

CURRICULUM VITAE

January 17, 2012

RICHARD D. BROWER, M.D.

Work Address:

MEB; Suite 2200G
Department of Medical Education
Paul L. Foster School of Medicine
5001 El Paso Drive
El Paso, TX 79905

Phone Numbers:

Office (915) 783-1700 ext. 245
FAX (915) 783-1715
E-mail richard.brower@ttuhsc.edu

Date of Birth:

November 2, 1959

Place of Birth:

Palo Alto, California

Citizenship:

American

Current Position:

Associate Professor and Department Chairman
Department of Medical Education
Clinical Associate Professor
Department of Neurology
Paul L. Foster School of Medicine
TTUHSC El Paso
(March 1, 2010 – present)
Hospital Affiliations:
R.E. Thomason General Hospital
(September 1996 – present)
El Paso Psychiatric Center
(April 1997 – present)

Previous Positions:

Associate Professor
Department of Medical Education
(January 1, 2009 – present)
Clinical Associate Professor (Neurology)
Paul L. Foster School of Medicine
TTUHSC El Paso

Associate Professor of Neurology
Department of Neurology
(September 1996 – present)
TTUHSC El Paso

Assistant Professor
Department of Neurology
The University of Texas Southwestern
Medical Center
5323 Harry Hines Blvd.
Dallas, Texas 75235-9036
(July 1993-August 1996)
Hospital Affiliations:
Parkland Memorial Hospital
Zale Lipshy University Hospital
Children's Medical Center of Dallas
(July 1993-August 1996)

Assistant Professor
Department of Neurology
Texas Tech University RAHC at El Paso
4800 Alberta Avenue
El Paso, Texas 79905
(September 1990-June 1992)
Hospital Affiliation:
R.E. Thomason General Hospital
(September 1990-June 1992)

The Doctors Clinic of Bremerton
(Private practice, general adult neurology)
2512 Wheaton Way
Bremerton, Washington 98310
(August 1989-July 1990)
Hospital Affiliation:
Harrison Memorial Hospital
(August 1989-July 1990)

Education:

FELLOWSHIP

Clinical Neurophysiology and Epilepsy
Department of Neurology
The University of Texas Southwestern
Medical Center
Dallas, Texas
(July 1992-June 1993)

RESIDENCY Department of Neurology
The University of Texas Medical Branch
Galveston, Texas
(July 1986-June 1989)

INTERNSHIP Department of Internal Medicine
The University of Utah Medical Center
Salt Lake City, Utah
(July 1985-June 1986)

MEDICAL SCHOOL University of Texas Medical Branch
Galveston, Texas
(Doctor of Medicine; May 1985)

COLLEGE University of Texas at Austin
Austin, Texas
(Bachelor of Science in Zoology with
High Honors; May 1981)

Licensure: Texas State Board of Medical Examiners
License H0214 (current)

Washington State Physician and Surgeon
License 26156 (allowed to expire due to
permanent relocation 11/01)

Board Certification: Neurology; January 1991 (certificate 34000)
American Board of Psychiatry and Neurology

Added Qualifications in Clinical
Neurophysiology; April 1994-April 2004
(certificate 0270)
American Board of Psychiatry and Neurology

Clinical Neurophysiology; September 9, 1995
American Board of Clinical Neurophysiology

NPI: 1801888557

Associations: American Academy of Neurology (elected
Fellow, October 5, 1998)
American Clinical Neurophysiology Society
American Epilepsy Society
El Paso County Medical Society
Texas Medical Association
Texas Neurological Society

Publications:

Sarkodie-Gyan T, Alaqtash MM, Yu H, Brower RD, Abdelgawad A. Application of wearable sensors for human gait analysis using fuzzy computational algorithm. *Engineering Applications of Artificial Intelligence* 2011;24(6):1018-1025

Sarkodie-Gyan T, Alaqtash M, Yu H, Abdelgawad A, Spier E, Brower R. Measurement of functional impairments in human locomotion using pattern analysis. *Measurement* 2011;44(1):181-191

Brower RD. What should medical students know and understand about fetal ultrasonography of the central nervous system? *Donald School Journal of Ultrasound in Obstetrics and Gynecology* 2009;3(4):53-57.

