

Education

1996 PhD in Experimental Psychology. Cambridge University, UK
1993 BA Psychology (honors). Magna cum laude. University of California San Diego

Positions

2011- Endowed chair of neuroimaging, University of South Carolina
2011- Professor, Psychology, University of South Carolina
2009-2011 Professor, Psychology, Georgia Institute of Technology
2009-2011 Director, Georgia State & Georgia Tech Center for Advanced Brain Imaging
2005-2009 Assoc Professor, Communication Sciences & Disorders, U of South Carolina
2004-2005 Reader, Psychology, University of Nottingham, UK
2000-2004 Lecturer, Psychology, University of Nottingham, UK
2000 Post Doc, Department of Psychology, U of South Carolina
1996-2000 Scientist, MRC Cognition & Brain Sciences Unit, Cambridge, UK
1998-1999 Post Doc, Institute of Cognitive Neuroscience, Queen Square, London, UK
1996-1997 Post Doc, Psychology Department, Birkbeck College, London, UK

Honors

2008 Arnold School of Public Health Research Award
2002 British Neuropsychological Society Elizabeth Warrington Prize
1993-1996 Overseas Research Scheme scholarship

Metrics (Jan 2014)

- H-index: 70 (Google)
- >1500 citations per year, 19783 for career ([Google](#))

Peer-reviewed publications ([automated listing](#))

1. Rorden C, Mattingley JB, Karnath HO, Driver J (1997) Visual extinction and prior entry: impaired perception of temporal order with intact motion perception after unilateral parietal damage. *Neuropsychologia* 35:421-433
2. Mattingley JB, Husain M, Rorden C, Kennard C, Driver J (1998) Motor role of human inferior parietal lobe revealed in unilateral neglect patients. *Nature* 392:179-182
3. Robertson IH, Mattingley JB, Rorden C, Driver J (1998) Phasic alerting of neglect patients overcomes their spatial deficit in visual awareness. *Nature* 395:169-172
4. Rorden C, Heutink J, Greenfield E, Robertson IH (1999) When a rubber hand 'feels' what the real hand cannot. *Neuroreport* 10:135-138
5. Rorden C, Driver J (1999) Does auditory attention shift in the direction of an upcoming saccade? *Neuropsychologia* 37:357-377
6. Rorden C, Brett M (2000) Stereotaxic display of brain lesions. *Behav Neurol* 12:191-200
7. Fink GR, Driver J, Rorden C, Baldeweg T, Dolan RJ (2000) Neural consequences of competing stimuli in both visual hemifields: a physiological basis for visual extinction. *Ann. Neurol* 47:440-446
8. Husain M, Mattingley JB, Rorden C, Kennard C, Driver J (2000) Distinguishing sensory and motor biases in parietal and frontal neglect. *Brain* 123 (Pt 8):1643-1659
9. Rorden C, Karnath HO, Driver J (2001) Do neck-proprioceptive and caloric-vestibular stimulation influence covert visual attention in normals, as they influence visual neglect? *Neuropsychologia* 39:364-375
10. Rorden C, Driver J (2001) Spatial deployment of attention within and across hemifields in an auditory task. *Exp Brain Res* 137:487-496
11. Brett M, Leff AP, Rorden C, Ashburner J (2001) Spatial normalization of brain images with focal lesions using cost function masking. *Neuroimage* 14:486-500
12. Ro T, Rorden C, Driver J, Rafal R (2001) Ipsilesional biases in saccades but not perception after lesions of the human inferior parietal lobule. *J Cogn Neurosci* 13:920-929
13. Baylis GC, Simon SL, Baylis LL, Rorden C (2002) Visual extinction with double simultaneous stimulation: what is simultaneous? *Neuropsychologia* 40:1027-1034
14. Karnath HO, Himmelbach M, Rorden C (2002) The subcortical anatomy of human spatial neglect: putamen, caudate nucleus and pulvinar. *Brain* 125:350-360
15. Karnath H, Reich E, Rorden C, Fetter M, Driver J (2002) The perception of body orientation after neck-proprioceptive stimulation. Effects of time and of visual cueing. *Exp Brain Res* 143:350-358

