felix Kratz, Head of the Division of Macromolecular Prodrugs, Tumor Biology Center, Freiburg (D)
- Statement 3 **Pre-clinical and Clinical Development of Transbuccal Insulin-GNP**
PD Dr. Jan Mous, CEO PharMida AG and COO Midatech Ltd, Muttentz (CH)
- Statement 4 **Immunostimulatory Nanoparticles for the Treatment of Allergic Asthma: Results of a Placebo-controlled
 Phase II Study**
Dr. Wolfgang A. Renner, CEO, Cytos Biotechnology Ltd, Schlieren (CH)
- Statement 5 **Recent Trends in Dendrimer Based Nanomedicine and Drug Delivery**
Prof. Dr. Donald Tomalia, Director of the National Dendrimer & Nanotechnology Center,
 Central Michigan University, Mt. Pleasant (USA)
- Statement 6 **Modulation of the Innate Immunity by Nanoparticles for Restenosis Therapy**
Prof. Dr. Gershon Golomb, School of Pharmacy, Faculty of Medicine, The Hebrew University of
 Jerusalem, Jerusalem, (IL)
- 18.50 **Questions and Debate**
- 19.20 **End of Second Day / Apéritif**
- 20.30 **Speakers Dinner** (leaving 20.00 from the Lobby of Swissôtel Le Plaza)

Wednesday, May 25, 2011 (Registration from 07.45 am until 1.00 pm)

Plenum

Hall Montreal

Keynote Lecture

08.15 **Why We Are Not the Slaves of Our Genes: a Novel Aspect of Nanobiology**
Prof. Dr. Gottfried Schatz, Prof. em. for Biochemistry, Biozentrum, University Basel, (CH) Fellow of the American Association for the Advancement of Science, (2009)

08.55 **Changing Halls**

3 Parallel Sessions

Hall Montreal Session A

Panel & Debate

09.00 **16. EMA SESSION 2 Anticipation of the Future Needs regarding Nanomedicine**
Chair **Prof. Dr. Marisa Papaluca**, Head of Scientific Support and Projects European Medicines Agency, London (UK)

Introduction

The Exploration of Scientific Aspects in Nanomedicine to make the right developments and regulatory considerations. This session will look at key uncertainties, both in fundamental and clinical research of nanotechnology, and at the applicability and relevance of current technical regulatory requirements. Investigators, sponsors and regulators will discuss the joint efforts needed from all stakeholders to establish common and integrated processes to accelerate the achievements promised by Nanomedicine.

What We Need from the Regulators! - Short Propositions from the Clinicians:

Prof. Dr. med. François Berger, Director of Unit "Nanomédecine et Cerveau" of INSERM, Grenoble (F)
Prof. Dr. med. Yasuhiro Matsumura, National Cancer Center Hospital East, Kashiwa City (J)
Prof. Dr. med. Patrick Hunziker, Dep. Chief of the Intensive Care Clinic of the University of Basel (CH)
Prof. Dr. med. Alberto Gabizon, Hebrew University, Jerusalem (IL)

Experts' Statements

- Statement 1 **Exploring Nano-Biological Systems Encountering a Nanomedicine**
Prof. Dr. Kenneth Dawson, BSc, MSc, Chair of Physical Chemistry, School of Chemistry and Chemical Biology, Centre for BioNano Interactions, University College Dublin (IRL)
- Statement 2 **Nanomedicines and First in Man Studies: Role of Non-clinical Studies and Key Regulatory Challenges**
Dr. Andreas Jordan, CSO, magForce Nanotechnologie AG, Berlin
- Statement 3 **Scientific Advice and Nanotechnology: the EMA Pre-Competitive Qualification Pathway**
Dr. med. Falk Ehmann, PhD, MSc, Scientific Support and Projects, Human Medicines Development and Evaluation Unit European Medicines Agency (EMA), London (UK)
- Statement 4 **Converging Regulatory Requirements**
Dr. Maj-Inger Nilsson, Directorate-General for Science & Innovation, Directorate G - Industrial Technologies Unit : Nano Sciences and Nano Technologies, European Commission, Brussels (B)
- 10.00 **Questions and Debate**
- 10.30 **Break**

