

## BIOGRAPHICAL SKETCH

NAME Leonardo Bonilha MD, Ph.D.	POSITION TITLE Research Assistant Professor		
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
State University of Campinas, Brazil	MD	1994-1999	Medicine
State University of Campinas	Neurologist	200-2003	Neurology (residency)
State University of Campinas	PhD	2002-2004	Epilepsy
University of Nottingham	Post-Doc	2004-2005	Cognitive Neuroscience

### A. Positions and Honors.

1994-1999	Medical School, State University of Campinas, Brazil
1996	Research Assistant, Center for Neurological Diseases, Brigham and Women's Hospital, Harvard Medical School, Boston, MA.
1999	Elective Clerkship, Hematology-Oncology, Brigham and Women's Hospital and Dana Farber Cancer Institute, Harvard Medical School, Boston, MA.
2000-2003	Medical Residency, Neurology, State University of Campinas, Brazil
2004	Board Certification: Neurologist (Brazilian Academy of Neurology)
2003	Interventional Neuroradiology Part-Time Fellowship, State University of Campinas, Brazil
2002-2004	Attending physician of the Intensive Care Unit, Sumaré State Hospital, Teaching affiliate of State University of Campinas, Brazil
2002-2004	PhD Student, Medical Physiopathology program, State University of Campinas, Brazil
2004-2005	Post-doctoral research fellow, School of Psychology and Division of Psychiatry, University of Nottingham, UK
2005-	Research Assistant Professor Dept. of Communication Sciences and Disorders and Department of Neuropsychiatry, University of South Carolina, SC

### Honors and Awards:

1995 - 2000	Training Studentship from Brazilian Culture and Education Ministry achieved through performance in Medical School
1999	Harvard Medical School Clerkship Tuition Waiver. High Honors Performance in Clinical Rotation
1999	State University of Campinas Basic Sciences Performance Award.
1999	State University of Campinas Adolpho Lutz Social Care Award. Scientific award for research in social care (L. Bonilha, A.M.Pinto; Health and Social Costs of Miscarriage in the City of Campinas)
2000 - 2003	State University of Campinas Medical Residency Studentship
2002 - 2003	PhD studentship funded by the National Commission for the Progress of Science (CNPQ), Brazilian funding agency (L.Bonilha, L.M.Li; Extent of Neuronal Damage in Medial Temporal Lobe Epilepsy)
2003	Young Investigator Bursary Award 25th International Epilepsy Congress, Lisbon - Portugal

## **B. Selected peer-reviewed publications (in chronological order).**

### **Publications:**

1. Borges G, Maciel Junior JA, Carelli EF, Alvarenga M, De Castro R, **Bonilha L**. Pilonidal cyst on the vault. Case report. *Arq Neuropsiquiatr* 1999 Jun;57(2A):273-6.
2. Borges G, Zambelli HJ, Fernandes YB, Carelli EF, **Bonilha L**. Arachnoid cyst: adversity and plasticity. *Arq Neuropsiquiatr* 1999 Jun;57(2B):377-81
3. Borges G, **Bonilha L**, Santos SF, Carelli EF, Fernandes YB, Ramina R, Zanardi V, Menezes JR, Nogueira RJ. Thrombosis of the internal carotid artery secondary to soft palate injury in children and childhood. Report of two cases. *Pediatr Neurosurg* 2000 Mar;32(3):150-3
4. Borges G, **Bonilha L**, Maldaum MV, Menezes JR, Zanardi V. Acute cervical epidural hematoma: case report. *Arq Neuropsiquiatr* 2000 Sep;58(3A):726-30.
5. **Bonilha L**, Borges G, Fernandes YB, Ramina R, Carelli EF, Alvarenga M. Pilocytic astrocytoma following radiotherapy for craniopharyngioma: case report. *Arq Neuropsiquiatr* 2000 Sep;58(3A):731-5
6. **Bonilha L**, Marques EL, Carelli EF, Fernandes YB, Cardoso AC, Maldaum MV, Borges G. Risk factors and outcome in 100 patients with aneurysmal subarachnoid hemorrhage. *Arq Neuropsiquiatr* 2001 Sep;59(3-B):676-80
7. **Bonilha L**, Fernandes YB, Mattos JPV, Borges WAA, Borges G. Bilateral internuclear ophthalmoplegia and clivus fracture following head injury : case report. *Arq Neuropsiquiatr* 2002 Sep;60(3-A):636-638
8. Mattos JP, **Bonilha L**, Ferreira D, Borges W, Fernandes YB, Borges G. Multiple systemic metastases of posterior fossa - primitive neuroectodermal tumor (PF-PNET) in adult: case report. *Arq Neuropsiquiatr*. 2003 Mar;61(1):100-3.
9. **Bonilha L**, Kobayashi E, Cendes F, Li LM. Effects of method and MRI slice thickness on entorhinal cortex volumetry. *Neuroreport* 2003 Jul 18;14(10):1291-5.
10. **Bonilha L**, Kobayashi E, Rorden C, Cendes F, Li LM. Medial temporal lobe atrophy in patients with refractory temporal lobe epilepsy. *J Neurol Neurosurg Psychiatry* 2003 Dec;74(12):1627-30.
11. Kobayashi E, **Bonilha L**, Li LM, Cendes F. Temporal lobe hypogenesis associated with arachnoid cyst in patients with epilepsy. *Arq Neuropsiquiatr* 2003 Jun;61(2B):327-9.
12. **Bonilha L**, Kobayashi E, Castellano G, Coelho G, Tinois E, Cendes F, Li LM. Texture analysis of hippocampal sclerosis. *Epilepsia* 2003 Dec;44(12):1546-50.
13. **Bonilha L**, Mattos JP, Borges WA, Fernandes Y, Andrioli MSD, Borges G. Chronic epidural hematoma of the vertex. *Clin Neurol Neurosurg* 2003 Dec;106(1):69-73.
14. **Bonilha L**, Rorden C, Kobayashi E, Montenegro MA, Guerreiro MM, Li LM, Cendes F. Voxel based morphometry study of partial epilepsies. *Arq Neuropsiquiatr* 2003; 61(Suppl1):93-97
15. Caselato GRC, Kobayashi E, **Bonilha L**, Castellano G, Rigas HA, Li LM, Lopes-Cendes I, Cendes F. Hippocampal texture analysis in patients with familial mesial temporal lobe epilepsy. *Arq Neuropsiquiatr* 2003; 61(Suppl 1):83-87
16. **Bonilha L**, Li LM. Heavy coffee drinking and epilepsy. *Seizure* 2004 Jun;13(4):284-5.
17. **Bonilha L**, Kobayashi E, Mattos JP, Honorato DC, Li LM, Cendes F. Value of extent of hippocampal resection in the surgical treatment of temporal lobe epilepsy. *Arq Neuropsiquiatr* Mar;62(1):15-20. Epub 2004 Apr 28.

