## **CURRICULUM VITAE**

## PERSONAL

| NAME<br>SURNAME<br>D.O.B - NATIONALITY<br>FAMILY<br>ADDRESS<br>COMMUNICATION | KANARIS<br>PANAGOPOULOS<br>3 <sup>rd</sup> August 1950, Greek<br>Married, two sons<br>296 Kifisias Ave. & 40 Navarinou Str. Athens<br>15232, GREECE<br>Pr. Clinic (+30) 210 68.42.990,<br>E-mail <u>kanpan@otenet.gr</u><br>Mobile (+30) 6944 733336 |
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| LANGUAGES  | Greek (native) English, French   |
| INTERESTS<br>OUTSIDE MEDICINE:   | Flying, music, equestrian sports, football.  |
| EDUCATION POSTS  |  |

| 1968-1971:            | Dental School, Salonica University  |
|-----------------------|---|
| 1971-1977:            | Medical School, Salonica University   |
| 1973                  | Undergraduate participation in the program<br>of the Department of Surgery of the Medical<br>School of Lyon University. Chairman: Pr.<br>Liaras                         |
| 1974-1976             | Undergraduate participation in the program<br>of the Department of Neurosurgery of the<br>Medical School of Salonica University<br>Chairman: As. Pr. Tavridis           |
| 1975                  | Undergraduate participation in the program<br>of the Department of Neurology of the<br>Medical School of Newcastle Upon Tyne<br>University. Chairman: Pr. Sir J. Walton |
| HOSPITAL APPOINTMENTS |   |
| 1977-1978             | SHO in Surgery & Neurosurgery,  |

| 1977-1978 | SHO in Surgery & Neurosurgery<br>"Evagelismos" Hospital, Athens. |
|-----------|--|
| 1978      | `SHO in Neurology, 401 Military Hospital Athens.                 |
| 1979-1980 | SHO in Neurology,N.I.M.T.S. Hospital Athens.                     |

| 1980-1981           | SHO in Neurosurgery, Children's Hospital<br>"Agia Sofia", Athens.   |
|---------------------|---|
| 1981-1982           | SHO in Neurosurgery, Regional Neurological<br>Center, Newcastle General Hospital,<br>Newcastle Upon Tyne.   |
| 1982-1983           | SHO & Registrar in Neurosurgery Regional<br>Neurological Center, Newcastle General<br>Hospital, Newcastle Upon Tyne.  |
| 1983-1984           | Registrar & Clinical Assistant in<br>Neurosurgery, National Hospital for Nervous<br>Diseases, Queen's Square London.  |
| 1984-1986           | Registrar in Neurosurgery, Regional<br>Neurological Center, Newcastle General<br>Hospital, Newcastle Upon Tyne.   |
| 1986-1987           | L. Senior Registrar in Neurosurgery.<br>Regional Neurological Center, Newcastle<br>General Hospital, Newcastle Upon Tyne.   |
| 1987                | L. Senior Registrar in Neurosurgery<br>Regional Center for Neurology &<br>Neurosurgery, Walton Hospital<br>Liverpool.   |
| 1990-1993           | Consultant Neurosurgeon, Department of Neurosurgery, Volos General Hospital, Greece.  |
| 1993-1994           | Chairman, Department of Neurosurgery<br>Children's Hospital "Agia Sofia", Athens.   |
| 1995-<br>2001 -2003 | Private Practice Consultant Neurosurgeon<br>"Ygeia", latriko Hospitals, and Hellenic<br>Craniofacial Center "Mitera" Hospital, Athens<br>(5 months L Consultant Neurosurgeon<br>National Health Service, Regional<br>Neurosurgical Center, Morriston Hospital |
|                     | Swansea, UK.  |

## ACADEMIC POSTS

| 1981      | Honorary SHO in Neurology, Medical School of Newcastle Upon Tyne University.        |
|-----------|---|
| 1987-1989 | Research Fellow in Surgery (Neurosurgery)<br>Harvard Medical School, Boston, U.S.A. |

