

CLINAM

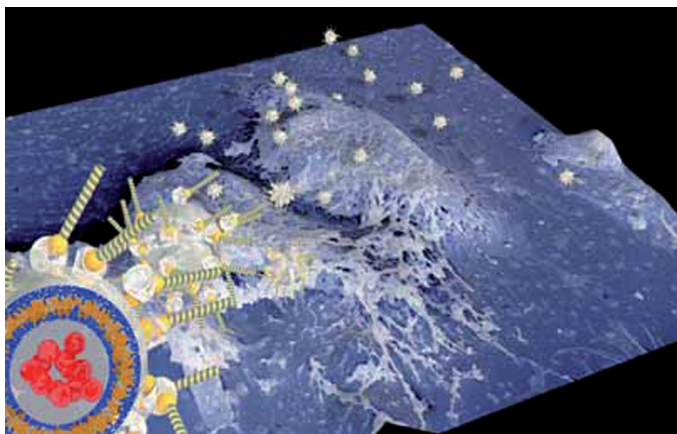
European Foundation for Clinical Nanomedicine

1st European Conference for Clinical Nanomedicine

State of the Art 2008 in Clinical Nanomedicine

Final Programme

Monday, May 19 – Wednesday, May 21, 2008



Venue:

Messe Schweiz, Conference Hall l'Entrée, Basel, Switzerland

European Foundation for Clinical Nanomedicine, Basel,
Switzerland

▶ www.clinam.org for registration

in cooperation with

The European Society for Nanomedicine

▶ (www.esnam.org)

Organisers

The European Foundation for Clinical Nanomedicine, Basel, Switzerland

in cooperation with

The European Society for Nanomedicine

Responsible

Beat Löffler, MA, Executive Director and
PD Patrick Hunziker, MD, Scientific Director

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: loeffler@clinam.org
Internet: www.clinam.org
Bank Connection: Bank Sarasin & Cie AG, Basel, Switzerland
IBAN Account Number CH6108750060053114001

Chairman of the Conference

PD Dr. med. Patrick Hunziker, President of the European Society of Nanomedicine

Scientific Committee of the Conference

PD Dr. med. Patrick Hunziker, President of the European Society for Nanomedicine, Basel, Switzerland (**Medical Chair**), Prof. Dr. Gert Storm, member of the Board of Trustees of the European Foundation for Clinical Nanomedicine, Utrecht, Netherlands (**Scientific Chair**), Prof. Dr. Joachim Seelig, Chairman Biozentrum, University, Basel, Switzerland (**Bioscience**), Prof. Dr. med Matthias Pfisterer, University Hospital Basel, Switzerland (**Cardiology**), Prof. Dr. Giacinto Scoles, Department of Chemistry, Princeton University, USA and Consorzio per la Biomedicina Molecolare, Trieste, I (**Nanoscience / Chemistry**), Prof. Dr. med. Peter Meier-Abt, University Basel, Switzerland (**University**), Dr. Frank Sinner, Institute of Medical Technologies and Health Management, Graz, Austria (**Analytics**), Beat Löffler, MA Executive Director of the European Foundation for Clinical Nanomedicine, Basel, Switzerland (**Conference Management**) Prof. Dr. Hans-Joachim Güntherodt, Member of the Board of the European Foundation for Clinical Nanomedicine, and Honorary President of the Swiss Nanoscience Institute (**Nanoscience / Physics**)

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Introduction

New nanotechnology-based methods, tools and materials with innovative nanoscale properties are being investigated to improve the prevention, early and reliable diagnosis and effective treatment of prevalent and of currently incurable diseases. Successful developments in major research areas such as targeted drug delivery, diagnostic imaging, laboratory diagnostics and monitoring, regenerative medicine and biomaterial implants have shown very promising results.

Until now the biomedical evaluation of nanomedical research has largely been limited to cell and animal experiments. However, an increasing number of products are being tested clinically and some are even reaching the market. Specific challenges are the facilitation of clinical nanomedical research, the assessment of the implications of nanomedicine for the individual and society, and the development of regulatory expertise to adequately assess nanomedicines.

The first European Conference for Clinical Nanomedicine lays a strong fundament for the successful collaboration between clinical physicians and academic nanomedicine researchers willing to bring their research to clinical application.

