

ANDREA L. BEHRMAN, PT, PhD, FAPTA
Curriculum Vitae

Office

Physical Therapy Department
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EDUCATION

- 1991 - 1995 **PhD**, University of Florida, Gainesville, Florida
Major: Motor Behavior, Minor: Physiological Psychology
- 1978 - 1980 **MS**, Duke University, Durham, North Carolina
Major: Physical Therapy
- 1972 - 1976 **BS (Cum Laude)**, Furman University, Greenville, South Carolina
Major: Biology

EMPLOYMENT HISTORY

- 2007 – current **Assistant Director**, Christopher and Dana Reeve Foundation NeuroRecovery Network
- 2007 – 2008 **Interim Director**, UF Brooks Center for Rehabilitation Studies, Jacksonville, FL
- 2006 – present **Research Health Scientist, Locomotor Initiative**, VA RR & D, Brain Rehabilitation Research Center, Malcom Randall VA, Gainesville, FL.
- 2001 – present **Associate Professor**, Department of Physical Therapy, University of Florida
- 2002 - 2005 **Graduate Coordinator** Rehabilitation Science PhD Program (PT)
- 1995 - 2001 **Assistant Professor**, Department of Physical Therapy
University of Florida, Gainesville, Florida
Graduate Faculty, Department of Physical Therapy
Faculty Associate, UF Institute of Aging
Faculty Associate, McKnight Brain Institute
Associate Member, Center for Neurobiological Sciences
- 2002 – present **Research Investigator**, VA RR & D Rehabilitation Outcomes Research Center
Malcolm Randall VA, Gainesville, Florida
- 2000 - present **Locomotor Initiative Coordinator**, VA RR & D Brain Rehabilitation Research Center, Malcolm Randall VA, Gainesville, Florida
- 2000 - 2006 **Research Investigator**, VA RR & D Brain Rehabilitation Research Center, Malcolm Randall VA, Gainesville, Florida

- 1993 - 1994 **Research Assistant**, Psychology Department
University of Florida, Gainesville, Florida
- 1991 - 1992 **Research Assistant**, Physical Therapy Department
University of Florida, Gainesville, Florida
- 1991 - 1994 **Graduate Teaching Assistant**, Physical Therapy Department
University of Florida, Gainesville, Florida
- 1987 - 1991 **Assistant Professor**, Physical Therapy Department
Beaver College, Glenside, Pennsylvania
- 1988 - 1990 **Physical Therapist** (part-time)
Magee Rehabilitation Hospital, Philadelphia, Pennsylvania
- 1987 **Physical Therapist** (part-time)
Shenandoah Valley Physical Therapy, Staunton, Virginia
- 1984 - 1987 **Director**, Physical Therapy Department
Woodrow Wilson Rehabilitation Center, Fishersville, Virginia
- 1982 - 1984 **Education Supervisor**, Physical Therapy Department
Woodrow Wilson Rehabilitation Center, Fishersville, Virginia
- 1981 - 1982 **Staff Physical Therapist**, Physical Therapy Department
Woodrow Wilson Rehabilitation Center, Fishersville, Virginia
- 1980 - 1981 **Staff Physical Therapist**, Physical Therapy Department
Memorial Mission Hospital, Asheville, North Carolina

LICENSURE

| | |
|----------------------------|-----------------|
| Florida #0007964 | 1992 to present |
| Pennsylvania #PT-0016670-E | 1987 to 1995 |
| Virginia 0105-001866 | 1981 to 1992 |
| North Carolina 1725 | 1980 to 1986 |

GRANTS FUNDED

Current Grants

VA Rehabilitation R&D Merit Review A6365-R

Development of evidence-based parameter selection for locomotor training

PI: Steve Kautz, PhD, co-PII:Carolynn Patten, PhD, Investigator: Andrea L. Behrman, PhD, PT (10%)

Start date:July, 2008, End date: June, 2011

\$ 672,759, total award

Craig Neilsen Foundation

Restoring walking in non-ambulatory children with severe chronic SCI

PI: Andrea L. Behrman, PhD, PT; co-PI: Dena R. Howland, PhD

Start date: Nov, 2006, Completion date: Nov, 2008, no-cost extension

\$250,000 total award

NIH-NINDS

Locomotor experience applied post-stroke (LEAPS), multisite randomized clinical trial

PI: Pamela Duncan; co-PIs: Andrea Behrman, PhD, PT (25% effort), Katherine Sullivan, PhD, PT

Start date: 9/25/05, Completion date: 9/24/10
\$13,500,000 total award

VA Rehabilitation Research and Development

Differential effects of robotic vs. manually-assisted locomotor training

PI: Andrea L. Behrman, PhD, PT (30% effort), co-PI: Steve A. Kautz, PhD

Start date: Nov, 2005, End date: Oct, 2008, no-cost extension

\$450,000 total award

VA Rehabilitation Research and Development

Mechanisms of response to locomotor training post-stroke

PI: Steve A. Kautz, PhD, co-PI: Andrea L. Behrman, PhD, PT (15% effort)

Start date: Sept, 2005, End date: August, 2009

\$1,715,259 total award

Grants under review:

Grants completed:

National Institutes of Health

R-01, Intermuscular coordination of hemiparetic walking – response to RFA HD-03-011.

PI: Steven A. Kautz, PhD, Co-Investigators: Andrea L. Behrman, PhD, PT (5% effort) Co-PI: Richard Neptune, PhD, Consultant: Felix E. Zajak, PhD.

Start date: 4/1/04, completion date: 3/31/08.

VA RR & D

Veteran-centered outcomes using qualitative and quantitative methods

PI: C Velozo

The overall research objective of this study is to combine qualitative research methods and Item Response Theory (IRT) to develop and evaluate valid outcome measures for Veterans receiving innovative rehabilitation treatments to improve gait.

Role: co-investigator (5% effort)

Start date: 11/01/05 – 10/30/07

National Center for Medical Rehabilitation and Research, National Institutes of Health.

K-01, Career Development Award.

Project: Activity-dependent plasticity after spinal cord injury.

PI: Andrea L. Behrman, PhD, PT (75% effort).

Start date: 4/1/00, Completion date: 4/1/05.

\$509,000 (direct costs)

FL Brain and SCI Research Trust Fund – Pilot Funds

Immediate effects of robotic- vs. manual-assisted locomotor training on neuromuscular plasticity after incomplete spinal cord injury

PI: Andrea L. Behrman, PhD, PT

Co-investigators: Steve Kautz, PhD, Floyd Thompson, PhD, Lisa Hannold, PhD

Start date: Nov. 2004. End date: July, 2005

\$57,000

National Institute of Child Health and Development

HD-01-022: Duration and Timing of Supported Treadmill Training

PI: Pamela W. Duncan, PhD, PT, Co-PIs: Andrea L. Behrman, PhD, PT; Katherine J. Sullivan, PhD, PT

Start date: 09/30/02, Completion date: 09/29/04.

National Center for Medical Rehabilitation and Research.

Project: Rehabilitation clinical trial in acute spinal cord injury.

PI: Bruce Dobkin, MD (UCLA), co-investigators: V. Edgerton, PhD, S. Harkema, PhD, J. Dittno, MD, M. Saulino, MD, M. Scott, MD, D. Apple, MD, G. Dudley, PhD, L. Fugate, MD, M. Basso, PhD, PT, H. Barbeau PhD, PT, D. DeForge, MD, A. Behrman, PhD, PT

Start date: 11/01/98, Completion date: 11/01/04

Christopher Reeves Paralysis Foundation.

Project: Acute neurophysiological changes in SCI individuals with locomotor training.

PI: Carl Kukulka, PhD, PT; Co-investigators: Floyd J Thompson, PhD, Andrea L Behrman, PhD, PT

Start date: 2001. Completion date: 12/2003.

\$82,221 (direct costs)

Veterans Affairs Rehabilitation, Research and Development Service

Project: VA Brain Rehabilitation Research Center.

PI: Leslie Gonzalez-Rothi, PhD

\$3,298,237 for 5 years

Sub-project: Adjunctive pharmacological treatment of patients with stroke undergoing physical therapy/Constraint-induced movement therapy for recovery of arm function post-stroke,

PI: Steve Nadeau, M.D., Principal Investigator: Andrea L. Behrman, PhD, PT

Start date: 7/1/99, Completion date: 5/30/04.

\$511,988 (direct costs)

Section on Pediatrics, American Physical Therapy Association.

Project: Reliability of the Actual Amount of Use Test and The Wolf Motor Function Test for pediatric patients with hemiplegia.

PI: Claudia Senesac, PT, PCS, co-investigators: Kathye E. Light, PhD, PT and Andrea L. Behrman, PhD, PT

Start date: 2000, Completion date: 2001.

\$1,000 (total award)

National Center for Medical Rehabilitation and Research, National Institutes of Health.

Project: The Extremity Constraint Induced Therapy Evaluation (EXCITE) Trial

PI: C. Kukulka, PhD, PT; co-PI: Kathye Light, PhD, PT co-investigator: Andrea L. Behrman, PhD, PT (5% effort; Year 1 only)

Start date: 4/1/2000. Completion date: 3/31/2005.

\$455,344 (direct costs)

American Paraplegia Society.

Project: Locomotor rehabilitation in human spinal cord injury: The effects of treadmill training.

PI: Andrea L. Behrman, PhD, PT; Co-PI, Mark Trimble, PhD, PT, Investigators: Floyd Thompson, PhD, Mary Thigpen, MHS, NCS, PT

Start date: December, 1998, Completion date: March, 2000.

\$10,000 (direct costs)

Foundation for Physical Therapy.

Project: New Investigator Fellowship Training Initiative: Neural tissue transplantation in syringomyelia: spinal cord neurophysiology

PI: Andrea L. Behrman, PhD, PT, (50% effort)

Start date: January, 1999, Completion date: January, 2000.

\$30,000 (direct costs, no indirects)

Brain and Spinal Cord Injury Trust Fund – Florida.

Project: Neurophysiology of spinal cord injury and repair.

PI: Floyd Thompson, co-investigators: Paul J. Reier, PhD, Mark Trimble, PhD, Charles J. Vierck, PhD, Basim Uthman, M.D., Andrea L. Behrman, PhD, Susan Mott, M.D.

Start date: 1997, Completion date: 1998
Start date: 1998, Completion date: 1999
\$26,416 (total award, direct costs only)

1998 Incentive Fund: College of Health Professions - University of Florida.

Project: Spasticity in spinal cord injury: The effects of neural tissue transplantation and treadmill training.
Grant funded purchase of Kin-Com isokinetic device combined with \$7,000 funds from Dept. of Neuroscience, UFBI, and Dept. of Exercise Science.
PI: Andrea Behrman, PhD, Co-PI: Mark Trimble, PhD, Floyd Thompson, PhD
Start date: 1998, Completion date: 1999.
\$ 9,270 (total costs).

Florida Physical Therapy Association Research Grant.

Project: Functional mobility and motor control in Parkinson's disease: The effects of pallidotomy.
PI: Andrea L. Behrman, PhD, PT
1997
\$3,200 (total award, no indirect costs)

Opportunity Fund: Intercollegiate and Interdisciplinary Research - Division of Sponsored Research, University of Florida

Project: Motor actions, biofeedback, and functional electrical stimulation: Recovering arm movements after a stroke.
PI: James Cauraugh, PhD, Co-PI: Kathy Light, PhD, Research Associate: Andrea Behrman, PhD, PT, Consultant: Bill Triggs, MD
Start date: 1997, Completion date: 1999
\$17,550 (total award)

Graduate Research Assistantship Program - Division of Sponsored Research, University of Florida.

