



SENEC | SOCIEDAD ESPAÑOLA DE NEUROCIRUGÍA

**PRE-PROGRAM COURSE**

**"Anatomy and Endo-Microneurosurgical Strategies in Brain Surgery"**

**University of Alicante (Campus: Sant Joan)**

**23-25 September 2011**

**COURSE DIRECTORS**

*Dr. Juan Carlos Fernandez Miranda*

*Assistant Professor of Neurological Surgery  
Director, Surgical Neuroanatomy Lab. University of Pittsburgh*

*Dr. Jose Piquer Belloch*

*SENEC Secretary*

**INVITED FACULTY**

*Dr. P. Rubino*

*Hospital el Cruce. Buenos Aires. Argentina*

*Dr. HT Wen.*

*University of Sao Paulo. Brazil*

*Dr PH Young*

*St. Louis University. U.S.A.*

**COORDINATION**

*Dr. Jaime Lloret*

*University of Alicante*

**A SENEC Hands-on Courses**

**1<sup>st</sup> Course/I Cycle: Brain Anatomy**

*With the collaboration of Portuguese Neurosurgical Society.*

*An SENEC/SPNS project*



**September, 23<sup>th</sup>**

**Course Introduction**

*Dr. J. C. Fernandez-Miranda/Dr. J Piquer*

**I Part**

**BRAIN ANATOMY FOR NEUROSURGEONS**

*(Lab Dissection – Brains)*

**Special Lecture: Function of the Cerebral Cortex**

*Dr. PH Young*

*Remember function of the brain*

**Microsurgical Anatomy of the Sulci, Gyri and Ventricles. Surface Anatomy**

*Frontal, Central, Parietal, Temporal, and Occipital: Lobes, Sulci & Gyri.*

*Learn the anatomical mapping for your hemispheric and intraventricular surgery.*

*Dr. P Rubino*

**Insula and Limbic System** Insular Lobe and Limbic Lobe: cingulum, fornix, septum, parahypocampal gyrus

*The most complex anatomical area of the brain in your hands*

*Dr. PH Young (3D anatomy)*

*Dr. J Piquer (Surgical application)*

**White Matter Anatomy: 3D Structure of the Fibre Tracts**

*After this practice, you should know the role of fibre dissection in Brain Surgery*

*Dr. J.C. Fernandez Miranda*

**Special Lecture. Surgical applications: Transcortical approaches, Intraventricular Surgery and Hemispherectomies**

**Superb anatomical review to understand the many forms to approach the ventricles.**

*Dr. Wen*



**Brain Stem/IV ventricle Anatomy and function.**

*Best way to organize your brain-stem surgical plan*

*Dr JP Farias*

**September, 24th**

**II Part**

**ANATOMY AND MICROSURGICAL STRATEGIES IN BASIC APPROACHES TO THE BRAIN:**

**Supratentorial**

(Lab Dissection – Heads)

***Magisterial Conference: Embryology of CNS for Neurosurgeons***

*The best conference about the origin of CNS I have heard (G. Yasargil)*

*PH Young*

**Anatomy and Surgery of the Anterior Circulation**

*Comprehensive overview of neurovascular anatomy for aneurysm surgery*

*Dr P Rubino*

**Sylvian fissure approach. Anatomic and technical considerations**

*A wide window to review the anatomy of the medial cerebral artery, basal cisterns and insular region*

*Dr. Wen*

**Surgical Anatomy and Approaches to Anterior Basal Cisterns and Suprasellar region.**

*Big way for micro and endoscopic anterior cranial base surgery*

*Dr. J.C. Fernandez Miranda*

**Amigdalohypocampectomy: Antero-medial temporal lobectomy, Transylvian and Transcortical approaches**



*Perform it and learn advantages and disadvantages of different corridors*

*Dr. Wen*

***Special 3D Lecture. Impact of MR High-Definition Fibre Tractography in Modern Neurosurgery.***

*Correlation with fibre tract anatomy and neurosurgical applications. –*

*Dr. J.C. Fernandez Miranda*

**Surgical Approach to the Thalamus Area**

*Believe and discover that it is possible to approach it safely*

*Dr. P. Rubino (3D Anatomy)*

*Dr J Hinojosa (Surgical Application)*

**September, 25th**

**II Part:**

**ANATOMY AND MICROSURGICAL STRATEGIES IN BASIC APPROACHES TO THE BRAIN: Infratentorial**

**(Lab Dissection – Heads)**

**Surgical Anatomy and Approaches to the Infratentorial Cisterns and Posterior Circulation**

*A superb state of art of posterior fossa approaches*

*Dr. J.C. Fernandez Miranda*

**Suboccipital and Retrosigmoid approach.**

*Remember bone flap landmarks and CPA angle anatomy*

*Dr. E Urculo*



### **Supracerebellar Approach to Pineal Region.**

*You must never forget the deep venous complex in this region*

*Dr. Jaime L Lloret*

### **Supracerebellar Transtentorial.**

*Another corridor to approach to medial temporal lobe and mesencephalon*

*Dr M. Casimiro*

### **Surgical Approach to the IV ventricle through the Telovelar Approach.**

*Is it the best approach to rhomboid fossa?*

*Dr. Wen*

### **Brain Stem surgery.**

*Localize and remember the safe entry areas*

*Dr J. Farias*

### **III Part**

## **ANATOMY AND ENDO-MICROSURGICAL STRATEGIES IN SPECIAL APPROACHES TO THE BRAIN:**

### **Lab Dissection – Heads**

### **Basic Anatomical and Surgical Principles in Skull Base Surgery**

*Rationale in the selection of open and endoscopic skull base approaches*

*Dr. J.C. Fernandez Miranda*

### **Basic Principles of Petrous Bone Anatomy and Surgery. Retro and Translaberintic Approaches**

*An excellent opportunity to learn the most classical cranial base approach*

*Dr J. Gisbert*



**FACULTY (in alphabetical order)**

*Dr. M. Casimiro. Hospital Egas Moniz, (Lisbon. Portugal)*

*Dr. J. P. Farias. Hospital Sta. Maria (Lisbon. Portugal)*

*Dr. J. C. Fernandez Miranda. University of Pittsburgh. USA*

*Dr. J. Gisbert. Hospital Universitario La Ribera. (Alzira. Spain)*

*Dr. J. Hinojosa. Hospital Hospital 12 de Octubre (Madrid, Spain)*

*Dr. J. Lloret. Hospital General Universitario. (Alicante. Spain)*

*Dr. J. Piquer. Hospital Universitario La Ribera. (Alzira. Spain)*

*Dr. J. Lloret. Hospital General Universitario. (Alicante. Spain)*

*Dr. P. Rubino. Hospital el Cruce. (Buenos Aires, Argentina)*

*Dr E. Urculo. Hospital de Donostia. (San Sebastian. Spain)*

*Dr. HT Wen. Universidad de Sao Paulo. (Brazil)*

*Dr. PH Young. University St Louis. (USA)*