11.00 Chair	Panel & Debate 17 Where Size matters - Nanodrugs: Definition, Action, Self Assembly Prof. Dr. Jan Mollenhauer, University of Southern Denmark Head Molecular Oncology Director of Lundbeckfonden Center of Excellence in Nanomedicine NanoCAN, Odense (DK) Introduction For classification and definition of testing requirements, a concise definition of the term “Nanodrugs” is necessary. The necessity is, for example, defined by the fact that toxicological knowledge about engineered nanoparticles is very limited. Traditional toxicology may not allow for a complete understanding of the impact of size, shape, composition and aggregation-dependent interactions of nanostructures with biological systems. On the other hand, in the history of drug development many molecules developed as potential drug candidates had to be abandoned despite substantial efficacy, because they exhibited too strong toxicity. Conversion to nanodrugs may play an important role towards the improvement of therapeutic windows, allowing such molecules to be brought back onto the screen. More than 20 "nanodrugs" are presently on the market. What makes their performance superior to conventional approaches and are there some first lessons that we can learn from these?
Statement 1	Where Size Matters? - The Problems of Nanodrug Definitions Prof. Dr. Jan Mollenhauer, University of Southern Denmark Head Molecular Oncology Director of Lundbeckfonden Center of Excellence in Nanomedicine NanoCAN, Odense (DK)
Statement 2	What Characterizes a Nanodrug? Prof. Dr. Costas Kiparissides, Department of Chemical Engineering, Aristotele University of Thessaloniki, Thessaloniki (GR)
Statement 3	Nanotechnology for Reducing Drug Toxicity Prof. Dr. med. Bengt Fadeel, PhD, Institute of Environmental Medicine (IMM) Karolinska Institutet, Stockholm (S)
Statement 4	Today's Performance of Nanodrugs Prof. Dr. Rogério Gaspar, Nanomedicine & DDS group, iMed.UL and Faculty of Pharmacy, University of Lisbon, Lisbon (P)
Statement 5	Manipulating Molecular Self-Assembly for Drug Development and other Technological Challenges for Nanodrug Development Prof. Dr. Ehud Gazit, Vice President for Research and Development Incumbent, Endowed Chair for Nano-Biology, Chairman of the Board, Ramot Ltd. Tel Aviv University, Tel Aviv (IL)
11.50	Questions and Debate
13.00	Lunch
	Hall Samarkand Session B
09.00 Chair	18. Nanoscience Technologies for Solving Medical Problems (4) Prof. Dr. Gerald Urban, Department of Microsystems engineering, University Freiburg and Director of the Freiburg Materials Research Centre, Freiburg i.Br. (D)
Statement 1	Nano-Cardiology for Atherosclerosis Treatment Dr. med. Varvara Karagkiozaki, MSc in Nanosciences, AHEPA University Hospital, Cardiology Department, Lab for Cardiovascular Engineering & Atherosclerosis", Thessaloniki Greece
Statement 2	Intelligent Operation of the 3D Dendritic Supramolecular Architecture Connected to Molecular Machines: in vitro human cell study Dr. Subrata Ghosh, Researcher, Advanced Scanning Probe Microscopy Group, Advanced Nano Characterization Center, National Institute for Materials Science, Tsukuba, Ibaraki, (J)
Statement 3	Cleaning Blood: Applications of Ultra-strong Metal Nanomagnets in Nanomedicine Dr. Inge Herrmann, Functional Materials Laboratory, ETH Zurich, Zurich (CH)

Statement 4	Ex Vivo Laser Mediated Nanophotothermolysis of Human Pancreatic Cancer with Albumin Functionalized Multi-walled Carbon Nanotubes. Dr. med Lucian Mocan, PhD , Surgical University Hospital no. 3; Nanomedicine Department, University of Medicine and Pharmacy, "Iuliu Hatieganu," Cluj-Napoca, (RO)
Statement 5	Nanoshell Assisted Laser Tissue Fusion: An Opportunity for Bypass Surgery PD Dr. med. Michael Reinert, Department of Neurosurgery, Inselspital Bern, University of Bern, Bern, (CH)
Statement 6	Multiplatform Nanodevices for Cancer Diagnostics Prof. Dr. med. Yury Volkov, PhD Department of Clinical Medicine, Trinity College Dublin, (IRL)
10. 00	Questions and Debate
10.30	Break
11.00	19. Nanoscience Technologies for Solving Medical Problems (5)
Chair	Prof. Dr. Bert Müller, Thomas Straumann Chair for Materials Science in Medicine, University Basel (CH)
Statement 1	Nanofluidic Technologies for Medical Diagnostics Prof. Dr. Giacinto Scoles , ELETTRA Synchrotron, SISSA and CBM, Area Science Park, Basovizza, Trieste (I) and Biology Department, Temple University, Philadelphia (USA)
Statement 2	Silver Nanoparticles - the Real "Silver Bullet" in Clinical Medicine? Prof. Dr. Kenneth Kak Yuen Wong , Department of Surgery, LKS Faculty of Medicine, University of Hong Kong and Queen Mary Hospital, Hong Kong (HK/RC)
Statement 3	Imaging Controlled Tumor Therapy with Magnetic Nanoparticles Prof. Dr. med. Christoph Alexiou , Head Division for Experimental Oncology and Nanomedicine at the Department of Oto-Rhino-Laryngology, Head and Neck Surgery, University Hospital Erlangen (D)
Statement 4	Shear Responsive Nanosystem for Cardiovascular Disease Dr. Andreas Zumbuehl , Assistant Professor, Department of Organic Chemistry, University of Geneva (CH)
11.40	Questions and Debate
12.00	20. Nanobots, Nanoids, Nanites, Nanomachines - under research or development?
Chair	Prof. Dr. Viola Vogel, Department of Materials Laboratory for Biologically Oriented Materials, ETH Zürich, Zürich (CH)
Statement 1	Nanorobotics – Medical Reality tomorrow? Prof. Dr.-Ing. habil. Sergej Fatikow , Head Div. Microrobotics & Control Eng, Dept Comp Science , University Oldenburg, and Head of Technology Cluster Automated Nanohandling, Research Center OFFIS, Oldenburg (D)
Statement 2	Top Down Approach to Intelligent Nanosystems Prof. Dr. Bradley Nelson , Founder and Professor of Robotics and Intelligent Systems, Leader of the Multi-Scale Robotics Lab, ETH Zürich, Zürich (CH)
Statement 3	Bottom Up Approach to Intelligent Nanosystems Prof. Dr. med. Patrick Hunziker , Dep. Chief of the Intensive Care Clinic of the University of Basel (CH)
12.30	Questions and Debate
13.00	Lunch

