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**WEDNESDAY,
09-04-2013**







17.00-19.00 **Registration at Kurhaus Baden-Baden**
19.00 **Kitchen Party**
Welcome reception at Kurhaus Baden-Baden


**THURSDAY,
09-05-2013**





07.30-08.30	Registration – Visit the Exhibition – Poster Viewing	Bénazetsaal
08.30-09.10	Opening Ceremony of the 25 th Annual Meeting iSMIT	
08.30-08.35	Introduction and official opening Uwe Spetzger, Karlsruhe, Germany	
08.35-08.50	Welcome address from the Technology Region Karlsruhe High Tech meets the Good Life Frank Mentrup, Mayor of Karlsruhe, Germany	
08.50-09.10	Key-note lecture: Science and high-tech region Rhine-Neckar Rüdiger Dillmann, Karlsruhe, Germany	
09.10-10.00	Plenary Session 1 iSMIT 25th Anniversary Session Chairs: Eiji Kanehira, Tokyo / Uwe Spetzger, Karlsruhe	Bénazetsaal
09.10-09.30	Reflections: A historical vignette of SMIT Andreas Melzer, Dundee, UK and Marc Schurr, Tübingen, Germany	
09.30-10.00	“The 25 th SMIT Anniversary Lecture” History and perspective of minimally invasive surgical treatment Richard Satava, Seattle, USA	
10.00-10.30	Coffee Break – Visit the Exhibition – Poster Viewing	
10.30-12.30	Parallel Session 2A Robotics in Medicine Chairs: Richard Satava, Seattle / Rüdiger Dillmann, Karlsruhe	Bénazetsaal
10.30–10.50	Key-note lecture: Robotics in neurosurgery - status quo and perspective Kirsten Schmieder, Bochum, Germany	
10.50-11.10	Key-note lecture: Cognitive robotic system for cognition-guided surgery Heinz Wörn, Karlsruhe, Germany	
11.10-11.25	Virtobot 2.0 – Multifunctional robotic system for medico-legal investigation Wolfgang Ptacek, Wien, Austria	
11.25-11.35	Feasibility studies for robot assisted total knee arthroplasty using a light-weight-robot Tim Beyl, Karlsruhe, Germany	
11.35-11.50	Application of the iSYS1® robotic device for stereotactic neurosurgical interventions: A preclinical phantom trial Gernot Kronreif, Wien, Austria	
11.50-12.00	An automated instrument as component of a cognitive medical robotic system for minimal invasive surgery Jessica Hutzl, Karlsruhe, Germany	
12.00-12.10	Robot for assisting ophthalmic surgery Ali Nasserli, München, Germany	
12.10-12.30	Key-note lecture: A new implant for restoration of accommodation Georg Bretthauer, Karlsruhe, Germany	

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

10.30-12.30	Parallel Session 2B Innovative Spine Treatment Chairs: Joachim Kettenbach, Bern / Jan Warnke, Zwickau	Runder Saal
10.30-10.42	Validation of the characteristics of a new high fidelity lumbar spine surgery simulation system Luis Enrique Bernal Vera, Leipzig, Germany	
10.42-10.54	Precise kinematic reconstruction of a degenerated lumbar disk space using a preoperative software planning tool Marcus Rickert, Frankfurt a. M., Germany	
10.54-11.06	Registration of MR images to percutaneous ultrasound images of the spine for image-guided surgery Lars Erik Bø, Trondheim, Norway	
11.06-11.18	Influence of a new anchorage geometry in pedicle screw loosening – a biomechanical analysis Christian Pilkahn, Bad Wildungen, Germany	
11.18-11.30	Effect of posterior dynamic stabilization topping-off fusion: A biomechanical study Missoum Moumene, Newton, USA	
11.30-11.42	Concept of a robotic assistance system for minimal invasive spine surgery Stephanie Sahn, Siegen, Germany	
11.42-11.54	Distractable titanium cages vs. PEEK cages vs. iliac bone crest for the replacement of cervical vertebral bodies Stefan Alexander König, Karlsruhe, Germany	
11.54-12.06	Osseointegration into a new Ti-coated PEEK implant Roland RiBel, Schwäbisch Gmünd, Germany	
12.06-12.18	Implication of core radius in ball-and-socket implants for cervical total disc replacement Missoum Moumene, Newton, USA	
12.18-12.30	Comparative evaluation of cement augmented fixation Roland RiBel, Schwäbisch Gmünd, Germany	
12.30-13.15	Plenary Session 3 John Abele Lecture Introduction by Uwe Spetzger Invited special lecture: Cerebral Revascularization: Simulations and measurements in the pursuit of perfection Fady Charbel, University of Illinois, Chicago, USA	Bénazetsaal
13.15-14.00	Lunch at the Exhibition	

