The IRDC-Academy & University Hospital of Leipzig present:

LEIPZIG TRAINING COURSE
FOR ENT-SURGERY
with Automatic Assistance Systems (ENT-AAS)

Module FESS & Frontal Skull Base:
20\textsuperscript{st} - 22\textsuperscript{th} January 2011
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ORGANISATION

VENUE
International Reference and Development Centre for Surgical Technology (IRDC)
Kaethe-Kollwitz-Strasse 64
04109 Leipzig, Germany
and
Hörsaal der Kopfkliniken
Liebigstrasse 10-14
04103 Leipzig, Germany
and
Institute of Anatomy
Liebigstrasse 13
04103 Leipzig, Germany

COURSE DIRECTORS:
Ingo Bechmann, MD PhD
Andreas Dietz, MD PhD
Tim Lüth, PhD
Gero Strauss, MD PhD

COURSE COORDINATORS
Dr. Milos Fischer, MD
Dr. Mathias Hofer, MD

COURSE SECRETARY
Mrs. Iris Gollnick, Centre Manager IRDC

CONTACT
Tel.: +49 (0)341 33733160
Fax: +49 (0)341 33733163
E-Mail: i.gollnick@irdc-leipzig.de
Internet: www.irdc-leipzig.de

HOTEL RECOMMENDATION
Hotel Mercure am Johannisplatz ****
Stephanstrasse 6, 04103 Leipzig
Tel.: +49 (0)341/9779-611
E-Mail: h5406@accor.com
www.mercure.com
Single rooms: 99,- EUR
Double rooms: 105,- EUR
Including breakfast
Reservation until December 8th,
Keyword: “IRDC”
IRDC ACADEMY is the training section of the IRDC in partnership with the university hospital at the University of Leipzig. IRDC ACADEMY is specified by the international Board of Surgeons of the IRDC and open to all surgical schools worldwide.

The institution is focussed on teaching surgical procedures according to (A) international SOP’s, (B) exceptional situations, (C) integrated surgical systems, (D) safety and (E) logistic tools as well in (I) lessons, (II) live-surgery and (III) training conditions.

The training courses are designed and adapted with the help of international training facilities from other disciplines, e.g. Lufthansa and Airbus Ind. All courses are defined for a specific trainee level to avoid redundancies in teaching and training:

All participants of IRDC ACADEMY training courses will belong to their individual Surgical Masterclasses. They will pass this class after fulfilling 60 points with an IRDC-certification and life-long membership to the IRDC ACADEMY.

This surgical training can be combined with training at the OR1™ plus-Training Centres worldwide to add principle knowledge of these highly-integrative workplaces and to pass the certification for OR1™ plus Surgical Units.
REGISTRATION FEES

Registration before December 1, 2010  EUR 600
Registration after December 1, 2010  EUR 650

IMPRINT

Editor: International Reference and Development Centre for Surgical Technology (IRDC), Leipzig
Pictures: Mathias Hofer, Media Group, Tuttlingen
Text: Gero Strauss
Design: Media Group, Tuttlingen
Print: Media Group, Tuttlingen
Leipzig Training Courses for Surgery with Automatic Assistance Systems (AAS)

The IRDC training courses are specially designed for continuous surgical training for highly-specialised surgical procedures. With professional partners like the Center for Innovative Surgical Training Technologies (iSTT) a unique training philosophy for surgery is developed and realized in every course. In the following you can find some information about the general concept. For further information please contact the IRDC office.

