

David M. Selkowitz, PT, PhD, DPT, OCS

Physical Therapy Department
MGH Institute of Health Professions
36 1st Avenue
Boston, MA 02129-4557
(617) 724-0252
dselkowitz@mghihp.edu

Education

- PhD, Kinesiology, The Union Institute and University, Cincinnati, OH/USA 2001
- MS, Physical Therapy, Sargent College – Boston University, Boston, MA/USA 1982
- BA, Anthropology, State University of New York (SUNY) at Buffalo, Buffalo, NY/USA 1978

Postdoctoral/Entry-level Training

- Doctor of Physical Therapy, MGH Institute of Health Professions, MA/USA 2015
- Research Fellow, Musculoskeletal Biomechanics Research Laboratory, Department of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, CA/USA 2005-2014
- Work-study Internship in Orthopedic Manual Therapy with Michael Moore, PT, FAAOMPT at Folsom Physical Therapy, June-August 1993 1993
- Folsom Physical Therapy Long-Term Course in Orthopedic Manual Therapy, M. Moore, D. Morgan, B. Stevens, et al, May 1990 – July 1991 1990-1991

Certificates and Licensure

- Massachusetts 4734, Commonwealth of MA, Division of Professional Licensure, Board of Allied Health Professions 1982, 2013-present
- California PT 11427, California Medical Board State Registration in Physical Therapy 1982-present
- Board Certified Specialist in Orthopedic Physical Therapy (OCS) 1992-present
- Diplomate, American Academy of Pain Management (DAAPM), 2001-present (AAPM has dissolved ~ 2021)* 2001-present*
- Fellow, American Academy of Pain Management (FAAPM) 1992-2001

Academic Appointments

- Associate Professor, MGH Institute of Health Professions, Charlestown (Boston), MA	2013-present
- Professor, Department of Physical Therapy Education, Western University of Health Sciences, Pomona, CA; tenured from 2007	2004-2013
- Associate Professor, Department of Physical Therapy Education, Western University of Health Sciences, Pomona, CA	2000-2004
- Assistant Professor, Samuel Merritt College, Oakland, CA	1996-2000
- Instructor, Samuel Merritt College, Oakland, CA	1992-1996
- Staff Physical Therapist, SHARE (formerly Spine Center of the Eastbay), Oakland, CA	1992-2000
- Staff Physical Therapist, Wendy Katzman Physical Therapy, Berkeley, CA	1992
- Staff Physical Therapist, Tri-Valley Rehabilitation, Walnut Creek, CA	1989-1992
- Physical Therapy Consultant, Pain Relief Center, Walnut Creek and San Leandro, CA	1987-1993
- Physical Therapy Supervisor, MPI (now Summit) Sports Medicine and Orthopedic Rehabilitation, Oakland, CA	1982-1988

Clinical Appointments

- Staff Physical Therapist, SHARE (formerly Spine Center of the Eastbay), Oakland, CA	1992-2000
- Staff Physical Therapist, Folsom Physical Therapy, Folsom, CA	1993
- Staff Physical Therapist, Wendy Katzman Physical Therapy, Berkeley, CA	1992
- Staff Physical Therapist, Tri-Valley Rehabilitation, Walnut Creek, CA	1989-1992
- Physical Therapy Consultant, Pain Relief Center, Walnut Creek and San Leandro, CA	1987-1993
- Physical Therapy Supervisor, MPI (now Summit) Sports Medicine and Orthopedic Rehabilitation, Oakland, CA	1982-1988

Honors and Awards

- Faculty Publication Award, California Physical Therapy Association	2013
- Clarence W. Hultgren Service Award, California Physical Therapy Association	2009
- Best Research Podium Presentation, Annual State Conference, California Physical Therapy Association	2009
- Graduated Magna Cum Laude, Boston University	1982
- Graduated Magna Cum Laude, SUNY at Buffalo	1978
- Graduated "With Highest Distinction", Anthropology Department, SUNY at Buffalo	1978
- New York State Regents' Scholarship	1974
- Bernard Adelstein Scholarship Fund, Teamsters' Lodge #2201, B'nai B'rith	1974

