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# **Adolescent Idiopathic Scoliosis Spine Concept Sobernheim**

**Specialized Courses  
in  
Orthotics and Prosthetics**



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## 1. OVERVIEW

This specialized course on spinal orthotics for Adolescent Idiopathic Scoliosis Treatment based on Sobernheim functional brace classification is addressed towards practicing P&O professionals who are interested in this advanced spinal bracing system. The course consists of three parts:

1. Five weeks of online theoretical part with an evaluation
2. at the end of this part
3. Five days of on-site practical training
4. Three month of online follow up and support
5. Clinical Case Presentation

For the online trainings, the participants will be enrolled on the Human Study internet platform/virtual classroom to receive the specific theoretical content.

The theoretical subjects covered in this course are:

- Anatomy: Short review of the musculoskeletal system of the spine (osteology, myology, neurology)
- Biomechanics of the normal spine
- Pathomechanics of spinal deformities
- Professional practice including practical techniques for patient assessment, casting techniques, rectification of positive models, production of spinal braces, fitting techniques, evaluation and analysis of brace effectiveness

The Five-day on-site training is conducted at the participants' local P&O facilities (in-house) with real cases of AIS whom shall be prepared and communicated with HS team at an earlier stage.

The online follow up period includes online support for cases that are handled by the participants over three month after the completion of the practical training. It includes up to three case presentations to be conducted by each participant with attendance of other participants and the trainer team in the virtual classroom, however the submission of at least one Case Presentation per candidate is mandatory in order to receive the Human Study Certificate for this course.

The number of participants for this course is ten; it is to be trained by two spinal orthotics experts: one associated with Human Study and the other associated with Medical Outpatient Treatment Center Bad Sobernheim. Physiotherapists who are associated with the center at which the training shall be conducted can attend this training to learn about this type of bracing based on the Sobernheim Functional Brace Classification.

The course timeline overview is available in Annex 1.

Upon the successful completion of this training course the participants shall receive a Certificate of Achievement for a Specialized Course on AIS from Human Study.

## 2. ONLINE THEORY PERIOD

Each participant shall receive the required credential to be enrolled in the Human Study platform for all online activities. The initial Five-week period covers all theory required as pre-requisite to the practical training. The theory part consists of printed study notes, power point presentations, video recordings, and weekly live sessions with online discussions. Each participant shall have access to the platform tools such as forums, direct messaging, and the glossary. An IT session can be carried out if the majority of the participants require help with surfing on the platform.

The online theory period consists of:

### Week 1:

- Kick-off conference (Introduction and IT training)
- Terminology and technical terms related to AIS treatment, History of AIS treatment, anatomy of the human spine
- Quiz

### Week2:

- Biomechanics of the human spine
- Pathomechanics of AIS scoliosis
- Current treatment concepts- Sobernheim Functional Brace Classification (derivative of Cheneau brace)
- Quiz
- Live session- discussion

### Week 3:

- Patient assessment, patient selection
- Casting techniques, modeling techniques
- Model rectification techniques, including videos
- Quiz

### Week 4:

- Production techniques, thermoforming, types of materials used
- Trial fitting
- Trouble shooting
- Quiz

### Week 5:

- Final fitting
- Outcome analysis
- Reporting to the rehabilitation team; report writing
- Overlaying patient's spine picture to X-Ray
- Quiz
- Live session- discussion

### **3. ON-SITE TRAINING**

Adolescent Idiopathic Scoliosis- Sobernheim Functional Brace Classification

The main goal of the practical workshop is to enable participants to design, manufacture and fit on actual patients an AIS spinal brace using the Cheneau-based functional bracing.

The trainers shall demonstrate each step of the fitting procedure and the participants will reproduce the process. All aspects of AIS patient treatment shall be exercised by the participants. Delivery of corsets made for the actual cases using the Sobernheim functional brace classification shall be done.

The practical workshop is organized as follows:

- Day 1: Quick review of anatomy, patient anamnesis, casting demonstration and practice
- Day 2: Negative model evaluation, positive model rectification, demonstration and practice
- Day 3: Brace production by thermoforming, trimming and strapping
- Day 4: Patient fitting, trouble shooting
- Day 5: delivery of braces to patients, outcome analysis

The detailed practical training procedure is disbursed upon agreement and contracting.

### **4. ONLINE SUPPORT & FOLLOW UP PERIOD**

This is a three-month period through which participants are urged to fit at least one and up to three patients following the Sobernheim Functional Brace Classification. Participants can contact the trainers for any questions or support. Participants are also required to prepare and submit online a PPT presentation on one case. Participants will then present their PPT live and discussions on their cases will be held among the trainers and other participants.

### **5. PARTICIPANT REQUIREMENTS**

This course is aimed for practicing P&O professionals who want to improve their skills by learning the Cheneau-based Sobernheim Functional Bracing method for scoliosis treatment.

Candidates requirements:

- At least 2 years experience in scoliosis treatment
- Curriculum Vitae with photo
- Computer with internet access

### **6. AWARD of CERTIFICATION**

Each participant is required to complete a theoretical examination (online based) and to present at least one case presentation in the frame of the course. Upon successful theoretical examination and completed case presentation, the participant will be awarded a Certificate of Achievement by Human Study e.V.

## CONTACT

For any enquiries contact us via email on:



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