Hall Rio Session C

21. University Village "Small Talks" – Translation and Leadership at the Universities

Chair Prof. Dr. Mike Eaton, London (UK)

20 short 4 minutes / 3 Slides-Presentations from Universities

Switzerland, Norway, Austria, Sweden, France, Austria, Israel, Denmark, United Kingdom, Alexandria, Portugal Romania and further countries.

10.30 **Break**

Proposal Session & Debate

10.45 **22. ETPN-SESSION 3 - The ETPN Flash Proposal Session – Present your Ideas for Collaborative Research Projects - Find partners to join your efforts!**

Chair Nicolas Gouze, VDI/VDE Innovation, ETPN, Berlin (D)

Introduction

The 7th Framework Programme for Research and Technological Development (FP7) is the EU's main instrument for supporting collaborative research, development and innovations in science, engineering and technology, providing funding to co-finance research, technological development and demonstration projects based on competitive calls and independent peer review of project proposals. Several calls for proposals relevant for the Nanomedicine community are currently published or will be opened shortly. Other programmes such as the ERA-Net EuroNanoMed and calls on a national level are further opportunities to seek for co-funding of research efforts. **The goal of the ETPN- Flash Proposal session is to offer to the community an opportunity to briefly present their project ideas** and by that attract further project collaborators to improve or complete the consortium. The session is organised and chaired by the ETPN. A call for submission of proposals will be published shortly. Presentations shall be not longer than 5 minutes and contain a maximum of 5 slides.

13.30 **Later Short Lunch**

Plenum

Hall Montreal

Looking back to the CLINAM 2010 Focus Sessions - Continuation on Cancer

14.15 **23. Medical Problems in Cancer**

Chair Prof. Dr. med. Simo Schwartz, Jr., PhD, Nanomedicine Coordinator Molecular Biology and Biochemistry Research Center for Nanomedicine (CIBBIM-Nanomedicine) Vall d'Hebron Univ. Hospital Research Institute, Barcelona (SP)

14.15 **Introduction Lecture 1**

From Vision to Reality: Nanomedicine in the Oncology Practice

Prof. Dr. med. Alberto Gabizon, Hebrew University, Jerusalem (IL)

Introduction Lecture 2

14.35 **Nanomedicine - a Big Step towards Curing Cancer**

Prof. Dr. med. Simo Schwartz, Jr., PhD, Nanomedicine Coordinator Molecular Biology and Biochemistry Research Center for Nanomedicine (CIBBIM-Nanomedicine) Vall d'Hebron University Hospital Research Institute, Barcelona (SP)

14.55 **The Short 5 minutes Statements from the Experts**

The Need for Predictive Models of Biodistribution

Statement 1 Prof. Dr. med. Patrick Hunziker, Dep. Chief of the Intensive Care Clinic of the University of Basel, President of the European Society for Nanomedicine, Basel (CH)

Statement 2 **Personalized Medicine - An essential component of Nanotechnology-based drugs**

Dr. Neil P. Desai, Senior Vice President, Global research & Development, Abraxis BioScience, Los Angeles (USA)

- Statement 3 **Defining and Implementing Theranostic Nano-interfaces: a Key Challenge for Real Nanomedicine**
Prof. Dr. med. François Berger, Université Joseph Fourier, Director of Unit "Nanomédecine et Cerveau" of INSERM, Grenoble (F)
- Statement 4 **Can Nanomedicine suppress medical expenses?**
Prof. Dr. med. Yasuhiro Matsumura, Chief, Investigative Treatment Division, Research Center for Innovative Oncology, National Cancer Center Hospital East, Kashiwa City (J)
- Statement 5 **Problems and Perspectives in Personalized Cancer Nanomedicine**
Prof. Dr. Jan Mollenhauer, University of Southern Denmark Head Molecular Oncology Director of Lundbeckfonden Center of Excellence in Nanomedicine NanoCAN, Odense (DK)
- Statement 6 **A successful Development Nano-drug is Highly Dependent on Understanding of the Needed Physico-chemical properties properties!!!!**
Prof. Dr. Yechezkel Barenholz, Head, Lab of Membrane and Liposome Research Department of Biochemistry, Hebrew University - Hadassah Medical School, Jerusalem (IL)
- Statement 7 **Nanothernostics - a Step Further Towards Clinical Applications**
Prof. Dr. med. Christoph Alexiou, Experimental Oncology and Nanomedicine, University Hospital Erlangen (D)
- Statement 8 **Realizing the Clinical Potential of Tumor-targeted Nanomedicines through Rationally Designed Combination regimens**
Dr. Twan Lammers, PhD, DSc, Experimental Molecular Imaging, RWTH Aachen, Aachen (D)
- 15.35 **Questions and Debate**
- 16.20 **Closing remarks by the organisers and announcement of CLINAM 2012 (May 6-9, 2012)**
- 16.30 **End of Conference 2011 and Poster visits until 17.15**
- 19.00 **Light Farewell Supper for Speakers and Invited Guests**