**GENERAL PURPOSE**
- highest quality in teaching and preparation training
- highest feasibilities for training and education
- highly equipped ENT-ORs
- check-in and check-out tests for classifying our trainees to build inhomogenous groups for maximum learning effect (small group teaching nach S. Kagan)
- Leipzig as the metropolitan hub in the up and coming Central Region of Germany with one of the oldest and largest universities in Europe
- an extraordinary cultural life with different opera houses, orchestras, the famous Leipzig Gewandhausorchester, the Thomanerchor in the city of Bach, international restaurants and many other attractions
- course certification

**SURGICAL FOCUS**
- surgical approaches and varieties presented in Standard Operating Procedures (SOP), Brief Technical Notes (BTN), Exceptional Handling (EXH), Interactive Sessions (IAV)
- presented by international, experienced trainers
- wet- and dry lab with unique automatic recording and analysis of the trainees performances
- prepare, program and use assistance systems

**TECHNICAL FOCUS**
- Instrument navigation
- Distance Control Systems
- Navigated Control (“autopilot”)
- Endoscope manipulators
- Telemanipulators
- Micromanipulators
- Integrated OR
- Logistics
The IRDC-Academy & University Hospital of Leipzig presenting

**LANGUAGE**
- English

**SKILL LEVEL**
- **B, C:*; B-Advanced Trainees (4-7); C-Senior-Surgeons (>7 years experience)**

**IRDC-MASTERCLASS**
- 20 Points Category B/C

**CME-CREDIT**
- certified by the German Ärztekammer

**HEAD**
- Gero Strauss, MD PhD and Andreas Dietz, MD PhD

**INVITED GUESTS AND TRAINERS**
- Dan Fliss, MD PhD (Tel Aviv, Israel)
- Daniel Simmen, MD PhD (Zürich)
- Hans-Jürgen Welkoborsky, MD PhD (Hannover)
- Ingo Bechmann, MD PhD (Leipzig)
- James Zinreich MD PhD (Maryland, USA)
- Joerg Schipper, MD PhD (Düsseldorf)
- Jürgen Meixensberger, MD PhD (Leipzig)
- Konrad Schwager, MD PhD (Fulda)
- Marco Caversaccio, MD PhD (Bern)
- Mohamed Zaki Helal, MD PhD (Cairo, Egypt)
- Tim Lueth PhD (Munich)
- Thomas Lenarz (Hannover)
- Wolfgang Draf, MD PhD (Hannover)

**PARTNER**
- ENT-Dept. University Hospital Leipzig, Institute of Anatomy, University of Leipzig

**COST**
- EUR 600-650

**PARTICIPANTS**
- Maximum of 30
Dear Colleagues and friends,

It is a great pleasure for us to invite you to Leipzig for the annual training course for ENT-surgery with Automatic Assistance Systems (ENT-AAS). This course has a 3-year tradition with more than 120 participants from 9 countries. We are very thankful for the opportunity to teach and train ENT-surgery with the special focus on modern techniques with assistance systems for the OR. The purposes of the ENT-AAS training course are simple: teaching the modern and international ENT-standards, training in standard and unexpected situations and, last but not least, understanding of the medical technology we are using on a daily basis. Navigation, Navigated Instruments, Navigated Control, Endoscope- and instrument manipulators are only some examples of these components.

The course addresses ENT surgeons in the advanced practical training years and experienced operating surgeons. We promise you a professionally organized course with many highlights in a family atmosphere. We are pleased to welcome you in January to the IRDC and the University Hospital at the University of Leipzig.

Enter with us into the ENT surgical cockpit!

Gero Strauss, MD PhD
Head of the Surgical Cockpit-Program
University of Leipzig, Director of the IRDC, Leipzig

Ingo Bechmann, MD PhD
Professor, Head of Dept. of Anatomy
University Munich
University Hospital of Leipzig

Tim Lüth, PhD
Professor, Head of Dept. for Micro-Medical Devices
Technical University Munich

Andreas Dietz, MD PhD
Professor, Head of the Dept. for ENT
University Hospital of Leipzig
**STANDARDS**  
**DAY 1**

