

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- Co-Director, McCausland Center for Brain Imaging, 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 (~Assoc Prof), Psychology, University of Nottingham, UK
2000-2004 Lecturer (~Asst Prof), 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

2025 OHBM Aperture Paper of the Year 2024
2008 Arnold School of Public Health Research Award
2002 British Neuropsychological Society Elizabeth Warrington Prize
1993-1996 Overseas Research Scheme scholarship

Google Scholar Metrics (1/2026)

- h-index: 88; i10-index 235
- >3200 citations per year, >35000 for career

Software

I am the lead developer for some of the most popular tools in my field. All of these are open source and provided under a permissive license. This allows other teams to understand and extend the algorithms. I have an A+ Github Stats rating.

- My MRIcro software was a seminal visualization tool, and the publication describing it has been cited over 2800 times.
- My MRIcron software has consistently been the top download from the NeuroImaging Tools & Resources Collaboratory
<https://www.nitrc.org/top/toplist.php?type=downloads>
- My dcm2niix tool is the most popular tool for converting data from complicated medical formats to simple scientific formats. Evidence for the popularity include 900 stars, 229 forks and more than 50 other tools that depend on it
<https://github.com/rordenlab/dcm2niix>
- My MRIcroGL voxel viewing tool showcases leading edge methods. It has 207 stars, 33 forks and the technologies involved are being evaluated for the next releases of core tools in our field (FSL and AFNI) <https://github.com/rordenlab/MRIcroGL>
- My Surfice mesh viewer provides unique visualization for tractography, connectome and functional data. It has 106 stars and 23 forks <https://github.com/neurolabusc/surf-ice>
- My team developed NiStat which provides unique statistical methods for neuroimaging data. It has 19 stars and 14 forks. This tool cross-pollinated with other popular tools like PALM <https://github.com/neurolabusc/NiStat>
- My team actively develops NiVue which has been adopted by many popular tools including AFNI, brainlife, FreeSurfer, FSL, OpenNeuro. 66 forks, 270 stars.
<https://github.com/niivue/niivue>

Peer-reviewed publications

see <https://www.ncbi.nlm.nih.gov/myncbi/christopher.rorden.1/bibliography/public/>

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. 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. PMID: 15351625
25. 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

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. PMID: 15120071
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. Fridriksson J, Rorden C, Morgan PS, Morrow KL, Baylis GC (2006) Measuring the hemodynamic response in chronic hypoperfusion. *Neurocase* 12:146-150
41. 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
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. Fridriksson J, Bonilha L, Rorden C (2007) Severe Broca's aphasia without Broca's area damage. *Behav Neurol* 18:237-238
45. 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. PMID: 17097893
46. 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
47. 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
48. 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
49. 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
50. Rorden C, Bonilha L, Nichols TE (2007) Rank-order versus mean based statistics for neuroimaging. *Neuroimage* 35:1531-1537

51. 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
52. Rorden C, Karnath H, Bonilha L (2007) Improving lesion-symptom mapping. *J Cogn Neurosci* 19:1081-1088
53. 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
54. 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
55. 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
56. 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
57. 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
58. Rorden C, Guerrini C, Swainson R, Lazzari 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
59. 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
60. 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
61. 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
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. Smith DT, Jackson SR, Rorden C. (2009) Repetitive transcranial magnetic stimulation over frontal eye fields disrupts visually cued auditory attention. *Brain Stimul.* 2(2):81-7. PMID: 20502626
72. 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
73. 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
74. 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
75. Karnath H, Rorden C, Ticini LF (2009) Damage to white matter fiber tracts in acute spatial neglect. *Cereb. Cortex* 19:2331-2337
76. 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

