

CURRICULUM VITAE

Name: Isabel Pavão Martins

Nationality: Portuguese

Present Address:

Language Research Laboratory,

Centro de Estudos Egas Moniz, Hospital de Sta Maria, 1600 Lisboa, Portugal.

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Medical Education:

1980- MD, Faculty of Medicine, University of Lisbon (classification 18/20)

1981-1985- General Medical Internship Hospital de Santa Maria, Lisbon

1985-1990- Neurology Resident, Hospital de Santa Maria, Lisbon

1985-1986- Senior House Officer. The National Hospital for Nervous Diseases, Queen Square, London, UK (August, 1985 to February, 1986)

1986- Honorary Registrar at the Dept Neurology. The Hospitals for Sick Children, London (February to August, 1986) British Council fellowship

1990- Full Licensed Neurologist by the Colégio da Especialidade de Neurologia da Ordem dos Médicos and by the Ministério da Saúde

Positions:

1990-1998- Staff Neurologist, Department of Neurology, Hospital de Santa Maria, Lisbon (July, 1990- June, 1998)

1997-1998 - Consultant degree in Neurology, Ministério da Saúde (December, 1997)

1997- PhD, Faculty of Medicine, University of Lisbon

1998-2007 Professor Auxiliar, Faculty of Medicine, University of Lisbon

1998-present - Director, Language Research Laboratory

2007- present - Professor Auxiliar com Agregação, Faculty of Medicine, University of Lisbon

2007-2010 - President of the Portuguese Society of Neurology

Honours and Awards

1981 - First "PFIZER" prize for young researchers, Sociedade de Ciências Médicas Lisboa.

1982 -"Merck" Honorable Award: "Disorders of cognitive and neurological development in a school population. Relation with school achievement",

1986, 1988, 1992, 1994 - UCB prizes, awarded by the Portuguese Society of Neurology.

1998-First Tecnifar Award (Portuguese Headache Society).

2002- First Tecnifar Award (Portuguese Headache Society).

2007- First Tecnifar Award (Portuguese Headache Society).

Scientific Pannels/Scientific Societies

- Classification Committee of the International Headache Society (2000-2003).

1. Ordem dos Médicos (1980-)
2. Sociedade Portuguesa de Neurologia (desde 1981)
3. General Medical Council (Limited Registration), (1985-1986)
4. Grupo de Estudos de Cefaleias (desde 1986-1997)
5. Sociedade Portuguesa de Cefaleias (1997-)
6. International Neuropsychological Society (1981-1985, 1997-)

7. Membro correspondente estrangeiro da Sociedade Brasileira de Neuropsicologia (desde 1991).
8. Sociedade Portuguesa de Neurociências (1993-)
9. International Headache Society (1996-)
10. American Headache Society (AHS) (2001-)
11. Sociedade Portuguesa de Neurologia Pediátrica (2003-)

Selected References

1. Ferro JM, Martins IP, Pinto F, Castro Caldas A. Aphasia following a right striato-insular infarction in a left-handed child: a clinic-radiological study. *Dev Med Child Neurol* 1982; 24:173-182.
2. Ferro JM, Martins IP. Sex differences among children with aphasia and EEG abnormalities. *Dev Med Child Neurol* 1982; 24:703-704 (letter).
3. Martins IP, Ferro JM. Afasia adquirida em crianças. Estudo clínico e neuropsicológico longitudinal. *Jornal das Ciências Médicas de Lisboa* 1982; CXLVI: 63-106.
4. Ferro JM, Martins IP, Mariano MG, Castro Caldas A. CT scan correlates of gesture recognition. *J Neurol Neurosurg Psychiatry* 1983; 46: 943-952.
5. Ferro JM, Martins IP, Távora L. Neglect in children. *Annals of Neurology* 1984; 15: 281-284.
6. Martins IP, Ferro JM, Trindade A. Acquired crossed aphasia in a child. *Dev Med Child Neurol* 1987; 29: 96-100.
7. Martins IP, Ferro JM. Acquired conduction aphasia in a child. *Dev Med Child Neurol*, 1987; 29: 529-540.
8. Martins IP, Ferro JM. Atypical Facial Pain, baclofen and ectasy of the basilar artery. A case report. *Headache* 1989; 29: 581-583.
9. Martins IP, Blau JN. Headaches in insulin-dependent diabetic patients. *Headache* 1989; 29: 660-663.
10. Ferro JM, Martins IP. Some new aspects of Neglect in Children. *Behavioral Neurology* 1990;3:1-6.
11. Campos J, Gomes L, Alemida A, Coutinho D, Pereira R, Lobo Antunes J, Trindade A, Baeta E, Martins IP. Terapêutica endovascular em aneurismas cerebrais gigantes. *Acta Médica Portuguesa* 1990; 3: 359-366.
12. Martins IP. Cefaleias. *Pathos*. Monografias em Patologia Geral 1991; (80):1-150.
13. Martins IP, Ferro JM. Recovery of Acquired Aphasia in Children. *Aphasiology* 1992; 6(4): 431-438.
14. Martins IP, Ferro JM, Antunes NL. Landau and Kleffner syndrome. Dichotic Listening performance and Outcome of Aphasia. *A.N.A.E.* 1992; 1: 26-31.