Project: Functional mobility and motor control in Parkinson's disease: The effects of pallidotomy.
PI: Andrea L. Behrman, PhD, PT
Start date: 1996, Completion date: 1997.
\$6,485 (total award)

National Institute on Aging - Summer Institute on Aging for New Investigators.

One of four physical therapists awarded attendance, Airlie, Virginia.
July 20 –26, 1996.
Granted attendee for Andrea Behrman, PhD, PT including all expenses and conference attendance.

New Faculty Award Program - Division of Sponsored Research, University of Florida

Project: Gait in Parkinson's Disease: Effects of Pallidotomy.
Funded purchase of computerized gait mat.
PI: Andrea L. Behrman, PhD, PT
1995 - 1996,
\$15,000 (total award)

Grant submitted and scored:

Locomotor restoration in the absence of isolated voluntary movement in chronic SCI
Christopher Reeve Foundation
Dec. 2006 – Dec. 2008
PI: Andrea L. Behrman, PhD, PT; co-PI: Dena R. Howland, PhD
Total award: \$150, 000

Due to overlap with Craig Neilsen Foundation-funded grant, we did not accept the award.

Christopher Reeve Paralysis Foundation
Project: NeuroRecovery Network at Brooks Rehab and the University of Florida

Role: PI: Andrea Behrman, PhD, PT
Start date: 1/018/05 – 01/18/-08
Conditional award; decided not to resubmit in 2006.

*National Institute of Child Health and Development
R-03, Treadmill training post-stroke: translation to overground*
PI: Andrea L. Behrman, PhD, PT; co-PI Pamela W. Duncan, PhD, PT
Start date: 07/01/04, Completion date: 06/31/06
Received a 1.6 score; budget limitations prevented funding.

External consultations:

Christopher and Dana Reeve Paralysis Foundation
Project: NeuroRecovery Network
PI: Susan Harkema, PhD, University of Louisville, Louisville, KY
Consultant for development of model clinics for translation of activity-based rehabilitation strategies to clinical practice in SCI rehabilitation.
2005, 2007

Veterans Affairs Rehabilitation, Research, and Development Service.
Project: Computer aided wheelchair prescription system (CAWPS).
PI: Nigle Shapcott, M.SC, Univ. of Pittsburgh, School of Health and Rehabilitation Services.
Consultant: Andrea L. Behrman, PhD, PT
Provided consultation on wheelchair prescription process to develop a case based reasoning computer software system to improve the selection and prescription of wheelchairs based on ANSI/RESNA wheelchair standards.
1995 – 1996.

PUBLICATIONS

Referred publications

Phadke CP, Thompson FJ, Trimble M, Behrman AL, Kukulka C. Reliability of soleus H-reflexes in standing and walking post incomplete spinal cord injury. *International Journal of Neuroscience*. Accepted, Sept. 2009.

Phadke CP, Klimstra M, Zehr EP, Thompson FJ, Behrman AL. Soleus H-reflex modulation during stance phase of walking with altered arm swing patterns. *Motor Control*. Accepted, 2009.

Bowden MG, Balasubramanian CK, Behrman AL, Kautz SA. Validation of a speed-based classification system using quantitative measures of walking performance post-stroke. *Neurorehabilitation and Neural Repair*, 2008;22:672-675.

Bowden MG, Hannold EM, Nair PM, Fuller LB, Behrman AL. Beyond gait speed: A case report of a multidimensional approach to locomotor rehabilitation outcomes in incomplete spinal cord injury. *J Neurol Phys Ther*. 2008 Sep; 32(3):129-38.

Thigpen MT, Cauraugh J, Creel G, Day K, Flynn S, Fritz S, Frost S, Respees R, Gardner-Smith P, Light K, Brack M, Behrman A. Adaptation of postural responses during different standing perturbation conditions in individuals with incomplete spinal cord injury. *Gait Posture*. 2009 Jan;29(1):113-8. Epub 2008 Sep 6.

Jayaraman A, Shah P, Gregory C, Bowden M, Stevens J, Bishop M, Walter G, Behrman A, Vandenborne K. Locomotor training and muscle function after incomplete spinal cord injury: case series. *J Spinal Cord*

Med. 2008;31(2):185-93.

Shah P et al. Non-invasive assessment of lower extremity muscle composition after incomplete spinal cord injury. *Spinal Cord.* 2008 Aug;46(8):565-70. Epub 2008 Mar 18

Behrman AL, Nair PM, Bowden MG, Dauser RC, Herget BR, Martin JB, Phadke CP, Reier PJ, Senesac CR, Thompson FJ, Howland DR. Locomotor training restores walking in a nonambulatory child with chronic, severe, incomplete cervical spinal cord injury. *Phys Ther.* 2008 May;88(5):580-90; discussion 590-5. Epub 2008 Mar 6.

Jeon HS, Kukulka HS, Brunt D, Behrman AL, Thompson FJ. Soleus h-reflex modulation and paired reflex depression from prone to standing and from standing to walking. *Int J Neurosci.* 2007 Dec;117(12):1661-75.

Duncan PW, Sullivan K, Behrman AL, Azen SP, Wu SS, Nadeau SE, Dobkin BH, Rose DK, Tilson J. Protocol for the Locomotor Experience Applied Post-Stroke (LEAPS) trial: a randomized controlled trial *BMC Neurology* 2007, 7:39.

Plummer-D'Amato P, Altmann LJ, Saracino D, Fox E, Behrman AL, Marsiske M. Interactions between cognitive tasks and gait after stroke: A dual task study. *Gait Posture.* 2008 May;27(4):683-8. Epub 2007 Oct 22.

Phadke C, Wu S, Thompson FJ, Behrman AL. Comparison of soleus H-reflex modulation after incomplete spinal cord injury in 2 walking environments: treadmill with body weight support and overground. *Arch Phys Med Rehabil.* 2007 Dec;88(12):1606-13

Bowden M, Behrman AL. Step Activity Monitor: Accuracy and test-retest reliability in persons with incomplete spinal cord injury. *J Rehabil Res Dev.* 2007;44(3):355-62.

Ditunno JF Jr, Barbeau H, Dobkin BH, Elashoff R, Harkema S, Marino RJ, Hauck WW, Apple D, Basso DM, Behrman A, Deforge D, Fugate L, Saulino M, Scott M, Chung J. Validity of the walking scale for spinal cord injury and other domains of function in a multicenter clinical trial. *Neurorehabil Neural Repair.* 2007 Nov-Dec;21(6):539-50. Epub 2007 May 16.

Behrman AL and Harkema SJ. Physical rehabilitation as an agent for recovery after spinal cord injury. *Phys Med Rehabil Clin N Am.* 2007;18(2);182-202.

Plummer P, Behrman AL, Duncan PW, Spigel P, Saracino D, Martin J, Fox E, Thigpen M, Kautz S. Effects of stroke severity and training duration on locomotor recovery after stroke: a pilot study. *Neurorehabil Neural Repair.* 2007 Jun;21(2):137-51.

Gregory CM, Bowden MG, Jayaraman A, Behrman A, Kautz SA, Vandenborne K. Resistance training and locomotor recovery after incomplete spinal cord injury: a case series. *Spinal Cord.* 2007 Jul;45(7):522-30. Epub 2007 Jan 16

Dobkin B, Barbeau H, Deforge D, Ditunno J, Elashoff R, Apple D, Basso, M, Behrman A, Harkema S, Saulin M, Scott M and the Spinal Cord Injury Locomotor Trial Group. The evolution of walking-related outcomes over the first 12 weeks of rehabilitation for incomplete traumatic spinal cord injury: The multicenter randomized spinal cord injury locomotor trial. *Neurorehabil Neural Repair,* 2007,21:25-35.

Jayaraman A, Gregory CM, Bowden M, Stevens JE, Shar P, Behrman AL, Vandeborne K. Lower extremity skeletal muscle function in persons with incomplete spinal cord injury. *Spinal Cord,* 2006;44:680-687.

Hannold EM, Rittman M, Young ME, Behrman AL. Locomotor training: experiencing the changing body. *J Rehabil Res Dev.* 2006 Nov-Dec;43(7):905-16.

Behrman AL, Bowden MG, Nair P. Neuroplasticity after spinal cord injury and locomotor training: A paradigm shift in the foundation for rehabilitation and recovery *Phys Ther*, 2006;86:1406-1425. **Invited paper.**

Martin J, Plummer P, Bowden MG, Fulk G, Behrman AL. Body weight support systems: Considerations for clinicians. *Phys Ther Reviews*. 2006;11:143-152.

Phadke C, Thompson FJ, Behrman AL. Soleus H-reflex modulation in response to change in percentage of leg loading in standing after incomplete spinal cord injury. *Neurosci Lett*. 2006 Jul 31;403(1-2):6-10. Epub 2006 May 24

Shah PK, Stevens JE, Gregory C, Pathare N, Jayaraman A, Bickel S, Bowden M, Behrman AL, Walter G, Dudley G, Vandeborne K. Lower extremity muscle cross-sectional area after incomplete spinal cord injury. *Arch Phys Med Rehabil*. 2006 Jun;87(6):772-8.

Fritz SL, Light KE, Clifford SN, Patterson TS, Behrman AL, Davis SD. Descriptive predictors of outcomes following Constraint-Induced Movement Therapy for individuals post-stroke. *Phys Ther*. 2006 Jun;86(6):825-32.

Dobkin B, Apple D, Barbeau H, Basso, M, Behrman A, Deforge D, Ditunno, J, Elashoff R, Fugate L, Harkema S, Saulin M, Scott M. for the Spinal Cord Injury Locomotor Trial (SCILT) Group Weight-supported treadmill vs over-ground training for walking after acute incomplete SCI. *Neurology* 66, 484-93 (2006).

Behrman AL, Lawless-Dixon AR, Davis SB et al. (2005). Locomotor training progression and outcomes after incomplete spinal cord injury. *Phys Ther*. Dec;85(12):1356-71.

Boylstein C, Rittman M, Gubrium J, Behrman A, Davis S. The social organization of constraint-induced movement therapy. *Journal of Rehabilitation, Research, and Development*. 2005;42(3):263-267.

Fritz SL, Light KE, Patterson TS, Behrman AL, Davis SD. Active finger extension predicts outcomes following Constraint-Induced Movement Therapy for individuals with post-stroke hemiparesis. *Stroke*. 2005 Jun;36(6):1172-7.

Nadeau S, Behrman A, Davis S, Reid K, Wu S, Stidham B, Helms K, Rothi L. Donepezil as an adjuvant to constraint induced therapy for upper extremity dysfunction after stroke. *Journal of Rehabilitation, Research, and Development* 2004;41:525-534.

Day J, Fox E, Lowe, J, Swales HB, Behrman AL. Locomotor training with partial body weight support on a treadmill in a non-ambulatory child with spastic tetraplegic cerebral palsy. *Pediatr Phys Ther* 2004;16:106-113.

Dobkin B, Apple D, Barbeau H, Basso, M, Behrman A, Deforge D, Ditunno, J, Elashoff R, Fugate L, Harkema S, Saulin M, Scott M. for the Spinal Cord Injury Locomotor Trial (SCILT) Group. Methods for a randomized trial of weight-supported treadmill training versus conventional training for walking during inpatient rehabilitation after incomplete traumatic spinal cord injury. *Neurorehabilitation and Neural Repair* 2003;17:153-167.

Behrman AL, Light KE, Miller GM. Sensitivity of the Tinetti gait assessment for evaluating individuals with Parkinson's disease. *Clinical Rehabilitation* 2002; 16:399-405.