Grants

Completed

- Western University of Health Sciences Intramural Grant, David M. Selkowitz (PI); The Effects of Hip Exercises on EMG Activity of the Hip Musculature in Healthy Persons and Persons with Patellofemoral Pain; \$20,000, 6/27/08 2008
- California Physical Therapy Fund, Inc., Research Grant, Casey Chaney (PI); The EMG Effects of Inhibitory Taping of the Upper Trapezius Muscle in Patients with Shoulder Impingement; \$2,500, May 2002, Role: "Experienced Investigator/Mentor" to principle investigator; Co-wrote grant application. 2002
- California Physical Therapy Fund, Inc., Research Grant, David M. Selkowitz (PI); Effects of Spinal Orthoses and Posture on Myoelectric Activity of the Low Back; \$2,500, September 1996. 1996
- Samuel Merritt College Faculty Research Grant, David M. Selkowitz (PI); Effects of Spinal Orthoses and Posture on Myoelectric Activity of the Low Back; \$1,400, April 1996. 1996
- Dudley Allen Sargent Research Fund, David M. Selkowitz (PI, PT student); Improvement in Isometric Strength of the Quadriceps Femoris Following Training with Electrical Stimulation; \$75, January 1982. 1982

Publications

Peer-reviewed articles

- **Selkowitz DM**, Beneck GJ, Powers CM. (2022) Persons with Patellofemoral Pain Exhibit Altered Hip Abductor Muscle Recruitment While Performing Hip Abductor Exercises, *Physiotherapy Theor Pract*. DOI: 10.1080/09593985.2022.2101167
- Liu J, Teng HL, **Selkowitz DM**, Asavasopon S, Powers CM. (2022) Influence of Hip and Knee Positions on Gluteus Maximus and Hamstrings Contributions to Hip Extension Torque Production. *Physiother Theor Pract*. 38(13):2650-2657.
- Beneck GJ, **Selkowitz DM**, Janzen DS, Malecha E, Tiemeyer BR. (2018) The Influence of Pelvic Rotation on Clinical Measurements of Hip Flexion and Extension Range of Motion Across Sex and Age. *Phys Ther Sport*. 30:1-7.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2016) Comparison of EMG Activity of the Superior and Inferior Portions of the Gluteus Maximus Muscle during Common Therapeutic Exercises. *J Orthop Sports Phys Ther*. 46(9):794-799. **[publication selected for JOSPT Read-for-Credit Quiz]**
- Beneck GJ, Popovich JM Jr., **Selkowitz DM**, Azen S, Kulig K, Physical Therapy Clinical Research Network (PTClinResNet). (2014) Intensive, Progressive Exercise Improves Quality of Life Following Lumbar Microdiscectomy: A Randomized Controlled Trial. *Clin Rehabil*. 28(9):892-901.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2013) Which Exercises Target the Gluteal Muscles While Minimizing Activation of the Tensor Fascia Lata? Electromyographic Assessment Using Fine-Wire Electrodes. *J Orthop Sports Phys Ther*. 2013;43:54-64.
[publication selected for JOSPT Perspectives for Patients, and Read-for-Credit Quiz]
[California Physical Therapy Association (CPTA) Faculty Publication Award]

- **Selkowitz DM**, Rossman E, Fitzpatrick S. (2009) Effect of Burst-Modulated Alternating Current Carrier Frequency on Current Amplitude Required to Produce Maximally-Tolerated Electrically-Stimulated Quadriceps Femoris Knee Extension Torque. *Am J Phys Med Rehabil.* 88:973-978.
- Kulig K, Beneck GJ, **Selkowitz DM**, Popovich JM Jr., Ge TT, Flanagan SP, Poppert EM, Yamada K, Powers CM, Azen S, Winstein CJ, Gordon J, Samudrala S, Chen TC, Shamie N, Khoo L, Spoonamore MJ, Wang JC, Physical Therapy Clinical Research Network (PTClinResNet). (2009) The Effect of An Intensive, Progressive Exercise Program on Functional Performance in Patients Post Single-Level Lumbar Microdiscectomy. *Phys Ther.* 89:1145-1157.
- **Selkowitz DM**, Chaney C, Stuckey SJ, Vlad G. (2007) The Effects of Scapular Taping on the Surface EMG Activity of Shoulder Girdle Muscles During Upper Extremity Elevation in Individuals with Shoulder Impingement. *J Orthop Sports Phys Ther.* 37:694-702.
- **Selkowitz DM**, Kulig K, Poppert EM, Flanagan SP, Matthews ND, Beneck GJ, Popovich Jr JM, Lona JR, Yamada KA, Burke WS, Ervin C, Powers CM, Physical Therapy Clinical Research Network (PTClinResNet). (2006) The Immediate and Long-Term Effects of Exercise and Patient Education on Physical, Functional, and Quality-Of-Life Outcome Measures After Single-Level Lumbar Microdiscectomy: A Randomized Controlled Trial Protocol. *BMC Musculoskeletal Disorders.* 7:70.
- **Selkowitz DM**, Cameron MH, Mainzer A, Wolfe R. (2002) The Lack of Efficacy of Pulsed Low Intensity Ultrasound for the Acceleration of Wound Healing of a Stage III Pressure Ulcer in a Geriatric Patient: A Single-Case Design. *Ostomy/Wound Management.* 48:40-50.
- **Selkowitz DM**. (1985) Improvement in isometric strength of the quadriceps femoris muscle after training with electrical stimulation. *Phys Ther.* 65:186-196.

