CURRICULUM VITAE

Courtney D. Hall

Research Health Scientist **Associate Professor**

Auditory and Vestibular Dysfunction REAP Department of Physical Therapy

James H. Quillen VA Medical Center East Tennessee State University

Telephone: 423-926-1171, ext. 7518

Fax: 423-979-3403

Email: hallcd1@etsu.edu

EDUCATION

Ph.D.	2000	University of Texas at Austin (Kinesiology)
M.S.	1997	University of Oregon (Exercise & Movement

University of Oregon (Exercise & Movement Science)

B.S. 1990 University of North Carolina at Chapel Hill (Physical Therapy)

B.S. 1984 Davidson College (Mathematics)

PROFESSIONAL POSITIONS

Current

2011 - present Associate Professor, Dept of Physical Therapy, East Tennessee State University Johnson City, TN

2011 - present Research Health Scientist, James H. Quillen VA Medical Center, Mountain Home, TN

2011 - present Adjunct Associate Professor of Rehabilitation Medicine, Emory University, Atlanta, GA

Previous

2010 - 2011	Investigator	Rirmingham	/Atlanta	Geriatric Research	and Education	Clinical Consortium
2010 2011	ilivestigator,	Diffillingfiairi	α	OCHALIC NESCALCI	and Ludcation	Cilinical Consolitiani

2005 – 2010 Affiliate Investigator, Birmingham/Atlanta Geriatric Research and Education Clinical Consortium

2003 – 2011 Assistant Professor, Department of Rehabilitation Medicine, Emory University Atlanta, GA

2003 - 2011 Research Health Scientist, Atlanta VA Medical Center, Decatur, GA

2002 - 2003 Research Fellow, Department of Rehabilitation Medicine, Emory University Atlanta, GA

2001 – 2002 Research Fellow, Center for Successful Aging at California State University, Fullerton

2001 – 2002 Instructor, Kinesiology & Health Promotion, California State University, Fullerton

1999 – 2000 Staff physical therapist, HealthSouth, Austin, TX

1998 – 1999 Teaching Assistant, Kinesiology & Health Education, University of Texas, Austin

1997 - 2000 Staff physical therapist, St. David's Medical Center, Austin, TX

1994 – 1996 Staff physical therapist, Sacred Heart Medical Center, Eugene, OR

1992 – 1994 Staff physical therapist/clinical instructor, Dekalb Medical Center, Atlanta, GA

1991 – 1992 Staff physical therapist, Moses Cone Memorial Hospital, Greensboro, NC

1990 – 1991 Staff physical therapist, St. Joseph's Home Health Agency, Pinehurst, NC

LICENSURE/SPECIALTY BOARDS

1990	Licensure examination in Physical Thera	ру
1990	North Carolina Physical Therapy license	PT 2375 (current)
1992, 2002	Georgia Physical Therapy license	PT 003628 (no longer active)
1994	Oregon Physical Therapy license	PT 2777 (no longer active)
1997	Texas Physical Therapy license	PT 1111011 (no longer active)
2001	California Physical Therapy license	PT 26096 (no longer active)
2012	Tananasaa Dhusiaal Tharranu liaanaa	DT 0.474 (amant)

Tennessee Physical Therapy license PT 9474 (current)

Specialty Boards: Certification in Vestibular Rehabilitation (1999)

SCHOLARLY ACTIVITY

Grants

Active

DoD/VA Chronic Effects of Neurotrauma Consortium (CENC; Co-PI) 10/1/14 – 9/30/17 Direct costs: \$656,520

Otolith Dysfunction and Postural Stability

VA Rehabilitation R&D Merit Review Grant E7613R (PI)

8/01/12 - 7/31/15 Direct costs: \$635,135 Vestibular rehabilitation and dizziness in geriatric patients (PI)

VA Rehabilitation R&D Merit Review Pilot Grant E7614P (PI)

8/01/12 - 7/31/14 (no-cost extension: 9/30/15) Direct costs: \$199,825

Cognitive training and dual-task ability in older adults

Completed

Atlanta Rehab R & D Center of Excellence pilot, 2400H-1 (PI) 5/1/2009-12/31/2010 Direct costs: \$39,000

Veterans' Intraocular Lenses (IOLs) Project

Atlanta Rehab R & D Center of Excellence pilot, 2400H-2 (PI) 5/1/2009-12/31/2010 Direct costs: \$41,404

Characterization of Test Performance in Patients with Traumatic Brain Injury

Paralyzed Veterans of America, 592 (Co-I)

6/01/2008-5/31/2010 (No-cost extension 11/30/10) Direct costs: \$100,000

Wheelchair Tai Chi Training Program for People with Spinal Cord Injury

Private Industry: Wicab, Inc. (PI)

3/01/2008-8/31/2010 Direct costs: \$42,125

A Pilot Study to Investigate the Effects of the BrainPort Balance Device on Balance, Gait, and Quality of Life in

Patients with Traumatic Brain Injury

VA Rehab R &D Advanced Research Career Development Award, E4465K (PI)

10/01/2006-9/30/2009 Direct costs: \$432,150 Relationship between Dual-Task Ability and Fall Risk in Older Adults

VA Rehab R&D Merit Review Pilot Grant, C4168P (PI)

4/01/2006-9/30/2009 Direct costs: \$100,000 Vestibular rehabilitation and dizziness in geriatric patients

VA Rehab R&D Research Career Development Award C3249 (PI) 7/1/03 - 6/30/06 Direct costs: \$265,000

Dynamic Visual Acuity and Fall Risk in Older Adults with Vestibular Loss

Atlanta Rehab R & D Center of Excellence pilot, 2400H-1 (PI) 10/2003-9/2004 Direct costs: \$20,000 Effects of T'ai Chi Intervention on Dual-Task Ability in Older Adults

