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EDUCATION

- **Ph.D. candidate** in Rehabilitation Sciences at University of Kansas Medical Center – Kansas City – KS, USA, from **2002 to date**.
- **M.S.**, Physiology, Functional and Molecular Biology Department, Campinas State University, Campinas, SP, Brazil, **2001**.
- **B.S.**, Physical Therapy, Londrina State University, Londrina, Pr, Brazil, **1986**.

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 - Ribeirão Preto University , 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
Physical Therapist

TEACHING EXPERIENCE

- Assistant Professor, Department of Physical Therapy Education, Ribeirão Preto University (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).

Teaching responsibilities: Basics of Acute Care Physical Therapy (Practical Lab).

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 date). 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 date). Principal Investigator: Dr. Barb Quaney, Ph.D.

RESEARCH INTERESTS

Conduct research in biomechanics and motor control to understand the functional deficits in orthopedics and neurological disorders. My recent works have been focusing in the inter-joint coordination of the lower limbs during balance control and in the neurological mechanisms to protect the ankle from sprain injuries. I also have been working with stroke survivors in two principal investigations: Functional changes following ankle Joint mobilizations and cognitive changes after exercise training.

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. 29th 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, February, 2006 (accepted).

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. Liu W, **Santos M**, McIntire K, Loudon J, Goist-Foley H, Horton G. An Inter-Joint Coordination Pattern in the Lower Extremity during Single Limb Stance. *Clinical Biomechanics*. July 2005 (*in review*).
4. **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*. August 2005 (*in review*).
5. Kluding P, **Santos M**, Condray, R. Functional changes following ankle joint mobilizations in subjects with hemiplegia. *Physical Therapy*. September 2005 (*in review*)
6. **Santos MJ** and Liu W. Unloading reaction to electrical stimulation at neutral and inverted ankle positions. (*In preparation*).

HONORS AND AWARDS

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