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one-and-a-half decades

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Biomechanics and East-West educational cooperation in the last one-and-a-half decades

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Within the framework of the *European Society of Biomechanics (ESB)*, international education knows a remarkable example of East-West cooperation in the last one-and-a-half decades. This is the case, some eighty years since Drs. Sir Robert Jones from the UK, Vittorio Putti from Italy, and Murk Jansen from The Netherlands founded the *Société Internationale de Chirurgie Orthopédique et de Traumatologie (SICOT)*. The next review shows some seminal effects of current East-West educational collaboration between 1) University of Hasselt, Diepenbeek, Belgium, Department Functional Morphology and 2) St. Petersburg State Polytechnical University, St. Petersburg, Russia, Department of Biomechanics and Health Sciences.

Research and educational spear points of the department first mentioned included functional anatomy and movement analysis of the skeletal muscular system in man and quadrupeds, while research and educational efforts of the second mentioned department gained wide acclaim in the area of biomechanics and goal oriented mathematical simulation of human movement. Both departments decided to join forces in 1993, since then concentrating on research and education in the field of clinical application of upper and lower extremity biomechanics, working out some of the theoretical and practical aspects of physical adaptation.

They succeeded to do so, by effective lower and higher graduate teaching in each other's research institutes, mutually supported during the years by each other's universities and federal government grants. Jointly produced PhD and Master Theses since then, on themes abovementioned, crowned their efforts, while scientific output of both departments experienced real boosts, increasing their visibilities worldwide. Evidence of their international educational cooperation is given now, by mentioning some output figures.

Consulting the popular "Scientific Commons" website at the Internet, by filling out author's names of the Head of SPSPU Department of Biomechanics and Health Sciences A.V. Zinkovsky, currently O.E. Piskun, will produce the summing up of at least 18 different joint publications within 12 years, this is 1½ each year

Internet search, by filling out the name of the first author of this present abstract, at the ISI Web of Science, yields 3 of his full articles, published during the 15 years of our collaboration. Most of these publications concentrated on the functional analysis of lower leg muscles and movement analysis of human gait, they were worldwide cited 5 times until now. In each case, the research carried out by our PhD and Master Students, had been a fruit of our long standing international educational cooperation.

During the same one-and-a-half decades, another author of the present abstract co-authored the article "Data representation for joint kinematics simulation of the lower limb within an educational context", cited 6 times until now, according to ISI Web of Science. This publication too has educational goals.

Active university congress participation in new state countries (Jena, Wrocław, Vilnius) during the years, eventually led to joint publications in prestigious journals on human movement, like the *Journal of Morphology*, *Acta of Bioengineering and Biomechanics*, and *Journal of Vibroengineering*.

Our shared expertise currently intends to serve for the (2008) Tacis Neighbourhood Programme [INTERREG IIIA/TACIS CBC No NEB/PL/PDL/2.1/05/238 (JTS-BY-UA)], called "Biomechanical research and elaboration the methods for improvement of children gait". As most new states commonly tend to stress young people's health, we sincerely hope that the present East-West educational cooperation in Biomechanics may help to improve the well-being and prosperity, of old and new Europeans alike.