



AT-EQUAL 2009



LAB-RS July 22-24, 2009

2nd ECSIS Symposium on Learning and Adaptive Behaviours in Robotic Systems
Learning and adaptation in robots working within environments in close proximity to other robots and humans

ARTIPED July 23-25, 2009

The International Symposium on Assistive and Recuperative Technologies
for Injured, ill, Pregnant, Elderly and people with Disabilities

ISRIS July 22-26, 2009

The International School on Robotics and Intelligent Systems
Assistive robots and systems for healthcare and rehabilitation





ARTIPED July 23-25, 2009

The International Symposium on Assistive and Recuperative Technologies
for Injured, ill, Pregnant, Elderly and people with Disabilities

Program

Day 1
22 of July 2009

Joined sessions LAB-RS, ISRIS
Rehabilitation Hospital Theatre

10²⁰-12⁰⁰ Computed Assisted Live Surgery: Birmingham hip resurfacing arthroplasty (BHR)
Featuring Paul Botez Md PhD, Dr Geert Peersman, Antwerp, Belgium
Operative navigation equipment provided by Smith& Nephew

Day 2
23 of July 2009

Rehabilitation Hospital Theatre

8³⁰-9⁰⁰ Welcome from the organizers, opening ARTIPED
Professor Paul Botez Md PhD
Morning session
Chair: Prof. Friedl W, Assoc. Prof. Sirbu P.

9⁰⁰-9²⁰ The Gliding Nail (GN). A Universal Implant for Immediate Weight Bearing Restoration in all Per- and Subtrochanteric Femur Fractures. Evaluation of 501 Patients Friedl W., Hilsenbeck Fl., and Stürzenhofecker Ph, Aschaffenburg, Germany

9²⁰-9⁴⁰ Is the Cross Section Profile Relevant for the Cut Out Risk of the Femur Neck Component in Implants Used for the Treatment of Proximal Femur Fractures?
Experimental Examination and Clinical Results Friedl W Hilsenbeck Fl. and Stürzenhofecker Ph, Aschaffenburg, Germany

9⁴⁰-10⁰⁰ Quality Improvement of Knee Resurfacing with the Galileo Navigation System
Wilhelm Friedl and Ralf Imig, Aschaffenburg, Germany

10⁰⁰-10³⁰ Minimally Invasive Plate Osteosynthesis with Systems with Angular Stability in Complex Distal Femoral Fractures. Design, Biomechanics and Clinical Results
P.D. Sîrbu, E Carata, T. Petreus, R. Asaftei, and P. Botez, "Gr.T.Popa" University of Medicine and Pharmacy Iasi, Romania

10³⁰-11⁰⁰ Intermezzo- video recordings of BHR computed assisted surgery, discussions

10⁰⁰-11¹⁰ Session 2

Chair: Prof Lobonțiu A, Prof Munteanu FI

11¹⁰-12⁰⁰ A Novel Revolutionary Surgical Device for TransOral Incisionless Surgery: EsophyX™ used for Endoluminal Fundoplication (ELF) in patients suffering of Reflux Disease
Adrian Lobontiu and Loisanca Daniel, Henri Mondor Hospital, Paris 12 University Paris, France

12¹⁰ Lunch break

Afternoon Joint session ARTIPED-ISRIS

Rehabilitation Hospital Main Theatre

Chair: Prof Paul Botez

13³⁰-13⁵⁰ Development of Pseudo 3D Visualization System by Superimposing Ultrasound Images Yumi Iwashita, Shinji Tarumi, Ryo Kurazume, and Makoto Hashizume, Kyosho University Japan

13⁵⁰-14²⁰ Review of Communication Systems for Ingestible Miniaturized Integrated Sensor Microsystems Aydin Nizamettin, Bahcesehir University, Turkey,, Tughrul Arslan, Edinburgh University,U.K

14²⁰-15¹⁰ Mechatronic leg with intelligent control
Alberto Rovetta, Politecnico di Milano Italy

15¹⁰-15³⁰ The Effect of Clearance in Total Hip Endoprosthesis
Florin Munteanu, Paul Sirbu, Constantin Barbarosie, Anca Munteanu and Paul Botez, “Gr.T.Popa” University of Medicine and Pharmacy Iasi, Romania

