

CURRICULUM VITAE

Jonathan J. Halford, M.D.

96 Jonathan Lucas St.
Suite 301 CSB; MSC606
Charleston, SC 29425
Telephone: 843-792-3221

CURRENT POSITIONS

Professor of Neurology
Department of Neurology
Medical University of South Carolina (MUSC)
Charleston, SC

Staff Neurologist
Department of Neurology
Ralph H. Johnson Veterans Medical Center
Charleston, SC

Adjunct Associate Professor
Department of Electrical and Computer Engineering and School of Computing
College of Engineering and Science
Clemson University
Clemson, SC



ORCID iD QR Code

<https://orcid.org/0000-0003-1681-6744>

EDUCATION

- | | |
|--|--------------------------|
| Bachelor of Arts, Religious Studies
Graduated Cum Laude
Duke University
Durham, NC | August 1986 to May 1990 |
| Doctor of Medicine
Medical University of South Carolina
Charleston, SC | June 1991 to May 1996 |
| Internal Medicine Internship
Department of Medicine
Virginia Commonwealth University
Richmond, VA | July 1996 to June 1997 |
| Combined Neurology-Psychiatry Residency
Neurology Division, Department of Medicine
Department of Psychiatry
Duke University Medical Center
Durham, NC | July 1997 to June 2002 |
| Clinical Neurophysiology Fellowship
Neurology Division, Department of Medicine
Duke University Medical Center
Durham, NC | July 2002 to August 2003 |

HONORS

Golden Apple Special Appreciation Award from the
Medical School Class of 1996 for teaching in Medical Neuroscience

Fellow, American Clinical Neurophysiology Society, 2014 – present

Fellow, American Epilepsy Society, 2016 – present

BOARD CERTIFICATION

Diplomate, Neurology, American Board of Psychiatry and Neurology, 05/2002 – 12/31/2024;
recertification on 12/31/2013

Diplomate, Psychiatry, American Board of Psychiatry and Neurology, 9/2003 – 12/31/2024;
recertification on 12/31/2013

Diplomate, American Board of Psychiatry and Neurology, Epilepsy Subspecialty Certification;
12/2013 – 12/2023 (The first time this board exam was offered was in 2013.)

Diplomate, American Board of Psychiatry and Neurology, Sleep Medicine Subspecialty
Certification; 11/19/09 – 12/31/29; recertification on 11/3/21

Diplomate, American Board of Sleep Medicine; March 22, 2005 – no recertification possible
because this board was dissolved and replaced by ABPN Sleep Medicine (above)

Diplomate, American Board of Clinical Neurophysiology, Advanced Neurophysiology and
Epilepsy Monitoring; 10/2005 – 12/31/2025; recertification in 06/2015

MEDICAL LICENSURES:

South Carolina Active status: August 2003 – present

North Carolina Active status: March 2000 – September 2003

Inactive status: September 2003 – present

WORK EXPERIENCE

Professor of Neurology, Psychiatry, and Behavioral Science. Medical University of South
Carolina, Charleston, SC, 2018 – present

Associate Professor of Neurology (primary appointment), Medical University of South Carolina,
Charleston, SC, July 2011 – 2018

Assistant Professor of Neurology (primary appointment), Medical University of South Carolina,
Charleston, SC, September 2003 – 2011

Associate Professor of Psychiatry (secondary appointment), Medical University of South
Carolina, Charleston, SC, July 2011 – 2018

Assistant Professor of Psychiatry (secondary appointment), Medical University of South
Carolina, Charleston, SC, July 2005 – 2011

Staff Neurologist, Ralph H. Johnson VA Medical Center, Charleston, SC, July 2004 – present

Clinical Neurophysiology Fellow, Department of Medicine, Neurology Division, Duke University
Medical Center, July 2002 – July 2003

Psychiatry Resident, Department of Psychiatry, Duke University Medical Center, January 2000
– June 2002

Neurology Chief Resident, Department of Medicine, Neurology Division, Duke University
Medical Center, July 1999 – December 1999

Neurology Resident, Department of Medicine, Neurology Division, Duke University Medical Center, July 1997 – December 1999
Intern in Internal Medicine, Medical College of Virginia, Richmond VA, July 1996 – June 1997
Research Assistant (computer programming, MRI image processing), Center for Advanced Imaging Research, MUSC, July 1995 – June 1996
Research Assistant (neurophysiology signal analysis), Dept. of Physical Medicine and Rehabilitation, MUSC, Spring 1993 – Fall 1994
Student Medical Missionary, Seventh-day Adventist Church, Amazon Region of Brazil, August 1990 – February 1991
Computer Technician (computer programming, hardware installation), part-time, National Biomedical Simulation Resource, Department of Physiology, Duke University, 1986 – 1990
Computer Technician (computer hardware installation), Trident Medical Center, North Charleston SC, May-August 1987

PROFESSIONAL ACTIVITIES

Journal Review

Ad Hoc Reviewer, *Epilepsy and Behavior*, 2003 – present
Ad Hoc Reviewer, *Epilepsia*, 2011 – present
Ad Hoc Reviewer, *Journal of Clinical Neurophysiology*, 2013 – present
Ad Hoc Reviewer, *Clinical Neurophysiology*, 2015 – present
Ad Hoc Reviewer, *Journal of Neuroscience Methods*, 2015 – present
Ad Hoc Reviewer, *Computers in Biology and Medicine*, 2015 – present
Ad Hoc Reviewer, *Neurology*, 2016 – present
Ad Hoc Reviewer, *Annals of Neurology*, 2021 – present

Leadership Roles

Director, Adult Epilepsy Program, MUSC, 2005 – 2007
Director, Translational Research Unit, Departments of Neurology and Neurosurgery, MUSC, 2011 – present
Associate Director for Technical Development, MUSC Clinical Neurophysiology Laboratory, 2012 – present
Director, VA Epilepsy Centers of Excellence Consortium Site, Ralph H. Johnson VA Medical Center, Charleston SC, 2012 – present
Director, Clinical Neurophysiology Laboratory, Ralph H. Johnson VA Medical Center, Charleston SC, 2012 – present

University Committee Membership

Member, Physicians Information Council, MUSC, 2005 – 2009
Member, Practice Partner Committee, MUSC 2009 – 2010
Member, Department of Neurosciences Grand Rounds Committee, Department of Neurosciences, MUSC, 2009 – 2013
Member, IRB III Committee, MUSC, full board member 2010 – 2012, alternate board member 2012-2019, full board member 2019 – present

Member, Clinical Research Task Force, College of Medicine, MUSC, 2013 – 2015

Member, Faculty Research Onboarding/Offboarding Committee, College of Medicine, MUSC, 2016 – present

National Committee Membership

Member, VA Neurology Centers of Excellence Program External Review Committee, 2020 - present

Member, Research Committee, American Epilepsy Society, 2019 – present

Co-Chairman, Clinical Research Committee, American Clinical Neurophysiology Society, 2013 – 2016

Member, Clinical Research Committee, American Clinical Neurophysiology Society, 2016 – 2019

Member, EEG Guidelines Committee, American Clinical Neurophysiology Society 2015 – 2016

Board Member, American Board of Clinical Neurophysiology, 2015 – present

EEG Research Core Committee, Epilepsy Study Consortium Human Epilepsy Project, 2015 – present

Member, Research Collaborative Leadership Council of ASET's Standards & Practices Committee, 2014 – 2015

International Committee Membership

User Co-Chairman, Digital Imaging and Communication in Medicine (DICOM) Working Group 32 for Clinical Neurophysiology (DICOM WG-32), 2018 – present

Member, EEG Task Force Committee, Big Data Commission, International Federation of Clinical Neurophysiology, 2022 – present

Co-Chairman, Task Force "Standard Format for Neurophysiology Data Exchange", International Federation of Clinical Neurophysiology, 2017 – 2018

National Consortium Membership

Member, Epilepsy Study Consortium, 2011 – present

Member, Critical Care EEG Monitoring Research Consortium, 2012 – present

Other Professional Activities

Scientific Abstract Reviewer, American Academy of Neurology Annual Meeting, 2022

Coordinator, Military Epileptologist (VA) Special Interest Group Meeting, American Epilepsy Society Annual Meeting, 2010 – 2014

Co-Coordinator, Military Epileptologists (VA) Special Interest Group Meeting, American Epilepsy Society Annual Meeting, Boston, 2009

Coordinator, Routine Scalp EEG Spike Detection Special Interest Group Meeting, American Clinical Neurophysiology Society Meeting, San Diego, February 2010

Examiner for Oral Board Exam, American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET) March 2007, August 2007, and October 2011

Examiner for Oral Board Exam, American Board of Clinical Neurophysiology, Durham NC; October 11, 2008.

Exam Writer for Intraoperative Monitoring Exam, American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET) 2008-2010

SOCIETY MEMBERSHIPS

National Societies	American Academy of Neurology American Academy of Sleep Medicine American Clinical Neurophysiological Society American Epilepsy Society American Medical Association
Local Societies	South Carolina Neurological Society Charleston County Medical Society

CONFERENCE ATTENDENCE

American Epilepsy Society 2003 – 2019, 2021
American Clinical Neurophysiology Society, 2009 – 2019, 2022
American Academy of Neurology 1998 – 1999, 2011, 2017-2019
International Congress of Clinical Neurophysiology, 2018
IEEE International Engineering in Medicine and Biology Society (EMBS), 2012 - 2013
European Federation of Neurological Societies, Florence, Italy, September 2009
International Epilepsy Congress, Budapest, June 2009
International Epilepsy Colloquium, Lyon, France, 2019
Kongress of German, Austrian, and Swiss Epileptologists, 2017
7th International Conference of ICA and Blind Signal Source Separation 2007, London, UK
6th International Conference on ICA and Blind Signal Source Separation 2006, Charleston SC
American Neuropsychiatric Association in Fort Myers, FL in February 2001

MENTORSHIP

Ph.D. Thesis Committee, William B. Pressley M.S., Clemson University School of Computing. His thesis is based on my work and is entitled “A Computational Framework to Support the Automated Analysis of Routine Electroencephalography Data”. Primary Mentor: Brian Dean, Ph.D (Clemson). PhD was awarded September 2010.

Ph.D. Thesis Committee, Chad G. Waters M.S., Clemson University School of Computing

Ph.D. Thesis Committee, Jing Zhou M.S. Clemson University Department of Electrical and Computer Engineering. Her thesis is based on my work and is entitled “A Study of Automatic Detection and Classification of EEG Epileptiform Transients”. PhD was awarded May 2014.

Ph.D. Thesis Committee, Elham Bagheri, School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore. PhD awarded in 2019.

