

## SCIENTIFIC PROGRAM

DECEMBER 7, 2015

- 13h15 Registration  
 13h35 Poster installation - Session A  
 13h30 Opening session  
 Nathalie Mignet (French Society for Nanomedicine) & Andrew Owen (British Society for Nanomedicine)

### SESSION 1 – Nanocarriers for Macromolecules Delivery

Chairpersons: B. Lebleu & P. Midoux

- 14h00 **Endocytosis and Drug Delivery**  
Jones Arwyn, Cardiff School of Pharmacy, United Kingdom
- 14h30 **Anticancer treatment using a novel Cell-Penetrating Peptide**  
Lenormand Jean-Luc, TheREX, TIMCS-IMAG, France
- 15h00 **Protein-based hybrid magnetic nanoplatfoms for theranostic applications**  
Mertz Damien, Ménard Mathilde, Blanco-Andujar Cristina, Meyer Florent, Bégin-Colin Sylvie
- 15h10 **Mechanistic study on the interaction between PtX and neural stem cells cellular membranes**  
Carradori Dario, Dos Santos Andreia, Mingeot Marie-Paule, Saulnier Patrick, Eyer Joel, Préat Véronique, Des Rieux Anne
- 15h20 **Innovative self-assembling dendrimer platforms for siRNA and anticancer drug delivery**  
Peng Ling
- 15h30 **Reduction-Sensitive Dextran Nanogels aimed for Intracellular Delivery of Antigens**  
Li Dandan, Vermonden Tina, Hennink Wim, Van Nostrum Cornelus
- 15h40 **Preparation and in vitro evaluation of imiquimod loaded polylactide-based micelles as potential vaccine adjuvants**  
Trimaille Thomas, Jimenez-Sanchez Gloria, Gignes Didier, Verrier Bernard
- 15h50 **Design of Bioinspired Foldamer Architectures For Intracellular Delivery of Nucleic Acids**  
Douat Céline, Kichler Antoine, Guichard Gilles
- 
- 16h00 Coffee break & Poster Session (Session A)
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- 16h30 **Functionalizing liposomes with anti-CD44 aptamer for selective targeting of cancer cells**  
Alshaer Walhan, Hillaireau Hervé, Vergnaud Juliette, Ismail Said, Fattal Elias
- 16h40 **Presentation of Fondation Nanosciences**  
Fontaine Alain, Director of Fondation Nanosciences, France
- 16h50 **Sponsor Presentation**
- |                                  |                        |
|----------------------------------|------------------------|
| Schaefer Techniques              | Nanolane               |
| Malvern Instruments              | Horiba Scientific      |
| Izon Science                     | Anton Paar             |
| Equipements Scientifiques, Cilas | Mauna Kea Technologies |
| Fujifilm Visualsonics            | Alliance for Science   |
| Mettler Toledo                   | iThera Medical         |
- 18h00 **Round Table: Nanomedicines and Macromolecules**
- 19h00 **Welcoming Cocktail** at Maison Minatec

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8h30 Registration

**SESSION 2- Nanospecific Toxicological Issues**

Chairpersons: S. Greco &amp; D. Betbeder

9h00 **Preclinical assessment of the immunological safety of nanomedicine candidates**Owen Andrew, Univ. Liverpool, United Kingdom9h30 **Reliability and measurement science for HTS Nanomedicine**Wick Peter, EMPA, Switzerland10h00 **Safety of inhalable biodegradable nanoparticles**Fattal Elias, Univ Paris Sud, France10h30 **The behavior of antigen presenting cells can be altered upon a nanoparticle exposure**Gonon Alexis, Villiers Christian, Bayon Emilie, Navarro Fabrice, Loretz Brigitta, Lehr Claus-Michael, Lux Francois, *et al.*

10h40 Coffee break &amp; Poster Session (Session A)

**SESSION 3- Nano and MicroMedical Devices**

Chairpersons: C. Picart &amp; M.-P. Rols

11h00 **Microdevices to locally electroporate mouse embryos: from the proof-of-concept to the prototype**Gosse Charlie, LPN, France11h30 **Microfluidic devices for the diagnosis or treatment of cells**Le Pioufle Bruno, ENS Cachan, France12h00 **BraintPrint technology: from the basic innovative concept to translation**Berger François, Clinattec, France12h15 **Nanofiber matrices for local control of pediatric solid tumors after subtotal resection surgery**Carcaboso Angel M.12h25 **Bio-functional surfaces for analysis and diagnostics**Potrich Cristina, Vaghi Valentina, Lunelli Lorenzo, Pasquardini Laura, Santini Gaia, Pirri Candido, Pederzoli Cecilia

12h35 Lunch break &amp; Poster Session (Session A)

