

# 7<sup>th</sup> GENEVA SPINE COURSE



## Sagittal balance

### Master course

JC. Le Huec (Bordeaux) - A. Faundez (Genève)  
C. Barrey (Lyon)

### Sagittal Balance course

Hôtel Warwick

**Friday January 18<sup>th</sup>, 2019**

### Anatomical workshop

SWISS Foundation for Innovation  
and Training in Surgery

**Saturday January 19<sup>th</sup>, 2019**



*Didactic and practical teaching*

*How to integrate spine balance analysis in your daily practice for diagnosis and treatment*

*Pelvic and spine parameters, normal and degenerative changes*

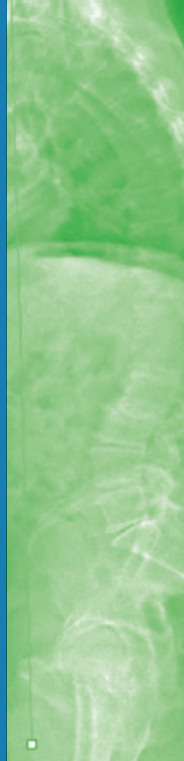
*WORKSHOP sessions : individual computer analysis with KEOPS software*

*Cases discussion*

**12 CME credits SSOT**  
**10 CME credits SSN**

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**Hôtel Warwick**  
14 Rue de Lausanne, 1201 Geneva





### Sagittal Balance Course Agenda

### PROGRAM

#### Principles for daily practice in DDD

Sagittal balance is a complex topic. In order to understand the concepts, a different type of educational course is needed. This course is modeled on a European program, designed by Professor Jean Charles Le Huec, teaching at Bordeaux university medical school and past Eurospine (Spine Society of Europe) president and Dr Antonio Faundez, consultant at Geneva University Hospital.

A comprehensive approach of the balance concept will be presented.

The course is designed to introduce concepts slowly with adequate time for questioning and discussion before moving on to more advanced concepts.

It is mandatory for all participants to visit an e-learning website. You will receive an access code with the payment of your registration. There will be 5 sessions of 10 to 15 min each, which will provide you the basic knowledge that you should have, to be able to actively participate during the course.

There is a 'hands on' approach to measuring parameters on spinal X Rays and the use of a software for digital images. The speakers will provide their expertise through didactic presentations and clinical cases precisely selected.

The program will also include breakout session to discuss clinical cases and their treatment options, according to sagittal balance parameters.

All participants are requested to bring their own cases well documented in a ppt format for open discussion

**Chairmen:** JC. Le Huec , A. Faundez

**Invited Speakers:** C. Barrey, F. Christensen, P. Maxy

## FRIDAY JANUARY 18<sup>th</sup>, 2019

- 07:45** WELCOME: **A. Faundez**
- 07:55** OBJECTIVES OF THE COURSE: **JC. Le Huec**
- 08:00** Intro
- 08:15** Quiz on the basics of sagittal balance based on the pre course e learning
  - To evaluate the candidates
  - To allow to make some adapted remarks to obtain strong basic knowledge
- 08:45** Normative value to analyze the spinal balance
- 08:50** Pelvic parameters: the pelvic vertebra - **A. Faundez**
  - Pelvic version as compensatory phenomenon
- 09:00** Correlation between spine shape and pelvic shape - **A. Faundez**
  - Sagittal Spine contour in the asymptomatic population
  - Simple asymptomatic clinical cases analysis
- 09:15** Global balance analysis: C7 plumb line and other parameters - **JC. Le Huec**
  - SVA, SSA, Barrey index, FBI index, C2-HA
  - Clinical case discussion
- 09:45** Analysis of compensatory mechanisms - **C. Barrey**
  - Compensation and imbalance: how to recognize
  - Local regional general
  - Clinical examples

### 10:15 COFFEE BREAK AND OPEN CASE DISCUSSION

- 10:45** Cervical spine sagittal alignment : **JC. Le Huec**
  - New parameters, classification of normal asymptomatic population
  - Analysis of cervical pathology and balance problems
  - Clinical cases
- 11:15** How do I analyse the balance of my patients : **A. Faundez, JC. Le Huec**
  - Clinical cases presentation with analysis on 4 simple lumbar degenerative cases
  - Clinical cases presentation on deformity : 2 cases
  - Clinical presentation on spondylolisthesis : 2 cases
- 12:30** Demonstration sagittal software analysis : 2 cases analysed with different softwares
  - Keops balance analyzer : **A. Faundez**
  - Surgimap analyzer : **C. Barrey**
  - Sagittalmeter app (iphone and android) : **JC. Le Huec**

### 13:00 LUNCH TIME : ON SITE BUFFET

- 14:00** Sagittal balance analysis in pathology: PJK risk
- 14:00** Biomechanics of junctional failures - **JC. Le Huec, P. Maxy**
  - Analysis of failure
  - Biomechanical consequences for thoraco-lumbar fusion methods
- 14:30** Case discussion: where to stop the fusion
  - Kephren software demonstration - **P. Maxy, A. faundez**
- 15:00** How to control the correction: pre op, per op
- 15:00** Strategy of correction for kyphosis and kypho scoliosis, pre op planification: planification softwares
  - Nuvamap, surgimap - **C. Barrey**
  - Keops and other - **A. Faundez**

Clinical case demonstration: 1 case with each software, audience vote
- 15:30** Which technique to choose - **A. Faundez**
  - Chevron osteotomy with TLIF
  - Posterior subtrraction osteotomy: PSO
  - Anterior column release: ACR
  - Sacro-iliac fixation

### 16:00 COFFEE BREAK

- 16:30** How to control per-operatively - **JC. Le Huec**
  - X ray control
  - App control
  - SpineNav control
- 17:00** How implant self adapting shape can help to restore the anatomical spine shape: new implant concept to clinical experience - **F. Christensen**
- 17:30** Clinical cases discussion
  - Full documented cases: vote of the audience
- 18:30** Take home message - **JC. Le Huec, A. Faundez**
  - Open case discussion
  - Product fare: Medtronic, Nuvasive, Medica
  - EOS station visit on request (free)

Free evening or Group restaurant (reservation requested)

**SATURDAY JANUARY 19<sup>th</sup>, 2019**

#### ANATOMICAL WORKSHOP

**SWISS Foundation for Innovation and Training in Surgery**

*Rue Gabrielle-Perret-Gentil 4, 1205 Geneva*

SWISS FOUNDATION FOR INNOVATION  
AND TRAINING IN SURGERY



**Chairmen:** A. Faundez, JC. Le Huec

**Monitors:** F. Christensen, D. May, T. Selz, C. Barrey

**08:00**

**08:00** Welcome and preparation for the lab - **JC. Le Huec**

**08:20** Surgical technique of PSO lumbar - **JC. Le Huec**

**08:40** Surgical technique of PSO lumbar thoracic - **C. Barrey**

**09:00** XLIF/DLIF/LLIF : ACR (Anterior Colonn Reconstruction) - **A. Faundez**

**09:15-9:30** Preparation to go to cad lab

**09:30**

#### WORKSHOP WITH 5 STATIONS

**Medtronic:** Table 1: Lumbar and thoracic chevron, tlif, pso, SIJ fixation  
Table 2: ALIF OLIF DLIF

**Nuvasive:** Table 3: Lumbar and thoracic chevron, tlif, pso  
Table 4: ALIF OLIF DLIF

**Medicrea:** Table 5: Lumbar and thoracic chevron, tlif, pso

**12:30** Wrap up and discussion (clinical cases)

**14:00**

**END OF THE COURSE AND LUNCH BUFFET**

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