15. Paiva T, Esperança P, Martins IP, Batista A, Martins P. Sleep Disorders in Headache Patients. *Headache Quarterly. Current Treatment and Research*. 1992;3 (4): 438-442.
16. Martins IP, Canhão P, Luzes B, Tomé A. Cefaleias no idoso. *Geriartria*. 1992;15 (50): 13-23.
17. Pimentel J, Martins IP. Reader's syndrome. A case with an unusual localization. *Cephalalgia* 1993;13:135.
18. Martins IP. Enxaqueca. Clínica e Terapêutica. *Revista do Interno* 1993; 1: 21-30.
19. Martins IP, Baeta E, Paiva T, Campos J, Gomes LB. Headaches during intracranial endovascular procedures: A possible Model of Vascular Headache. *Headache*, 1993; 33 (5): 227-233.
20. Martins IP, Antunes NL, Levy A. Acquired Visual Agnosia in a Child. *A.N.A.E.* 1993; 5: 70-75.
21. Martins IP, Ferro JM. Acquired Childhood Aphasia: a Clinicoradiological study of 11 stroke patients. *Aphasiology*, 1993; 7 (5): 489-495.
22. Martins IP. O papel do orientador de formação. *Revista do Interno* 1993; 3:165-167.
23. Monteiro P, Seabra E, Palmeiro J, Paiva T, Pontes C, Santos G, et al. An Open Study of Self- administration of Subcutaneous Sumatriptan to treat Successive Attacks of Acute Migraine. *The Journal of International Medical Research*, 1994; 33 (4): 225-235.
24. Paiva T, Martins P, Baptista A, Esperança P, Martins IP. Sleep disturbances in Chronic Headache Patients: A comparison with healthy controls. *Headache Quarterly, Current Treatment and Research*, 1994; 5 (2): 135-141.
25. Martins IP, Antunes NL, Castro-Caldas A, Antunes JL. Atypical Dominance for Language in Developmental Dysphasia. *Dev Med Child Neurol* 1995; 37 (1): 85-90.
26. Martins IP, Parreira E, Costa I. Extratrigeminal icepick status *Headache* 1995; 35 (2): 107-110.
27. Paiva T, Campos C, Baeta E, Gomes LB, Martins IP, Parreira E. EEG monitoring during endovascular embolization of cerebral arteriovenous malformations. "*The EEG Journal*" *Electroencephalography and Clinical Neurophysiology*, 1995; 95: 3-13.
28. Guerreiro M, Castro-Caldas A, Martins IP. Aphasia Following Right Hemispheric Lesion in a Woman with Left Hemisphere injury in Childhood. *Brain and Language* 1995; 49: 280-288.
29. Martins IP. Lesões cerebrais adquiridas na infância. *Revista da Faculdade de Medicina de Lisboa*, 1997; (2): 377-379.
30. Martins IP. Childhood Aphasias. *Clinical Neurosciences* 1997; 4 (2), 73-77.