**Thursday, January 20**

<table>
<thead>
<tr>
<th>Time</th>
<th>Section</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 09:00  | BTN     | **Welcome & Introduction**  
Aims, focus, evaluation                                             |
| 09:30  | BTN     | Lesson 1.01  
**Anatomical update**  
Landmarks, risk structures, anatomical relationships               |
| 10:00  | SOP     | Lesson 1.02  
**Endoscopic Sinus Surgery**  
A stepwise concept to Who-When-Why and How                          |
| 10:30  | SOP     | Lesson 1.03  
**FESS I**  
Infundibulum and maxillary sinus                                     |
| 11:00  |         | **Coffee break**                                                     |
| 11:30  | SOP     | Lesson 1.04  
**FESS II**  
Anterior ethmoid                                                     |
| 12:00  | SOP     | Lesson 1.05  
**FESS III**  
Frontal Sinusostomy - When Why and How!                             |
| 12:30  | SOP     | Lesson 1.06  
**FESS IV**  
Spheno-ethmoidal complex                                              |
<p>| 13:00  |         | <strong>Lunch</strong>                                                            |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
<th>Moderators</th>
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<tbody>
<tr>
<td>14:00</td>
<td>IAV</td>
<td>Live Session 01&lt;br&gt;Moderated surgery, HD-quality, discussion with the auditorium</td>
<td>Daniel Simmen, Mohamed Zaki Helal, Dan Fliss</td>
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<tr>
<td>16:00</td>
<td></td>
<td>Coffee Break</td>
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</tr>
<tr>
<td>16:30</td>
<td>BTN</td>
<td>Lesson 1.07&lt;br&gt;<strong>HD-videoendoscopy</strong>&lt;br&gt;Videostandards, image and video chain, documentation</td>
<td>Georg Weiß</td>
</tr>
<tr>
<td>17:00</td>
<td>EXH</td>
<td>Lesson 1.08&lt;br&gt;<strong>CSF-leak in transnasal surgery</strong>&lt;br&gt;Reasons, acut and subacut treatment, prevention strategies</td>
<td>Konrad Schwager</td>
</tr>
<tr>
<td>17:30</td>
<td>EXH</td>
<td>Lesson 1.09&lt;br&gt;<strong>Bleeding in transnasal surgery</strong>&lt;br&gt;Reasons, acut and subacut treatment, prevention strategies</td>
<td>Christian Mozet</td>
</tr>
<tr>
<td>18:00</td>
<td>BTN</td>
<td>Lesson 1.10&lt;br&gt;<strong>The Surgical Deck for ENT-NS at the OR1-cranio</strong>&lt;br&gt;Standard instrumentation, powered instruments, surgical cockpit</td>
<td>Gero Strauss</td>
</tr>
<tr>
<td>18:30</td>
<td>IAV</td>
<td><strong>On-site visit Surgical Deck</strong>&lt;br&gt;visit of the IRDC-concept OR’s: Examination Room, Briefimg Room, Surgical Deck</td>
<td>Iris Gollnick</td>
</tr>
<tr>
<td>20:00</td>
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<td><strong>KARL STORZ OR1</strong>&lt;br&gt;featuring PORSCHE Leipzig</td>
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<tr>
<td>Time</td>
<td>Type</td>
<td>Lesson</td>
<td>Topic</td>
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</tr>
<tr>
<td>08:00</td>
<td>BTN</td>
<td>2.01</td>
<td>Anatomical update</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Surgeons view</td>
</tr>
<tr>
<td>08:30</td>
<td>SOP</td>
<td>2.02</td>
<td>Endonasal surgery of the orbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Indications, standards, procedures</td>
</tr>
<tr>
<td>09:00</td>
<td>SOP</td>
<td>2.03</td>
<td>Dacryo-Cysto-Rhinostomy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Indications, techniques, interdisciplinarity, results</td>
</tr>
<tr>
<td>09:30</td>
<td>EXH</td>
<td>2.04</td>
<td>Orbital complications</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Hematoma, injuries of orbital muscles, intraorbital pressure syndrome</td>
</tr>
<tr>
<td>10:00</td>
<td>BTN</td>
<td>2.05</td>
<td>Olfaction in Sinus Surgery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What the nose knows</td>
</tr>
<tr>
<td>10:30</td>
<td>SOP</td>
<td>2.06</td>
<td>Instrument navigation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Indications, efficiency</td>
</tr>
<tr>
<td>11:00</td>
<td></td>
<td></td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:30</td>
<td>IAV</td>
<td>02</td>
<td>Live Session 02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Moderated surgery, HD-quality, discussion with the auditorium</td>
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<tr>
<td>13:00</td>
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<td></td>
<td>Lunch and transfer to anatomy</td>
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Friday, January 21

