

Curriculum Vitae - Fernando Cendes

Full Professor; Department of Neurology, FCM – UNICAMP, Cidade Universitária Zeferino Vaz, Director; Epilepsy Surgery Program and Neuroimaging Lab., Dept. Neurology, FCM-UNICAMP Campinas SP, Brazil 13081-970, Tel. (55 19) 3521-7372; Email: fcendes@unicamp.br

1.) Education/Training

<i>Year</i>	<i>Title or activity</i>	<i>Institution</i>
1991 - 1997	Post-Doctoral Research Fellowship;	MNIH; McGill University, Canada
1993 - 1997	PhD in Neuroscience;	McGill University, Montreal, Canada
1989 - 1989	EEG training;	MNIH, McGill University, Canada
1986 - 1989	Residence in Neurology	University of Campinas, UNICAMP
1980 - 1985	Medicine – M.D. degree	Federal University of Goiás, UFG Goiânia; Brazil

2.) Personal Statement

I am an epileptologist and director of a comprehensive epilepsy program that serves as a referral center for about four million people and a Professor of Neurology, involved in teaching and training undergrad and graduate students as well as neurology residents. I work full time in a public university hospital that offers free medical care for the population, including complex treatments such as epilepsy surgery. My time is divided into teaching/supervision, clinical activities in epilepsy care, clinical research and academic administrative duties. My research involves mainly aspects of diagnosis, treatment and the consequences of seizures and comorbidities of epilepsy.

I am also involved in several activities in the ILAE over the years, in particular with the Diagnostic Commission, and in the Brazilian local chapter of ILAE. I am currently a member of the ALADE Task Force, Education Council, eLearning Task Force, Epilepsy surgery education task force, FCD Classification Task Force, Imaging Task Force, and the Finance Committee (<https://www.ilae.org/fernando-cendes>), and I chaired the Diagnostic Commission of the ILAE from 2009 to 2013.

I have also been participating actively as a teacher and helping with the organization of the Latin American Summer School of Epilepsy (LASSE) since its beginning 13 years ago. I coordinate an Epilepsy Surgery Program which offers Fellowship training for young neurologists from my country as well as from several other countries in Latin America since 1997.

Over the years I have trained many epileptologists, not only from Brazil, but also from several countries of Latin America.

My service as an educator in the neurosciences and neurology goes beyond my institution, in the form of numerous lectures, teaching seminars, and invited conferences worldwide.

I have the commitment, expertise, and background necessary, and will be honored to help in the ILAE-Latin America region commission.

3.) Positions and Honors

Positions and Employment.

2010– Full Professor; **2004-2009-** Associate Professor; **1997-2003-** Assistant Professor, Department of Neurology; Faculty of Medical Sciences (FCM); University of Campinas (UNICAMP)

2002-2006; and **2010-2014;** Head, Department of Neurology, FCM-UNICAMP

2006-2010; Coordinator; Graduate Course “Medical Pathophysiology” - FCM -UNICAMP.

2010- 2014: Associate Dean for Clinical Research – FCM - UNICAMP

1997- present: Director; Epilepsy Surgery Program, Dept. Neurology, FCM-UNICAMP

1997- present: Director; Neuroimaging Laboratory, Dept. Neurology, FCM-UNICAMP

Committees/ editorial roles:

2005- 2009: Secretary, Diagnostic Commission ILAE- International League Against Epilepsy

2009- 2013: Chair, Diagnostic Commission ILAE- International League Against Epilepsy

2013- 2017: Treasurer, Diagnostic Commission ILAE- International League Against Epilepsy

1998-2002: Secretary Brazilian League Against Epilepsy (Liga Brasileira de Epilepsia)

2006-2008: President Brazilian League Against Epilepsy

2017 - 2021: Member of the ILAE Education Council

2020- 2022: Treasurer, Brazilian League Against Epilepsy

2014 - Associate Editor – *Epilepsia*

Member of the Editorial board of the following journals:

Neurology 2008-to the present, Epilepsy Research 2008-to the present; Epileptic Disorders 2006-2010;

Epilepsia 2005-2009; Journal of Epilepsy and Clinical Neurophysiology 2002-to the present; Arq

NeuroPsiquiatria 2009-to the present; Frontiers in Neurology 2010 – to the present

Advisory Groups

2007 - Advisory Committee of Health Sciences at FAPESP <http://www.fapesp.br/en/6950>

2008 – Advisory Committee, Graduate Courses in Medicine – CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior), Brazil

2014-2022 – Brazilian Delegate: World Federation of Neurology <http://www.wfneurology.org/members-south-america>

Grant Review Experience:

1997 - Ad Hoc reviewer – FAPESP – São Paulo Research Foundation - Brazil

1997 - Ad Hoc reviewer – CNPq – Conselho Nacional de Desenv. Científico e Tecnológico - Brazil

1997 - Ad Hoc reviewer – CAPES – Coord. de Aperfeiçoamento de Pessoal de Nível Superior - Brazil

2002 - Ad Hoc reviewer –for several Grant Agencies from other Countries (including Australia, New Zealand, Ireland, Italy, Spain, and Canada)

Professional Memberships

1995- Member, American Academy of Neurology

1999 Member, American Epilepsy society

1985 Member, Brazilian Chapter of ILAE

1997 Member, Brazilian Society of Clinical Neurophysiology

1999 Member, Brazilian Diagnostic Neuroradiology Society

2000 Member Brazilian Academy of Neurology.

Honors and Awards:

2007- Academic Recognition Award "Zeferino Vaz" for high performance in teaching and research activities among the Professors at the Faculty of Medical Sciences, UNICAMP.

2011- Elected Full Member of the Brazilian National Academy of Science (ABC) <http://www.abc.org.br>

2012- Award "Scientific contribution to the Brazilian Neurology"– awarded by the Brazilian Academy of Neurology.

4.) Contribution to Science

I am Full Professor of the Department of Neurology, State University of Campinas (UNICAMP), Brazil, and Coordinator of the Epilepsy Surgery Program at UNICAMP.

During my career, I supervised 74 graduate students (47 Ph.D. and 27 MSc) and 20 post-doctoral fellows in addition to my teaching activities with medical students and residents and my ongoing clinical activities in our teaching hospital at University of Campinas – UNICAMP since 1997.

My research is focused on Epilepsy, Neuroimaging and Clinical Neuroscience, with more than 450 full papers published in peer review journals, with 14,240 citations, and an H-index of 59 according to the Web of Science (<http://www.researcherid.com/rid/C-1301-2012>), and H-index of 80 according to Google Scholar (<https://scholar.google.com.br/citations?user=K7jgGRQAAAAJ&hl=pt-BR>).

I am currently the PI of The Brazilian Research Institute for Neuroscience and Neurotechnology (BRAINN), which is one of the Research, Innovation and Dissemination Centers (RIDC) sponsored by FAPESP (São Paulo Research Foundation) with a 11 years operational grant (<http://cepid.fapesp.br/en/materia/32>). This Center focuses on investigating the basic mechanisms that lead to epilepsy and stroke, combining genetics, neurobiology, pharmacology, neuroimaging, computer sciences, robotics, physics and engineering. This research has important applications regarding prevention, diagnosis, treatment and rehabilitation, and will serve as a model for better understanding normal and abnormal brain function. The driving force of this RIDC came from the need to approach these relevant and complex biological problems by combining the expertise of research groups with distinct and complementary backgrounds.