13h45 Poster Installation - Session B

**SESSION 4- Nanomedicine and Imaging**

Chairpersons: F. Denat &amp; J-L Coll

14h00 **Enhanced nano-drug delivery into cancer after photoimmunotherapy**Kobayashi Hisataka, NIC-NIH, USA14h30 **Interests and limits of intraoperative fluorescence imagery in liver surgery**Vibert Eric, Hôpital Paul Brousse, France15h00 **The use of nano & micro sized systems in medical imaging: perspectives and limitations**Maiocchi Alessandro, Bracco Group, Italy15h15 **Fluorescent probe development for tumor imaging**Gayet Pascal, Fluoptics, France15h30 **Gadolinium-based nanoparticles diffusion within the brain tissue following ultrasound induced BBB permeabilization**Larrat Benoît, Magnin Rémi, Conti Allegra, Gerstenmayer Matthieu, Lux François, Tillement Olivier *et al.*15h40 **The effect of polymer coating on the hepatic uptake and clearance of iron oxide nanoparticles studied by MRI**Ramniceanu Grégory, Bich-Thuy Doan, Graillot Alain, Loubat Cédric, Mignet Nathalie, Berret Jean-François15h50 **Elemental imaging by Laser spectroscopy: new perspectives for biological and medical applications**Sancey Lucie, Busser Benoit, Trichard Florian, Pelascini Frédéric, Pinel Nicole, Roux Stéphane, Coll Jean-Luc, *et al.*

16h00 Coffee break &amp; Poster Session (Session B)

16h30 **Tumor stiffening, a key determinant of tumor progression, is reversed by photohyperthermia: In vivo monitoring by ultrasound elastography**Marangon Iris, Andriola Silva Amanda, Guilbert Thomas, Bianco Alberto, Ménard-Moyon Cécilia, Marchiol Carmen, *et al.*16h40 **In vivo imaging of electropermeabilization effects**Golzio Muriel, Bellard Elisabeth, Joncker Nathalie, Markelc Bostjan, Chabot Sophie, Pelofy Sandrine *et al.*16h50 **Round Table: Will optical imaging reach the clinic?**17h50 **General Assembly of SFNano (French Society for Nanomedicine)**19h00 Téléphérique for **Gala Dinner** on the top of **Bastille Mountain** (sponsored by Nanobiotix)

**SESSION 5 - Nanomedicine and Cancer supported by CLARA**

Chairpersons: N. Mignet &amp; F. Berger

- 9h00 **Nanomedicines to Enable Drugs in Oncology**  
Ashford Marianne, AstraZeneca, United Kingdom
- 9h30 **Prostatic cancer and optical nanoprobes for theragnostic**  
Grenier Nicolas, CHU Bordeaux, France
- 10h00 **Image-guided drug delivery**  
Lammers Twan, Univ Hospital RWTH, Germany
- 10h30 **A nanohybrid consisting of titanate nanotubes and docetaxel for the treatment of prostate cancer in preclinical developments**  
Boudon Julien, Mirjolet Céline, Loiseau Alexis, Créhange Gilles, Millot Nadine
- 
- 10h40 Coffee break & Poster Session (Session B)
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- 11h10 **Magneto-plasmonic heat nano-generators for bimodal hyperthermia**  
Espinosa Ana, Bugnet Mathieu, Radtke Guillaume, Neveu Sophie, Botton Gianluigi A., Wilhelm Claire, Abou-Hassan Ali
- 11h20 **Gadolinium-based nanoparticles for lung tumor investigations**  
Dufort Sandrine, Bianchi Andrea, Lux François, Le Duc Géraldine, Crémillieux Yannick, Tillement Olivier, Coll Jean-Luc
- 11h30 **Using photoresponsive upconversion nanocarriers for light controlled gene therapy of drug resistant cancer**  
Shrestha Rishav, Zhang Yong
- 11h40 **Bifunctional Nanoparticles: pros and cons for the definition of theranostic anticancer agents**  
Jia Tao, Ciccione Jérémie, Choi Jungyoon, Amblard Muriel, Said Jebors, Mehdi Ahmad, Martinez Jean, *et al.*
- 11h55 **Nanodrugs in oncology: more efficacious, safer or not?**  
Attali Pierre, Hôpital Paul Brousse, France
- 12h10 **EuroNanomed Award Presentation**
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- 12h20 Lunch break & Poster Session (Session B)

**SESSION 6 – Young Investigators Session & Nanomedicine & Tissue Regeneration**

Chairpersons: A. Szarpak &amp; B. Verrier

- 13h45 **Tripartite Poly-Ionic Complex (PIC) micelles as non-viral siRNA vectors for mesenchymal stem cells.**  
Raisin Sophie, Bony Claire, Noël Danièle, Jorgensen Christian, Devoisselle Jean-Marie, Morille Marie, Belamie Emmanuel
- 13h55 **Targeting membranous GRP78 through taxol-nanoparticles: Three in One against ovarian cancer**  
Meynier Sonia, Delie Florence, Petignat Patrick, Cohen Marie
- 14h05 **Nanocrystals-Polymer Particles: a Novel Drug Delivery System for Knee Osteoarthritis Treatment**  
Maudens Pierre, Thauvin Cédric, Jordan Olivier, Allémann Eric
- 14h15 **Photoacoustic imaging for characterization of tumors in vivo**  
Lavaud Jonathan, Henry Maxime, Gayet Pascal, Coll Jean-Luc, Josserand Véronique
- 14h30 **Nanomedicine for a Cellular Therapy of Diabetes**  
Benhamou Pierre-Yves, CHU Grenoble, France
- 15h00 **The cellular Capsules Technology**  
Nassoy Pierre, Institut d'optique d'Aquitaine, France
- 15h30 British Society, SFNano and Sanofi Awards
- 16h00 Final conclusion and Meeting Closure of ENM 2015

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