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<th>Location</th>
<th>Activity</th>
<th>Lecturers</th>
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<tr>
<td>14:00</td>
<td>BTN</td>
<td><strong>Introduction to wet lab</strong>&lt;br&gt;Steps of training, schedule</td>
<td>Mathias Hofer, Werner Korb, Norman Geissler</td>
</tr>
<tr>
<td>14:30</td>
<td>IAV</td>
<td><strong>Wet lab preparation training Part 1</strong></td>
<td>All faculty</td>
</tr>
<tr>
<td>16:00</td>
<td></td>
<td><strong>Coffee break</strong></td>
<td></td>
</tr>
<tr>
<td>16:30</td>
<td>IAV</td>
<td><strong>Wet lab preparation training Part 2</strong></td>
<td>All faculty</td>
</tr>
<tr>
<td>18:00</td>
<td>IAV</td>
<td><strong>Evaluation preparation training</strong>&lt;br&gt;Reports of the experts, discussion, aims of the next day</td>
<td>All faculty</td>
</tr>
<tr>
<td>20:00</td>
<td></td>
<td><strong>Course dinner</strong></td>
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## Saturday, January 22

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<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
<th>Speaker</th>
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<tr>
<td>08:00</td>
<td>BTN</td>
<td>Lesson 3.01 Current aspects in imaging anatomy for frontal skull base and FESS</td>
<td>James Zinreich</td>
</tr>
<tr>
<td>08:30</td>
<td>SOP</td>
<td>Lesson 3.02 Anterior skull base surgery for malignomas</td>
<td>Omid Majdani</td>
</tr>
<tr>
<td>09:00</td>
<td>SOP</td>
<td>Lesson 3.03 Skull base surgery in children</td>
<td>Dan Fliss</td>
</tr>
<tr>
<td>09:30</td>
<td>SOP</td>
<td>Lesson 3.04 Endoscopic transnasal rhino-neurosurgery</td>
<td>Joerg Schipper</td>
</tr>
<tr>
<td>10:00</td>
<td>SOP</td>
<td>Lesson 3.05 Transnasal pituitary surgery microscopic and endoscopic approaches</td>
<td>Juergen Meixensberger</td>
</tr>
<tr>
<td>10:30</td>
<td>BTN</td>
<td>Lesson 3.06 Surgical Assistant Systems for transnasal surgery Registration, accuracy, modern applications</td>
<td>Tim Lüth</td>
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11:00 Coffee break
## Saturday, January 22

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<th>Event Description</th>
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<tr>
<td>11:30</td>
<td>IAV</td>
<td><strong>Wet lab preparation training</strong>&lt;br&gt;Part 3</td>
</tr>
<tr>
<td>13:00</td>
<td></td>
<td><strong>Lunch</strong></td>
</tr>
<tr>
<td>14:00</td>
<td>BTN</td>
<td><strong>Evaluation preparation training, course certification</strong>&lt;br&gt;Reports of the experts, discussion, aims of the next day</td>
</tr>
<tr>
<td>14:30</td>
<td>IAV</td>
<td><strong>Wet lab preparation training</strong>&lt;br&gt;Part 4</td>
</tr>
<tr>
<td>15:00</td>
<td>IAV</td>
<td><strong>Visit to the IRDC, University hospital and ICCAS (in parallel)</strong>&lt;br&gt;Hands-on: ressource planning, documentation, patient ticket, instrument management, operation report, surgical PACS</td>
</tr>
<tr>
<td>16:00</td>
<td></td>
<td><strong>Certificates and Farewell apero</strong></td>
</tr>
</tbody>
</table>
Ingo Bechmann, MD PhD
Head of Institute of Anatomy, University Hospital of Leipzig

