

**CURRICULUM VITAE**  
**Clarisa Martinez, PT, DPT, MS**

**Contact**

Address: Division of Biokinesiology and Physical Therapy  
University of Southern California  
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Los Angeles, CA 90089-9006

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Foreign Lang: Spanish (proficient)

**Education**

2016 **University of Southern California**  
Master's of Science, Clinical, Biomedical and Translational Investigations

2009 **University of Southern California**  
Doctor of Physical Therapy

2005 **The University of Texas at El Paso**  
Major: Pre-Physical Therapy

2002 **The University of Texas at Austin**  
Bachelor of Arts, English

**Post-Graduate Training**

09/16 – 09/17 **Postdoctoral Scholar**  
University of California, Los Angeles, Department of Neurology  
710 Westwood Plaza, Los Angeles, CA, 90095-1769  
*Advisor:* Bruce Dobkin, MD  
*Topic:* Clinical research with wearable sensors, telerehabilitation, stroke rehabilitation

08/14 – 07/16 **Postdoctoral Fellow (T32), Training in Rehabilitation Efficacy and Effectiveness Trials**  
*Funding:* NIH, National Center for Medical Rehabilitation Research (T32 HD06457)  
University of Southern California, Division of Biokinesiology and Physical Therapy  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
*Advisors:* Nicolas Schweighofer, PhD, Carolee Winstein, PT, PhD, FAPTA, Beth Fisher, PT, PhD, FAPTA  
*Topic:* Unmasking movement capability in individuals with post-stroke motor impairment

**Licensure**

**Physical Therapy Board of California**  
License No: 35803

**Employment History**

01/18 - **Study Statistician, Multi-Center Case Series Implementation of “Vestibular Rehabilitation for Peripheral Vestibular Hypofunction: An Evidence-Based Clinical Practice Guideline”**  
*Principal Investigator:* Julie Tilson  
*Funding:* American Academy of Neurological Physical Therapy  
University of Southern California, Division of Biokinesiology and Physical Therapy

- 10/16 – 8/18 **Sub-Investigator, Study of Modified Stem Cells (SB623) in Patients with Chronic Motor Deficit from Ischemic Stroke (ACTIssIMA)**  
*Sponsor:* SanBio, Inc, *Collaborator:* Sunovion, *Principal Investigator:* Gary Steinberg, MD, PhD  
Ronald Reagan UCLA Medical Center  
757 Westwood Plaza, Los Angeles, CA 90095
- 09/17 – 7/18 **Staff Research Associate**  
University of California Los Angeles, Geffen School of Medicine, Department of Neurology  
710 Westwood Plaza, Los Angeles, CA, 90095-1769  
*Director:* Dr. Bruce Dobkin, MD, FRCP  
*Projects:* Remote mobility and practice tracking for post-stroke hemiparesis, self-management training to enhance post-stroke task practice, bimanual robotic exoskeleton for patients with moderate to severe stroke.
- 08/14 - 12/15 **Research Assistant (Part-time), Dose Optimization for Stroke Evaluation**  
*Principal Investigators:* Nicolas Schweighofer, PhD, Carolee Winstein, PT, PhD, FAPTA  
*Funding:* NIH, Eunice Kennedy Shriver Natl Inst of Child Health and Human Development (HD065438)  
University of Southern California, Division of Biokinesiology and Physical Therapy  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006
- 07/11- 08/14 **Project Coordinator, Dose Optimization for Stroke Evaluation**  
*Principal Investigators:* Nicolas Schweighofer, PhD, Carolee Winstein, PT, PhD, FAPTA  
*Funding:* NIH, Eunice Kennedy Shriver Natl Inst of Child Health and Human Development (HD065438)  
University of Southern California, Division of Biokinesiology and Physical Therapy  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006
- 01/10 – 07/11 **Physical Therapist, Home Health**  
Center for Physical Therapy  
Home Health, (562) 900-0147
- 07/09 – 07/11 **Physical Therapist, Outpatient Neurological and Orthopedic**  
Kern and Associates Physical Therapy, Santa Monica, CA  
2901 Wilshire Boulevard, Suite #440, Santa Monica, CA 90403
- 05/07 – 12/08 **Study Coordinator, Muscle-Specific Strengthening Effectiveness Post Lumbar Microdiscectomy**  
University of Southern California, Los Angeles, Division of Biokinesiology and Physical Therapy  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006
- 06/04 – 08/04 **Undergraduate Research Assistant—Summer Research Program, Biomechanics**  
Des Moines University, Des Moines, IA  
3200 Grand Avenue Des Moines, IA 50312

### **Academic/Teaching Experience**

- 08/18 - **University of Southern California, Division of Biokinesiology and Physical Therapy**  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
Assistant Professor of Clinical Physical Therapy  
Co-Director, Evidence Based Practice Curriculum (PT561B, PT561C)
- 09/17 - 7/18 **University of Southern California, Division of Biokinesiology and Physical Therapy**  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
Adjunct Assistant Professor  
Co-Director, Evidence Based Practice Curriculum (PT561B, PT561C)

## C.Martinez – Curriculum Vitae

- 05/17 - 08/17 **Chapman University, Crean College of Health and Behavioral Sciences; Physical Therapy**  
9401 Jeronimo Rd, Irvine, CA 92618  
*Lecturer*  
Motor Control/Motor Learning Lab
- 08/13 – 08/15 **University of Southern California, Division of Biokinesiology and Physical Therapy**  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
*Instructor, Annual Summer Course*  
TMS Certification Course, Continuing Education
- 04/13 – 04/16 **University of Southern California, Division of Biokinesiology and Physical Therapy**  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
*Annual guest lecturer, “Clinical considerations for the upper extremity after stroke”*  
PT 581L Clinical Management of the Patient with Neurological Dysfunction
- 01/11 – 05/12 **University of Southern California**  
1540 Alcazar Street, CHP 155, Los Angeles, CA 90089-9006  
*Instructor of Clinical Physical Therapy*  
PT 581L Clinical Management of the Patient with Neurological Dysfunction

### **Professional Memberships**

- 2006 – American Physical Therapy Association  
2014 – Society for Neuroscience

### **Publications**

**Martinez CA**, Bacon H, Kim BK, Wolf SE, Woodbury ML, Rowe V, Winstein C. Reliability and validity of an adapted Reaching Performance Scale for Stroke to characterize movement compensation during Wolf Motor Function Test. *In review*.

