

CURRICULUM VITAE

PERSONAL DATA

NAME: Frederic E. Martens
DATE OF BIRTH: 15 /02/01957
PLACE OF BIRTH: Antwerp
Married Véronique De Winter 1990 Divorced 2002
Children: Cédric 30/12/92 and Yorick 7/2/96
Address: Hof Somergem 57 9320 Erembodegem

STUDIES

Secondary education

Koninklijk Atheneum te Berchem 1975, Latin Greek section, graduated with honours, medal of the government (prijs van de regering -ministerie van nationale opvoeding en cultuur)

University studies

Dokter in de genees-heel -en verloskunde (M.D.) V.U.B. 1982; with honours (grote onderscheiding)

Neurosurgical training

Enrolled in general surgery before changing to neurosurgery

1982-1985 Training in general surgery University Hospital Sint-Pieters Brussels (Prof Bremer)

1985-1986 Training in neurology University Hospital Sint-Pieters Brussels (Prof Noël)

1986-1990 Training in Neurosurgery University Hospital Ghent (Prof Calliauw)

25.10.1990 Board certified as neurosurgeon

Staff member department of neurosurgery AZ Stuivenberg (OCMW Antwerpen) from 1/10/90 till 31/12/91

Staff member neurosurgery OLV Aalst since 1/1/92

Military service Belgian Army (Military Hospital Neder-Over-Heembeek) 1990-1991-lieutenant

During the neurosurgical training attended the training courses of the European Association of Neurological Surgeons (EANS) in Porto (1986) Wroclaw (1987) Amsterdam (1988) and Rostock (1989). Could not assist the 1990 course in Israel that was cancelled due to the Gulf War 1990.

Passed the government French language examination (level 1) 1982

PUBLICATIONS

Martens F, Ectors P, Noel P, Hanquinet S, Faverly D : Unusual cause of cerebellar abscess : occipital dermal sinus and dermoid cyst. *Neuropediatrics* 18:107-109 ,1987.

Martens F, Ectors P : Partially resolved problems : priorities in management of polytraumatised patients with head injuries. *Acta Neurochir (Wien)* 94:70-73, 1988

Martens F, Van Velthoven V, Calliauw L : Post-traumatic brain abscess with clostridium perfringens. *Zent. bl. Neurochir.* 50:203-205 1989

Martens F, Ectors P : Early management and priorities of polytraumatised patients with intracranial lesions. In : *Advances in Neurotraumatology, Neurosurgical Review Vol 12* (1989) Suppl 1 D Voth , K Sano (eds) de Gruyter , Berlin

Martens F, Bruyns T, Vandekerckhove T, Caemaert J, Kalala O, Calliauw L: Safety of Fraxiparine administration in neurosurgical patients. In : *Advances in Neurosurgery Vol 19*, Bock WJ, Lumenta C, Brock M, Klinger M (eds) Springer Verlag

Calliauw L, D'Hara M, Martens F, Vannerem L : Spinal epidural hematoma without lesions of the spine. Report of four cases. *Clin Neurol Neurosurg* 90:131-140, 1988

Ectors P, Martens F : Postoperative tension pneumocephalus (letter) *J Neurosurg* 69:641 1988.

Verstraete KLA, Martens F, Smets P, Vandekerckhove T, Meire D, Parizel PM, Van de Velde E, Calliauw L: Traumatic lumbosacral nerve root meningoceles. *Neuroradiology* 31:425-429, 1989.

Caemaert J, Martens F, Verbeke L, Calliauw L : Interstitiele radiotherapie voor inoperabele hersentumoren. *Tijdschr Geneesk* 45:1269-1276, 1989

De Vulder J, De Kolvenaere L, Rolly G, Calliauw L, Caemaert J, Martens F : Spinal cord stimulation in chronic pain therapy. *Clinical Journal of pain* 6:51-56, 1990

Delanghe J, De Buyzere M, De Winter H, Cluy L, Caemaert J , Martens F: Estimation of brain lesion size based on quantifying CK-BB release. *Clin Chem* 36:404-405, 1990

Delanghe J, De Winter H, De Buyzere M, De Praetere C, Martens F, Caemaert J: Sensitive mass concentration measurements of CK-BB in cerebrospinal fluid after cerebral damage. *Eur J Clin Inv* 19:A50, 1989

Govaert P, Calliauw L, Vanhaesebrouck P, Martens F, Barrilari A: On the management of neonatal tentorial damage. Eight case reports and a review of the literature. *Acta Neurochir (Wien)* 106:52-64, 1990

Calliauw L, Vandenbogaerde J, Kalala O, Caemaert J, Martens F, Vandekerckhove T: Transesophageal echocardiography : a simple method for monitoring the patency of: ventriculoatrial shunts. *J Neurosurg* 74:1018-1020, 1991

Verbeke L, Martens F, Caemaert J, Calliauw L: Stereotactische radiochirurgie. Toepassing op de lineaire accelerator in het UZ te Gent. *Tijdschr Geneesk* 47:1299-1306, 1991

Dhooge C, Govaert P, Martens F, Caemaert J: Transventricular endoscopic investigation and treatment of suprasellar arachnoid cysts. *Neuropediatrics* 23:245-247, 1992.