Books and chapters (Peer-reviewed)

- **Selkowitz DM**: Foundations of Electrical Stimulation. In: Watson T, Nussbaum EL (eds.): Electrophysical Agents – Evidence-Based Practice, 13th ed. Elsevier: Edinburgh, UK; 2021.
- **Selkowitz DM**: Electrical currents. In: Cameron MH (ed.): Physical Agents in Rehabilitation: From Research to Practice. WB Saunders Co: Philadelphia, PA; 1999.
- Alon G, Robinson AJ, Spielholz N, Kloth L, **Selkowitz D**, Gersh M, Baker LL: Electrotherapeutic Terminology in Physical Therapy. Report by the Electrotherapy Standards Committee of the Section On Clinical Electrophysiology of the American Physical Therapy Association. Section on Clinical Electrophysiology and the American Physical Therapy Association: Alexandria, VA: 2001.
- **Selkowitz DM** in Evans PR: Preparing for the Physical Therapist Licensure Examination. FA Davis Co.: Philadelphia, PA; 1999. (Contributing Item Writer)

Editorials and critical reviews (Peer-reviewed)

- **Selkowitz DM.** (2015) Observations and Recommendations on the Investigation of Clinical Decision-Making and Usage Involving Electrophysical Agents. *Israel Journal of Health Policy Research*. 2015, 4:54. **[Invited commentary]**
- **Selkowitz DM.** (2010) Electrical Stimulation for Enhancing Strength and Related Characteristics of Human Denervated Skeletal Muscle. *Phys Ther Rev*. 2010;15:327-333. Erratum 2010;15(6). **[Invited]**
- **Selkowitz DM.** (1992) The sympathetic nervous system in neuromotor function and dysfunction and pain. A brief review and discussion. *Funct Neurol*. 1992;7:89-95. **[Invited]**
- **Selkowitz DM.** (1992) Stimulating thoughts. *J Orthop Sports Phys Ther*. 15:329-330.
- **Selkowitz DM.** (1991) Reducing the rate of fatigue. *Phys Ther*. 71:345-346.
- **Selkowitz DM.** (1989) High frequency electrical stimulation in muscle strengthening: a review and discussion. *Am J Sports Med*. 17:103-111.

Media appearances

- **Davis, J.** (2013) The 5 Best Exercises to Strengthen Your Hip Muscles and Prevent Injury. *Runners Connect*. Retrieved from <https://runnersconnect.net/the-top-5-hip-strengthening-exercises-for-runners-to-prevent-injury-and-improve-hip-drive/>
- **Gabison, S** (2023) Gurus in the Field. *My Electrotherapy*. Retrieved from <http://myelectrotherapy.org/about/gurus-in-the-field/>

