

## **Marcio J. Santos, P.T., Ph.D.**

### **Postdoctoral research associate**

University of Illinois at Chicago  
Department of Physical Therapy  
1919 W. Taylor m/c 898  
Chicago, IL 60612  
Phone: (312) 355 0902  
Fax: (312) 996 4583  
E-mail: [santosmj@uic.edu](mailto:santosmj@uic.edu)

### **EDUCATION**

- **Ph.D.** in Rehabilitation Sciences at University of Kansas Medical Center (KUMC), Kansas City, KS, USA, **2006**.
- **M.S.**, Human Physiology, Universidade Estadual de Campinas (UNICAMP), Campinas, SP, Brazil, **2001**.
- **B.S.**, Physical Therapy, Universidade Estadual de Londrina (UEL), Londrina, Pr, Brazil, **1986**.

### **SPECIALIZED COURSES**

- Postural Global Reeducation (R.P.G.), Saint Mount University, Vera Cruz—Ba, Brazil, 1996.
- R.P.G. Applied to Articular Lesions, Saint Mount University, Rio de Janeiro, RJ, Brazil, 1997.
- Osteopathic Muscle-skeletal Medicine, Sutherland College of Osteopathic Medicine, São Paulo, SP, Brazil, 1996 and Paris, France, 1997.

### **PROFESSIONAL EXPERIENCE**

- SOCIEDADE PORTUGUESA DE BENEFICIÊNCIA, Dr. Gaetani Orthopedic Clinic, Ribeirao Preto, SP, Brazil ( January and February/1987). **Orthopedic Physical Therapist.**
- IGASE – POLICLINICA LTDA, Ribeirão Preto, SP, Brazil (From August 1991 to May 1996). **Manager Physical Therapist.**
- UNAERP – Univesidade de Ribeirão Preto, SP, Brazil (From August 1998 to July 2002). **Clinical Supervisor (Orthopedic Physical Therapy).**
- Clinica SANITAS (Fisiosplar Centro Clínico de Fisioterapia e Performance Fisica Ltda.), Ribeirão Preto, SP, Brazil (From May1988 to date (as a managing partner). **Managing Partner and Physical Therapist.**

#### **TEACHING EXPERIENCE**

- Assistant Professor, Department of Physical Therapy Education, Universidade de Ribeirão Preto (UNAERP), Ribeirão Preto, SP, Brazil. (From 08/1988 to 12/1993 and from 08/1994 to 07/2002).  
Teaching responsibilities: Clinical Orthopedics II, Muscle Skeletal Osteopathy, Electrotherapy, Kinesiology, Theory of Clinical Practice I.
- Teaching assistant, Department of Physical Therapy and Rehabilitation Sciences, Kansas University Medical Center, Kansas City, KS, USA (08/2004 to 12/2004 and 01/2006).  
Teaching responsibilities: Basics of Acute Care Physical Therapy and Musculoskeletal III (Practical Laboratory).

#### **RECENT RESEARCH EXPERIENCE**

1. Principal investigator, Effects of Ankle Bracing on Motions of the Knee and Hip Joints during Trunk Rotation Tasks; Ankle Instability and a Reactive Strategy to Avoid an Ankle Sprain: Georgia Holland Cardiopulmonary and

Neuromuscular Research Laboratory, Kansas University Medical Center, Kansas City, KS, USA (08/2002 to 08/2006). Advisor: Wen Liu, Ph.D.

2. Research collaborator, An Inter-Joint Coordination Pattern in the Lower Extremity during Single Limb Stance: Georgia Holland Cardiopulmonary and Neuromuscular Research Laboratory, Kansas University Medical Center, Kansas City, KS, USA (08/2002 to 07/2003). Principal Investigator: Dr. Wen Liu, Ph.D.

3. Research assistant, Vision and Balance Disabilities in Acoustic Neuroma Patients: Ear, Nose and Otolaryngology Outpatient Clinic (ENT Clinic), Kansas University Medical Center, Kansas City, KS, USA (11/2002 to 05/2003). Principal Investigator: Dr. Denise Gobert, Ph.D.

4. Research assistant, Exercise Programs in Stroke Survivors: Balance and Mobility: Research Laboratory (BMRL Lab.) Kansas University Medical Center, Kansas City, KS, USA (06/2003 to 06/2004). Principal Investigator: Dr. Denise Gobert, Ph.D.

5. Research assistant, Functional Electrical Stimulation in individuals with Chronic Stroke: Center on Aging, Kansas University Medical Center, Kansas City, KS, USA (08/2004 to 06/2005). Principal Investigator: Dr. Barb Quaney, Ph.D.

6. Research assistant, Functional Changes Following Ankle Joint Mobilizations in Subjects with Hemiplegia: Georgia Holland Cardiopulmonary and Neuromuscular Research Laboratory, Kansas University Medical Center, Kansas City, KS, USA (01/2005 to 06/2005). Principal Investigator: Dr. Patricia Kluding, Ph.D.

