

## DEBORAH ELLEN KENNEY

### EDUCATION

M.S., Occupational Therapy, San Jose State University; June 1992.  
Thesis research under Professors K. Schwartz and L. Pedretti on the test-retest reliability of the hand volumeter using two different methods.

Bachelor of Science in Kinesiology, University California Los Angeles; December 1984.  
Undergraduate research under Professor R. Gregor on the kinetics and kinematics of the lower extremity during bicycling at varying saddle heights.

### PROFESSIONAL EXPERIENCE

2011-2015 **Study Coordinator, Health Science Researcher**

2015-2024 **Research Manager**

Stanford Medical Center Dept. of Orthopaedic Surgery, Palo Alto, CA

Designs, plans, and implements an integrated research program with the Principal Investigator related to CMC osteoarthritis. This is a multifaceted research program that includes an NIH RO1 on the biomechanics of early osteoarthritis progression, genetics studies and basic science related to this joint. Performs routine and experimental occupational therapy procedures and assessments in accordance with approved human subject protocols. Works with the PI, department, sponsor, and institution to support and provide guidance on the administration of the compliance, financial, personnel and other related aspects of these research studies. Coordinates participant tests and procedures. Collects data as required by the protocol. Assists PI with scientific and compliance reporting requirements in accordance with Federal regulations and University and sponsoring agency policies and procedures. Promotes the ethical conduct of research and GCP. Maintains confidentiality of subject data and long-term storage. Works with physicians/PIs to formulate new ideas and write grant proposals and scientific papers.

**2016-2021 Research Manager/Study Coordinator – Polyganics PROSPECTIVE COHORT EVALUATION OF NEUROCAP® In the Treatment of symptomatic Neuroma – Post Marketing Surveillance Study**

Coordinates with Principal Investigator and school, department, Stanford outpatient surgery center and central administration to help ensure that clinical research and related activities are performed in accordance with Federal regulations, hospital and University and sponsoring agency policies and procedures. Supports, facilitates, and coordinates the daily clinical trial activities. Responsible for the Device Accountability Log and coordinating with outpatient surgery center to deliver the needed devices to the OR. Works with the PI, department, sponsor, and institution to support and provide guidance on the administration of the compliance, financial, personnel and other related aspects of the clinical study. Coordinates participant tests and procedures. Collects data as required by the protocol. Assures timely completion of Case Report Forms. Assists Principal Investigator with scientific and compliance reporting requirements in accordance with Federal regulations and University and sponsoring agency policies and procedures. Promotes the ethical conduct of research and GCP. Maintains confidentiality of subject data and long-term storage.

**2015-2018 Study Coordinator – IlluminOss 14-03-PATHOLHUM-02 - Phase III IDE study IlluminOss® Photodynamic Bone Stabilization System for the Treatment of Impending and Actual Pathological Fractures in the Humerus from Metastatic Bone Disease**

Stanford Hospital and Clinics, Palo Alto, CA

Coordinates with Principal Investigator and school, department, Stanford Cancer Center Clinical Trials Office, Stanford Hospital, and central administration to help ensure that clinical research and related activities are performed in accordance with Federal regulations, Hospital and University and sponsoring agency policies and procedures in this IDE study. Supports, facilitates, and coordinates the daily clinical trial activities including the coordination of the specialized surgical instruments and device with Stanford Hospitals main OR. Works with the PI, department, sponsor, and institution to support and provide guidance on the administration of the compliance, financial, personnel and other related aspects of the clinical study. Coordinates participant tests and procedures. Collects data as required by the protocol. Assures timely completion of Case Report Forms and uploading of data to electronic data capture system. Assists Principal Investigator with scientific and compliance reporting requirements in accordance with Federal regulations and University and sponsoring agency policies and procedures. Promotes the ethical conduct of research and GCP. Maintains confidentiality of subject data and long-term storage.