Kahn MA, Briones DF, Brower, RD. Disability from "soft" neuropsychiatric sequelae due to frontal lobe injury. *Southern Medical Journal* 2009;102(8):829-831 (pre-published online July 4, 2009).

Andersen PM, Sims KB, Xin WW, Kiely R, O'Neill G, Ravits J, Pioro E, Harati Y, Brower RD, Levine JS, Heinicke HU, Seltzer W, Boss M, Brown RH: Sixteen novel mutations in the Cu/Zn superoxide dismutase gene in amyotrophic lateral sclerosis: a decade of discoveries, defects and disputes. *ALS and other motor neuron disorders* 2003;4(2):62-73.

Wolfe GI, Brower RD, Burns DK: Perineurial cell hyperplasia in early-onset polyneuropathy with multiple cranial neuropathies. *Neuromuscular Disorders* 2000;10:503-506.

Brower RD, Leroy RF, Mickey BE: The Parkland Memorial Hospital depth electrode monitoring experience: technique and morbidity. *Journal of Epilepsy* 1994;7(3): 215-219.

Brower RD, Dreyer CF, Kent TA: Neuroleptic malignant syndrome in a child treated with metoclopramide for chemotherapy-related nausea. *Journal of Child Neurology* 1989;4(3): 230-232.

Conference Papers:

Alaqtash M, Sarkodie-Gyan T, Yu H, Fuentes O, Brower R, Abdelgawad A: Automatic Classification of Pathological Gait Patterns Using Ground Reaction Forces and Machine Learning Algorithms. Proceedings of the 2011 IEEE Engineering in Medicine and Biology Conference (EMBC '11), Boston, MA, USA, August 30 – September 3, 2011

Alaqtash M, Yu H, Brower R, Abdelgawad A, Spier E, Sarkodie-Gyan T: Application of wearable miniature non-invasive sensory system in human locomotion using soft computing algorithm. Paper ID:157; Proceedings of the 2010 International Conference on Intelligent Robotics and Applications, Shanghai, China, November 10-12, 2010

Sarkodie-Gyan T, Alaqtash M, Yu H, MacDonald C, Spier E, Brower R: Determination of functional impairments using the methods of computational intelligence. Proceedings of the 6th World Congress on Neurorehabilitation, Vienna, Austria, March 21-25 2010

Yu H, Riskowski J, Brower R, Sarkodie-Gyan T. Gait variability while walking with three different speeds. Proceedings of the IEEE 11th International Conference on Rehabilitation Robotics; Kyoto International Conference Center, Japan, June 23-26, 2009.

MacDonald C, Spier E, Brower R, Sarkodie-Gyan T. Towards real-time fuzzy inferential gait phase detection using lower limb kinematic data. *Biomedical Engineering Recent Developments: Proceedings of the 24th*

Southern Biomedical Engineering Conference, April 18-20, 2008; College of Engineering, The University of Texas at El Paso, TX, USA. Medical and Engineering Publishers, Inc. 2008 (p.157-160). Also published in abstract form in the International Journal of Medical Implants and Devices 2008;3(1):34.

Yu H, Nava P, Brower R, Sarkodie-Gyan T. Design and validation of a fuzzy expert system for neurorehabilitation: a case study. Biomedical Engineering Recent Developments: Proceedings of the 24th Southern Biomedical Engineering Conference, April 18-20, 2008; College of Engineering, The University of Texas at El Paso, TX, USA. Medical and Engineering Publishers, Inc. 2008 (p.149-152). Also published in abstract form in the International Journal of Medical Implants and Devices 2008;3(1):33.

Yu H, Brower R, Ceberio M, Sarkodie-Gyan T. Identification of human gait using fuzzy inferential reasoning. Proceedings of the IEEE 10th International Conference on Rehabilitation Robotics; Noordwijk, The Netherlands; June 12-15,2007:656-660.

MacDonald C, Smith D, Brower R, Ceberio M, Sarkodie-Gyan T. Determination of human gait phase using fuzzy inference. Proceedings of the IEEE 10th International Conference on Rehabilitation Robotics; Noordwijk, The Netherlands; June 12-15,2007: 661-665.

