Our Philosophy – Sharing expertise

Under the roof of B. Braun Melsungen AG, Aesculap is the competent partner for surgery and, with about 9,000 employees worldwide, the second largest division of the B. Braun Group. The Aesculap brand has been standing for quality and reliability for more than 140 years. The Aesculap division focuses on products and services for all core processes in surgery, from opening through intervention to wound closure and sterile supplies processing – all from a single source.

As one of the world-leading corporations in the healthcare market, we are charged with special responsibilities: responsibility for the optimal provision for patients and for all the people helping these patients. “Sharing Expertise” represents our promise to our customers, and what we have practiced successfully in many cases: to convince by our knowledge about products and therapies, procedures and processes.
**Introduction**

Aesculap Orthopaedics is one of the fastest growing Strategic Business Areas of Aesculap. Our products and services represent the highest level of quality and most actual product portfolio in the orthopaedic field. Especially the service which primarily includes professional education and hands-on training for surgeons and nurses sets a high standard.

Aesculap together with the Aesculap Academy is offering a variety of medical and scientific programs in order to improve standards in healthcare.

We understand professional training as an integrative part of our products and are aware that health care professionals are facing increasing demands for advanced technologies in orthopaedics surgery from their patients.

In the light of the diversity of demands, we offer specific concepts: from observerships to Expert Courses, from more general orthopaedics topics to very specific, highly discussed and of burning actuality.

**Expert courses will not only incorporate theoretical lectures about current topics presented by orthopaedics specialists, but will also provide intensive hands-on trainings under the guidance of experienced surgeons.**

Enjoy and discover the spirit of our educational courses!

Prof. Dr. med. Hans-Peter Knaebel

Hans-Peter Welsch

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**Preamble**

The Aesculap medical education courses are enjoying high acceptance in the market.

For more than 10 years clinicians are sharing their expertises with the orthopaedic community. At Aesculap we emphasize on increasing the knowledge about the products hence for the patient’s benefit. This includes hands-on workshops in anatomical institutes and sawbone laboratories for the correct handling of Aesculap products and also round-table discussions with highly respected and experienced international faculty.

All lectures and hands-on sessions are held in the scientific environment of our Aesculap Academy locations and in cooperating anatomical institutes.

The official language of all Aesculap Expert Training Courses is English, if not otherwise mentioned.
Knee Expert Training Navigation

"Orthopaedic surgery is in the midst of change. Patients are demanding certain procedures such as minimally invasive surgery, while surgeons are looking for the latest technology to accommodate this demand. Computer Assisted Orthopaedic Surgery (CAOS) is the key technology in this changing environment. CAOS systems can improve surgical precision and reduce surgical morbidity and therefore also enhance new techniques like minimally invasive procedures. Proper product training and knowledge are the keys to use navigation technology at the highest level of care and precision. Successful training sessions not only incorporate theoretical lectures but also provide intensive hands-on parts under the guidance of navigation experienced surgeons. The training course is held in the scientific environment of the Anatomical Institute of Vienna. ..."

Chairmen 2010:
Frank Lampe, MD  |  Prof. Franz Maurer  |  Tim Vaughan-Lane, MD
Reinhard von Bremen-Kühne, MD

Since eight years the Aesculap Knee Expert Training Courses are well known as a proven platform to enhance surgeons knowledge covering all topics around navigation in knee arthroplasty.

These courses provide medical professionals with the theoretical and practical knowledge they require to get the most of benefit from our excellent implant systems and our OrthoPilot Navigation System.

Interested surgeons are most welcomed to our Knee Expert Training Navigation to enlarge and share their knowledge with international attendees and the experienced faculty.

Topics

Scientific program

- Role and principles of Navigation in TKA
- Important anatomical landmarks
- Surgical procedure in TKA
- Tips & Tricks for navigation
- Soft tissue management for a balanced knee
- Case simulation
- Role of navigation in MIS surgery and TKR

Workshop

- 3 hands-on workshops sessions in anatomy laboratory
- 6 workshop stations
- OrthoPilot navigation of e.motion & Columbus knee implants

General information

- 30 participants
- Course language: English
- International faculty
- Venue: Anatomical Institute, Vienna
- 2 days program
**Knee Expert Training Revision**

“In our daily practice, we can see an increasing number of patients who are in need of a Total Knee Revision Arthroplasty. The reasons are multiples, but amongst them are the improper alignment of the implants and the poor management of the surrounding soft tissues unfortunately still important ones.