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

14.00-16.00	Parallel Session 4A Endoscopy in Narrow Spaces Chairs: Nicola di Lorenzo, Rome / Paul Alan Wetter, Miami	Bénazetsaal
14.00-14.20	Brain - The challenge of intraventricular neurosurgery Henry Schröder, Greifswald, Germany	
14.25-14.45	Lung - Endobronchial ultrasound-guided biopsy in pulmonary carcinoma Georg Kähler & Gerald Schmidt-Bindert, Mannheim, Germany	
14.50-15.10	Spine - Endoscopy inside the spinal canal Jan Warnke, Zwickau, Germany	
15.15-15.35	GI - Development and state-of-the-art of capsule endoscopy Nicola di Lorenzo, Rome, Italy	
15.40-16.00	Hip – Techniques of hip joint arthroscopy Wolfgang Miehlke, Pforzheim, Germany	
14.00-16.00	Parallel Session 4B Modern Endovascular Treatment Chair: Daniel Wendt, Essen	Runder Saal
 14.00-14.30	Key-note lecture: Innovations in neuroendovascular technology N.N.	
14.30-14.45	Shapeable catheter for MR-guided endovascular interventions Helene Clogenson, Delft, the Netherlands	
14.45-15.00	An operational comparison of MRI and X-Ray for vascular interventions. Case of study: Task and user experience analysis for iliac angioplasty. Fabiola Fernandez-Gutierrez, Dundee, UK	
15.00-15.15	Stent graft configurator for assisting implant planning in aortic aneurysm repair Sandra von Sachsen, Leipzig, Germany	
15.15-15.30	Thoracic EndoVascular Aortic Repair (TEVAR) in aortic dissection: long-term in vivo configuration of deployed stentgrafts and comparison with nominal dimensions Philipp Hoegen, Heidelberg, Germany	
15.30-15.45	Qualitative assessment of thermal effects in high intensity ultrasound thrombolysis experiments Andrea Cafarelli, Pisa, Italy	
15.45-16.00	Is the future OR a hybrid-OR? Joris Jaspers, Utrecht, the Netherlands	
16.00-16.30	Coffee Break – Visit the Exhibition – Poster Viewing	

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

16.30-17.00	Plenary Session 5 High-performance sports car engine development Invited special lecture Wolfgang Hatz, Porsche AG, Board of Management	Bénazetsaal
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17.00-18.30	Parallel Session 6A Modern Imaging Chairs: Joachim Kettenbach, Bern / Rudolf Fahlbusch, Hannover	Bénazetsaal
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- 17.00-17.30 Key-note lecture: Future of intraoperative MR-imaging
 Rudolf Fahlbusch, Hannover, Germany
- 17.30-17.45 Ultrasound-guided neurosurgery - Results from 15 years of research at the National Competence Centre in ultrasound and image guided therapy, Trondheim Norway
 Toril Nagelhus Hernes, Trondheim, Norway
- 17.45-18.00 CT-guided puncture using an advanced needle guidance system: Ex-vivo experiments
 Joachim Kettenbach, Bern, Switzerland
- 18.00-18.15 Transient 3-D lung imaging by electrical impedance tomography
 Zhanqi Zhao, Furtwangen, Germany
- 18.15-18.30 Development of stereotactic planning software with tractography in cooperation between clinician and industry: Challenges and opportunities
 Donatus Cyron, Karlsruhe, Germany