Foyer-Exhibition and University Village

The first foyer exhibition and the University Village allow to meet pioneers in the field of Nanomedicine and related technologies and to meet members of Universities who will show the state of the art of their alma mater. Find here

Companies / Institutes

magForce Nanotechnologie AG, Berlin, (D)

CEA-Léti, Grenoble (F)

Karlsruhe Institute of Technology KIT, Leopoldshafen (D)

TECOmedical AG, Sissach (CH)

BioSystems International, Evry (F)

kibero GmbH, Saarbrücken (D)

5 presenters of young start-up companies in Nanomedicine from the United Kingdom

....and further ones

Universities

Switzerland (Basel and Zürich)

Norway (SINTEF Trondheim)

Austria (Graz)

Sweden (Stockholm)

France (Strasbourg and Grenoble)

Hungary (Budapest)

Israel (Tel Aviv)

Denmark (Copenhagen and Odense)

United Kingdom (London)

Egypt (Alexandria)

Portugal (Lisbon)

Romania (Cluj-Napoca) **....and further ones**

The full list of Companies, Universities and Institutions shall be available at the Conference

CLINAM 2012

The 5th European Conference for Clinical Nanomedicine is scheduled from May 6-9, 2012 in Basel, Switzerland

General Information

Structure of the conference

The 4th CLINAM conference will take the form of a debate, where the time slot for presentations plus first question and answers is 10 -12 minutes and, after a series of talks, 30-60 minutes are reserved for interdisciplinary debates. The participants will discuss the promise and limits of nanomedical tools, techniques, and materials in the context of unsolved medical problems. The conference will also address questions of sustainability, toxicity, ethics, and the impact on society and the environment. The debates will start with clinicians reporting unsolved medical problems in important fields related to diseases that are waiting for novel methods to improve health or to cure diseases. Based on these reports by clinicians, approaches for resolving the medical problems will be discussed from the nanotechnological point of view. In this way, the CLINAM 2011 conference will give clear views on the reality of nanotechnology applied to medicine. Due to the collaboration between CLINAM, the ETPN and the EMA regulations, policy and the future funding of Nanomedicine as well as the industrial impact will be discussed by experts from industry, science and politics.

Foyer Exhibition and University Village 2011

A small first Foyer Exhibition will comprise existing tools, instruments and materials and presentations in the field of regenerative medicine, diagnostics, targeted drug delivery systems, novel materials for nanoparticles, Nanomedicine-related medical tools and medical instrumentation

The University Village is the space for universities and research institutes, providing them with an opportunity to present novel approaches, new research projects and initial outcomes of research and experimental results as well as first patents. Researchers and engineers can use the foyer to show the state of the art of their University with regard to the development of Nanomedicine.

University Small Talk Sessions

Posters and results are presented in a special sessions of small talks. This is 4 minutes in length presentations serving to highlight the research activities in Nanotechnology in Health. The Small Talk must comprise a maximum of three slides, • **Slide 1:** general introduction to the topic of your field, presented in a way that is accessible to the highly interdisciplinary audience • **Slide 2:** some of the highlights of submitters work and institutions work • **Slide 3:** the prove how the work at the University/Institute fits into the area of Nanomedicine including showing the future.

Nanomedicine Art Moments (research pictures from the speakers)

Science produces sometimes art and art can often describe science. Therefore we intend to exhibit visualisations in the nanomedical field in the foyer of the conference halls. We invite you to send the best visualisation you have made in the field of Nanomedicine (600dpi required). **The emphasis is art** and not experimental details. We will have a small jury of artists and scientists and will chose the 30 best "masterpieces" and enlarge them to a format 50 x 80 cm. The participants of the conference will then vote for the best picture and author shall receive the "CLINAM Golden Palm Leaf" during the evening event. Send your work to clinam@clinam.org under the subject "Art Moments Nanomedicine" no later than until April 23, 2011 - Of course participation is facultative!