31. Agostini M, Metz-Lutz MN, Van Hout A, Chavance M, Deloche G, Pavão-Martins I, Dellatollas G. Batterie d'Evaluation du Langage Oral de L'enfant Aphasique (ELOLA): Standardization Française (4-12 ans). *Revue de Neuropsychologie* 1998 ; 8(3):319-367.
32. Martins IP, Parreira E, Albuquerque L, Ferro JM. Capacités de calcul chez des enfants scolarisés avec des lésions cérébrales acquises. *A.N.A.E.* 1999; 51: 6-12.
33. Vieira MR, Santos ME, Martins IP. Análise do débito verbal em crianças de 5,7 e 9 anos. *Jornal da Associação Portuguesa de Terapeutas da Fala* 1999;1: 2-7.
34. Pavão-Martins I, Cunha e Sá M. Loss of topographic memory and prosopagnosia during a migraine aura (Case report). *Cephalalgia* 1999;19: 841-843.
35. Martins IP, Ferreira JJ, Borges L. Acquired procedural dyscalculia associated to a left parietal lesion in a child. *Child Neuropsychology* 1999; 5 (4):265-273.
36. Pavão-Martins I. Cefaleias na Urgência. *Revista do Interno* 2000; 11:145-150.
37. Martins IP, Parreira E. Tricks to relieve migraine attacks. *Headache Q* 2000; 11:113-117.
38. Parreira E, Tomé A, Martins IP. Cefaleia em Salvas. *Acta Médica Portuguesa* 2000; 13: 93-99.
39. Martins IP, Parreira E. Behavioural Response to Headache: A comparison Between Migraine and Tension-type Headache. *Headache* 2001; 41 (6): 546-553.
40. Martins IP, de Sá J, Pereira RC & Gomes LB. Cerebral Venous Thrombosis – May Mimic Migraine with Aura. *Headache Quarterly* 2001; 12 (2): 121-124.
41. Martins IP, Loureiro C. Síndromas de Inatenção Hemiespacial: diagnóstico na Urgência. *Revista do Interno* 2001; 12: 81-87.
42. Martins IP, Gouveia RG. Hypnic headache and travel across time zones: a case report. *Cephalalgia* 2001; 21:928-931.
43. Gil-Gouveia R, Martins IP. Headache Associated with refractive errors: Myth or Reality? *Headache* 2002; 42 (4): 256-262.
44. Martins IP. Perturbações Específicas do Desenvolvimento da Linguagem. Avaliação, Classificação, Diagnóstico Diferencial, Prognóstico. *Psicologia* 2002; vol XVI (1): 27-50.
45. Leal G, Martins IP. “Deep Dyslexia”- quando Lisboa se lê capital, siec/sua e muito/assim. *Sinapse* 2002; 2 (2):34-38.
46. Martins IP. Teste do Amital Sódico. *Psychologica* 2003; 34 :71-85.
47. Martins IP, Fernandes T. Avaliação cognitiva e neurológica numa população recém-escolarizada. *Psychologica* 2003 ; 34: 187-214.