Abstracts and Posters:

Brower RD, Osborne D, Arana T, Bramblett DE, Patham B, Black AC Jr: Teaching Neurosciences in Context Using a Clinical Presentation-Based Curriculum and Introductory Diagnostic Schemes (P05.015). Poster presentation in section entitled: "Neurologic Education: Medical Student Education" at the 63rd Annual Meeting of the American Academy of Neurology; Honolulu, HI; April 9-16, 2011 (abstract published in Neurology 2011;76(9)Suppl.4:A382).

Pfarr C, Kupesic S, Patham B, Janssen H, Guerra M, Lopez J, Corral L, Rodriguez J, Brower r, Steele D, Hogg T: Towards a Comprehensive E-Book for Delivering Curriculum Materials in a Clinical Presentation-Based Curriculum. Poster presentation at the 2010 IAMSE Annual Meeting; New Orleans, LA; July 2010.

Brower, R, Steele D, Arroyave A, Pfarr C, McMahan K, Woods G, Hogg T: Medical Education Curriculum for the 21st Century: Integration is Key. Poster Presentation at the 2010 AAMC Annual Meeting; Washington, DC; November, 2010.

Wolfe GI, Burns DK, Brower, RD: Perineural Cell Hyperplasia in Hereditary Motor and Sensory Neuropathy with Multiple Cranial Neuropathies. 22nd Annual Carrell-Krusen Symposium, Texas Scottish Rite Hospital for Children, Dallas, TX (February 24-25, 2000). *J Child Neurology* 2000;15.

Riela AR, Lowell C, Mertens L, Stephens N, Tosch P, Guzzetta C, Harvey JH, Brower RD, Cantrell DC, Van Ness PC: Non-epileptic seizures; patient demographics, perceptions of the diagnosis, and follow-up. Poster presentation at the 1996 annual meeting of the American Epilepsy Society. *Epilepsia* 1996;37(supplement 5):32.

Brower RD, Riela AR, Combs Cantrell DT: Subclinical rhythmic electrographic discharge of adults (SREDA) complicating the diagnosis of nonepileptic seizures. Poster presentation at the 1994 annual meeting of the American EEG Society. *Electroencephalography and Clinical neurophysiology* 1995;95(2):34P.

Brower RD, Chaconas AE, Leroy RF, Mickey BE: The Parkland Memorial Hospital depth electrode experience: technique and morbidity. Poster presentation at the 1993 annual

meeting of the American EEG Society. Electroencephalography and clinical neurophysiology 1994;91(2):39P.

Gonzales PCW, Raroque H, Jr., Bell WL, Leroy RF, Brower RD, Chaconas AE; Comparison of techniques for detection and localization of interictal epileptiform activity during intensive video-EEG monitoring. Epilepsia 1993;34 (supplement 6):135.

Investigational Drug Studies:

A Multicenter, Double-Blind, Randomized, Placebo-Controlled, Three-Arm, Parallel Group Study to Evaluate the Efficacy and Safety of Oxcarbazepine Extended-Release (OXC XR) (1200 and 2400 mg/day) as Adjunctive Therapy in Subjects with Refractory Partial Seizures due to Epilepsy on up to two Concomitant Antiepileptic Medications. Supernus (protocol 804P301 with 'follow-on' open-label extension protocol 804P302; phase 3). Investigator; Summer 2009 – Fall 2010.

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. (protocol E2007-G000-304 with 'follow-on' open-label extension protocol E2007-G000-307; phase 3). Investigator, Summer 2008 – Summer 2011.

A Historical-controlled, Multicenter, Double-blind, Randomized Trial to Assess the Efficacy and Safety of Conversion to Lacosamide 400mg/day Monotherapy in Subjects with Partial-onset Seizures. Schwarz Biosciences, Inc. (protocol SP902 with 'follow-on' open-label extension protocol SP904; phase 3). Investigator, Spring 2008 – Spring 2011.

A double-blind, placebo-controlled, parallel group study of Rufinamide given as adjunctive therapy in patients with refractory partial seizures. Eisai Medical Research, Inc.

(protocol E2080-A001-301; phase 3).
Investigator, Fall 2006 – Fall 2010.

