

PRUDENCE PLUMMER-D'AMATO, Ph.D.

Assistant Professor
Department of Physical Therapy
Northeastern University
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EDUCATION / TRAINING

Postdoctoral training	University of California Los Angeles , Dept of Neurology <i>Mentor:</i> Bruce H. Dobkin, MD	2006-2008
Postdoctoral training	University of Florida , Brooks Center for Rehabilitation Studies <i>Mentors:</i> Andrea L. Behrman, PhD; Pamela W. Duncan, PhD	2004-2006
Ph.D.	La Trobe University , School of Physiotherapy <i>Thesis:</i> Physiotherapy assessment of unilateral neglect: psychometric testing and clinical decision making <i>Supervisors:</i> Meg E. Morris, PhD; Judith Dunai, PhD	2000-2004
Grad. Certificate	Swinburne University of Technology , Health Statistics	2000
BPhysio (Honors)	La Trobe University , School of Physiotherapy <i>Thesis:</i> Effect of direction of covert attentional shift of speed of response to visual stimuli within perceived three-dimensional moving objects <i>Supervisors:</i> Judith Dunai, PhD; Kerry Bennett, PhD	1996-2000

PROFESSIONAL EXPERIENCE

2008-pres	Assistant Professor , Dept of Physical Therapy, Northeastern University
2006-pres	Study Coordinator , SIRROWS, University of California Los Angeles
2006-2008	Postdoctoral scholar , Dept of Neurology, University of California Los Angeles
2004-2006	Postdoctoral scholar , Brooks Center for Rehabilitation Studies, University of Florida
2003-2004	Postdoctoral Research Assistant , National Stroke Research Institute, Australia
2003	Research Assistant / Physiotherapist (adult cerebral palsy), La Trobe University
2003	Research Assistant / Physiotherapist (stroke balance and falls), La Trobe University
2000-2003	Instructor (sessional), School of Physiotherapy, La Trobe University

PROFESSIONAL LICENCES / CERTIFICATION

Physiotherapists' Registration Board of Victoria, Australia (1999-2003)

SCHOLARLY CONTRIBUTIONS

REFEREED PUBLICATIONS

1. Cumming T, **Plummer-D'Amato P**, Linden T, & Bernhardt J. Hemispatial neglect and rehabilitation in acute stroke. *Archives of Physical Medicine and Rehabilitation*. (In press)
2. Canavan P, Cahalin L, Harris M, Lowe S, Fitzpatrick D, & **Plummer-D'Amato P**. Managing gait disorders in older persons residing in nursing homes: A review of literature. *Journal of the American Medical Directors Association*. 2009; 10: 230–237. **Invited**
3. Newton JM, Dong Y, Hidler J, **Plummer-D'Amato P**, Marehbian J, Albisteguis-Du Bois R, Woods R, Dobkin B. Reliable assessment of lower limb motor representations with fMRI: Use of an MR compatible device for monitoring torque at ankle, knee and hip joint. *NeuroImage*. 2008;43(1):136-46.
4. **Plummer-D'Amato P**, Altmann LJP, Saracino D, Fox E, Behrman AL, & Marsiske M. Interactions between cognitive tasks and gait after stroke: a dual task study. *Gait & Posture*. 2008;27:683-688.
5. **Plummer-D'Amato P**. Focus group methodology (part two): considerations for analysis. *International Journal of Therapy and Rehabilitation*. 2008;15(3):123-129.
6. **Plummer-D'Amato P**. Focus group methodology (part one): considerations for design. *International Journal of Therapy and Rehabilitation*. 2008;15(2):69-73.
7. **Plummer P**, Behrman AL, Duncan PW, Spigel P, Saracino D, Martin J, Fox, E, Thigpen M, & Kautz, SA. Effects of stroke severity and training duration on locomotor recovery after stroke: a pilot study. *Neurorehabilitation and Neural Repair*. 2007;21:137-151.
8. Martin J, **Plummer P**, Bowden M, Fulk G, Behrman A. Body weight support systems: considerations for clinicians. *Physical Therapy Reviews*. 2006;11:143-152.
9. **Plummer P**, Morris ME, Hurworth RE, & Dunai J. Characterisation of unilateral neglect by physiotherapists. *Disability and Rehabilitation*. 2006;28(9):571-577.
10. **Plummer P**, Morris ME, Hurworth RE, & Dunai J. Physiotherapy assessment of unilateral neglect: Insight into procedures and clinical reasoning. *Physiotherapy*. 2006;92:103-109.
11. **Plummer P**, Dunai J, & Morris ME. Understanding the effects of moving visual stimuli on unilateral neglect following stroke. *Brain and Cognition*. 2006;60:156-165.
12. **Plummer P**, Morris ME, Denisenko S, & Dunai J. Clinical reasoning processes in physiotherapists' assessment of unilateral neglect: part two. *International Journal of Therapy and Rehabilitation*. 2005;12:533-541.
13. **Plummer P**, Morris ME, Denisenko S, & Dunai J. Clinical reasoning processes in physiotherapists' assessment of unilateral neglect: part one. *International Journal of Therapy and Rehabilitation*. 2005;12:498-504.
14. Behrman AL, Lawless AR, Davis SB, Bowden MG, Nair P, Phadke C, Hannold EM, **Plummer P**, & Harkema SJ. Locomotor training progression and outcomes after incomplete spinal cord injury: Case report. *Physical Therapy*. 2005;85:1356-1371.