Behrman AL, Light KE, Flynn SM, Thigpen MT.) Is the Functional Reach test useful for identifying falls risk among individuals with Parkinson disease? *Arch Phys Med Rehabil* 2002;83:538-542,

Sicard-Rosenbaum L, Light KE, Hartzell J, Behrman AL. Gait, lower extremity strength and self-assessed function post hip joint replacement. *Journal of Gerontology* 2002;57A(1):M47-M51.

Wirth, III, ED, Reier PJ, Fessler RG, Thompson FJ, Uthman B, Behrman AL, Beard J, Vierck CJ, Anderson DK.. Feasibility and safety of neural tissue transplantation in patients with syringomyelia. *J Neurotrauma* 2001; 18(9):911-929.

Thompson FJ, Reier PJ, Uthman B, Mott S, Fessler RG, Behrman AL, Trimble M, Anderson DK, Wirth, III, ED.. Neurophysiological assessment of the feasibility and safety of neural tissue transplantation in patients with syringomyelia. *J Neurotrauma* 2001;18(9):931-945.

Trimble MH, Behrman AL, Flynn SF, Thigpen MT, Thompson FJ. Acute effects of locomotor training on overground walking speed and H-reflex modulation in individuals with incomplete spinal cord injury. *J Spinal Cord Med* 2001;24:74-80.

Behrman AL, Harkema SJ. Locomotor training after human spinal cord injury: A series of case studies. *Phys Ther* 2000; 80(7):688-700. **(In Special Series on Spinal Cord Injury, invited paper)**

Cauraugh J, Light KE, Kim S, Thigpen M, Behrman A. Chronic motor dysfunction after stroke: Recovering wrist movement by electromyography-triggered neuromuscular stimulation. *Stroke* 2000;31(6):1360-1364.

Basso DM, Behrman AL, Harkema SJ. Recovery of walking after CNS insult: Basic research in the control of locomotion as a foundation for developing rehabilitation strategies. *Neurology Report* 2000; 2:47-54.

Behrman AL, Cauraugh JH, Light KE. Practice as an intervention to improve speeded motor performance and motor learning in Parkinson's disease. *Journal of the Neurological Sciences* 2000;174:127-136.

Trimble M, Kukulka C, Behrman AL. The effect of treadmill gait training on low-frequency depression of the soleus H-reflex: Comparison of a spinal cord injured man to normal subjects. *Neuroscience Letters* 1998;246:186-188.

Behrman AL, Teitelbaum P, Cauraugh JH. Verbal instructional sets to normalize the temporal and spatial gait parameters in Parkinson's disease. *Journal of Neurology, Neurosurgery, and Psychiatry* 1998; 65:580-582.

Light KE, Behrman AL, Thigpen M, Triggs WJ. The 2-minute-walk test: A tool for evaluating endurance in clients with Parkinson's disease. *Neurology Report* 1997; 21(4):136-139.

Behrman AL, Light KE. Scientific conferences: Incorporating recent research into the neurorehabilitation course of a professional physical therapist curriculum. *Neurology Report* 1996; 20(1):55-59.

Light KE, Reilly MA, Behrman AL, Spirduso WW. Reaction times and movement times: Benefits of practice to young and older subjects. *Journal of Aging and Physical Activity* 1996; 4:27-41.

Brunt D, Vander Linden DW, Behrman AL. The relation between limb loading and control parameters during gait initiation in stroke patients. *Arch Phys Med Rehabil* 1996; 76:627-634.

Behrman AL, Sawyer KL, Tomlinson SS. "I want to walk": An approach to physical therapy management for the individual with an incomplete spinal cord injury. *Neurology Report* 1993; 17(2):7-12.

Behrman AL, Vander Linden DW, Cauraugh JH. Relative frequency knowledge of results: Older adults learning a force-time modulation task. *Journal of Human Movement Studies* 1992; 23:233-250.

Behrman AL. Factors in functional assessment: Choosing a wheelchair system. *Journal of Rehabilitation and Research Development* 1990;2:17-30.

Non-referred publications

Behrman AL, Plummer-D'Amato P. "What's in a name?": Revisited. *Phys Ther.* 2008 Jan;88(1):6-9.

Behrman AL, Thigpen MT (2005). Locomotor training after stroke and spinal cord injury: The challenge of evidence-based practice. *BioMechanics*;3:55-59.(non-referred)

Pease J. Rehabilitation Revolution. *Explore: Research at the University of Florida*, Fall, 2004, 30-35. (report on the Locomotor Initiative).

Mukalel R, Flynn S, Thigpen M, Trimble M, Behrman AL. (2000). Arm posture affects lower limb reflex and EMG activity while walking in individuals with incomplete spinal cord injury. *Journal of Undergraduate Research*; 1(9).

Harkema SJ, Ono SA, Behrman AL, Basso DM, Fugate LP. (1999). *Locomotor Training Manual*. Copyright.

Behrman AL. (1993). Commentary: Does the rehabilitation environment need a change? *Neurology Report*; 17(2), 20-21.

PUBLISHED ABSTRACTS AND PROCEEDINGS

Day K, Kautz S, Suter S, Behrman A. Assistive devices alter motor control solutions for balance during walking in adults with incomplete SCI. Accepted for CSM 2010.

Tilson, J, Sullivan K, Cen S, Rose DK, Behrman AL, Azen S, Duncan PW. Determination of the minimal clinically important difference for self-selected gait velocity in the first 60 days post-stroke. CSM, 2009.

Day K, Kautz S, Behrman A. Does compensation with an assistive device mask recovery of dynamic walking stability after spinal cord injury? CSM, 2009.

Fox E, Tester N, Subramanian S, Kautz, S Howland D, Behrman A. Patterns of motor recovery in a child with severe, incomplete SCI. CSM, 2009.

Davis S, Richards L, Behrman A, Singletary F, Spigel P, Paris T, Antonios N, Nadeau S. Constraint induced movement therapy: Acute pilot study preliminary report. CSM, 2009.

Gill L, Day K, Bowden M, Stickles S, Behrman A. Quantifying locomotor adaptability after spinal cord injury: clinic vs. community-based performance. CSM, 2009.

Paper K, Oschsner J, Dugan T, Nathanson B, Peterson E, Raibert C, Shelburne L, Smith W, Behrman A, Harkema S. Locomotor training outcomes in children with incomplete spinal cord injuries. CSM, 2009.

Forest GF, Harkema SJ, Behrman A, Schmidt M, Williams S, Graves D, Morrison S, Sisto S, Basso M. Correlations among functional outcome measures after human incomplete spinal cord injury when provided with standardized locomotor training from a multi-center rehabilitation network. Society for Neuroscience Meeting, 2008.

Behrman A, Fox E, Tester NJ, Nair P, Phadke, C, Peterson DM, Sudhyadhom A, Senesace C, Dauser R, Spierre L, Johns J, Thompson F, Kleim J, Reier P, Howland D. Differential response to locomotor training after severe, chronic pediatric spinal cord injury and associated neural substrates. Society for Neuroscience Meeting, 2008.

Rose DK, Behrman AL, et al. Response to exercise tolerance testing in subjects post-stroke across severity levels. International Stroke Conference, 2008 and CSM, 2009.

Duncan PW, Sullivan KJ, Behrman AL, Azen AL, Wu SS, Dobkin BH, Nadeau SE. Locomotor Experience Applied Post-Stroke (LEAPS): A randomized controlled trial. International Stroke Conference 2008.

Behrman AL, Pomeranz JL, Yu NS. Locomotor training for individuals with SCI: Implications for life care planning. Accepted, 2008 International Symposium on Life Care Planning, Sept 20-21, 2008.

Sisto, SA, Behrman AL, Harkema SJ. NeuroRecovery Network: Translational model from basic science to clinical practice and policy. Accepted, Annual Meeting of the Allied Health Research Institute, conference on Translational Research in Rehabilitation Care, Sept 8-9, 2008.

Phadke CP, Klimstra M, Zehr EP, Thompson FJ, Behrman AL. Soleus H-reflex modulation during stance phase of walking with altered arm swing patterns. American Congress of Sports Medicine, May, 2008.

Fox E, Tester N, Nair P, Phadke C, Peterson DM, Sudhyadhom A, Senesac C, Dauser R, Spierre L, Johns J, Thompson FJ, Kleim J, Reiere, Howland D, Behrman A. Insights on response to locomotor training: Beyond motor scores in three children with severe chronic SCI. Christopher and Dana Reeve Foundation Scientific Symposium, May 10, 2008.

Tseter NJ, Howland DR, Kautz SA, Zehr EP, Behrman AL. Interlimb coordination during walking post-SCI. Christopher and Dana Reeve Foundation Scientific Symposium, May 10, 2008.

Fox E, Tester N, Subramanian S, Kautz SA, Howland DR, Behrman AL. Two muscle synergies account for pattern of walking recovery. Neural Control of Movement Society Meeting, April, 2008.

Gonzalez-Rothi, Behrman AL, Sapienza C, Patten C. Emerging therapies and technologies in brain rehabilitation. HSR & D National Meeting. Feb. 14, 2008.

Hannold, EM, Velozo CA, Roach MJ, Hanjian JM, Jordan MM, Behrman AL, Daly JJ. Identifying veteran-centered outcomes using qualitative methods. VA HSR & D 2008 National Meeting.

Chiu Y-P, Davis SB, Light KE, Behrman AL, Teitelbaum O, Teitelbaum P. An alternative clinical method to analyze a complex movement task in the wolf motor function test. CSM, 2008

Day K, Gill L, Behrman AL. Dynamic walking stability after incomplete SCI. CSM, 2008 (platform)

Bowden, M Balasubramanian C, Behrman A, Kautz S. Validation of a Speed-based Classification System Using Quantitative Measures of Walking Performance Post-Stroke. CSM, 2008. (platform)

Harkema SJ and the Neurorecovery Network Team. Recovery of function after incomplete spinal cord injury with a standardized activity-based intervention provided by a multi-center network. European Network meeting, Sept., 2007. (platform)

Day K, Gill L, Kautz SA, Behrman AL. Quantifying dynamic walking stability in persons with incomplete spinal cord injury.

Innovations in Balance and Locomotor Rehabilitation: The Translation from Fundamental Science to Clinical Applications, Montreal, Quebec, Canada, July 13th, 2007 (**First Place – Doctoral Student Award**)

Bowden MG, Behrman AL, Kautz SA. Joint power response to locomotor training post-stroke: preliminary findings.

Innovations in Balance and Locomotor Rehabilitation: The Translation from Fundamental Science to Clinical Applications
Montreal, Quebec, Canada, July 13th, 2007.

Behrman AL, Day K, Kautz SK. Differential effects of robotic- versus manual-assisted locomotor training on stepping performance after incomplete spinal cord injury. 2007 International Society Posture and Gait Research Conference, Burlington, VT July 14-18.

Behrman AL et al. Isolated, voluntary leg movement: Is it a necessity for restoration of walking after spinal cord injury? 2007 International Society Posture and Gait Research Conference, Burlington, VT, July 14-18, 2007

Bowden MG, Behrman AL, Kautz SA. Does self-selected walking speed stratify hemiparetic walking ability? 2007 International Society Posture and Gait Research Conference, Burlington, VT

Plummer P, Behrman AL, Duncan PW, Spigel P, Saracino D, Martin J, Fox E, Thigpen M, Kautz SA. Functionally significant recovery of walking speed after stroke in patients with moderate and severe impairment. International Stroke Society, 2007.

Behrman AL et al.. Training restores walking in the absence of voluntary leg movement following severe, chronic pediatric spinal cord injury. American Spinal Injury Association – Annual Meeting, 2007.

Chiu Y-P, Davis SB, Light KE, Behrman AL, Teitelbaum O, Teitelbaum P. Movement component analysis of a complex task in the Wolf Motor Function Test using Eshkol-Wachman Movement Notation. 15th International World Confederation for Physical Therapy Congress, Vancouver, Canada, June 2007.