We shall be conscious that a revision is in general the last opportunity for our patients to return to their usual life style. Important is therefore that we target a long-lasting or even a life time solution for them.

Navigation in Total Knee Revision Arthroplasty, bases on available anatomical landmarks and per-operative kinematical analyses, provides the surgeon valuable information about the individualized proper alignment of the components and of the gaps situation for an adequate soft tissue management. With it your decision making process is coherent and your goals can be reached precisely.

If you are already familiar with Navigation for primary knee implantation, you might strive to benefit from in case of revision as well. You will notice that for demanding revision cases it is an even more helpful and valuable tool to achieve the planned results...”

Chairmen 2010:
Frank Lampe, MD | Prof. Rolf Miehlke

Aesculap is committed to improve patient outcomes through medical education. Therefore we are offering a range of educational support programmes, such as the Expert Training Course for Knee Revision Arthroplasty.

This course is an ideal platform for surgeons to share experience and knowledge about this challenging surgical procedure. It is covering different aspects around revision surgery, such as surgical procedure, knee revision implant systems of different kind and the supporting navigation technology.

**Topics**

**Scientific program**
- Reasons and diagnosis of Total Knee Revision
- Mechanical failures
- Infections / Allergy
- Pre-OP planning of revision surgery
- Surgical procedure of Total Knee Revision
- Role of Navigation in Total Knee Revision
- Reconstruction of bone defects
- How to achieve stability in Total Knee Revision

**Workshop**
- 3 hands-on workshop sessions in anatomy laboratory
- 3 workshop stations
- OrthoPilot navigation with e.motion, Columbus Revision and EnduRo hinged knee

**General information**
- maximal 15 participants
- Course language: English
- International faculty
- 2 days program
Hip Expert Training – Minimally Invasive Hip Arthroplasty

“The Hip Arthroplasty is defining a new state of implants along with changing the anchorage philosophy of stems. Today’s patients are getting younger that leads to more demanding procedures in surgery but also in implants. The design of the METHA Short Hip Stem is based on a methaphyseal anchoring concept, that provides with his modularity an optimal reconstruction of the hip of most of your patients. Together with B. Braun Aesculap AG Tuttlingen we have set up an outstanding scientific program representing the most interesting topics around Minimally Invasive Hip Surgery. The program includes lectures about bone preserving strategies, short stem philosophy, possibilities for minimal invasive approaches and navigation.

In the practical part there will be sufficient time for surgical training of the different approaches. Intensive case discussion is also one of the important and essential aspects of this course.

We are sure this course will highlight the topics of Minimally Invasive Hip Surgery and we trust you will enjoy this training…”

Chairmen, 2010:
Prof. Klaus-Dieter Heller | Prof. Henning Windhagen

For already more than three years the Hip Expert Training is a reliable platform to share experiences and knowledge about specific aspects of hip surgery. This compact one day training course offers know-how transfer from experienced surgeons in minimally invasive hip surgery to the participants. It is treating all aspects of short stems, independently from the approach.

A combination of theoretical lessons with practical workshop sessions on cadavers assures the success and a good learning experience.

Topics

Scientific program
- Short stem philosophy
- Bone preserving strategies
- Different approaches
- Metha: indications & surgical procedure
- Tips & Tricks
- Role of navigation in THA
- Clinical experiences with Metha
- Case discussion

Workshop
- 2 intensive hands-on workshop sessions in the anatomical laboratory
- 3 workshop stations
- Demonstration of navigated Metha implantation on model

General information
- 15 participants
- Course language: English
- International faculty
- compact 1 day program
The first Direct Anterior Approach hip surgery has been performed in 1947 by Robert Judet. The years ago, minimal invasive hip surgery has entered the global scene. The Direct Anterior Approach has gained increasing interest and several advances have been made to simplify and optimize this really minimal invasive approach.

Total hip replacement with standard stems through this approach can be challenging without any adapted instruments and traction table. Short stems are going to establish an additional implant choice with promising mid-term results. The geometry of these stems facilitates the DAA.

Together with B. Braun Aesculap AG we have set up this comprehensive course program encompassing the most important topics and skills to perform the DAA...

Chairmen, 2010:
Prof. Christoph Eingartner

The Hip Expert Course – Direct Anterior Approach is a new highlight in the Aesculap range of surgeons training.