Since November 2009 Prof. Dr. Bechmann has been Director of the Institute of Anatomy, University Hospital of Leipzig. He studied human medicine in Frankfurt/Main, Berlin and at Yale. In 1999 he received his doctoral degree and habilitated 2001 at Charité. He received an AiP-stipendiary in 1998/1999 in the Dept. of Neurology of the Charité (Prof. Einhäupl), 2000 - 2002 stipendiary for state doctorate in the Dept. of Neurobiology of the Charité (Prof. Nietsch). Between 2004 and 2006 he was operating as C3 Professor for Anatomy at Charité and 2006 - 2009 as W3-Professor for Anatomy in Frankfurt. His field of research is neuro-immunology, immune tolerance as well as the development of human pathology models.

Marco Caversaccio, MD PhD
Inselspital, Department of ENT, Head and Neck Surgery, Bern, Switzerland

Professor Marco Caversaccio is Head of the University Hospital of ENT at Bern in Switzerland. His clinical focus is wide open with special interest in technical assistance systems, e.g. navigation. He has organised the International Bernese Training Course for Sinus Surgery (PSSB) for years. His Department is composed of multiple, highly specialized units such as Otology, Audiology, Otoneurology, Rhinology, Oncology, Laryngology, Phoniatrics. Prof. Caversaccio holds several memberships e.g. Swiss Society of Oto-Rhino-Laryngology, Head and Neck Surgery, German Society of Oto-Rhino-Laryngology, Head and Neck Surgery, German Society for Computer and roboterassisstierte Surgery (CURAC), International Society for Computer Aided Surgery (ISCAS). In February 2008 he received the CO-ME award for Excellence in Computer Aided Surgery around the Head in Leipzig.

Andreas Dietz, MD PhD
Head of ENT Department University hospital of Leipzig

Since April 2004 Prof. Dr. Dietz has been director of the ENT Department, University hospital of Leipzig. During the time he was assistant doctor and deputy he worked at the ENT Department University Hospital of Heidelberg. In the context of numerous studies his scientific work concentrated on gathering exogenic and endogenous risk circumstances for the appearance of head and neck tumours. Since 2001 Prof. Dietz has been member of the executive board of the working committee Oncology of the German Society for otorhinolaryngology, head and neck surgery. He is active in numerous committees, such as the German Society of Cancer and is executive board member of the Innovation Center for Computer Assisted Surgery (ICCAS) Leipzig.

Wolfgang Draf, MD PhD
Department of Ear, Nose and Throat Diseases, Head and Neck Surgery International Neuroscience Institute at the University of Magdeburg (INi)

Prof. Dr. hc Wolfgang Draf HNO attained international recognition as Director of the Clinic for Ear, Nose and Throat Diseases, Head and Neck and Facial Plastic Surgery, Fulda Hospital. Since 2006 he has been Director of the Clinic for Ear, Nose and Throat Diseases, Head, Neck and Facial Plastic Surgery of the International Neuroscience Institute in Hanover. He is also a member and honorary member of numerous scientific societies, and Invited Lecturer of the Royal Society of Medicine in London and Visiting Professor at Birmingham, Liverpool, Scotland and Dublin. Mohamed Zaki Mohamed Helal
Dan M. Fliss, MD PhD  
Department of Otolaryngology Head and Neck Surgery Dept. Tel Aviv Sourasky Medical Center

