



**Ottenbacher, Kenneth J. – PI/Project Director**

Professor & Director, Division of Rehabilitation Sciences (SHP)  
Director, Center for Rehabilitation Sciences  
Associate Director, Sealy Center on Aging  
University of Texas Medical Branch

Research Interests

Functional assessment, outcomes measures, stroke, disability

Recent Publications

- Ostir, G.V., Berges, I-M, Ottenbacher, M.E., Graham, J.E., Ottenbacher, K.J. (2008). Positive emotion following stroke. *Journal of Rehabilitation Medicine*, 40, 477-481. PMID: PMC2408382
- Berges, I.M., Kuo, Y.F., Ostir, G.V., Granger, C.V., Graham, J.E., Ottenbacher, K.J. (2008). Gender and ethnic differences in rehabilitation outcomes after hip-replacement surgery. *American Journal of Physical Medicine and Rehabilitation*, 87, 567-572. PMID: 18574348
- Reyes-Ortiz, C.A., Velez, L.F., Camacho, M.E., Ottenbacher, K.J., Markides, K.S. (2008). Health insurance and cervical cancer screening among older women in Latin America and Caribbean cities. *International Journal of Epidemiology*, 37, 870-878. PMID: PMC2614365
- Graham, J.E., Chang, P.J., Berges, I.M., Granger, C.V., Ottenbacher, K.J. (2008). Race/ethnicity and outcomes following inpatient rehabilitation for hip fracture. *Journal of Gerontology: Medical Sciences*, 63A, 860-866. NIHMSID: NIHMS56439
- Samper-Ternent, R., Al Snih, S., Raji, M.A., Markides, K.S., Ottenbacher, K.J. (2008). Relationship between frailty and cognitive decline in older Mexican Americans. *Journal of the American Geriatrics Society*. 56(10), 1845-1852. NIHMSID: NIHMS88799
- Nguyen-Oghalai TU, Wu H, McNearney TA, Granger CV, Ottenbacher KJ. (2008) Functional outcome after stroke in patients with rheumatoid arthritis and systemic lupus erythematosus. *Arthritis Rheum*. 59(7):984-8. PMID: 18576291
- Deutsch, A., Granger, C.V., Russell, C., Heinemann, A.W., Ottenbacher, K.J. (2008). Apparent changes in IRF outcomes due to a change in the definition of program interruption. *Archives of Physical Medicine and Rehabilitation*, 89, 2274-2277. PMID: 19061738
- Temple, R.O., Zgaljardic, D.J., Abreu, B.C., Seale, G.S., Ostir, G.V., Ottenbacher, K.J. (2009). Ecological validity of the Neuropsychological Assessment Battery Screening Module in post-acute brain injury rehabilitation. *Brain Injury*, 23:1, 45-50.
- Ottenbacher, K.J., Graham, J.E., Al Snih, S., Raji, M.A., Mukaila, R., Samper-Ternent, R., Ostir, G.V., Markides, K.S. (2009). Mexican Americans and Frailty: Findings from the Hispanic Established Populations Epidemiologic Study of the Elderly. *American Journal of Public Health*, 99:4, 673-678. NIHMSID: NIHMS87209

Current Funding (as PI)

Grant# H133G080163 – Impact of Prospective Payment on Rehabilitation Outcomes National Institute on Disability and Rehabilitation Research, DOE	10/01/08 – 09/30/13
Grant# K12 HD055929 - Rehabilitation Research Career Development Program National Center for Medical Rehabilitation Research (NICHD), NIH	09/25/07 – 08/31/12
Grant# R03 TW007614 - Fogarty International Collaboration Award Fogarty International Center, NIH	07/15/06 - 06/30/09
Grant# R01 AG017638 - Disablement Process in Mexican American Older Adults National Institute of Aging, NIH	08/01/00 – 02/28/10
Grant# H133P040003 - Interdisciplinary Rehabilitation Research Training National Institute on Disability and Rehabilitation Research, DOE	07/01/04 – 06/30/09
Grant# T32 HD007539 - Predoctoral Training in Rehabilitation Research National Center for Medical Rehabilitation Research (NICHD), NIH	05/01/01 - 04/30/11



**Vandenborne, Krista - Deputy Director**

Associate Professor & Chair  
Department of Physical Therapy  
University of Florida

Research Interests

Muscle degeneration/regeneration from a pathophysiological level to functional impairment

