

# **Modelling of blood diseases**

## **Preliminary list of speakers**

**M. Adimy (University of Pau, INRIA)**

Discrete maturity-structured model of cell differentiation

**F. Ataullakhanov (Moscow Hematological Center)**

Spatial dynamics of blood clotting determines the pattern of biochemical network of coagulation

**S. Bernard (Humboldt University, Berlin)**

Cyclic neutropenia and chronic myeloid leukemia: closely linked dynamical diseases

**J.P. Boissel (University Lyon 1)**

Modelling atherosclerotic plaque rupture to predicting clinical efficacy of reducing heart rate in coronary disease

**G. Bricca (University Lyon 1)**

Structure - fonction relationship and quantification in the cardio-vascular system : the challenge of multifactorial diseases

**V. Capasso (University of Milan)**

Stochastic geometric models and related statistical issues in tumour induced angiogenesis

**S. Collot-Teixeira (King's College, University of London)**

Different models to investigate scavenger receptor CD36 and OxLDL relationship and implication in atherosclerosis

**A. Ducrot (University Bordeaux 2)**

A reaction-diffusion approach in hematopoiesis modelling

**T. Dumont (University Lyon 1)**

Modelling and simulation of a stroke

**C. Dumontet (University Lyon 1, E. Herriot Hospital)**

Optimizing use of immunophenotypic data in patients with haematological malignancies

**O. Gandrillon (CNRS, University Lyon 1)**

Adding self-renewal in committed erythroid progenitors improves the biological relevance of a mathematical model of erythropoiesis

**S. Genieys (University Lyon 1)**

Mathematical models and simulations for atherosclerosis

**F. Morle (University Lyon 1)**

Relative levels of EKLf and FLI-1 transcription factors determine the commitment decision of bipotent erythro-megakaryocytic progenitors

**C. Negrier (University Lyon 1, E. Herriot Hospital)**

To be announced

**M. Nikulin (University Bordeaux 2)**

Flexible regression models for cancerogenesis studies : state of the art

**M. Panteleev (Moscow Hematological Center)**

Understanding the complexity of blood coagulation: possible implications for diagnostics and therapy

**L. Pujo-Menjouet (University Lyon 1)**

Contribution to the understanding of hematopoiesis using a multi-agent model

**A. Quarteroni (EPFL et Politecnico di Milano)**

Multifields problems in blood modelling

**O. Rukavitsyn (Hematological Center, Main Military Hospital, Moscow)**

Retrospective study of data in the case of multiple myeloma, acute nonlymphoblastic leukemia and chronic myeloproliferative disorders

**V. Savchenko (Moscow Hematological Center)**

Endothelial damage while cytotoxic treatment of acute leukemias

**I. Sirakov (University of Saint-Etienne)**

Fluid-structure interaction in a thin channel with an elastic wall

**Y. Ventikos (University of Oxford)**

Thrombosis and growth models for cerebral aneurysms