Consulting contracts

2014 - 2017	Consultant (Subject Matter Expert), Research and Engineering Research Center (RERC) on
	Technologies to Support Successful Aging with Disability, Georgia Institute of Technology

2007 - 2009 Founding Member, Falls Advisory Council, Philips Lifeline

2002 - 2004 Data Analyst, California State University, Fullerton

Scientific publications

- Hall CD, Woollacott MH, Jensen JL. Age-related changes in rate and magnitude of ankle torque development: Implications for balance control. <u>The Journals of Gerontology. Series A, Biological sciences and medical sciences</u>. 54A(10): M507-13, 1999.
- Hall CD, Smith A, Keele S. The impact of aerobic activity on cognitive function in older adults: A new synthesis based on the concept of executive control. <u>European Journal of Cognitive Psychology.</u> 13(1/2): 279-300, 2001.
- Hall CD, Jensen JL. Age-related differences in lower extremity power following support surface perturbations. <u>Journal of the American Geriatrics Society</u>. 50(11):1782-8, 2002.
- Hall CD, Schubert MC, Herdman SJ. Prediction of fall risk reduction as measured by dynamic gait index in individuals with unilateral vestibular hypofunction. <u>Otology & Neurotology</u>. 25(5):746-751, 2004.
- Hall CD, Jensen JL. The effect of cane use on balance control. <u>Clinical Biomechanics</u>. 19(7): 678-687, 2004.
- Hall CD, Herdman SJ. Reliability of clinical measures used to assess patients with vestibular hypofunction. Journal of Neurologic Physical Therapy. 30(2):74-81, 2006.
- Herdman SJ, Hall CD, Schubert MC, Das VE, Tusa RJ. Recovery of dynamic visual acuity in bilateral vestibular hypofunction. Archives of Otolaryngology Head & Neck Surgery. 133(4):383-9, 2007.
- Hall CD, Miszko T, Wolf SL. Effects of tai chi intervention on dual-task ability in older adults: a pilot study. <u>Archives of Physical Medicine and Rehabilitation</u>. 90(3):525-529, 2009.
- Hall CD, Cox LC. The role of vestibular rehabilitation in the balance disorder patient. <u>Otolaryngologic Clinics of North America</u>. 42(1):161-169, 2009.
- Schubert MC, Hall CD, Das VE, Tusa RJ, Herdman SJ. Oculomotor strategies and their effect of reducing gaze position error. <u>Otology & Neurotology</u>. 31(2):228-231, 2010.
- Hall CD, Heusel-Gillig L, Tusa RJ, Herdman SJ. Efficacy of gaze stability exercises in older adults with dizziness. <u>Journal of Neurologic Physical Therapy</u>. 34(2):64-69, 2010. [Winner of Golden Synapse Award for best article in JNPT for 2010]

- Hall CD, Heusel-Gillig L. Balance rehabilitation and dual-task ability in older adults. <u>Journal of Clinical Geriatrics & Gerontology</u>. 1(1):22-26, 2010.
- Herdman SJ, Hall CD, Eggers R, Sampson S, Goodier S, Filson R. Misclassification of patients with spinocerebellar ataxia as having psychogenic postural instability based on computerized dynamic posturography. Frontiers in Neurology. 2:21, 2011. [doi: 10.3389/fneur.2011.00021]
- Hall CD, Barnes CS, Schuchard RA. Fall Risk Assessment in People with Retinitis Pigmentosa. <u>InSight:</u> Research and Practice in Visual Impairment and Blindness. 4(2):55-64, 2011.
- Hall CD, Echt KV, Wolf SL, Rogers WA. Cognitive and motor mechanisms underlying older adults' ability to divide attention while walking. <u>Physical Therapy</u>. 91(7): 1039-1050, 2011.
- Herdman SJ, Hall CD, Delaune W. Variables Associated with Outcome in Patients with Unilateral Vestibular Hypofunction. <u>Neurorehabilitation and Neural Repair</u>. 26(2):151-62, 2012.
- Bhatti PT, Herdman SJ, Roy SD, Hall CD, Tusa RJ. A Prototype Head-Motion Monitoring System for In-Home Vestibular Rehabilitation Therapy. <u>Journal of Bioengineering & Biomedical Science</u>. S1-009, 2012.
- Hackney ME, Hall CD, Echt KV, Wolf SL. Application of Adapted tango as Therapeutic Intervention for Patients with Chronic Stroke: A Case Study. <u>Journal of Geriatric Physical Therapy</u>. 35(4):206-17, 2012.
- Akin FW, Hall CD, Murnane O. The Role of Rotational Stimulation in Vestibular Compensation. <u>Otolaryngology-Head & Neck Surgery</u>. 148(1):176-7, 2013.
- Hackney ME, Hall CD, Echt K, Wolf SL. Dancing for Balance: Feasibility and Efficacy in Oldest-Old Adults with Visual Impairment. <u>Nursing Research</u>. 62(2):138-143, 2013.
- Akin FW, Hall CD, Riska KM. Interdisciplinary Approach to Dizziness: Roles of Audiology and Physical Therapy. ASHA Perspectives on Public Health Issues Related to Hearing and Balance. 14: 11-21, 2013. doi:10.1044/phi14.1.11
- Hackney ME, Hall CD, Echt K, Wolf SL. Multimodal Exercise Benefits Mobility in Older Adults with Visual Impairment: a Preliminary Study. <u>Journal of Aging and Physical Activity</u>. (2015 Jan 6) ePub ahead of print
- Riska KM, Akin FW, Murnane O, Hall CD. Video Head Impulse Testing (vHIT) and the Assessment of Horizontal Semi-circular Canal Function: A case study. <u>Journal of the American Academy of Audiology</u>. (In Press)
- Hall CD, Clevenger CK, Wolf RA, Lin JS, Johnson TM, Wolf SL. Feasibility of a Low-cost, Interactive Gaming System to Assess Balance in Older Women. <u>Journal of Aging and Physical Activity</u>. (In Revision)