77. Liddle EB, Jackson GM, Rorden C, Jackson SR (2009) Lateralized temporal order judgement in dyslexia. *Neuropsychologia* 47:3244-3254
78. 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
79. 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
80. 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. PMID: 19822034
81. de Haan B, Rorden C (2010) Similarity Grouping and Repetition Blindness are Both Influenced by Attention. *Front Hum Neurosci* 4(20): 1-12.
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. 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
84. Baker JM, Rorden C, Fridriksson J (2010) Using Transcranial Direct-Current Stimulation to Treat Stroke Patients With Aphasia. *Stroke*. PMID 20395612.
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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. Karnath HO, Rennig J, Rorden C (2011) The anatomy underlying acute versus chronic spatial neglect: a longitudinal study. *Brain*. 134: 903-912.
93. Pirog Reville K, Karnath HO, Rorden C (2011) Distinct anatomy for visual search and bisection: a neuroimaging study. *NeuroImage*. 57: 476-481.
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96. 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.
97. Rorden C, Hjaltason H, Fillmore P, Fridriksson J, Kjartansson O, Magnusdottir S, Karnath HO (2012) Allocentric neglect strongly associated with egocentric neglect. *Neuropsychologia*.
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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.
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116. Bonilha L, Gleichgerrcht E, Nesland T, Rorden C, Fridriksson J. (2015) Gray matter axonal connectivity maps. *Front Psychiatry*. 6:35
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123. 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 PMID: 25016386
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Conference Papers

- Fedorov A, Bu Y, Hu X, Rorden C, Plis C (2024) State-of-the-Art Stroke Lesion Segmentation at 1/1000th of Parameters. 2025 IEEE 22nd International Symposium on Biomedical Imaging (ISBI) DOI: 10.1109/ISBI60581.2025.10981054
- Thuy Dao, Xincheng Ye, Chris Rorden, Steffen Bollmann (2025) Browser-based training for medical image classification. OHBM
- Saunders AM, McMaster EM, Rorden C, Jis JK, Sun M, Sadriddinov A, VanTilburg L, Kim ME, Landman BA, SchillingK (2025). OpenDIVE: Streamlining Tractography Visualization. Medical Imaging with Deep Learning. <https://2025.midl.io/>
- Riccardi N, Newman-Norlund S, Fridriksson J, Rorden C, Bonilha L (2025) Distinct brain age gradients reflect diverse neurobiological hierarchies. CNS Boston
- Martin A, Bonilha L, Rorden C, Fridriksson J, Riccardi N (2025) Regional Brain Age Patterns Predict Aphasia Outcomes - Data Blitz. CNS Boston
- Rorden C, Karnath HO, Bonilha L (2025) Invited Symposium, Using Human Brain Lesions to Infer Function: Entering a New Era. CNS Boston
- Halchenko et al. (2025) The Ecosystem of Standards in Neuroscience: Which Ones Are For You? SfN annual meeting, San Diego

Submitted Research Support

- NIH P50- DC014664 competitive renewal, role PI of Neuroimaging Core, PI of Research Project 2 ~\$12m, in review

Funded Research Support

Internal support listed in *Italics*. While I think extramural funding is a strong indicator for competitive research, I wish to highlight the collaborative nature for the internal awards I have sought.