Ph.D. These Committee, Mattia Galanti, Clemson School of Computing

PEER-REVIEWED PUBLICATIONS

1. Jing J, Ge W, Hong S, Fernandes MB, Lin Z, Yang C, An S, Struck AF, Herlopian A, Karakis I, **Halford JJ**, Ng MC, Johnson EL, Appavu BL, Sarkis RA, Osman G, Kaplan PW, Dhakar MB, Jayagopal LA, Sheikh Z, Taraschenko O, Schmitt S, Haider HA, Kim JA, Swisher CB, Gaspard N, Cervenka MC, Rodriguez Ruiz AA, Lee JW, Tabaeizadeh

- M, Gilmore EJ, Nordstrom K, Yoo JY, Holmes MG, Herman ST, Williams JA, Pathmanathan J, Nascimento FA, Fan Z, Nasiri S, Shafi MM, Cash SS, Hoch DB, Cole AJ, Rosenthal ES, Zafar SF, Sun J, Westover MB. Development of Expert-Level Classification of Seizures and Rhythmic and Periodic Patterns During EEG Interpretation. 2023 Apr 25;100(17):e1750-62
2. McInnis RP, Ayub MA, Jing J, **Halford JJ**, Mateen FJ, Westover MB. Epilepsy diagnosis using a clinical decision tool and artificially intelligent electroencephalography. *Epilepsy & Behavior*. 2023 Apr 1;141:109135.
 3. Peltola ME, Leitinger M, **Halford JJ**, Vinayan KP, Kobayashi K, Pressler RM, Mindruta I, Mayor LC, Lauronen L, Beniczky S. Routine and sleep EEG: Minimum recording standards of the International Federation of Clinical Neurophysiology and the International League Against Epilepsy. *Clinical Neurophysiology*. 2023 Jan 23.
 4. Jing J, Ge W, Struck AF, Fernandes MB, Hong S, An S, Fatima S, Herlopian A, Karakis I, **Halford JJ**, Ng MC, Johnson EL, Appavu BL, Sarkis RA, Osman G, Kaplan PW, Dhakar MB, Jayagopal LA, Sheikh Z, Taraschenko O, Schmitt S, Haider HA, Kim JA, Swisher CB, Gaspard N, Cervenka MC, Rodriguez Ruiz AA, Lee JW, Tabaeizadeh M, Gilmore EJ, Nordstrom K, Yoo JY, Holmes MG, Herman ST, Williams JA, Pathmanathan J, Nascimento FA, Fan Z, Nasiri S, Shafi MM, Cash SS, Hoch DB, Cole AJ, Rosenthal ES, Zafar SF, Sun J, Westover MB. Interrater Reliability of Expert Electroencephalographers Identifying Seizures and Rhythmic and Periodic Patterns in Electroencephalograms. *Neurology*. 2023 Apr 25;100(17):e1737-49.
 5. Kanner AM, Saporta AS, Kim DH, Barry JJ, Altalib H, Omotola H, Jette N, O'Brien TJ, Nadkarni S, Winawer MR, Sperling M, French JA, Abou-Khalil B, Alldredge B, Bebin M, Cascino GD, Cole AJ, Cook MJ, Detyniecki K, Devinsky O, Dlugos D, Faught E, Ficker D, Fields M, Gidal B, Gelfand M, Glynn S, **Halford JJ**, Haut S, Hegde M, Holmes MG, Kalviainen R, Kang J, Klein P, Knowlton RC, Krishnamurthy K, Kuzniecky R, Kwan P, Lowenstein DH, Marcuse L, Meador KJ, Mintzer S, Pardoe HR, Park K, Penovich P, Singh RK, Somerville E, Szabo CA, Szaflarski JP, Lin Thio KL, Trinkka E, Burneo JG; and the Human Epilepsy Project. Mood and Anxiety Disorders and Suicidality in Patients With Newly Diagnosed Focal Epilepsy: An Analysis of a Complex Comorbidity. *Neurology*. 2023 Mar 14;100(11):e1123-34.
 6. **Halford JJ**, Brinkmann BH, Clunie DA, Gotman J, Beniczky S, Rampp S, Rémi J, Husain A, Ehrenberg JA, Winkler S. Continued progress in DICOM neurophysiology standardization. *Clinical neurophysiology: official journal of the International Federation of Clinical Neurophysiology*. 2022 Dec 28;147:11-3.
 7. Tatum WO, **Halford JJ**, Olejniczak P, Selioutski O, Grigg-Damberger MM, Gloss D, Acharya J, Schuele S, Sinha SR, Tsuchida T, Drislane FW. Minimum Technical Requirements for Performing Ambulatory EEG. *Journal of Clinical Neurophysiology*. 2022 Sep 1;39(6):435-40.
 8. Harid NM, Jing J, Hogan J, Nascimento FA, Ouyang A, Zheng WL, Ge W, Safar SF, Kim JA, Lam AD, Herlopian A, Maus D, Ioannis K, Ng M, Hong S, Zhu Y, Kaplan PW, Cash S, Shafi M, Martz G, **Halford JJ**, Westover MD. Measuring expertise in identifying interictal epileptiform discharges. *Epileptic Disorders*. 24(3), pp.496-506.
 9. Sander JW, Rosenfeld WE, **Halford JJ**, Steinhoff BJ, Biton V, Toledo M. Long-term individual retention with cenobamate in adults with focal seizures: Pooled data from the clinical development program. *Epilepsia* 2022; 63(1): 139-149
 10. Tatum WO, Mani J, Jin K, **Halford JJ**, Gloss D, Fahoum F, Maillard L, Mothersill I, Beniczky S. Minimum Standards for Inpatient Long-Term Video-EEG Monitoring: A

Clinical Practice Guideline of the International League Against Epilepsy and International Federation of Clinical Neurophysiology. *Clinical Neurophysiology* 2022; 134:111-128

11. French JA, Cole AJ, Faught E, Theodore WH, Vezzani A, Liow K, **Halford JJ**, Armstrong R, Szafarski JP, Hubbard S, Patel J, Chen K, Feng W, Rizzo M, Elkins J, Knafler G, Parkerson KA. Phase 2 study of natalizumab as adjunctive therapy in drug-resistant focal epilepsy. *Neurology* 2021; 97(18): e1757-e1767
12. Scheffer IE, **Halford JJ**, Miller I, Nabbout R, Sanchez-Carpintero R, Shiloh-Malawsky Y, Wong M, Zolnowska M, Checketts D, Dunayevich E, Devinsky O. Add-on Cannabidiol in Patients with Dravet Syndrome: Results of a Long-Term Open Label Extension Trial. *Epilepsia* 2021; 62(10): 2505-2517
13. Patel AD, Mazurkiewicz-Beldzińska M, Chin RF, Gil-Nagel A, Gunning B, **Halford JJ**, Mitchell W, Perry MS, Thiele EA, Weinstock A, Dunayevich E, Checketts D, Devinsky O. Long-term Safety and Efficacy of Add-on Cannabidiol in Patients with Lennox-Gastaut Syndrome: Results of a Long-Term Open Label Extension Trial. *Epilepsia* 2021; 62(9): 2228-2239
14. **Halford JJ**, Sperling MR, Arkiloc D, Asgharnejadd M, Zingere C, Xud R, Duringe M, French JA. A phase 1b/2a study of soticlestat as adjunctive therapy in participants with developmental and/or epileptic encephalopathies. *Epilepsy Research*; August 2021: 174: 106646
15. **Halford JJ**, Clunie DA, Brinkmann BH, Krefting D, Rémi J, Rosenow F, Husain AM, Fürbass F, Ehrenberg JA, Winkler S. Standardization of Neurophysiology Signal Data into the DICOM® Standard. *Clinical Neurophysiology*; 2021; 32(4): 993-997.
16. Ge W, Jing J, An S, Herlopian A, Ng M, Struck AF, Appavu B, Johnson EL, Osman G, Haider HA, Karakis I, Kim JA, **Halford JJ**, Dhakar MG, Sarkis RA, Swisher CB, Schmitt S, Lee JW, Tabaeizadeh M, Rodriguez A, Gaspard N, Gilmore E, Herman ST, Kaplan PW, Pathmanathan J, Hong S; Rosenthal ES; Zafar S; Sun J, Westover MB. Deep Active Learning for Interictal Ictal Injury Continuum EEG Patterns. *Journal of Neuroscience Methods*. 2021; (351):108966-
17. **Halford JJ**, Edwards JC. Current State of Seizure Freedom as an Outcome in Epilepsy Treatment Clinical Trials. *Acta Neurologica Scandinavica* 2020; 142:91-107.
18. Sperling MR, Klein P, Aboumatar S, Gelfand M, **Halford JJ**, Krauss GL, Rosenfeld WE, Vossler DG, Wechsler R, Borchert L, Kamin M. Cenobamate (YKP3089) as adjunctive treatment for uncontrolled focal seizures in a large, phase 3, multicenter, open-label safety study. *Epilepsia* 2020; 61: 1099-110.
19. Thomas J, Jing J, Thangavel P, Bagheri E, Yuvaraj R, Dauwels J, Rathakrishnan R **Halford JJ**, Cash SS, and Westover B. Automated Detection of Interictal Epileptiform Discharges from Scalp Electroencephalograms by Convolutional Neural Networks. *International Journal of Neural Systems*. 2020 Aug 19:2050030-
20. Nair DR, Laxer KD, Weber PB, Murro AM, Park YD, Barkley GL, Smith BJ, Gwinn RP, Doherty MJ, Noe KH, Zimmerman RS, Bergey GK, Anderson WS, Heck C, Liu CY, Lee RW, Sadler T, Duckrow RB, Hirsch LJ, Wharen RE, William WO; Srinivasan S, McKhann GM, Agostini MA, Alexopoulos AV, Jobst BC, Roberts DW, Salanova V, Witt TC, Cash SS, Cole AJ, Worrell GA, Lundstrom BN, Edwards JC, **Halford JJ**, Spencer DC, Ernst L, Skidmore CT, Sperling MR, Miller I, Geller EB, Berg MJ, Fessler J, Rutecki P, Goldman AM, Mizrahi EM, Gross RE, Shields DC, Schwartz TH, Labar DR, Fountain NB, Elias WJ, Olejniczak PW, Villemarette-Pittman NR, Eisenschenk S, Roper SN, Boggs JG, Courtney TA, Sun FT, Seale CG, Miller KL, Skarpaas TL, Morrell MJ. Nine

year prospective efficacy & safety of brain-responsive neurostimulation for focal epilepsy. 2020 *Neurology*. 95(9): e1244-e1256