Book chapters

- Hall CD, Smith A, Keele S. The impact of aerobic activity on cognitive function in older adults: A new synthesis based on the concept of executive control. In: <u>Ageing and executive control</u>. U.Mayr, D.Spieler, & R.Kliegl (eds). Hove, UK: Psychology Press, 2001.
- Hall CD, Herdman SJ. Dynamic Posturography. In: <u>Neurotology</u>. Jackler RK, Brackmann D (eds). Harcourt, Inc; 256-269: 2005.
- Hall CD, Herdman SJ. Balance, Vestibular and Oculomotor Dysfunction. In: Textbook of Neural Repair and Rehabilitation. Selzer ME, Cohen L, Gage FH, Clarke S, Duncan PW (Eds.). Cambridge, U.K.: Cambridge University Press; 298 314: 2006.
- Wolf SL, Hall C, Kapasi Z. Section 7: Geriatrics. In: The Rehabilitation Specialist's Handbook, 4th Edition. Roy SH, Wolf SL (Eds.). Philadelphia: F.A. Davis Company; 647-688: 2013.
- Hall CD, Herdman SJ. Balance, Vestibular and Oculomotor Dysfunction. In: Textbook of Neural Repair and Rehabilitation, 2nd Edition. Selzer ME, Cohen L, Gage FH, Clarke S, Duncan PW (Eds.). Cambridge, U.K.: Cambridge University Press; 355-366: 2014.
- Gillig-Heusel L, Hall CD. Physical Therapy Management of People with Non-Vestibular Dizziness. In: Vestibular Rehabilitation, 4th Edition. Herdman SJ & Clendaniel RA (Eds.). Philadelphia, PA: F.A. Davis; 569-583: 2014.
- Hall CD, Meldrum D, Whitney SL. The Role of Emerging Technologies in Vestibular Rehabilitation. In: Vestibular Rehabilitation, 4th Edition. Herdman SJ & Clendaniel RA (Eds.). Philadelphia, PA: F.A. Davis; 537-553: 2014.
- Hall CD, Meldrum D. The Aging Vestibular System: Implications for Rehabilitation. In: Balance Function Assessment and Management, 2nd Edition. Jacobson GP & Shepard NT (Eds.). San Diego, CA: Plural Publishing, Inc.; 793-808: 2015.

Manuals, videos, computer programs, and other teaching aids

- Hall CD. Introducing the Nagi Model. Balance and Mobility Specialist Certification Program [On-line lecture], California State University, Fullerton, Fullerton, CA, 2002.
- Hall CD. Internal /External Risk Factors. Balance and Mobility Specialist Certification Program [On-line lecture], California State University, Fullerton, Fullerton, CA, 2002. Revised July 2008.
- Hall CD. Medical Diagnoses, Medications, and Their Importance in the Community Setting. Balance and Mobility Specialist Certification Program [On-line lecture], California State University, Fullerton, Fullerton, CA, 2008.
- Hall CD. Multisensory Training. Balance and Mobility Specialist Certification Program [On-line lecture], California State University, Fullerton, Fullerton, CA, 2008.

Hall CD. Overview of Balance. Balance and Mobility Specialist Certification Program [On-line lecture], California State University, Fullerton, Fullerton, CA, 2008.

Published Abstracts

- Hall CD, Light KE. Heavy resistive exercise effort on reciprocal movement coordination of closed-head injured subjects with spasticity. Neuro Report. 1990;14:19.
- Light KE, Rehm S, Hall CD, Giuliani C. Does heavy resistive exercise promote muscular cocontraction and loss of reciprocal movement in brain-injured subjects? Abstr Soc Neurosci. 1994;20:884 (353.2).
- Hall CD, Jensen JL. Postural response to vertical optic flow in 4- to 12-month old infants. <u>J Sport Exercise</u> Psych. 1996;18 (Suppl.):S37.
- Hall CD, Jensen JL. The relationship between muscle onset latencies and balance control. <u>J Aging Phys Activity</u>. 1997;5:369-370.
- Hall CD, Jensen JL. Rate of ankle muscle torque development: Implications for balance control. <u>J Sport Exercise Psych</u> 20 (Suppl): S5, 1998.
- Hall CD, Jensen JL. Age-related changes in balance control: Mechanical energy changes following perturbation. Posture Gait 2001.
- Hall CD. The ABCs of a community-based fall risk reduction program. Gerontology 47 (Suppl): 115, 2001.
- Hall CD, Jensen JL. The effect of cane use on the compensatory step. J Geriatr PT 24: 15, 2001.
- Hall CD, Schubert MC, Herdman SJ. Prediction of Fall Risk Reduction in Individuals with Unilateral Vestibular Hypofunction. <u>Neuroscience Abstracts</u>. 2003.
- Rose DJ, Hall CD. Identifying risk factors for falls in older adults residing in assisted living settings. <u>Med</u> Sci Sports Exer. 36 (Suppl): S181, 2004.
- Hall CD, Herdman SJ. Reliability of Clinical Measures to assess patients with vestibular hypofunction. <u>J</u> Neurol Phys Ther. 29:208-209, 2006.
- Herdman SJ, Hall CD, Schubert MC, Das, VE, Tusa RJ. Exercise-induced recovery of dynamic visual acuity in patients with bilateral vestibular hypofunction. <u>J Neurol Phys Ther</u>. 29:217, 2006.
- Hall CD, Abbott KN, Lane EC, Petrosky KN, Pilgrim JA, Tusa RJ, Herdman SH. Development of the Emory clinical vestibular chair test. <u>J Neurol Phys Ther</u>. 31:210-211, 2007.
- Herdman SJ, Nathan ER, Richardson KD, Hall CD, Tusa RJ. Effect of otolith dysfunction on clinical presentation of patients with vestibular hypofunction. J Neurol Phys Ther. 31:217, 2007.