Professor Dan M. Fliss is a specialist in Otolaryngology, Head and Neck Surgery. He is Chairman of the Department of Otolaryngology Head and Neck Surgery Dept. Tel Aviv Sourasky Medical Center and the Faculty of Medicine Tel Aviv University. Prof. Fliss is a scientific Staff Member, Department of Otolaryngology Head and Neck Surgery, Mount Sinai Hospital, Toronto Ontario, and The University of Toronto, Canada and Professor of Otolaryngology Head and Neck Surgery The Faculty of Health Sciences Ben Gurion University, Beer – Sheva, Israel (1996). He holds several fellowships such as Head and Neck Surgical Oncology, Mount Sinai Hospital, University of Toronto, Microvascular Head and Neck Surgery and Reconstruction, Sunnybrook Health Science Center, University of Toronto and Skull Base Surgery, Department of Maxillofacial Surgery, Plastic and Reconstructive Surgery, Inselspital, University of Bern, Switzerland. Prof. Fliss is an invited guest lecturer in various countries in Europa and Oversea. He is author of 150 clinical and scientific articles.

Thomas Lenarz, MD PhD, Professor and Chairman  
Dept. of Otolaryngology, Medical University of Hannover

Professor Lenarz is senior surgeon for ENT-surgery and one of the most famous surgical trainers in his field worldwide. His department runs the world’s largest cochlear implant programme with more than 3,000 patients implanted since 1984. Other fields of clinical interest are skull base surgery including intraoperative monitoring and neuronavigation. Professor Lenarz holds memberships in national/international societies of otolaryngology, audiology and skull base surgery. More than 200 publications in national and international journals have been released. Scientific emphasis: Cochlear implants, Implantable hearing aids, Neonatal hearing screening, intraoperative monitoring in skull base procedures, Otology and skull base surgery.

Tim Lueth, Ordinarius Prof. Dr.  
Technical University of Munich, Institute for Micro Technology and Medical Device Technology (MiMEd)

Tim Christian Lueth, full professor, was born in Hamburg, West Germany, in November, 30, 1965. Since 2005 he has been director of the Institute for Micro Technology and Medical Device Technology (MiMED) at the Technical University of Munich, Germany. From 2001 to 2005 he was full professor for Clinical Navigation and Robotics at the Charité, Medical School of the Humboldt-University and co-director of the Clinic for Craniofacial and Maxillofacial Surgery in Berlin. In combination of functions he was Director of the Medical Device Department for Production Systems and Design Technology at the Fraunhofer-Institute (IPK) in Berlin. In 2006 Dr. Lueth received an appointment as full professor (status only) at the University of Toronto, Canada, Department of Medical Imaging. Dr. Lueth received a Dipl.-Ing. Degree (M.S.) in Electrical Engineering at the Technical University Darmstadt in 1989, his Ph.D. in Robotics at the University Karlsruhe in 1993 and the State doctorate (Habilitation, Priv. Doz.) for Computer Science at the University Karlsruhe in 1997.

Jürgen Meixensberger, MD PhD  
University Hospital, Department of Neurosurgery, Leipzig

Prof. Meixensberger has been director of the Department for Neurosurgery at the University Hospital in Leipzig since 2001 and Director of the Board, Innovation Center Computer-assisted Surgery (ICCAS) since 2004.
**Profile of Trainers & Experts**

**Joerg Schipper, MD PhD**
University Hospital, Department of Oto-Rhino-Laryngology, Duesseldorf

Professor Schipper is Head of the Department for ENT at the University Hospital Duesseldorf. He has lectured in the field of computer-assisted surgery for many years. Joerg Schipper is the President of the German Society for Computer Assisted Surgery (CUR AC). His Department encompasses the diagnosis, the conservative and surgical treatment, as well as the prevention and rehabilitation of all diseases of the ear and the vestibular organ, the nose, the paranasal sinuses, the throat and the larynx, the salivary glands, the lymphatic system of the head and neck, the upper aero-digestive tract, and the cranial nerves of the head and neck. The focus of experimental research is based on head and neck oncology. Particularly, tumor immunology, development of immunological approaches against head and neck cancer and the characterization as well as inhibition of tumour cell metastasis.