17.00-18.30	Parallel Session 6B Special Session – Nitinol Chairs: Harald Fischer, Karlsruhe / Daniel Wendt, Essen	Runder Saal
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- 17.00-17.15 Prototype of semi-active nitinol vena cava filter versus non-resonant conventional VCF, TrapEase. A Comparison of MRI Images and RF Induced heating in 1.5 MR-scanner
 Mahsa Fatahi, Dundee, UK
- 17.15-17.30 Active bending mechanism using shape memory alloy wires
 Takumi Kobayashi, Sendai, Japan
- 17.30-17.45 Minimal-invasive resection of calcified aortic valves
 Daniel Wendt, Essen, Germany
- 17.45-18.00 Effects of surface modification on the biocompatibility of nitinol implants
 Markus Wohlschlägel, Pforzheim, Germany
- 18.00-18.15 Surface conditions of nitinol stents - a market review
 Ernst Nennig, Ettlingen, Germany
- 18.15-18.30 Innovative nitinol solutions for minimal invasive surgery
 Bernd Vogel, Stutensee, Germany

- Key-note lecture
- Honorary lecture
- Special lecture
- Sponsor seminar





19.15-19.35 **Departure to Black Forest Night**
 Meeting point for Bus transfer:
 main entrance Kurhaus Baden-Baden


08.00-08.30	Registration – Visit the Exhibition – Poster Viewing	
08.30-09.20	Plenary Session 7 iSMIT 25th Anniversary Session Chairs: Andreas Melzer, Dundee / Marc Schurr, Tübingen	Bénazetsaal
08.30-08.50	Endoluminal surgery in the stomach - history and development Eiji Kanehira, Tokyo, Japan	
08.50-09.20	The past, present and future of minimally invasive therapy in endovascular interventions: a review and speculative outlook Daniel Wendt, Essen, Germany	
09.20-10.00	Plenary Session 7A Special Session – Bone substitution Chairs: Uwe Spetzger, Karlsruhe / Gerhard Schmidmaier, Heidelberg	Bénazetsaal
09.20-09.45	Key-note lecture: Development of bone substitution Gerhard Schmidmaier, Heidelberg, Germany	
09.45-10.00	Small peptide technology as a component of biologic bone grafts: P-15 peptide basic science and technology review James Benedict, Westminster, USA	
10.00-10.30	Coffee Break – Visit the Exhibition – Poster Viewing	
10.30-12.30	Parallel Session 8A Computer-assisted Medicine Chairs: Eiji Kanehira, Tokyo / Beat Müller, Heidelberg	Bénazetsaal
10.30-10.45	Computer-assisted minimally invasive abdominal surgery Beat Müller, Heidelberg, Germany	
10.45-11.00	Towards intraoperative soft-tissue registration with biomechanical models in laparoscopic liver surgery Stefanie Speidel, Karlsruhe, Germany	
11.00-11.15	High resolution mapping of ex-vivo simulated brain shift dynamics – testing a 3D stereo camera technique Robin Krug, Bochum, Germany	
11.15-11.30	Workflow for CBCT-guided robot assisted needle placement Gernot Kronreif, Wien, Austria	
11.30-11.45	Voxel based 3D neuronavigation for anatomical studies: Landmark analysis of the superior sagittal sinus Günther Feigl, Bamberg, Germany	
11.45-12.00	OCT – imaging for delineation of superficial tumors Hans-P. Berlien, Berlin, Germany	
12.00-12.15	3D Ultrasound Computer Tomography at KIT Nicole Rüter, Karlsruhe, Germany	
12.15-12.35	Niti-on Special Seminar Power-controlled robotic technology facilitates the future medicine Noriyuki Inaki, Kanazawa, Japan	Bénazetsaal





-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

NITI-ON
Reduced Port Surgery Division
I'm your new **Quartermaster**
Healthcare R&D Business Division

