



### Instituto de Biomecánica de Valencia

IBV is a Technological Centre whose aim is the promotion and practice of scientific research, technological development, technical assessment and training in Biomechanics. Engineers, medical doctors, physical therapists, biologists, informatics, and experts in training, design and social work compose its interdisciplinary staff, with large experience in European, national and regional projects. The Healthcare Technology Group collaborates with surgeons, implants companies and other entities interested in health management, trauma care and development of health products. IBV has an Education and Training department, whose activity is focused on development and teaching of different courses regarding the areas of interest of the Institute, and a department of ICT, especially dedicated to the valorization of the activities of the Centre and the dissemination of the project results.

### Minimally Invasive Surgery Centre Jesús Usón

The Jesús Usón Minimally Invasive Surgery Centre, CCMIJU, is a multidisciplinary institution dedicated to excellence in research and training in minimally invasive surgical. Thanks to the available facilities and equipment, it is possible to develop less invasive surgical treatments by applying combined techniques and multidisciplinary equipment for treatment approach, thus benefiting the patient and providing higher precision to the surgeon. Similarly, the Centre is committed to technological development and innovation in health care, and for its advancement it works closely with companies from all over the world. Besides, since the CCMIJU is free from medical assistance, it joins all its efforts and resources into research. In short, this activity will have an impact on higher clinical quality for human patients and on the scientific and technical development within medical/surgical areas.

### Instytut Techniki Gorniczej KOMAG

KOMAG is a state-owned research and development organization, subordinated to and supervised by the Ministry of Economy, employing 125 scientific research and technical specialists (total 225 employees), offering new, competitive technical solutions in the branch of mechanical systems. An interdisciplinary knowledge of KOMAG specialists, their high scientific, research and technical qualifications create a significant potential, enabling to develop the best advanced technologies.

### Silesian University of Technology. Faculty of Organization and Management

The Faculty of Organization and Management is an entity of the Silesian University of Technology (1935 employed researchers), one of the largest higher education institutions in Poland having long scientific and didactic traditions. It is one of the leading scientific entities located in the region of Upper Silesia. Silesia – home for industry has a significant meaning for the economic and social development of the country. It is also the second most populated region in Poland. The end of the industrial era caused the change in the direction of the development of Upper Silesia to knowledge based economy, particularly the pro-innovative activities. Their activities are focused on enhancing work conditions and ergonomics in health care.

### Institute of Biomechanics, Trauma Center Murnau and Paracelsus Private Medical University Salzburg

The Institute of Biomechanics Murnau is a research institute for orthopaedic disorders. Key activities are biomechanical research, product development, clinical research, training and education, and gait analysis. The research institute is associated to the Trauma Center Murnau, which is known for their expertise in trauma surgery. The research institute is composed of approximately 12 employees, including six research assistants and two orthopedic surgeons. The facility is approximately 500 square meters and includes equipment for static mechanical testing (Zwick), dynamic mechanical testing (Instron), a full machine shop, a preparation room for biological samples, a micro CT scanner (Scanco) and finite element analysis software (Ansys). The primary research focus is mechanical testing and numerical evaluation of the interaction between implants and biological tissues in order to improve osteosynthesis techniques. The institute furthermore supports industrial partners with the clinical evaluation of medical products, including the planning, preparation and conduct of clinical studies. In the past the institute successfully completed Leonardo programs (Orthotraining, Osteoform) for lifelong learning and adult education.

### Sociedad Española de Cirugía Laparoscópica y Robótica

The Spanish Society of Laparoscopic Surgery and Robotic (in Spanish SECLA –Sociedad Española de Cirugía Laparoscópica y Robótica-) was founded in 2000. Its main purpose was to bring together in one organism the different surgical specialties which have in common the use of endoscopic approach as surgical instrument. These specialties include General Surgery, Gastroenterology, Gynecology, Obstetrics, Urology, Pediatric Surgery, Thoracic Surgery, Vascular Surgery, Neurosurgery, and Traumatology, among others.

Contact: Víctor J. Primo  
Instituto de Biomecánica de Valencia  
Universidad Politécnica de Valencia  
Edificio 9C. Camino Vera s/n  
46022 Valencia – Spain  
[www.ibv.org](http://www.ibv.org)  
[victor.primo@ibv.upv.es](mailto:victor.primo@ibv.upv.es)

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



## Project development

The initial meeting of the LAPFORM project took place in Valencia, Spain, on the 18th of October, 2012, organized by IBV.

During these first months of the project partners have been working on the formative needs detection of laparoscopic instruments designers and laparoscopic surgeons (WP1). Activities have been implemented through collaborative work by the teams in each country, and have involved activities of exploration, discussion group, etc., either by using electronic mail or discussion forums.