- Schuchard RA, Barnes C, Hall C. Relationship of visual function and everyday task functional vision in people with RP. <u>Investigative Ophthalmology & Visual Science</u>, Suppl 49, abstract 4112, 2008.
- Hall CD, Hutcheson J, Cloudt, Millians E, Wolter J, Herdman S. The effect of predictability of head turns on gait in patients with vestibular hypofunction. J Neurol Phys Ther. 32:217, 2008.
- Hall CD, Sampson S, Wilson R, Raymer R, Stone S, Herdman S. Do patients with spinocerebellar atrophy meet criteria for aphysiological postural instability on computerized dynamic posturography? <u>J Neurol Phys Ther</u>. 32:219, 2008.
- Hall CD, Hoover J, Jacobs M, Lieberman R, Mihevc K, Tusa RJ, Herdman SJ. "A new measurement tool for vestibular hypofunction: Validity of the Emory clinical vestibular chair test". <u>J Neurol Phys Ther</u>. 33:232, 2009.
- Hall CD, Heusel-Gillig L. Effect of balance rehabilitation on dual-task ability in older adults. <u>International Congress on Gait & Mental Function</u>. Abstract 66, 2010.
- Hackney ME, Hall CD. Effects of Cognitive and Manual tasks on gait in community dwelling older adults. Society for Neural Control of Movement 20th Annual Meeting Program. Naples, FL, April 20-25, 2010.
- Hall CD, Heusel-Gillig L, Tusa R, Herdman SJ. Efficacy of gaze stability exercises in older adults with complaints of dizziness. Annual Conference of the APTA. Phys Ther. ISSN: 1538-6724; Abstract 158-RR. 2010. http://apps.apta.org/Custom/abstracts/pt2010/abstractsPt.cfm?m id=28491.
- Hall CD, Hoder J. Feasibility of Using Electrotactile Feedback to Improve Balance in Individuals with Remote History of Traumatic Brain Injury. Annual Conference of the APTA. Phys Ther. Abstract 166-RR. 2011. http://apps.apta.org/Custom/abstracts/pt2011/166-RR.html.
- Hall CD, Hackney ME, Wolf SL. Impact of Cognitive and Manual Dual-tasks on Gait in Older Adults at High and Low Risk for Falls. Paper presented at 64th Annual Conference of the Gerontological Society of America. Boston, MA, November 18-22, 2011. The Gerontologist 2011; 51(S2): 383.
- Hackney, ME, Hall CD, Echt KV, Wolf SL. Adapted Tango: Feasibility and Efficacy in Older Adults with Visual Impairment. Paper presented at 64th Annual Conference of the Gerontological Society of America. The Gerontologist 2011; 51(S2): 626-627.
- Hall CD, Clevenger C, Byrd Sellers J, Wolf R, Lin J, Johnson T, Wolf S. Feasibility of Using Nintendo Wii Fit System to Assess Balance in Older Adults. Combined Sections Meeting of the APTA. Chicago, IL, February 8-11, 2012. Phys Ther. Abstract 2128.
- Herdman SJ, Hall C, Delaune W, Ebert M, Ferris JL, Knight SS, M B. Variables Associated with Outcome in Patients with Bilateral Vestibular Hypofunction: Preliminary Study. Combined Sections Meeting of the APTA. San Diego, CA, January 21-24, 2013.

- Heusel-Gillig L, Hall CD. Effectiveness of Physical Therapy Intervention in Patients with Degenerative Cerebellar Ataxia. Combined Sections Meeting of the APTA. San Diego, CA, January 21-24, 2013.
- Hall CD, Heusel-Gillig L, Brawner C, Dillon C, Jones A, Herdman SJ. Impact of anxiety and depression on outcome in patients with unilateral vestibular hypofunction: Preliminary results. Poster presented at XXVIII Barany Society Meeting. Buenos Aires, Argentina, May 25-28, 2014. J Vestib Res 2014; 24 (2-3): 246.
- Williams D, Hall C, Cantor P, Williams J, Brown N, Dulling R, Egbujor O. Reliability of Two Alternative Methods for the Standard Mid-Thigh Isometric Pull. International Society of Biomechanics in Sports. Johnson City, TN, July 12-16, 2014.
- Hall CD, Broadwater A, Caissie DJ, Woodward D, Young H. Reliability and Validity of a Low-cost, Interactive Gaming System to Assess Balance in Older Adults. Combined Sections Meeting of the APTA. Indianapolis, IN, February 4-7, 2015. Poster 1035.
- Hall CD, Riska K, Keck K, Kerley J, King A, Kington B, Lamie K. Reliability and Normative Values of the InVision™ Dynamic Visual Acuity Test in Older Adults. Combined Sections Meeting of the APTA. Indianapolis, IN, February 4-7, 2015. Poster 2253.
- Williams D, Cantor P, Williams J, Hall C, Brown N, Dulling R, Egbujor O. Reliability of Two Alternative Methods for the Standard Mid-Thigh Pull. Combined Sections Meeting of the APTA. Indianapolis, IN, February 4-7, 2015. Poster 1257.

Invited Professional Presentations and/or Continuing Education Courses - International

Invited Course Instructor, 3rd International Tutorial Course on Vestibular Rehabilitation, Bertinoro, Italy, "Otolith defects", "Age, fear, subjective complaints in patients with BVH", "Treatment approach for disuse disequilibrium and fear of falling", "Habituation assessment and exercises", "Modification of exercises and expectations in treatment of patients with UVH and migraine or Meniere's". November 24 – 26, 2005.