A randomized, double-blind, placebo-controlled, parallel-group, multicenter study to evaluate the efficacy, safety, and tolerability of RWJ-333369 as adjunctive therapy in subjects with partial onset seizures followed by an open-label extension study. Johnson & Johnson Pharmaceutical Research & Development, L.L.C. (protocol 333369-EPY-3001/3004; phase 3). Investigator, Fall 2006 – Summer 2011.

A double-blind, placebo-controlled, dose-ranging study to evaluate the efficacy, safety, and tolerability of RWJ-333369 as adjunctive therapy in subjects with refractory partial seizures. Johnson & Johnson Pharmaceutical Research & Development, L.L.C. (protocol 333369-EPY-2003 and 333369-EPY-2006; phase 2). Investigator, Spring 2005 – Summer 2008.

A randomized, double-blind, parallel group, monotherapy study to compare the safety and efficacy of two doses of topiramate in the treatment of newly diagnosed epilepsy or recurrent epilepsy. R.W. Johnson Pharmaceutical Research Institute & Pharmaceutical Research Associates International (protocol PRI/TOP-INT-28/TOPMAT-EPMN-106). Investigator, Fall 1999 - site closure 2001.

Dose-response study of efficacy and safety of vigabatrin (Sabril) 1,3,4, and 6g/day as monotherapy in patients with complex partial seizures. Marion Merrell Dow Inc., vigabatrin protocol 223 (and extension protocol 242). Principal investigator, November 1995-August 1996.

Evaluation of the efficacy and tolerability of ucb L059 (500 and 1500 mg b.i.d., tablets) add-on treatments in epileptic patients with partial

onset seizures: a 38-week, double-blind placebo-controlled parallel group multi-center trial. UCB S.A. Pharma Sector, ucb L059 study/protocol N132. Participating sub-investigator, October 1994-August 1996.

An open label, long-term safety study of vigabatrin administered concomitantly with anti-epilepsy drugs or as monotherapy. Marion Merrill Dow, Inc., vigabatrin protocol 028. Principal investigator, January 1994-August 1994.

An open study of Lamictal [lamotrigine] in epileptic outpatients. Burroughs Wellcome Company, lamotrigine protocol 17. Principal investigator, January 1994-June 1995.

A multi center, double-blind, active control evaluation of the efficacy and safety of lamotrigine monotherapy in patients with partial seizures. Burrough's Wellcome Company, lamotrigine protocol 30. Principal Investigator, November 1994-August 1996.

Clinical experience and use of Sabril [vigabatrin] in patients with partial seizures. Marion Merrell Dow, Inc., vigabatrin protocol 098. Principal investigator, July 1994-August 1996.

Localization of epileptic foci in SPECT brain studies utilizing a stable formulation of ^{99m}Tc-Exametzime [Ceretec]. Medi-Physics, Inc., clinical study protocol MPI Pr93-101. Participating subinvestigator, 1993-August 1996.

Additional Scholarly Activities:

Invited lecture: "The clinical presentations of dementia". Accredited CME lecture (one hour/AMA PRA credit) for the medical staff of Las Palmas Medical Center; El Paso, TX; May 17, 2007

Invited lectures: "The Management of an Adolescent or Adult with a First Seizure" and

“Optimizing the Treatment of Epilepsy in Adolescents and Adults”. Accredited CME Course (“Mid-Winter Medicine Update XIV”) sponsored by the Texas A&M Health Sciences Center Coastal Bend Health Education Center; Ruidoso, NM; February 23-25, 2007.

Course Director: “Advances in Epilepsy Management 2003”. Accredited CME Course (4 hours) sponsored by Texas Tech University Health Sciences Center at El Paso; El Paso Hilton Camino Real Hotel, May 3, 2003.

Invited lecture: “Differential Diagnosis of Seizures and Spells”. Department of Neuropsychiatry Grand Rounds (accredited CME program – 1 hour); Texas Tech University Health Sciences Center at Lubbock; September 24, 2002.

Course Director: “Advances in Epilepsy Management 2002”. Accredited CME Course (3 hours) sponsored by Texas Tech University Health Sciences Center at El Paso; El Paso Hilton Camino Real Hotel, May 4, 2002.

Course Director: “Primary Care Neurology: 3rd Annual Course” Accredited CME Course (6 hours) sponsored by Texas Tech University Health Sciences Center at El Paso; El Paso Marriott Hotel, May 13, 2000.