16. Rorden C, Greene K, Sasine G, Baylis G (2002) Enhanced tactile performance at the destination of an upcoming saccade. *Curr. Biol* 12:1429-1434
17. Husain M, Rorden C (2003) Non-spatially lateralized mechanisms in hemispatial neglect. *Nat. Rev. Neurosci* 4:26-36
18. Manly T, Owen AM, McAvinue L, Datta A, Lewis GH, Scott SK, Rorden C, Pickard J, Robertson IH (2003) Enhancing the sensitivity of a sustained attention task to frontal damage: convergent clinical and functional imaging evidence. *Neurocase* 9:340-349
19. Swainson R, Cunnington R, Jackson GM, Rorden C, Peters AM, Morris PG, Jackson SR (2003) Cognitive control mechanisms revealed by ERP and fMRI: evidence from repeated task-switching. *J Cogn Neurosci* 15:785-799
20. Mort DJ, Malhotra P, Mannan SK, Rorden C, Pambakian A, Kennard C, Husain M (2003) The anatomy of visual neglect. *Brain* 126:1986-1997
21. Bonilha L, Kobayashi E, Rorden C, Cendes F, Li LM (2003) Medial temporal lobe atrophy in patients with refractory temporal lobe epilepsy. *J. Neurol. Neurosurg. Psychiatr* 74:1627-1630
22. Duncan J, Bundesen C, Olson A, Humphreys G, Ward R, Kyllingsbaek S, Van Raamsdonk M, Rorden C, Chavda S (2003) Attentional functions in dorsal and ventral simultanagnosia. *Cognitive Neuropsychology*, 20:675-701
23. Plodowski A, Swainson R, Jackson GM, Rorden C, Jackson SR (2003) Mental representation of number in different numerical forms. *Curr. Biol* 13:2045-2050
24. Baylis GC, Simon-Dack SL, Greene K, Jelsone L, Rorden C (2004) The effect of ipsilesional cues on line-bisection errors: the importance of predictive value. *Neuropsychologia* 42:175-182
25. Marcel A, Postma P, Gillmeister H, Cox S, Rorden C, Nimmo-Smith I, Mackintosh B (2004) Migration and fusion of tactile sensation-premorbidity susceptibility to allochiria, neglect and extinction? *Neuropsychologia* 42:1749-1767
26. Smith DT, Rorden C, Jackson SR (2004) Exogenous orienting of attention depends upon the ability to execute eye movements. *Curr. Biol* 14:792-795
27. Hillstrom AP, Husain M, Shapiro KL, Rorden C (2004) Spatiotemporal dynamics of attention in visual neglect: a case study. *Cortex* 40:433-440
28. Bonilha L, Rorden C, Castellano G, Pereira F, Rio PA, Cendes F, Li LM (2004) Voxel-based morphometry reveals gray matter network atrophy in refractory medial temporal lobe epilepsy. *Arch. Neurol* 61:1379-1384
29. Wojciulik E, Rorden C, Clarke K, Husain M, Driver J (2004) Group study of an "undercover" test for visuospatial neglect: invisible cancellation can reveal more neglect than standard cancellation. *J. Neurol. Neurosurg. Psychiatr* 75:1356-1358
30. Karnath H, Fruhmann Berger M, Küker W, Rorden C (2004) The anatomy of spatial neglect based on voxelwise statistical analysis: a study of 140 patients. *Cereb. Cortex* 14:1164-1172
31. Rorden C, Karnath H (2004) Using human brain lesions to infer function: a relic from a past era in the fMRI age? *Nat. Rev. Neurosci* 5:813-819
32. Smith DT, Jackson SR, Rorden C (2005) Transcranial magnetic stimulation of the left human frontal eye fields eliminates the cost of invalid endogenous cues. *Neuropsychologia* 43:1288-1296
33. Humphreys G, Husain M, Farné A, Rorden C, Bartolomeo P (2005) Disorders of visuo-spatial cognition. *Neurocase* 11:146-147
34. Bonilha L, Rorden C, Castellano G, Cendes F, Li LM (2005) Voxel-based morphometry of the thalamus in patients with refractory medial temporal lobe epilepsy. *Neuroimage* 25:1016-1021
35. Fridriksson J, Ryalls J, Rorden C, Morgan PS, George MS, Baylis GC (2005) Brain damage and cortical compensation in foreign accent syndrome. *Neurocase* 11:319-324
36. Peers PV, Ludwig CJH, Rorden C, Cusack R, Bonfiglioli C, Bundesen C, Driver J, Antoun N, Duncan J (2005) Attentional functions of parietal and frontal cortex. *Cereb. Cortex* 15:1469-1484
37. Amorim BJ, Etchebehere EC, Camargo EE, Rio PA, Bonilha L, Rorden C, Li LM, Cendes F. (2005) Statistical voxel-wise analysis of ictal SPECT reveals pattern of abnormal perfusion in patients with temporal lobe epilepsy. *Arq Neuropsiquiatr.* 63(4):977-83.
38. Rorden C, Fruhmann Berger M, Karnath H (2006) Disturbed line bisection is associated with posterior brain lesions. *Brain Res* 1080:17-25
39. Alessio A, Bonilha L, Rorden C, Kobayashi E, Min LL, Damasceno BP, Cendes F (2006) Memory and language impairments and their relationships to hippocampal and perirhinal cortex damage in patients with medial temporal lobe epilepsy. *Epilepsy Behav* 8:593-600
40. Bonilha L, Montenegro MA, Rorden C, Castellano G, Guerreiro MM, Cendes F, Li LM (2006) Voxel-based morphometry reveals excess gray matter concentration in patients with focal cortical dysplasia. *Epilepsia* 47:908-915