Invited Course Instructor, Vestibular Rehabilitation, Melbourne, Australia, "Assessment of Balance and Gait", "Management of the Elderly Person with Vestibular Dysfunction", "Case studies: Decision Making - Bilateral Hypofunction". November 8-12, 2006.

Invited Lecturer, Otoneurology Lab of the British Hospital, Montevideo, Uruguay, "Gaze Stability in Individuals with Vestibular Hypofunction", August 5, 2008.

Invited Course Instructor, Vestibular Rehabilitation, Auckland, New Zealand. "Key elements of the Clinical Examination", "Assessment of Balance and Gait", "Vestibular pathology – Benign Paroxysmal Positional Vertigo", "Treatment of vestibular hypofunction", "Progression of exercises and planning of home exercise program". September 20 – 22, 2010.

Invited Course Instructor, Advanced Vestibular Rehabilitation, Brisbane, Australia. "Update on Assessment of Balance and Gait". September 27 – 29, 2010.

Invited Course Instructor, Vestibular Rehabilitation: A Competency-based Course, Brisbane, Australia. "Assessment of Balance and Gait", "Case study: Decision Making – Non-vestibular Dizziness". September 28 – October 2, 2010.

Invited Speaker, "An Interdisciplinary Approach to Normal Pressure Hydrocephalus", "Clinical Cases and Vestibular Rehabilitation" presented at the XV International Congress of the Mexican Association of Communication, Audiology, Otoneurology and Phoniatrics (AMCAOF), Guanajuato, Mexico, March 16-19, 2011.

Invited Course Instructor, Vestibular Rehabilitation: A Competency-based Course, Auckland, New Zealand. "Assessment of Balance and Gait", "Management of the Elderly Person with Vestibular Dysfunction", "Case study: Decision Making – Non-vestibular Dizziness". December 5 – 9, 2012.

Invited Course Instructor, Vestibular Rehabilitation: A Competency-based Course, Perth, Australia. "Assessment of Balance and Gait", "Management of the Elderly Person with Vestibular Dysfunction", "Case study: Decision Making – Non-vestibular Dizziness". April 20 – 24, 2013.

Invited Speaker, "Efficacy of Gaze Stability Exercises" presented at the XXVIII Barany Society Meeting, Buenos Aires, Argentina, May 25-28, 2014.

Invited Speaker, "The Role of Emerging Technologies in Rehabilitation" presented at the XXVIII Barany Society Satellite Meeting, Buenos Aires, Argentina, May 29, 2014.

Invited Professional Presentations /or Continuing Education Courses - National

Course Instructor. Balance & Mobility Specialist Certification Program, California State University, Fullerton, CA. 6-weekend CE course, "Introducing the Nagi Model", "Internal/External Risk Factors". 2001, 2002.

Lab Assistant. Vestibular Rehabilitation: A Competency-Based Course, Emory University, Atlanta GA. March 12-16, 2002.

Course Instructor. Vestibular Rehabilitation: A Competency-Based Course, Emory University, Atlanta GA. "Management of the Patient with Non-vestibular Dizziness"; "Assessment of Balance and Gait", "Management of the Elderly Person with Vestibular Dysfunction", "Focused assessment of patients with vestibular hypo function", "Case study: Elderly Fear of Falling". 2003 - 2013.

Course Instructor. Advanced Vestibular Rehabilitation: A Competency-Based Course, Emory University, Atlanta GA. "Update on Balance & Gait Assessment". 2003, 2005, 2007 (offered every other year).

Invited speaker. Balance Disorders: Evaluation & Treatment [Distance Learning Program], University of Florida, Gainesville, FL. "Rehabilitation and Balance: A Physical Therapist's Perspective." Spring 2004.

Course Instructor. Balance & Mobility Specialist Certification Program, California State University, Fullerton, CA. On-site certification course, July 6 - 8, 2004.

Lab Assistant. Vestibular Function: Test Interpretation and Application to Rehabilitation, Emory University, Atlanta GA. 2004, 2006, 2010 (offered every other year).

Course Instructor. Balance & Mobility Specialist Certification Program, Denver, CO. On-site certification course. May 6 – 8, 2005.

Invited Course Instructor. Florida Association of Speech-Language Pathologists and Audiologists Fall Conference, Lake Mary, FL. "Computerized dynamic posturography", "Overview of vestibular rehabilitation", "BPPV assessment and treatment". September 9, 2005.

Course Instructor. Balance & Mobility Specialist Certification Program, Emory University, Atlanta, GA. On-site certification course. 2005 - 2010.

Course Instructor. Balance & Mobility Specialist Certification Program, Doylestown Hospital, Doylestown, PA. On-site certification course. May 19 – 21, 2006.

Invited speaker. Visiting Nurse Health Systems, Atlanta, GA. "Assessment and Treatment of Balance Dysfunction". October 21, 2006.

Course Instructor. Balance & Mobility Specialist Certification Program, Greenspring Retirement Village, Springfield, VA. On-site certification course. February 23 – 25, 2007.

Invited speaker. 8th Annual Transforming Fall Prevention Practices Conference. VISN 8 Patient Center of Inquiry and the University of South Florida College of Nursing, Clearwater, FL. "Cognition, Multi-tasking, and Falls". April 16-18, 2007.

Keynote Speaker. Resident Life Directors' Meeting, Erickson Communities, Cedar Crest Village, NJ. "FallProof™ at Erickson: Steps to Better Balance and Greater Independence". October 17, 2007.

Invited Speaker. Center for Hearing and Balance Seminar Series, Department of Otolaryngology – Head & Neck Surgery, Johns Hopkins University, Baltimore, MD. "Cognition, Multi-tasking and Fall Risk", November 6, 2008.

Invited Speaker. Center for Rehabilitation Medicine Seminar Series, Department of Rehabilitation Medicine, Emory University, Atlanta, GA. "Cognition, Multi-tasking and Fall Risk: Implications for Rehabilitation", November, 18, 2008.