48. Townes B, Rosenbaum JG, Pavão Martins I, Castro-Caldas A. Neurobehavioral assessment of children: A cross-cultural perspective. *Psychologica* 2003; 34:177-185.
49. Coelho M, Ferreira JJ, Dias B, Sampaio C, Pavão Martins I, Castro-Caldas A. Assessment of time perception: the effect of ageing. *Journal of the International Neuropsychological Society* 2004; 10: 332-341.
50. Martins IP, Gil-Gouveia R, Antunes JL. Double dissociation between Autonomic Symptoms and pain in Cluster Headache. *Cephalagia* 2005, 25 (5): 389-400.
51. Gil-Gouveia R, Parreira E, Martins IP. Autonomic features in Cluster headache. Exploratory Factor Analysis. *J Headache Pain* 2005; 6(1): 20-23.
52. Martins IP, Gil-Gouveia R, Parreira E. Cluster Headache without Autonomic Symptoms: Why Is It different? *Headache* 2005; 45: 190-195.
53. Leal G, Martins IP. Avaliação da afasia pelo médico de família. *Revista Portuguesa de Clínica Geral* 2005; 21: 359-64.
54. Martins IP, Castro-Caldas A, Townes B, Ferreira G, Rodrigues P, Marques S, Rosebaum G, Benton TS, Leitão J, DeRouen T. (2005) Age and Sex Differences in Neurobehavioral Performances: A Study of Portuguese Elementary School Children. *International Journal of Neuroscience*.2005; 115: 1687-1709 .
55. Parreira E, Pavão-Martins I, Gil-Gouveia R. Outras cefaleias primárias. *Dor* 2005; 13(1):44-48.
56. Martins IP, Loureiro C, Rodrigues S, Dias B. (2005) Nomeação de Faces Famosas. Capacidade de evocação de nomes próprios numa amostra populacional Portuguesa. *Psicologia, Educação e Cultura* 2005; Vol. IX (2): 421-436.
57. DeRouen TA, Martin MD, Leroux BG, Townes BD, Woods JS, Leitao J, Castro-Caldas A, Luis H, Bernardo M, Rosenbaum G, Martins IP (2006). Neurobehavioral effects of dental amalgam in children: a randomized clinical trial. *Journal of the American Medical Association (JAMA)*. 295 (15):1784-9.
58. Gil-Gouveia R, Parreira E, Martins IP (2006). Duração das crises de cefaleias em salvas. *Sinapse* 6 (1): 41-47.
59. Martins IP, Gil Gouveia R & Parreira E. Kinesiophobia in migraine (2006). *The Journal of Pain*, 7: 445-51.
60. Parreira E, Gouveia RG, Martins IP (2006) Cefaleia em salvas: fisiopatogenia, clínica e tratamento. *Revista Portuguesa de Clínica Geral* 22:471-482.
61. Martins IP, Farrajota L (2007). Proper and common names: a double dissociation. *Neuropsychologia*, 45: 1744-1756.
62. Martins IP, Gil-Gouveia R (2007). More on water headache. *Cephalagia*,27: 372-374.
63. Castro MJ, Stam AH, Lemos C, Barros J, Gouveia RG, Martins IP, Koenderink JB, Vanmolkot KR, Mendes AP, Frants RR, Ferrari MD, Sequeiros J, Pereira-Monteiro

- JM, van den Maagdenberg AM (2007). Recurrent ATP1A2 mutations in Portuguese families with familial hemiplegic migraine. *J Hum Genet.* 52: 990-998.
64. Martins IP, Vieira R, Loureiro C, Santos ME (2007). Speech rate and fluency in children and adolescents. *Child Neuropsychol.* 13(4):319-32.
65. Gil-Gouveia R, Sousa RF, Lopes L, Campos J, Martins IP (2007). Headaches during angiography and endovascular procedures. *Journal of Neurology*, 254:591-596.
66. Martins IP (2007). Crossed aphasia during migraine aura. Transcallosal spreading depression? *Journal of Neurology Neurosurgery and Psychiatry*, 78, 544-545.
67. Martin MD, Benton T, Bernardo M, Woods JS, Townes BD, Luis H, Leitao J, Rosenbaum G, Castro-Caldas A, Pavao I, Rue T, Derouen TA (2007). The association of dental caries with blood lead in children when adjusted for IQ and neurobehavioral performance. *Sci Total Environ.* 377, 159-164.
68. Martins IP (2007). Migraine in Children and Adolescents. *Modern Migraine Management*, 5 (2): 7-14.
69. Lauterbach M, Martins IP, Castro-Caldas A, Bernardo M, Luís H, Amaral H, Leitão J, Martin M, Townes, B, Rosenbaum G, De Rouen T (2008). Neurological outcomes in children with/without mercury exposure from amalgam: seven years of observation in a randomized trial. *Journal of the American Dental Association*, 139 (2): 138-45.
70. Townes BD, Martins IP, Castro-Caldas A, Rosenbaum G, Derouen T (2008). Repeated test scores on neurobehavioral measures over an eight year period in a sample of Portuguese children. *International Journal of Neurosciences* 118: 79-93.
71. Townes BD, Rosenbaum G, Martin M, Martins IP (2008). The Development of Neurocognitive Structures during Adolescence: A Longitudinal Factor Analytic Study Study of children's neurocognitive abilities. *International Journal of Neurosciences*;118 (7): 1009-23.
72. Albuquerque L, Loureiro C, Martins IP. (2008) Effect of lesion site on serial position during list learning: a study with the CVLT. *International Journal Neuroscience*; 118 (7): 917-33.
73. Gil-Gouveia RS, Sousa RF, Lopes L, Campos J, Martins IP (2008) Post-angiography headaches. *J Headache Pain.* (5): 327-30.
74. Martins IP, Lauterbach M, Luis H, De Rouen T, Martin M, Castro-Caldas A, Leitão J, Rosebaum G, Townes B, Slade P. (2008). A Longitudinal Study of Neurological Soft Signs from Late Childhood into Early Adulthood. *Dev Med Child Neurol* Aug; 50 (8): 602-7.
75. Lauterbach M, Martins IP, Garcia P, Cabeça J, Ferreira AC, Willmes K. (2008) The Portuguese version of the Aachen Aphasia Test (AAT). *Journal of the International Neuropsychological Society*, 14, 1-11.
76. Martins IP (2008). Um caso de afasia segundo Tolstoi. *Sinapse - Publicação da Sociedade Portuguesa de Neurologia*, nº 2, vol. 8, pag. 45-48.