41. Fridriksson J, Rorden C, Morgan PS, Morrow KL, Baylis GC (2006) Measuring the hemodynamic response in chronic hypoperfusion. *Neurocase* 12:146-150
42. Bonilha L, Moser D, Rorden C, Baylis GC, Fridriksson J (2006) Speech apraxia without oral apraxia: can normal brain function explain the physiopathology? *Neuroreport* 17:1027-1031
43. Bonilha L, Rorden C, Appenzeller S, Coan AC, Cendes F, Li LM (2006) Gray matter atrophy associated with duration of temporal lobe epilepsy. *Neuroimage* 32:1070-1079
44. Datta A, Cusack R, Hawkins K, Heutink J, Rorden C, Robertson IH, Manly T (2007) The p300 as a marker of waning attention and error propensity. *Comput Intell Neurosci*:93968
45. Fridriksson J, Bonilha L, Rorden C (2007) Severe Broca's aphasia without Broca's area damage. *Behav Neurol* 18:237-238
46. Hirth VA, Davis B, Fridriksson J, Rorden C, Bonilha L (2007) Cognitive performance and neural correlates of detecting driving hazards in healthy older adults. *Dement Geriatr Cogn Disord* 24:335-342
47. Bonilha L, Halford J, Rorden C, Li LM, Patel A, Rumbolt Z, Morgan P (2007) Microstructural white matter abnormalities in nodular heterotopia with overlying polymicrogyria. *Seizure* 16:74-80
48. Bonilha L, Rorden C, Halford JJ, Eckert M, Appenzeller S, Cendes F, Li LM (2007) Asymmetrical extra-hippocampal grey matter loss related to hippocampal atrophy in patients with medial temporal lobe epilepsy. *J. Neurol. Neurosurg. Psychiatr* 78:286-294
49. Bonilha L, Yasuda CL, Rorden C, Li LM, Tedeschi H, de Oliveira E, Cendes F (2007) Does resection of the medial temporal lobe improve the outcome of temporal lobe epilepsy surgery? *Epilepsia* 48:571-578
50. Fridriksson J, Moser D, Bonilha L, Morrow-Odom KL, Shaw H, Fridriksson A, Baylis GC, Rorden C (2007) Neural correlates of phonological and semantic-based anomia treatment in aphasia. *Neuropsychologia* 45:1812-1822
51. Rorden C, Bonilha L, Nichols TE (2007) Rank-order versus mean based statistics for neuroimaging. *Neuroimage* 35:1531-1537
52. Bonilha L, de Vries PM, Vincent DJ, Rorden C, Morgan PS, Hurd MW, Besenski N, Bergmann KJ, Hinson VK (2007) Structural white matter abnormalities in patients with idiopathic dystonia. *Mov. Disord* 22:1110-1116
53. Rorden C, Karnath H, Bonilha L (2007) Improving lesion-symptom mapping. *J Cogn Neurosci* 19:1081-1088
54. Almor A, Smith DV, Bonilha L, Fridriksson J, Rorden C (2007) What is in a name? Spatial brain circuits are used to track discourse references. *Neuroreport* 18:1215-1219
55. Bonilha L, Alessio A, Rorden C, Baylis G, Damasceno BP, Min LL, Cendes F (2007) Extrahippocampal gray matter atrophy and memory impairment in patients with medial temporal lobe epilepsy. *Hum Brain Mapp* 28:1376-1390
56. Goldenberg G, Hermsdörfer J, Glindemann R, Rorden C, Karnath H (2007) Pantomime of tool use depends on integrity of left inferior frontal cortex. *Cereb. Cortex* 17:2769-2776
57. Rorden C, Guerrini C, Swainson R, Lazerri M, Baylis GC (2008) Event related potentials reveal that increasing perceptual load leads to increased responses for target stimuli and decreased responses for irrelevant stimuli. *Front Hum Neurosci* 2:4
58. Rorden C, Davis B, George MS, Borckardt J, Fridriksson J (2008) Broca's area is crucial for visual discrimination of speech but not non-speech oral movements. *Brain Stimulat* 1:383-385
59. de Haan B, Morgan PS, Rorden C (2008) Covert orienting of attention and overt eye movements activate identical brain regions. *Brain Res* 1204:102-111
60. Bonilha L, Cendes F, Rorden C, Eckert M, Dalgalarondo P, Li LM, Steiner CE (2008) Gray and white matter imbalance--typical structural abnormality underlying classic autism? *Brain Dev* 30:396-401
61. Fridriksson J, Moss J, Davis B, Baylis GC, Bonilha L, Rorden C (2008) Motor speech perception modulates the cortical language areas. *Neuroimage* 41:605-613
62. Wick W, Stupp R, Beule A, Bromberg J, Wick A, Ernemann U, Platten M, Marosi C, Mason WP, van den Bent M, Weller M, Rorden C, Karnath H (2008) A novel tool to analyze MRI recurrence patterns in glioblastoma. *Neuro-oncology* 10:1019-1024
63. Bonilha L, de Vries PM, Hurd MW, Rorden C, Morgan PS, Besenski N, Bergmann KJ, Hinson VK (2009) Disrupted thalamic prefrontal pathways in patients with idiopathic dystonia. *Parkinsonism Relat. Disord* 15:64-67
64. Rorden C, Jelsone L, Simon-Dack S, Baylis LL, Baylis GC (2009) Visual extinction: the effect of temporal and spatial bias. *Neuropsychologia* 47:321-329
65. Bonilha L, Halford JJ, Rorden C, Roberts DR, Rumboldt Z, Eckert MA (2009) Automated MRI analysis for identification of hippocampal atrophy in temporal lobe epilepsy. *Epilepsia* 50:228-233
66. Rorden C, Fridriksson J, Karnath H (2009) An evaluation of traditional and novel tools for lesion behavior mapping. *Neuroimage* 44:1355-1362