Nair P, Behrman AL. Neuromechanical examination of the control of walking with a posterior leaf spring ankle foot orthosis. CSM, 2007.

Gregory C, Bowden M, Jayaraman A, Nair P, Behrman AL, Kautz S, Vandendorne K. Lower extremity strength measures as predictors of locomotor function after incomplete SCI. CSM, 2007.

Behrman AL, Kautz SA. Differential effects of robotically- versus manually-assisted locomotor training on stepping performance after incomplete spinal cord injury. 112th Annual Meeting. Association of Military Surgeons of the United States, San Antonio, Texas, November 5-10, 2006.

Training restores walking in a non-ambulatory child with chronic, cervical spinal cord injury AL Behrman, M Bowden, K Day, B Herget, P Nair, C Phadke, PJ Reier, C Senesac, F Thompson, DR Howland. Injuries and Dysfunction of the Spinal Cord in Children (Howard H. Steel Conference), Lake Buena Vista, FL, Dec 2006.

Behrman AL, Bowden M, Herget M, Day K, Herget B, Nair P, Phadke C, Reier P, Senesac C, Thompon F, Howland DR. Evidence for a human spinal pattern generator: insights from a pediatric SCI case study. Society for Neuroscience, accepted for 2006. (*One of 700 abstracts selected from pool of 14,000 for release with Public Education and Communication Committee for Neuroscience 2006 Press Book*).

Differential effects of robotically- versus manually-assisted locomotor training on stepping performance after incomplete spinal cord injury. AL Behrman, M Bowden, K Day, L Fuller, B Herget, R Knight, P Nair, C Phadke, S Kautz. Robotics Symposium, 2006, Zurich, Switzerland. (unable to attend).

Chris Gregory, Arun Jayaraman, Mark Bowden, Andrea Behrman, Krista Vandendorne. Resistance Training In Persons After Incomplete Spinal Cord Injury. American Paraplegia Society Meeting, 2005

Behrman AL, Bowden M, Herget M, Howland D, Martin J, Nair P, Phadke C, Reier P, Senesac C, Thompon F. Locomotor training and recruitment of developmental neuroplasticity: Insights from a pediatric SCI case study. Neuroscience, 2005.

Hannold, E.M., Young, M.E., Rittman, M.R., & Behrman, A.L. (2005). "Empowerment: The value of a consumer-centered approach to rehabilitation." Presented March 18, 2005 at the University of Florida and Department of Veterans Affairs *Qualitative Research in Health, Illness and Disabilities Conference* in Gainesville, Florida.

Hannold, E.M., Young, M.E., Rittman, M.R., & Behrman, A.L. (2005). "Empowerment: The value of a patient-centered approach to care." (**Plenary Presentation**) Presented February 17, 2005 at the 2005 VA *HSR&D National Meeting* in Baltimore, Maryland. *One of five invited abstracts for plenary session of the annual VA HSR & D meeting, 2005.*

Nair PN, Behrman AL. Intrarater, Interrater and Test-retest reliability of spatial and temporal measurements of gait after incomplete spinal cord injury using Gaitmat II. APTA(CSM) February 1-4, 2006 - San Diego, California.

Behrman A, Nair P, Bowden M, Fuller L, Herget B, Phadke C, Senesac C, Reier PJ, Thompson FJ, Howland DR. Locomotor training: Recovery of walking in non-ambulatory 4.5 year old child with chronic, cervical SCI. APTA-Combined Sections Meeting, February 1-4, 2006 - San Diego, California.

Nair PM, Kautz SA, Behrman AL. Neuromechanical examination of the control of walking with a posterior leaf spring ankle foot orthosis. Neuroplasticity Symposium, University of Florida, September 22nd, 2005.

Shah P, Stevens J, Jayaraman A, Pathare N, Bowden M, Nair P, Phadke C, Behrman A, Walter G, Vandenberg K. Loading induced changes in soleus muscle following incomplete spinal cord injury using magnetic resonance imaging. APTA (CSM) February 23-27, 2005 - New Orleans, Louisiana.

Shah P, Stevens JE, Jayaraman A, Pathare NC, Bowden M, Phadke CP, Nair PM, Ko M, Walter G, Behrman AL, Vandenberg K. Effect of locomotor training on skeletal muscle size in individuals with incomplete spinal cord injury. Combined Sections Meeting, American Physical Therapy Association, Feb. 2005.

Arun Jayaraman, Prithvi Shah, Chris Gregory, Jennifer Stevens, Mark Bowden, Andrea Behrman, Glenn Walter, Krista Vandenberg. Mechanisms of muscle dysfunction in persons after incomplete spinal cord injury. ACSM, 2005.

Chris Gregory, Arun Jayaraman, Mark Bowden, Andrea Behrman, Krista Vandenberg. Resistance training and muscle function in persons after incomplete spinal cord injury. ACSM, 2005.

Jayaraman A, Gregory C, Stevens J, Bowden M, Shah P, Behrman A, Vandenberg K. Changes in skeletal muscle function after treadmill training in persons with incomplete spinal cord injury. Combined Sections Meeting, American Physical Therapy Association, Feb. 2005.

Shah P, Stevens JE, Jayaraman A, Pathare NC, Bowden M, Phadke CP, Nair PM, Ko M, Walter G, Behrman AL, Vandenberg K. Effect of locomotor training on skeletal muscle size in individuals with incomplete spinal cord injury. Combined Sections Meeting, American Physical Therapy Association, Feb. 2005.

Chiu YP, Light K, Behrman A, Flynn SF, Teitelbaum O, Teitelbaum P. The application of Eshkol-Wachman movement notation in movement analyses of stroke. Combined Sections Meeting, American Physical Therapy Association, Feb. 2005.

Nair P, Phadke C, Bowden MG, Davis S, Lawless AR, Behrman AL. Clinical gait outcomes after locomotor training in persons with chronic, incomplete spinal cord injury. *Arch Phys Med Rehabil* 2004; 85: E8, Number 14. **Third Place Award for abstracts/poster submissions to ACRM and Society for Neurorehabilitation meeting.**

Behrman AL, Lawless AR, Davis S, Phadke C, Nair P, Bowden M, Woodbury M, Flynn SM. Locomotor training: progression and outcomes after SCI. American Spinal Injury Association Meeting, May 14-16, 2004, *Journal of Spinal Cord Medicine*, April 2004.

Phadke C, Woodbury, MW, Light KE, Behrman AL. Speed-dependent modulation of leg-to-arm interlimb reflex while walking on a treadmill. APTA (CSM) Nashville, Tennessee February 4-8, 2004.

Lawless AR, Davis S, Phadke C, Nair P, Bowden M, Woodbury M, Flynn SM, Hannold E, Ko M, Senesac C, Behrman AL. Case report: Locomotor training, progression, and outcomes after incomplete spinal cord injury. APTA (CSM) February 4-8, 2004 Nashville, Tennessee.

Hannold EM, Young ME, Rittmann MR, Behrman AL. Locomotor training experiences: cognitive-emotional reactions and training benefits identified by persons with incomplete spinal cord injury. APTA (CSM) February 4-8, 2004 Nashville, Tennessee.

Chou Y, Phadke C, Flynn S, Kukulka C, Thompson F, Behrman A. H-reflex modulation during body weight supported treadmill walking in subjects with incomplete SCI: Immediate response to treadmill speed. Combined Sections Meeting, Tampa, FL, Feb, 2003

Phadke C, Kukulka C, Behrman A, Thompson F, Flynn S, Chou Y. H-reflex rate depression in normal and spinal cord injured subjects before and after a single bout of treadmill training.. Society for Neuroscience, November, 2002.

Behrman AL , Flynn SM, Thigpen MT, Chou YL, Phadke CP. Locomotor training outcomes for persons with incomplete spinal cord injury. American Paraplegia Society, September 3, 2002 , 48th Annual Conference Program and Abstracts, p. 23.

Flynn SM, Thigpen MT, Fritz SL, Behrman AL, Thompson FJ. Locomotor training improves recovery of walking following contusion injury in the adult rat. APTA, Combined Sections Meeting, February, 2002.

Aquino V, Flynn SM, Behrman AL, Thompson FJ. The effect of locomotor training on grid and ladder crossing in contused spinal cord injured adult rat. FPTA meeting, August 3, 2001.

Thigpen M, Behrman AL, Light KE, Cauraugh JH. Automatic postural control in individuals with incomplete spinal cord injury: the role of sensory and motor pathways. Functional recovery after spinal cord injury. 2001; Monte Verita, Ascona, Switzerland.

Flynn SM, Behrman AL, Thompson FJ. Activity-dependent neuroplasticity following locomotor training in the spinal cord injured adult rat. Functional recovery after spinal cord injury. 2001; Monte Verita, Ascona, Switzerland.

Wirth ED, Gessler RG, Reier PJ, Thompson FJ, Uthman B, Behrman AL, Beard A, Vierck CJ, Anderson DK. (2000) Neural tissue grafting in the injured human spinal cord: 1-year follow up in 7 subjects. *J. Neurotrauma*, 17.

Wirth ED, Fessler RG, Reier PJ, Thompson FJ, Uthman B, Behrman A, Beard J, Anderson DK. (2000). Neural transplantation for SCI repair: Translation from bench to bedside. *J. Spinal Cord Medicine* (in press).

Flynn SM, Fritz S, Thigpen MT, Behrman AL, Thompson FJ. (2000). Locomotor training improves recovery of walking following contusion injury in the adult rat. *Society for Neuroscience Abstracts*, 26, 260.6

Cauraugh JH, Kim S, Thigpen MT, Behrman AL. (2000). Recovering force capabilities in a hemiplegic wrist. *Journal of Sport and Exercise Psychology*, S25.

Flynn SM, Trimble MH, Behrman AL, Thompson FJ. (1999). Rate-depression of the soleus H-reflex in SCI and control subjects: Implications for Different Presynaptic Mechanisms. *Society for Neuroscience Abstracts*, 25: 262.15.

Behrman AL. (1999). Activity-dependent neuroplasticity: A new premise in the rehabilitation of locomotion after human incomplete spinal cord injury. *Journal of Sport and Exercise Psychology*, 21:S9.

Flynn SM, Thigpen MT, Taylor E, Creel GL, Behrman AL. (1999). Recovery of walking: activity-dependent plasticity in an individual with a chronic, incomplete spinal cord injury. *Journal of Sport and Exercise Psychology*, 21:S43.

Thigpen MT, Flynn SM, Creel GL, Taylor E, Behrman AL. (1999). Case study: the effect of locomotor training on spatial-temporal parameters in an individual with an acute incomplete spinal cord injury. *Journal of Sport and Exercise Psychology*, 21:S121.

Thompson FJ, Uthman B, Mott S, Remson EJ, Wirth III, ED, Fessler RG, Reier PJ, Behrman AL, Trimble M, Anderson DK. (1999). Neural tissue transplantation in syringomyelia patients: Update of neurophysiological assessment. *Exp. Neurology*, 159:615.

Wirth III, ED, Fessler RG, Reier PJ, Thompson FJ, Uthman B, Behrman AL, Beard J, Anderson DK. (1999). Neural tissue transplantation in patients with syringomyelia: Update on feasibility and safety. *Exp. Neurology*, 159:616.

Trimble MH, Behrman AL, Flynn S, Thigpen MT, Taylor EJ, Thompson FJ. (1998). Treadmill walking: A permissive condition for H-reflex gain modulation in incomplete SCI subjects. *Neurology Report*, 22(5), 182.