15. **Plummer P**, Morris ME, & Dunai J. Assessment of unilateral neglect. *Physical Therapy*. 2003;83:732-740.
16. **Plummer P**, Morris M, & Dunai J. Physical therapy for stroke patients with unilateral neglect: The role of visual cues and limb activation strategies. *Physical Therapy Reviews*. 2001;6:175-188.

SUBMITTED AND IN PREPARATION

1. Rogalski Y, Altmann LJP, **Plummer-D'Amato P**, Behrman AL, & Marsiske M. Discourse coherence and cognition after stroke: A dual task study. (Currently under review)
2. **Plummer-D'Amato P**, Altmann LJP, Behrman AL, & Marsiske M. Interference between cognition, double limb support, and swing during gait in community-dwelling individuals post stroke. (Currently under review)
3. **Plummer-D'Amato P**, Alicea A, Buehring S, Lacroix W, Quigley K, Tiegan N, & Altmann LJP. Age-related changes in cognitive-motor interference during continuous overground walking. (In preparation)
4. **Plummer-D'Amato P**, Dobkin BH, Elashoff R, Nenov V, & SIRROWS Trialists. Stroke Inpatient Rehabilitation Reinforcement of Walking Speed: An international multisite randomized controlled trial. (In preparation)

EDITORIALS / COMMENTARIES

1. **Plummer-D'Amato P** & Giesser B. Commentary on Developing a Self-Management and Exercise Model for People with Mild to Moderate Multiple Sclerosis: An Interdisciplinary Approach. *International Journal of Therapy and Rehabilitation*. 2009;16(1):42. **Invited**
2. Behrman, AL & **Plummer-D'Amato P**. "What's in a name?" Revisited. *Physical Therapy*. 2008;88(1):6-9.
3. **Plummer-D'Amato P**. Improving rehabilitation outcomes in unilateral neglect. *International Journal of Therapy and Rehabilitation*. 2007;14(4):154.

PUBLISHED ABSTRACTS

1. **Plummer-D'Amato P**, Dobkin BH, Nenov V, & the World Federation for NeuroRehabilitation. Feasibility of collaborative multi-center trials in neurorehabilitation. *Neurorehabilitation and Neural Repair*. 2008;22(5):627.
2. **Plummer-D'Amato P**, Morris ME, & Denisenko S. Diagnosing unilateral neglect: hypothesis generation and pattern recognition in physiotherapists' clinical reasoning. *Physiotherapy*. 2007;93(S1):S533.
3. **Plummer-D'Amato P**, Morris ME, Denisenko S, & Bilney B. A clinical glossary can improve physiotherapists' characterisation of unilateral neglect. *Physiotherapy*. 2007;93(S1):S667.