- 2025 lead mentor Google Summer of Code “Cloud deployment and Fullstack Development for NiiVue”
- 2025-2030 co-I (PI Bonilha) NIH U01-DC022447 Transcranial Direct Current Stimulation to Treat Aphasia: A Superiority Study. **0.45 months/year support**
- 2024-2029 co-I (PI Bonilha) NIH R01-AG088635 Brain Age in Aphasia. \$3,008,360 **1.8 months/year support**
- 2023-2026 PI, Extending ezBIDS, NiiVue and dcm2niiix for user-friendly cloud-based integration and visualization NIH RF1-MH133701 \$2,039,629 **3 months/year support**
- 2021-2026 Project leader (MPI with Bonilha, project 3) and core leader (neuroimaging core) Center for the Study of Aphasia Recovery (C-STAR). P50 DC014664 \$12,376,384. PI: Fridriksson **5 months/year support**
- 2021-2026; co-I Neural Bases of Vocal Sensorimotor Impairment in Aphasia R01-DC018523. PI: Behroozmand \$3,505,705 **2 months/year support**
- 2020-2025 co-I Semantic Systems R01-DC017162-04, PI Desai \$1,662,745 **0.45 months/year support**
- 2023-2024; PI, Improving usage of the Aphasia Research Cohort (ARC) repository, NOT-OD-23-044 for DC014664. \$223,446. PI: Rorden
- 2019-2024: co-I, Speech Entrainment for Aphasia Recovery (SpARc). NIH R01 DC017521. \$4,240,950. PI: Bonilha
- 2021-2022; PI, Public sharing of the Aphasia Recovery Cohort, NOT-OD-21-089 for DC014664. \$223,500. PI: Rorden
- 2021-2022; PI, Advanced neuroimaging visualization for cloud computing ecosystems, NOT-OD-21-091 for DC014664. \$223,500. PI: Rorden
- 2016-2019: MPI, Individual recovery of cognitive defects after stroke. Euro Deutsche Forschungsgemeinschaft (DFG) KA 1258/23-1. €243,550. PIs: Karnath and Rorden.
- 2016-2021 Project leader (project 3) and core leader (neuroimaging core) Center for the Study of Aphasia Recovery (C-STAR). P50 DC014664 \$11,468,000. PI: Fridriksson
- 2015-2020. Co-I, Integrative Functions of the Planum Temporale R01 DC009659 \$3,438,568. PI: Hickok
- 2015-2020: co-I, Integrative Functions of the Planum Temporale. NIH R01 DC009659. \$3,438,568. PI: Bonilha
- 2015-2017: co-I, Speech Entrainment Treatment for Broca's Aphasia R21 DC014170 \$275,000. PI: Fridriksson.
- 2014-2024: co-I, Brain Connectivity Supporting Language Recovery In Aphasia. NIH 1R01 DC014021. \$1,381,525 + \$1,703,101. PI: Bonilha
- 2012-2017 Co-I, Trans-cranial Direct Current Stimulation to Treat Aphasia: Phase II Trial. U01 DC011739 \$4,680,000. PI: Fridriksson
- 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 PI, NIH Neuroimaging Informatics Tools and Resources Clearinghouse (NITRC) NOT-EB-08-002 Supplement. \$50,000

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

2007-2012 co-I, 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-PI, 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, Swinson, 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 PI: Biotechnology & Biological Sciences Research Council PhD studentship: Frontal and parietal lobe involvement in perception and saccade programming

Service Activities

Grant related:

- Leader, Neuroimaging Core: Center for the Study of Aphasia Recovery
- Co-Leader, Project 3: Center for the Study of Aphasia Recovery

Member:

- Member, Institute of Mind & Brain Space Allocation Task Force
- Member, Department of Psychology External Review Task Force

Institution:

- Co-Director, McCausland Center for Brain Imaging
- Member University Committee on Tenure and Promotions
- Member and reviewer, Council for Endowed Chairs and Named Professorships

External:

- Scientific Advisory Board member, Vascular Brain Health Institute (VBHI) in Bordeaux France
- National Study Sections:
 - NIH Study Sections: served on 3 study sections in 2024 (NINDS, NIDCD, BRAIN Initiative), 2 in 2025 (NIDA; NIDCD).
 - Prior to 2025: Fogarty study section, NINDS ANIE. Ad hoc member for T32 study section. Ad hoc reviewer for P50 study sections. Ad hoc member for National Center for Medical Rehabilitation Research study section. NSF.
- International Study Sections
 - 2025 EBRAINS
 - 2025 Swiss National Science Foundation
- Reviewer for journals.
- 2025: Neuropsychologia, JSCVD, Imaging Neuroscience, Human Brain Mapping, Brain, Cortex

Scholarly presentations (2024 and 2025), Research Visits and Brain Hacks:

- 2024: University of Oxford; University of Cambridge; Together MRI; University of Barcelona; University of Pennsylvania; Johns Hopkins University; University of Oregon; MGH; Boston Children's Hospital; University of Massachusetts Boston; NIH AFNI group; Georgia State University.
- 2025: Vanderbilt BrainHack, University of Delaware

Teaching

- PSYC589/888 Image to Inference
<https://neurolabusc.github.io/crnl/psyc589888/>
This course has uses NSF ACCESS cloud and NeuroDesk for compute
- PSYC450 Sensation and Perception
<https://neurolabusc.github.io/crnl/psyc450/>
- SCHC402 (Honors College) The ABCs of NeuroImaging
This course uses BrainLife for compute