Thompson FJ, Uthman B, Mott S, Remson EJ, Wirth, III, ED, Fessler RG, Reier PJ, Behrman A, Trimble M, Anderson DK. (1998). Neurophysiological assessment of neural tissue transplantation in syringomyelia patients. *Society for Neuroscience Abstracts*; 24:70, 33.16.

Wirth, III ED, Fessler RG, Reier PJ, Thompson FJ, Uthman B, Behrman A, Remson EJ, Anderson DK. (1998). Feasibility and Safety of neural tissue transplantation in patients with syringomyelia. *Society for Neuroscience Abstracts*; 24:70, 33.17.

Wirth ED, III, Fessler RG, Reier PJ, Thompson FJ, Uthman B, Behrman A, Remson EJ, Anderson DK. (1998). Neural tissue transplantation in syringomyelia patients: Feasibility and safety. *Exp. Neurology*, 153:379.

Thompson FJ, Uthman B, Mott S, Remson EJ, Wirth, III, ED, Fessler RG, Reier, PJ, Behrman AL, Trimble M, Anderson DK. (1998). Neural tissue transplantation in syringomyelia patients: Neurophysiological assessment. *Exp. Neurology*, 153:379.

Kukulka CG, Trimble MH, Behrman AL. (1997). The effect of treadmill gait training on low frequency depression of the soleus H-reflex: A case study of a spinal cord injured man. *Society for Neuroscience Abstracts*, 409.6.

Chang JA, Chou M, Behrman AL, Light KE, Bowers D, Triggs WJ, Friedman WA. (1997). Spatial-temporal analysis of gait in individuals with Parkinson's disease before and after pallidotomy. *Graduate Student Forum*, 96 and *The PT Educator*, Spring, 20.

Behrman AL, Light KE, Arnaiz CO. (1997). Externally driving the internal locomotor: Case study on treadmill training a subject with an incomplete spinal cord injury. *Neural Control of Movement Society*, 2:20

Flynn S, Behrman A, Light K, Thigpen M. (1997). Is the Timed "Up and Go" Test an effective measure of functional performance in individuals with Parkinson's disease?, *International Conference on Aging and Physical Activity*, Austin, Texas.

Behrman A, Light K, Flynn S, Bowers D, Triggs W, Friedman W. (1997). Task sensitivity of the Berg balance test for individuals with Parkinson's disease. *Neurology Report*, 20(4), 17.

Light K, Behrman A, Flynn S, Bowers D, Friedman W. (1997). Cross-correlations of the movements in the timed functional movement battery for elderly clients. *Neurology Report*, 20(4), 12-13.

Behrman A, Light K, Flynn SM, Bowers D, Triggs W, Friedman W. (1996). Upright mobility in Parkinson's disease: Backward walking is the most difficult. *Society for Neuroscience Abstracts*, Vol. 22, 91.16

Light KE, Behrman AL, Flynn SM, Bowers D, Friedman WA (1996). Timing of functional movements for individuals with Parkinson's disease. *The Gerontologist*, Vol. 36 (1), 133.

Light KE, Behrman AL, Flynn SM, Bowers D. (1996). Is the functional reach test a meaningful balance assessment for clients with Parkinson's disease? *College of Health Professions Annual Research Fair*, PT:35.

Teitelbaum P, Fryman J, Teitelbaum O, Behrman A. (1996). Implications for robotic walking based on sequenced versus superimposed movement, the proximal-distal gradient, and allied reflexes in humans. *International Society for Adaptive Behavior*.

Behrman AL, Cauraugh JH, Light KE. (1996). Timing in a complex movement sequence: Practice effect comparisons of individuals with and without Parkinson's disease. *Journal of Sport & Exercise Psychology*, Vol. 18, Supplement, S15.

Behrman AL, Cauraugh J, Light KE. (1995). Analysis of the movement initiation problem in Parkinson's disease: Practice as an intervention. *Neurology Report*, 19(4), 16.

Bauer JA, Cauraugh J, Kellogg R, Behrman AL (1995). New research tools for biomechanics and motor control sport scientists: Understanding human movement. *Proceedings: International Council for Health, Physical Education, Recreation, Sport, & Dance*. S19-21.

Teitelbaum P, Behrman AL, Maurer RG, Fryman J, Teitelbaum O. (1995). Stages in walking are determined by the proximal-distal gradient. *International Society for Developmental Psychobiology*. San Diego, CA.

Cauraugh JH, Behrman AL, Kellogg RM. (1995). Planar aspects of bimanual aiming: Coordination timing changes. *Journal of Sport & Exercise Psychology*, Vol. 17, S38.

SUBMITTED ABSTRACTS:

BOOKS and BOOK CHAPTERS

Field-Fote E. and Behrman AL. Locomotor training after incomplete spinal cord injury: Neural mechanisms and functional outcomes. In *Spinal Cord Injury Rehabilitation*, ed. E. Field-Fote. FA Davis Publisher: In press.

Reier, Paul J; Lane, Michael A; Behrman, Andrea L and Howland, Dena R (March 2009) *Spinal Cord: Repair and Rehabilitation*. In: *ENCYCLOPEDIA OF LIFE SCIENCES*. John Wiley & Sons, Ltd: Chichester <http://www.els.net/>

Behrman AL, Druin E, Bowden M, Harkema SJ. (2008) Ambulation training after spinal cord injury. In Sisto S, editor. Therapeutic Exercise for Spinal Cord Injury. Elsevier Publishers.

Fulk G, Schmitz TJ, Behrman AL. (2006). Traumatic spinal cord injury. In: SB O'Sullivan, Schmitz TJ, editors. Physical Rehabilitation: Assessment and Treatment. Fifth Edition. FA Davis Co., Inc., Philadelphia, PA.

Levy CE, Behrman AL, Gonzalez-Rothi L, Heilman K. (2002). Frontiers and fundamentals in neurorehabilitation. In: BO Young, MA Young, SA Steins, editors. *Physical Medicine and Rehabilitation Secrets*. 2nd Edition. Hanley and Belfus, Inc., Philadelphia, PA, pp. 220-233.

Under review

Ardolino E, Schmidt M, Harkema SJ, Behrman AL. Case Study: Locomotor training for incomplete SCI. In Clinical Case Study Guidelines for Training to Improve Functional Outcomes for Physical Rehabilitation. Editors: Susan B. O'Sullivan and Thomas J. Schmitz, FA Davis Co, Inc.

In preparation

Barbeau H, Behrman AL, Harkema SJ. Locomotor Training: Principles and Practice. Elsevier Publisher.

Behrman AL and Fisher B. Locomotor Rehabilitation. In Neurological Rehabilitation. Ed. KA Sullivan. FA Davis.

Harkema SJ, Behrman AL, Barbeau H. Physical Rehabilitation, locomotor training, functional electrical stimulation and robotics. In Spinal Cord Injuries, a volume in the Handbook of Clinical Neurology series, 3rd Edition. Volume Editors: J Verhaagen and JW McDonald. Series Editors: MJ Aminoff, F Boller, and D Swaab, Publisher Elsevier Ltd.

PRESENTATIONS

International

"Locomotor Training after Stroke and SCI"

Presented to physical therapists at SCI Paralysis Center
Stockholm, Sweden
July 15, 2004

"Translational Research from Bench to Bedside: Reflex Excitability after Spinal Cord Injury and Locomotor Training"

Presented to: Faculty and students of the Center for Sensory-Motor Interaction,
Aalborg University, Aalborg, Denmark.
May 31, 2000.

"Activity-dependent Plasticity: A New Premise in Rehabilitation after Spinal Cord Injury"

Presented to: Physical Therapy faculty at La Trobe University and Victoria Physiotherapy Society,
Melbourne, Australia.
May 15, 2000.

National conferences/meetings

“Selecting, using and interpreting outcome measures in SCI : Evidence from the Neurorecovery Network”. Basso M, Hutchinson KJ, Ardoino, E, Behrman A, Peschel C, VanHiel L, Sisto S. Accepted for presentation at CSM, 2009, sponsored by Research and Neurology Sections, APTA.

“New Frontiers in Research” Presented at APTA Annual Meeting, San Antonio, TX, June 13, 2008.

Invited speaker at session co-sponsored by APTA Research and NIH-NCMRR.

“What an N=1 teaches us about physical therapy, plasticity, and possibility after SCI” Combined Sections Meeting, APTA, **invited speaker** by Neurology Section as recipient of 2006 Research Award, Feb. 2007

“Locomotor training and recovery of walking after Incomplete SCI: Translation from basic science to clinical practice”

Combined Sections Meeting, American Physical Therapy Association, Feb. 2007

Invited Speaker for Neurology Section pre-conference

“Locomotor recovery after SCI: From basic science to clinical practice”

The Best of III Step Conference, sponsored by the Neurology and Pediatrics Section, APTA June, 2006, Orlando, FL

Invited presenter

“The science of hope: Best practice for the recovery of walking after spinal cord injury”.

Working 2 Walk Symposium, sponsored by the Christopher Reeve Foundation and the Unite 2 Fight Paralysis Organization

Washington, D.C.

April 30, 2006

Invited presenter

“Locomotor recovery after SCI: From basic science to clinical practice”

The Best of III Step Conference, sponsored by the Neurology and Pediatrics Section, APTA February, 2006, CSM, San Diego, CA

Invited presenter

“Locomotor recovery after SCI: From basic science to clinical practice”

III Step Conference, sponsored by the Neurology and Pediatrics Section, APTA July 19, 2005, Salt Lake City, Utah

Invited presenter

“Bridging the science of SCI research to restoration of function”

“Locomotor training after SCI: pediatric case study”

Pediatric SCI Conference sponsored by Tingley Children’s Hospital and University of New Mexico, Department of Pediatrics, College of Medicine

July 10, 2005, Albuquerque, New Mexico

Invited Keynote Speaker

“Locomotor Training Post SCI & Stroke: Bridging Basic Science with Clinical Research and Practice.” Duncan, P.W., Thompson, F., Behrman, A.L., Kautz, S., & Hannold, E. (2004).

Presented September 12, 2004 at the *2004 ACRM-ASNR Joint Conference* in Ponte Vedra, Florida.

“Translation from basic science to clinical practice: Recovery of walking after incomplete SCI”

Pre-conference at American Congress of Rehabilitation Medicine and Society for Neurorehabilitation, Ponte Vedre, FL, September, 2004.

"Locomotor rehabilitation in persons with incomplete SCI: Basic science to clinical practice"

"Practice considerations to locomotor training: Acute medical and clinical adaptations and administrative concerns"

Spinal Cord Injuries Conference, presented by Contemporary Forums, Continuing Education for Healthcare Professionals

June 3-5, 2004

Invited Speaker

"Implementing locomotor training in acute SCI rehabilitation: Experiences from a multi-site randomized clinical trial"

Bratta A, Schmidt Read M, VanHiel L, Botkin R, Saulino M, Harkema SJ, Behrman AL

American Spinal Injury Association Meeting

May 12-14, 2004, Platform presentation, presenter: Behrman

"Locomotor Training after Acute Spinal Cord Injury: Lessons Learned from a Randomized Clinical Trial"

American Physical Therapy Annual Meeting, Nashville, TN, February 5, 2004

Invited Speaker.

"Locomotor Training: From lab to clinical research to rehabilitation"

Model SCI Center Annual Conference, Birmingham, AL, October 11, 2003

Invited Speaker

"Locomotor Training in Individuals after Stroke"

Presented to: American Physical Therapy Association

September 19, 2003, Las Vegas, Nevada

Invited Speaker

"Locomotor Training Outcomes in Persons with Incomplete Spinal Cord Injury"

Presented to: American Paraplegia Society

September 8, 2002, Las Vegas, Nevada

Invited Speaker

"Neuroplasticity and Regeneration after Spinal Cord Injury: Translational Research",

"Physical Rehabilitation as an Agent for Recovery after SCI"

Presented to: American Physical Therapy Association Annual Conference, with Paul Reier, PhD

June, 2002

Invited Speaker

"Rehabilitation for Persons with Parkinson Disease"

Presented to: American Physical Therapy Association Meeting, pre-conference continuing education, with Meg Morris, PhD, PT

June, 2001

Invited Speaker

"Rehabilitation of Walking after Human SCI: Locomotor Training vs. Conventional Therapy"

Presented to: American Spinal Injury Association.