## **ADMINISTRATION POSTS**

| 1986       | Member of the Committee for Neurology & Neurosurgery Newcastle Health Authority.                |
|------------|---|
| 1987       | Member of the Committee for Neurology & Neurosurgery, Mersey Health Authority.                  |
| 1988       | Member of brain tumor committee<br>Congress of Neurological Surgeons, U.S.A.                    |
| 1993-1994  | Advisor for Neurosurgery to the Central<br>Health Council of the Ministry of Health,<br>Greece. |
| 2016- 2018 | President, European Society of Craniofacial Surgery   |

## POSTGRADUATE ACADEMIC AND PROFESSIONAL DIPLOMAS

| 1984 | Board Certified in Neurosurgery, Greece.                    |
|------|---|
| 1989 | Ph.D. Medical School, Athens University.                    |
| 1990 | M.Sc. Medical School, University of<br>Newcastle Upon Tyne. |

## **MEDICAL REGISTRATION**

| 1977 | Greece   |
|------|--|
| 1981 | United Kingdom, General Medical Council,<br>Specialist List. |

#### **MEMBER OF SCIENTIFIC SOCIETIES**

- American College of Surgeons
- European Society of Craniofacial Surgeons ESCFS
- Athens Medical Association
- Hellenic Neurosurgical Association
- Hellenic Craniofacial Center
- Hellenic Chapter of American College of Surgeons
- European Society of Craniofacial Surgery
- International Society of Craniofacial Surgery

### **MAJOR RESEARCH INTERESTS**

#### a. Clinical Research

- Syringomyelia. Medical School, University of Newcastle upon Tyne. Principal Investigator for 2 years. (Publication No. 2, Presentation No. 30, Monograph No. 47.).
- 2. Microvascular decompression of cranial nerves. Newcastle General Hospital. Co-Investigator for 6 months. (Publications No.2, 13 Presentation No.17).
- 3. Spontaneous Intracerebral Hematoma. Medical Schools of Universities of Athens and Newcastle upon Tyne. (monograph 46).
- 4. Craniosynostosis (publications No.12, No.13)

#### b. Laboratory Research

- 1. Mechanisms of tumorigenesis of the nervous system. Harvard Medical School Co-Investigator for 2 years. (Publication No.5, Presentations No.19, 21, 22, 42).
- 2. Cytogenetic analysis of pituitary tumors. Harvard Medical School. Principal Investigator for one year.
- 3. Tumorigenetic properties of galanin in rat pituitary tumors. Harvard Medical School. Co-Investigator for 6 months.
- 4. Micro-anastomosis with KTP LASER. Harvard Medical School Co-Investigator for 6 months (Monograph No. 4).
- 5 The role of b-endorphins in cerebral ischemia. Greek Ministry of Health. Co-Investigator for 2 years. (Presentations No. 28, 31).

## TEACHING EXPERIENCE

#### a. Courses Attended

- 1. Neuroscience's Course, Medical School, University of Newcastle Upon Tune 1984.
- 2. Microsurgical Practical Course, Cambridge Medical School, Cambridge. 1985
- 3. Neurosurgical Update. Harvard Medical School, Boston. 1987
- 4. Neurosurgical Update. Harvard Medical School, Boston.1988
- 5. Visiting the House Ear Clinic, University of South California. Los Angeles, California, USA, 1995
- 6. Neuroendoscopy Hands-on Course, Aesculap Tutlligen, Mainz, Germany.2001

#### b. Teaching

- 1. Teaching of 4<sup>th</sup> year medical students. University of Newcastle upon Tyne, 1986
- 2. Organized weekly Grand Rounds and seminars for teaching of postgraduates in neurosciences. Newcastle General Hospital, 1986
- 3. Teaching of 4<sup>th</sup> year medical students. University of Liverpool,1987
- 4. Participation in postgraduate seminars of Department of Surgery. Volos, 1990-1992
- 5. Invited Speaker, postgraduate seminars of the Department of Surgery Medical School of university of Athens, 1994
- 6. Organized and developed weekly postgraduate teaching program in Pediatric Neurosurgery Children's Hospital "Agia Sofia" Athens, 1993-1994
- 7. Teaching residents in 120 cases per year in the operating room. Children's Hospital "Agia Sofia" Athens. 1993-1994

#### **SCIENTIFIC PAPERS**

#### a. Publications

1. Neurovascular decompression for cranial rhizopathies. K. Panagopopulos, S. Deopujari, M. Chacrabothry, R. Sengupta. Br. J. Neurosurg. Vol.1, p235-41, 1987.