It is dedicated to surgeons, who are interested to get an in-depth view on this – certainly challenging – approach technique.

Surgeons are going to be trained by an experienced faculty within the professional environment of an anatomy institute.

**Topics**

**Scientific program**

- DAA for bone & soft tissue preserving strategies
- Scientific overview of the DAA
- DAA for Short Stems – Pro’s & Con’s
- Surgical technique “step by step”
- Tips & Tricks
- Limitations of the anterior surgical technique
- Biomechanical Pro’s & Con’s
- Learning curve with DAA
- Indications for DAA
- Benefits of DAA
- Case discussion

**Workshop**

- 2 intensive hands-on workshop sessions in anatomical laboratory
- 3 workshop stations
- Use of Aesculap Metha short stem

**General information**

- 15 participants
- Course language: English
- International faculty
- compact 1 day program
“... Patients are demanding certain procedures such as minimally invasive surgery, while surgeons are looking for the latest technology to accommodate this demand. Computer Assisted Orthopaedic Surgery (CAOS) is the key technology in this changing environment. CAOS systems can improve surgical precision and reduce surgical morbidity and therefore also enhance new techniques like minimally invasive procedures.

Proper product training and knowledge are the key to use navigation technology on a high level. Training sessions under the guidance of navigation experienced surgeons will assure the highest level of care and precision during the patient treatment...”

Chairmen, 2010:
Prof. Christoph Eingartner | Prof. Djordje Lazovic

Since years the Aesculap Hip Expert Trainings are a proven platform which combines theoretical product training with intensive hands-on parts guided by an experienced international faculty.

All courses are held in the scientific environment of medical universities.

Interested surgeons are welcome to share and increase their knowledge in the field of hip navigation and learn more about this successful tool which is supporting the precision and therefore the long-lasting outcome of a THA procedure.

**Topics**

**Scientific program**
- Computer assisted surgery in THA
- Surgical procedure THA cup
- Approaches & surgical techniques in hip surgery
- Bone preserving strategies
- Biomechanical principles of short stems
- Straight & short stem planning exercise on X-rays considering navigation
- Surgical procedure THAplus straight & short stem navigation
- OrthoPilot HipSuite options for navigation
- Clinical experience
- Case discussion

**Workshop**
- 1 hands-on workshop of THA Cup on model
- 2 hands-on workshop sessions in the anatomical laboratory
- 3 workshop stations
- Use of Aesculap implant systems for cup, straight & short hip stem

**General information**
- 15 participants
- Course language: English
- International faculty
- 1½ days program
Navigation Learning Centre

The idea of the Navigation Learning Centre is to offer a training concept tailored for specific group of surgeons. This “custom made” course offers an intensive training in navigated joint reconstruction using the Aesculap OrthoPilot navigation system. Know how transfer is assured by a combination of theoretical lectures and sessions in an anatomical cadaver lab workshop, guided by an experienced international faculty. The program of this 1 ½ day training course can be adapted to the needs and interest of the attendees. The course language is the mother tongue of the participants.

Topics
Scientific program
- according to the needs of the participants

Workshop
- 2 hands-on workshop sessions in anatomical laboratory
- 3 workshop stations
- Use of Aesculap hip or knee implant systems with OrthoPilot navigation

General information
- max. 15 participants
- Course language: country specific
- National and / or International faculty
- 1 ½ days program
Clinical Observation Visit

This arrangement does provide the opportunity to meet an expert orthopedic consultant, directly at his hospital.

Our program is intended to address the needs of international visiting surgeons who want to start or gain experience with our products and instruments very much related to its underlying specific surgical workflow, technology and technique.

Our collaborating host clinics will allow for visiting the OR for the observation of surgeries and case discussion.

The visitor will get an insight view, particularly into the product, the surgical technique and the general case treatment options.

Usually clinical observation schedules will be organized for one to five visiting days at one or more clinical sites of interests for Joint Arthroplasty, Minimal Invasive Orthopaedic Surgery (MIOS) and Computer Navigation (CAS).

Our local B. Braun subsidiary in your country or its sales representative would be pleased to receive your inquiry for a visit.

Accordingly, we will make arrangements for an efficient visit schedule that meets at best your clinical interests and requirements.

Preferred language for this program is English to optimize the knowledge exchange.

B. Braun Aesculap will provide accompanying staff attendance during these visits for the introduction of the guest surgeon at our collaborating hospital.