21. Jing J, Sun H, Kim JA, Herlopian A, Karakis I, Ng M, **Halford JJ**, Maus D, Chan F, Dolatshahi M, Muniz C, Chu C, Sacca V, Pathmanathan J, Ge W, Dauwels J, Lam A, Cole AJ, Cash SS, Westover MB. Development of Expert-Level Automated Detection of Epileptiform Discharges During Electroencephalogram Interpretation. *JAMA Neurology*. 2020; Jan 1;77(1):103-8.
22. Jing J, Herlopian A, Karakis I, Ng M, **Halford JJ**, Lam A, Maus D, Chan F, Dolatshahi M, Muniz C, Chu C, Sacca V, Pathmanathan J, Ge W, Sun H, Dauwels J, Cole AJ, Hoch DB, Cash SS, Westover MB. Interrater reliability of experts in identifying interictal epileptiform discharges in electroencephalograms. *JAMA Neurology*. 2020; Jan 1;77(1):49-57.
23. Cardenas D, **Halford JJ**, Whitmire LE, Morgan LC, Lie OV, Jetter JM, Cavacos JE. Automated Processing of Single-Channel Surface Electromyography from Generalized Tonic-Clonic Seizures to Inform Semiology. *Journal of Clinical Neurophysiology*. 2020; 37(1):56-61.
24. Thiele E, Marsh E, Mazurkiewicz-Beldzinska M, **Halford JJ**, Gunning B, Devinsky O, Checketts D, Roberts C. Cannabidiol in patients with Lennox–Gastaut syndrome: Interim analysis of an open-label extension study. *Epilepsia*. 2019; 60(3):419-428
25. Stamoulis C, Connolly J, Axeen E, Kaulas H, Bolton J, Dorfman K, **Halford JJ**, Duffy FH, Pearl PL. Non-invasive Seizure Localization with Ictal Single-Photon Emission Computed Tomography is Impacted by Preictal/Early Ictal Network Dynamics. *IEEE Transactions on Biomedical Engineering*. 2019; 66(7): 1863 - 1871
26. **Halford JJ**; Westover MB; LaRoche SM; Macken MP; Kutluay E; Edwards JC; Bonilha L; Kalamangalam GP; Ding K; Hopp JL; Arain A; Dawson R, Martz GU, Wolf BJ, Waters CG, Dean BC. Interictal Epileptiform Discharge Detection in EEG in Different Practice Settings. *Journal of Clinical Neurophysiology*. 2018; 35(5): 375-380
27. Husain AM, Lee JW, Kolls BJ, Hirsch LJ, **Halford JJ**, Gupta PK, Minazad Y, Jones J, LaRoche SM, Herman ST, Swisher CB, Sinha SR, Palade A, Dombrowski KE, Gallentine WB, Hahn CD, Gerard EE and Westover MB for the Critical Care EEG Monitoring Research Consortium. Treatment of Recurrent Electrographic Nonconvulsive Seizures (TRENdS): A Prospective, Randomized Trial of Lacosamide Versus Fosphenytoin. *Annals of Neurology*. 2018; 83:1174–1185
28. **Halford JJ**, Sperling MR, Nair DR, Dlugos DJ, Tatum WO, Harvey J, French JA, Pollard JR, Faught E, Noe KH, Henry TR, Jetter GM, Lie OV, Morgan LC, Girouard MR, Cardenas DP, Whitmire LE, Cavazos JE. Detection of Generalized Tonic-Clonic Seizures Using Surface EMG Monitoring. *Epilepsia*; 2017; 28: 178-184
29. Bagheri E, Dauwels J, Dean BC, Waters CG, Westover MB, **Halford JJ**. Interictal Epileptiform Discharge Characteristics Underlying Expert Interrater Agreement. *Clinical Neurophysiology*; 2017; 128(10): 1994-2005
30. Westover MB, **Halford JJ**, Bianchi MT. What It Should Mean for an Algorithm to Pass a Statistical Turing Test for Detection of Epileptiform Discharges. *Clinical Neurophysiology*. 2017; 128(7): 1406-1407
31. Bolen RD, Edwards JC, **Halford JJ**. Aliasing of 60 Hz artifact due to compressed timebase. *Journal of Clinical Neurophysiology*. 2017; 34:e19-e22
32. Stamoulis C, Vermad N, Kaulasa H, **Halford JJ**, Duffy FH, Pearl PL, Trevesa TS. The promise of subtraction ictal SPECT co-registered to MRI for improved seizure

localization in pediatric epilepsies: Affecting factors and relationship to the surgical outcome. *Epilepsy Research*. 2017; 129: 59-66

33. **Halford JJ**, Arain A, Kalamangalam GP, LaRoche, SM, Bonilha L, Bash M, Azar NJ, Martz GU, Wolf BJ, Waters CG, Dean BC. Characteristics of EEG Interpreters Associated with Higher Inter-rater Agreement. *Journal of Clinical Neurophysiology*. 2017; 34(2) 168-173
34. Al Kasab S, Dawson RA, Jaramillo JL, **Halford JJ**. Correlation of Seizure Frequency and Medication Down-titration Rate During Video-EEG Monitoring. *Epilepsy & Behavior*. 2016; 64: 51–56
35. Tsuchida TN, Acharya JN, **Halford JJ**, Kuratani J, Sinha SR, Stecker, MM, Tatum WO, Drislane F. American Clinical Neurophysiology Society EEG Guidelines Introduction. *Journal of Clinical Neurophysiology*. 2016; 33(4): 301-302
36. Sinha SR, Sullivan L, Sabau D, San-Juan D, Dombrowski k, **Halford JJ**, Hani A, Drislane F, Stecker M. American Clinical Neurophysiology Society Guideline 1: Minimum Technical Requirements for Performing Clinical Electroencephalography. *Journal of Clinical Neurophysiology*. 2016; 33(4):303-307
37. **Halford JJ**, Sabau D, Drislane FW, Tsuchida, TN, Sinha SR. American Clinical Neurophysiology Society Guideline 4: Recording Clinical EEG on Digital Media. *Journal of Clinical Neurophysiology*. 2016; 33(4):317-319
38. **Halford JJ**. Book Review: Handbook of ICU EEG Monitoring by Suzette M. Laroche. *Journal of Clinical Neurophysiology*. 2016; 33(5):475
39. Stead M, **Halford JJ**. A Proposal for a Standard Format for Neurophysiology Data Recording and Exchange. *Journal of Clinical Neurophysiology*. 2016; 33:403–413
40. **Halford JJ**, Schalkoff RJ, Satterfield KE, Martz GU, Kutluay E, Waters CG, Dean BC. Comparison of a Novel Dry Electrode Headset to Standard Routine EEG in Veterans. *Journal of Clinical Neurophysiology*. 2016; 33(6):530-537
41. Haider HA, Rosana E, Hahn CD, Westover MB, **Halford JJ**, Lee J, Shafi MM, Gaspard N, Herman ST, Gerard EE, Hirsch LJ, Ehrenberg JA, LaRoche SM. Sensitivity of Quantitative EEG for Seizure Identification in the Intensive Care Unit. *Neurology*. 2016; 87(9):935-944
42. Foreman B, Mahulikar A, Tadi P, Claassen J, Szaflarski J, **Halford JJ**, Dean BC, Kaplan PW, Hirsch LJ, LaRoche S, Critical Care EEG Monitoring Research Consortium (CCEMRC). Generalized periodic discharges and ‘triphase waves’: A blinded evaluation of inter-rater agreement and clinical significance. *Clinical Neurophysiology*. 2016 Feb; 127(2):1073-80
43. Furbass F, Hartmann MM, **Halford JJ**, Koren J, Herta J, Gruber A, Baumgartner C, Kluge T. Automatic detection of rhythmic and periodic patterns in critical care EEG based on American Clinical Neurophysiology Society (ACNS) standardized terminology. *Neurophysiologie Clinique/Clinical Neurophysiology*. 2015; 45(3): 203-213
44. Lee D, Kalu U, **Halford JJ**, Biton V, Cloyd J, Klein P, Bekersky I, Peng G, Dheerendra S, Tolbert D. Intravenous carbamazepine as short-term replacement therapy for oral carbamazepine in adults with epilepsy: pooled tolerability results from two open-label trials. *Epilepsia*. 2015 Jun; 56(6):906-14
45. Sahlem GL, Badran BW, **Halford JJ**, Williams NR, Korte JE, Leslie K, Strachan M, Breedlove JL, Runion J, Bachman DL, Uhde TW, Borckardt JJ, George MS. Oscillating square wave Transcranial Direct Current Stimulation (tDCS) delivered during slow wave sleep does not improve declarative memory more than sham: A randomized sham controlled crossover study. *Brain Stimulation*. 2015; 8(3):528-34