4. **Plummer-D'Amato P**, Behrman AL, Saracino D, Martin J, Fox E, Kautz SA, & Duncan PW. Functionally significant recovery of walking speed after stroke in patients with moderate and severe impairment. *Stroke*. 2007;38(2):521.
5. **Plummer-D'Amato P**, Nenov V, Dobkin BH, & the World Federation for NeuroRehabilitation. Establishing a network for conducting multi-center trials of neurorehabilitation interventions. *Archives of Physical Medicine and Rehabilitation*. 2007;88(10):e23.
6. **Plummer P**, Morris ME, Hurworth RE, & Dunai J. How do physiotherapists assess unilateral neglect? *Neurorehabilitation and Neural Repair*. 2006;20(1):181.
7. **Plummer P**, Dunai J, & Bennett K. A rightward attentional bias for shifting covert attention in a moving object paradigm. *Australian Journal of Psychology*. 2001;53(supplement):64.

GRANTS

EXTRAMURAL

Pending

Title: Training Dual Task Walking after Stroke
 Participation: Principal Investigator (25% effort)
 Type: R21 Exploratory/Developmental
 Agency: National Institutes of Health
 Direct costs: \$275,000
 Notification date: Jan 2010

INTRAMURAL

Awarded

Title: Cognitive-motor interference during gait in community-dwelling individuals with stroke
 Participation: Principal Investigator
 Type: Proposal Development Grant
 Agency: Northeastern University
 Amount: \$5000
 Funding period: 2009

Title: Interactions between cognitive processes and gait in healthy young and older adults
 Participation: Faculty mentor
 Type: Undergraduate Research Program Grant
 Agency: Northeastern University
 Amount: \$1635
 Funding period: 2008-2009
 Status: Ongoing

Completed

Title: Physiotherapy assessment of unilateral neglect following stroke: the effects of structured guidelines on clinical decisions
Participation: Principal Investigator
Type: Postgraduate Support Grant
Agency: La Trobe University, Faculty of Health Sciences
Amount: \$417
Funding period: 2002

Title: Physiotherapy assessment of unilateral neglect following stroke: identifying the processes
Participation: Principal Investigator
Type: Postgraduate Support Grant
Agency: La Trobe University, Faculty of Health Sciences
Amount: \$492
Funding period: 2001

Title: Investigation of moving visual cues in patients with unilateral neglect after stroke
Participation: Principal Investigator
Type: Postgraduate Support Grant
Agency: La Trobe University, Faculty of Health Sciences
Amount: \$10,000
Funding period: 2000-2003

Title: Movement rehabilitation in stroke patients with visuospatial neglect: The effects of visual cues and active movement
Participation: Principal Investigator
Type: Postgraduate Support Grant
Agency: La Trobe University, Faculty of Health Sciences
Amount: \$500
Funding period: 2000

Title: Physical therapy for stroke patients with unilateral neglect: The role of visual cues and limb activation strategies
Participation: Principal Investigator
Type: Publication Grant
Agency: La Trobe University, Faculty of Health Sciences
Amount: \$430
Funding period: 2000