77. Lauterbach M, Martins IP, Garcia P, Cabeça J, Ferreira AC and Willmes K. (2008) Cross linguistic aphasia testing: The Portuguese version of the Aachen Aphasia Test (AAT). *Journal of the International Neuropsychological Society* 14 (6), 1046-1056.
78. Townes, B.D., Martins, I.P., Castro-Caldas, A., Rosenbaum, G., DeRouen, T. (2009). The Serial Use of Child Neurocognitive Tests: Development versus Practice Effects. *Psychological Assessment*, 29 (4), 361-369.
79. Martins IP, Loureiro C, Ramos S. Grammatical dissociation during acquired childhood aphasia (in press in *Developmental Medicine & Child Neurology*)

Artigos submetidos

Martins IP, Lauterbach M, Luis H, Amaral H, Vaz L, Carvalho M, DeRouen TA, Castro-Caldas A, Rosebaum G, Slade P, Townes BD. Neural Basis of Neurological Soft Signs: a correlation study. (accepted *The American Journal of Psychiatry*).

Lauterbach M, Leal G , Martins IP, Willmes K. PAAT - Teste de Afasia de Aachen (Aachener Aphasia Test, AAT), versão portuguesa.: Instrumentos validados para a População Portuguesa. (submitted, Avaliação Psicológica)

2. Chapters and books

1. Trindade A, Pavão Martins I, Ferro JM. Métodos auxiliares de diagnóstico (Capítulo 11). Em João Lobo Antunes & José Manuel Ferro (editores) *Acidentes vasculares cerebrais. Diagnóstico e tratamento*. Lisboa, Laboratórios UCB, 1986: pp.117-138.
2. Ferro JM, Pavão Martins I, Lobo Antunes J. Tratamento dos acidentes vasculares cerebrais. (Capítulo 12). Em João Lobo Antunes & José Manuel Ferro (editores) *Acidentes vasculares cerebrais. Diagnóstico e tratamento*. Lisboa, Laboratórios UCB, 1986: pp.139-157.
3. Pavão Martins I. Comas, Estados Confusionais, Convulsões e Encefalopatia de Wernicke. Em J. Pinto Correia, J. Velosa, M. E. A. Camilo & M. Martins Alves(eds). *Manual de Urgências e Cuidados Intensivos em Gastroenterologia*. Lisboa: Manuais Universitários. Edul 1989: pp.119-132.
4. Martins IP, Ferro JM. Recovery from aphasia and lesion size in the temporal lobe. In Isabel Pavão Martins, A Castro-Caldas, Hugo R van Dongen & A van Hout (eds). *Acquired Aphasia in Children*. The Netherlands: Kluwer Academic Publishers 1991: pp.171-184.
5. Martins IP, Ferro JM. Type of aphasia and lesions localization. In Isabel Pavão Martins, A Castro-Caldas, Hugo R van Dongen & A van Hout (eds). *Acquired Aphasia in Children*. The Netherlands: Kluwer Academic Publishers 1991: pp.143-159.
6. Martins IP, Ferro JM. Acquired subcortical lesions in children. In G. Vallar, S.F.Cappa and Claus-W. Wallesch (eds). *Neuropsychological Disorders associated with subcortical lesions*. Oxford: Oxford University Press 1992: 381-396.