Topics and Key Issues of the Conference

This conference will show the promise of nanomedical tools, techniques, and materials in the context of prevalent and unsolved medical problems, e.g. diagnosis and therapy of cancer, cardiovascular disease, inflammation, infection, degenerative and neurological disease, as well as nanomedicine applications for molecular imaging, bedside biomarker testing and monitoring technologies, also addressing questions of toxicity, ethics, societal and environmental impact.

Target audience

The conference specifically addresses clinical physicians as well as nanoscientists with a background of pharmacology, biology, physics and engineering involved in development and clinical application of nanomedicine. The conference is also of interest for policymakers, experts from industry in the field of life sciences and involved in the development of new tools and materials for nanomedicine, as well as all those investigating the potential of future emerging technologies.

Programme

Monday, May 19

as from 7.30

Registration

8.45

Opening of the Conference

Chairman Beat Löffler, MA

Welcome Address

Beat Löffler, MA

Executive Director of the Foundation

Address of the City of Basel

Dr. med. Guy Morin

President of the Government of the Canton Basel-Stadt

Address of the Swiss National Science Foundation

Prof. Dr. med. Jürg Schifferli

Swiss National Research Council

*Address by the European Technology Platform
Nanomedicine, Brussels*

Patrick Boisseau

Executive Board of the ETP Nanomedicine

9.20 Keynote lecture

Milestones to Clinical Nanomedicine

PD Dr. med. Patrick Hunziker, President of the European Society for Nanomedicine and University Hospital Basel, CH

9.50

Clinical Nanomedicine – Perspective from the American Academy for Nanomedicine

Dr. med. Chiming Wei, PhD, President of the American Academy of Nanomedicine and Director of the Cardio-thoracic-Renal Nanomedicine Program, Johns Hopkins University School of Medicine, Baltimore, USA

10.10 – 10.40

Break

10.40 Table 1

Unsolved Problems Waiting for Nanomedical Solutions (1)

Chairmen: *Prof. Dr. Giacinto Scoles, Department of Chemistry, Princeton University, USA and Consorzio per la Biomedicina Molecolare, Trieste, I*
Prof. Dr. Patrick Couvreur, CNRS, University of Paris-Sud, F

Statement 1 **Oncology**
Prof. Dr. med. Giorgio Stanta, University of Trieste (UNITS), Trieste, I

Statement 2 **Cardiology**
Prof. Dr. med. Matthias Pfisterer, University Hospital Basel, CH

Statement 3 **Metabolic Diseases - Unsolved Problems in Diabetes**
Prof. Dr. med. John Pickup, Guy's Hospital / Kings College, London, UK

Statement 4 **Haematology**
Prof. Dr. med. Alois Gratwohl, University Hospital Basel, CH

Questions & Discussion

12.10 – 13.30

Lunch

13.30 Table 2

Nanoscience Technologies at Hand for Solving Medical Problems (1)

Chairmen: *Prof. Dr. Wolfgang Meier, University Hospital Basel, CH*
Prof. Dr. Gert Storm, Dept. for Pharmaceutical Sciences, Utrecht University, NL

Statement 1 **Nanoparticles for Medicine**
Prof. Dr. Patrick Couvreur, CNRS, University of Paris-Sud, F

- Statement 2 **Artherosclerosis Targeting**
Dr. Pavel Broz, PD Dr. med. Patrick Hunziker, University Hospital Basel, CH
Prof. Dr. Wolfgang Meier, University Basel, CH
- Statement 3 **Carbo-Nanotubes in Medicine: Promises and Dangers**
Prof. Dr. Kostas Kostarelos, School of Pharmacy, University of London, UK
- Statement 4 **Nano Approaches to Diabetes**
Dr. Silke Krol, Cluster in Biomedicine scl., Trieste, I
- Statement 5 **Pathway from Robotics to Nanomachines**
Prof. Dr. Bradley Nelson, Dept. Robotics and Intelligent Systems, ETH Zurich, CH
- Questions & Discussion

15.15 – 15.45

Break

15.45 Panel 1

Building Bridges Between Clinicians and Nanoscientists: How to Apply the “Technologies” to Solve the “Problems”