46. **Halford JJ**, Shiau D, Desrochers JA, Kolls BJ, Dean BC, Waters CG, Azar NJ, Haas KF, Kutluay E, Martz GU, Sinha SR, Kern RT, Kelly KM, Sackellares JC, LaRoche SM. Inter-rater agreement on identification of electrographic seizures and periodic discharges in ICU EEG recordings. *Clinical Neurophysiology*. 2015; 126: 1661-1669
47. **Halford JJ**. One Ring to Dissolve Them All. *Epilepsy Currents*. 2015; 15(1):52-53
48. Zhou J, Schalkoff RJ, Dean BC, **Halford JJ**. A Study of Morphology-Based Wavelet Features and Multiple-Wavelet Strategy for EEG Signal Classification: Results and Selected Statistical Analysis. *Conf Proc IEEE Eng Med Biol Soc*. 2013 Jul; 5998-6002.
49. **Halford JJ**, Schalkoff RJ, Zhou J, Benbadis SR, Tatum WO, Turner RP, Sinha S, Fountain NB, Arain A, Pritchard PB, Kutluay E, Martz G, Edwards JC, Waters C, Dean BC. Standardized Database Development for EEG Epileptiform Transient Detection: EEGnet Scoring System and Machine Learning Analysis. *Journal of Neurosciences Methods*. 2013 Jan; 212(2): 308-316
50. Zhou J, Schalkoff RS, Dean BC, **Halford JJ**. Morphology-Based Wavelet Features and Multiple Mother Wavelet Strategy for Spike Classification in EEG Signals. *Conf Proc IEEE Eng Med Biol Soc*. 2012; 3959-62.
51. Bonilha L, **Halford JJ**, Morgan PS, Edwards JC. Hippocampal atrophy in temporal lobe epilepsy: the generator and receiver. *Acta Neurologica Scandinavica*. 2012 Feb;125(2):105-10.
52. Sackellares JC, Shiau DS, **Halford JJ**, LaRoche SM, Kelly KM. Quantitative EEG Analysis for Automated Detection of Nonconvulsive Seizures in Intensive Care Units. *Epilepsy & Behavior*. 2011; 22(Suppl 1):S69-73.
53. Chien JH, Shiau D-S, **Halford JJ**, Kelly KM, Kern RT, Yang MC, Zhang J, Sackellares JC, Pardalos PM. Signal Regularity-Based Automated Seizure Prediction Algorithm on Scalp EEG. *Cybernetics and Systems Analysis* 2011; 47(4): 586-597.
54. **Halford JJ**, Pressly WB, Benbadis SR, Tatum WO, Turner RP, Arain A, Prichard PB, Edwards JC, Dean BC. Web-based Collection of Expert Opinion on Routine Scalp EEG: Software Development and Inter-rater Reliability. *Journal of Clinical Neurophysiology* 2011; 28: 178-184.
55. **Halford JJ**, Ben-Menachem E, Kwan P, Ness S, Schmitt J, Eerdekens M, Novak G. A randomized, double-blind, placebo-controlled study of the efficacy, safety and tolerability of adjunctive carisbamate treatment in patients with partial-onset seizures. *Epilepsia* 2011; 52(4): 816-825.
56. **Halford JJ**. Response to "Spike Detection Algorithm Performance and Methods of Acquiring Expert Opinion". *Clinical Neurophysiology* 2010; 121(11): 1968-1969.
57. **Halford JJ**, Shiau D-S, Kern RT, Stroman C, Kelly KM, Sackellares JC. Seizure Detection Software Used to Complement the Visual Screening Process for Long-Term EEG Monitoring. *American Journal of Electroneurodiagnostic Technology* 2010; 50: 133-147.
58. Kelly KM, Shiau D-S, Kern, RT, Chien J-H, Yang MC, Yandora, K, Valeriano, JP, **Halford JJ**, Sackellares JC. Assessment of a scalp EEG-based automated seizure detection system. *Clinical Neurophysiology* 2010; 121(11): 1832-1843
59. Shiau D-S, **Halford JJ**, Kelly KM, Kern RT, Inman M, Chien J-H, Pardalos PM, Sackellares JC. Signal Regularity-Based Automated Seizure Detection System for Scalp EEG Monitoring. *Cybernetics and Systems Analysis* 2010; 46(6): 922-935.
60. Bonilha L, Edwards JC, Kinsman SL, Morgan PS, Fridriksson J, Rorden C, Rumboldt Z, Roberts DR, Eckert MA, **Halford JJ**. Hippocampal gray matter loss and hippocampal deafferentation in patients with temporal lobe epilepsy. *Epilepsia* 2010; 51(4): 519-528.

61. Sperling MR, Greenspan A, Cramer J, Kwan P, Kälviäinen R, **Halford JJ**, Schmitt J, Haas M, Yuen E, Cook T, and Novak G. Carisbamate as adjunctive treatment of partial onset seizures in adults in two randomized, placebo-controlled trials. *Epilepsia* 2010; 51(3): 333-343.
62. **Halford JJ**. Computerized Epileptiform Transient Detection in Scalp EEG: Obstacles to Progress and the Example of Computerized ECG Interpretation. *Clinical Neurophysiology* 2009; 120: 1909-1915
63. Bonilha L, **Halford J**, Rorden C, Roberts D, Rumbolt Z, Eckert M. Automated MRI analysis for identification of hippocampal atrophy in temporal lobe epilepsy. *Epilepsia* 2009; 50(2):228-233
64. Bonilha L, **Halford JJ**. The influence of hippocampal atrophy on extra-hippocampal gray matter loss in temporal lobe epilepsy. *Neurology* 2009; 72(23):2052
65. **Halford JJ**, LaPointe M. Clinical Perspectives on Lacosamide. *Epilepsy Currents* 2009; 9(1): 1-9
66. **Halford JJ**. Detection of Paroxysmal EEG Discharges using Multi-taper Blind Signal Source Separation. *Lecture Notes in Computer Science* 2007 Sept; 4666: 601-608
67. Bonilha L, **Halford J**, Rorden C, Li LM, Patel A, Rumbolt Z, Morgan P. Microstructural white matter abnormalities in nodular heterotopia with overlying polymicrogyria. *Seizure*. 2007; 16(1):74-80.
68. Bonilha L, Rorden C, **Halford JJ**, Eckert M, Appenzeller S, Cendes F, Li LM. Asymmetrical extra-hippocampal grey matter loss related to hippocampal atrophy in patients with medial temporal lobe epilepsy. *J Neurol Neurosurg Psychiatry* 2007, 78(3):286-94.
69. **Halford J**, Mazeika G, Slifer S, Speer M, Saunders AM, Strittmatter WJ, Morgenlander JC. APOE2 allele increased in tardive dyskinesia. *Movement Disorders* 2006; 21(4):540-542
70. **Halford JJ**. Neurophysiologic correlates of psychiatric disorders and potential applications in epilepsy. *Epilepsy and Behavior* 2003. 4(4):375-385.
71. Dell DL, **Halford JJ**. Dementia presenting as postpartum depression. *Obstetrics & Gynecology* 2002; 99(5 Pt 2):925-928

COLLABORATIVE GROUP AUTHORSHIP

1. Devinsky O, Patel AD, Cross JH, Villanueva V, Wirrell EC, Privitera M, Greenwood SM, Roberts C, Checketts D, VanLandingham KE, Zuberi SM for the **GWPCARE3 Study Group**. Effect of cannabidiol on drop seizures in the Lennox–Gastaut syndrome. *New England Journal of Medicine*. 2018 May 17;378(20):1888-97.
2. Devinsky O, Helen Cross HJ, Laux L, Marsh E, Miller I, Nabbout R, Scheffer IE, Thiele EA, Wright S, M.D for the **Cannabidiol in Dravet Syndrome Study Group**. Trial of Cannabidiol for Drug-Resistant Seizures in the Dravet Syndrome. *New England Journal of Medicine*. 376:2011-20, 2017.
3. Wechsler R, Hauser RA, French J, and **The Clinician Investigator Collaborative**. Who is helping whom? Manuscript support and transfer of value. *Annals of Neurology* 77(2): 353-355, 2015.
4. Gaspard N, Foreman B, Alvarez V, Kang CC, Probasco JC, Jongeling AC, Meyers E, Espinera A, Haas KF, Schmitt SE, Gerard EEG, Gofton T, Kaplan PW, Lee JW, Legros B, Szaflarski JP, Westover BM, LaRoche SM, Hirsch LJ, For the **Critical Care EEG Monitoring Research Consortium (CCEMRC)**. *Neurology* Nov 2015, 85 (18) 1604-1613.

5. Morrell MJ; On behalf of the **RNS System in Epilepsy Study Group**. Responsive cortical stimulation for the treatment of medically intractable partial epilepsy. *Neurology*. 77: 1295-1301, 2011.
6. Chung S, Sperling MR, Biton V, Krauss G, Hebert D, Rudd GD, Doty P, **SP754 Study Group**. Lacosamide as adjunctive therapy for partial-onset seizures: a randomized controlled trial. *Epilepsia*. 51(6):958-67, 2010.
7. Benbadis SR et al. NES Treatment Workshop 2003: **Member and video-EEG scorer**. Interrater reliability of EEG-video monitoring. *Neurology*. 73:843-846, 2009.

BOOK CHAPTERS

1. **Halford JJ**. "Technical Aspects of EEG" in Handbook of EEG Interpretation, 3rd Edition. Tatum WO (ed). New York, Springer Publishing Company, 2021: 1-18.
2. **Halford JJ**. "Equipment and Instrumentation" in Artifacts in Clinical Neurophysiology. Tatum WO (ed); Springer, 2018. pp 27-40.
3. **Halford JJ**. 'Interrater Agreement for EEG Interpretation' in Handbook of ICU EEG Monitoring. LaRoche SR (eds); Springer, 2018. pp. 241-246.
4. **Halford J**. 'Electrographic Seizures in Adults: Recognition and Examples' in Continuous EEG Monitoring: Principles and Practice. A.M. Husain, S.R. Sinha (eds.); Springer, 2017. pp 87-114.
5. **Halford JJ**. Chapter 37: 'Non-Epileptic Events' in Practical Epilepsy. Editor: Husain AM. New York; Springer, 2015. pp. 396-401.
6. Chien J-H, Shiao D-S, Sackellares JC, **Halford JJ**, Kelly KM, Pardalos PM. 'Using Relative Power Asymmetry as a Biomarker for Classifying Psychogenic Nonepileptic Seizure and Complex Partial Seizure Patients' in Data Mining for Biomarker Discovery. Editors: Pardalos PM, Xanthopoulos P, Zervakis M. New York: Springer, 2012. pp. 57-78.
7. **Halford JJ**. 'Antiepileptic Medications'. Editor Edwards JC. In Handbook of Epilepsy: Diagnosis and Management. MUSC University Press. Charleston SC USA. 2010. pp.173-176.
8. **Halford JJ**. 'Neurophysiologic Correlates of Psychiatric Disorders and Potential Applications in Epilepsy' in Behavioral Aspects of Epilepsy: Principles and Practice. Editors: S Schachter and G Holmes. Demos Medical Publishing, 2007

ABSTRACT PRESENTATIONS

1. McInnis R, Ayub M, Mateen F, **Halford J**, Westover MB. Facilitating Epilepsy Diagnosis through a Simple Decision-Making Algorithm. American Epilepsy Society Virtual Meeting. December 2020.
2. **Halford J**, Scheffer IE, Nabbout R, Sanchez-Carpintero R, Shiloh-Malawsky Y, Wong M, Checketts D, Dunayevich E. Long-Term Safety and Efficacy Cannabidiol (CBD) Treatment in Patients with Dravet Syndrome (DS): 3-Year Results of an Open-Label Extension (OLE) Trial (GWPCARE5). North American Virtual Epilepsy Meeting in September 2020.
3. **Halford JJ**, Arkilo D, Asgharnejad M, Zinger C, Chen S, During M, French JA. Initial Data from the Ongoing ENDYMION Open-label Extension Trial of Soticlestat (TAK-935/OV935) in Participants with Developmental and/or Epileptic Encephalopathies (DEE). Presented virtually at the American Academy of Neurology Annual Meeting in May 2020.