Responsible Organiser

The European CLINAM Foundation for Clinical Nanomedicine, Basel, Switzerland (www.clinam.org) in collaboration with the European Society for Nanomedicine and the European Technology Platform on Nanomedicine (ETPN), the European Science Foundation (ESF) and the European Medicines Agency (EMA)

Responsibility

Beat Löffler, MA, CEO of the European Foundation for Clinical Nanomedicine and Prof. Dr. med. Patrick Hunziker, MD, CSO of the European Foundation for Clinical Nanomedicine, Dr. Sebastian Lange, Managing Director of the European Technology Platform on Nanomedicine, Berlin (D)

Office

European Foundation for Clinical Nanomedicine

Alemannengasse 12, P.O. Box, CH-4016 Basel, Switzerland

Phone: + 41 61 695 93 95

Fax: + 41 61 695 93 90

Mail: clinam@clinam.org

The people behind the organizers

European Foundation for Clinical Nanomedicine

The CLINAM-Foundation is a non profit organisation that brings together the leading physicians in Nanomedicine on a European and international level; it provides a network for actively engaged professionals in clinical nanomedicine. The *CLINAM-Foundation* fosters the interdisciplinary cooperation of medical doctors with experts from research and industry in other fields of life sciences. Its purpose is to accelerate specifically the genesis of innovation within translational nanomedicine.

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Prof. Dr. Stergios Logothetidis, Aristotele University of Thessaloniki,

Prof. Dr. med. Peter Meier-Abt, Vice-principal and Head of Research, University of Basel

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Dr. Romeo Paioni, Head of Scientific and External Affairs, Novartis, Basel

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Peter Schönherr, Ambassador of the Netherlands, Berne

Prof. Dr. med. Jürg Schifferli, Head Internal Medicine, University Hospital Basel, Basel

Prof. Dr. Giacinto Scoles, Biochemist and Physicist, University of Princeton (USA) and Trieste

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Prof. Dr. Donald Tomalia, Director of the National Dendrimer & Nanotechnology Center, Central Michigan University
Dr. med. Panagiotis Trohopoulos, Cardiologist and Nano-Physician, Thessaloniki.

European Society for Nanomedicine

The European Society for Nanomedicine was set up by the CLINAM-Foundation and enjoys a large influx of members. The society is, a non profit organisation being an interdisciplinary academic society with the focus of clinical application of Nanomedicine. Since Nanomedicine is a highly interdisciplinary area of studies it brings together the physicians, biologists, pharmacologists, chemists, and biochemists as well as people with particular interests in Nanomedicine and its applications. Presently the society has more than 250 members. The Executive Structuring Council consists of the following persons: • Prof. Dr. med. Patrick Hunziker • Beat Löffler, MA • Prof. Dr. med. Jacques-André Bazex • Dr. Frank Sinner • Prof. Dr. med. Hans Myhre • Prof. Dr. Gert Storm • Prof. Dr. Joachim Seelig • Prof. Dr. med. Dr. h.c. Fritz Bühler • Prof. Dr. med. Jacques Chambron.

The European Technology Platform on Nanomedicine

The **ETP Nanomedicine** is the initiative led by industry and set up together with the European Commission, addressing the **application of nanotechnology to achieve breakthroughs in healthcare**. The ETP supports its members in **coordinating their joint research efforts and improving communication** amongst the members as well as towards the European Commission and the European Member States. The Policy Objectives are to • Establish a clear strategic vision in the area resulting in a Strategic Research Agenda • Decrease fragmentation in nano-medical research • Mobilize additional public and private investment • Identify priority areas • Boost innovation in nanobiotechnologies for medical use. Three key priorities have been confirmed by the stakeholders: • Nanotechnology-based diagnostics including imaging • Targeted drug delivery and release • Regenerative medicine. Furthermore, the dissemination of knowledge, regulatory and IPR issues, standardization, ethical, safety, environmental and toxicity concerns, as well as public perception in general and input from other stakeholders such as insurance companies or patient organizations play an important role.

The ETPN Executive Board

• **Bertrand Loubaton**, Director Pharmaceutica & Academic Research Collaboration, Director Strategy, Head of Innovation and Cooperation, GE Healthcare Europe, Velizy, (F) • **Dr. Jürgen Simon** Director Strategy, Head of Innovation and Cooperation Siemens AG Healthcare, Erlangen, (D) • **Patrick Boisseau**, CEA-Léti, Head of the Business Development Nanomedicine; Nanomedicine Research Fellow CEA, Grenoble (F) • **Dr. Adriele Prina-Mello**, CRANN-Naughton Institute Trinity College Dublin, (IRL) • **Prof. Mike Eaton**, London, UK • **Prof. Costas Kiparissides**, Director of Central Administration / Chairman of the Board of Directors C.E.R.T.H. ,Athens,.(GR) • **Prof. Flavio Forni**, Full professor in pharmaceutical technology, University of Modena and Reggio Emilia, (I) • **Dr. Cem Bozkurt** CEO, Alvimedica Medical Technologies, Istanbul, (TR) • **Dr. Joan-Albert Vericat**, Associate Professor of Legal Governance, NOSCIRA S.A., Madrid, Spain • **Prof. Bärbel Dorbeck-Jung**, University of Twente, (NL) **Maike van Velzen**, Senior Director, IP Creation - BG Healthcare, Managing Director, Philips Intellectual Property & Standards, Best, (NL) **Dr. Klaus-Michael Weltring**, Bioanalytik-Münster e.V., Münster, (D) **Dr. Sebastian Lange**, VDI/VDE-IT, Berlin (D)