67. Fridriksson J, Baker JM, Whiteside J, Eoute D, Moser D, Vesselinov R, Rorden C (2009) Treating visual speech perception to improve speech production in nonfluent aphasia. *Stroke* 40:853-858
68. Davis B, Christie J, Rorden C (2009) Temporal order judgments activate temporal parietal junction. *J. Neurosci* 29:3182-3188
69. Gläscher J, Tranel D, Paul LK, Rudrauf D, Rorden C, Hornaday A, Grabowski T, Damasio H, Adolphs R (2009) Lesion mapping of cognitive abilities linked to intelligence. *Neuron* 61:681-691
70. Turner TH, Fridriksson J, Baker J, Eoute D, Bonilha L, Rorden C (2009) Obligatory Broca's area modulation associated with passive speech perception. *Neuroreport* 20:492-496
71. Fridriksson J, Moser D, Ryalls J, Bonilha L, Rorden C, Baylis G (2009) Modulation of frontal lobe speech areas associated with the production and perception of speech movements. *J. Speech Lang. Hear. Res* 52:812-819
72. Moser D, Fridriksson J, Bonilha L, Healy EW, Baylis G, Baker JM, Rorden C (2009) Neural recruitment for the production of native and novel speech sounds. *Neuroimage* 46:549-557
73. Smith DT, Jackson SR, Rorden C (2009) An intact eye-movement system is not required to generate inhibition of return. *J Neuropsychol* 3:267-271
74. Karnath H, Rorden C, Ticini LF (2009) Damage to white matter fiber tracts in acute spatial neglect. *Cereb. Cortex* 19:2331-2337
75. Moser D, Baker JM, Sanchez CE, Rorden C, Fridriksson J (2009) Temporal order processing of syllables in the left parietal lobe. *J. Neurosci* 29:12568-12573
76. Liddle EB, Jackson GM, Rorden C, Jackson SR (2009) Lateralized temporal order judgement in dyslexia. *Neuropsychologia* 47:3244-3254
77. Bonilha L, Eckert MA, Fridriksson J, Hirth VA, Moser D, Morgan PS, Rorden C (2009) Age-related relative volume preservation of the dominant hand cortical region. *Brain Res* 1305:14-19
78. Smith DT, Jackson SR, Rorden C. (2009) Repetitive transcranial magnetic stimulation over frontal eye fields disrupts visually cued auditory attention. *Brain Stimul.* 2:81-7
79. de Haan B, Rorden C (2010) Similarity Grouping and Repetition Blindness are Both Influenced by Attention. *Front Hum Neurosci* 4(20): 1-12.
80. Smith DV, Davis B, Niu K, Healy EW, Bonilha L, Fridriksson J, Morgan PS, Rorden C (2010) Spatial attention evokes similar activation patterns for visual and auditory stimuli. *J Cogn Neurosci* 22:347-361