18. **Bonilha L**, Cendes F, Ghizoni E, Vieira RJ, Li LM. Epilepsy due to a destructive brain lesion caused by scorpion sting. *Arch Neurol*. 2004 Aug;61(8):1294-6.
19. **Bonilha L**, Montenegro MA, Cendes F, Li LM. The role of neuroimaging in the investigation of patient with single seizure, febrile seizure or refractory partial seizure. *Med Sci Monit*. 2004 Mar;10(3):RA40-6.
20. **Bonilha L**, Kobayashi E, Cendes F, Li LM. Protocol for volumetric segmentation of medial temporal structures using high resolution 3D MRI. *Hum Brain Mapp* 2004 Jun;22(2):145-54.
21. **Bonilha L**, Rorden C, Castellano G, Pereira F, Rio PA, Cendes F; Li LM. Voxel-based Morphometry Reveals Gray Matter Atrophy in Refractory Medial Temporal Lobe Epilepsy. *Arch Neurol*. 2004 Sep;61(9):1379-84.
22. Borges G, **Bonilha L**, Menezes AS, Queiroz Lde S, Carelli EF, Zanardi V, Menezes JR. Long term follow-up in a patient with papillary glioneuronal tumor. *Arq Neuropsiquiatr* Sep;62(3B):869-72. Epub 2004 Oct 05.
23. Castellano G, **Bonilha L**, Li LM, Cendes F. Texture analysis of medical images. *Clin Radiol*. 2004 Dec;59(12):1061-9.
24. **Bonilha L**, Kobayashi E, Cendes F, Li LM. The value of accurate anatomic assessment on volumetric analysis of the amygdala. *Brazilian Journal of Medical and Biological Research Braz J Med Biol Res*. 2005 Mar;38(3):409-18.
25. **Bonilha L**, Rorden C, Castellano G, Cendes F; Li LM. Voxel based morphometry of the thalamus in patients with refractory medial temporal lobe epilepsy. *Neuroimage*. 2005 Apr 15;25(3):1016-21
26. **Bonilha L**, Collares CF, Amaral DA, Barcia SD, Oliveira AMAA, Li LM. Antiepileptic drugs: a study of 1028 cases registered by the São Paulo Intoxication Control Center Seizure. 2005 Apr;14(3):170-4.
27. Borges G, **Bonilha L**, Proa M Jr, Fernandes YB, Ramina R, Zanardi V, Menezes JR. Imaging features and treatment of an intradural lumbar cystic schwannoma. *Arq Neuropsiquiatr*. 2005 Sep;63(3A):681-4. Epub 2005 Sep 9.
28. Amorim BJ, Etchebehere EC, Camargo EE, Rio PA, **Bonilha L**, Rorden C, Li LM, Cendes F. Statistical voxel-wise analysis of ictal SPECT reveals pattern of abnormal perfusion in patients with temporal lobe epilepsy. *Arq Neuropsiquiatr*. 2005 Dec;63(4):977-983.
29. Borges G, Pereira HC, Carelli EF, Fernandes YB, **Bonilha L**, Roma MF, Zanardi VA, Menezes Netto JR, Schenka AA, Queiroz LS. Central neurocytoma: report of two cases. *Arq Neuropsiquiatr*. 2005 Dec;63(4):1084-1089.
30. Alessio A, **Bonilha L**, Rorden C, Kobayashi E, Li LM, Damasceno BP, Cendes F. Memory and language impairments and their relationships to hippocampal and perirhinal cortex damage in patients with medial temporal lobe epilepsy. *Epilepsy and Behavior* 2006 May;8(3):593-600.
31. Pellijeff A, **Bonilha L**, Morgan PS, McKenzie K, Jackson SR. Parietal updating of limb posture: An event-related fMRI study. *Neuropsychologia* 2006 Feb 25; [Epub ahead of print].
32. Ryan SE, **Bonilha L**, Jackson SR. Individual variation in the location of the parietal eye fields: A TMS study. *Experimental Brain Research* 2006 Aug;173(3):389-94.
33. Coan AC, **Bonilha L** Morgan PS, Cendes F, Li LM. T2-weighted and T2 relaxometry images in patients with medial temporal lobe epilepsy. *J Neuroimaging*. 2006 Jul;16(3):260-5.