Peer-Reviewed Presentations and Abstracts

Podium Presentations

- **Selkowitz DM**, Beneck GJ, Powers CM. Persons with patellofemoral pain exhibit higher levels of tensor fascia lata activity and lower levels of superior gluteus maximus activity during common therapeutic exercises. Oral presentation and panel at the International Society of Electrophysiology and Kinesiology (ISEK) XXIII Virtual Congress (Nagoya, Japan). 2020
- **Selkowitz DM**, Beneck GJ, Powers CM. Activation of hip muscles during a step-down task in persons with and without patellofemoral pain. Oral presentation and panel at the ISEK XXIII Virtual Congress (Nagoya, Japan). 2020
- **Selkowitz DM**. Evidence-Based Practice of Electrotherapy: Foundations & Pain Control. In: **Selkowitz DM**, Freeman L, Herziger C, Ochoa S: Show Me the Value: Evidence-Based Clinical Decision-Making for & Application of Biophysical Agents: Pain Management. Pre-Conference Course, Combined Sections Meeting (CSM) of the American Physical Therapy Association (APTA), Denver, CO. 2020
- **Selkowitz DM**, Beneck GJ, Robinson C, Powers CM: Hip Muscle Activation in Persons with PFP During the Side-Step Exercise: Is Resistance Important? XXIInd Congress of the ISEK, Dublin, Ireland. 2018
- **Selkowitz DM**: Electrotherapy for Muscle Strengthening: Evidence and Parameter Settings. 2-hour Educational Session. CSM of the APTA, New Orleans, LA. 2018
- **Selkowitz DM**, Beneck GJ, Powers CM: Comparison of Different Positions for Eliciting Maximum EMG Activity of the Gluteal Muscles in Persons with PFP: Implications for EMG Normalization. 5th International Patellofemoral Pain Research Retreat (iPFRR), Gold Coast, Australia. 2017
- **Selkowitz DM**, Beneck GJ, Robinson C, Powers CM: Hip Muscle Activation in Persons with PFP During the Clam Exercise: Is Resistance Important? 5th iPFRR, Gold Coast, Australia. 2017
- **Selkowitz DM**, Beneck GJ, Mithbavkar P, Powers CM: Differences in Hip Muscle Activation between Persons with and without PFP during Side-Step Exercise Using Elastic Resistance. CSM of the APTA, Anaheim, CA, 2016; and 4th iPFRR, Manchester, UK, 2015. 2016, 2015
- **Selkowitz DM**, Beneck GJ, Powers CM: Comparison among Different Positions for Maximizing Electromyographic (EMG) Activity of Selected Hip Muscles. XVIIth International Congress of the World Confederation for Physical Therapy (WCPT), Singapore. 2015

- **Selkowitz DM**, Beneck GJ, Bui M, Powers CM. (2014) Decreased Hip Muscle Activation in Persons With Patellofemoral Pain Compared to those Without Pain in Selected Therapeutic Exercises Recommended for Rehabilitation – Preliminary Findings Using Fine-Wire EMG. XXth Congress of the ISEK, Rome, Italy.
- **Selkowitz DM**. (2014) Rational Approach and Foundation for Parameter Settings in Electrotherapy - Part One. 2-hour Educational Session. CSM of the APTA, Las Vegas, NV.
- **Selkowitz DM**. (2014) A Rational Approach and Foundation for Parameter Settings in Electrotherapy - Part Two. 2-hour Educational Session. CSM of the APTA, Las Vegas, NV.
- **Selkowitz DM**, Beneck GJ, Bui M, Powers CM. (2013) Differences in Hip Muscle Activation between Persons with and without PFP during Common Therapeutic Exercises Recommended for Hip Strengthening. 3rd iPFRR, Vancouver, Canada.
- **Selkowitz DM**. (2013) Teaching, Learning, & Practicing Electrotherapy: Approaches to Content for Selecting Appropriate Parameters and Devices. 2-hour Educational Session. CSM of the APTA, San Diego, CA.
- **Selkowitz DM**. (2012) Beneck GJ, Powers CM: Comparison among different maximum voluntary isometric contraction positions for maximizing EMG activity of selected hip muscles. Annual State Conference, California Physical Therapy Association (CPTA), Santa Clara, CA. **[2nd highest-rated abstract; 1 of 6 (out of more than 50) selected for podium presentation]**
- **Selkowitz DM**, Beneck GJ, Powers CM. (2012) Activation of hip muscles detected with fine-wire electrodes during four common therapeutic exercises in persons with patellofemoral pain. XIXth Congress of the ISEK, Brisbane, Australia.
- **Selkowitz DM**. (2012) A User-Friendly Framework for Evidence-Based Decision-Making in Electrotherapy: Part One. 2-hour Educational Session. CSM of the APTA, Chicago, IL.
- **Selkowitz DM**. (2012) A User-Friendly Framework for Evidence-Based Decision-Making in Electrotherapy: Part Two. 2-hour Educational Session. CSM of the APTA, Chicago, IL.
- **Selkowitz DM**. (2012) A User-Friendly Framework for Evidence-Based Decision-Making in Electrotherapy: Part Three, added 2-hour Lab workshop session. CSM of the APTA, Chicago, IL.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2011) Hip Muscle Activation in Persons with Patellofemoral Pain during Therapeutic Exercise: A Pilot Study Using Fine-Wire Electrodes. Annual State Conference, CPTA, Oakland, CA. **[2nd highest-rated abstract; 1 of 6 (out of more than 50) selected for podium presentation]**
- **Selkowitz DM**, Beneck GJ, Zonca R, Powers CM. (2010, 2010) Using Fine-Wire versus Surface Electrodes to Quantify the Amplitude of the Myoelectric Signal of Hip Musculature during Therapeutic Exercise. XVIIIth Congress of the ISEK, Aalborg, Denmark; and at Annual State Conference, CPTA, Oakland, CA. **[Highest-rated abstract; 1 of 5 (out of 50) selected for podium presentation]**
- **Selkowitz DM**, Beneck GJ, Powers CM. (2010) Difference in EMG Activation between Superior and Inferior Fibers of Gluteus Maximus during Therapeutic Exercises. CSM of the APTA, San Diego, CA.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2009) Which Exercises Target the Gluteal Muscles While Limiting Activation of the Tensor Fascia Lata? EMG Assessment Using Fine Wire Electrodes. Annual State Conference, CPTA, Pasadena, CA. **[Conference Award Winner, Best Research Podium Presentation]**