- Chairman: *PD Dr. med. Patrick Hunziker, University Hospital Basel, CH*
- Participants: *Prof. Dr. med. Alois Gratwohl, University Hospital Basel, CH*
Prof. Dr. Patrick Couvreur, CNRS, University of Paris-Sud, F
Prof. Dr. Mansoor Amiji, School of Pharmacy, Northeastern University, Boston, USA
Prof. Dr. Silvio Aime, University of Torino, I
Prof. Dr. Mike Eaton, UCB, Slough, UK
Prof. Dr. med. John Pickup, Kings College, UK

The challenges for nanomedicine being discussed in the panel include the following questions:

- How to prevent development of disease in healthy individuals by nanomedicine?
- How to improve rapid diagnosis of acute heart disease pre-hospital and in-hospital by nanotools?
- How to diagnose/quantify/localize atherosclerosis early in a preclinical stage?
- How to detect cancer in the future?
- How to cure currently incurable cancer and leukaemia in the future?
- How to improve outpatient management in diabetes and other diseases by nanodevices?
- How to prevent disease progression in diabetic patients?
- How to improve disease/life sign monitoring in hospitalized patients?

17.00 – 17.15

Short Break

17.15 Table 3

Late Breaking and Ongoing Clinical Trials in Nanomedicine: Therapy

- Chairmen: *Prof. Dr. med. Peter Meier-Abt, University Basel, CH*
Prof. Dr. Kostas Kostarelos, School of Pharmacy, University of London, UK
- Statement 1 **Targeted Anti-inflammatory Nanomedicine**
Prof. Dr. Gert Storm, Pharmaceutical Sciences, Utrecht University, NL
- Statement 2 **New Opportunities for Polymeric Nano particles in Oncology and other diseases**
Prof. Dr. Mansoor Amiji, School of Pharmacy, Northeastern University, Boston, USA
- Statement 3 **Cancer Therapy in Solid and Haematological Tumors with Doxil, a Nano-agent**
Prof. Dr. med. Alberto Gabizon, Hebrew University, Jerusalem, IL
- Statement 4 **Dendrimer-Based Nanomedicine**
Prof. Dr. Donald Tomalia, Central Michigan University, Mt. Pleasant, USA
- Statement 5 **Transdrug: Clinical Trial Phase III for Hepatocellular Carcinoma**
Dr. med. Pierre Attali, Liver Unit, Bicêtre Hospital and Bioalliance Pharma, Paris, F
Dr. med. Dominique Costantini, Bioalliance Pharma, Paris, F
- Questions & Discussion

19.00

Evening Event

- 19.00 Apéro
20.00 Walk from Hotel to Safran Zunft
20.30 Dinner

Tuesday, May 20, 2008

Chairman *Beat Löffler, MA*

8.45 Keynote lecture 1

Physics Roots of Nanomedicine

Prof. Dr. Hans-Joachim Güntherodt, Honorary President of the Swiss Nanoscience Institute, Basel, CH

9.15 Keynote lecture 2

Medicine of the Future: Societal, Economic and Ethical Challenges

Dr. Donald Bruce, Edinethics Ltd., Edinburgh, Scotland, UK

9.45 – 10.15

Break

10.15 Table 4

Unsolved Problems Waiting for Nanomedical Solutions (2)

Chairmen	<i>Prof. Dr. med. Jürg Schifferli, University Hospital, Basel, CH</i> <i>Prof. Dr. med. Alberto Gabizon, Hebrew University, Jerusalem, IL</i>
Statement 1	Inflammatory and Infectious Diseases <i>Dr. Patrice N. Marche, INSERM, Laboratory for Immunology, Grenoble, F</i>
Statement 2	Widespread Third World Killer Diseases: A target for Nanomedicine? <i>Dr. med. Thomas Teuscher, World Health Organisation, Geneva</i>
Statement 3	Lab Diagnostics <i>Prof. Dr. med. Karl J. Lackner, Johannes Gutenberg-University, Mainz, D</i>
Statement 4	Monitoring / Critical Care Medicine <i>Prof. Dr. med. Didier Payen de la Garanderie, Hospital Lariboisière, Paris, F</i>
Statement 5	Challenges in translational research of neurodegenerative diseases – the example Motoneurone Diseases <i>Prof. Dr. med. Albert C. Ludolph, University of Ulm, D</i>