4. **Halford JJ**, Sanchez-Carpintero R, Nabbout R, Shiloh-Malawsky Y, Scheffer IE, Wong M, Checketts D, Dunayevich E. Long-Term Safety and Efficacy of Cannabidiol (CBD) in Dravet Syndrome: 3-Year Interim Results of an Open-label Extension Trial (GWPCARE5). Presented virtually at the American Academy of Neurology Annual Meeting in May 2020.
5. **Halford JJ**, Sperling MR, Arkilo D, Asgharnejad M, Paker AM, Xu R, During M, French JA. A Phase Ib/IIa Study of Soticlestat (TAK-935 /OV935) as Adjunctive Therapy in Patients With Developmental and Epileptic Encephalopathies. Presented virtually at the American Academy of Neurology Annual Meeting in May 2020.
6. Cardenas, DP, Whitmire L, **Halford J**. Machine Learning Analysis of Surface Electromyography for Differentiation between non-Tonic Clonic Epileptic Seizures from Activities of Daily Living. American Clinical Neurophysiology Society Meeting in New Orleans LA, February 2020.
7. Scheffer IE, **Halford J**, Nabbout R, Shiloh-Malawsky Y, Wong M, Checketts D, Dunayevich E. Long-Term Safety and Efficacy of Add-on Cannabidiol (CBD) Treatment in Patients with Dravet Syndrome (DS): 3-Year Results of an Open-Label Extension (OLE) Trial (GWPCARE5). American Epilepsy Society Annual Meeting in Baltimore MD in December 2019.
8. **Halford JJ**, Sperling MR, Arkilo D, Asgharnejad M, Paker AM, Xu R, During M, French JA. A Phase Ib/IIa Study of TAK-935 (OV935) as Adjunctive Therapy in Patients With Developmental and Epileptic Encephalopathies. International Epilepsy Colloquium in Lyon, France in May 2019.
9. **Halford J**, Scheffer IE, Nabbout R, Sanchez-Carpintero R, Shiloh-Malawsky Y, Wong M, Checketts D, VanLandingham K. Long-term Safety and Efficacy of Add-on Cannabidiol Treatment in Patients with Dravet Syndrome in an Open-label Extension Trial (GWPCARE5). American Academy of Neurology Annual Meeting in Philadelphia PA in May 2019.
10. Cardenas D, **Halford J**, Voyles S, Whitmire L, Cavazos C. Automated Calculation of Tonic and Clonic Phase Lengths in GTC Seizures From Single-Channel EMG. American Epilepsy Society Annual Meeting in New Orleans LA in December 2018.
11. Scheffer IE, **Halford J**, Nabbout R, Sanchez-Carpintero R, Shiloh-Malawsky Y, Wong M, Checketts D, VanLandingham K. Long-Term Safety and Efficacy of Add-on Cannabidiol (CBD) Treatment in Patients with Dravet Syndrome (DS) in an Open-Label Extension (OLE) Trial (GWPCARE5). American Epilepsy Society Annual Meeting in New Orleans LA in December 2018.
12. **Halford J**, Marsh E, Mazurkiewicz-Beldzinska M, Gunning B, Checketts D, Roberts C, Thiele E. Long-term Safety and Efficacy of Cannabidiol (CBD) in Patients with Lennox-Gastaut Syndrome (LGS): Results from Open-label Extension Trial (GWPCARE5). American Academy of Neurology in Los Angeles CA, April 2018.
13. Shiao D-S, Rodriguez A, Haas KF, **Halford JJ**, Desrochers J, Kern RT, Kelly KM. Validation of an All-in-One EEG and Seizure Monitoring Handheld Device (CereScope) through Simultaneous Recordings with Clinical EEG Systems. American Epilepsy Society Annual Meeting in Washington DC in December 2017.
14. Cavazos JE, **Halford JJ**, Nair D, Dlugos, DJ, Tatum W, Harvey J, French J, Pollard JR, Faught E, Noe K, Henry T, Jetter G, Lie OV, Morgan LC, Girouard, M, Mallow K, Cardenas DP, Whitmire L. Using post-processed Surface EMG from the Brain Sentinel® Monitoring and Alerting System for classification of GTCS and PNES, and Recognition of False Alarms. American Epilepsy Society Annual Meeting in Washington DC in December 2017.

15. Marsh ED, Mazurkiewicz-Beldzinska M, **Halford JJ**, Gunning B, Checketts D, Nichol K, Thiele E. Maintained Safety and Efficacy of Cannabidiol (CBD) in a Long-Term Open-Label Trial in Patients with Lennox-Gastaut Syndrome (LGS) (GWPCARE 5). American Epilepsy Society Annual Meeting in Washington DC in December 2017.
16. Alkasab S, Dawson RA, Jaramillo JL, **Halford J**. Correlation of Seizure Frequency and Medication Down-titration Rate During Video-EEG Monitoring. American Academy of Neurology in Boston MA, April 2017.
17. **Halford J**, Cardenas D, Whitmire L, Cavazos J, Girouard M. Application of sEMG Feature Extraction from EEG Recordings for Evaluation of Generalized Tonic-Clonic Seizure Semiology. American Academy of Neurology in Boston MA, April 2017.
18. Cavazos J, **Halford J**, Sperling M, Nair D, Dlugos D, Tatum W, Harvey J, French J, Pollard J, Faught R, Noe K, Henry T, Jetter G, Lie O, Morgan L, Girouard M, Cardenas D, Whitmire L. Use of sEMG to inform GTC seizure semiology. American Academy of Neurology in Boston MA, April 2017.
19. Cavazos J, **Halford J**, Sperling M, Nair D, Dlugos D, Tatum W, Harvey J, French J, Pollard J, Faught R, Noe K, Henry T, Jetter G, Lie O, Morgan L, Girouard M, Cardenas D, Whitmire L. Semiological characteristics of generalized tonic-clonic seizures with video-EEG and sEMG. Kongress of German, Austrian, and Swiss Epileptologists (Jahrestagung) in Vienna Austria in May 2017
20. Bagheri E, Dauwels J, Dean BC, Waters CG, Westover MB, **Halford JJ**. Epileptiform Transient Characteristics Underlying Expert Interrater Agreement. American Clinical Neurophysiology Society Meeting in Phoenix AZ, February 2017.
21. **Halford J**, Cavazos J, Sperling M, Nair D, Tatum W, Dlugos D, Harvey J, French J, Pollard J, Faught E, Noe K, Henry T, Jetter G, Lie O, Morgan L, Girouard M, Cardenas D, Whitmire L. Application of sEMG Feature Extraction from EEG Recordings for Evaluation of Generalized Tonic-Clonic Seizure Semiology. American Epilepsy Society Annual Meeting in Houston TX, December 2016
22. Arain A, Kalamangalam G, LaRoche S, Bonilha L, Basha M, Azar N, Kutluay E, Martz G, Waters C, Dean B, **Halford J**. Interrater Agreement for Spike Detection in Routine EEG: Influence of Board Certification and Fellowship Training. American Epilepsy Society Annual Meeting in Houston TX, December 2016
23. Al-Kasab S, Dawson RA, Jaramillo JL, **Halford J**. Correlation of Seizure Frequency and Medication Down-Titration Rate during Video-EEG Monitoring. American Epilepsy Society Annual Meeting in Houston TX, December 2016
24. Cavazos J, Jetter G, Lie O, Morgan L, **Halford J**, Sperling M, Nair D, Tatum W, Dlugos D, Harvey J, French J, Pollard J, Faught E, Noe K, Henry T, Cardenas D, Girouard M, Whitmire L. Semiological Characteristics of Generalized Tonic-Clonic Seizures Assessed with Video-EEG and sEMG. American Epilepsy Society Annual Meeting in Houston TX, December 2016
25. Al-Kasab S, Dawson R, Rahwan M, Jaramillo J, **Halford JJ**. Outpatient Self-Reported Seizure Frequency Does Not Correlate to Seizure Frequency During Epilepsy Monitoring. American Clinical Neurophysiology Society Meeting in Orlando FL, February 2016.
26. Tsai Y-J, Bolen RD, Bonilha L, **Halford JJ**. Perception of HD EEG Studies among HD EEG providers. American Clinical Neurophysiology Society Meeting in Orlando FL, February 2016.
27. Sahlem GL, Badran BW, Peyton E, Reeves MT, Leslie K, **Halford JJ**, Bachman D, Uhde TW, Borckardt JJ, George MS. A Randomized Controlled Pilot Trial Suggesting That Cathodal Bi-Frontal Transcranial Direct Current Stimulation (tDCS) May Shorten Sleep

Onset Latency, and Increase Sleep Efficiency When Applied Before An Afternoon Nap. 2015 NYC Neuromodulation Conference. Brain Stimulation: Basic, Translational, and Clinical Research in Neuromodulation. 2017 Jan 1;10(1):e6.

28. Arain A, Kalamangalam G, LaRoche S, Bonilha L, Basha M, Azar N, Kutluay E, Martz G, Waters C, Dean B, **Halford J**. Interrater Agreement for Spike Detection in Routine EEG: Spike Scoring Competition Results. American Epilepsy Society Annual Meeting in Philadelphia PA, December 2015.
29. **Halford J**, Yang H, Williams B, Ma T, Laurenza A. Effect of Duration of Epilepsy on Adjunctive Perampanel Treatment in Patients With Drug-Resistant Partial Seizures. American Epilepsy Society Annual Meeting in Philadelphia PA, December 2015.
30. Husain A, Lee J-W, Kolls B, Hirsch L, **Halford J**, Gupta P, Minazad Y, Jones J, Laroche S, Herman S, Swisher C, Sinha S, Palade A, Dombrowski K, Gallentine W, Hahn C, Gerard E, Westover MB. The TRENdS trial: Intravenous lacosamide versus fosphenytoin for the treatment of frequent nonconvulsive seizures in critically ill patients. American Epilepsy Society Annual Meeting in Philadelphia PA, December 2015.
31. Cavazos JE, Girouard M, **Halford J**, Sperling MR, Nair D, Tatum W, Dlugos D, Harvey J, French J, Pollard J, Faught RE, Noe K, Henry TR, Jetter G, Lie OV, Morgan L, Whitmire L. Automated EMG based Seizure Detection and Quantification for the Home and the Epilepsy Monitoring Unit: A Prospective Multicenter Study. American Epilepsy Society Annual Meeting in Philadelphia PA, December 2015.
32. **Halford J**, Martz G, Kutluay E, Waters CG, Dean BC, Soussou W, Duff E. Quality Assessment of EEG from “Dry Electrode” System in Veterans. American Clinical Neurophysiology Society Annual Meeting in Atlanta GA, February 2014.
33. Hartmann M, Koren J, Furbass F, Weinkopf M, Schnabel K, **Halford J**, Baumgartner C, Kluge T. NeuroTrend: Rapid Review of Continuous EEGs from ICUs. American Clinical Neurophysiology Society Annual Meeting in Atlanta GA, February 2014.
34. Mahulikar A, Iadi P, **Halford J**, Claasen J, LaRoche S, Foreman B. Generalized Periodic Discharges: Inter-Rater Agreement. American Clinical Neurophysiology Society Annual Meeting in Atlanta GA, February 2014.
35. **Halford J**, Waters CG, Martz G, Kutluay, E, Dean BC, Soussou W. Quality Assessment of Electroencephalography Obtained From A “Dry Electrode” System in Veterans. American Epilepsy Society Annual Meeting in Washington DC, December 2013
36. Shiao D, Schnabel K, Desrochers J, Kern R, Sackellares J, **Halford J**. Automated Detection of Electrographic Seizures in Pediatric EMU Patients Through Analysis of Scalp EEG. American Epilepsy Society Annual Meeting in Washington DC, December 2013.
37. McGuire R, Frei M, Kern R, Shiao D, **Halford J**, Olin B, Begnaud J. Software Analysis of Seizure Severity and Post-Ictal Duration. American Epilepsy Society Annual Meeting in Washington DC, December 2013
38. Furbass F, **Halford JJ**, Baumgartner C, Schnabel K, Weinkopf M, Hartmann M, Gruber A, Koren J, Herta J, Perko H, Kluge T. Assessment of Automated EEG Analysis and Trending for Critically Ill Patients. American Epilepsy Society Annual Meeting in Washington DC, December 2013.
39. Furbass F, **Halford J**, Herta J, Koren J, Perko H, Schnabel K, Weinkopf M, Gruber A, Kluge T, Baumgartner C, Hartmann M. NeuroTrend: Computational EEG analysis for critically ill patients based on the standardized terminology of the ACNS. World Congress of Neurology in Vienna Austria in September 2013.