34. **Bonilha L**, Moser D, Rorden C, Baylis GC, Fridriksson J. Speech apraxia without oral apraxia: can normal brain function explain the physiopathology? *Neuroreport*. 2006 Jul 17;17(10):1027-31.
35. **Bonilha L**, Montenegro MA, Rorden C, Castellano G, Guerreiro MM, Cendes F, Li LM. Voxel-based morphometry reveals excess gray matter concentration in patients with focal cortical dysplasia. *Epilepsia*. 2006 May;47(5):908-15.
36. **Bonilha L**, Rorden C, Appenzeller S, Carolina Coan A, Cendes F, Min Li L. Gray matter atrophy associated with duration of temporal lobe epilepsy. *Neuroimage*. 2006 Sep;32(3):1070-9.
37. **Bonilha L**, Halford JJ, Rorden C, Patel A, Rumbolt Z, Morgan P. Microstructural white matter abnormalities underlying polymicrogyria. *Seizure*. 2007 Jan;16(1):74-80.
38. **Bonilha L**, Yasuda C, Rorden C, Li LM, Tedeschi H, deOliveira E, Cebdes F. Does resection of the medial temporal lobe improve the outcome of temporal lobe epilepsy surgery? *Epilepsia*. 2007 Feb 22; [Epub ahead of print]
39. Appenzeller S, **Bonilha L**, Rio PA, Li LM, Costallat L, Cendes F. Longitudinal analysis of gray and white matter loss in patients with systemic lupus erythematosus. *Neuroimage*. 2007 Jan 15;34(2):694-701.
40. **Bonilha L**, Alessio A, Rorden C, Baylis GC, Damasceno B, Cendes F. Extrahippocampal gray matter atrophy and memory impairment in patients with medial temporal lobe epilepsy. *Human Brain Mapping* (in press).
41. **Bonilha L**, deVries P, Vincent D, Rorden C, Morgan P, Hurd M, Besenski N, Bergamann KJ, Hinson VK. Structural white matter abnormalities in patients with idiopathic dystonia. *Movement Disorders*. *Mov Disord*. 2007 Jan 17; [Epub ahead of print]
42. **Bonilha L**, Rorden C, Halford JJ, Eckert M, Appenzeller S, Cendes F, Li LM. Asymmetrical extra-hippocampal gray matter loss related to hippocampal atrophy in patients with medial temporal lobe epilepsy. *J Neurol Neurosurg Psychiatry*. 2007 Mar;78(3):286-94.
43. Fridriksson J, Moser D, **Bonilha L**, Morrow-Odom KL, Shaw H, Fridriksson A, Baylis GC, Rorden C. Neural correlates of phonological and semantic-based anomia treatment in aphasia. *Neuropsychologia*. 2007 Jan 10; [Epub ahead of print]
44. Almor A, Smith DV, **Bonilha L**, Fridriksson J, Rorden C. What's in a name? Spatial brain circuits are used for tracking personal reference during discourse. *Neuroreport* (in press)
45. Rorden C, **Bonilha L**, Nichols TE. Rank-order versus mean based statistics for neuroimaging. *Neuroimage* (in press)

### **C. External funding.**

Title and grant number: Dissociating Components of the Attentional Network in Neglect R01 NS054266  
PI: Chris Rorden  
Funding source: National Institute on Neurological Disorders and Stroke  
Dates: 8/1/2006-7/31/2011: \$205,000/year  
Purpose: The purpose of this grant is to investigate brain damage associated with neglect in stroke patients.  
Other departmental faculty involved: Julius Fridriksson  
Role/level of effort: 50%

Title and grant number: Neural correlates of aphasia recovery R01  
PI: Julius Fridriksson  
Funding source: National Institute on Deafness and Other Communication Disorders  
Dates: 8/1/2006-7/31/2011: \$205,000/year  
Purpose: The purpose of this grant is to investigate brain damage associated with aphasia in stroke patients.  
Other departmental faculty involved: Chris Rorden  
Role/level of effort: 25%