The European Science Foundation

The European Science Foundation (ESF) is an independent non-governmental organisation, the members of which are 79 national funding agencies, research-performing agencies, academies and learned societies from 30 countries. The strength of ESF lies in the influential membership and in its ability to bring together the different domains of European science in order to meet the challenges of the future. Since its establishment in 1974, ESF, which has its headquarters in Strasbourg with offices in Brussels and Ostend, has assembled a host of organisations that span all disciplines of science, to create a common platform for cross-border cooperation in Europe. ESF is dedicated to promoting collaboration in scientific research, funding of research and science policy across Europe. Through its activities and instruments ESF has made major contributions to science in a global context. The ESF covers the following

scientific domains: •Humanities • Life Earth and Environmental Sciences • Medical Sciences •Physical and Engineering Sciences
•Social Science •Marine Sciences • Nuclear Physics • Polar Sciences • Radio Astronomy Frequencies • Space Sciences

The European Medicines Agency

The European Medicines Agency is a decentralised agency of the European Union, located in London. The Agency is responsible for the scientific evaluation of medicines developed by pharmaceutical companies for use in the European Union. To ensure that the system works effectively, the Agency works closely with its partners and stakeholders, and is a proactive member of important networks in Europe and beyond.

Accommodation

The official conference hotel is the Swissôtel Le Plaza***** under the same roof with the congress Center. All participants have a special room rate of CHF 285. – (about 220. – Euro), if **indicating their participation in the Nanomedicine-Conference**. Booking: Swissôtel Le Plaza, CH-4005 Basel, phone +41 61 555 3731 E-Mail: reservations.basel@swissotel.com

Other hotels can be provided through Basel Tourism: 4-star hotels CHF 180.00 - 220.00, 3-star hotels: CHF 150.00-180.00, 2-star hotels: CHF 130.00 - 150.00 Booking through: Basel Tourism Tel. +41 61 268 68 58 online on www.basel.com under "accommodation".

Conference Fees

Registration:	Regular	Late	1 Day	1Day Late
Currency is EURO	Until	After	Until	After
	30.4. 2011	1.5.2011	30.4. 2011	1.5.2011
Academy member	580. --	640. --	230. --	275. --
Academy regular	750. --	825. --	300. --	360. --
Governmental /intern. Agency member	750.--	825.--	300. --	360. --
Governmental /intern. Agency regular	850.--	900.--	390. --	430. --
Industry member	900. --	990. --	360. --	450. --
Industry regular	1'050. --	1'140. --	420. --	510. --
Student member	385. --	425. --	145. --	175. --
Student Regular	490. --	540. --	195. --	235.--

Registration is possible until May 21, 2011. On site registration is subject to a surcharge of 20%

Your contribution to the Official Evening Event: 50 €

When receiving your registration the Organiser will send you an invoice

We prefer web-registration under www.clinam.org however we also accept scanned documents by E-mail and Fax transmissions

Changes of the Conference programme

This programme for Conference, University Village and Exhibition is subject to changes

Liability for Exhibition and University Village

A general liability insurance has been signed for the duration of the conference by the organiser. However this does not include damages or theft of goods within the exhibition and the university village or in the conference halls.

How to get to Basel and the Conference Center

By Airplane

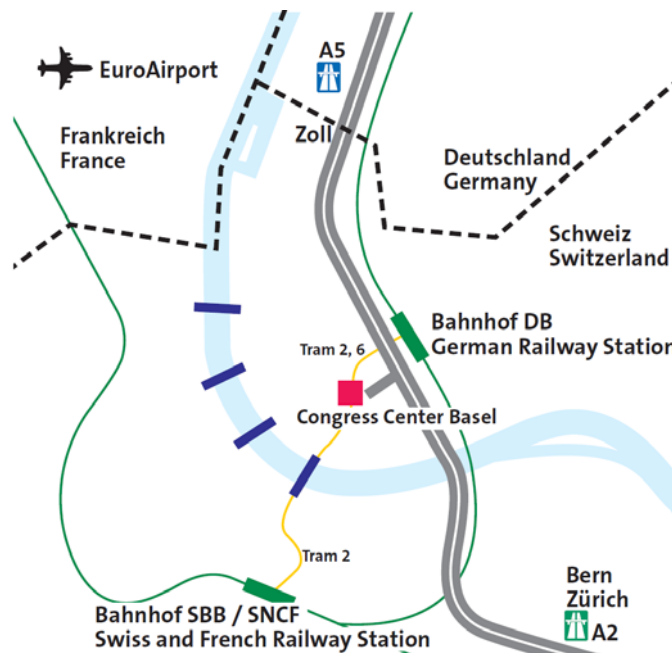
Basel-Mulhouse-Freiburg Airport is 15 minutes' drive from the Congress Center Basel. European airlines operate fast links to over 50 European cities. All direct intercontinental flights into Switzerland land at Zurich Airport, which is 55 minutes from Basel by train.