2. Cerebral astrocytoma presenting as syringomyelic syndrome. C. Kumar, K. Panagopoulos, R. Kalbag, V. McAllister. Surg. Neurol., Vol. 27, No.2, p. 187-90, 1987.

**3.** Mucinous cysts of the pituitary stalk: a report of two cases. **K. Panagopoulos**, F. Joles, M. El-Azouzi, P. McL. Black. J. Neurosurg. Vol.71, p.276-78, 1989.

Loss of distinct regions on the short arm of chromosome 17 associated with tumorigenesis of human astrocytoma. M. El-Azouzi, R. Chung, G. Farmer, R. Martuza, P.McL. Black, G. Rouleau, C. Hettlich, E. Headley-Whyte, N. Zervas
K. Panagopoulos, Y. Nakamura, J. Gusela, B. Seizinger. Proc. Nat. Acad. Sciences, U.S.A. Vol.86 p.7186-90, 1989.

**5.** Transphenoidal surgery for visual loss in patients with pituitary adenomas. M. El-Azouzi, P.McL. Black, G. Candia, N. Zervas, **K. Panagopoulos**. Neurolog. Research, March 12(1) p.23-25, 1990. 6. Intracranial epidermoid tumors. A continuing diagnostic challenge.
K. Panagopoulos, F. Joles, M.El-Azouzi, P.McL. Black. Arch. Neurol. Vol.47/7 p.813-6, 1990.

7. Value of the facial nerve latency test in prognosis of childhood Bell's palsy.
V. Danelidis, A. Skevas, K. Panagopoulos, I. Kastanioudakis.
Child's Nervous System, May 8(3) p.126-8, 1992.

8. {Causes of misdiagnosis of subarachnoid hemorrhage}
K. Panagopoulos, K. Anagnostou, V. Sanidas. Encefalos, Vol.29 p.164-67, 1992.

**9.** {The role of operative ultrasound in posterior fossa tumors of childhood} G. Sfakianos, M. Koutzoglou, D. Petsanas, B. Evagelinos, N. Prodromou, A. Petrou, **K. Panagopoulos**. Greek Neurosurgery Vol.1 p.108-10, 1994.

**10.** {On the tethered cord problem: report of 8 cases} G. Sfakianos, M. Koutzoglou, N. Prodromou, **K. Panagopoulos**, B. Evagelinos. Greek Neurosurgery, Vol.2 p.72-5, May 1995.

**11.** {Arterial aneurysms of the brain in childhood: report of 2 cases} G. Sfakianos, M. Koutzoglou, N. Prodromou, D. Rologis, **K. Panagopoulos**, B. Evagelinos. Greek Neurosurgery Vol. 2 p.85-8, May 1995.

- A Novel de Novo Mutation Within EFNB1 Gene in a Young Girl With Craniofrontonasal Syndrome. Despina Apostolopoulou, M.Sc., Alexander Stratoudakis, M.D., Angeliki Hatzaki, Ph.D., Olga S.Kaxira, M.D., E.B.O.P.R.A.S., Kanaris P.Panagopoulos, M.D., M.Sc., F.A.C.S., Panagoula Kollia, Ph.D., Vassiliki Aleporou, Ph.D. Cleft Palate-Craniofacial Journal, January 2012, Vol.49 No.1
- **13.** Genetic Analysis of Syndromic and Nonsyndromic Patients With Craniosynostosis Identifies Novel Mutations in the TWIST1 and EFNB1 Genes. Apostolopoulou D, Kaxira OS, Hatzaki A, **Panagopoulos KP**, Alexandrou K, Stratoudakis A, Kollia P, Aleporou V. Clef Palate Craniofac J.2018 Jan 1