Martens F, Verbeke L : Stereotactic radiosurgery of cerebral metastases : preliminary results. *Acta Clin Belg* 48, 4:228-233. 1993

Martens F, Verbeke L : Radiosurgery of arteriovenous malformations on a linear accelerator : preliminary results. Acta neurol Belg 1993, 93:204-216

Martens F, Verbeke L : Radiosurgical treatment of acoustic neurinomas on a linear accelerator. Acta Neurochirurgica (Suppl)122:164,1993

Martens F, Verbeke L, Piessens M, Van Vyve M : Stereotactic radiosurgery of vestibular schwannomas with a linear accelerator Acta Neurochir 1994 (Suppl) 62:36-40

F. Martens, M. Van Vyve : Het "Neuronavigatiesysteem": De "ISG Viewing Wand". Een nieuwe technologische aanwinst in de neurochirurgie. Tijdschrift voor Geneeskunde, 53, 1601-1607, 1997.

F. Martens, G. De Geest: Evaluation of the "MicroEndoscopic Discectomy" : a less invasive method for lumbar discectomy. In: Enrique Ferrer 'ed.) 4th International Congress on Minimally Invasive Neurosurgery. Monduzzi 1999

Michael Ahrens, Peter Donkersloot, , Frederic Martens, John Sherman, Jean Charles Le Huec, Anthony,
Nucleus Replacement Using An In Situ Cured, Balloon Contained, Injectable Polyurethane Device: Clinical Results From Two Prospective Multi-Center European Studies. Poster. NASS Austin 2007

LECTURES

Martens F.: Synoviosarcome du pied : à propos d'une observation et revue de la littérature. Conférences d'enseignement de la licence en Orthopédie (CELO) de l'U.L.B 21.3.1986 Hôpital St-Pierre Bruxelles

Ectors P , Martens F: Le traitement des traumatismes médullaires. Séminaires de l'A.M.U.B. 1984. St-Pietersziekenhuis Brussel

Ectors P , Martens F: Le traitement des lésions ostéomédullaires de la jonction thoracolombaire. CELO. Hôp St-Pierre BXL

Martens F, Ectors P: Early management and priorities of polytraumatised patients with intracranial lesions. International Conference on recent advances in neurotraumatology (ICRAN) Cologne 2,3-5 1986

Verstraete K, Martens F, Smeets P, Vandekerckhove T, Meire D, Parizel PM, Van de Velde E, Calliauw L: Traumatic Lumbosacral nerve root meningoceles. 'Interuniversitaire staf Neuroradiologie' Antwerpen 26.6.89

Martens F, Verstraete K, Vandekerckhove T, Calliauw L: Traumatic lumbosacral nerve root avulsion and menigocele. 'Belgische wetenschappelijke vereniging voor neurochirurgie' Leuven 18.3.1989

Martens F., Calle P., Caemaert J.: Toepassing van Nimodipine bij subarachnoidale bloedingen. Stafvergaderingen Intensieve zorgen en spoedopname. UZ Gent .23.02.90

Kalala O, Vandekerckhove T, Vandenbogaerde J, Calliauw L, Caemaert J, Martens F: Functional non-invasive method for evaluation of ventriculo-atrial shunt patency. Deutsche Gesellschaft für Neurochirurgie 41st Annual Meeting Düsseldorf 27th-30th May 1990

Delanghe J, Martens F, Caemaert J, Vandekerckhove T, De Winter H, Calliauw L: CK-BB measurements following severe head injury: new technical aspects, physiological

considerations and correlation with neurological outcome. Deutsche Gesellschaft für Neurochirurgie 41st Annual Meeting Düsseldorf 27th-30th May 1990

Martens F, Bruyns T, Baele G, Caemaert J, Vandekerckhove T, Kalala O, Calliauw L : Is preventive administration of fraxiparine in neurosurgical patients safe ? Deutsche Gesellschaft für Neurochirurgie 41st Annual Meeting Düsseldorf 27th-30th May 1990

Martens F : Spina Bifida . Interuniversitaire seminaries neurochirurgie juni 91.

Martens F, Verbeke L : Stereotactische radiochirurgie. Voordracht gehouden in het kader der Interuniversitaire seminaries neurochirurgie ; 8/6/92 UZ Gent

Martens F, Verbeke L, Calliauw L : Radiosurgery of acoustic neurinomas : initial results on a linear accelerator. Presented at the First Euregio , Maastricht the 12th of february 1993.

Martens F, Verbeke L , Calliauw L: Stereotactic radiosurgery of cerebral metastases : preliminary results. Presented at the winter meeting of the EANS Rome, the 20th of february 1993

Martens F, Verbeke L : Radiosurgical treatment of acoustic neurinomas on a linear accelerator. Presented at the 1st congress of the International Stereotactic Radiosurgery Society, Stockholm June 16-19, 1993.