## this issue

Introduction to LapForm P.1

News P.2

LapForm Partners P.3-4

## Introduction to LapForm

The main objective of LapForm project is the development of the contents and the implementation of an online course to assure surgeons and laparoscopic instruments designers a worthy education and training along their professional career regarding ergonomics applied to laparoscopy, matching product innovation with the needs of laparoscopic surgeons and the latter with their working environment. The e-learning tool resulting from the project will be available online in 4 European languages (English, Spanish, Polish and German) in order to increase acceptance of the course.

The general objective will be achieved through the achievements of the following partial objectives:

- Definition of the formative needs in matter of the target groups across Europe, and definition of VET Training curriculum.
- Development of the formative contents satisfying the needs.

In general, the contents will include knowledge related to ergonomics training and laparoscopic surgery, in order to train Laparoscopic surgeons and Instruments designers.



[www.lapform.eu](http://www.lapform.eu)

## Lifelong Learning Programme

Lifelong Learning Programme (LLP) supports learning opportunities from childhood to old age in every single life situation through different programmes as Comenius, Erasmus, Leonardo da Vinci, Grundtvig, Jean Monnet, and transversal key activities.

## Leonardo da Vinci (sub-programme)

The Leonardo da Vinci programme links policy to practice in the field of vocational education and training (VET). Projects range from those giving individuals the chance to improve their competences, knowledge and skills through a period abroad, to Europe-wide co-operation between training organisations.

Leonardo da Vinci focuses on **vocational education and training**, other than at tertiary level. It addresses both the learning and teaching needs in the sector, and is therefore aimed at all parties involved, namely trainees in vocational education, teachers and trainers, institutions and educational bodies, enterprises, associations, social partners and bodies relating to either lifelong learning or the labour market.



## LapForm project – Kick-off Meeting and first steps

Last 18th of October, the Instituto de Biomecánica de Valencia hosted the kick-off meeting of the LapForm project, with the presence of all the participants: the Minimally Invasive Surgery Centre Jesús Usón, the KOMAG Institute of Mining Technology, the Silesian University of Technology and the Spanish Society of Laparoscopic and Robotic Surgery.

The aim of LapForm project is to create, implement and set the basis for a pan-European exploitation of a new online Vocational Educational Training course in laparoscopy ergonomics applied to product development (instruments and equipment) addressed to design professionals, and posture and workplace-related ergonomics for surgeons.

As a result of the meeting, first steps to follow for detection of formative needs in laparoscopic surgery ergonomics for surgeons and designers of laparoscopic instrumental were defined. The selected method for this purpose was the conduction of focus groups, specific interviews and on-line surveys. This task was performed during the first months of the project with the collaboration of all partners, focusing in the definition of the aforementioned surveys and interviews for the detection of formative needs.

In addition, during these months, a specific LapForm project website was created ([www.lapform.eu](http://www.lapform.eu)). This website have a public and private area. Public area will constitute the main platform for dissemination activities and will contain all public information of the project. Private area will be used as file exchange repository and internal communications tool. Public area is available in all the languages of the project partners.



**Institut für Biomechanik**  
Berufsgenossenschaftliche  
Unfallklinik Murnau



**INSTITUTE OF MINING TECHNOLOGY**



### Instituto de Biomecánica de Valencia (IBV)

Universidad Politécnica de Valencia  
Edificio 9C. Camino Vera s/n  
46022 Valencia – Spain  
e-mail: [ibv@ibv.upv.es](mailto:ibv@ibv.upv.es)  
Website: [www.ibv.org](http://www.ibv.org)

### Minimally Invasive Surgery

#### Centre Jesús Usón

Carretera N-521, km. 41,8. 10071  
CÁCERES (SPAIN)  
e-mail: [ccmi@ccmijesususon.com](mailto:ccmi@ccmijesususon.com)  
website: <http://www.ccmijesususon.com>

### KOMAG Institute of Mining Technology

Pszczyńska 37, 44-101 Gliwice, Poland  
e-mail: [info@komag.eu](mailto:info@komag.eu)  
Website: [www.komag.eu](http://www.komag.eu)

### Silesian University of Technology

Akademicka 2A, 44-100 Gliwice, Poland  
e-mail: [Joanna.Bartnicka@polsl.pl](mailto:Joanna.Bartnicka@polsl.pl)  
Website: [www.polsl.pl](http://www.polsl.pl)

### Institute of Biomechanics, Trauma Center Murnau and Paracelsus Private Medical University Salzburg

Prof.-Kuentzcher-Str. 8  
82418 Murnau  
Germany  
e-mail: [biomechanik@bgu-murnau.de](mailto:biomechanik@bgu-murnau.de)  
website:  
<http://www.bgu-murnau.de/de-DE/medizin/biomechanik/>

### Spanish Society of Laparoscopic and Robotic Surgery.

Plaza de Cristo Rey, nº 4 – 2º derecha.  
Madrid – 28040 (SPAIN)  
e-mail:  
[ramonsalinas@seclaendosurgery.com](mailto:ramonsalinas@seclaendosurgery.com)  
Website: [www.seclaendosurgery.com](http://www.seclaendosurgery.com)