Visit at Aesculap headquarters in Tuttlingen/Germany could complement the training with product specific information and factory tour, if desired.

Scholarship

Our 1-3 months period scholarship program has been designed for knowledge transfer and surgical skill training from “expert to expert” for those surgeons who demand in more detail training on specific topics in orthopaedic reconstruction, advanced surgical techniques and technologies.

Our program provides three central educational elements:

- Clinical Training
- Bio-skill Training combined with Academic Lectures
- Aesculap Academy Visit

special topics of interests:

- Bone Preserving Hip Arthroplasty with Short Stem Metha
- MIOS Hip Arthroplasty
- MIOS Knee Arthroplasty
- Hip & Knee Arthroplasty
- OrthoPilot Computer Navigation in Adult Reconstruction

Clinical Training

will be tailored and customized according to the needs of the attending guest surgeon. It will comprise scrub in privilege, attendance on clinical case discussion and radiology meeting for the specific topics of interests.

Bio-skill Training

will provide an optional surgical skill training at an Arthroplasty Expert Training depending on given course availability during the attachment period.

Aesculap Site Visit

Visit at Aesculap headquarters including Academy in Tuttlingen/Germany will fully complement the training with product specific information and factory tour.
The Hanover Medical School Department of Orthopaedic Surgery Fellowship in Orthopaedic Short Stem Hip Research is a 6-month fellowship. It aims at orthopaedic residents, research faculty or orthopaedic surgeons with standard orthopaedic surgical skills, who want to specialize in hip adult reconstruction.

Time is spent with the director and staff of the fellowship in the Adult Reconstruction Unit of the Orthopaedic Department at Hanover Medical School. Time is also spent with the research staff at the Laboratory for Biomechanics and Biomaterials (LBB) of the Orthopaedic Department.

The fellow is requested to be active part of the Hanover Medical School Orthopaedic 1+1 concept: participate in one experimental and a second clinical research study related to topics of hip surgery, predominately in short stem hip research.

The Orthopaedic Department at Hanover Medical School is one of the largest Orthopaedic Hospitals in Germany with over 6000 surgeries and a department structure containing Spine, Joint Reconstruction, Sports Medicine, Hand- and Foot Surgery as well as paediatrics. 60 staff surgeons are involved in clinical work and research related to Orthopaedic Surgery.

This fellowship attachment consists of three cooperational elements:

Clinical:
- Clinical work may be dependend on German language skills.

Surgery:
- Depending on interest and orientation, assistance in surgery is scheduled.
  - Board certified surgeons with special permission of the German Health Authorities are allowed to perform surgeries with assistance of the program directors.
  - Assist residents in surgery at Laboratory of Biomechanics and Biomaterials–meetings and orthopaedic rounds when requested and available.

Research:
- Time and facilities are available for clinical and basic science research projects in the Laboratory for Biomechanics and Biomaterials.
- Fellow is required to work in the 1+1 program project during the fellowship time. This combines work in experimental research, as much as clinical research, either in the OR or gait analysis unit. It is expected that this research will result in a presentation, a publication, or both.

Faculty:
The Fellowship Program Director is Prof. Henning Windhagen, M.D., Department of Orthopaedic Surgery, Hanover Medical School. Prof. Windhagen is Chairman of the Orthopaedic Department and Head of the Adult Reconstruction Unit. The Fellowship Co-Director Prof. Christof Hurschler, PhD is Head of the Laboratory of Biomechanics and Biomaterials (LBB). Prof. Gabriela v. Lewinski, M.D., Associate Professor, Department of Orthopaedic Surgery, Hanover Medical School is a member of the teaching staff and leads research groups related to hip adult reconstruction. Prof. Fritz Thorey, M.D., Associate Professor, Department of Orthopaedic Surgery, Hanover Medical School is a member of the teaching staff and leads research groups related to hip joint preservation, reconstruction and arthroplasty. The fellowship director establishes an appropriate curriculum for the fellow according to MHH – and DGOU – guidelines. All MD-faculty are board certified in orthopaedic surgery.
Feedback from participants:

“Workshops answered many questions“

“Great and informative meeting!”

“Incredible opportunity to practice on cadavers – Thanks!”

“Improved me as a surgeon...!”

“Really helpful information especially Tips and Tricks”

“Great mixture of all relevant topics“

“Excellent course, I’ve learned a lot...!”

“Very interesting course with a high value!“

“I got the chance to learn how I can improve my surgical technique!”