81. Kennett S, Rorden C, Husain M, Driver J (2010) Crossmodal visual-tactile extinction: Modulation by posture implicates biased competition in proprioceptively reconstructed space. *J Neuropsychol* 4:15-32
82. Bonilha L, Edwards JC, Kinsman SL, Morgan PS, Fridriksson J, Rorden C, Rumboldt Z, Roberts DR, Eckert MA, Halford JJ (2010) Extrahippocampal gray matter loss and hippocampal deafferentation in patients with temporal lobe epilepsy. *Epilepsia* 51:519-528
83. Baker JM, Rorden C, Fridriksson J (2010) Using Transcranial Direct-Current Stimulation to Treat Stroke Patients With Aphasia. *Stroke*. PMID 20395612.
84. Fridriksson J, Bonilha L, Baker JM, Moser D, Rorden C (2010) Activity in preserved left hemisphere regions predicts anomia severity in aphasia. *Cereb. Cortex* 20:1013-1019
85. Rorden C, Karnath HO (2010) A simple measure of neglect severity. *Neuropsychologia*. 48:2758-63.
86. Bonilha L, Elm JJ, Edwards JC, Morgan PS, Hicks C, Lozar C, Rumboldt Z, Roberts DR, Rorden C, Eckert MA (2010) How common is brain atrophy in patients with medial temporal lobe epilepsy? *Epilepsia*. 51: 1774-1779.
87. Fridriksson J, Kjartansson O, Morgan PS, Hjaltason H, Magnúsdóttir S, Bonilha L, Rorden C. Impaired speech repetition and left parietal lobe damage (2010) *J Neurosci*. 30:11057-61.
88. Richardson JD, Baker JM, Morgan PS, Rorden C, Bonilha L, Fridriksson J (2011) Cerebral perfusion in chronic stroke: Implications for lesion-symptom mapping and functional MRI. *Behavioural Neurology*. 24: 117-122.
89. Binder JR, Gross WL, Allendorfer JB, Bonilha L, Chapin J, Edwards JC, Grabowski TJ, Langfitt JT, Loring DW, Lowe MJ, Koenig K, Morgan PS, Ojemann JO, Rorden C, Szafarski JP, Tivarus ME, Weaver KE (2011) Mapping Anterior Temporal Lobe Language Areas with FMRI: A Multi-Center Normative Study. *NeuroImage*. 54(2):1465-75
90. Karnath HO, Rennig J, Rorden C (2011) The anatomy underlying acute versus chronic spatial neglect: a longitudinal study. *Brain*. 134: 903-912.
91. Fridriksson J, Richardson JD, Baker JM, Rorden C (2011) Transcranial Direct Current Stimulation Improves Naming Reaction Time in Fluent Aphasia: A Double-Blind, Sham-Controlled Study. *Stroke*. 42: 819-821.
92. Nemoto K, Dan I, Rorden C, Ohnishi T, Tsuzuki D, Okamoto M, Yamashita F, Asada T. (2011) Lin4Neuro: a customized Linux distribution ready for neuroimaging analysis. *BMC Med Imaging*. 11:3.