Invited Panelist, Texas Department of Health Public Meeting (regarding investigation of possible multiple sclerosis cluster in El Paso) November 30, 1999; TTUHSC El Paso

Course Director and Lecturer: “Primary Care Neurology: 2nd Annual Course” (lecture: “Common Pitfalls in Antiepileptic Drug Therapy”). Accredited CME Course (8 hours) sponsored by Texas Tech University Health Sciences Center at El Paso, Cloudcroft, New Mexico, April 30-May1, 1999.

Course Director and Lecturer: “Primary

Care Neurology: 1st Annual Course” (lecture: “Differential Diagnoses of Seizures and Spells”). Accredited CME Course (7 hours) sponsored by Texas Tech University Health Sciences Center at El Paso, Ruidoso, New Mexico, June 6, 1998.

Invited lecture: “Cognitive assessment of the Alzheimer’s disease patient”. Beyond the Alzheimer’s disease diagnosis: options and opportunities (an educational conference for health care professionals and family caregivers), El Paso, Texas; January 24, 1997. Sponsored by The Texas Council on Alzheimer’s Disease and Related Disorders and The Texas Department of Health.

Invited lecture: “Non-epileptic seizures”. Epilepsy Update for Primary Care Physicians (CME Seminar). Dallas, Texas; October 21, 1995. Sponsored by the Department of Neurology and the office of Continuing education at the University of Texas Southwestern Medical Center (with an unrestricted educational grant by Abbott Laboratories).

Invited lecture: “The diagnosis and management of non-epileptic seizures”. Update on Epilepsy (CME Seminar). Fort Worth, Texas; November 4, 1994. Sponsored by the University of Texas Southwestern Medical Center and John Peter Smith Hospital/Tarrant County Hospital District (with pharmaceutical industry support/ educational grants).

Invited lecture: “The evaluation of uncontrolled seizures”. Neurology conference, Texas Tech University RAHC at El Paso, February 4, 1994 (sponsored by Carter-Wallace Inc.).

Committees/Service:

Peer reviewer for scholarly submissions (posters and oral presentations) to the 2012 Annual Meeting of the Southern Group for Educational Affairs (SGEA); Carol Elam,

Program Chair; April 19-21, 2012; Lexington, Kentucky

Invited lecture to the High School and Collegiate “Double T’s” (pre-health professions development program) entitled: “Understanding seizures, epilepsy and stroke”. Paul L. Foster School of Medicine; December 3, 2011

Invited panelist for the Paul L. Foster School of Medicine on the local PBS television show “El Paso Physician”, educating the community regarding the growth of the medical school. KCOS-TV; February 24, 2011

Scientific session co-chair for S59: Ethics, Pain and Palliative Care (April 14, 2011) at the 63rd Annual Meeting of the American Academy of Neurology; Honolulu, HI; April 9-16, 2011

Session auditor (Poster Session P04: Clinical Epilepsy and Scientific Platform Session S05 Clinical Epilepsy) for the scientific program at the 63rd Annual Meeting of the American Academy of Neurology; Honolulu, HI; April 9-16, 2011

Peer reviewer for scholarly submissions (posters and platform presentations) to the 2011 Annual Meeting of the Southern Group for Educational Affairs (SGEA); Elizabeth Nelson, M.D., Meeting Organizer; April 14-16, 2011; Houston, Texas

Paul L. Foster School of Medicine Strategic Planning Committee for the Institutional Goal Regarding Medical Education; Member, September 10, 2010 – present

Paul L. Foster School of Medicine Dean’s Council “EVU Committee”; Member, September 7, 2010 – present

Dean’s Ad Hoc Committee on Paul L. Foster School of Medicine Post-Baccalaureate and JAMP Programs (“the PB&J Committee”);

Manuel Schydlower, MD, Committee Chair;
Member, May 2010 – present

Paul L. Foster School of Medicine Department
Chairmanship-related committees (Dean's
Council, Strategic Planning); March 1, 2010 –
present

Paul L. Foster School of Medicine LCME Self-
Study Subcommittees (“Faculty” and
“Educational Program” sections); Member, Fall
2009 – present

