

## RELEVANT TOOLS AND MODELS FOR THE TRANSLATION OF ADVANCED DRUG DELIVERY

The goal of this workshop is to bring together leaders in the field from all over the world and stimulate discussions on the relevance of *in silico*, *in vitro*, *in vivo* tools and models for the assessment of drug delivery by the oral and parenteral routes. This will allow the participants to discover the state-of-the-art and obtain recommendations from international experts.



### October 2, 2014

#### SESSION 1: BASIC CONCEPTS

- Pharmacokinetics and pharmacodynamic concepts—**T. Paehler**, Sanofi, Germany
- Drug delivery through cell membranes: What can we learn from Molecular Dynamics simulations —**M. Tarek**, Nancy, France
- *In vitro* - *in vivo* correlation a biopharmaceutics tool used in drug development—**J.M. Cardot**, Clermont-Ferrand, France
- Principles of electroporation for drug delivery—**M-P. Rols**, Toulouse, France
- Electroporation: Characterization, tools and constraints for *in vivo* drug delivery—**D. Miklavcic**, Ljubljana, Slovenia

#### SESSION 2: ORAL ROUTE

- Oral Drug Delivery: Physiological challenges for pharmaceuticals. — **C. Wilson**, Strathclyde, United Kingdom
- Computational Models for Drug Delivery by Oral Administration — **M. Bolger**, Simulations Plus, Lancaster, USA
- *In vitro* and *in vivo* models for assessment of oral drug absorption— **P. Artursson**, Uppsala, Sweden

#### SHORT ORAL COMMUNICATIONS

FREE EVENING

### October 3, 2014

#### SESSION 3: PARENTERAL ROUTE

##### *Intravenous route (for cancer and brain treatment)*

- Physiological barriers to drug delivery by intravenous route (clinical relevance and challenges) - **J-M. Devoisselle**, Montpellier, France
- *In vitro* and *in vivo* models for drug delivery to cancer— **K. Greish**, Otago, New Zealand
- Preclinical development of electrochemotherapy (ECT) for treatment of tumors— **G. Sersa**, Ljubljana, Slovenia
- Targeting the Blood-Brain Barrier to improve Drug Delivery to Brain —**X. Declèves**, Paris, France
- Challenges of using *in vitro* data for modeling P-glycoprotein efflux in the blood-brain barrier—**M. Yliperttula**, Helsinki, Finland

##### *Alternative routes: Pulmonary, nasal & cutaneous routes*

- Drug delivery to the lungs: barriers, challenges and opportunities —**R. Vanbever**, Louvain, Belgium
- *In vitro* models of pulmonary drug disposition - are we there yet? —**C. Ehrhardt**, Dublin, Ireland

#### SHORT ORAL COMMUNICATIONS

GALA DINNER

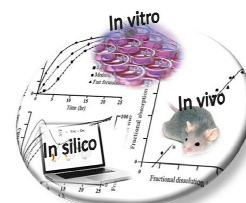
### October 4, 2014

#### SESSION 3: PARENTERAL ROUTE (CONT'D)

##### *Drug delivery by cutaneous route:*

- Challenges in percutaneous drug delivery: Recent developments in formulation and predicting tools —**B. Delgado-Charro**, Bath, United Kingdom
- DNA electroporation for local delivery of therapeutic proteins and vaccines— **G. Vandermeulen**, Louvain, Belgium
- Current clinical experience on electroporation based treatments and future prospects — **J. Gehl**, Copenhagen, Denmark
- Nanomedicine revolution: the path through regulatory science into personalized medicine— **R. Gaspar**, Lisboa, Portugal

#### LUNCH AND MEETING CLOSURE



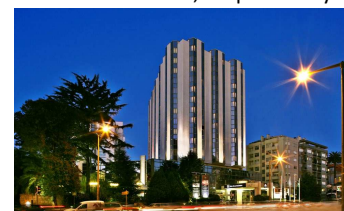
For details on COST TD 1104 please visit:  
[www.electroporation.net](http://www.electroporation.net)

**Participants.** Scientists, postdocs, Masters and PhD students, engineers and technicians interested in the fields of computational/molecular modelling, mammalian cell biology, biochemistry, membrane biophysics, drug delivery, pharmaceutical sciences, biopharmacy.

| Class                                      | Fees  | Included  |
|--|-------|---|
| Industry <sup>1</sup>                      | 900 € | 3 nights (Oct.1-3), 3 lunches (Oct.2-4)<br>Gala Dinner + Porto Wine Tasting Party |
| Academy <sup>2</sup>                       | 700 € |   |
| Student and COST participants <sup>3</sup> | 450 € | Conferences, 3 lunches (Oct.2-4) + Gala dinner                                    |

<sup>1</sup> contact us for sponsoring opportunities; <sup>2</sup> public and non-profit organizations, regularly registered for a PhD or post-doctoral program; <sup>3</sup> reduced fees for students and COST participants (which does not include accommodation at Tiara Park Hotel)

The SFNano Workshop will be held at the **Tiara Park Atlantic Hotel**. For more information about location and accommodation, please visit:  
<http://www.tiara-hotels.com/en/park-atlantic-porto/>.



For registration, please go to <http://ecole-sfnano.sciencesconf.org/>

**Organizing Committee:** Gillian Barratt, Sylvie Bégu, Didier Betbeder, Anne-Claude Couffin, Harivardhan-Reddy Lakkireddy, Bernard Lebleu, Nathalie Mignet, Marie-Pierre Rols.

**For sponsoring SFNano events,** please contact D. Betbeder ([didier.betbeder@neuf.fr](mailto:didier.betbeder@neuf.fr))

For more details, please visit [www.sfnano.fr](http://www.sfnano.fr)