**Konrad Schwager, MD PhD**
Fulda Hospital for Ear, Nose and Throat Diseases

Professor Konrad Schwager is Director of the Department of Otorhinolaryngology, Head and Neck Surgery at the Klinikum Fulda. He is Executive Director of the Skull Base Center at the Fulda hospital. He has a wide expertise regarding the surgery of the anterior and lateral skull base. He received his experience in middle ear and skull base surgery at the Department of Otorhinolaryngology and the Kopfklinik at Würzburg from his academic and surgical teacher Professor Jan Helms. His major interest is surgery of the temporal bone and surgery of the inner ear canal (acoustic neuroma), mainly in focus as an interdisciplinary approach with neurosurgery.

**Daniel B. Simmen, MD**
Center of Rhinology, Skull Base Surgery and Facial Plastic Surgery
ORL-Zentrum, Klinik Hirslanden

Professor Simmen is a consultant in ORL – Head and Neck Surgery at the Hirslanden Clinic and Centre for Rhinology and Facial Plastic Surgery in Zürich Switzerland. Professor Simmen has been innovative in the field of rhinology, especially in endonasal – endoscopic sinus and skull base surgery as well as facial plastic and reconstructive surgery. He has organized and is running many instructional hands on courses in Zürich and throughout the world. He has published a leading textbook on endoscopic sinus surgery (Thieme – Manual on Endoscopic Sinus Surgery and Extended Applications) and many book chapters and papers in the field of his expertise.

**Gero Strauss, MD PhD**
University Hospital of Leipzig, Dept. of ENT, Director IRDC

Gero Strauss is a specialist for ENT surgery and primarily specialized in otology, paranasal sinuses and skull base surgery. Since 1998 he has been Deputy Director of the Department of Ear, Nose and Throat Surgery at the University of Leipzig. His scientific work focuses on modern assistant systems in the operating theatre. He is Executive Board Member of the Innovation Center for Computer Assisted Surgery (ICCAS) of the medical department of the University Hospital Leipzig and Director of the International Reference and Development Centre (IRDC) Leipzig. For several years Dr. Strauss has organized training courses for ENT surgery and is guest speaker at numerous international events.
Hans-Jürgen Welkoborsky, MD DDS PhD
Head of ENT-Department, Clinical centre Region Hannover Krankenhaus Nordstadt

Prof. Dr. Welkoborsky habilitated in 1995 for the discipline of ENT at the Johannes Gutenberg University Mainz. Since 1997 Prof. Dr. Welkoborsky has been director of the ENT Department of the clinical centre Hannover. Between 1995 and 2007 he reached several qualifications such as plastic surgery, specialized ENT-Surgery, allergology, environmental medicine and somnology. In 2001 he was nominated to the extraordinary professor by the minister for scientific affairs and research of the federal state Rheinland-Pfalz. He has been president of the North-German Society for otorhinolaryngology and cervicofacial surgery. Among others Prof. Welkoborsky is member of the German Society of ORL and Head and Neck Surgery, the European Skullbase Society, European Laryngological Society, American Academy of Otolaryngology, Head and Neck Surgery, and American Head and Neck Society.