#### b. Published abstracts

- 14. Value of neurovascular decompression for cranial rhizopathies. **K. Panagopoulos**, C. Deopujari, R. Sengupta. Neurol. Neurosurg. Psych. Vol.50, No.1, p.646, 1987.
- Hemiballismus initiated by Levo-dopa treatment in a patient with Parkinson's disease and spastic hemiparesis. C. Anagnostou, K. Panagopoulos, D. Ziogas J.Neurol. Vol. 241, S. 126, 1994.
- Focal abnormalities demonstrated in a patient with multiple tics-a case report. C.N. Anagnostou, K. P. Panagopoulos. Movement Disorders. Vol. 11, Suppl. 1/96, p. 925.

 Computerized Quantitative Analysis of Electroencepalogram (EEG) during mental activity in normal subjects. C. N. Anagnostou, K. P. Panagopoulos. Electroencephalography and Clinical Neurophysiology, Vol. 32, Suppl. 1/96, p. 392.

#### c. Presentations

- Neurovascular decompression for cranial rhizopathies. K. Panagopoulos, Deopujari, R. Sengupta. Joint meeting of the British Society of Neurological Surgeons and Hellenic Neurosurgical Association Athens, September 1986
- {The role of LASER in surgical treatment of giant pituitary adenomas} K.
   Panagopoulos. R.Jeffreys. 1<sup>st</sup> National Neurosurgical Congress. Athens, December 1987.
- Fundamental mechanisms of tumorigenesis in astrocytomas. El-Azouzi, G. Rouleau, P. McL. Black, N. Zervas, G. Farmer, Y. Nakamura, K Panagopoulos K, R. Martuza, J. Gusela, B. Seizinger. Joint meeting of the New-york and New England Neurosurgical Societies Bermuda, October 1988.
- {Relationship of hydrocephalus and angiospasm after subarachnoid hemorrhage of aneurysmal origin}.
   K. Panagopoulos, A. Tzouras, S. Kelemouridis, P. McL. Black. 2<sup>nd</sup> National Neurosurgical Congress, Athens, November, 1988.
- La biologie moleculaire des astrocytomes et les mecanismes etiopathologiques possibles. El-Azouzi, P. McL. Black, R. Martuza, N. Zervas, G. Rouleau, G. Farmer, Y. Nakamura, K. Panagopoulos, J. Gousela, B. Seizinger. Societe de Neurochirurgie de la Langue Francaise et Societe Francaise de Neuro- radiology. Paris, Decembre 1988.
- **23.** {Basic ongogenetic mechanisms of the nervous system}. **K. Panagopoulos**, B. Seizinger. 3<sup>rd</sup> National Neurosurgical Congress, Salonica, November 1989.
- {New trends in stereotactic singulotomy for treatment of mental diseases}.K.
   Panagopoulos, K. Anagnostou. 12<sup>th</sup> National Psychiatric Congress, Volos, Greece, April, 1991.
- **25.** {The value of EEG mapping in psychiatric diseases}. K. Anagnostou, **K. Panagopoulos**. 12<sup>th</sup> National Psychiatric Congress, Volos, Greece, April, 1991.
- {Clinical correlation of CT scan findings in Parkinson's diseases. K. Anagnostou, K. Panagopoulos, D. Ziogas. 12<sup>th</sup> National Neurological Congress, Volos, Greece, April 1991.
- Cerebral damage due to carotid oclusion following attempted suicide by hanging in Childhood: a case report. Anagnostou, K. Panagopoulos. 7th European Congress of Angiology Rhodes, May 1991.