Invited Speaker. Cognitive Aging Brown Bag Series, Department of Psychology, Georgia Institute of Technology, Atlanta, GA. "Mechanisms underlying ability to divide attention while walking", March 4, 2009.

Invited speaker. 10th Annual Transforming Fall Prevention Practices Conference. VISN 8 Patient Center of Inquiry and the University of South Florida College of Nursing, Clearwater, FL. "Management of the Elderly Person with Vestibular Dysfunction", "Fall Risks and Intervention in a Dizzy Older Adult", May 5-7, 2009.

Invited Speaker. Scientific seminar Southeast Center of Excellence in Geriatric Medicine, Quarterly Conference, University of Alabama, Birmingham, AL. "Dual-task ability in older adults". August 13, 2009.

Faculty, Advances in Vestibular Rehabilitation: Recertification Course, Duke University, Durham, NC, "Update on balance & gait assessment", August 3-6, 2011.

Invited Speaker. California Chapter of American Physical Therapy Association, Annual Conference, Long Beach, CA. "Management of the patient with vestibular hypofunction or loss", September 22-23, 2011.

Invited Speaker. Georgia Academy of Audiology, Annual Conference, Atlanta, GA. "A multi-disciplinary approach to management of the dizzy patient", January 31-February 1, 2013.

Core Faculty. Balance & Mobility Specialist Certification Program, California State University, Fullerton, Fullerton, CA. On-site certification course. February 15-17, 2013.

Invited Speaker. Joint Defense Veterans Audiology Conference, Annual Conference, Nashville, TN. "A multi-disciplinary approach to management of the dizzy patient", February 25-27, 2013.

Core Faculty. Balance & Mobility Specialist Certification Program, Franke at Seaside, Mount Pleasant, SC. On-site certification course. September 27-29, 2013.

Invited Speaker. American Speech-Language-Hearing Association, Annual Conference, Chicago, IL. "An inter-disciplinary approach to management of the dizzy patient", November 14-16, 2013.

Course Co-Director/Faculty. Vestibular Rehabilitation: A Competency-Based Course, Emory University, Atlanta GA. "Assessment of Balance and Gait", March 31-April 5, 2014.

Scientific Presentations (Peer Reviewed)

Rose DR (Chair), Jones CJ, Lucchese NL, Hall CD. "Developing and implementing community-based fall risk reduction programs: Sharing the hurdles and highlights". Symposium presented at World Congress of Gerontology, Vancouver, Canada, July 1-6, 2001.

Rose DR, Hall CD, Trueblood PR. "Developing group-based fall risk reduction programs for seniors at risk of falling". Symposium presented at Annual Conference of the American Physical Therapy Association, Chicago, IL, June 30-July 3, 2004.

Backus DA, George SZ, Johnston TE. "Becoming a PT Researcher, or So I Finished My PhD: What Do I Do Now?" Panel Discussion (Brach JS, Hall CD, Lee SC). Symposium presented at Combined Sections Conference of the American Physical Therapy Association, Nashville, TN, February 6 – 9, 2008.

Backus DA, Brach JS, George SZ, Hall CD, Johnston TE, Lee SC. "The Business of Balancing Research, Service and Teaching: A Program for Junior Faculty". Symposium presented at the APTA Combined Sections Meeting, Las Vegas, NV, February 9 –12, 2009.

Hall CD, Echt K, Wolf SL, Rogers WA. "Cognitive and motor mechanisms underlying ability to divide attention while walking". Paper presented at the International Society for Posture and Gait Research Conference, Bologna, Italy, June 21-25, 2009.

Hall CD. "Fall risk, dynamic visual acuity and balance in visually impaired individuals". Research symposium on Balance, Mobility and Falls: Theory and Practice (Odom JV, Moderator) presented at Envision Conference 09: A Multi-disciplinary Low Vision Rehabilitation and Research Conference. San Antonio, TX, September 9-12, 2009.

Hall CD, Goldstein F, Polensek S. An Interdisciplinary Approach to Normal Pressure Hydrocephalus. Symposium presented at Annual Conference of the American Physical Therapy Association, Boston, MA, June 16 – 19, 2010.

Herdman SJ, Hall CD. "Management of Vestibular Hypofunction: Evidence-Based Practice, Progression of Treatment and Outcomes". Educational session presented at Annual Conference of the American Physical Therapy Association, National Harbor, MD, June 8-11, 2011.

Hall CD, Hackney ME, Wolf SL. "Impact of Cognitive and Manual Dual-Tasks on Gait of Older Adults at High and Low Fall Risk". Paper presented at The Gerontological Society of America's 64th Annual Scientific Meeting, Boston, MA, November 18-22, 2011.

Hackney ME, Hall CD, Echt KV, Wolf SL. Adapted Tango: Feasibility and Efficacy in Older Adults with Visual Impairment. Paper presented at 64th Annual Conference of the Gerontological Society of America. Boston, MA, November 18-22, 2011.

Field-Fote EC, Craik RL, Hall CD, Johnston TE, Zeni JA. "Responding to grant and manuscript reviewers' comments". Symposium presented at the APTA Combined Sections Meeting, Las Vegas, NV, February 9 – 12, 2014.

Professional Presentations (Non-peer Reviewed)

Invited speaker. Mini Medical Course, Emory University, Center for Lifelong Learning. "Approaches to Dizziness and Disorders of Balance". September 27, 2005.

Invited Speaker. Park Springs Low Vision Support Group, Stone Mountain, GA. "Age-related changes in balance control". August 11, 2005.

Invited Speaker. Park Springs Community, Stone Mountain, GA. "Relationship between Dual-task Ability and Fall Risk in Older Adults". February 11, 2008.