10.30-12.30	Parallel Session 8B Modelling and Simulation in Medicine – IFAC (invited session) Chairs: Gernot Kronreif, Wien / Balasz Benyó, Budapest	Runder Saal
10.30-10.45	Prediction of bacteraemia in a low-bacteraemia-prevalence cohort using the Treat decision support system Logan Morgan Ward, Aalborg, Denmark	
10.45-11.00	A biphasic pancreas model for the Glucosafe decision support system Mark Lillelund Rousing, Aalborg, Denmark	
11.00-11.15	A new method for computing the derivatives of the mean and amplitude of physiological variables with respect to the parameters of a cardiovascular system model Antoine Pironet, Liège, France	
11.15-11.30	Patient-specific modeling on blood glucose dynamics during liver transplantation József Homlok, Budapest, Hungary	
11.30-11.45	Minimal model prediction of FiO ₂ influence on oxygen content in human blood Jörn Kretschmer, Furtwangen, Germany	
11.45-12.00	Improving the robustness of parameter identification for a model of gas exchange Axel Riedlinger, Furtwangen, Germany	
12.00-12.15	Advanced feeding regime combined with STAR protocol on ICU patients Balázs Benyó, Budapest, Hungary	
12.15-12.30	System identification and transfer function derivation of a new active mechanical lung simulator concept Christian Knöbel, Furtwangen, Germany	
12.35-13.20	Plenary Session 9 John Wickham Lecture Introduction by Uwe Spetzger	Bénazetsaal
	Modern neurosurgical treatment of epilepsy Karl Schaller, University of Geneva, Switzerland	
13.20-14.15	Lunch at the Exhibition	





-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

14.15-16.15	Parallel Session 10A NOTES Chairs: Georg Kähler, Mannheim / Jan Stallkamp, Mannheim	Bénazetsaal
14.15-14.35	NOTES – What remained from the original idea of transgastric surgery? Jürgen Hochberger, Strasbourg, France	
14.35-14.45	Transgastric surgery: Where we are? Richard Magdeburg, Mannheim, Germany	
14.45-15.00	Expectations on NOTES: What can be achieved in 25 years? Georg Kähler, Mannheim, Germany	
15.00-15.15	Technologies for NOTES: What can be implemented in 25 years? Jan Stallkamp, Mannheim, Germany	
15.15-15.30	Application of beta titanium in DraCo®, a new double bendable forceps for single incision endoscopic surgery Eiji Kanehira, Tokyo, Japan	
15.30-15.45	Manual controllability for medical instruments in pathway surgery Chunman Fan, Delft, the Netherlands	
15.45-16.00	Sensor technologies as a key for NOTES Nikolaos Deliolanis, Mannheim, Germany	
16.00-16.15	Snake robotic system N.N. Kings College, London, UK	
14.15-16.15	Parallel Session 10B Smart instruments and technologies Chairs: Toril Nagelhus Hernes, Trondheim / Joris Jaspers, Utrecht	Runder Saal
14.15-14.40	 Key-note lecture: Minibox-surgery at the skull base Jörg Schipper, Düsseldorf, Germany	
14.40-14.55	Crown cutter – The impact of tooth quantity and bevel type on tissue deformation and penetration forces Filip Jelinek, Delft, the Netherlands	
14.55-15.10	Effect of orthovanadate-based nanoparticles on functional activity of Ehrlich carcinoma cancer stem cells Anatolij Goltsev, Kharkov, Ukraine	
15.10-15.25	Mechatronic refilling device for long-term implantable artificial organs Veronica Iacovacci, Pisa, Italy	
15.25-15.40	Can a simple photodiode be used to detect pain Marit van Velzen, Rotterdam, the Netherlands	
15.40-15.55	Integration of a low energy radiation source in MRI environment for intraoperative applications - a feasibility evaluation Michael Friebe, München, Germany	
15.55-16.10	Evaluation of a manually controlled steerable needle Kirsten Henken, Delft, the Netherlands	
16.15-16.45	Coffee Break – Visit the Exhibition – Poster Viewing	

-  Key-note lecture
-  Honorary lecture
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16.45-18.30	Parallel Session 11A Modern Endoscopy Chairs: William Meng, Hong Kong / Liselotte Mettler, Kiel	Bénazetsaal
16.45-17.00	Three-dimensional HD endoscopy – preliminary experiences in neurosurgery with the Einstein Vision® system Nikolai Hopf, Stuttgart, Germany	
17.00-17.15	Preliminary experience with the MOVIX®© trocar holding system in a clinical setting, omitting a pair of hands in laparoscopic procedures Joris Jaspers, Utrecht, the Netherlands	
17.15-17.30	The method for minimising the joint play in the steerable laparoscopic instrument prototype – DragonFlex Filip Jelinek, Delft, the Netherlands	
17.30-17.45	Endoscopically guided Nd:YAG laser therapy of benign stenosis in the upper respiratory tract Anis Almohamad, Berlin, Germany	
17.45-18.00	Evaluation of postoperative liver dysfunction using Octopus® liver retractor system in laparoscopic gastrectomy Masahiro Waseda, Tokyo, Japan	
18.00-18.15	Intraoperative high resolution manometry-guided myotomy for laparoscopic Heller's procedure in achalasic patients: a first preliminary report Luigi Marano, Naples, Italy	
18.15-18.30	Update on endoscopic ectopic pregnancy treatment in gynecology Liselotte Mettler, Kiel, Germany	