- {Reasons of misdiagnosis in cases of subaracnoid hemorrhage}. K. Panagopoulos, K. Anagnostoy, B. Sanidas 5<sup>th</sup> National Neurosurgical Congress. Athens, November 1991.
- Time-course of beta-endorphin release into cerebrospinal fluid in cerebral infarction. Anagnostou, K. Panagopoulos. 3rd European Neurological Meeting Lausane, June 1992.
- Evaluation of computerized Electroencephalogram in transient ischimic attacts confirmed by Xenon computed tomography K. Anagnostou. K. Panagopoulos. 16th Word Congress of International Union of Angiology Paris, September 1992.
- **31.** {Observations on syringomyelia}. Meeting "New trends in Neurosurgery" **K. Panagopoulos**, K. Anagnostou. Athens, March 1992.
- **32.** {The role of b-endorphins in cerebral ischemia}. K. Anagnostou, **K. Panagopoulos**. 19<sup>th</sup> Annual National Medical Meeting, Athens, May 1993.
- **33.** {Particular findings on spinal canal diseases in childhood}. B. Sanidas, G. Sfakianos, N. Prodromou, M. Koutzoglou, **K. Panagopoulos** Salonica, September 1993.
- {The slit ventricle syndrome as a complication of hydrocephalus drainage}. M. Koutzoglou, G. Sfakianos, I. Polythdorakis B. Evagelinos, N. Prodromou, M. Varela, K. Panagopoulos. 7<sup>th</sup> National Neurosurgical Congress, Athens, November 1993.
- {The role of operative U/S in treatment of posterior fossa tumors}. G. Sfakianos, M. Koutzoglou, D. Petsanas, B. Evagelinos, N. Prodromou, A. Petrou, K. Panagopoulos. 7<sup>th</sup> National Neurosurgical Congress, Athens, November 1993.
- {Infectious endocranial collections in childhood}. G. Sfakianos, M. Koutzoglou, N. Prodromou, B. Evagelinos, K. Panagopoulos. 20<sup>th</sup> Annual National Medical Meeting, Athens May 1994.
- Sella region tumors in children. D. Petsanas, G. Sfakianos, M. Koutzoglou, B. Evagelinos, N. Prodromou, K. Panagopoulos. Joint meeting of the Hellenic and the Italian Neurosurgical Societies, May 1994, Athens.
- {Temporal bone fracture in childhood}. I. Economides, K. Parpounas, G. Perogambagis, K. Panagopoulos G. Sfakianos. 32<sup>nd</sup> National Pediatric Congress, Corfu, June 1994.
- Hemiballismus initiated by Levo-dopa in a patient with Parkinson's Disease and hemiparesis. Anagnostou, K. Panagopoulos, D. Ziogas. 4th meeting of the European Neurological Society, June 1994, Barcelona.
- 40. { EEG analysis during normal mental activity in normal individuals}. K. Anagnostou,
   K. Panagopoulos. 14<sup>th</sup> National Neurological Congress, Athens, November 1995.

- Basal ganglia traumatic hematomas in children. A. Petsanas, M. Koutzoglou, K. Panagopoulos, N. Prodromou, G. Sfakianos, B. Evangelinos, A. Anagnostou, P. Stilidis. International Neurotraumatology Meeting, Thessaloniki, 1995.
- Surgical management of post-traumatic intracranial hematomas in the first 2 years of life. M. Koutzoglou, A. Petsanas, K. Panagopoulos, G. Sfakianos, B. Evangelinos, A. Anagnostou, N. Stilidis. International Neurotaumatology Meeting, Thessaloniki, 1995.
- {Study of ongogene n-myc in brain tumors with PCR}. G Tsagarakis, B. Micraki, M. Moshovi, K. Konstantinidou, K. Panagopoulos, F. Stathopoulou-Gorgatou. 33<sup>rd</sup> National Pediatric Limnos, June 1995.
- **44.** Focal abnormalities demonstrated in a patient with multiple tics: a case report. K.N. Anagnostou, **K. P. Panagopoulos**. 4<sup>th</sup> International Meeting on Movement Disorders. Vienne June 1996.
- Gilles de la Tourette s syndrome with electroencephalographic abnormalities: a case report. C.N. Anagnostou, K. P. Panagopoulos. 7<sup>th</sup> Meeting of the European Neurological Society Rhodes June 1997.
- 46. Total Malar Osteotomy in the treatment of thyroid Ophthalmopathy. A. Stratoudakis,
   K. Panagopoulos. 7<sup>th</sup> European Congress of Surgery, 3-7 June 1997, Athens, Greece.