Recent Publications

- JJ, Theriaque DW, Meyer RS. Ambulatory continuous posterior lumbar plexus nerve blocks after hip arthroplasty: a dual-center, randomized, triple-masked, placebo-controlled trial. *Anesthesiology*. 2008 Sep;109(3):491-501.
- Jayaraman A, Shah P, Gregory CM, Stevens JE, Bowden M, Walter GA, Behrman AB, Vandeborne K. Muscle Adaptations and Locomotor Training after Incomplete Spinal Cord Injury: A Case Series. *J Spinal Cord Med*. 2008;31(2):185-93.
- Liu M, Bose B, Walter GA, Thompson F, Vandeborne K. A longitudinal study of skeletal muscle following spinal cord injury and locomotor training. *Spinal Cord*. 2008 Jul;46(7):488-93.
- Shah P, Gregory C, Stevens J, Pathare N, Jayaraman A, Behrman A, Walter G, and K Vandeborne. Noninvasive assessment of Lower Extremity Muscle Composition after Incomplete Spinal Cord Injury. *Spinal Cord*. 2008 Aug;46(8):565-70.
- Pathare N, Vandeborne K, Liu M, Stevens JE, Li Y, Frimel TN, Walter GA. Alterations in Inorganic Phosphate in Mouse Hindlimb Muscles During Limb Disuse. *NMR Biomed*. 2008 Feb;21(2):101-110
- Chen YW, Gregory CM, Scarborough MT, Shi R, Walter GA, Vandeborne K. Transcriptional Pathways Associated with Skeletal Muscle Disuse Atrophy in Humans. *Physiol Genomics*. 2007 Nov 14;31(3):510-20.
- Borst SE, Conover CF, Carter CS, Gregory CM, Marzetti E, Leeuwenburgh C, Vandeborne K, Wronski TJ. Anabolic Effects of Testosterone Are Preserved during Inhibition of 5{alpha} - Reductase. *Am J Physiol Endocrinol Metab*. 2007 Aug;293(2):E507-14.
- Gregory CM, Bowden MG, Jayaraman A, Shah P, Behrman A, Kautz SA, Vandeborne K. Resistance training and locomotor recovery after incomplete spinal cord injury: a case series. *Spinal Cord*. 2007 Jul;45(7):522-30.

Current Funding

- NIH-T32 HD043730-6 Krista Vandeborne (PI) 06/11/03-05/30/13  
"Interdisciplinary pre-doctoral training in neuromuscular plasticity and rehabilitation".  
The objective of this proposal is to acquire funding to train pre-doctoral students. The training program reinforces interdisciplinary interactions and translational research in neuromuscular plasticity and rehabilitation.
- NIH-R01 HD048051 Krista Vandeborne (PI) 07/01/04-06/30/09  
"Molecular signatures of Muscle Rehabilitation after limb disuse".  
The overall objective of this proposal is to identify the molecular (transcriptional) signatures associated with muscle remodeling in response to rehabilitation in patient cohort.
- NIH-U54 AR052646 H. Lee Sweeney, PhD (PI) 01/01/06-12/31/11  
"Modulation of Muscle Growth for the muscular dystrophies"  
The theme of the center is the modulation of muscle growth for the treatment of muscular dystrophy. The goal is to provide pre-clinical and clinical data to support pharmaceutical development of compounds that increase muscle growth and repair for the treatment of muscular dystrophy.
- NIH-R01HL078670 Glenn Walter (PI) 09/22/04-08/31/09  
"Noninvasive monitoring and tracking of muscle stem cells"  
The overall objective of this proposal is to develop high resolution methods to noninvasively evaluate cell based therapies in skeletal- and cardiac myopathies.
- K12 HD055929-01 Kenneth Ottenbacher (PI) 09/25/07-08/31/12  
"Rehabilitation Research Career Development Program"  
Role: Deputy Director & PI subcontract  
The objective of this RRCD program is to recruit and train rehabilitation scientists who are occupational and physical therapists. This program will provide trainees with the skills necessary to become independent investigators and future leaders and mentors in rehabilitation.



**Abreu, Beatriz C. – Interim Recruitment Officer**

Director of Occupational Therapy

Translational Learning Center

Clinical Professor

Department of Occupational Therapy, UTMB

Research Interests

Brain injury, virtual environment, postural control seating, cognitive rehabilitation

Recent Publications

Reistetter, T. A., Chang, P.-F., Abreu, B.C. (In Press). Showering habits: Time, steps, and products used after brain injury. *American Journal of Occupational Therapy*.

Abreu, B. C., Reistetter, T., Bear-Lehman, J., Ottenbacher, K.J. (Invitational Paper) Unilateral and bilateral upper extremity weight-bearing effect on hand function and functional performance after brain injury. *Occupational Therapy International*.