93. Pirog Reville K, Karnath HO, Rorden C (2011) Distinct anatomy for visual search and bisection: a neuroimaging study. *NeuroImage*. 57: 476-481.
94. Karnath, HO, Rorden C (2011). The anatomy of spatial neglect. *Neuropsychologia*. 50(6):1010-7. PMID 21756924.
95. Rorden C, Kristjansson A, Reville KP, Saevarsson S. (2011) Neural correlates of inter-trial priming and role-reversal in visual search. *Front Hum Neurosci*. 5:151.
96. Suchan J, Rorden C, Karnath HO. (2012) Neglect severity after left and right brain damage. *Neuropsychologia*. PMID: 22230231.
97. Christie J, Ginsberg JP, Steedman J, Fridriksson J, Bonilha L, Rorden C (2012) Global versus local processing: Seeing the left side of the forest and the right side of the trees. *Front Hum Neurosci*. 6:28.
98. Rorden C, Bonilha L, Fridriksson J, Bender B, Karnath HO (2012) Age-specific CT and MRI templates for spatial normalization. *NeuroImage* 61(4):957-65.
99. Rorden C, Hjaltason H, Fillmore P, Fridriksson J, Kjartansson O, Magnúsdóttir S, Karnath HO (2012) Allocentric neglect strongly associated with egocentric neglect. *Neuropsychologia*.
100. Magnúsdóttir S, Fillmore P, den Ouden DB, Hjaltason H, Rorden C, Kjartansson O, Bonilha L, Fridriksson J (2012) Damage to left anterior temporal cortex predicts impairment of complex syntactic processing: A lesion-symptom mapping study. *Human Brain Mapping*.
101. Fridriksson J, Hubbard HI, Hudspeth SG, Holland AL, Bonilha L, Fromm D, Rorden C. (2012) Speech entrainment enables patients with Broca's aphasia to produce fluent speech. *Brain*. 135:3815-29.
102. Richardson JD, Fillmore P, Rorden C, Lapointe LL, Fridriksson J. (2012) Re-establishing Broca's initial findings. *Brain Lang*. 2012 Nov;123(2):125-30.
103. Smith DT, Schenk T, Rorden C. (2012) Saccade preparation is required for exogenous attention but not endogenous attention or IOR. *J Exp Psychol Hum Percept Perform*. PMID: 22428677
104. Rice JK, Rorden C, Little JS, Parra LC. (2013) Subject position affects EEG magnitudes. *Neuroimage*. 64: 476-84.
105. Smith DV, Clithero JA, Rorden C, Karnath HO. (2013) Decoding the anatomical network of spatial attention. *Proc Natl Acad Sci U S A*. 2013 Jan 22;110(4):1518-23.
106. Rorden C, Hanayik T. (2013) StimSync: Open-source hardware for behavioral and MRI experiments. *J Neurosci Methods*. PMID: 24286701
107. de Haan B, Rorden C, Karnath HO. (2013) Abnormal perilesional BOLD signal is not correlated with stroke patients' behavior. *Front Hum Neurosci*. PMID: 24137123
108. Fridriksson J, Guo D, Fillmore P, Holland A, Rorden C. (2013) Damage to the anterior arcuate fasciculus predicts non-fluent speech production in aphasia. *Brain*. 136:3451-60. PMID: 24131592
109. Huang Y, Dmochowski JP, Su Y, Datta A, Rorden C, Parra LC. (2013) Automated MRI segmentation for individualized modeling of current flow in the human head. *J Neural Eng*. PMID: 24099977
110. Rorden C, Hanayik T. (2014) StimSync: open-source hardware for behavioral and MRI experiments. *J Neurosci Methods*. 227:90-9. PMID: 24286701
111. Bonilha L, Nesland T, Rorden C, Fridriksson J. (2014) Asymmetry of the structural brain connectome in healthy older adults. *Front Psychiatry*. PMID: 24409158
112. Bonilha L, Rorden C, Fridriksson J. (2014) Assessing the clinical effect of residual cortical disconnection after ischemic strokes. *Stroke*.45(4):988-93. PMID: 24619391
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114. Fridriksson J, Fillmore P, Guo D, Rorden C. (2014) Chronic Broca's Aphasia Is Caused by Damage to Broca's and Wernicke's Areas. *Cereb Cortex*. PMID: 25016386
115. Li D, Karnath HO, Rorden C. (2014) Egocentric representations of space co-exist with allocentric representations: Evidence from spatial neglect. *Cortex*. 58C:161-169. PMID: 25038308
116. Basilakos A, Fillmore PT, Rorden C, Guo D, Bonilha L, Fridriksson J. (2014) Regional white matter damage predicts speech fluency in chronic post-stroke aphasia. *Front Hum Neurosci*. 8:845.
117. Gleichgerrcht E, Kocher M, Nesland T, Rorden C, Fridriksson J, Bonilha L. (2015) Preservation of structural brain network hubs is associated with less severe post-stroke aphasia. *Restor Neurol Neurosci*. 34(1):19-28.
118. Bonilha L, Gleichgerrcht E, Nesland T, Rorden C, Fridriksson J. (2015) Gray matter axonal connectivity maps. *Front Psychiatry*. 6:35
119. Kocher M, Gleichgerrcht E, Nesland T, Rorden C, Fridriksson J, Spampinato MV, Bonilha L. (2015) Individual variability in the anatomical distribution of nodes participating in rich club structural networks. *Front Neural Circuits*. 9:16.
120. Desai RH, Herter T, Riccardi N, Rorden C, Fridriksson J. (2015) Concepts within reach: Action performance predicts action language processing in stroke. *Neuropsychologia*. 71:217-24.

