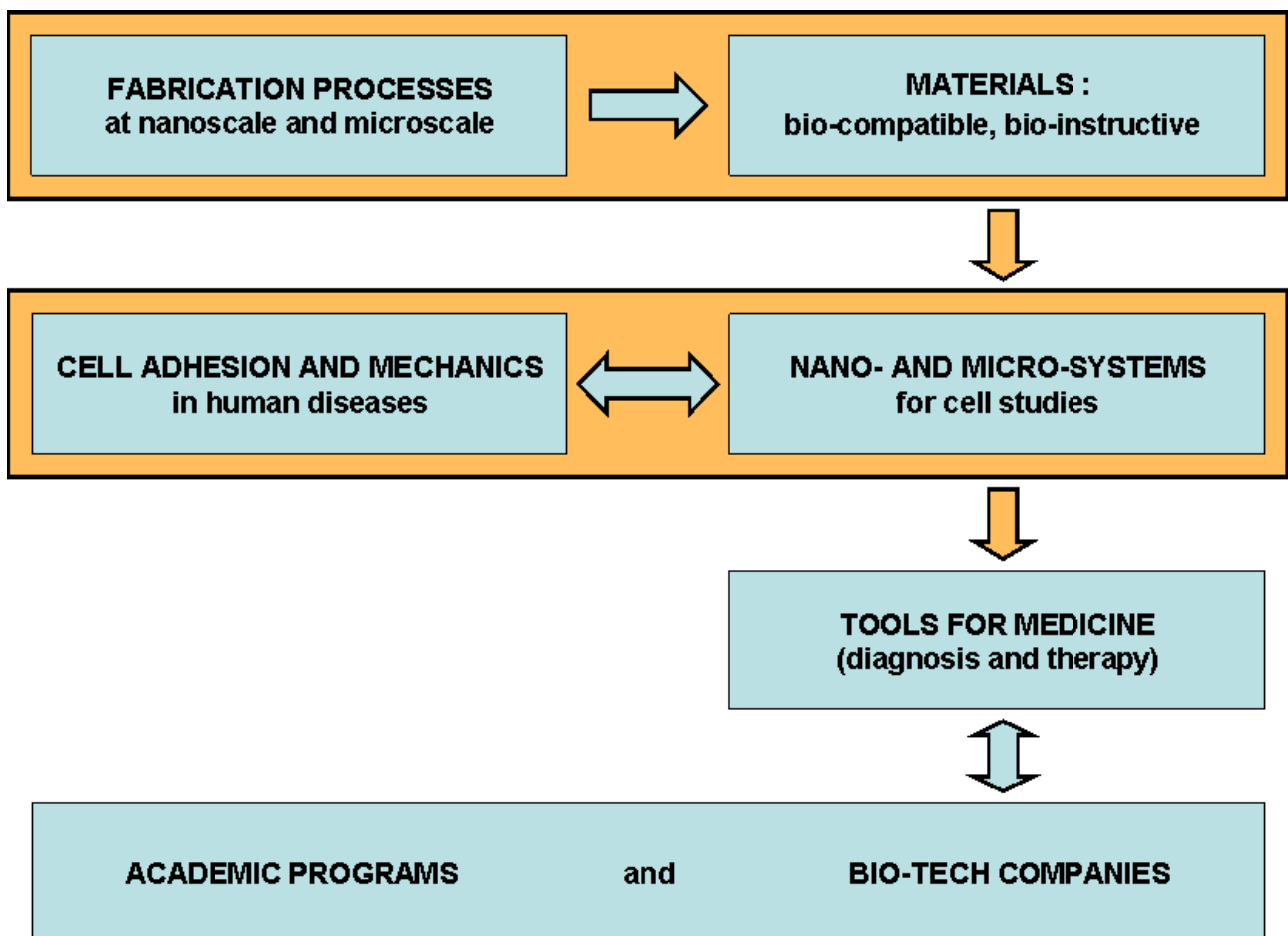


**French-Norwegian Interdisciplinary Symposium on
Nano and Micro Frontiers in Biology and Medicine**

August 31st – September 2nd 2009

Department of Biomedicine, UiB, Bergen





PROGRAMME

MONDAY, THE 31ST OF AUGUST

REGISTRATION

08:30
- 09:00 **Auditorium 1** - Bygg for Biologisk Basalfag, Jonas Lies vei 91, 5009 Bergen

WELCOME

09:00
- 09:10 Prof. R. K. Reed

09:10
- 09:15 Dr. A. Micoulet

INTRODUCTION

09:15 **Why "nano" in Medicine?**

- 09:40 Prof. P. Boisseau

09:45 **The Tumour Cell and its Microenvironment**

- 10:10 Prof. R. Bjerkvig

10:15 **Nanomedicines: their fate after parenteral and oral administration**

- 10:40 Prof. E. Fattal

11:45
- 13:00 **Lunch** (room in front of the auditorium)

SESSION 1 : Fabrication Processes at Nanoscale and Microscale :
Bio-Compatible or Bio-Instructive Materials and Techniques