Temple, R. O., Zgaljardic, D. J., Abreu, B.C., Seale, G.S., Ostir, G.V., Ottenbacher, K.J. (2009) Ecological validity of the neurophysical assessment battery screening module in post-acute brain injury rehabilitation. *Brain Injury* 23(1), 45-50.

Nakamura, T., Abreu, B. C., Patterson, R.M., Buford Jr, W.L., & Ottenbacher, K.J. (2008). Upper Limb Kinematics of the Presumed to be Non-affected Side after Brain Injury. *American Journal of Occupational Therapy* 62(1), 46-50.

Abreu, B. C. (2006). Professional identity and work place integration. *American Journal of Occupational Therapy*, 60(5), 596-599.

Sherwin, E., Whiteneck, G., Corrigan, J., Bedell, G., Brown, M., Abreu, B., DePompei, R., Gordon, W., & Kreutzer, J. (2006). Domains of a TBI Minimal Data Set: Community reintegration phase. *Brain Injury*, 20(4), 383-389.

Sangole A. P., Abreu, B. C. & Stein F. (2006) Mentoring Review and Reflections. *Occupational Therapy in Health Care*, 20(1), 1-16.



**Mann, William C. – Associate Program Director**

Professor & Chair  
Department of Occupational Therapy  
University of Florida

Research Interests

Home monitoring and communications technologies (tele-health, tele-homecare), and older driver assessment and rehabilitation

Recent Publications

Classen, S., Shechtman, O., Stephens, B., Davis, E., Lanford, D.N., & Mann, W. (2009) The impact of roadway intersection design of young and senior adults' driving performance in the recovery phase. Manuscript accepted for publication 03/03/09 by The British Journal of Occupational Therapy

Bendixen, R.M., Levy C.E., Olive E.S., Kobb, R.F., Mann, W.C. (2009) Cost Effectiveness of a Telerehabilitation Program to Support Chronically Ill and Disabled Elders in Their Homes, Telemedicine and e-HEALTH 15(1) 31-38

Stav, W.B., Justiss, M.D., McCarthy D.P., Mann, W.C., Lanford, D.N. (2008) Predictability of clinical Assessments for driving performance. Journal of Safety Research 39(10), 1-7

Mann,W.C., Johnson J.L., Lynch L.G., Justiss M.D., Tomita M., Wu S.S. (2008) Changes in impairment level, functional status, and use of assistive devices by older people with depressive symptoms. American Journal of Occupational Therapy, 62(1), 9-17

Current Funding

Smart Technology, Funded by the Administration on Aging, \$98,000  
October 1, 2008 – September 30, 2009



**Protas, Elizabeth J. – Associate Program Director**

Interim Dean  
School of Health Professions  
University of Texas Medical Branch

Research Interests

Geriatrics, rehabilitation of adults with stroke, Parkinson's disease, and spinal cord injury

Recent Publications

Bryant MS, Rintala D, Lai E, Protas EJ (in press). Self-Administration of auditory cueing to improve gait in persons with Parkinson's Disease. *Clinical Rehabilitation*.

Kortebein, P, Ferrando A, Symonds T.B., Paddon-Jones DJ, Ronsen O, Protas EJ, Conger S, Lombeida, JI, Wolfe R, Evans WJ (in press). Functional impact of ten days bed rest in health older adults. *J Gerontol Sci*.

Protas EJ, Tissier S (in press). Strength and speed training for elders with mobility disability. *J Aging & Phys Act*.

Trail, M, Protas,EJ, Lai,E. *Neurorehabilitation in Parkinson's Disease: An evidenced-based treatment model*. Thorofare, NJ: Slack Inc. 2008.

Protas EJ, Raines ML, Tissier S. Comparison of spatio-temporal and energy cost of the use of three different walkers and unassisted walking in older adults. *Arch PM & R*. 88:768-73, 2007.

Current Funding

Title of Project: Gait and step training to prevent falls in Parkinson's disease

Principal Investigator: Elizabeth J. Protas, P.T., Ph.D

Agency: National Institute of Health (1 R1 HD51844-01)

Type/Period: R1 (9/1/06 –8/31/11)

Major Goal: Test the outcomes of a clinical gait and balance training program on individuals with Parkinson's disease

Title of Project: Bed rest in elders

Principal Investigator: William Evans

Agency: National Institute of Health/National Institute on Aging (NIH P01 AG 023591)

Type/Period: Program Project (09/01/04 – 08/31/09)

Major Goal: To characterize the physiological and functional consequences of bed rest in the elderly.