2007-2013

**Study Coordinator- Aux 857/858/860- Xiaflex FDA study Phase III**

Stanford Hospitals and Clinics, Palo Alto, CA

Coordinates with Principal Investigator and school, department, and central administration to help ensure that clinical research and related activities are performed in accordance with Federal regulations and University and sponsoring agency policies and procedures. Supports, facilitates and coordinates the daily clinical trial activities. Works with the PI, department, sponsor, and institution to support and provide guidance on the administration of the compliance, financial, personnel and other related aspects of the clinical study. Coordinates participant tests and procedures. Collects data as required by the protocol. Assures timely completion of Case Report Forms. Assists Principal Investigator with scientific and compliance reporting requirements in accordance with Federal regulations and University and sponsoring agency policies and procedures. Promotes the ethical conduct of research and GCP. Maintains confidentiality of subject data and long term storage.

2005-2010

**Living Skills Instructor-REACH**

Foothill College, Los Altos, California

Planned, implemented, and integrated occupational therapy living skills group for post-stroke survivors. Worked to remediate problems with both cognitive and physical deficits through functional activities and group exercise. Educated students in anatomy, body mechanics, and physiology.

1998-2007

**Research Occupational Therapist**

VA Health Care System, Palo Alto, California

Performs routine and experimental occupational therapy procedures and assessments in accordance with an approved human subject protocol. Acts as a consultant to other RR&D researchers on matters specific to occupational therapy and biomechanics. Assists in the development of research methodology for current and proposed projects. Participates in the development and implementation of data analysis and publication of these results. Projects: Functional Restoration Of Grasp In People With Tetraplegia, Robotics For Upper Extremity Treatment Of Stroke, And Assessment And Evaluation Of Transfer Training Skills In Persons With Neurological Deficits.

1995-1998

**Social Science Research Assistant III** (IPA between Stanford and the VA)

Stanford University School of Medicine, Stanford, California

Projects: Artificial Nerve Graft Study and Balance and the Elderly Study

1991-1995

**Research Occupational Therapist**

VA Health Care System, Palo Alto, California  
Projects: Balance and the Elderly, and Robotics for Upper Extremity Treatment  
Of Patients Following Stroke.

1991-1994

**Senior Staff Therapist**

Veterans Affairs Medical Center, Department of PMR, Palo Alto, California  
Planned, implemented and integrated a comprehensive occupational therapy program for adult patients with neurologic disorders, diseases and injuries of the hand, orthopedic disorders, chronic pain, and deconditioning. Performed vocational assessments and ergonomic prescriptions of VA employees. Mentored/trained staff and students in research and hand therapy. Supervised occupational therapy interns and practicum students, and volunteers.

**ADDITIONAL RELATED EXPERIENCE**

**2005- Current WOC appointment at VA HCS Palo Alto**

2006-2024 Guest Lecturer and course mentor - Stanford Department of Engineering 110/210-  
Perspectives in Assistive Technology

**PUBLICATIONS**

O'Mara, A., Kerkhof, F., Kenney, D., Segovia, N., Asbell, P., Ladd, A. L. Opportunistic hand radiographs to screen for low forearm bone mineral density: a prospective and retrospective cohort study. *BMC musculoskeletal disorders*. 2024; 25 (1): 159 <https://doi.org/10.1186/s12891-023-07127-w>

McCullough M, Kenney D, Curtin C, Ottestad, E. Peripheral nerve stimulation for saphenous neuralgia. *Regional Anesthesia & Pain Medicine* Published Online First: 02 December 2023. <https://doi.org/10.1136/rapm-2023-104538>

Rachel Heeb Desai, Allison L'Hotta, Carie Kennedy, Aimee S. James, Katherine Stenson, Catherine Curtin, Doug Ota, Deborah Kenney, Katharine Tam, Christine Novak, Ida Fox; Caregiving for People With Spinal Cord Injury Undergoing Upper Extremity Reconstructive Surgery: A Prospective Exploration of Lived Experiences, Perioperative Care, and Change Across Time. *Top Spinal Cord Inj Rehabil* 1 June 2023; 29 (3): 58–70. doi: <https://doi.org/10.46292/sci22-00063>

Kerkhof F, Kenney D, Ogle M, Shelby T, Ladd A. The biomechanics of osteoarthritis in the hand: Implications and prospects for hand therapy. *J Hand Ther*. 2022 Jul-Sep;35(3):367-376. doi: 10.1016/j.jht.2022.11.007. Epub 2022 Dec 10. PMID: 36509610.