40. **Halford JJ**, Waters CG, Tatum WO, Dean BC. Web Technology to Facilitate an Interactive EEG Teaching. American Clinical Neurophysiology Society Annual Meeting in Miami FL in February 2013
41. Waters CG, Dean BC, **Halford JJ**. EEGnet: A Web Platform for Collaborative EEG Research. American Clinical Neurophysiology Society Annual Meeting in Miami FL in February 2013.
42. **Halford J**, Waters CG, Wolfe BJ, Benbadis SR, Tatum WO, Turner RP, Arain A, Fountain NB, Sinha SR, Pritchard PB, Martz GU, Kutluay E, Edwards JC, Dean BC. Comparison of Binary and Ordinal Scoring for Epileptiform Transient Detection. American Epilepsy Society Annual Meeting in San Diego CA, December 2012.
43. Chien J, LaRoche SM, **Halford JJ**, Sackellares JC, Kelly KM, Shiau DS. Automated Detection of Periodic Discharges in ICU Patients Through Analysis of Scalp EEG. American Epilepsy Society Annual Meeting in San Diego CA, December 2012.
44. Shiau DS, **Halford JJ**, LaRoche S, Kelly KM, Kern RT, Sackellares JC. Automated Detection of Nonconvulsive Seizures in ICU through Analysis of Scalp EEG. American Epilepsy Society Annual Meeting in Boston, December 2011.
45. Skinner HJ, Shiau DS, **Halford JJ**, Sackellares JJ. Inter-Hemisphere Asymmetries in EEG Signal Properties in Patients with Temporal Lobe Epilepsy Versus Non-Epileptic Seizures. American Epilepsy Society Annual Meeting in Boston, December 2011.
46. **Halford JJ**, Pressley WB, Benbadis SR, Tatum WO IV, Edwards JC, Pritchard PB, Turner RP, Arain A, Dean BC. Paroxysmal Electroencephalographic Event Labeling and Categorization Using Distributed Clinical Research Software. Academy of Neurology Annual Meeting in Honolulu Hawaii in April 2011
47. Bonilha L, **Halford JJ**, Edwards J. Hippocampal atrophy in patients with medial temporal lobe epilepsy: differences between the 'generator' and the 'receiver'. American Epilepsy Society Annual Meeting in San Antonio TX in December 2010.
48. Maru N and **Halford JJ**. Is There a Relationship Between Allergies/Medication Intolerances and Nonepileptic Events?: A Retrospective Analysis. American Epilepsy Society Annual Meeting in San Antonio TX in December 2010.
49. **Halford JJ**, Shiau D-S, Chien J, Kelly K, Kern R, Pardalos P, Sackellares JC. Interictal EEG Dynamics in Patients with Non-epileptic Seizures versus Those with Temporal Lobe Epilepsy. American Epilepsy Society Annual Meeting in San Antonio TX in December 2010.
50. Shiau D-S, LaRoche S, **Halford JJ**, Kelly K, Kern R, Chien J, Valeriano J, Pardalos, Sackellares JC. Quantitative EEG Trending for Monitoring Non-Convulsive Seizures in ICU Patients. American Epilepsy Society Annual Meeting in San Antonio TX in December 2010.
51. **Halford JJ**, Ben-Menachem E, Kwan P, Ness S, Schmitt M, Novak G. Efficacy, Safety, and Tolerability of Carisbamate 800 and 1200 mg/day as Adjunctive Therapy in Patients with Partial Onset Seizures: Randomized, Double-Blind, Placebo-Controlled Trial. European Conference on Epileptology in Rhodes, Greece June 2010.
52. **Halford JJ**, Chien J-H, Shiau D-S, Georgiev PG, Zhang J, Pardalos PM, Sackellares JC. State Transitions in Brain Network of Neurocortical Epilepsy. American Clinical Neurophysiology Society Annual Meeting in San Diego in February 2010.
53. Bonilha L, Edwards J, Morgan P, **Halford J**. How common is brain atrophy in patients with mesial temporal lobe epilepsy? American Epilepsy Society Annual Meeting, Boston 2009.
54. **Halford J**, Kälviäinen R, Ben-Menachem E, Schmitt J., Wiegand F, Novak G. An open-label extension of two placebo-controlled studies of carisbamate as adjunctive treatment of partial

- onset seizures in adults: 18-month update. American Epilepsy Society Annual Meeting, Boston, 2009.
55. Kelly K, Shiau D, Kern R, Chien J, Pardoalos P, Valeriano J, **Halford J**, Sackellares JC. Epileptic seizure prediction by scalp EEG analysis. American Epilepsy Society Annual Meeting, Boston, 2009.
 56. **Halford J**, Shiau D, Kern R, Chien J, Kelly K, Valeriano J, Pardoalos P, Sackellares J. Validation Study of an automated seizure detection algorithm in scalp EEG. American Epilepsy Society Annual Meeting, Boston, 2009.
 57. Sackellares JC, Shiau D, Chien J, **Halford J**, Kelly KM Epileptic Seizure Prediction by Scalp EEG Analysis. American Neurological Association 134th Annual Meeting in Baltimore. October 2009. Annals of Neurology Vol 66 (suppl 13) pp. S13-14.
 58. Kälviäinen R, Ben-Menachem E, Rosenfeld R, **Halford JJ**, Wiegand F, Schmitt J, Novak G. Six Month Efficacy and Tolerability Results of Carisbamate as Adjunctive Treatment of Partial Onset Seizures: Experience From Two Open Label Extension Studies. European Federation of Neurological Societies Meeting. Florence, Italy. September 2009.
 59. Kälviäinen R, Ben-Menachem E, Rosenfeld R, **Halford JJ**, Wiegand F, Schmitt J, Novak G. Six Month Efficacy and Tolerability Results of Carisbamate as Adjunctive Treatment of Partial Onset Seizures: Experience From Two Open Label Extension Studies. 28th International Epilepsy Congress, Budapest. June 2009.
 60. Shiau DS, Chien JH, **Halford J**, Kelly KM, Sackellares JC Epileptic Seizure Prediction by Scalp EEG Analysis. Fourth International Workshop on Seizure Prediction (ISPW4). Kansas City, June 2009
 61. Pressly WB, **Halford JJ**, Dean BC. Distributed Clinical Research Software for Studying Paroxysmal Electroencephalographic Events. American Clinical Neurophysiology Society. Orlando, FL March 2009.
 62. Dean BC, Pressly WB, **Halford JJ**. Optimal Window Lengths for EEG Spike Detection Using Independent Component Analysis as a Preprocessing Step. American Clinical Neurophysiology Society. Orlando, FL March 2009.
 63. **Halford JJ**, Pressly WB, Dean BC. Paroxysmal Electroencephalographic Event Labelling and Categorization Using Distributed Clinical Research Software. American Clinical Neurophysiology Society. Orlando, FL March 2009.
 64. Sperling M, Greenspan A., Cramer J., Kwan P., Kailvainen R., **Halford J.**, Schmitt J., Haas M., Novak G. Carisbamate as adjunctive treatment of partial onset seizures in adults in two international, randomized, placebo-controlled trials. American Epilepsy Society Annual Meeting, Seattle. December 2008.
 65. Bonilha L, Rorden C, Rumbolt Z, Roberts D, **Halford JJ**. Impaired connectivity in patients with medial temporal lobe epilepsy: relationship with hippocampal deafferentation and regional brain atrophy. American Epilepsy Society Annual Meeting, Seattle. December 2008.
 66. **Halford JJ**, McDonald CR, Rumbolt Z, Roberts DR, Bonilha L. Voxel based morphometry and cortical thickness analysis of medial temporal lobe epilepsy – same or different? American Epilepsy Society Annual Meeting, Seattle. December 2008.
 67. **Halford JJ**, Rumboldt Z, Roberts D, Rorden C, Morgan P, Bonilha L “Hippocampal deafferentation and extra-temporal atrophy in temporal lobe epilepsy” American Epilepsy Society Annual Meeting, Philadelphia. December 2007

68. Bonilha L, Eckert M, Rorden C, Rumboldt Z, Roberts D, **Halford JJ** "Can automated voxel-wise analysis of MRI help the detection of hippocampal sclerosis?" American Epilepsy Society Annual Meeting, Philadelphia. December 2007
69. **Halford, J.** "Analysis of Temporal Lobe Paroxysmal Events Using Independent Component Analysis". American Epilepsy Society Annual Meeting, San Diego. December 2006
70. **Halford, J.** Husain, A. "Stimulus-Sensitive Status Epilepticus" at the American Epilepsy Society Annual Meeting, Seattle. December 2002
71. Vincent DJ, **Halford J**, Steedman J, Wright AC, Webb J, Pecheny A, Bohning DE, Frey D, Cure J, Horton J, Young J, Dannels WR, George MS: "An Initial Clinical Study Using Echoplanar BOLD fMRI to Determine Language Location by Hemisphere. 2nd International Conference on Functional Mapping of the Human Brain. June 17-21, 1996, Boston, MA.
72. Vincent DJ, Bryant AE, Roberts DR, **Halford JJ**, Worthington WC, Vera CL, George MS: "Preliminary Results of Multi Modality Presurgical Evaluation for Intractable Epilepsy." 26th Annual Meeting Society for Neuroscience, Washington, November 16-21, 1996.