#### d. Monographs

- **47.** {Spontaneous intracerebral hematomas: conservative or surgical treatment}. Ph.D.Thesis Athens 1988.
- **48.** A study on the treatment of communicating syringomyelia by craniocervical decompression. Master of Science Thesis, Newcastle upon Tyne 1989.
- **49.** {Lasers in Neurosurgery. In the textbook «Lasers in Medicine»} :G Parissianos, Editor Athens 1995.
- **50.** Endoscopy in Neurosurgery. HELLENIC GENERAL SURGICAL ASSOCIATION MEETING 2002.
- **51.** Pediatric neuroendoscopy. PEDIATRIC MEETING NOV 2003.
- e. Lectures, Symposious e.t.a.

- **51.** Speaker Symposium on Parkinson's Disease. Possidio, Greece 1991.
- **52.** Speaker {Head Injuries} Grand Rounds in Surgery, Volos Greece, 1990.
- **53.** Speaker {Head Injury policies}. Velestino, Greece 1991.
- **54.** Invited Speaker : Pediatric neurotrauma. European Paediatric Intensive Care Meeting, Athens 1993.
- **55.** Invited Speaker : {New trends on brain tumor treatment} Department of Surgery Postgraduate Course, Medical School of Athens University, Athens 1993.
- **56.** Speaker.: {LASER in Neurosurgery}. 2<sup>nd</sup> Postgraduate Seminar "LASER in Medicine" Athens, October 1993.
- **57.** Invited Speaker: Surgery of craniofacial abnormalities. Meeting of Geek Craniofacial Center. Athens May 1997.
- **58.** Speaker : The role of the Neurosurgeon in craniofacial anomalies. International seminar of the Hellenic Craniofacial Center. Athens May 1998.
- **59.** Invited speaker: "Genetics of dysraphism" in the round table of 12<sup>th</sup> National Neurosurgical Congress. Delphi November 1998.
- **60.** Speaker: Meeting of European Society of Craniofacial Surgeons E.S.C.F.S, Athens September 2002.

## TEACHING

My teaching experience started in 1982. At that time as Registrar in Neurosurgery I participated in clinical teaching of medical students at the patient's bed in Neurology and Neurosurgery in the Medical School of Newcastle Upon Tyne University. I also participated in weekly seminars organized in the Department of Neurosurgery of Newcastle General Hospital.

In 1986 I was Senior Registrar in Neurosurgery. I organized weekly seminars for postgraduates in neurosciences in Newcastle General Hospital. I also organized teaching of 4<sup>th</sup> year medical student groups rotating every 2 weeks, in Neurology-Neurosurgery. I was responsible for teaching of the Junior Staff ( 5 Registrars and 4 SHO's) in daily rounds and practical teaching in the operating room.

In 1987 I was Senior Registrar and Clinical Tutor in Neurosurgery. I organized teaching for 4<sup>th</sup> year students with lectures and exams. I was responsible for teaching of the Junior Staff (3 Registrars and 5 SHO's) in daily rounds and practical teaching in the operating room.

In 1990 I participated in the teaching activities of the Department of Surgery of Volos General Hospital with lectures of interest to Surgical Residents.

In 1993 I organized the postgraduate teaching program for Neurologist and Neurosurgeons in "Agia Sofia" Children's Hospital. I also participated in the teaching activities of Department of Pediatrics of the Medical School of Athens University

In 1993 I participated in the teaching activities of Department of Surgery of the Medical School of Athens University, invited by Prof. of Surgery B.Goulematis.

In 1996 I was member of the scientific committee for organization of the International Congress "LASERS at the Dawn of the third Millennium"

In 2003 I was member of the Hellenic Chapter of the American College of Science. I participated in the committee of teaching and application of new technologies in Surgery.