L'Hotta AJ, James AS, Curtin CM, Kennedy C, Kenney D, Tam K, Ota D, Stenson K, Novak CB, Fox IK. Surgery to restore upper extremity function in tetraplegia-Preferences for early and frequent access to information. *PM R*. 2022 Jun 5. doi: 10.1002/pmrj.12862. Epub ahead of print. PMID: 35665476.

Garcia-Lopez E, Moore DC, Kenney DE, Ladd AL, Weiss AC, Crisco JJ. Evaluation of the PROMIS Upper Extremity Against Validated Patient-Reported Outcomes in Patients With Early Carpometacarpal Osteoarthritis. *J Hand Surg Am*. 2022 Jul;47(7):621-628. doi: 10.1016/j.jhsa.2022.03.003. Epub 2022 May 5. PMID: 35527094; PMCID: PMC9271544.

McQuillan TJ, Vora M, Hawkins J, Kenney D, Diaz R, Ladd AL. Adhesive Taping Shows Better Cosmetic Outcomes Than Tissue Adhesives for Sutured Upper Extremity Incisions: A Single-Blind Prospective Randomized Controlled Trial. *Orthopedics*. 2022 Jan-Feb;45(1):e42-e46. doi: 10.3928/01477447-20211101-08. Epub 2021 Nov 8. PMID: 34734780.

Lai C, Kenney D, Kerkhof F, Finlay A, Ladd A, Roh E. Ultrasound of Thumb Muscles and Grasp Strength in Early Thumb Carpometacarpal Osteoarthritis. *J Hand Surg Am.* 2022 Sep;47(9):898.e1-898.e8. doi: 10.1016/j.jhsa.2021.07.021. Epub 2021 Sep 8. PMID: 34509311.

Gire JD, Koltsov JCB, Segovia NA, Kenney DE, Yao J, Ladd AL. [Single Assessment Numeric Evaluation \(SANE\) in Hand Surgery: Does a One-Question Outcome Instrument Compare Favorably?](#) *J Hand Surg Am.* 2020 Jul;45(7):589-596.

Schreiber JJ, McQuillan TJ, Halilaj E, Crisco JJ, Weiss AP, Patel T, Kenney D, Ladd AL. Changes in Local Bone Density in Early Thumb Carpometacarpal Joint Osteoarthritis *J Hand Surg Am.* 2018 Jan;43(1):33-38.

Thomas J. McQuillan, Molly M. Vora, Deborah E. Kenney, Joseph J. Crisco, Arnold-Peter C. Weiss, Kerry A. Ebert, Kathleen E. Snelgrove, Alexandra Sarnowski, and Amy L. Ladd. The AUSCAN and PRWHE Demonstrate Comparable Internal Consistency and Validity in Patients With Early Thumb Carpometacarpal Osteoarthritis. *Hand (N Y).* 2018 11;13(6):652-658.

Curtin CM, Kenney D, Suarez P, Hentz VR, Hernandez-Boussard T, Mackey S, Carroll IR. [A Double-Blind Placebo Randomized Controlled Trial of Minocycline to Reduce Pain After Carpal Tunnel and Trigger Finger Release.](#) *J Hand Surg Am.* 2017 Mar;42(3):166-174.