SCIENTIFIC AND PROFESSIONAL PRESENTATIONS

INTERNATIONAL CONFERENCE PRESENTATIONS / PROCEEDINGS

1. **Plummer-D'Amato P**, Altmann LJP, Behrman AL, & Marsiske M. Dual task effects during swing and stance phases of gait after stroke: a pilot study. *Proceedings of the 19th Conference of the International Society for Posture and Gait Research*. Bologna, Italy. June 21-25, 2009.
2. **Plummer-D'Amato P**, Dobkin BH, Nenov V, & the World Federation for NeuroRehabilitation. Feasibility of collaborative multi-center trials in neurorehabilitation. *5th World Congress for NeuroRehabilitation*. Brasília, Brazil. September 24-27, 2008.
3. **Plummer-D'Amato P**, Altmann L, Behrman AL, & Marsiske M. Cognitive-motor interference during walking after stroke. *Proceedings of the 18th Conference of the International Society for Posture and Gait Research Conference*. Burlington, Vermont, USA. July 14-18, 2007.
4. **Plummer-D'Amato P**, Morris ME, & Denisenko S. Diagnosing unilateral neglect: hypothesis generation and pattern recognition in physiotherapists' clinical reasoning. *15th International Congress of the World Confederation of Physical Therapy*. Vancouver, Canada. June 2-6, 2007. **Research report platform presentation.**
5. **Plummer-D'Amato P**, Morris ME, Denisenko S, & Bilney B. A clinical glossary can improve physiotherapists' characterisation of unilateral neglect. *15th International Congress of the World Confederation of Physical Therapy*. Vancouver, Canada. June 2-6, 2007. **Special Interest platform presentation.**
6. **Plummer-D'Amato P**, Behrman AL, Saracino D, Martin J, Fox E, Kautz SA, & Duncan PW. Functionally Significant Recovery of Walking Speed after Stroke in Patients with Moderate and Severe Impairment. Poster presentation, *2007 International Stroke Conference*. San Francisco, California, USA. February 7-9, 2007.
7. **Plummer P**, Morris ME, Hurworth RE, & Dunai J. How do physiotherapists assess unilateral neglect? Poster presentation, *4th World Congress for NeuroRehabilitation*. Hong Kong. February 12-16, 2006. **Commendation for Young Investigator Best Poster Presentation.**
8. **Plummer P**, Morris ME, & Dunai J. The effects of stationary and moving visual cues on line bisection performance in people with unilateral neglect following stroke. *14th International Congress of the World Confederation of Physical Therapy*. Barcelona, Spain. June 7-12, 2003. **Research report platform presentation.**
9. **Plummer P**, Morris ME, & Dunai J. How do physiotherapists characterise unilateral neglect? *14th International Congress of the World Confederation of Physical Therapy*. Barcelona, Spain. June 7-12, 2003. **Research report platform presentation.**

NATIONAL CONFERENCE PRESENTATIONS / PROCEEDINGS

1. **Plummer-D'Amato P**, Dobkin BH, & SIRROWS Trialists. International Stroke Inpatient Rehabilitation Reinforcement of Walking Speed (SIRROWS). *2009 American Congress of Rehabilitation Medicine & American Society of Neurorehabilitation Joint Conference*. Denver, CO, USA. October 7-11, 2009. (Abstract accepted.)

2. Geisser BG, Herlihy E, **Plummer-D'Amato P**, West M, Thomas S, Budovitch A, Pokras N, Guttry M, Regnaud JP, Voskuhl, R, Gold S, & Dobkin B. Locomotor training may improve cognitive performance in persons with multiple sclerosis. *American Academy of Neurology*. Seattle WA, USA. April 25-May 2, 2009.
3. Rogalski Y, Altmann LJP, **Plummer-D'Amato P**, Behrman AL, & Marsiske M. Discourse coherence and cognition after stroke: a dual task study. *American Speech-Language-Hearing Association*. Chicago IL, USA. November 20-22, 2008.
4. **Plummer-D'Amato P**, Nenov V, Dobkin BH, & the World Federation for NeuroRehabilitation. Establishing a network for conducting multi-center trials of neurorehabilitation interventions. Poster presentation, *2007 American Congress of Rehabilitation Medicine & American Society of Neurorehabilitation Joint Conference*. Washington DC, USA. October 2-7, 2007.
5. **Plummer P**, Dunai J, & Bennett K. A rightward attentional bias for shifting covert attention in a moving object paradigm. *28th Annual Australasia Experimental Psychology Conference*. Melbourne, Australia. April 20-22, 2001. **Research report platform presentation.**

REGIONAL CONFERENCE PRESENTATIONS / PROCEEDINGS

* denotes student mentored by PPD

1. Rhodes K*, **Plummer-D'Amato P**, & Giesser B. Effects of locomotor training and a progressive exercise program on perceived impact of MS using the Multiple Sclerosis Impact Scale. *Rosalind Franklin University of Medicine and Science, 4th All School Research Consortium*. March 2009.
2. Dobkin BH, Dong Y, Newton J, **Plummer-D'Amato P**, Thomas S, Goldfine A, Woods R. fMRI as a physiological assay of therapy-induced neuroplasticity. *University of California Los Angeles, Neurology Faculty Retreat*. January 2008.
3. **Plummer P**, Spigel P, Saracino D, Thigpen M, Behrman AL, Kautz S, & Duncan PW. Locomotor training after stroke: effects of stroke severity and training duration. *University of Florida, Neuromuscular Plasticity Symposium*. September 2005.