Title of Project: UTMB Claude Pepper Older Americans Independence Center

Principal Investigator: James Goodwin

Aging: National Institute of Health/National Institute on Aging (NIH P30-AG24832)

Type/Period: Program Project (06/01/05 – 05/30/10)

Role: Core Leader, Recruitment and Measurement Core Major Goal: To support research, core research resources, and investigators related to aging with a focus on skeletal muscle.

Title of Project: Interdisciplinary Rehabilitation Research

Principal Investigator: Kenneth Ottenbacher

Agency: National Institute on Disability and Rehabilitation Research, Department of Education (H133P040003)

Type/Period: Training (07/01/04 – 06/30/09)

Major Goal: Provide support for three postdoctoral fellows to conduct rehabilitation research.

Title of Project: Predoctoral training in Rehabilitation Research

Principal Investigator: Kenneth Ottenbacher

Agency: National Center for Medical Rehabilitation Research, NIH (T32HD007539)

Type/Period: Training (05/01/01 – 04/30/11)



**Velozo, Craig A. – Evaluation Coordinator**

Associate Professor & Associate Chair  
Department of Occupational Therapy  
University of Florida

Research Interests

Development of outcome measures, using Rasch measurement theory

Recent Publications

- Classen, S., Winter, S.M., Velozo, C., Bédard, M., Lanford, D., & Brumback, B., Lutz, B. (in press). Item Development and Validity Testing for a Safe Driving Behavior Measure. *American Journal of Occupational Therapy*.
- Ying-Chih Wang, Y.C., Byers, K.L., Velozo, C.A. (2009) Validation of the FIM-MDS crosswalk conversion algorithm. *Journal of Rehabilitation Research and Development*. 45(7),1065-1076 .
- Woodbury, M.L., Velozo, C.A., Richards, L.G., Duncan, P.W., Studenski, S., Lai, S.M. (2008) Longitudinal stability of the Fugl-Meyer upper extremity assessment. *Archives of Physical Medicine and Rehabilitation*. 89(8),1563-1569.
- Pomeranz, J.L., Byers, K., Moorehouse, M.D. Velozo, C.A., & Spitznagel, R.A. (2008). Using Rasch analysis to investigate the psychometric properties of the word knowledge subtest of the Career Ability Placement Survey. *Rehabilitation Counseling Bulletin* 51, 251 - 259.
- Velozo, C.A., Wang, Y., Lehman, L., Wang, J. (2008). Utilizing Rasch measurement models to develop a computer adaptive self-report of walking, climbing and running, *Disability and Rehabilitation*, 30(6), 458-467.
- Donovan, N.J., Kendall, D.L., Heaton, S.C., Velozo, C.A., Kwon, S., Duncan, P.W. (2008). Conceptualizing Functional Cognition in Stroke. *Neurorehabilitation and Neural Repair*. 22(2),122-135.
- Duncan, P.W., Velozo, C.A. (2007). State-of-the-science on post-acute rehabilitation: measurement and methodologies for assessing quality and establishing policy for post-acute care. *Archives of Physical Medicine and Rehabilitation*, 88(11), 1482-1487.
- Donovan, N.J., Velozo, C.A., Rosenbek, J.C. (2007). The Communicative Effectiveness Survey: Investigating Its Item-level Psychometric Properties. *Journal of Medical Speech-Language Pathology*, 15(4), 433-447.
- Classen, S., Velozo, C.A., Mann, W. (2007). Examining the Rosenberg Self-esteem Scale as a relevant measure of self-esteem for the non-institutionalized elderly. *Clinical Gerontologist*, 31(1), 77-93.
- Velozo, C.A., Byers, K.L., Wang, Y.C., Roberts, B. R. (2007). Translating Measures Across the Continuum of Care: Using Rasch Analysis to Create a Crosswalk Between the FIM and the MDS. *Journal of Rehabilitation Research and Development*, 44(3). 467- 478.
- Pomeranz, J.L, Shaw, L.R, Sawyer, H.W., & Velozo, C.A. (2007). Consensus Among Life Care Planning Experts Regarding Activities to Consider When Recommending Personal Attendant Care Services: A Delphi Study. *Journal of Life Care Planning*, 5, 7-23.
- Woodbury, M.L., Velozo, C.A., Richards, L.G., Duncan, P.W., Studenski, S., Lai, S.M. (2007) Dimensionality and construct validity of the Fugl-Meyer Assessment of the Upper Extremity. *Archives of Physical Medicine and Rehabilitation*, 88 (6) 715-723