



The 1st International Workshop within the SCOPES project
“Computational modelling of blood flow in the tumor vasculature”

Friday, January 25th 2013

9.30 – 9.35 Welcome speech by the Rector of the University of Kragujevac Prof. Dr. Slobodan Arsenijevic

9.35 – 9.45 Welcome speech by SCOPES project coordinator Prof. Dr. Nenad Filipovic

9.45 – 10.30 Prof. Dr. Curzio Rugg, University of Fribourg, Switzerland, SCOPES project coordinator –

Tumor angiogenesis, a critical determinant of tumor progression and a therapeutic target

10.30 – 11.15 Prof. Dr. Nenad Filipovic, University of Kragujevac – **Computer modelling of angiogenesis and blood microcirculation**

11.15 – 11.30 Coffee break

11.30 – 12.15 Prof. Dr. Christian Hellmich, Vienna University of Technology, Austria - **"Universal" patterns pervading bone materials at multiple scales: structure - composition - mechanics**

12.15 – 13.00 Prof. Dr. Hans Van Oosterwyck, KU Leuven, Belgium - **Multiscale modelling of angiogenesis and osteogenesis: linking oxygen, cell phenotypes and tissue formation**

13.00 – 14.00 Lunch break

14.00 – 14.45 Prof. Dr. Dimitris Fotiadis, University of Ioannina, Greece - **Modelling of glucose metabolism in Type I diabetes**

14.45 -15.30 Dr. Themis Exarchos, FORTH, Greece - **Computational Modelling of Cardiovascular Diseases**

15.30 – 15.45 Coffee Break

15.45 – 16.30 Prof. Dr. Valentin Djonov, University of Bern, Switzerland - **Escape mechanisms after antiangiogenic treatment, or why are the tumors growing again?**

16.30 – 17.15 Dr. Vladislav Volarevic, University of Kragujevac - **The role of IL-33/ST2 signalling pathway and galectin 3 in experimental model of fulminant hepatitis**

17.15 – 17.45 Discussion



Saturday, January 26th 2013

9.30 – 9.35 Welcome speech by SCOPES project coordinator Prof. Dr. Nenad Filipovic

9.35 – 9.55 Dr. Igor Koncar, University of Belgrade – **The clinical value of modelling the abdominal aortic aneurysm**

9.55 – 10.15 Dr. Boban Stojanovic, University of Kragujevac - **Various approaches in modeling muscle contraction at molecular level**

10.15 – 10.35 Dr. Milos Ivanovic, University of Kragujevac - **Thin filament regulation in solution – parallelization of stochastic model**

10.35 – 10.55 Dr. Miljan Milosevic, University of Kragujevac - **Modelling of diffusion in complex systems by using a numerical homogenization procedure**

10.55 – 11.10 Coffee break

11.10 – 11.30 Tijana Djukic, PhD student, University of Kragujevac - **Multi-scale modeling of cancer progression and prediction of tumor behavior based on experimental results**

11.30 – 11.50 Milica Obradovic, PhD student, University of Kragujevac - **Modeling of Axonal Growth and Elongation by Stem Cells using Finite Element Method**

11.50 – 12.10 Milos Radovic, PhD student, University of Kragujevac - **Mining Data from CFD Simulations**

12.10 – 12.30 Zarko Milosevic, PhD student, University of Kragujevac - **Artool: A platform for the development of multi-level patient-specific artery and atherogenesis models**

12.30 – 13.00 Discussion

13.00 Lunch