Coughlan, Monica J., Alexandra Bourdillon, Joseph J. Crisco, Deborah Kenney, Arnold-Peter Weiss, and Amy L. Ladd. Reduction in Cylindrical Grasp Strength Is Associated With Early Thumb Carpometacarpal Osteoarthritis. *Clinical Orthopaedics and Related Research* 475.2 (2016): 522-28.

Mcquillan, Thomas J., Deborah Kenney, Joseph J. Crisco, Arnold-Peter Weiss, and Amy L. Ladd. Weaker Functional Pinch Strength Is Associated With Early Thumb Carpometacarpal Osteoarthritis. *Clinical Orthopaedics and Related Research* 474.2 (2015): 557-61.

Gajendran VK, Hentz V, Kenney D, Curtin CM. Multiple collagenase injections are safe for treatment of Dupuytren's contractures. *Orthopedics.* 2014 Jul;37(7):657-60.

Luker KR, Aguinaldo A, Kenney D, Cahill-Rowley K, Ladd AL. (2013) *Functional Task Kinematics of the Thumb Carpometacarpal Joint.* *Clin Orthop Relat Res.* 2013 Apr 3

Charles G Burgar, Peter S Lum, A M Erika Scremin, Susan L Garber, H F Machiel Van der Loos, Deborah Kenney, Peggy Shor (2011) Robot-assisted upper-limb therapy in acute rehabilitation setting following stroke: Department of Veterans Affairs multisite clinical trial. *The Journal of Rehabilitation Research and Development* 01/2011; 48(4):445-58.

Smaby N, Johanson, ME, Baker B, Kenney D, Murray, WM, Hentz, VR (2004) Identification of key pinch forces required to complete functional tasks. *J Rehabil Res Dev.* **41** 2:215-224

Lum PS, Burgar CG, Kenney D, Van der Loos HFM (1999) Quantification of force abnormalities during passive and active-assisted upper-limb reaching movements in post-stroke hemiparesis. *IEEE Transactions on Biomedical Engineering* 46(6):652-662.

O'Laughlin, TJ, Klima RR, Kenney DE (1994) Rehabilitation of Eosinophilic Fasciitis, A case report. *Am J Phys Med Rehabil* 73:286-292.

Kenney, DE, Klima, RR (1993) Modified arm sling for soft-tissue injuries of the shoulder and glenohumeral subluxation. *J Hand Therapy* 6:215-6.

## Conference Presentations and Abstracts

Amy Ladd, Joseph J. Crisco, Amy Hoang-Kim, Deborah Kenney, Miriam Marks, Douglas C. Moore, Arnold-Peter C. Weiss, Jennifer Wolf. **Developing a Core Outcome Set for the**

**Research and Treatment of Thumb Carpometacarpal Osteoarthritis: A Delphi Study.**  
**Orthopedic Research Society Annual Meeting, New Orleans, LA, 3/10-13/2018**

Bardiya Akhbari, Deborah E. Kenney, Kerry A. Ebert, Amy L. Ladd, Arnold-Peter C. Weiss, Douglas C. Moore, Joseph J. Crisco . **Decreased Passive Retroposition With Progression of Thumb Carpometacarpal Joint Osteoarthritis.** Orthopedic Research Society Annual Meeting, New Orleans, LA, 3/10-13/2018

Schreiber JJ, Crisco JJ, Weiss AP, Patel T, Kenney D, Ladd AL. Local Bone Density Decreases in Early Thumb Carpometacarpal Joint Osteoarthritis". American Society for Surgery of the Hand Annual Meeting, Austin, TX, 1/29/2016

Schreiber JJ, McQuillan TJ, Crisco JJ, Weiss AP, Patel T, Kenney D, Ladd AL. Local Bone Density Decreases in Early Thumb Carpometacarpal Joint Osteoarthritis. International Wrist Investigators Workshop at the ASSH, Austin, TX, 1/28/2016