May 19, 2001.

Invited speaker.

"Evidence-based Practice and Physical Therapy Intervention for Individuals with Parkinson's disease"

Presented to: American Physical Therapy Association Annual Conference, Anaheim, California.

June, 2001.

Invited speaker

"Spinal Cord Injury – Recovery versus Compensation of Function"
Presented to: American Physical Therapy Association Annual Conference,
Symposium sponsored by the *Physical Therapy Journal*, Indianapolis, Indiana
June 17, 2000.

Invited speaker

"Recent Developments in Motor Control Rehabilitation after Central Nervous System Insult: Is Basic Research a Useful Launching Pad for Rehabilitation Practice?"
Presented to: American Physical Therapy Association Annual Conference, Indianapolis, Indiana.
June 16, 2000.

Invited speaker

*"Current Rehabilitation Practice for Ambulation Training after SCI and Outcomes" and
"From Science to Clinical Practice: Recovery of Walking after SCI"*
Presented to: Combined Sections Meeting, American Physical Therapy Association, course:
"Recovery of Walking after CNS Insult: Basic Research in the Control of Locomotion as a
Foundation for Developing Rehabilitation Strategies", sponsored by the *Neurology Section* of the
American Physical Therapy Association and the *Paralyzed Veterans of America*. New Orleans,
LA, February 1-2, 2000.

Invited speaker

"Where do research dollars go? A historical perspective on the Foundation for Physical Therapy"
Presented to: American Physical Therapy Association Annual Conference, sponsored by the
Foundation for Physical Therapy.
Washington, DC, June 7, 1999.

Invited panelist

Regional

"Locomotor training: principles and practice". Continuing education course taught in association
with the Reeve Foundation NeuroRecovery Network.
Presented at Magee Rehabilitation Hospital, Oct 23-26, 2008.
Presented at Shepherd Center, Atlanta, GA, May, 2007; March 2009.

"Best practice for recovery of walking after SCI and stroke" with M. Bowden
Presented to FL State Association of Rehabilitation Nurses, annual meeting
Orlando, FL, May 20, 2006

Invited speaker

"Best Practice for the Recovery of Walking"
UF and VA Aging and Rehabilitation Research Seminar Series.
September, 2005.

"Recovery of walking after incomplete spinal cord injury"
Presented via V-TEL for N Florida S Georgia VA Medical Centers physicians, nurses, and
therapists.
November 9, 2004

"Locomotor Training after Spinal Cord Injury: bridge from basic science to the clinic"
Present to: Discovery to Recovery conference sponsored by Shands Rehabilitation Hospital and
Brooks Rehabilitation Hospital
Gainesville, FL
September 16, 2003

“Translating Evidence to Clinical Practice: Locomotor Training Principles and Indicators of Recovery of Walking after SCI” and
“Neural Tissue Transplantation: Feasibility and Safety”
Present to: Ohio Physical Therapy Association State Meeting, “Advances in Spinal Cord Injury Treatment and Research”
Columbus, Ohio, March 20, 2002
Invited Speaker

“*Advances in the Treatment of Spinal Cord Injury: Walking Towards Health*”
Present to: Ohio State University, interdisciplinary seminar sponsored by *Office of Research and Physical Therapy Division, College of Medicine*: “Motor Control Research: Basic Advances and Applications to Rehabilitation”.
Columbus, Ohio, April 19-20, 2001.
Invited speaker

“*From Discovery to Recovery: Walking after Spinal Cord Injury*”
Present to: interdisciplinary conference, “Rehab 2001: From Discovery to Recovery”, sponsored by *Shands Rehab Hospital*
Gainesville, FL, April 11, 2001.
Invited speaker

“*Transitions to Standardized Assessments for Documentation of Outcomes*”
Presented to: physical and occupational therapists, course sponsored by *Healthcare Professional Seminars*
Austin, TX, March 28-29, 1998; Richmond, VA, March 7-8, 1998; Philadelphia, PA, August 16-17, 1997; Savannah, GA, Feb. 22-23, 1997.

“*Standardized Assessments: Post-Stroke Rehabilitation Clinical Guidelines*”
Presented to: physical and occupational therapists attending course “Stroke Care: The Changing Image”, sponsored by *Healthcare Professional Seminars*.
Dallas, TX, December 6-7, 1996.

“*National Clinical Guidelines for Stroke Rehabilitation: The How-to on Standardized Assessments*”
Presented to: physical and occupational therapists, sponsored by *Healthcare Professional Seminars*.
St. Petersburg, FL, June 21-22, 1996; Jacksonville, FL, April 26-27, 1996.

“*Motor Learning Strategies for Physical Therapy and Work-related Skills*”
Presented to: health care professionals attending course “The Head Injured Patient: Physical Therapy Focus on Return to Work”, sponsored by the University of Florida.
Orlando, FL, April 24, 1993.

“*Evaluation and Treatment of the Individual with Incomplete SCI: Emphasis on Ambulation*”
Presented to: *GAIT: Strategies for Physical Therapy Intervention* sponsored by *Moss Rehabilitation Hospital*
Philadelphia, Pennsylvania, Oct. 7-8, 1989

“*An Approach to Treatment of Individuals with Incomplete Spinal cord Injuries*”
Presented to: 1) Pennsylvania P.T. Association - Southeast District Meeting, Philadelphia, Pa., 1988, 2) Combined Sections Meeting - APTA, Atlanta, Georgia, February, 1987, 3) Physical Therapy Management of Individuals with Incomplete Spinal Cord Injury, continuing education course sponsored by Woodrow Wilson Rehabilitation Center.
Fishersville, Virginia, Oct.- 1985, Oct. - 1986.

“*Wheelchair Recommendation Process*”.

Presented to: 1st Annual Advanced Course for Allied Health Professions on Management of the Patient with Spinal Cord Injury, Virginia Spinal Cord Injury System.
Virginia Beach, Virginia, 1986.

“Early Rehabilitation”, “Wheelchair Recommendation”, “P.T. Programs with Emphasis on Paraplegia and Quadriplegia”, “Mechanisms and Outcomes of SCI”, “Rehabilitation Philosophy”.
Presented to: Physical Therapy Management of the the Spinal Cord Injured: Accent on Independence, continuing education course sponsored by Woodrow Wilson Rehabilitation Center. Fishersville, Virginia, Oct., 1984; April 30-May 4, 1984; Nov. 7-11, 1983; Oct. 17-21, 1983; May 2-6, 1983; Oct. 18-22, 1982.

“Rehabilitation Philosophy”, “Gait Training and Advanced Transfer Techniques”, “Treatment Principles”.
Presented to: Physical Therapy Rehabilitation and Management of the Brain-Injured Individual: Accent on Independence sponsored by Woodrow Wilson Rehabilitation Center, Fishersville, Virginia, May 26-June 1, 1984; September 26-30, 1983

“Manual Wheelchair Mobility Training”
Presented to: Wheelchairs and Seating: Current Practices and Technological Advances sponsored by the University of Virginia Rehabilitation Engineering Center. Charlottesville, Virginia, April 28, 1984.

“Electric Wheelchair Propulsion Using a Hand Control/Sling Suspension in the C4 Quadriplegic”
Presented to: *Annual Meeting of Regional SCI Centers' Directors' Meeting*, Magee Rehabilitation Hospital, Philadelphia, Pennsylvania, Oct. 13, 1983.

State

“Walking Recovery in Kids”
Presented at Pediatric SCI Conference,
Sponsored by Tampa General Hospital,
Tamp, FL
April 5, 2008
Invited Speaker

“Best practice for recovery of walking after SCI and stroke”
Presented to FL State Association of Rehabilitation Nurses, annual meeting
Orlando, FL, May 20, 2006
Invited speaker

“Update on SCI clients receiving Locomotor Training”
Presented to regional meeting of Dept. of Health Rehabilitation Techs and Social Workers
Jacksonville FL, December 15, 2004
Invited speaker

“Locomotor-dependent plasticity: Stepping beyond expectations after incomplete spinal cord injury and current ambulation rehabilitation”
Presented to Florida American Physical Therapy Association Meeting.
Orlando, FL, March 26, 2004

“On-going Research, Locomotor Training”
Presented to regional meeting of Dept. of Health Rehabilitation Techs and Social Workers
Gainesville, FL, Oct. 25, 2002
Invited speaker

“Recovery of Walking After Spinal Cord Injury”
Presented to: Florida PT Association Annual Meeting.

Orlando, FL, March 27, 1999.
Invited speaker

Local

"Kids STEP Study: Recovery of Walking after Pediatric SCI"

Presented in Rehabilitation Research Seminar Series at Brooks Rehabilitation in Jacksonville, FL
with Dr. Louise Spierre
Oct. 26, 2007

"Walking rehabilitation after spinal cord injury: A step in the right direction".

Presented at Showcasing the Possibilities, UF Campaign Kick-off
Sept. 28, 2007

"Best practice for recovery of walking after SCI and stroke"

Presented to Tampa VAMC physicians, therapists, nurses
May 16, 2006

"Locomotor recovery after neurologic injury: From basic science to clinical practice"

"Best practice for recovery of walking".

Washington University: PT students, PT clinic, Physical Medicine and Rehabilitation
Seattle VA Medical Center: PT, Physicians, and SCI QUERI
February 7-9, 2006, Seattle, WA

Invited Speaker

"Locomotor recovery after SCI: From basic science to clinical practice"

"Best Practice for Recovery of walking".

Arcadia University
December 12, 2006, Glenside, PA

"Advances in Walking Recovery and Rehabilitation".

Women's Education Association of Gainesville, FL
October 26, 2005

Career Development Awardees Brown Bag Lunch, *"Developing a Research Platform and Team"*
September 20, 2005

"The Science of Hope: Recovery of Walking after Neurologic Injury"

Presented to the Alachua County Medical Society, Gainesville, FL
March 8, 2005

"Overview to Locomotor Training and Recovery Research Program" and "Translation and Development of Locomotor Training Intervention"

Presented at First Annual Locomotor Research Retreat, sponsored by the Locomotor Training and Recovery Research Program (representing partners from Brooks Center for Rehabilitation Studies, VA Brain Rehabilitation Research Center, VA Rehabilitation Outcomes Research Center, McKnight Brain Institute, and College of Public Health and Health Professions)

Coordinators: Dr. Andrea Behrman, Dr. Steve Kautz and Dr. Pamela Duncan.

Attended by 50 UF, VA, and Univ. St. Augustine faculty and investigators interested in locomotor research and opportunities for collaboration.

Oak Hammock, Gainesville, FL

January 7, 2005

VA-Acting Director Seamless Transition, presentation: *"Locomotor Recovery after Neurologic Injury"*

January 7, 2005

"Just How Smart is the Spinal Cord?"

Presented to the Rotary Club, Gainesville, FL
September, 24, 2004

"State of the Evidence for Locomotor Training Post-Stroke: Implications for Rehabilitation"

Presented for UF Geriatric Education Center, Caring for the Older Adult 4 Program, continuing education program
March 4, 2004

"Rehabilitation of walking after neurologic injury: experiences from the clinic to the lab and back"

Presented to CVA Team, Shands Rehabilitation Hospital
Gainesville, FL, Dec. 18, 2003.