RESEARCH GRANTS

Testing a Novel Dry Electrode Headset for Electroencephalography Telehealth
 HSRD VA Merit Grant from Veterans Administration
 PI for this multicenter EEG bioengineering clinical trial grant project
 \$1,200,000 (direct funds; indirect funding not VA specified); March 2022 – March 2025

Soticlestat as Adjunctive Therapy in Subjects with Lennox-Gastaut Syndrome
 Takeda Pharmaceuticals
 Role: site PI for one site (MUSC) of this multicenter phase III clinical trial (PI: Demetrios Arkilo MD
 \$75,000; 2022-2023

Soticlestat in Subjects with Dravet Syndrome
 Takeda Pharmaceuticals
 Role: site PI for one site (MUSC) of this multicenter phase III clinical trial (PI: Demetrios Arkilo MD
 \$75,000; 2022-2023

An Open-Label, Parallel, Randomized Study to Evaluate the Performance of Needle Placements for Diagnostic and Therapeutic Neuraxial Procedures, Using a Handheld Tactile Imaging-based Method Versus Palpation
 IntuiTap Medical, Inc.
 Role: site PI for this one site (MUSC) of this three-site multicenter phase III device clinical trial study. (PI: Jessica Traver, MSE)
 \$100,000; 2021-2022

A Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multicenter Trial of CVL-865 as Adjunctive Therapy in Adults with Drug-Resistant Focal Onset Seizures (REALIZE Trial)
 Cerevel Therapeutics
 Role: site PI for one site (MUSC) in this multicenter phase III clinical trial study (PI: Maciej Gasior MD PhD)
 \$100,000; 2020-2022
 Jordan (PI) Role:

A Double-blind, Randomized, Placebo-controlled Study to Evaluate the Efficacy and Safety of Intravenous Ganaxolone in Status Epilepticus

Marinus Pharmaceuticals

Role: site PI for one site (MUSC) in this multicenter phase III clinical trial study (PI: Julie Jordan MD)

\$90,000; 2021-2022

A Phase 2, Multicenter, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Efficacy, Safety, and Tolerability of TAK-935 as an Adjunctive Therapy in Pediatric Patients with Developmental and/or Epileptic Encephalopathies

Role: site PI for one site (MUSC) in this multicenter phase II clinical trial study

Takeda Pharmaceuticals

\$50,000; 2018-2019

A Phase 2, Prospective, Interventional, Open-Label, Multi-Site, Extension Study to Assess the Long-Term Safety and Tolerability of TAK-935 as Adjunctive Therapy in Patients with Rare Epilepsy

Takeda Pharmaceuticals

Role: site PI for one site (MUSC) in this multicenter phase II clinical trial study (PI: Asif Paker MD)

\$30,000; 2018-2019

ILAE VIREPA Enhancement using EEGnet

UCB Pharma

Role: PI for this medical education grant

\$20,000; 2017-2018

101EP201: A Randomized, Double-Blind, Placebo-Controlled, Phase 2 Study Exploring the Efficacy, Safety, and Tolerability of Natalizumab (BG00002) as Adjunctive Therapy in Adult Subjects With Drug-Resistant Focal Epilepsy

Biogen

Role: site PI for one site (MUSC) in this multicenter phase II clinical trial study (PI: Jacob Elkins MD PhD)

\$100,000; 2017-2018

TAK-935-2001: A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Dose-Escalation Study With an Open-Label Phase to Examine the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of TAK-935 as an Adjunctive Therapy in Subjects

Takeda Pharmaceuticals

Role: site PI for one site (MUSC) in this multicenter phase II clinical trial study (PI: Deborah Lee MD PhD)

\$50,000; 2017-2018

YKP3089C021: An Open Label, Multicenter, Safety and Pharmacokinetic Study of YKP3089 as Adjunctive Therapy in Subjects with Partial Onset Seizures

SK Life Sciences;

Goal: open label phase III safety study of an antiepileptic medication in adults with focal epilepsy

Role: site PI for one site in this open label multicenter trial (PI: Marc Kamin MD)

\$100,000; 2016-2018

NES-1.5-09.2016. Automated Identification of Psychogenic Nonepileptic Seizures
Brain Sentinel

Goal: to test an automated wearable grand mal seizure detector in the epilepsy monitoring unit and in the epilepsy patient's home

Role: PI

\$50,000; 2016-2017

A Pivotal Phase III Trial of Detecting Generalized Tonic-Clonic Seizures with a Seizure
Detection and Warning System (system version 1.5) in Epilepsy Patients
Brain Sentinel, Inc.

Role: site PI for one site (MUSC) in this multicenter phase III study (PI: Jose Cavazos MD PhD)

\$100,000; 2015-2016

NIH/NINDS (SBIR-IIB- 2R44NS064647-05A1) High Performance Seizure Monitoring and Alert
System

Goal: The aims of this project are to a hand-held EEG recording and spike/seizure detection system which will provide real-time alerts to clinicians

Role: Co-I (site PI) for this multicenter study (PI – Deng-Shan Shiua at Optima Neurosciences, Inc.)

\$120,000; 2015-2018

Human Epilepsy Project

Sponsored by the Epilepsy Study Consortium

Role: site PI for one site (MUSC) for this multicenter foundation study

\$ 40,000; 2014-2017

547-SSE-301: A Randomized, Double-Blind, [Phase 3] Placebo-Controlled Study To Evaluate
the Efficacy and Safety of SAGE-547 Injection in the Treatment of Subjects with Super-
Refractory Status Epilepticus
Sage Therapeutics

Role: site PI for one site (MUSC) in this multicenter phase III study

\$100,000; 2015-2017

SAGE-547 Injection – EEG Monitoring

SAGE Therapeutics, Inc.

Role: Sub-investigator who was one of the expert EEG reviewers for the study (PI: Aatif Husain)

\$4000; 2014

DZNS-EP-1025: An Open-Label [Phase 2], Safety and Tolerability Study of Chronic Intermittent
Use of Diazepam Nasal Spray in Adolescents and Adults with Cluster Seizures
Acorda Therapeutics, Inc.

Role: site PI for one site (MUSC) in this multicenter phase III study

\$125,000; 2015-2016

GWEP1415: An open label extension study to investigate the safety of cannabidiol (GWP42003-
P; CBD) in children and adults with inadequately controlled Dravet or Lennox-Gastaut
Syndromes

GW Research LTD
Role: site PI for one site (MUSC) in this multicenter phase III study
\$100,000; 2016-2017

GWEP1424: A randomized, double-blind, placebo-controlled study to investigate the efficacy and safety of cannabidiol (GWP42003-P) in children and young adults with Dravet syndrome
GW Research LTD
Role: site PI for one site (MUSC) in this multicenter phase III study
\$100,000; 2015-2016

GWEP1414: A randomized, double-blind, placebo-controlled study to investigate the efficacy and safety of cannabidiol (GWP42003-P; CBD) as adjunctive treatment for seizures associated with Lennox-Gastaut syndrome in children and adults
GW Research LTD
Role: site PI for one site (MUSC) in this multicenter phase III study
\$100,000; 2015-2016

Cliniscan EEG Spike and Seizure Event Detection Study
Picofermo, Inc.
Goal: Standardized dataset development for automated seizure and spike detection.
Role: PI
\$27,500; 2015

A Phase III, Pivotal Trial of Detecting Generalized Tonic-Clonic Seizures with a Seizure Detection System in Epilepsy Patients
LGCH, Inc.
Role: site PI for one site (MUSC) in this multicenter phase III study (PI: Jose Cavazos MD PhD)
\$150,000; 2013-2014

EEG Data Collection and Hardware Testing
Optima Neurosciences, Inc.
Goal: Standardized dataset development and automated seizure detection hardware testing.
Role: PI
\$65,000; 2012-2013

CEMC101.01: Utility of Intravenous Lacosamide Compared with Fosphenytoin in the Treatment of Patients with Frequent Nonconvulsive Seizures (TRENdS)
UCB Pharma, Inc.
Role: site PI for one site (MUSC) in the multicenter phase II study.
\$100,000; 2012-2014

NIH/NINDS (SBIR-I-R43NS076045-01A1) Validation of a Novel Automated Seizure Detection and EEG Trending System
Goal: The aims of this project are to create a novel seizure detection algorithm and EEG trending system for use in the ICU.
Role: Co-I (site PI) for this multicenter study (PI – Deng-Shan Shiua at Optima Neurosciences, Inc.)
\$80,000; 2012-2013

NIH/NINDS (SBIRII-R44S064647): High Performance Seizure Monitoring and Alert System.
Goal: Specific Aims of the project are to create a bedside seizure-detection system for the ICU.

Role: Co-I (site PI) in this multicenter study (PI - Deng-Shan Shiau at Optima Neurosciences, Inc.)
\$300,000; 2011-2014

E2007 G000 332: A Double-blind, Randomized, Placebo-controlled, Multicenter, Parallel-group Study with an Open-label Extension Phase to Evaluate the Efficacy and Safety of Adjunctive Perampanel in Primary Generalized Tonic-Clonic Seizures.

Eisai, Inc.

Role: site PI for one site of this multicenter phase III clinical trial.
\$100,000; 2011-2013;

NO1359: An Open-Label, Multicenter, Follow-up Study to Evaluate the Long-Term Safety and Efficacy of Brivaracetam Used as Adjunctive Treatment in Subjects Aged 16 Years or Older with Epilepsy

UCB Pharma, Inc.

Role: site PI for one site (MUSC) in the multicenter phase III study.
\$100,000; 2011-2016

NO1358: A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Parallel-Group Study to Evaluate the Efficacy and Safety of Brivaracetam in Subjects with Partial Onset Seizures.

UCB Pharma, Inc.

Role: site PI for one site (MUSC) in the multicenter phase III study.
\$100,000; 2010-2011

1318A: An Open-Label Study to Assess the Safety and Tolerability of Intravenous Carbamazepine as Short-Term Replacement of Oral Carbamazepine in Adult Patients with Epilepsy

Lundbeck, Inc.

Role: site PI for one site (MUSC) in the multicenter phase III study.
\$100,000; 2010-2011

Continuous EEG Monitoring Data Collection for Seizure Detection and Prediction.

Optima Neurosciences, Inc.

Goal: Continuous EEG monitoring data collection for continued development of seizure detection software.

Role: PI.

\$45,000; 2010-2011

NIH/NINDS (R01-NS050582-01A1) On Line Real Time Seizure Prediction

Goal: Specific Aims of the project are to test seizure-prediction algorithms of extracranial and intracranial datasets.