16.45-18.15	Parallel Session 11B FUSIMO Meeting Chairs: Calin Tiu, Campina / Arya Nabavi, Kiel	Runder Saal
16.45-17.00	Focused ultrasound in neurosurgery - technique, limitations and potential Arya Nabavi and Ferenc Jolesz, Kiel, Germany and Boston, USA	
17.00-17.15	Feasibility of 4D ultrasound-based motion tracking in FUS therapy of tumors in moving abdominal organs Thomas Langø, SINTEF, Trondheim, Norway	
17.15-17.30	MRI guiding focus ultrasound Andreas Melzer, IMSAT, Dundee, UK	
17.30-17.45	MRgFUS workflow and bottle necks – preliminary results Arjo Loeve, Delft, the Netherlands	
17.45-18.00	The FUSIMO prototype: Patient-specific prediction of focused ultrasound surgery in moving organs Jan Strehlow, Mevis Fraunhofer, Bremen, Germany	
18.00-18.15	Motion prediction during free-breathing for FUS liver therapy Christine Tanner, Computer Vision, Zürich, Switzerland	

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar


	20.00 Reception & GALA Dinner Booking necessary! Co-payment on site: EUR 60,--	Bénazetsaal
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08.00-08.30 Registration – Visit the Exhibition – Poster Viewing

08.30-10.00 Parallel Session 12A Bénazetsaal

Simulation and Training

Chairs: Stefanie Speidel, Karlsruhe / Ron Kikinis, Boston

-  08.30-09.00 Key-note lecture: Medical image computing in the procedure room
Ron Kikinis, Boston, USA
- 09.00-09.15 Realistic organ phantoms for image-guided therapy research, development and training
Anna Rethy, Trondheim, Norway
- 09.15-09.30 Features and skills in a TMJ arthroscopy simulator: a preliminary study
Jose Luis Moyano-Cuevas, Cáceres, Spain
- 09.30-09.45 eLaparo4D: first prototype of a physical training space for videolaparoscopic surgery
Marco Gaudina, Genova, Italy
- 09.45-10.00 Translational research with students - first experiences from a new lecture format in image guided surgeries – innovation creation?
Michael Friebe, München, Germany


08.30-10.00 Parallel Session 12B Runder Saal

Innovations in Ophthalmology

Chairs: Albert Augustin, Karlsruhe / Andreas Melzer, Dundee

- 08.30-08.45 OCRIPLASMIN – A new drug to replace invasive surgery in selected cases
Anat Loewenstein, Tel Aviv, Israel
- 08.45-09.00 FEMTOPHAKO – A new technology to perform cataract surgery – When will it be standard of care?
Gerd Auffarth, Heidelberg, Germany
- 09.00-09.15 Aflibercept, a potent design molecule or just another anti-VEGF drug
Paolo Lanzetta, Udine, Italy
- 09.15-09.30 The value of OCT for non-ophthalmologists
Gisele Soubrane, Paris, France
- 09.30-09.45 Artificial vision using Argus II – what are we able to provide for our patients?
Vera Schmit-Eilenberger, Karlsruhe, Germany
- 09.45-10.00 Discussion with the experts





10.00-10.30 Coffee Break – Visit the Exhibition – Poster Viewing


 10.30-11.15 Plenary Session 13 Bénazetsaal





Gerhard Buess Lecture

Introduction by Uwe Spetzger

From heroic surgery to high tech - the treatment history of hydrocephalus
Alfred Aschoff, Heidelberg, Germany