Invited speaker. Contemporary Practice of Physical Therapy, Emory University. Center for Lifelong Learning, "Cognition, Multi-Tasking, and Falls in Older Adults". July 15, 2008.

Invited speaker. Robust and Resilient Aging, Emory University. Osher Lifelong Learning Institute at Emory, "Fall Prevention: Steps to Better Balance and Greater Independence". July 6, 2010.

Invited Speaker, VA Pain Management Group, Atlanta VAMC, "Health Benefits of Tai Chi". July 15, 2010.

Lecturer. Robust and Resilient Aging: Update on Healthy Aging Research, series sponsored by Atlanta VAMC, Perimeter Adult Learning & Services, "Fall Prevention: Steps to Better Balance and Greater Independence", October 18, 2010.

Lecturer. Your Brain in the Wild: Wherewithal for living daily, series sponsored by Atlanta VAMC. Perimeter Adult Learning & Services, "Therapeutic Approach to Dizziness", September 12, 2011.

Invited Speaker. Senior Workshop, YMCA, Dekalb-Decatur, GA. "Therapeutic Approach to Dizziness", September 27, 2011.

Invited Speaker. "Fall Prevention: Steps to Better Balance and Greater Independence". Erwin Senior Center, October 10, 2013; Kinsgport Senior Center, November 5, 2013; Jonesborough Senior Center, November 19, 2013.

Poster Presentation. Williams D, Hall C, Brown N, Cantor P, Dulling R, Egbujor O, Williams J. Reliability of the Mid-thigh Pull Using Bar Method or Pelvic Belt Method. TPTA Spring Meeting, Nashville, TN, March 29-30, 2014.

TEACHING Courses

Neurological Dysfunction (3-credit undergraduate/graduate course). Exercise & Movement Science, University of Oregon, Summer 1996.

Measurement and Evaluation (3-credit undergraduate core curriculum course). Division of Kinesiology & Health Promotion, California State University, Fullerton, Spring 2001.

Motor Learning and Motor Control (3-credit undergraduate core curriculum course). Division of Kinesiology & Health Promotion, California State University, Fullerton, Fall 2001.

Biology of Aging (2-hour lecture). Graduate Gerontology Program, California State University, Fullerton. Fall 2001.

Balance Assessment and Treatment (4-hour lecture/lab). Neurologic Physical Therapy, Emory University. Fall 2003 – 2009.

Vestibular Anatomy and Physiology (2-hour lecture). Neurologic Physical Therapy, Emory University. Lecture: Fall 2003.

The Role of the Vestibular System in Postural Control (4-hour seminar). Emory University, Biology of Movement Control. Spring 2005.

Health Benefits of Tai Chi (2-hour lecture/demo). Neurologic Physical Therapy, Emory University. Fall 2005.

Ground Reaction Forces (2-hour lab). Musculoskeletal Kinesiology. Fall 2005 – 2008.

Data Analysis: Quantitative (2-hour lecture). Clinical Research I, Emory University. Spring 2008 – 2011.

Motor dual-task ability (2-hour lecture). Motor Control, Emory University. Summer 2011. Scientific Inquiry for Physical Therapists (1-credit graduate course). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Spring 2012 - 2013.

Introduction to Research (1-credit graduate course). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Summer, 2012 - 2015.

Scientific Inquiry for Physical Therapists (1-credit graduate course). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Spring, 2012 - 2015.

Case Study in Physical Therapy (1-credit graduate course, Capstone project). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Spring, 2014.

Clinical Correlates I (1-credit graduate course). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Spring, 2014.

Clinical Correlates II (1-credit graduate course). Department of Physical Therapy, East Tennessee State University, Johnson City, TN, Summer, 2014 - 2015.

Mentored Students

Doctor of Physical Therapy students directly supervised:

Elizabeth Lane, Kris Petrosky, Joseph Pilgrim, Kelly Abbott, Emory University, "Comparison of a clinical measure of vestibular function to computerized rotary chair testing". 2005 – 2007. [Presented in a poster at APTA CSM Nashville, TN. February 2008]

Elise Nathan, Kendra Richardson, Emory University, "Effect of otolith function on vestibular rehabilitation outcomes". 2005 – 2007. [Presented in a poster at APTA CSM Nashville, TN. February 2008]

Julia Hutcheson, Christy Cloudt, Beth Millians, Jill Wolter, Emory University, "The effect of predictability of head turns on gait in patients with vestibular hypofunction". 2006 – 2008. [Presented in a poster at APTA CSM Las Vegas, NV. February 2009]

Stasha Sampson, Becky Wilson, Rachael Raymer, Sydne Stone, Emory University, "Testing Patients with Cerebellar Degeneration for Aphysiologic Balance Problems Using Computerized Dynamic Posturography". 2006 – 2008. [Presented in a poster at APTA CSM Las Vegas, NV. February 2009] Julie Hoover, Margaret Jacobs, Ranit Lieberman, Kate Mihevc, Emory University, "Comparison of a clinical measure of vestibular function to computerized rotary chair testing". 2007 – 2009. [Presented in a poster at APTA CSM San Diego, CA. February 2010

Alana Loveday, Emily Hussey, Julia Toomey, Valerie Menendez, Emory University, "Role of divided attention in recovering from a trip during gait". 2008 – 2010. [Received a Physical Therapy Association of Georgia Research Grant, 2008; Received the Pam Catlin Research Award from Emory University, 2010].

Amanda Broadwater, Daniel Caissie, Daniel Woodward, Holly Young, East Tennessee State University, "Use of Wii Fit as a Low-Cost Alternative System to Evaluate Balance Ability in Older Adults". 2013 – 2015 [Student Research Award, Department of Physical Therapy, ETSU; Poster presented at APTA CSM, Indianapolis, IN. February 2015].