Questions and Discussion

12.00 – 13.30

Lunch

13.30 Table 5

Nanoscience Technologies at Hand for Solving Medical Problems (2)

Chairmen	<i>Dr. Frank Sinner, Institute of Medical Tech- nologies and Health Management, Graz, A</i> <i>Prof. Dr. Schönenberger, Swiss Nanoscience Institute, Basel, CH</i>
Statement 1	Imaging & Theragnostics <i>Prof. Dr. Silvio Aime, Center of Molecular Imaging of the University of Torino, I</i>
Statement 2	Nanotechnology for Tissue Engineering <i>Prof. Dr. Jeffrey A. Hubbell, Biomedical Engineering, EPFL, Lausanne, CH</i>
Statement 3	Micro- and Nanotech-based In Vitro Diagnostics <i>Patrick Boisseau, CEA-LETI, Grenoble, F</i>

Statement 4 **Organic-Inorganic Nanocomposite and Optical Biosensor for Implants**

Prof. Dr. Frédéric Cuisinier, University of Montpellier, F

Statement 5 **Nanomechanical Sensors**

Dr. Thomas Braun, CRANN, The Naughton Institute, Dublin, IRL

Questions and Discussion

15.15 Panel 2

Building Bridges Between Clinical Application and Nanoscience: How to Apply the “Technologies” to Solve the “Problems”?

Chairmen: *Beat Löffler, MA, European Foundation for Clinical Nanomedicine, Basel, CH*
Prof. Dr. Silvio Aime, University of Torino, I

Participants: *Dr. med. Thomas Teuscher, World Health Organisation, Geneva, CH*
Prof. Dr. med. Karl J. Lackner, Johannes Gutenberg-University, Mainz, D
Prof. Dr. med. Didier Payen de la Garanderie, Hospital Lariboisière, Paris, F
Prof. Dr. med. Stephan Marsch, University Hospital Basel, CH
Patrick Boisseau, CEA-LETI, Grenoble, F
Dr. Thomas Braun, CRANN, The Naughton Institute, Dublin, IRL

The challenges for nanomedicine being discussed in the panel include the following questions:

- How to avoid/overcome infections by antibiotic-resistant bacteria?
- How to advance diagnosis & management of rheumatic disease?
- How could nanomedicine replace organ transplantations?
- How can neurological diseases like Alzheimer be targeted?
- How could nanomedical vaccines eradicate AIDS or tuberculosis?
- How can Malaria and other tropical diseases profit from nanomedicine?
- Is the nanomedicine of the future affordable in Europe and the third world?

16.15 – 16.45

Break

16.45 Table 6

Late Breaking and Ongoing Clinical Trials in Nanomedicine: Diagnostics, Sensors, Immunization & Vaccine Development

Chairmen: *Prof. Dr. Ingrid S. Gribbestad, Institute of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, N*
Prof. Dr. Joachim Seelig, Chairman Biozentrum, University, Basel, CH

Statement 1 **Treating Hypertension and Other Diseases by Nanostructured Vaccines**
Dr. Wolfgang Renner, Cytos Biotechnology AG, Zurich, CH

Statement 2 **Clinical Trials in Magnetic Nanoparticle Cancer Therapy**
Prof. Dr. med. Klaus Maier-Hauff, Bundeswehr-Krankenhaus / Charité, Berlin, D
Dr. Andreas Jordan, CSO, Magforce Nanotechnologies AG, Berlin, D

Statement 3 **Clinical Application of Nano-Sensors: Cantilever Nose**
PD Dr. med. Patrick Hunziker, University Hospital Basel, CH

Statement 4 **Synthesis and Characterization of Selected Nanoparticles under Consideration of Medical Applications**
Dipl.-Chem. Helmut Schmid, Fraunhofer Institute of Chemical Technology, Pfinztal, D

Questions and Discussion

18.10

Short Summary and Outlook to 2009

PD Dr. med. Patrick Hunziker, President of the European Society for Nanomedicine (ESNAM)