INVITED / PROFESSIONAL PRESENTATIONS

1. Differential Diagnosis and Rehabilitation Management of the Adult with Right Hemispheric Dysfunction. Northern California Kaiser Permanente Rehabilitation Symposium, Oakland, California, USA. May, 2009. **Invited Keynote**
2. Shifting covert attention within and between objects: A rightward bias in healthy subjects. Center for Neuropsychological Studies, McKnight Brain Institute, University of Florida, Gainesville, Florida, USA. March 2006. **Invited**
3. LEAPS Pilot Study Case Presentation – Training and Clinical Outcomes. University of Florida, Brooks Center for Rehabilitation Studies, Locomotor Training and Recovery Research Retreat, Gainesville, Florida, USA. January 2005. **Invited**
4. Assessment and characterisation of unilateral neglect: A study of Australian physiotherapists. Université de Versailles-Saint-Quentin, Service de Rééducation Neurologique, Hôpital Raymond Poincaré, Garches, France. May 2004.

5. The effects of moving visual stimuli on line bisection performance in stroke patients with unilateral neglect. National Stroke Research Institute, Melbourne, Australia. March 2003.

TEACHING EXPERIENCE

Northeastern University, Department of Physical Therapy, Boston, MA

- 2009-pres Neurological Evaluation and Management II (4 credits)
2009-pres Neurological Evaluation and Management II Lab (1 credit)
2008-pres Health Care Research (recitation leader)
2008-pres Health Care Research (guest lecturer: Evidence-based practice and systematic reviews; Power analysis)

University of Florida, Department of Physical Therapy, FL

- 2004-2005 Neurological Physical Therapy (guest lecturer: Locomotor Training following Stroke)

La Trobe University, School of Physiotherapy, Victoria, Australia.

- 2000-2003 Clinical Preparation
2002-2003 Physiotherapy Skills & Anatomy
2000-2003 Professional Practice
2001-2003 Neurological Physiotherapy (guest lecturer: Unilateral neglect: physiotherapy assessment and approaches to treatment)

RESEARCH MENTORING

Faculty Mentor – Physical Therapy Graduate (PT Project)

- 2008-2009 Project: Interactions between cognitive processes and gait in older adults
Students: Alexandra Alicea
Steven Buehring
Whitney Lacroix
Kaitlyn Quigley
Nichole Tiegan

Research Internship Supervisor

- 2008 Project: Effects of locomotor training and a progressive exercise program on perceived impact of MS using the Multiple Sclerosis Impact Scale
Student: Kristen Rhodes (medical Student)
- 2007 Project: Effects of robotic assisted locomotor training in people with stroke
Students: Daniel Kozman (medical student)
Henrik Ullman (medical student)
- 2006 Project: Robotic-assisted locomotor training in people with multiple sclerosis and stroke
Student: Diana Mok (undergraduate intern)

2005 Project: Duration and timing of supported treadmill training after stroke
Student: Jennifer Corso (physical therapy intern)

COURSES UNDERTAKEN DURING POSTDOCTORAL TRAINING

2008 **Responsible Conduct of Research:** Plagiarism and Authorship, University of California Los Angeles
Instructor: Nancy Wayne, PhD

2008 **Biostatistics 100B**, University of California Los Angeles, K30 Graduate Training Program
Instructor: Catherine Sugar, PhD

2007 **Biostatistics 200A**, University of California Los Angeles, K30 Graduate Training Program
Instructor: John Boscardin, PhD

2007 **Interactive Online NIH Grant Writing Training Course**, Science Outreach Center; National Institute of General Medical Sciences
Coordinator: Margaret McConnell, University of Kentucky