Role: Co-investigator (site PI) for one site in this multicenter study (PI - Chris Sackellares MD at Optima Neurosciences, Inc.) \$80,000; 2008-2010

- SP0962: An Open-Label Extension Study to Assess the Safety and Seizure Frequency Associated with Long-Term Oral Lacosamide for Uncontrolled Primary Generalized Tonic-Clonic Seizures in Subjects with Idiopathic Generalized Epilepsy. UCB Pharma.
Role: site PI for one site (MUSC) in the multicenter phase IV study.
\$50,000; 2010-2011
- NP10004: Responsive Neurostimulator RNS System Pivotal Clinical Investigation. Neuropace, Inc.
Role: Co-I (Assessment Team Leader) for one site of this multicenter phase III study (MUSC site PI – Jonathan Edwards MD)
\$200,000; 2008-2010
- EPY3013/3014: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study to Evaluate the Efficacy, Safety and Tolerability of Carisbamate as Adjunctive Therapy in Subjects With Partial Onset Seizures, Followed by an Open-Label Extension Study. Johnson and Johnson Pharmaceutical Research Division.
Role: site PI for one site (MUSC) in the multicenter phase III study.
\$250,000; 2009-2010
- 2007-G000-304: A Double-Blind, Placebo-Controlled, Dose-Escalation Parallel-Group Study to Evaluate the Efficacy and Safety of E2007 (perampanel) Given as Adjunctive Therapy in Subjects with Refractory Partial Seizures. Eisai Medical Research, Inc.
Role: site PI for one site (MUSC) in this multicenter phase III study.
\$150,000; 2008-2010.
- K826-05-3001: A Phase 3, Randomized, Double-Blind, Parallel, Placebo-Controlled, Multicenter Study, with Optional Open-Label Continuation, of the Efficacy and Safety of Vanquix™ Auto-Injector (Diazepam Injection) for the Management of Selected, Refractory, Patients with Epilepsy who Require Intermittent Medical Intervention to Control Episodes of Acute Repetitive Seizures. King Pharmaceuticals, Inc.
Role: site PI for one site (MUSC) in this multicenter phase III study.
\$50,000; 2008-2010.
- EPY3001/3004: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multi-center Study to Evaluate the Efficacy, Safety and Tolerability of RWJ 333369 (carisbamate) as Adjunctive Therapy in Subjects with Partial Onset Seizures Followed by an Open-Label Extension Study. Johnson and Johnson Pharmaceutical Research Division.
Role: site PI for one site (MUSC) in this multicenter phase III study.
\$250,000; 2006-2010
- Computer-Aided Diagnosis of Subtle Brain Injury. South Carolina Health Science Foundation (Duke Endowment).
Role: co-I (PI: Mark Eckert PhD at MUSC).
\$90,000; 2007-2008
- SP754: A Multicenter, Double-blind, Randomized, Placebo-controlled, Parallel-group Trial to Investigate the Efficacy and Safety of SPM 927 (400 and 600mg / day) as Adjunctive Therapy in Subjects with Partial Seizures with or without Secondary Generalization. Schwarz Biosciences.
Role: site PI for one site (MUSC) in this multicenter phase III study.
\$150,000; 2006-2007

SP756: An Open-label Extension Trial to Determine Safety and Efficacy of Long-term Oral SPM 927 in Patients with Partial Seizures. Schwarz Biosciences.
Role: site PI for one site (MUSC) in this multicenter phase III study.
\$100,000; 2006-2008

SELECTED INVITED PRESENTATIONS

“Digital EEG: Instrumentation, Recording, and Review” at the Neurophysiology Technology Annual Course at the American Clinical Neurophysiology Society on January 26, 2022.

“Technical Troubleshooting: Sleep and Epilepsy Cases” at the Neurophysiology Technology Annual Course at the American Clinical Neurophysiology Society on January 26, 2022.

“Ambulatory EEG and Video-EEG Monitoring” and the Brazilian Congress of Neurophysiology on November 17, 2021.

“Use of Cannabidiol as an Antiepileptic Drug” at the 5th Annual Update in Neurology at the Medical University of South Carolina on February 28, 2020.

“EEG Epileptiform Transient (“Spike”) Detection, Board Certification, and Fellowship Training” at “Quality and Safety: Measuring Quality of EEG Interpretation” Special Interest Group (SIG) Meeting at the American Epilepsy Society Annual Meeting in Baltimore MD on December 10, 2019.

“Wearable EMG-Based Automated Detection and Visualization of Generalized Tonic Clonic Seizures” at the Satellite Symposium “sEMG: A New Diagnostic Biomarker for Seizure Monitoring” at the American Epilepsy Society Annual Meeting on December 8, 2019.

“Machine Learning Research in Clinical Neurophysiology”; MUSC Artificial Intelligence Summit; Palmetto Club, Columbia SC; November 20, 2019

“Treatment of Epilepsy with Cannabidiol”; Second Annual Medical Cannabis Conference; Institute of Psychiatry at MUSC; September 27, 2019

“Automated Detection of Epileptiform Discharges in the Electroencephalogram (EEG)”. Neurology Grant Rounds at MUSC in Charleston SC; August 22, 2019

“Challenges in Automated Event Detection in Neurophysiology”. American Epilepsy Society Annual Meeting in New Orleans LA; December 3, 2018.

“The Need for Standard Neurophysiology Formats”. International Congress of Clinical Neurophysiology in Washington DC; May 3, 2018. Also, Co-Chair with Matt Stead MD PhD (Mayo Clinic Rochester) for this conference session “Standard Formats for Clinical Neurophysiology”.

“Treatment of Epilepsy and Schizophrenia with Cannabidiol (CBD)” Stanford University Epilepsy Center. April 20, 2018.

“Can Computers interpret EEG? Man Versus Machine in Automated EEG Seizure and Spike Detection”. Neurology Grand Rounds. Mayo Clinic Jacksonville. March 16, 2018

“New Avenues in sEMG Research Relative to Epilepsy”. Kongress of German, Austrian, and Swiss Epileptologists (Jahrestagung) in Vienna Austria; May 5, 2017.

“Automate Detection of Interictal Epileptiform Activity”. American Clinical Neurophysiology Society Meeting; Phoenix AZ; February 12, 2017

“Research Highlights Introduction”. American Clinical Neurophysiology Society Meeting; Orlando FL; February 11, 2017

“Sleep Disorders, What’s New?” ROC the MOC: Neurology Maintenance of Certification Review Course. MUSC, November 20, 2016.

“Brain Stimulation for Epilepsy”. Neurology Update for the Primary Care Provider. MUSC, April 9, 2016.

“Secondarily Generalized Seizures – Fycompa and Others Antiepileptic Medications”. Eisai Pharmaceuticals Global Advisory Board Meeting, Runnymede Hotel, Windsor, UK. March 31, 2016

“Research Highlights Introduction”. American Clinical Neurophysiology Society Meeting; Phoenix AZ; February 13, 2016

“Standardized Database Development for EEG Spike Detection”, Clinical Neurophysiology Conference, Emory University, January 19, 2016

“EEGnet: A Web-based Research Tool for Annotation of 10-20 Montage EEG”, EEG Research Tools Special Interest Group Meeting, American Epilepsy Society Annual Conference, Philadelphia PA, December 5, 2015

“Sleep Disorders, What’s New?” ROC the MOC: Neurology Maintenance of Certification Review Course. MUSC, November 22, 2015.

“Standardized Database Development for EEG Spike and Seizure Detection”. Keynote Speaker at Workshop in Epilepsy Engineering at the University of Surrey, Guildford, Surrey, United Kingdom. June 29, 2015

“Research Highlights Introduction”. American Clinical Neurophysiology Society Meeting; Houston TX; February 7, 2015

“Brain Stimulation in Epilepsy” at the Brain Stimulation Symposium in Charleston SC. June 6, 2014

“Novel Technologies for Outpatient EEG Recording and Review”; June 25, 2014; New York University (NYU) Epilepsy Center in New York, NY

“Computer-Based Expert Consensus in EEG”; February 9, 2013; American Clinical Neurophysiology Society Meeting; Miami, FL

“Do We Need Automated Seizure Detection? Man vs. Machine”; February 7, 2013; American Clinical Neurophysiology Society Meeting; Miami, FL

“Automated Detection of Spikes and Seizures in EEG”; January 31, 2013; MUSC Neurology Grand Rounds

“Workshop: Electroclinical Correlation: Human-Computer Interfacing for Identification and Reporting of EEG”; February 10, 2012; American Clinical Neurophysiology Society Meeting; San Antonio, TX

“Remote Access to Clinical EEG Data within the VA System”; December 6, 2010; American Epilepsy Society “Military Epileptologist” Special Interest Group Meeting; San Antonio TX

“Misinterpretation of Routine Scalp EEG and Automated Spike Detection”, Neurology Grand Rounds, University of Florida, 3/30/10

“Computer Detection of Seizures & Spikes in Scalp Electroencephalography”, Neuroscience Grand Rounds, MUSC, 11/12/09

“Epilepsy Monitoring”, South Carolina Neurological Association Annual Meeting, Charleston SC, 10/2/09

“Epilepsy Surgery Update”, MUSC Annual Pediatric Neurology Conference at Kiawah Island SC, 3/20/09

“Sleep Disorders”, MUSC Annual Pediatric Neurology Conference at Kiawah Island SC, 3/20/09

“Nocturnal Epilepsy”, National Sleep Medicine Course, Chicago, 8/10/08

“Introduction to EEG”, National Sleep Medicine Course, Chicago, 8/10/08

“Spells, EEG, and Artificial Intelligence”, Neurosciences Grand Rounds, MUSC, 5/10/08

“Epilepsy”, Emergency Nurses Association, ART Building at MUSC, 4/10/08

“Event Detection in EEG using Independent Component Analysis”, MUSC-Clemson Bioengineering Collaboration Seminar, 4/2/07

“Epilepsy Monitoring and Intracranial Recording”, Dept. of Physics, Clemson University, 1/10/07

“Paroxysmal Event Detection Using Independent Component Analysis”, Dept. of Neurology Grand Rounds, Wake Forest University Baptist Medical Center, Winston Salem, NC, 6/13/2006

“Epilepsy”, second-year medical school class, College of Medicine MUSC, 4/7/2006

“Paroxysmal Event Detection Using Independent Component Analysis”, Dept. of Neurology Grand Rounds, Medical College of Georgia, Augusta, GA, 2/9/2006

“Status Epilepticus”, Dept. of Emergency Medicine Faculty, MUSC, 10/5/2005