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

11.15-12.45	Parallel Session 14A Skull Base Surgery Chairs: Fady Charbel, Chicago / Nikolai Hopf, Stuttgart	Bénazetsaal
	11.15-11.30 Advanced radiosurgical targeting in neurosurgery using the CyberKnife® system Nikolai Hopf, Stuttgart, Germany	
	11.30-11.45 Multi-port approaches in minimally-invasive surgery of the otobasis Stefan Hansen, Düsseldorf, Germany	
	11.45-12.00 Evaluation of a 3D voxel based neuronavigation system with perspective image rendering for keyhole approaches to the skull base: An anatomical study Günther Feigl, Bamberg, Germany	
	12.00-12.15 Real-time surface reconstruction and motion tracking for adapting a pre-planned laser incision path in phonomicrosurgery Andreas Schoob, Hannover, Germany	
	12.15-12.25 Toward non-invasive intracranial pressure monitoring: preliminary results from a Phase 2/a clinical trial Mario Ganau, Verona, Italy	
	 12.25-12.45 Key-note lecture: Humanoid robotic technologies in medicine Tamim Asfour, Karlsruhe, Germany	
11.15-12.45	Parallel Session 14B Ozon Treatment Chairs: Harald Fischer, Karlsruhe / Gerd Winkler, Karlsruhe	Runder Saal
	11.15-11.35 Ozone Injections on Back Pain Cakir Ruhi, Istanbul, Turkey	
	11.35-11.55 Penumbra and extracorporeal ozone treatment Gerd Wasser, Neukirchen-Vluyn, Germany	
	11.55-12.15 Treatment of malignant diseases in the central nerve-system with AHIT Cam Horst Kief, Ludwigshafen, Germany	
	12.15-12.35 Ozone therapy and combined PRP applications in pain management and discal disorders Cakir Ruhi, Istanbul, Turkey	
	12.35-12.45 Discussion	

-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

12.45-13.30 EPflex Luncheon Seminar Bénazetsaal

Advanced polymer solutions for MRI safe devices and RF resistant instruments for endoscopy

Bernhard Uihlein, Dettlingen / Andreas Melzer, Dundee



12.45-13.30 HumanTech Luncheon Seminar Runder Saal




The challenge of multiple level spinal instrumentation in patients with osteoporosis

Stefan Krebs, Markgröningen, Germany

Cell Selection Attachment and Activation: their role in Osteosynthesis and Bone Repair.





JJ Benedict, PhD., Westminster, USA




-  Key-note lecture
-  Honorary lecture
-  Special lecture
-  Sponsor seminar

13.30-15.00	Parallel Session 15A Smart Technologies Chairs: Thomas Langø, Trondheim / Martin Storck, Karlsruhe	Bénazetsaal
<ul style="list-style-type: none">  13.30-13.50 Key-note lecture: Evolution of open and endovascular aortic surgery Martin Storck, Karlsruhe, Germany 13.50-14.10 Aortic valvular simulation based on heart's pulsation Nobuhiko Mukai, Tokyo, Japan 14.10-14.20 Tip actuated guidewire for endovascular interventions under MRI guidance Helene Clogenson, Delft, the Netherlands 14.20-14.30 Monitoring the autonomic nervous activity as an indirect marker of the surgeon's intraoperative stress Fumihiko Fujita, Nagasaki, Japan 14.30-14.40 How to slide with low friction against an adhesive film Dimitra Dodou, Delft, the Netherlands  14.40-15.00 Key-note lecture: Modelling and simulation of the human heart for diagnosis and therapy Olaf Dössel, Karlsruhe, Germany 		

13.30-15.05	Parallel Session 15B Free Topics Chairs: Jenny Dankelman, Delft / Christian Pylatiuk, Karlsruhe	Runder Saal
<ul style="list-style-type: none"> 13.30-13.45 Body energy conversion to operate medical devices Christian Pylatiuk, Karlsruhe, Germany 13.45-13.55 Colonic stenting for obstruction Samar al Homoud, Riyadh, Kingdom of Saudi Arabia 13.55-14.05 Creating colorectal anastomosis using bipolar radio-frequency induced tissue fusion Lingxi Zhao, Shanghai, China 14.05-14.15 Development of new needlescopic instruments and initial clinical use in laparoscopic inguinal herniorrhaphy for a child Aya Kamei, Tokyo, Japan 14.15-14.25 Feasibility study of a third generation optical pose tracker for MIS technical skills assessment in the operating room Juan A. Sánchez-Margallo, Cáceres, Spain 14.25-14.35 Presence and safety status system for operating room devices Annetje Guédon, Delft, the Netherlands 14.35-14.45 Evaluation of an ECG and an EDA-sensor for monitoring the body's reaction to stress Celine Wegner, Furtwangen, Germany 14.45-14.55 Preliminary study on human reaction times to visual and tactile stimulation signals Jing Yu, Furtwangen, Germany 14.55-15.05 Validation of a new tip actuated needle steering system Nick van de Berg, Delft, the Netherlands 		