"Locomotor Training Update"

Presented to Florida Brain and Spinal Injury Association case managers.
Jacksonville, FL, December 11, 2003.

"Rehabilitation of walking after incomplete spinal cord injury: Experiences from the clinic to the lab and back?"

Presented to SCI Support Group, Shands Rehabilitation Hospital
Gainesville, FL, Sept. 8, 2003

"How do we decide to implement a new therapy or modality?"

Presented to Pediatrics Physical Therapy Group, Shands Health Care System
Gainesville, FL, June 23, 2003

"Rehabilitation of walking after incomplete spinal cord injury: Experiences from the clinic to the lab and back?"

Presented to University of Florida, Rehabilitation Research Seminar Series
Gainesville, FL, May 28, 2003

"Physical Rehabilitation as an Agent for Recovery of Walking after SCI"

Presented in-service to: Health South Rehabilitation Hospital: Sea Pines
Melbourne, FL, September 26, 2002

"Constraint-Induced Movement Therapy"

Presented continuing education to Brooks Rehabilitation Hospital PT/OT staff in conjunction with VA Brain Rehabilitation Research Center
Gainesville, FL, May 8-9, 2001

"Basic Science Research and its Translation to Develop Neurorehabilitation Strategies"

Present to: College of Medicine, Grand Rounds
University of Florida
November 9, 2000

"Introduction to Physical Therapy as a Career and Role of the Physical Therapist as a Rehabilitation Team Member"

Presented to: Survey of Disease and Disability course, Dept. of Rehabilitation Counseling,
University of Florida
September 8, 2000.

"Learning to Walk Again After Spinal Cord Injury: The Latest Techniques"

Presented to: "Back to College 2000", UF Alumni Association
April 15, 2000.

“Activity-dependent Plasticity after Spinal Cord Injury”

Presented to: Tampa VA Medical Center for medical/therapy staff.
Tampa, FL, March 16, 2000.

“Disability, Aging, and Physical Therapy”

Presented to: Issues and Concepts in Gerontology course, University of Florida
February 8, 2000.

“Spinal Cord Injury: Functional Rehabilitation”

Presented to: Shands Health Care System employees: physical therapists, occupational therapists and nurses, continuing education course.
University of Florida, July 31-August 1, 1999.

“Recovery of Locomotion after Spinal Cord Injury”

Presented to: Shands Rehabilitation Hospital, UF PT faculty, graduate students, continuing education course
Gainesville, FL, April 5, 12, 19, 26, 1999

“Update on Regeneration, Recovery, and Rehabilitation after SCI”

Presented to: University of Florida Neurology Medical Residents with Paul Reier, PhD.
Gainesville, FL, April 22, 1999.

“Recovery of Walking: An experimental locomotor training program after spinal cord injury”

Presented to: Florida Physical Therapy Association, Northern District Chapter Meeting.
April 13, 1999.

“Recovery of locomotion after spinal cord injury”

Presented to: *Health Care Issues Day, University of Florida*
April 9, 1999.

“Locomotion Recovery Research Laboratory”

Presented to: 36th Annual Junior Science, Engineering and Humanities Symposium,
UF Center for Precollegiate Education and Training.
February 8, 1999.

“Activity-dependent Plasticity after SCI”

Presented to: Undergraduate Student Neuroscience Club, University of Florida
December 1, 1998.

“Bridging biomedical engineering and physical therapy to facilitate rehabilitation for persons with SCI and cerebellar ataxia”

Presented to: EMG 3900: Introduction to Biomedical Engineering Design, UF
Sept. 15, 1998, faculty advisor to 3 research groups (Fall, 1998)

“Rehabilitation for Individuals with Ataxia: Where do we go from here?”

Presented to: Florida Ataxia Support Group
Tampa, FL, May 3, 1997.

“Parkinson’s Disease: Gait Patterns and Intervention”

Presented to: Gait and Posture Lecture Series: sponsored by the University of Florida,
Department of Physical Therapy, Shands Hospital, and North Florida Regional Hospital,
Gainesville, FL, March 28, 1996.

“Neurologic Disorders, Neurological Evaluation and Treatment, and Spinal Cord Injury Rehabilitation”

Presented to: Refresher Course for Physical Therapists sponsored by the Department of Physical Therapy, UF, Gainesville, Florida, Annually, 1993-1996.

“Advances in Mobility and Accessories for Your Lifestyle”
Presented to: Post-Polio Support Groups of Florida Annual Meeting
Ocala, FL, November 9, 1996.

“Creative Mobility”
Presented to: Post-Polio Support Groups of Florida Annual Meeting
Ocala, FL, November 11, 1995

TEACHING RESPONSIBILITY

Invited guest lecturer – Rehabilitation of walking after neurologic injury
Arcadia University – entry-level DPT program, December 5, 2005; November 25, 2008
University of Washington – entry-level program, February 6-8, 2006

University of Florida, Gainesville, Florida
Physical Therapy Department
Entry-level curriculum

| | |
|---------------|--|
| 2000- present | Neurorehabilitation (PHT 6319, 5 credits) |
| 1995 – 2000 | Neurological Evaluation and Treatment (PHT 4313, 5 credits) |
| 1995 – 1996 | Clinical Skills (PHT 3258, 3 credits) |
| 1995 – 1997 | Therapeutic Exercise (HSC 4234, PNF unit: lecturer/lab instructor) |

Rehabilitation Science PhD Program

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| 1998 – present | Neuroplasticity: As a Foundation for Rehabilitation (PHT 6166C/ PHT 6718, 3 credits) |
| 1999 – present | Rehabilitation Science Theory and Application, (RSD 6110, lecturer) |
| 1996 – 2000 | Research Instrumentation (PHT 6615, 3 credits) |
| 1995 – 1997 | Neurological Dysfunction (PHT 6236C, lecturer) |

Rehabilitation Science – Undergraduate Honors program (CPHHP)
2004, 2004, 2005, lecturer “Best Practice for the Recovery of Walking”

Beaver College, Glenside, Pennsylvania
Physical Therapy Department
Entry-level curriculum

Spinal Cord Injury Rehabilitation
Therapeutic Exercise
Neurology
Adult Neurorehabilitation (lab instructor)
Rehabilitation and Assistive Technology (elective course)
Geriatrics
Pathology
Biomechanics and Kinesiology (lab assistant)

GRADUATE STUDENT ADVISING – UNIVERSITY OF FLORIDA

Chair, Masters Committee

| | | |
|--------------|-------------|---|
| Sheryl Flynn | 1995 – 1997 | Is the timed “Up and Go” test an effective measure of functional performance in individuals with Parkinson’s disease? |
| Jung Chang | 1997 – 1999 | An analysis of Fitts tapping performance in individuals with Parkinson’s |

Emily Taylor 1997 – 2000 disease before and after pallidotomy.
Issue in achieving reliable biomechanical measures of ankle plantar flexor spasticity in adults with spinal cord injury.

Member, Masters Committee

Gwen Creel 1996 Concurrent and construct validity of the timed functional movement battery.
Viswasam Manohar 1996 Limits of the dual-strategy hypothesis in an isometric plantarflexion task.
Carlos Arnaiz 1996 – 1999 L-dopa induced overground locomotion in neonatal reats with acute spinal cord transections.
Lola Sicard-Rosenbaum 1996 –1999 Gait, lower extremity strength and self-assessed function post hip joint replacement.
Sharon Liu 1997 Gait initiation
Lee Burkham 1998 Eccentric excercise
Melody Chou 1997 – 1998 Comparision of timing components in stair-climbing and level-walking for individuals with Parkinson’s disease.
Claudia Senesac 1999 – present Reliability of the Actual Amount of Use Test and the Wolf Motor Function Test for pediatric patients with hemiplegia.
Ashwini Sheth 2000 Asessment of functional mobility and turning difficulty in older adults at risk for falls.
Yi-Po Chiu 2000 - present EMG-assisted biofeedback for restoration of wrist extension in individuals with chronic stroke.

Co-Chair, Doctoral Committee

Sheryl Flynn 1997 – 2001 Activity-dependent neuroplasticity following contusion spinal cord injury in the adult rat.
Mary Thigpen 1997 – 2001 Feedforward and feedback mechanisms of postural control after incomplete spinal cord injury.

Chair, Doctoral Committee

Martina Spiess 2008 – present
Sharon Barak 2007 - present
Emily Fox 2007 – present
Luther Gill 2007 - 2009
Kristin Day 2006 - present
Chetan Phadke 2001- 2006; currently post-doc, VA BRRC
Preeti Nair 2002 – 2007; currently post-doc, Zev Rymer, Chicago, IL
Mansoo Ko 2002 – 2006; currently Asst Professor, UT, El Paso, TX
Michelle Woodbury 2002-2003

Member, Doctoral Committee

Neha Lodla 2008- present
Adele Blum 2007- present
Stephanie Jefferson 2007-2009
Jill Heilman 2007 – present
Mark Bowden 2003 - present
Chitra Balusubramanian 2003- 2008
Prithvi Shah 2003- 2008
Arun Jayarman 2003- 2008
Neeti Pathare 2003 – 2005
Tara Patterson 2003 - present
Tiffany Frimmel 2001- 2005
Emily Plowman 2001 - 2005
Stacy Fritz 2000 – 2004

Lisa Hannold 2000 – 2004

Post-doctoral Fellows

Heather Ross, PhD 2009 – present (NIH K-12)

Sangeetha Madhavan, PhD, PT 2007-2008

Nicole Tester, PhD 2006 – 2007 (co-mentor with Dr. Dena Howland, Neuroscience)
2007 – present

VA RR & D Career Development Award I

Neuronal Coupling: Armswing and Leg Activation during Locomotion

PI: Nicole Tester.

The overall objective of this study is to examine the role of armswing in activating neural circuitry supporting walking activity.

Role: Primary mentor

Start Date: July, 2008

Chetan Phadke, PhD, PT 2006 – 2007 (co-mentor with Dr. Floyd Thompson, Neuroscience)

David Clark, PhD, PT 2008 – present (co-mentor, Dr. Steve Kautz, primary mentor)

Graduate Students who have received Honors, Scholarships, or Grants:

Emily Fox, doctoral student, FL Brain and SCI Program – Early Career Development Research Award, 2008

Kristin Day, doctoral student, FL Brain and SCI Program – Early Career Development Research Award, 2008

Kristin Day, Doctoral Student Poster Award, 2007 for

Day K, Gill L, Kautz SA, Behrman AL. Quantifying dynamic walking stability in persons with incomplete spinal cord injury. Presented at Innovations in Balance and Locomotor Rehabilitation: The Translation from Fundamental Science to Clinical Applications, Montreal, Quebec, Canada, July 13th, 2007.

Chetan Phadke, doctoral candidate was awarded a pre-doc research award by the College of Public Health and Health Professions, University of Florida, 2006

Lisa Hannold, PhD was selected to present her dissertation research (1/5 selected from 200 abstracts) as a Plenary Presentation at the 2005 VA HSR&D National meeting, February, 2005, Baltimore, MD. Hannold, EM, Young, ME, Rittman, MR, & Behrman, AL. (2005). Empowerment: the value of a patient-centered approach to care.

Preeti Nair, PT, doctoral candidate received Third Place Poster Research Award at the 2004 American Congress of Rehabilitation Medicine and Society for Neurorehabilitation conference.

Nair, P, Phadke, C, Bowden M, Davis S, Behrman AL. (2004). Clinical gait outcomes after locomotor training in persons with chronic, incomplete spinal cord injury.

Mark Bowden, MS PT, doctoral student received 2004 Research Award, UF College of Public Health and Health Professions Annual Research Day.