- **Selkowitz DM**, Souza RB, Powers CM. (2009) The Effect of Femoral Strapping on Lower Extremity Kinematics and Pain Response in Females with Patellofemoral Pain. 1st iPFRR, Baltimore, MD.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2009) Which Exercises Target the Gluteal Muscles While Limiting Activation of the Tensor Fascia Lata? EMG Assessment Using Fine Wire Electrodes. CSM of the APTA, Las Vegas, NV.
- **Selkowitz DM**, Beneck GJ, Powers CM. (2008) The Effects of Various Hip Exercises on the Activation of Hip Musculature: An Investigation Using Indwelling Fine-Wire Electrodes. XVIIth Congress of the ISEK, Niagara Falls, Ontario, Canada.
- **Selkowitz DM**, Chaney C, Vlad G, Stuckey S. (2004) The Effects of Scapular Taping on the Surface EMG Activity of Shoulder Girdle Muscles During Upper Extremity Elevation in Individuals with Shoulder Impingement Syndrome. XVth Congress of the ISEK, Boston, MA.
- **Selkowitz DM**, Knaflitz M, Bonato P. (2002) The Effect of External Supports on the Amplitude of the Surface EMG Signal Recorded from Lumbar Spine Muscles During Maintenance of a Forward-Flexed Posture. XIVth Congress of the ISEK, Vienna, Austria.
- **Selkowitz DM**, Knaflitz M, Bonato P. (2001, 2001) Effect of External Support on Surface Electromyography of the Lumbar Spine Musculature During Maintenance of Forward Flexion. 2001 Annual Conference and Exposition of the APTA, Anaheim, CA; and CSM of the APTA, San Antonio, TX.
- **Selkowitz DM**, Cameron M, Wain P, Gibler S. (1998) Electrical Conductance of Wound Dressings Used in the Treatment of Full-Thickness Wounds. CSM of the APTA, Boston, MA.
- **Selkowitz DM**. (1994) Use of a Spine Support to Allow Performance of Tasks in Forward-Bent Positions in People with Low Back Dysfunction and Pain. Canadian Physiotherapy Association (CPA)/APTA Joint Congress, Toronto, Canada.
- **Selkowitz DM**. (1991) The Sympathetic Nervous System in Neuromotor Function and Dysfunction. XIth International Congress of the WCPT, London, UK.
- **Selkowitz DM**. (1990) The Function and Dysfunction of the Interrelationship of the Sympathetic Nervous System and the Neuromuscular System. Annual State Conference, CPTA, Oakland, CA.

Poster Presentations:

- Liu J, Teng H-L, **Selkowitz DM**, Asavasopon S, Powers CM. (2017) Which Hip Extension Testing Position Results in the Highest Torque Production of the Gluteus Maximus While Minimizing the Torque Production of the Hamstrings? Combined Sections Meeting (CSM) of the American Physical Therapy Association (APTA), San Antonio, TX, February 18, 2017
- Selkowitz DM**, Beneck GJ, Powers CM. (2016) Comparison among Different Maximum Voluntary Isometric Contraction Positions for Maximizing Electromyographic (EMG) Activity of Selected Hip Muscles. CSM of the APTA, Anaheim, CA.
- Selkowitz DM**, Beneck GJ, Powers CM. (2015) Preliminary Investigation of Onset of EMG (Electromyographic) Activation of Selected Hip Muscles in Persons With And Without Patellofemoral Pain (PFP). XVIIth International Congress of the World Confederation for Physical Therapy (WCPT), Singapore.
- Selkowitz DM**, Beneck GJ, Powers CM. (2011) Hip Muscle Activation in Persons with Patellofemoral Pain during Therapeutic Exercise: A Pilot Study Using Fine-Wire Electrodes. Patellofemoral Pain Syndrome: Proximal, Local and Distal Factors, An International Research Retreat. 2nd International Patellofemoral Research Consortium Retreat (iPFRR), Ghent, Belgium. [Interactive Poster]