5.) Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/sites/myncbi/1j1KnbiqegiAw/bibliography/48593831/public/?sort=date&direction=descending>

6.) List of 20 relevant publications [includes JCR Impact Factor (IF) and number of citations]

1. Grasby KL, Jahanshad N, Painter JN, ... **Cendes F**, ...et al. The genetic architecture of the human cerebral cortex. **Science**. 2020;367(6484):eaay6690. doi:10.1126/science.aay6690 [IF: 41.06] Cited by 29
2. Bernasconi A, **Cendes F**, Theodore WH, Gill RS, Koepp MJ, Hogan RE, Jackson GD, Federico P, Labate A, Vaudano AE, Blümcke I, Ryvlin P, Bernasconi N. Recommendations for the use of structural magnetic resonance imaging in the care of patients with epilepsy: A consensus report from the International League Against Epilepsy Neuroimaging Task Force. **Epilepsia**. 2019;60(6):1054-1068. [IF: 6.04] Cited by 15
3. Avansini SH, Torres FR, Vieira AS, Dogini DB, Rogerio F, Coan AC, Morita ME, Guerreiro MM, Yasuda CL, Secolin R, Carvalho BS, Borges MG, Almeida VS, Araújo PAOR, Queiroz L, **Cendes F**, Lopes-Cendes I. Dysregulation of NEUROG2 plays a key role in focal cortical dysplasia. **Ann Neurol**. 2018;83(3):623-635. [IF: 10.24] Cited by 5
4. Alvim MK, Coan AC, Campos BM, Yasuda CL, Oliveira MC, Morita ME, **Cendes F**. Progression of gray matter atrophy in seizure-free patients with temporal lobe epilepsy. **Epilepsia** 2016; 57:621-9 [IF: 6.04] Cited by 24
5. de Campos BM, Coan AC, Lin Yasuda C, Casseb RF, **Cendes F**. Large-scale brain networks are distinctly affected in right and left mesial temporal lobe epilepsy. **Hum Brain Mapp** 2016 [Epub] [(IF: 5.97] Cited by 41
6. Jehi L, Yardi R, Chagin K, Tassi L, Russo GL, Worrell G, Hu W, **Cendes F**, Morita M, et al. Development and validation of nomograms to provide individualized predictions of seizure outcomes after epilepsy surgery: a retrospective analysis. **Lancet Neurol** 2015; 14(3):283-90. [IF: 28.75] Cited by 54
7. **Cendes F**, Sakamoto AC, Spreafico R, Bingaman W, Becker AJ. Epilepsies associated with hippocampal sclerosis. **Acta Neuropathol** 2014; 128(1):21-37. [IF: 18.17] Cited (web of science) by 57
8. **Cendes F**. Epilepsy in 2011: Insights into epilepsy treatments and biomarkers. **Nature Reviews Neurol** 2012 Jan 10. doi: 10.1038/nrneurol.2011.223. [Impact Factor (IF): 15.51] Cited by 1
9. **Cendes F**, Engel J Jr. Extending applications for high-frequency oscillations: The ripple effect. **Neurology** 2011; 77:518-519. Editorial [IF: 8.31]
10. Labate A, Gambardella A, Andermann E, Aguglia U, **Cendes F**, Berkovic SF, Andermann F. Benign mesial temporal lobe epilepsy. **Nature Reviews Neurol**. 2011; 7:237-40. [IF: 15.51] Cited by 19
11. Blümcke I, Thom M, Aronica E, Armstrong DD, Vinters HV, Palmieri A, Jacques TS, Avanzini G, Barkovich AJ, Battaglia G, Becker A, Cepeda C, **Cendes F**, Colombo N, et al. The clinicopathologic spectrum of focal

cortical dysplasias: a consensus classification proposed by an ad hoc Task Force of the ILAE Diagnostic Methods Commission. *Epilepsia* 2011; 52(1):158-74 [IF: 6.04] Cited by 879