Beat Löffler, MA, Executive Director of the European Foundation for Clinical Nanomedicine (CLINAM)

18.30 – 19.30 (For members of CLINAM and ESNAM)

General Assembly of the European Society for Nanomedicine (ESNAM)

20.30

Walk to CAFE SPITZ for ESNAM / CLINAM EVENT

20.30

Gala Dinner

Wednesday, May 21, 2008

09.30 – 11.00

Demonstration Morning at the University of Basel

The "Basel Cluster" of Nanotechnology – Visit to the Swiss Nanoscience Institute

Introduction

Prof. Dr. Christian Schönenberger, Director of the Swiss Nanoscience Institute, Basel, CH

Guided Tour through the Swiss Nanoscience Institute

Prof. Dr. Hans-Joachim Güntherodt, Honorary President of the Swiss Nanoscience Institute, Basel, CH

11.30 – 12.45

Visit to Technology Campus of Novartis

13.00

Farewell Lunch

General Information

Registration

Registration is possible at a regular fee until April 29, 2008. After this until May 18 registration rate is higher (see fees below). Registration fees have to be paid before the conference starts. Registrations on site and unpaid fees have to be settled in cash at the conference office.

The registration fee includes Lunch on May 19 and 20, the Evening Event on May 19, the Farewell-Lunch and the Conference Proceedings.

Fee Reduction for Members

As a member of the European Foundation for Clinical Nanomedicine (CLINAM) or of the European Society for Nanomedicine (ESNAM) you profit of a registration reduction. (www.esnam.org.)

Conference Fee and Payment

Category	Fee	Registration after April 29, 08
Academy Regular	480.– €	530.– €
Academy Members	360.– €	400.– €
Industry Regular	680.– €	760.– €
Industry Members	540.– €	610.– €
Student Regular	290.– €	320.– €
Student Members	240.– €	270.– €

When receiving the registration the organisers shall send you an invoice.

CLINAM / ESNAM-Gala-Dinner

This dinner gives all members of the European Society for Nanomedicine and of the European Foundation for Clinical Nanomedicine and all delegates of the conference the chance to get to know each other better and ample time for discussion. Registration for **Participation is to be paid at place at the conference desk in Basel**. The fee is **75 Euro for regular participants and 60 Euro for members** of the European Foundation for clinical Nanomedicine (CLINAM) or members of the European Society for Nanomedicine (ESNAM).

Accommodation

The official conference hotel is the **Swissôtel Le Plaza***** in 200 m distance from the conference hall**. All participants have a **special room rate of CHF 285.– (about 175.– Euro)**, if indicating their participation in the Nanomedicine-Conference. **Booking through:** Swissôtel Le Plaza, Messeplatz 25, CH-4005 Basel, phone +41 61 555 3333 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".

Cancellations / Substitutions

The following charges will apply upon cancellation: Until March 23, 2008 20% and thereafter 50%. Refunding after May 5 is not possible. Above deadlines refer to receipt of the cancellation notice. Substitutions can be made at any time.

Further Information

Please contact Beat Löffler, MA or PD Dr. med. Patrick Hunziker
Office: Alemannengasse 12, P.O. Box, CH-4016 Basel, Switzerland
Phone: + 41 61 695 93 95 , Fax: + 41 61 695 93 90
Mail: loeffler@clinam.org