Mohamed Zaki Mohamed Helal
Department of Faculty of Medicine, Ain Shams University, Cairo, Egypt

Professor Helal holds employments at the Department of Faculty of Medicine, Ain Shams University, he is head of the Rhinology Group, ORL Department, Ain Shams University and director of Ain Shams University Endoscopic Sinonasal Surgery Courses; basic and advanced. He is qualified with the Doctor Degree (M.D. Degree) in Surgery of Ear, Nose and Throat, Ain Shams University in collaboration with university of Tubingen in Germany., Master Degree (M.S. Degree) in Surgery of Ear, Nose and Throat and M.B., B. Ch. (Bachelor of medicine and surgery). He is member of various societies such as the Egyptian ORL Society, the Egyptian Rhinology Society, the International Rhinology Society or the Egyptian Society of ENT and Allied Sciences. Professor Helal has published more than 50 articles in the field of Endoscopic Sinonasal and Skull Base Surgery.

James Zinreich, MD PhD
Johns Hopkins Medical Institution Division of Neuroradiology, Baltimore, USA

Dr. S. James Zinreich serves as a professor of Radiology and Otolaryngology, Head and Neck Surgery at the Johns Hopkins Medical Institution. He received his B.S. at the University of Maryland, College Park and graduated cum laude from the University of Brussels, Belgium with an M.D. Dr. Zinreich was an intern at Union Memorial Hospital and completed his residency in radiology at Sinai Hospital, Baltimore. He completed his fellowship in Neuroradiology at the Johns Hopkins Medical Institutions and is currently the director of Head and Neck Imaging at JHMI.

Dr. Zinreich’s expertise spans the full gamut of neuroradiology techniques and disciplines with a special interest in head and neck imaging. He has authored over 100 manuscripts and co-authored 2 books. His particular affinity and known expertise is in the imaging of the nasal cavity and paranasal sinuses. He is one of the first physicians to work with 3D imaging in neuroradiology and has made significant contributions to the field of image guided surgery. Dr. Zinreich is a member of the editorial board on a variety of radiology and otolaryngology/ head and neck surgery journals, and is also a consultant and advisor to several instrumentation and pharmaceutical companies.
The International Reference and Development Centre for Surgical Technology (IRDC) in Leipzig is a development, research and training center for surgical technologies. At this facility, experienced surgeons perform procedures in a cutting-edge environment, and visiting physicians are trained in forward-looking technologies. The KARL STORZ comprehensive concept for a specialty OR links the operating room to the entire logistical process from patient check-in to follow-up and discharge to the primary care physician.

In a facility affiliated with a medical center, minimally invasive procedures are performed in ENT, orthopedics, pediatric surgery, neurosurgery and urology using two OR1™ operating rooms with novel cockpit design and modern equipment arrangement. Under real-life conditions, the IRDC demonstrates the potential associated with harmonizing newest generation medical devices.

The numerous applications of the KARL STORZ comprehensive concept for a specialty OR as well as the surgical cockpit require special training. Housed in a building larger than 800 square meters, the IRDC provides everything needed for surgical training classes, development workshops and teleconferences. The high-technology centre expects more than 300 experts from all over the world to visit every year. The surgeon-to-surgeon training model guarantees the exchange of experience among experts.
Leipzig is well-known for its industrial fair, the Leipziger Messe. In fact, the first trade exposition was held in 1190, making Leipzig one of the world’s oldest fair towns. It is also a cultural hub thanks to German composers Johann Sebastian Bach and Felix Mendelson Bartholdy who worked in the Saxon city.

In 1989 Leipzig Eastern German civil opposition started the so-called Monday Demonstrations, which became a public symbol of criticism of the political system and ultimately led to the collapse of the German Democratic Republic and the reunification of Germany. Today the city of 508,000 inhabitants is still famous as a trade fair town, as the site of Germany’s second oldest universities, and as one of the country’s greenest towns – approximately 50% of its is are covered by parks, gardens or woods. The Leipzig University celebrates its 600th anniversary in 2009. One can visit many historic and very modern sites of this excellent scientific place.

For more information on Leipzig, please visit the official pages of the town: hyperlink “http://www.leipzig.de/int/en/”
To carry out an event such as the Surgical Cockpit Training Course would not be possible without the support and contributions by the companies and organizations presented in the following listing. Their help is highly appreciated.

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