Cody Keck, Justin Kerley, Andrew King, Brent Kington, Kirsten Lamie, East Tennessee State University, "Normative Data for the Dynamic Visual Acuity Test for Vestibular Screening". 2013 – 2015 [Student Research Award, Department of Physical Therapy, ETSU; Poster presented at APTA CSM, Indianapolis, IN. February 2015].

Post-doctoral fellows directly supervised:

Strawberry Gatts, Ph.D. Rehab R & D Center, Atlanta VAMC, Mentor on Career Development Award II, "A new approach: Tai Chi to prevent falls in seniors with visual deficits". 2008 [Deceased].

Madeleine Hackney, Ph.D. Rehab R & D Center, Atlanta VA Medical Center, Mentor on Career Development Award I, "Exercise effects on mobility and fall risk in visually impaired elders". 2009 – 2012.

Kristal Riska, Ph.D. Auditory and Vestibular Research Enhancement Award Program (REAP), James H. Quillen VA Medical Center, Mentor on Career Development Award I, "Evaluation and Management of Veterans with Dizziness". 2014 – 2016.

Residents directly supervised:

James Lin, M.D. Research Fellow in Advanced Geriatrics, Atlanta VAMC. Atlanta Rehab R & D CoE, Pilot Grant, "A Pilot Study of the Wii Fit as a Low-Cost Virtual Reality System to Evaluate Balance Ability in Older Adults". 2008 – 2010.

Other students:

Tan Vo, Bobby (Zhihua) He, Xiao (Randy) Han, Kiet Huynh, Advisor senior design project, Georgia Tech BME Program – "An Assistive Locomotive Device for Diabetic Peripheral Neuropathy". 2007 – 2008.

SERVICE AND LEADERSHIP

SERVICE AND	LEADERSHIP
<u>Department</u>	
2007-2011	Academic Affairs Committee, Emory University
2007-2009	Continuing Education Committee, Emory University
2005-2007	Admissions Committee, Emory University
2011-2013	Curriculum Committee, East Tennessee State University (ETSU)
2011-2014	Admissions Committee, ETSU
2011-present	Student Promotion and Retention Committee, ETSU
2011-2012	Chair Search Committee, ETSU
2011-2015	Practice Development (Johnson City Community Health Center), ETSU
2014-2015	Research Committee, ETSU
<u>University</u>	
2008-2011	Emory University/VA Institutional Review Board Committee, Emory University
2011-2014	Johnson City Community Health Center Planning Committee, ETSU
2013-2014	Collaborative Research Committee, ETSU
2014-2015	Faculty Development and Awards committee, ETSU
<u>External</u>	
2003-2011	Research Committee, Physical Therapy Association of Georgia
2003-2011	National Scientific Advisory Council, American Federation for Aging Research
2005-2011	Grant reviewer, American Federation for Aging Research
2005	Grant reviewer, Retirement Research Foundation
2010	Grant reviewer, NASA Sensorimotor Peer Review Panel
2010-2013	Secretary, Early Career Researcher Special Interest Group, Section on Research, American Physical Therapy Association
2011-2013	Scientific Review Committee, Physical Therapy Foundation
2011	Grant reviewer (Ad Hoc), VAi2 Industry Innovation Competition, Veterans' Affairs
2011	Session Chair, Session Title: Risks for Functional Limitations, Annual Conference of the Gerontological Society of America. Boston, MA, November 18-22, 2011.
2012	Grant reviewer (Ad Hoc), Sensory Systems/Communication RRD Review Panel, Veterans' Affairs
2012-2015	Team Lead, Vestibular Rehabilitation Clinical Practice Guidelines Workgroup, Neurology Section, APTA
2013	Grant reviewer (Ad Hoc), Sensory Systems/Communication and Career Development RRD Review Panels, Veterans' Affairs
2014	Planning Committee, Geriatric Evaluation and Management Tools (GEMs) dissemination, GEC National Program Office
2015	Grant reviewer, Peer Review Program, Chronic Effects of Neurotrauma Consortium (CENC), Veterans' Affairs/Department of Defense

Editorial Boards and Reviewer Activity

2005 - present Editorial Board, Journal of Aging and Physical Activity 2008 - present Editorial Board, The Open Longevity Science Journal

2010 - present Editorial Board, Frontiers in Neuro-otology

Reviewer for the following journals:

Annals of Neurology

Archives of Gerontology & Geriatrics

Archives of Physical Medicine & Rehabilitation

Audiology & Neurotology

Gait & Posture

Journal of Experimental Psychology: Applied

Journal of Neurologic Physical Therapy

Journal of Vestibular Rehabilitation

Otology & Neurotology

Physical Therapy Journal

Professional affiliations

American Physical Therapy Association (since 1989; Neurology and Geriatrics Sections; Vestibular and Balance and Falls Special Interest Groups)

Bárány Society (selected in 2014)

Gerontological Society of America (since 2000)

North America Society for Psychology of Sport and Physical Activity (1996 – 2002)

Honors and Awards

1996	Graduate Student Research Award, University of Oregon,
1996 - 1997	Systems Physiology Training Grant Fellowship, University of Oregon,
1997 - 1999	A.D. Hutchison Fellowship, University of Texas
1998	Phi Kappa Phi Honor Society, University of Texas
1998	Graduate Student Professional Development Award, University of Texas
1999	Technical Assistance Workshop Fellow, National Institute on Aging
2009	Marquis' Who's Who in America
2011	ERRIS (Enhancing Rehabilitation Research in the South) Intensive Workshop on Grant
	Writing in Rehabilitation, Research Fellow
2011	Golden Synapse Award for best article ("Efficacy of gaze stability exercises in older adults
	with complaints of dizziness") published in Journal of Neurologic Physical Therapy in 2010

Other Activities

1984 – 1986 Volunteer Teacher and Technical trainer, U.S. Peace Corps, Lesotho, Southern Africa.