15³⁰-16⁰⁰ Robotics in orthopedic surgery; past, present and future trends
Paul Botez „Gr.T. Popa” University of Medicine and Pharmacy, Iasi, Romania

16⁰⁰-17⁰⁰ Workshop joint session ARTIPED-ISRIS
Minimally Invasive Plate Osteosynthesis in Distal Femoral Fractures (MIPO), “Gr.T
Paul Sirbu, “Gr.T.Popa” University of Medicine and Pharmacy, Iasi, Romania

19⁰⁰ Dinner around

Day 3

24 of July 2009

University Medicine and Pharmacy Theatre

8⁰⁰-9⁰⁰ Coffee

Plenary joined session LAB-RS – ARTIPED- ISRIS
Chair Prof.Vander Sloten, Prof Lefeber

9¹⁰-10⁰⁰ Daphne System for Neuromotor Control Evaluation: Reconfiguration Concepts
Alberto Rovetta, PhD Politecnico di Milano Italy

10⁰⁰-10¹⁰ Coffee break

10¹⁰-10⁰⁵⁵ Use of Compliant Actuators in Robotic Application
Professor Dirk Lefeber Vrije Universiteit Brussel, Belgium

10⁵⁵-11¹⁰

11¹⁰-11²⁰ Intermezzo coffe break
Chair Session, Proffesor Lobontiu, Adriana Tapus

Towards Improved Assessment of Bone Fracture Risk
Jos Vander Sloten, Katholieke Universiteit Leuven, Belgium

10²⁰-11⁴⁵ Robotically Assisted Aorto-Femoral Bypass Grafting Surgery
Professor Adrian Lobontiu, MD
Henri Mondor Hospital, Paris 12 University, France

11⁴⁵-12¹⁰ Improving the Quality of Life of People with Dementia through the Use of Socially Assistive Robots
Adriana Tapus Md PhD University of Southern California, USA

12¹⁰-12³⁰ Presentation Bruno Pettit

12³⁰-13³⁰ Lunch Unirea Restaurant

Special Session ARTIPED
Stem cells and tissue engineering
Biomedical Faculty Theatre A1
Chair Prof Zoran Ivanovic

14⁵⁰-15²⁰ Oxygen availability and self renewal of stem cells
Zoran Ivanović, Aquitaine-Limousin Branch of French Blood Institute
Bordeaux, France

15²⁰-15⁵⁰ Chitosan-Hydroxyapatite Composite Obtained by Biomimetic Method as New Bone Substitute
C. E. Tanase, M. I. Popa, and L. Verestiuc, “Gr.T.Popa” University of Medicine and Pharmacy Iasi, Romania

- 15⁵⁰-16²⁰ Correlation Between Microstructure and Nanomechanical Properties of Lamellar Bone L.Cueru, University of Medicine and Pharmacy Iasi, Romania, A-M. Trunfio-Sfarghiu' National Institute of Applied bioscience Y. Bala' B. Depalle, Y. Berthier, H. Follet Laboratory INSERM, Lyon, France
- 16²⁰-16⁵⁰ Robotics and Automation in Regenerative Medicine for Musculoskeletal Applications
Luminita Simion, Paul Botez, and Florin Zugun-Eloae, "Gr.T.Popa"
University of Medicine and Pharmacy Iasi, Romania
- 16⁵⁰-17⁰⁰ Discussions
- 17⁰⁰-18⁰⁰ Poster session
Unirea Hotel Lobby
Robotic Scaffolds for Tissue Engineering and Organ Growth
Adrian Stoica, NASA-JPL, California Institute of Technology, USA
All ISRIS students
- 19³⁰ Outdoor networking & dinner (LAB-RS, ISRIS, ARTIPED)

Day IV, 25 of July 2009

- 8⁰⁰-9³⁰ Buss loading, departure UNESCO awarded Northern Moldavia Monasteries tour
- 13³⁰-15³⁰ Lunch Jam-session
Romania on the map of industrial and health care robotics development
Prof Dr Paul Botez, Prof Dr Adrian Stoica, Prof Dr Dragoş Arotaritei, Conf Dr Paul Sirbu