13:00 **Collagen Liquid Crystals and Stabilized Gels, Materials**

- 13:40 **for Biology and Medicine** - Dr. M.-M. Giraud-Guille

13:45 **Simple Methods to Confine Cells in 1D, 2D and 3D**

- 14:25 Dr. M. Piel

14:30 **Biocompatibility and *in vivo* Sensors**

- 14:55 Dr. I. Clausen

15:00 **Nanoencapsulation Processes in Medicine**

- 15:10 Dr. J. Yang

15:15 **Study of Cells at Interfaces: IRM/RICM and TRIF**

- 15:25 Prof. P. Bongrand

15:30 **Nanopatterned Surfaces to Study Cell Behaviour**

- 15:40 Dr. A. Micoulet

15:45
- 16:00 **coffee break**

SESSION 2 : Cell Adhesion, Mechanics, Signalling and Gene Regulation in Human Diseases
1/2

16:00 **Cell Behaviour at Interfaces**

- 16:40 Prof. P. Bongrand

16:45 **Tumour Cell Invasion in The Central Nervous System:**

- 17:10 **Models and Mechanisms** - Prof. R. Bjerkvig

17:15 **Single Cell Determination of Signal Networks in Normal and Leukemic**

- 17:40 **Blood Cells** - Prof. B. T. Gjertsen

TUESDAY, THE 1ST OF SEPTEMBER

SESSION 2 : Cell Adhesion, Mechanics, Signalling and Gene Regulation in Human Diseases
2/2

08:45 **Cell Adhesion in Regenerative Medicine and Nanobiology**

- 09:10 Prof. D. Gullberg

09:15 **Gene expression patterns regulating the invasive behaviour of brain**

- 09:40 **tumour cells** - Assoc. Prof. P. Ø. Enger

SESSION 3 : Nano-/Micro-Systems and Physical Models for Studies of Cells
and for Diagnosis

09:45 **Simple Micro-Tools to Study Complex Cell Behaviors**

- 10:10 Dr. M. Piel

10:15

- 10:30

coffee break

10:30 **Dynamics of Giant Vesicles and Red Blood Cells in Shear Flow**

- 10:55 Dr. A. Viallat

11:00 **Physical Models for Actin Nucleating Factors which are Stress Dependent**

- 11:25 Prof. B. Fourcade

11:30 **Microfluidic Cells Capture For Cancer Diagnosis and Treatment Selection**

- 11:55 Prof. J.-L. Viovy

12:00

- 13:00

Lunch (room in front of the auditorium)

SESSION 4 : Nano-Particles : Diagnosis, treatment and toxicity

13:00 **Lipid Nano Particles, a Multifunctional Platform for *in vivo* Diagnostics**
and Therapy - Prof. P. Boisseau

13:30 **Nanotechnologies for the Delivery of Nucleic Acids and Contrast Agents**

- 13:55 Prof. E. Fattal

14:00 **Sustained Release Nanoparticles (SRN):**

- 14:25 **A New Nanopharmaceutical Delivery System** - Dr. E. Pisani

14:30 **Nanoencapsulation Processes in Medicine**

- 14:55 Dr. C. Simon

15:00

- 15:15

coffee break

15:15	In Vitro Biological Effects of TiO₂ Nanoparticles
- 15:40	Assoc. Prof. M. Cimpan
15:45	Toxicity of Quantum Dots and Nanoparticles Towards Cancer Cells
- 16:10	Dr. P. Juzenas

18:30
- **Conference dinner at the USF, Georgernes Verft 12, 5011 Bergen**

WEDNESDAY, THE 2ND OF SEPTEMBER

SESSION 5 : Nano-Ethics, NanoScience Programme at UiB and Presentations of Biotech Companies

9:00	Soft Regulation for Responsible Nanosciences
- 09:50	Prof. R. Strand
10:00	Presentation of the NanoScience Programme at UiB : NanoUiB
- 10:15	Prof. K. Børve
10:20	Improvements in AFM Imaging of Biological Samples
- 10:45	Dr. E. Hartmann

CONCLUDING REMARKS

10:50
- 11:00 Prof. R. Reed

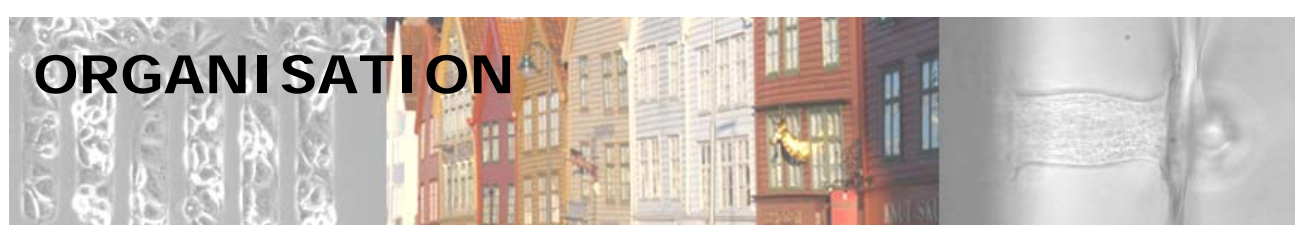


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THE DEPARTMENT OF BIOMEDINE, UNIVERSITY OF BERGEN



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Organizing committee:

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J.-L. Duclos (French Embassy)
E. Boon (FFN-FNS)

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