Grading and Promotions Committee for the
Paul L. Foster School of Medicine, TTUHSC;
Member, November 9, 2009-present

Search Committee for Basic Science Medical
Educators at Paul L. Foster School of
Medicine, TTUHSC; ‘Ex-Officio’ Member (as
Department Chair), August 2010-present

Search Committee for Clinician Medical
Educators at Paul L. Foster School of
Medicine, TTUHSC; Member, September
2009-present (Chair since Spring 2010)

Search Committee for the Department of
Neurology Chair at Paul L. Foster School of
Medicine, TTUHSC; Member, July 8, 2009 until
committee reconstituted in 2011

Scientific Principles of Medicine Course Co-
director (the major integrated medical science
course for first two years of the curriculum);
Paul L. Foster School of Medicine; TTUHSC;
September 2009 to March 1, 2010

Scientific Principles of Medicine Clinician Unit
Co-Director for the Musculoskeletal and
Neurological Systems (Unit 2); Paul L. Foster
School of Medicine; TTUHSC; Early 2009 to
present

Dissertation Committee for Huiying Yu,
candidate for Ph.D.; Department of Electrical

and Computer Engineering, University of Texas at El Paso. Proposal defense September 4, 2009 (preliminary title: "Assessment of Functional Outcome Following Neurological Insult using Fuzzy Inferential Reasoning Driven Knowledge-Based System"). Final title: "Categorization of Functional Impairments Using the Methods of the Fusion of Multiple Sensors and Computational Intelligence". Dissertation defense June 29, 2010

Dissertation Committee for Chad MacDonald, candidate for Ph.D.; Department of Electrical and Computer Engineering, University of Texas at El Paso. Proposal defense June 5, 2009. Dissertation: "Dynamic Modeling of Human Gait and Motor Adaptation: Towards the Simulation of Ankle Impairments". Dissertation defense December 4, 2009

Adjunct Professor (for research and committee activities); Department of Electrical and Computer Engineering; The University of Texas at El Paso. Re-appointed July 7, 2009

Reviewer for Ethics, Pain and Palliative Care abstracts for the 2010 American Academy of Neurology Annual Meeting in Toronto, Ontario, Canada

Annual Meeting Subcommittee; member (term May 3, 2009-April 17, 2011); American Academy of Neurology

Scientific Program Committee; member (two year term beginning December 2008); American Epilepsy Society

American Academy of Neurology Palatucci Advocacy Forum; Selected Participant, January 2008

Admissions Committee; member, 2008 – present; Paul L. Foster School of Medicine; Texas Tech University Health Sciences Center

Admissions Committee; member, 2003-2008;
School of Medicine; Texas Tech University
Health Sciences Center

Legislative Committee; member, 1999-present;
El Paso County Medical Society

Corporate Advisory Committee; member,
1999-2001; American Epilepsy Society

External consultant (epilepsy related grant
reviews), Department of Veteran Affairs Merit
Review Program, September 1994

Dallas Epilepsy Association Professional
Advisory Board; member, 1994, 1995, 1996

**Medical Education-related
Professional Development:**

RIME “Cadre Review” participant (reviewer for
abstracts submitted to the Conference of the
American Association of Medical Colleges
(AAMC) Section for Research in Medical
Education (RIME) at the AAMC Annual
Meeting scheduled for November 4-9, 2011 in
Denver, Colorado (training and
service/reviewer components completed)

2010 AAMC Executive Development Seminar
for Associate Deans and Department Chairs
(and Pre-Conference Negotiation Workshop);
Designated Participant; Babson Executive
Conference Center; Babson Park, MA; October
7 – 11, 2010

AAMC Western Group on Educational Affairs
Annual Meeting; Participant in MERC
Workshops on “Data Management and
Preparing for Statistical Consultation” and
“Questionnaire Design and Survey Research”;
April 25-27, 2010

Team-Based Learning 2009 Conference;
participant; University of Texas at Austin;
March 4-6, 2009

14th Annual Program for Educators in the
Health Professions; selected participant;
Harvard Macy Institute; Boston, MA; January
18-28, 2009 and May 17-22, 2009

National Board of Medical Examiners Test
Question Writing Workshop; PLFSOM; El
Paso, TX; December 16, 2008