2007 **Brain Mapping for Translational Investigators**, University of California Los Angeles, K30 Graduate Training Program
Coordinator: John Mazziotta, MD, PhD

2006, 2007 **NIH Grant Preparation**, University of California Los Angeles, K30 Graduate Training Program
Coordinator: John S. Adams, MD

2005 **Neuroplasticity: A Foundation for Neurorehabilitation**, University of Florida
Instructors: Andrea L. Behrman, PhD, PT; David Fuller, PhD

2005 **Introduction and Application of Rasch Measurement**, University of Florida
Instructor: Craig A. Velozo, PhD, OTR

PROFESSIONAL SERVICE

Editorial Board Member

2007-pres International Journal of Therapy and Rehabilitation

Ad-hoc Reviewer for Professional Journals

2008-pres Journal of Rehabilitation Research and Development
2007-pres Gait and Posture
2007-pres Australian Journal of Physiotherapy
2007-pres International Journal of Therapy and Rehabilitation
2004-pres Physical Therapy
2004-pres Archives of Physical Medicine and Rehabilitation
2006-pres Neurorehabilitation and Neural Repair
1999 Journal of Clinical and Experimental Neuropsychology

Thesis examination

2007 Doctor of Physiotherapy program, University of Melbourne, Australia

Consulting

2004-2005 Manuscript consultant (English grammar), Movement and Perception Laboratory, Institute of Cognitive Neuroscience, University of the Mediterranean, Marseille, France.

UNIVERSITY SERVICE

Northeastern University, Boston, MA

2008-pres Research committee, coordinator, Department of Physical Therapy

University of California Los Angeles, CA

2007-2008 Society of Postdoctoral Scholars, Career Development Committee member

La Trobe University, Victoria, Australia

2001-2003 Postgraduate student coordinator, School of Physiotherapy
Organized and coordinated monthly research seminars, conference presentation rehearsals, and journal and writing groups for Faculty members, lecturers and postgraduate research students.

2000-2003 Human Research Ethics Committee, Faculty of Health Sciences, Postgraduate student representative

HONOURS / AWARDS / SCHOLARSHIPS

2006 **Commendation – Young Investigator Award, Best Poster Presentation** 4th World Congress for NeuroRehabilitation, Hong Kong

2004 **Graduate Research Prize**, Faculty of Health Sciences, La Trobe University, Australia
Awarded annually for ‘Best’ thesis submitted for Masters by Research or Ph.D. in the Faculty of Health Sciences

2003 **Felice Rosemary Lloyd Trust Fund Scholarship** (\$10,000)
This scholarship is awarded to recent graduates from the School of Physiotherapy at La Trobe University or the University of Melbourne for travel to obtain specialist experience

Visits to the following laboratories in April-May 2004 were funded by this scholarship:

- Movement and Perception Laboratory, Institute of Cognitive Neuroscience, University of the Mediterranean, Marseille, France (Dr. Mireille Bonnard)
- School of Physiotherapy, Keele University, UK (Dr. Margaret Bailey)
- Hôpital Raymond Poincare, Garches, Paris, France (Professor Philippe Azouvi)
- Neurology and Imaging of Cognition, University of Geneva, Geneva, Switzerland (Professor Patrik Vuilleumier)
- Hospital of the University of Geneva (Professor Armin Schneider)

1999 **Research Prize**, Physiotherapy Research Foundation

This prize is awarded annually by the Physiotherapy Research Foundation (Australia) to the fourth-year undergraduate physiotherapy student who obtains the highest marks in the honours thesis

- 1999 **Research Prize**, Australian Physiotherapy Association, Victorian Branch
This prize is awarded annually to the final year student who gained the highest marks for their research (thesis)
- 1999-2003 **Australian Postgraduate Award** (Scholarship)
Awarded for pursuit of Ph.D. (3 years full time)
- 1997 **Golden Key International Honour Society**, La Trobe University chapter

PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

- 2007-pres American Heart Association
- 2006-pres International Society for Posture and Gait Research
- 2000-2003 Cognitive Neuroscience Interest Group, University of Melbourne, Australia
- 1999-2001 Australian Physiotherapy Association