121. Basilakos A, Rorden C, Bonilha L, Moser D, Fridriksson J. (2015) Patterns of poststroke brain damage that predict speech production errors in apraxia of speech and aphasia dissociate. *Stroke*. 46(6):1561-6.
122. Fridriksson J, Basilakos A, Hickok G, Bonilha L, Rorden C. (2015) Speech entrainment compensates for Broca's area damage. *Cortex*. 69:68-75.
123. Bonilha L, Gleichgerrcht E, Fridriksson J, Rorden C, Breedlove JL, Nesland T, Paulus W, Helms G, Focke NK. (2015) Reproducibility of the Structural Brain Connectome Derived from Diffusion Tensor Imaging. *PLoS One*. 10(8):e0135247.
124. Guo D, Fridriksson J, Fillmore P, Rorden C, Yu H, Zheng K, Wang S. (2015) Automated lesion detection on MRI scans using combined unsupervised and supervised methods. *BMC Med Imaging*. 15:50.
125. Gleichgerrcht E, Fridriksson J, Rorden C, Nesland T, Desai R, Bonilha L. (2015) Separate neural systems support representations for actions and objects during narrative speech in post-stroke aphasia. *Neuroimage Clin*. 10:140-5.
126. Yourganov G, Smith KG, Fridriksson J, Rorden C. (2015) Predicting aphasia type from brain damage measured with structural MRI. *Cortex*. 73:203-15.
127. Fridriksson J, Fillmore P, Guo D, Rorden C. (2015) Chronic Broca's Aphasia Is Caused by Damage to Broca's and Wernicke's Areas. *Cereb Cortex*. 25(12):4689-96
128. Bonilha L, Gleichgerrcht E, Nesland T, Rorden C, Fridriksson J. (2016) Success of Anomia Treatment in Aphasia Is Associated With Preserved Architecture of Global and Left Temporal Lobe Structural Networks. *Neurorehabil Neural Repair*. 30(3):266-79.
129. Li X, Morgan PS, Ashburner J, Smith J, Rorden C. (2016) The first step for neuroimaging data analysis: DICOM to NIFTI conversion. *J Neurosci Methods*. 264:47-56.
130. Findlater SE, Desai JA, Semrau JA, Kenzie JM, Rorden C, Herter TM, Scott SH, Dukelow SP. (2016) Central perception of position sense involves a distributed neural network - Evidence from lesion-behavior analyses. *Cortex*. 2016 79:42-56.
131. Yourganov G, Fridriksson J, Rorden C, Gleichgerrcht E, Bonilha L. (2016) Multivariate Connectome-Based Symptom Mapping in Post-Stroke Patients: Networks Supporting Language and Speech. *J Neurosci*. 36(25):6668-79.
132. Fridriksson J, Yourganov G, Bonilha L, Basilakos A, Den Ouden DB, Rorden C. (2016) Revealing the dual streams of speech processing. *Proc Natl Acad Sci USA*. 113(52):15108-15113.
133. Wright AE, Davis C, Gomez Y, Posner J, Rorden C, Hillis AE, Tippett DC. (2016) Acute Ischemic Lesions Associated with Impairments in Expression and Recognition of Affective Prosody. *Perspect ASHA Spec Interest Groups*. 1(2):82-95.
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196. Keator LM, Basilakos A, Rorden C, Elm J, Bonilha L, Fridriksson J. (2020) Clinical Implementation of Transcranial Direct Current Stimulation in Aphasia: A Survey of Speech-Language Pathologists. *Am J Speech Lang Pathol*. 29(3):1376-1388. PMID: 32437243