12. Coan AC, Appenzeller S, Bonilha L, Li LM, **Cendes F**. Seizure frequency and lateralization affect progression of atrophy in temporal lobe epilepsy. *Neurology* 2009; 73:834-42. [IF: 8.31] Cited by 29
13. Bonilha L, Alessio A, Rorden C, Baylis G, Damasceno BP, Min LL, **Cendes F**. Extrahippocampal gray matter atrophy and memory impairment in patients with medial temporal lobe epilepsy. *Hum Brain Mapp* 2007; 28(12):1376-90 [IF: 5.39] Cited by 20
14. Bonilha L, Rorden C, Castellano G, Pereira F, Rio PA, **Cendes F**, Li LM. Voxel-based morphometry reveals gray matter network atrophy in refractory medial temporal lobe epilepsy. *Arch Neurol* 2004; 61(9):1379-84. [IF: 6.62] cited by 66
15. Kobayashi, E; Lopes-Cendes, I; Guerreiro, CAM; Sousa, SC; Guerreiro, MM; **Cendes, F**. Seizure outcome and hippocampal atrophy in familial mesial temporal lobe epilepsy. *Neurology* 2001; 56: 166-172 [IF: 8.31] Cited by 73
16. **Cendes F**, Caramanos Z, Andermann F, Dubeau F, Arnold DL. Proton magnetic resonance spectroscopic imaging and magnetic resonance imaging volumetry in the lateralization of temporal lobe epilepsy: a series of 100 patients. *Ann Neurol* 1997; 42:737-746. [IF: 10.74] Cited by 157
17. Scheffer IE, Bhatia KP, Lopes-Cendes I, Fish DR, Marsden CD, Andermann F, Andermann E, Desbiens R, **Cendes F**, Manson JI, et al. Autosomal dominant frontal epilepsy misdiagnosed as sleep disorder. *Lancet* 1994; 343(8896):515-7. [IF: 33.63] Cited by 237
18. **Cendes F**, Andermann F, Preul MC, Arnold DL. Lateralization of temporal lobe epilepsy based on regional metabolic abnormalities in proton magnetic resonance spectroscopic images. *Ann Neurol* 1994; 35(2):211-6. [IF: 10.74] Cited by 195
19. **Cendes F**, Andermann F, Gloor P, et al. MRI volumetric measurements of amygdala and hippocampus in temporal lobe epilepsy. *Neurology* 1993; 43:719-725. [IF: 8.31] Cited by 324
20. **Cendes F**, Andermann F, Dubeau F, Gloor P, Evans A, Jones-Gotman M, Olivier A, Andermann E, Robitaille Y, Lopes-Cendes I, et al. Early childhood prolonged febrile convulsions, atrophy and sclerosis of mesial structures, and temporal lobe epilepsy: an MRI volumetric study. *Neurology* 1993; 43(6):1083-7. ** Selected as one of the most important epilepsy articles in the past 60 years for the 60th anniversary of *Neurology* -- Republished as one of the "Historical Abstracts" in *Neurology* May 24, 2011 76:1845; <http://www.neurology.org/content/76/21/1845.citation> Cited by 307

6.) Ongoing Research Support

- PI of The Brazilian Research Institute for Neuroscience and Neurotechnology (BRAINN : <http://www.brainn.org.br/>) – FAPESP grant #2013/07559-3 – Duration: July 01, 2013 - June 30, 2024

<http://www.bv.fapesp.br/en/auxilios/58565/brainn-the-brazilian-institute-of-neuroscience-and-neurotechnology/>

- Co-PI: National Institute of Translational Neuroscience, INCT - INNT – CNPq/MCT/CAPES – Grant# 465346/2014-6 - PI: Prof. Roberto Lent <http://innt.org.br/>

- Co-PI: NIH Grant R01 NS097719-01. "A Nomogram to Predict Seizure Outcomes after Resective Epilepsy Surgery". PI: Dr. Lara Jehi, Cleveland Clinic Lerner College of Medicine, USA. Co-PIs: Drs. S. Jones, R. Burgess, X. Wang, (Cleveland Clinic); Dr. Gregory Worrell (Mayo Clinic); Dr. Fernando Cendes (UNICAMP).