7. Martins IP, Ferro JM. Afasia adquirida na criança: Aspectos clínicos e de prognóstico. Em Letícia Mansur e Norberto Rodrigues (eds). *Temas em Neurolinguística*. S Paulo: Sociedade Brasileira de Neuropsicologia, 1993 (2): 92-102.
8. Martins IP. Acalculia. In Franz J. Stachowiak et al (Eds) *Developments in the Assessment and Rehabilitation of Brain-damaged Patients*. Perspectives from a European Concerted Action. Tubingen: Narr 1993: pp. 459-462.
9. Martins IP, Luzes B, Paiva T. Migraine in Childhood: clinical features and outcome. In F. Clifford Rose (ed). *New Advances in Headache Research*: vol 3. London: Smith-Gordon and Company Ltd 1994: pp. 21-27.
10. Martins IP. Basal ganglia lesions, language and neuropsychological dysfunction. In D Riva, A Benton (eds). *Localization of Brain Lesions and Development Functions*. Eastleigh: John Libbey Company Ltd 2000: pp.57-65.
11. Martins IP, Gil-Gouveia R. Emergency Diagnosis and management of headache. In K K Shinha & P Sandra (Eds). *Advances in Clinical Neurosciences* 2000 (10): 377-392.
12. Ferro JM, Pavão-Martins I. Memory loss. In J. Bugoslavsky and L. Caplan (eds). *Stroke Syndromes*. Second Edition. Cambridge: Cambridge University Press 2001: pp. 242-253.
13. Martins IP. Cefaleias: Terapêutica. In Ponce P, Ferro JM, Brandão FM, Guerreiro AS e Neves BC (eds) *Manual de Terapêutica Médica*, vol. 2 Neurologia, 2002: 20 – 28.
14. Martins IP (2004) Persistent Acquired Childhood Aphasia. In “Neurogenic Language Disorders in Children”. Ed. Fabro F. “E.Medea” Scientific Institute, University of Udine. Elsevier, 2004: pp. 231-251.
15. Martins IP. (2006). Cefaleias. Neurologia. Principios, Diagnóstico e Tratamento. Eds. Ferro J e Pimentel J. Edições Lidel. Capítulo 3, pp 35-46.
16. Martins IP. (2006) Funções Cognitivas. Neurologia. Principios, Diagnóstico e Tratamento. Eds. Ferro J e Pimentel J. Edições Lidel. Capítulo 1, pp 1-23.
17. Martins IP. (2006) Cortical specialization for language in childhood: evidence from negative cases. In D Riva “*Language: normal and pathological development*”, Riva D, Rapin I, Zardini G (Eds.) John Libbey Eurotext, 13, 1-13.
18. Martins IP, Caeiro L, Ferro JM. (2007) Right versus left hemispheric syndromes. The *Behavioral and Cognitive Neurology of Stroke*. Bugoslavsky J, Godefroy J (Eds) Oxford University Press, chapter 32, 617-636.
19. Editor: Isabel Pavão Martins, A Castro-Caldas, Hugo R van Dongen & A van Hout (eds). *Acquired Aphasia in Children*. The Netherlands: Kluwer Academic Publishers 1991.

Organization of International Scientific Meetings:

- IMM International Doctoral Programme - Neurosciences - Methods in Neurosciences”. Instituto de Medicina Molecular and Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal, February, 18-22, 2008.
- Forum of Neurological Portuguese Society. Grande Hotel do Luso, Luso, Lisboa, Portugal, May 16-17 May, 2008.
- Statistical Course to Medical Student from the Neurological Portuguese Society. Faculdade de Medicina da Universidade de Lisboa, Lisboa, Portugal, June 26 to July 2, 2008.
- Congress of Neurological Portuguese Society. Hotel Ipanema, Porto, Lisboa, Portugal, November 21-23, 2008.
- Comunicação e Linguagem - Perspectivas evolutivas e de desenvolvimento: comportamento e neurofisiologia. Curso integrado na “Neurologia sem Lágrimas” formação para internos de Neurologia. Coimbra, Quinta das Lágrimas, Junho 2007.
- International Neuropsychological symposium. Estoril, June, 2006
- Recovery of Aphasia and Neglect after stroke. European Commission. Brussels, June 2000
- European Federation of Neurological Societies (Lisbon, Sept. 1999)
- European Meetings of the International Neuropsychological Society (Funchal 1993 and Lisbon, 1983)
- NATO Advanced Research Workshop “Acquired Childhood Aphasia” (Sintra, 1990)

Main scientific area of research: Behavioral Neurology

Other scientific areas of interest: Craniofacial pain