By Car

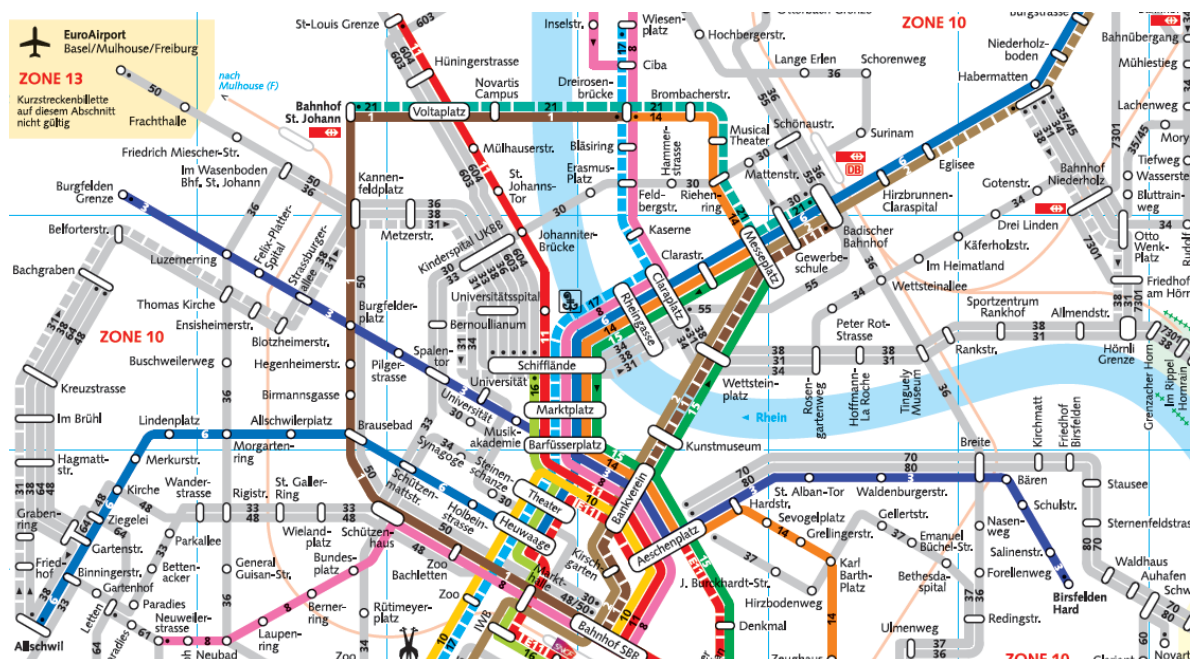
Basel is the point where the Swiss, French and German motorway networks meet. The Congress Center Basel and the trade-fair grounds have their own motorway exit. There is a Multi-storey car park with space for 1600 vehicles at the Exhibition Square.

By Train

All three of Basel's railway stations – SBB (Switzerland), SNCF (France) and DB (Badischer Bahnhof, Germany) – are within 10 minutes of the Congress Center Basel and connected to Tramway No 2.



Your Tramway and Busses in Basel (ticket included in your guest card)



CLINAM 2011

4th European-Conference for Clinical Nanomedicine CLINAM 2011

The Great Strides towards the Medicine of the Future

Monday, May 23, 8.45 am – Wednesday, May 25, 2011, 4.30 pm

Conference Registration Form

☐ I register for the **Fourth European Conference for Clinical Nanomedicine.**

Regular

Member

Academy ☐

☐

Industry ☐

☐

Students ☐

☐

☐ I participate in the **evening event** on May 23, 2011 at the support rate of 50. -- €

Title _____ Last name _____ First name _____

Profession _____ Company / University _____

Department / Affiliation _____ Address _____

ZIP code _____ Town _____

Country: _____ Phone _____

Fax: _____ E-Mail _____

Legally binding Signature: _____ Date: _____

Conference Fees

Registration:	Regular	Late	1 Day	1Day Late
Currency is EURO	Until	After	Until	After
	30.4. 2011	1.5.2011	30.4. 2011	1.5.2011
Academy member	580. --	640. --	230. --	275. --
Academy regular	750. --	825. --	300. --	360. --
Governmental /intern. Agency member	750. --	825.--	300. --	360. --
Governmental /intern. Agency regular	850. --	900.--	390. --	430. --
Industry member	900. --	990. --	360. --	450. --
Industry regular	1'050. --	1'140. --	420. --	510. --
Student member	385. --	425. --	145. --	175. --
Student Regular	490.--	540. --	195. --	235. --