Winstein C, Kim B, Kim S, **Martinez C**, Schweighofer N. Dosage Matters: A Randomized Controlled Trial of Rehabilitation Dose in the Chronic Phase after Stroke. *bioRxiv*. 2018 Jan 1:441253.

Dobkin B, **Martinez CA**. Wearable sensors to monitor, enable feedback and measure outcomes of activity practice. *Current Neurology and Neuroscience Reports*. 2018; 18:87.

Dobkin B, **Martinez CA**. Designing a clinical trial in neurorehabilitation. *Oxford Textbook of Neurorehabilitation, 2e*. In Press.

**Martinez CA**, Mintz E, Ecsedy AE, Fisher BE. Constraining movement reveals motor capability in chronic stroke: an initial study. *Clin Rehab*. Sept 1 2016.

Wang X, Liu BJ, **Martinez C**, Zhang X, Winstein CJ. Development of a novel imaging informatics-based system with an intelligent workflow engine (IWEIS) to support imaging-based clinical trials. *Comput Biol Med*. Mar 28 2015.

**Martinez CA**, Wang C. Structural constraints on learning in the neural network. *Journal of Neurophysiology*. 2015;114(5):2555-2557.

Liu BJ, Winstein C, Wang X, Konersman M, **Martinez CA**, Schweighofer N. An imaging informatics-based ePR (electronic patient record) system for providing decision support in evaluating dose optimization in stroke rehabilitation. Proc. SPIE 8319, *Medical Imaging*. 2012.

### **Poster Presentations**

Mac Dowell S, **Martinez CA**, Roth H, Dannenbaum E, D’Silva LJ, Farrell L, Howard R, Skop K, Crouner B, Tilson JK. Vestibular Rehabilitation: Strategies for Dissemination of Clinical Practice Guidelines through Knowledge Translation. International Conference of Vestibular Rehabilitation. August 2018.

**Martinez CA**, Kim B, Bacon H, Winstein C. Unraveling the active ingredients that underlie improved movement time in paretic reach to grasp. American Society for Neurorehabilitation Annual Meeting. November 2016.

Bacon H, Kim B, **Martinez CA**, Winstein C. Is task similarity reflected in modified Reaching Performance Scale scores? USC Ostrow School of Dentistry Research Day. March 2016.

Matthews ND, Hershberg JA, **Martinez CA**, Caudill EJ. You are not alone: Development of a local neurologic private practice network—strategies and successes. American Physical Therapy Association Combined Sections Annual Meeting, Poster 3086. February 2015.

**Martinez CA**, Bacon H, Finley J, Schweighofer N, Winstein C. Can inertial sensors characterize treatment-induced skill acquisition in chronic stroke? Society for Neuroscience Annual Meeting, Poster SS52 184.07. November 2014.

Kuo YL, **Martinez CA**, Dubuc T, Winstein CJ, Schweighofer N, Kulig K, Fisher BE. Reliability of ipsilateral silent period to measure interhemispheric inhibition: preliminary results in non-disabled young adults. Society for Neuroscience Annual Meeting, Poster HH25 164.05. November 2014.

**Martinez CA**, Bacon H, Finley J, Schweighofer N, Winstein C. Can inertial sensors characterize treatment-induced skill acquisition in chronic stroke? American Society for Neurorehabilitation Annual Meeting, Poster 76. November 2014.

Kuo YL, **Martinez CA**, Dubuc T, Winstein CJ, Schweighofer N, Kulig K, Fisher BE. Reliability of ipsilateral silent period to measure interhemispheric inhibition: preliminary results in non-disabled young adults. American Society for Neurorehabilitation Annual Meeting, Poster 48. November 2014.

**Martinez CA**, Kuo YL, Dubuc T, Fisher BE. Reliability of ipsilateral silent period to measure interhemispheric inhibition. USC Ostrow School of Dentistry Research Day, March 2014.

Liu B, Winstein C, Wang X, Konersman M, **Martinez CA**, Schweighofer N. An imaging informatics-based ePR system for providing decision support in evaluation dose optimization in stroke rehabilitation. International Society for Optics and Photonics Annual Meeting (SPIE), February 2012. Doi:[10.1117/12.912952](https://doi.org/10.1117/12.912952)

**Martinez CA** and Kulig K. The Lumbar Instability Test: Does this test's outcome reflect our clinical assumptions? California Physical Therapy Association Annual Conference, Oakland, CA. September 2008.

**Martinez CA**, Vardaxis VG, Buchanan P. Anterior cruciate ligament injury and ground reaction forces in pre- and post-adolescent athletes. Des Moines University Research Symposium, Des Moines, IA. April 2005.

### **Invited Talks**

**Martinez CA**. Stroke Rehabilitation: Upper Extremity Recovery and Physical Activity. University of California, Los Angeles, Department of Physical Therapy. June 06 2018.