Eric Pridgen PhD, Deborah Kenney MS, Eugene Roh MD, and Amy Ladd MD. In Vivo Measurement of the Thenar Muscles and First Dorsal Interosseous In Thumb Carpometacarpal Joint Osteoarthritis Using Ultrasound Imaging. American Association for Hand Surgery. Annual Meeting, Scottsdale, AZ, 1/13-16/2016

Johanson ME, Smaby N, Baker B, Kenney DE, Murray WM, Hentz VR. Target key pinch forces for assessment of surgical outcome in tetraplegia. (Best Poster Award). *29th Ann Mtg Amer Spinal Injury Assoc*, Miami, FL, Apr, 2003. Abstract: *J Spinal Cord Med*, 26 (suppl 1): 541, 2003.

Kenney DE, Johanson ME, Smaby N, Murray WM. Functional evaluation of lateral pinch in subjects with tetraplegia. *Proc 3rd VA Natl Rehab Res Dev Conf* , p 8, 2002.

Van der Loos HFM, Kenney DE, Buckley EL, Topp EL, Davidson CA. Video-based performance assessment following stroke: design of the critical elements video assessment instrument. *Proc 3rd VA Natl Rehab Res Dev Conf* , p 14, 2002.

Sabelman EE, Troy BS, Kenney DE, Yap R, Lee B. Quantitative balance analysis: accelerometric lateral sway compared to age and mobility status in 60-90-year-olds. *Proc RESNA 2001 Ann Conf*, Reno, NV, 2001.

Baker B, Smaby N, Johanson M, Murray W, Towles J, Kenney D, Hentz VR. Identification of target key pinch forces for functional tasks. *Proc 7th Intl Conf Tetraplegia* , Bologna, Italy, p 74, 2001.

Kenney DE, Troy BS, Lee BL, MS, Sabelman EE. Accelerometric Analysis of Sit-to-Stand as an Evaluation Tool for Balance in Parkinson's Patients, *2nd National Rehabilitation Research and Development Service Meeting*, Arlington, VA, February 20-22, 2000.

Troy BS, Kenney DE, Sabelman EE. Sit-to-Stand as an Evaluation Tool for Balance. *52nd Ann Sci Mtg Gerontological Soc Am*, San Francisco, CA, Nov. 1999. Abstract: *The Gerontologist*, Vol 39, Special Issue I, 1999: p374.

Troy BS, Kenney DE, Sabelman EE, Dunn-Gabrielli S. Accelerometric motion analysis of balance-impaired elderly subjects. *Proc RESNA '96 Annual Conference* (Salt Lake City, UT, 1996.

Sabelman EE, Gadd JJ, Kenney DE, Winograd CH., Balance analysis for the fall-prone elderly. *45th Annual Meeting, Gerontological Society of America* , Washington, DC, Nov 18-22, 1992.

Kenney DE, Winograd CH, Gadd, JJ, Sabelman EE. Comparison of upper-body accelerometry with clinical balance assessments. *American Gerontological Society* , Washington, DC, Nov. 17, 1992.

Sabelman, EE, Gadd JJ, Kenney DE, Winograd, CH. Balance analysis for the fall-prone elderly. *45th Annual Meeting, Gerontological Society of America*, Washington, DC, Nov 18-22, 1992.

Sabelman, EE, Gadd JJ, Kenney DE, Winograd, CH. Balance diagnosis using a wearable upper body motion analysis computer. *Proc RESNA International '92*, Toronto, Canada, June 6-11, 1992, paper 5.5, pp.81-3.

Sabelman, EE, Gadd JJ, Kenney DE, Winograd, CH. New apparatus for analysis of loss-of-balance and falling in the elderly. *American Federation for Clinical Research*, Washington, DC, April 29 - May 1, 1992.

Sabelman, EE, Gadd JJ, Kenney DE, Winograd, CH. Detection and prevention of loss-of-balance and falling in the elderly. *Engineering design for an Aging Society, 2nd International Stein Conference*, Philadelphia, PA, Oct. 23-25, 1991: *Experimental Aging Research*, 17: 130, 1991.