-  Key-note lecture
-  Honorary lecture
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	15.05-15.35 iSMIT Awards 5 attractive monetary prizes will be awarded for outstanding presentations	Bénazetsaal
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15.35-16.00	Closing Remarks	Bénazetsaal
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iSMIT 2013 – 25th Conference of the International Society for medical innovation and technology

September
05-07, 2013

Bénazetsaal

Poster presentations

Effect of simple perfusion tube attached to the rigid endoscope corresponding to the bleeding in waffles

Minoru Ishida, Sapporo, Japan

A preliminary validation of the Xron surgical simulator for robotic surgery

Juan A. Sánchez Margallo, Cáceres, Spain

Surgical management of cervical myelopathy – indications for anterior, posterior or circumferential procedures

Stefan Alexander König, Karlsruhe, Germany

Design goal of pedicle screw-based posterior dynamic stabilization

Missoum Moumene, Newton, USA

Biological effect of extract of cryopreserved piglets' heart fragments upon ischemia and experimental myocardial necrosis

Olena Bogatyrova, Kharkov, Ukraine

Clustering of the reflection property in a panoramic image of a tubular organ

Takuro Ishii, Chiba, Japan

Colloid properties of ultrasound contrast agents

Tereza Krutišová, Brno, Czech Republic

Regional airway obstruction in cystic fibrosis: how about using electrical impedance tomography?

Zhanqi Zhao, Furtwangen, Germany

Balloon remodeling of a pipeline stent

Martin Oselkin, New York, USA

Automated sorting and microscopy of biological model organisms

Christian Pylatiuk, Karlsruhe, Germany

Simple rabbit model for vascular stent studies

Denys Byzov, Kharkov, Ukraine

X-ray simulation allows ERCP-hands-on-training without exposure to radiation

Volker Aurich, Düsseldorf, Germany

Evaluation of ultrasonography-guided reduction of nasal bone fracture with two methods: panoramic and combined view

Akiko Hirata, Tokyo, Japan

Training models for vascular microneurosurgery

Uwe Spetzger, Karlsruhe, Germany

September
05-07, 2013

Bénazetsaal

Poster presentations

Illuminated resonant stent-less aortic valve conduit versus non-resonating aortic valve, comparison of MR-images in 1.5 T scanner

Mahsa Fatahi, Dundee, UK

Prototype of a syringe mixing pump for ultrasound contrast agents application

Marek Orban, Brno, Czech Republic

Telemetric monitoring system of ICP

Till Brombach, Karlsruhe, Germany

Development of gait training equipment and its application for guidance of motion

George Alexandru Negoita, Bucharest, Romania

Biomechanical comparison of rigid vs. compliant constructs in spinal fusion:
A finite element Study

Missoum Moumene, Newton, USA

Comparison of corneal topography and calculated spherical aberration of model corneas measured with Pentacam and Keratron Scout

Wolfgang Brezna, Wien, Austria

Multivariate analysis of craniofacial bone shapes. Principle component and independent component analyses

Emi Okada, Tokyo, Japan

Reducing patients' waiting times during surgical day-care

Linda Wauben, Delft, the Netherlands

Effectiveness of an artificial pancreas with closed loop system to achieve tight glycemic control

Takuji Asano, Tokyo, Japan

Biological effect of extract of cryopreserved newborn piglets' skin fragments in cold injury and when added to fibroblast culture

Olena Bogatyrova, Kharkov, Ukraine

Multivariate analysis of craniofacial bone shapes; three-dimensional database of the craniofacial bone

Akiteru Hayashi, Chiba, Japan

Training for Minimally-Invasive Surgery using Motion Analysis and Kinect

Sebastian Bodenstedt, Karlsruhe, Germany

Automated comparative analysis of blood flow in vessel trees

Enrico Kuhn, Karlsruhe, Germany