Martens F, Govaert P, Calliauw L : Hématome sous-dural aigu du nouveau-né. Etiologie et indication opératoire. Belaps, vergadering 10/11/90 te Mariemont

De Deyne C, Poelaert J, Vandekerckhove T, Martens F, Calliauw L, Collardyn Dr F. : Bulbus Jugularis Oxymetrie bij het ernstige neurotrauma. Belgische vereniging voor intensieve geneeskunde en urgentiegeneeskunde, 1/2/91 Brussel

Verbeke L, Martens F: Stereotactische radiochirurgie met een lineaire versneller. Een valabele alternatieve behandeling voor hersentumoren zoals acusticusneurinomen en solitaire hersenmetastasen. Vereniging van Vlaamse Zenuwartsen. Lustrumviering Antwerpen 16/10/93

I Goethals, F.Martens, M. Van Orshoven, M. Van Vyve : Medullaire neurosarcoïdose : een gevalstudie. Belgische Vereniging Neurochirurgie, Leuven 19/3/94

F.Martens, L. Verbeke, M. Piessens, M. Van Vyve : De stereotactische radiochirurgie met een lineaire accelerator van vestibulaire schwannomen : ervaring bij 30 patiënten Belgische Vereniging Neurochirurgie, Leuven 19/3/94

F. Martens : Recente minimale invasieve technieken in de neurochirurgie. Lentevergadering Vereniging van Vlaamse Zenuwartsen., 20/6/98

F. Martens : the 'microendoscopic discectomy': evaluation of a less invasive method for lumbar discectomy MIN Barcelona 1999

M. Van Vyve, F. Martens, E. Van de Kelft : Symposium Neurochirurgie [Neurosurgery Symposium], 'Actualiteiten in de intracraniele chirurgie', 23 January 1999, De Montil Essene.

M. Van Vyve, F. Martens, E. Van de Kelft : Symposium Neurochirurgie, 'De actuele behandeling van Lumbale Discushernia' 19 February 2000, De Montil Essene.

F.Martens Expérience avec la microdiscectomie endoscopique lombaire postérieure. De M.E.D à METR'X. Société francophone de neurochirurgie du rachis. XIIème congrès annuel. Grenoble 26-27-28 avril 2000.

F.Martens : Experience with video-assisted posterior lumbar microdiscectomy. Jornadas universitarias del Raquis. Barcelona 4/5/2000.

M.Van Vyve, F. Martens & E. Van de Kelft, 3e Wintersymposium Neurochirurgie [Third Neurosurgery Winter Symposium] 27 January 2001, De Montil Essene.

M.Van Vyve, F. Martens, E. Van de Kelft & M. Wissels), Symposium Neurochirurgie 'Het gebruik van implantaten in de Neurochirurgie' 25 January 2003, De Montil Essene.

M. Van Vyve, F. Martens ,5e Wintersymposium Neurochirurgie [Fifth Neurosurgery Winter Symposium]
'15 jaar stereotactische bestralingen in België' 4 February 2006, De Montil Essene.

F.Martens Discectomia lumbar. Resultados. Cirugia Lumbar con Tecnicas Minimamente Invasivas. Curso Dr Maximo Villalba. Santander 30/6/2006

OTHER PROFESSIONAL ACTIVITIES

During neurosurgical training in the University Hospital Ghent (Prof Calliauw) developed with radiotherapist Dr Luc Verbeke the first stereotactic radiosurgery application in the Benelux using a LINAC, the first medical application in December 1989. This was further developed in the OLV ziekenhuis Aalst with over 1000 treated patients.

Introduction and clinical application (7/2/1996) of the first neuronavigation equipment (ISG Viewing Wand) on the continent, later Brainlab for operative treatment of brain tumours.

Introduction and clinical application of the MicroEndoscopic Discectomy (MED later Metr'x) in Europe (October 1997)

Appointed Consultant for Sofamor Danek later Medtronic Inc. Spine division for the development of Minimal Invasive Spine Surgery since 1998.

Conducted multiple workshops with cadaver surgery for Minimal invasive Spine Surgery in Paris, Grenoble, Bordeaux, Vienna, Amsterdam, Lyon, Toronto, Graz.
Performed MED guest surgeries for lumbar disc herniation in Antwerp, Lille (France) Eindhoven, Utrecht, Porto, Madrid and Amman.

Actively involved in the clinical trial and application of the Dascor lumbar disc nucleus prosthesis since 2006 and development of the posterolateral approach.

PERSONAL INTERESTS

As much as possible, priority is given to spend time with my two sons and in any case during every holiday period.

I am a regular golf competitor with a fair Hcp of 10.0.

Beside these two important items, I have a lifetime passion for contemporary art which I inherited from my father and I am actively collecting on a regular base. This passion permits a different view on life than it is through medical spectacles.