PK-PD workshop, Cordeliers Research Centre, Programme of the 1<sup>st</sup> day of the workshop: Thursday December 18, 2008

9:00-9:30 J. Clairambault & J.-P. Marie: Welcome, coffee and croissants

9:30-10:15 Annabelle Ballesta: A Combined Biological and Mathematical Approach for Modeling PK-PD of the Anticancer Drug Irinotecan - Focus on Acquired Resistance and Circadian Rhythms at the Cell Population Scale

10:15-11:15 Justine Bodin: Multiscale modelling of 5-fluorouracil antitumour activity
Inès Paule: Individual dose adaptation of capecitabine for reduction of severe hand and foot syndrome

## 11:15-11:45 Coffee Break

11:45-12:30 Benjamin Ribba: Mechanistic PK-PD models to reveal synergy between antiangiogenesis drugs and chemotherapy

12:30-13:15 Maciej Swat: Modelling of PK-PD and drug-drug interaction (synergy / antagonism / additivity) with examples of anti-cancer and anti-inflammatory drug combinations

## 13:15-14:30 Lunch Break

14:30-15:15 Vladimir Vainstein: Physiologically-based PK/PD of targeted drug delivery by monoclonal antibodies

15:15-16:00 Dinesh DeAlwis: Exploring the potential of PK/PD in early phase oncology drug development

## 16:00-16:30 Coffee Break

16:30-17:15 Jack Tuszynski: Computational cancer chemotherapy drug design and laboratory validation

17:15-18:00 Albert Goldbeter: Using an automaton model for the cell cycle to probe temporal patterns of drug administration in cancer chronotherapy

PK-PD workshop, Cordeliers Research Centre, Programme of the 2<sup>nd</sup> day of the workshop: Friday December 19, 2008

## 8:45-9:00 Coffee and croissants

9:00-9:45 Peter Hinow: A mathematical model separates quantitatively the cytostatic and cytotoxic effects of a HER2 tyrosine kinase inhibitor

9:45-10:30 Peter Kim: Potential sources of drug resistance during Imatinib treatment

## 10:30-11:00 Coffee Break

11:00-11:45 Pierre Magal: Modelling P-gp transfer and acquired multi-drug resistance in tumour cells

11:45-12:30 Jean-Pierre Marie: Drug resistance induced by ABC-transporter proteins

# 12:30-14:00 Lunch Break

14:00-14:45 Alissa Weaver: Modulation of drug response and selection of clonal populations by microenvironment constraints

14:45-15:30 Jeannette Soria: Micro-environment and drug resistance in leukemia and ovarian cancer tumoral microenvironment and involvement of hospicells in drug resistance

## 15:30-16:00 Coffee Break

16:00-16:45 Francis Lévi: Circadian clock induction or disruption in cancer therapy

16:45-17:30 Andrzej Swierniak: Direct and indirect control of drug resistant cancer populations

17:30-18:00 Jean Clairambault: Towards optimisation of cancer therapeutics by taking into account patient-specific constraints: mathematical models for individualised medicine

18:00-18:15 J. Clairambault & J.-P. Marie: Conclusion of the workshop