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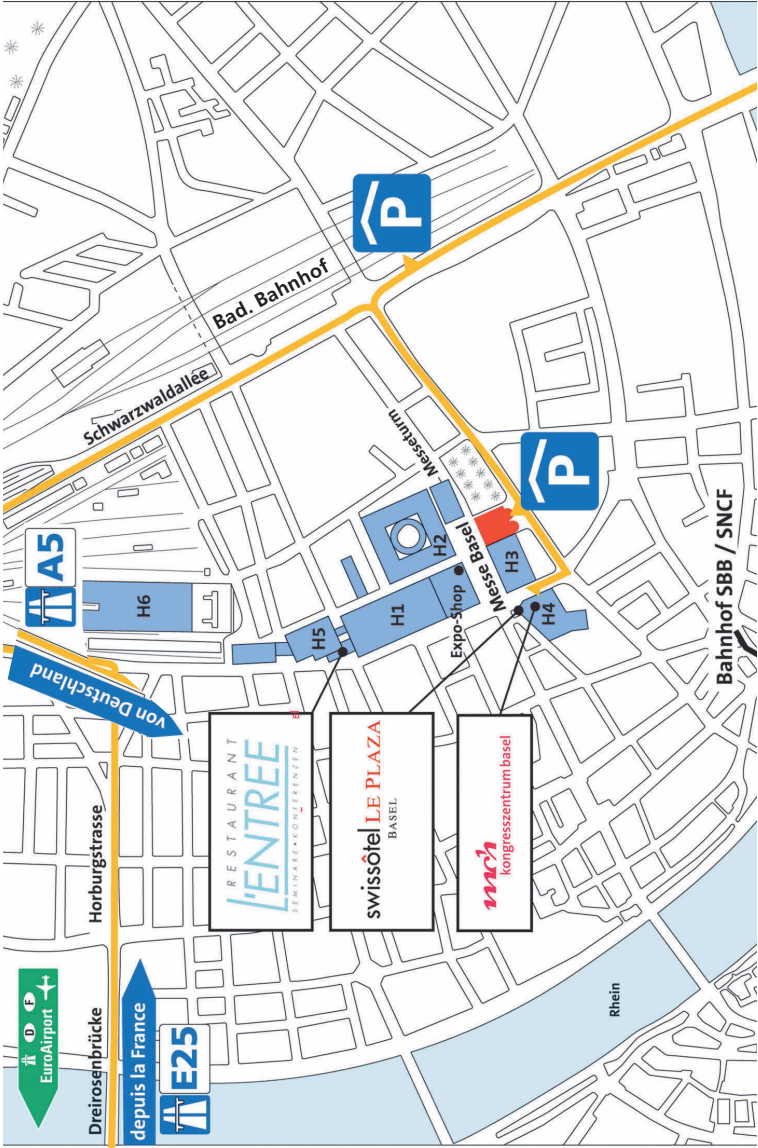
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Directions

Arrival by plane

from the airport Basel-Mulhouse-Freiburg

Public transportation:

Airport-bus to the main railway station SBB. Change to the tram No. 2 direction City. Get off the tram at the Convention Centre "Messeplatz" (5 stations)

Duration approx. 40 minutes, costs approx. CHF 3.–

By taxi:

Duration approx. 15 minutes, costs approx. CHF 40.–

Arrival by train

from the German Railway Station

Public transportation:

Tram No. 2 or 6 direction City. Get off the tram at the "Messeplatz" (2 stations)

Duration approx. 5 minutes, costs approx. CHF 2.–

By taxi:

Duration approx. 3 minutes, costs approx. CHF 10.–

from the main railway station SBB

Public transportation:

Tram No. 2 direction City. Get off the tram at the "Messeplatz" (5 stations)


Duration approx. 12 minutes, costs approx. CHF 3.–

By taxi:

Duration approx. 8 minutes, costs approx. CHF 20.–

Arrival by car

From Germany:

Highway A5 direction customs Weil am Rhein, Exit "Basel Nord/Kleinhüningen", follow the sign  -Messe to the "Messeplatz".

From France:

Highway A35 direction Basel, Exit "Badischer Bahnhof/Basel Ost", follow the sign  -Messe to the "Messeplatz".

Regular ticket Academy Participation in
CLINAM / ESNAM Member Industry Evening Event (included)
 Student CLINAM / ESNAM-Dinner (supplementary)

I register for the **First European Conference for Clinical Nanomedicine**

Title: _____

Last name: _____ First name: _____

Profession: _____

Company / University: _____

Department / Affiliation: _____

Address: _____

ZIP code: _____ Town: _____

Country: _____ Phone: _____

Fax: _____ E-Mail: _____

Place, Date: _____

Legally binding Signature: _____

**Registration is possible until May 18, 12h;
after that at conference office on site**

**Registration for the European Conference for Clinical Nanomedicine,
Basel, May 19-21, 2008**

Please send this Registration to

European Foundation for Clinical Nanomedicine (CLINAM)

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

or by fax to

+41 61 695 93 90

or as scan to

clinam@clinam.org