Your contribution to the Official Evening Event: 50 €

Registration is possible until May 21, 2011. On site registration is subject to a surcharge of 20%

When receiving your registration the
Organiser will send you an invoice

We prefer web-registration (www.clinam.org) however we also accept scanned documents by E-mail and Fax transmissions

Send Registration to the European Foundation for Clinical Nanomedicine, Alemannengasse 12, P.O. Box, CH-4016 Basel, Switzerland, Phone + 41 61 695 93 95 Fax +41 61 695 93 90 E-Mail clinam@clinam.org

4th European-Conference for Clinical Nanomedicine CLINAM 2011

The Great Strides towards the Medicine of the Future

Monday, May 23, 8.45 am – Wednesday, May 25, 2011, 4.30 pm

Exhibition and University Village Registration Form

Please note that there is a limitation of space and a maximum of 40 Universities shall be admitted.

For the Foyer Exhibition the space is limited to 50 companies. Booths will be assigned on a first come-first served basis. You shall receive after your registration within 10 days a confirmation from the CLINAM Organising Office.

I herewith register as a participant within the

- ☐ **Foyer Exhibition** (for Companies, Industrial Institutes, Societies, Network Groups)
☐ **University Village** (for Universities, University-Institutes and Research Labs)

I register as: ☐ **Company**.....☐ **University**.....

Company name / University Name.....

Responsible: Last Name.....First Name.....

Address.....

Zip..... Town.....Country.....

Phone.....Fax.....

.....Email.....

Pricing for Exhibitors

- ☐ **Exhibition Space per m²**, minimum space 4 m², maximum space 20 m².....280. -- €
Exhibition Space: I book m² (please indicate in letters)
Setting: (x by y meter)
- ☐ **Booth construction per m²**, minimum size 6 m², includes
1 table, 2 chairs, power connection, booth labelling 160. -- €
- ☐ Transferable Exhibitor Conference Ticket: **It includes the lunches and the CLINAM-Evening Event for one person**..... 770.-- €

Pricing for University Village

- ☐ **Village table (23-25 May)** incl. 1 Table, 2 chairs, 1 pinboard for poster, Power connection, and one transferable conference badge and lunch 550.-- €

For all optionals and furnishing, please send request to the Exhibition Organisers' Office Congress Plus, Rosemarie Marty, contact@congress-plus.ch

Place, Date.....

Legally binding Signature and Company Stamp / University Stamp.....

Please send registration by E-mail, Mail or Fax to the organisers' office (clinam@clinam.org) or +41 61 695 93 90)
European Foundation for Clinical Nanomedicine, Alemannengasse 12, CH 4016 Basel, Switzerland
Phone +41 61 695 93 95 Fax + 41 61 695 93 90 Email: clinam@clinam.org Homepage: www.clinam.org

General Overview - Timetable

Monday, May 23	Tuesday, May 24			Wednesday, May 25		
All day Hall Montreal	Montreal	Singapore	Rio	Montreal	Samarkand	Rio
09.00-10.40 Plenum	08.30-10.40 Plenum			08.15-08.55 Plenum		
				09.00-10.30 Session A	09.00-10.30 Session B	09.00-10.30 Session C
10.40-11.10 Coffee-Break	10.40-11.10 Coffee-Break			10.40-11.10 Coffee-Break		
11.10-12.20 Plenum	11.15-13.00 Session A	11.15-13.00 Session B		11.00-13.00 Session A	11.00-13.00 Session B	11.00-13.00 Session C
12.20-13.45 Lunch	13.00-14.15 Lunch			13.00-14.15 Lunch		
13.45-15.50 Plenum	14.15-15.40 Plenum			14.15-16.30 Plenum		
15.50-16.30 Coffee-Break	15.40-16.15 Coffee-Break			16.30 End of Conference		
16.30-19.15 Plenum	16.15-17.45 Session A	16.15-17.45 Session B	16.15-17.45 Session C	19.00 Light Farewell-Supper for Speakers and Invited Guests		
20.15 Evening Event (Leaving from the Lobby of the Swissotel Le Plaza at 20.00)	17.50-19.20 Plenum					
	19.20 Apéritif (in the Foyer)					
	20.30 Speaker's Dinner					

Your Personal Notes

4th European Conference for Clinical Nanomedicine CLINAM 2011

The Great Strides towards the Medicine of the Future

What to expect of the 4th European-Conference for Clinical Nanomedicine?

- Unsolved Problems, Technologies at Hand and Late Breaking Trials in Clinical Nanomedicine
- 2 Regulation Sessions of the European Medicines Agency (EMA)
- 2 European Technology Platform on Nanomedicine (ETPN) Strategy and Roadmap Sessions
- ETPN Proposal Sessions: Your Ideas for Collaborative Research Projects - Find partners
- CLINAM 2011 University Village and CLINAM Foyer Exhibition

SPONSORS OF THE 4th EUROPEAN CLINAM CONFERENCE