Research Support (ongoing or recently completed)

- 2016-2021 Project leader ([project 3](#)) and Project leader ([neuroimaging core](#)) Center for the Study of Aphasia Recovery (C-STAR). P50 DC014664 \$11,468,000. The goal of C-STAR is to advance the treatment of aphasia in the acute and chronic phases of stroke. PI: Fridriksson.
Recommended for funding, 2021-2026
- 2012-2017 Co-I, Trans-cranial Direct Current Stimulation to Treat Aphasia: Phase II Trial. U01 DC011739 \$4,680,000. PI: Fridriksson
- 2015-2017: coI, Speech Entrainment Treatment for Broca's Aphasia R21 DC014170 \$275,000. PI: Fridriksson.
- 2016-2019: MPI, Individual recovery of cognitive defects after stroke. Euro Deutsche Forschungsgemeinschaft (DFG) KA 1258/23-1. €243,550. PIs: Karnath and Rorden.
- 2014-2024: co-I, Brain Connectivity Supporting Language Recovery In Aphasia. NIH 1R01 DC014021. \$1,381,525. PI: L Bonilha
- 2010-2011: co-I, Biological Bases of Anxiety/Stress Induced Seizures in Patients with Epilepsy. Pfizer award. PI Kimford Meador. \$200,000.
- 2009-2011: co-PI, Processing discourse reference in mind and brain. NIH R21AG030445 . \$345,000. PI: A Almor
- 2009-2013: co-PI, The neural basis of processing discourse reference. NSF 0822617.\$299,236. PI: A Almor
- 2009-2014: Joint-Principal investigator, A Unified Neuroanatomical Model of Speech Production and Perception: Implications for Apraxia of Speech and Conduction Aphasia. NIH R01 DC009571. Joint-PI: Julius Fridriksson. \$ 1,062,500 direct support.

2008-2009 Principal investigator, NIH Neuroimaging Informatics Tools and Resources Clearinghouse (NITRC) NOT-EB-08-002 Supplement. \$50,000

2008-2009: co-Principal investigator, Processing discourse reference in mind and brain. NIH R21 AG030445. \$345,413. PI: A Almor

2007-2012 co-Investigator, Neurological Predictors of Anomia Recovery in Aphasia, NIH NIDCD R01 DC008355. Direct budget: \$1,125,000. PI: J Fridriksson

2007-2008 co-PI, Computer-Aided Diagnosis of Subtle Brain Injury. Health Sciences South Carolina \$100,000. PI: Mark Eckert (MUSC)

2007-2009 Principal investigator, Acute stroke diagnosis using high field MRI. Health Sciences South Carolina \$100,000

2006-2011 PI, Dissociating Components of the Attentional Network in Neglect NIH R01 NS054266 Direct budget \$1,025,000

2006 Lead author: Brain plasticity in aging adults. Centennial Proposal 11560-07-14727. Leverages \$800,000 in startup funds for four of the new FEI hires

2006 Lead author: Brain plasticity in adults Faculty of Excellence Initiative 11560-06-13084. Five tenure track faculty positions

2003-2008: co-Principal investigator, Brain Mechanisms of Perceptual Extinction Following Stroke NIH NINDS R01 042047: Direct budget \$820,800. PI: GC Baylis

2005 Medical Research Council and EPSRC program grant. Morris, Bowtell, Francis, Glover, Gowland, Hall, Jackson, Liddle, Palmer, and Rorden. Functional Neuroimaging at Ultra-High-Field [7Tesla] ~3,450,000 USD

2002-2003 ASL Ltd. research grant: Jackson, Swainson, Rorden, and Jackson. Sensorimotor impairment in developmental dyslexia ~337,000 USD

2002-2005 Biotechnology & Biological Sciences Research Council: Jackson, Rorden, Liddle. Cognitive control of action: A behavioural & brain imaging study, ~480,000 USD

2000-2004 Principal investigator: Biotechnology & Biological Sciences Research Council PhD studentship: Frontal and parietal lobe involvement in perception and saccade programming