7. Research assistant, The Effect of Aerobic Exercise on The Executive Function for Cognitive and Motor Tasks in Individuals with Chronic Stroke: Center on Aging, Human Performance Laboratory, Kansas University Medical Center, Kansas City, KS, USA (08/2005 to 08/2006). Principal Investigator: Dr. Barb Quaney, Ph.D.

8. Postdoctoral research associate, Anticipatory Postural Adjustments organization and Modulation of Grip Force in healthy and disease. Knecht

Movement Science Laboratory, Department of Physical Therapy, University of Illinois at Chicago, Chicago, IL 09/2006 to date).

## **PRINCIPAL RESEARCH INTERESTS**

Biomechanics and motor control applied to orthopedics and neurological disorders.

## **SELECTED PRESENTATIONS**

1. **Santos MJ**, Almeida GL. The Control of Shoulder Voluntary Movements in Swimmers with Glenohumeral Instability. XV Congresso Brasileiro de Fisioterapia, I Congresso Brasileiro do Século XXI, and VII Congresso Paulista de Fisioterapia, São Paulo, SP, Brazil, 2001.
2. **Santos MJ**, McIntire, Foecking J, Liu Wen. Effects of Ankle Bracing on Knee Motions during Trunk Rotational Tasks. Eighth International Symposium on the 3-D Analysis of Human Movement. Tampa, Florida, USA, April 2004.
3. Gobert DV, Cho JK, Bouckhout V, Kim SH, Billinger, S, **Santos MJ**, Kapros I. Can an Exercise Program with Total Body Reciprocal Training Improve Gait and Balance in Chronic Stroke Survivors? International Posture e Gait Society annual meeting, Sidney, Australia. March 2003.
4. John E, **Santos MJ**, Bouckhout, V, Jernigan S, Kapros I, Gobert D. Cardiovascular Response of Chronic Stroke Survivors to a Resistance Exercise Training Program. 29<sup>th</sup> Interantional Stroke Conference, American Stroke Association, San Diego, CA, USA. February 2004.
5. Quaney B, Zahner LH, **Santos MJ**, Kadivar Z. Improved Upper Extremity Control after Neuromuscular Stimulation in Individuals with Chronic Stroke. Progress in Motor Control V. State College, PA, USA. August 2005.

6. Kluding P, **Santos MJ**. Changes in Sit-to-Stand Following Ankle Joint Mobilizations in Subjects with Hemiplegia. APTA Combined Sections Meeting, San Diego, CA, USA, February, 2006.

#### PEER REVIEW PUBLICATIONS

1. **Santos M**, McIntire, Foecking J, Liu Wen. Effects of ankle bracing on motions of the knee and hip joints during trunk rotation tasks. *Clinical Biomechanics* 19 (2004) 964-971.
2. **Santos MJ**. What are the functions of the mechanoreceptors in the shoulder joint? A literature review. *Revista Brasileira de Fisioterapia da USP* Jan/June 11 (2004) (1:1-69) 39-46.
3. **Santos MJ**, Belangero WD, Almeida GL. The effect of joint instability on latency and recruitment order of the shoulder muscles. *Journal of Electromyography and kinesiology* (Accepted in January of 2006 – in press).
4. **Santos MJ** and Liu W. Unloading reaction to electrical stimulation at neutral and supinated ankle positions. *Gait and Posture*. (Accepted in August of 2006 – in press).
5. **Santos MJ**, Zahner L, McKiernan B, Quaney B. Can neuromuscular electrical stimulation improve severe hand dysfunction in the chronic stroke survivor? *Journal of Neurologic Physical Therapy*. (Accepted in September of 2006 - in press).
6. Kluding P, **Santos M**. Functional changes following ankle joint mobilizations in subjects with hemiplegia. *Archives of Physical Medicine and Rehabilitation*. (Accepted with review in October of 2006).
7. **Santos MJ** and Liu W. Unloading reactions in individuals with functional ankle instability. *Clinical Neurophysiology*. (Submitted in September of 2006 – in review).

#### PEER REVIEWER

1. Revista Brasileira de Fisioterapia da Universidade de São Paulo (USP), São Paulo, SP, Brazil – 2004 to date.

## **HONORS AND AWARDS**

- Fellowship to develop the project entitled Global Postural Reeducation and Manipulation: Applications in the Shoulder Impingement Syndrome. Sponsor: Universidade de Ribeirão Preto, Brazil, 1997-1998.
- Fellowship to attend the Master Program at Universidade Estadual de Campinas (UNICAMP). Sponsor: Universidade de Ribeirão Preto, Brazil, 1999 -2001.
- Fellowship to attend the Ph.D. Program at University of Kansas Medical Center (KUMC). Sponsor: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq – Brazil) 2002-2006.
- First place award for the oral research presentation entitled: Effects of Ankle Bracing on Motions of the Knee and Hip Joints during Trunk Rotation Tasks. Student Research Forum (SRF), category: Clinical Studies. Kansas University Medical Center, Kansas City, KS, USA, 2004.
- First place award for the oral research presentation entitled: Unloading reactions to electrical stimulation in neutral and inverted ankle position. Student Research Forum (SRF), category: Musculoskeletal studies. Kansas University Medical Center, Kansas City, KS, USA, 2006.