## ANALYSIS OF SCIENTIFIC ACTIVITY

My scientific activity has two branches:

A. training-education, clinical work, and continues medical education (CME)

B. clinical and laboratory research

# A. Training - Education, Clinical Activities and continues medical education (CME)

#### a. Training - Education

My training started in Greece in 1977 and continued in England. There I had the chance to work in 3 major teaching centers the Regional Neurological Center of (Teaching) Newcastle Health Authority, the National Hospital of Nervous Diseases in Queen's Square and the Regional Center for Neurology-Neurosurgery of (Teaching) Mersey Health Authority in all grades from Senior House Officer to Senior Registrar.

The Regional Neurological Center of Newcastle General Hospital had a 2.000.000 population caching area for neurosurgery. On top patients from overseas were referred for treatment. I had the chance to get exposed to clinical Neurology and Neurosurgery with teaching of Sir.John Walton and Prof. J. Hankinson.

I then worked for one year as Registrar in Neurosurgery in the National Hospital for Nervous Diseases. This Institution, one of the best in the word in the field of neurosiences, had a large catching population within England but on top it was open to referrals from all over the world. The busy daily operative program in which I participated mainly assisting the Senior Staff, included in large percentages difficult and complicated procedures such as germinomas, craniopharyngiomas, acoustic neuromas e.t.a. in neuro-oncology; trans-oral and trans-thoracic approaches in spinal surgery; the new for that time stereotactic frame of Brown-Robert-Wells with reference points on the CT scan. Along with the above there was a permanent teaching and educational activity with lectures, seminars e.t.a. given by prominent guest speakers.

When I returned to Newcastle I had the chance to apply the above experience to clinical and operative practice. I attended the Cambridge hands-on microsurgical course. I then performed operations in almost all the field of modern neurosurgery.

The Department of Neurosurgery at the Walton Hospital of Liverpool has a well known interest in functional neurosurgery. Application of CO2 LASER in neuro-oncology cases was an innovation for that time. I worked for almost one year as Senior Registrar and I benefited tremendously.

#### **b.** Clinical Activities

After two years of academic work in U.S.A. I returned in1990 to Greece. I was appointed Consultant Neurosurgeon in Volos General Hospital. Neurosurgery in this small Unit had to be organized from scratches. However within a the limited time and with restricted resources a reasonable attempt was made together with the Department of Neurology, to accomplish good standards of every day clinical practice. There was good research work with a program on endorphin release in cerebrospinal fluid after stroke, supported with a grand to the Department of Neurology by the Greek Ministry of Health and other topics.

In 1993 I was appointed Head of the Department of Neurosurgery in Children's Hospital "Agia Sofia" of Athens. This large Unit is the only one in the Balkan area for Pediatric Neurosurgery. It has staff of 5 more trained neurosurgeons and 3-4 residents rotating every year in approved by the Ministry of Health program of specialization in Neurosurgery. Under my guidance clinical work in the whole spectrum of pediatric neurosurgery was performed like aneurysm clipping, craniopharyngioma, spinal tumors e.t.a. In the existing infrastructure for microsurgery were added new equipment like operative U/S. The Department was equipped with computer for file keeping and access in the literature. I did plan to develop the first Epilepsy Surgery Unit in Greece from the pool of 5000 children treated for Epilepsy in the Department of Neurology. The euro 3000000 ECU budget project did not get financed, but is currently under revision to be submitted again.

#### c. Continues Medical Education (CME)

Attendance and participation as well as organization of many scientific meetings and hands-on courses for certification of up to date continues medical education. The most important is the attendance of the Congress of Neurological Surgeons yearly meeting in U.S.A. with participation in hands-on courses. Essential it was the participation in 2001 on hands-on course in Tutlligen in Germany to establish since then experience in Neuroendoscopy procedures. Particularly large experience in the field in neurotraumatology. Experience in vascular surgery with microsurgical teqniques (not including endovascular treatment). Experience in neuroongology with the use of neuronavigation coupled with modern surgical microscope. Experience in neuroendoscopy, (III ventriculostomy), neuroendoscopic assisted surgery. Experience in minimal invasive and instrumentation spinal teqniques. Experience in Pediatric neurosurgery including craniofacial surgery of complex syndromes (Crouzon, Apert, Pfeiffer etc). This surgical experience is implicated to over 2000 neurosurgical procedure done by myself or under my guidance and responsibility.