Bowden M, Behrman AL. Step activity monitor: quantifying community ambulation outcomes after incomplete spinal cord injury.

Michelle Woodbury, OT, doctoral student received 2003 Research Award, UF College of Public Health and Health Professions Annual Research Day.

Woodbury M, Phadke C, Nair P, Thompson F, Behrman AL. H-reflex modulation during locomotor training for persons with incomplete spinal cord injury: immediate response to treadmill speed.

Mary Thigpen, PhD, PT, former doctoral student, current UF faculty,

- o received Brooks Foundation Research Fellowship for 2003-2005.
Treadmill training post-stroke: translation to overground.
- o *Pre-Doctoral Scholarship from the Foundation for Physical Therapy*, American Physical Therapy Association, (\$15,000 per year). 1999 – 2000.

Lola Sicard-Rosenbaum, Advanced Masters graduate (1999), published paper of Master's research received Research Award from the APTA – Section on Orthopedics, CSM, 2004
Sicard-Rosenbaum L, Light KE, Hartzell J, Behrman AL. (2002), Gait, lower extremity strength and self-assessed function post hip joint replacement.

Sheryl Flynn, PhD, PT, doctoral program graduate,

- o received Doctoral Research Award 2002 for abstract from Neurology Section, APTA
- o Associate Investigator Post-Doc Award from VA Rehab. R & D, 2002-2004
- o Awarded *Center for Neurobiological Studies Predoctoral Traineeship*, University of Florida (\$14,786 per year), first PT student to receive this traineeship. 1999-2000 and 2000 – 2001.
- o *Pre-Doctoral Scholarship from the Foundation for Physical Therapy*, American Physical Therapy Association, (\$15,000 per year). 1998-1999 and 1999 – 2000.

Sheryl Flynn, PT, Masters student received Graduate Student Research Award, University of Florida Health Science Center – Research Fair, Fall, 1997 for Masters thesis:
S. Flynn, A. Behrman, K. Light, M. Thigpen. Is the Timed “Up and Go” Test an effective measure of functional performance in individuals with Parkinson’s disease?

Stacy Fritz, PT, doctoral student in PhD program: Rehabilitation Sciences

Poster Session First Place Awardee in Human Physiology and External Influences
Graduate Student Forum 2000 - University of Florida:
Fritz S, Saunders D, Flynn SM, Light KE, Behrman AL. Effect of arm swing on step length during constant speed treadmill walking: A pilot study.

Claudia Senesac, PT, advanced Masters degree student in physical therapy

Section on Pediatrics, American Physical Therapy Association research grant,
1999 - 2000, (See under Grants – Awarded)

UNDERGRADUATE STUDENT MENTORING

Undergraduate Honors students

Erin McCrea Spring, 2005 – Spring, 2006 (accepted to UF PT program, Fall, 2006))
Crystal Bay Spring, 2005 – Spring, 2006

Undergraduate student volunteers/assistants in the Locomotor Training and Recovery Research

Ben Herget (RA) Fall, 2001 to 2006(accepted to UF PT program, Fall, 2006)
Lindsay Burton Fall, 2004 - Spring, 2005 (accepted to Shenandoah Valley PT program)
Angelika Linowski Spring, 2005
Eileen Villanueva Spring, 2005
Darren Brunner 2004 (pre-med)
Elisa Gonzalez-Rothi 2002-2004 (attended Univ. of Miami PT program, accepted RSD program at UF, fall, 2008)
Brian Frost 2007-2008, (current UF DPT student)
Megan Piersal 2007-2008 (current UF DPT student)

Undergraduate Independent Study Advisor – Health Sciences major
Carolina Galindo, Spring, 2004 (attended Univ. of Miami PT program)

Undergraduate Interdisciplinary Studies Program, Research Advisor
Michel Dolberg, 2000 – 2001 (pre-med student)

University Scholars Program, Faculty research mentor
Rajani Mukalel, undergraduate psychology major, (pre-PT student, graduated UF PT program)
May, 1999 - May, 2000.

Minority student mentoring, University of Florida
Minority Mentoring Program, 1997-1998, 1998-1999
McNair Mentoring Program: 1997

Student Science Training Program, UF Center for Precollegiate Education and Training,
Faculty mentor for high school students, 7-week summer program.
Summer, 2000: Owen Johnson, Andres Abreu
Summer, 1999: Joseph Carucci

PROFESSIONAL ASSOCIATIONS AND SERVICE

American Physical Therapy Association, 1979 - present
Neurology Section

- Secretary, Spinal Cord Injury Special Interest Group, 2002-2004
 - Co-founded the SCI SIG
- Consultant to Education Committee to write grant proposal, submitted to Paralyzed Veterans of America: Education and Training Foundation for sponsorship of two-day course "Recovery of walking after CNS insult". PVA grant awarded for \$6,500.
- Chair, Awards Committee, 1995 - 1998
- Secretary, 1990 - 1994
- Nominating Committee, 1987 - 1990
- Member Special Interest Groups: Spinal Cord Injury and Stroke

Research Section – current member

Pennsylvania Chapter – APTA

- Southeast District - Co-Chair Program Committee, 1988 - 1990

North American Society for the Psychology of Sport and Physical Activity, 1991- present

- Membership and Conference Promotion Committee, 1999
- Contributing Editor to Newsletter, 1994-1995
- Student Representative to Executive Board, 1993-1994

Society for Neuroscience, 1994 – present

Society for Neurotrauma, 1998 – present

Society for Neural Control of Movement– 2008 – present

International Society Posture and Gait – 2007 - present

National Stroke Association, 1994 - 1998

National Parkinson Foundation, 1994 – 1998

Guest editor

- *Neurology Report*, Special Topics Issue: Parkinson's Disease, Volume 21, October, 1997.

Editorial Board Member

- *Physical Therapy – 2005 to 2009*

Manuscript reviewer

- *Archives of Physical Medicine and Rehabilitation*
- *Clinical Rehabilitation*
- *Developmental Medicine and Neurology*
- *Journal of Neurological Sciences*
- *Journal of Rehabilitation, Research, and Development*
- *Journal of Spinal Cord*
- *Muscle and Nerve*
- *Neurology Report*

- *Physical Therapy*
- *Stroke*
- *Journal of Exercise and Sports Science Reviews*

Expert reviewer

- Neurological Foundation of New Zealand, Grant reviewer, 2009
- External PhD reviewer for PhD in Kinesiology, McMaster University, 2007
- Craig H. Neilsen Foundation, 2007, 2008 – grant reviewer
- Cochrane Reviews, 2007, 2006 reviewer for Cochrane Injuries Group Nutrition & Public Health Intervention Research Unit: proposal The Cochrane Database of Systematic Reviews (Proposal: Locomotor training for improving walking function after SCI), invited reviewer.
- Michael Smith Foundation for Health Research, Peer Review Application, Vancouver, BC, 2006
- Canadian Stroke Network, 2003 – grant reviewer
- VA Rehabilitation Research and Development Grants, 2002, 2004 – grant reviewer
- Appleton & Lange for new edition of textbook: *Spinal Cord Injury: Functional Rehabilitation* by M. Somers, March, 1999.
- Spinal Cord Injury Medicine Consortium of the Paralyzed Veterans of America for *Neurogenic Bowel Management in Adults with Spinal Cord Injury: Clinical Practice Guideline*, August, 1997.

SERVICE: University and Community

University of Florida

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|-------------|---|
| 1996 – 2004 | Member, Graduate Student Teaching Awards Committee (evaluate 6-7 students per year) |
| 2002 | Speaker for Graduate Student Teaching Awards, April 25, 2002 |

College

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|-------------|--|
| 2006 | Promotion and Tenure Committee |
| 2002 - 2005 | Graduate Coordinator, Rehabilitation Science PhD – Movement Science Track |
| 2002 – 2005 | RSD – PhD Program, Steering Committee |
| 2002 | Member, Search Committee for Director and Associate Director for Brooks Laboratory for the Advancement of Rehabilitation Science |
| 2000 | Member, Search Committee for Faculty, Occupational Therapy |
| 1999 | Member, Search Committee for Chief of Physical Medicine and Rehabilitation, Veterans Affairs Hospital, Gainesville, FL |
| 1998 - 1999 | Member, Search Committee for Chair, Occupational Therapy |
| 1997 | Member, College Incentive Fund Committee |
| 1996 | Member, Collaborative Funding Opportunities for Faculty (ad-hoc committee) |
| 1996 | Member, Search Committee for Chair, Health Services Administration |

Physical Therapy Department

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|----------------|--|
| 2008 – present | Chair, Marketing Committee |
| 2007- present | Member, DPT Orientation Committee |
| 2006-2008 | Co-chair, Departmental Vision Retreat and Task Force |
| 2007- present | Member, Academic Advancement Review Committee |
| 2007- present | Member/Chair, Mid-Term Tenure Review Committee |
| 2005 - present | Member, Professionalism Committee |
| 2005 - present | Member, Rehabilitation Science PhD Committee |
| 2000 | Chair, Search Committee for PT Department Faculty Position |

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|-------------|---|
| 1997 | Member, Search Committee for PT Department Faculty Position |
| 1997 - 1998 | Advisor, Student Physical Therapy Association |
| 1995 - 1997 | Member, Continuing Education Committee |
| 1995 - 1997 | Member, Curriculum Committee |

Beaver College/ Arcadia University

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|-------------|--|
| 1989 – 1990 | Faculty Secretary |
| 1989 – 1991 | Racial Diversity Action Group, faculty representative, |
| 1989 | Member, Search Committee for Dean of Students |
| 1988 - 1989 | Student Affairs Committee |
| 1988 | Task Force on Student Diversity |
| 1988 | Middle States Review - Student Services Committee |

Physical Therapy Department

| | |
|-------------|---|
| 1989 - 1991 | Curriculum Committee |
| 1988 - 1991 | Student Physical Therapy Association, Advisor |
| 1990 | Geriatrics Curriculum Review Committee |
| 1988 - 1989 | Accreditation Self-Study |
| 1998 | Admissions Committee |

Community

Meghan Kessler, 8th grade Intern at UF Locomotor Lab, Dec 3-7, 2007, from Millhopper Montessori School, Gainesville, FL

See Presentations: Local

HONORS AND AWARDS

| | |
|------|--|
| 2009 | Furman University – Distinguished Alumnus Award |
| 2009 | Catherine Worthingham Fellow of the American Physical Therapy Association |
| 2008 | Duke University Physical Therapy Program Alumni Award for Clinical Practice first recipient, Oct 17, 2008. Award is given by Duke to an alumna who “embodies the professional characteristics and ideals of a physical therapist and who has demonstrated innovation or creativity in the delivery of physical therapy services/practice or exceptional caring in the delivery of physical therapy services to patients or clients.” |
| 2006 | Neurology Section - Research Award for contributions to recovery of function after SCI – American Physical Therapy Association |
| 2003 | Superior Accomplishment Award – University of Florida |
| 2000 | Nominee for the Margaret L. Moore Award for Outstanding New Faculty Member, American Physical Therapy Association national award, nominated by Carl G. Kukulka, PhD, PT, Professor and Chair, University of Florida, PT Department |
| 1997 | Teacher of the Year Award, College of Health Professions |
| 1995 | Phi Kappa Phi International Honor Society |

- 1995 Marylou Barnes Doctoral Scholarship Award,
Neurology Section, American Physical Therapy Association
- 1994 - 1995 Doctoral Research Award, Foundation for Physical Therapy
- 1992 - 1993 Most Outstanding Graduate Student Teacher: Calvin A. Vanderwerf Award,
University of Florida, Gainesville, Florida
- 1990 - 1991 Advisor of the Year Award - Beaver College, Glenside, Pennsylvania