- **Selkowitz DM**, Souza RB, Powers CM. (2009) The Effect of Femoral Strapping on Lower Extremity Kinematics and Pain Response in Females with Patellofemoral Pain. Annual State Conference, California Physical Therapy Association (CPTA), Pasadena, CA.
- Souza R, **Selkowitz D**, Powers C. (2007) The Effect of Femoral Strapping on Pain Response, Hip Rotation, and Gluteus Maximus Activation in Persons with Patellofemoral Pain. XVth International Congress of the WCPT, Vancouver, Canada. **[speaker]**
- Yamada K, Lewthwaite R, Popovich J, Beneck G, **Selkowitz D**, Kulig K. (2007) The Low Back Activity Confidence Scale (LoBACS): Development, Test-Retest Reliability, and Preliminary Validation. CSM of the APTA, Boston, MA.
- **Selkowitz DM**, Rossman E, Fitzpatrick S. (2006) Effect of Alternating Current Carrier Frequency on Knee Extension Torque and Current Amplitude. XVIth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Torino, Italy.
- Legaspi R, Chaney C, **Selkowitz D**, Bonomo G, Stuckey S, Bailey M. (2001) The Influence of Scapular Taping on the Upper and Lower Trapezius Muscles During Upper Extremity Elevation in the Scapular Plane and During a Functional Task. Southwest American College of Sports Medicine Annual Meeting, Salt Lake City, UT.
- **Selkowitz DM**, Cameron M, Wolfe R, Mainzer A. (1999) The Efficacy of Pulsed Low Intensity Ultrasound for the Acceleration of Wound Healing of a Stage III Pressure Ulcer in a Geriatric Patient. A Single-Case Design. Annual Conference and Exposition of the APTA, Washington, DC.
- **Selkowitz DM**, Knaflitz M, Bonato P. (1999) Effects of External Support Devices and Posture on Myoelectric Activity of the Lumbar Spine Musculature. Repeatability and Preliminary Findings. Annual Conference and Exposition of the APTA, Washington, DC.
- **Selkowitz DM**, Knaflitz M, Bonato P. (1998) The Effects of an Elasticized Lumbosacral Corset and Posture on Myoelectric Activity of the Lumbar Spine Musculature. Repeatability and Preliminary Findings. XIIth Congress of the ISEK, Montreal, Canada.

Invited Presentations

International (Invited)

- **Selkowitz DM:** Focus and Update on Lower Limb Pathomechanics, Patellofemoral Pain, & Hip Muscle Activation during Exercise: "Connecting the Dots", University of Antwerp, Belgium. 2022
- **Selkowitz DM:** Background & Recent Research Agenda on Musculoskeletal Factors of Lower Extremity Pathokinesiology & Associated Interventions Casting a Net for Potential Collaborators, Politecnico di Torino, Italy. 2022
- **Selkowitz DM:** The Effects of Selected Therapeutic Exercises on EMG Activity of the Hip Musculature Investigated Using Fine-Wire Electrodes - Clinical and Research Considerations, Rizzoli Orthopedic Institute, Bologna, Italy. 2014
- **Selkowitz DM:** The Sympathetic Nervous System in Neuromotor Dysfunction and Pain, and a Rationale for and Clinical Experience with Physiotherapeutic and Medical Interventions. Societa Italiana di Neurologica, 6th Riunione del Gruppo di Studio sul Sistema Nervoso Vegetativo, Pavia, Italy. 1991
- **Selkowitz DM:** A Discussion of Training Regimen Parameters and Measurements of Quadriceps Femoris Strengthening Using Electrical Stimulation; and, Knee Rehabilitation Programs Using EMS. Post-Conference Symposium of the Xth WCPT Conference on Exercise and Rehabilitation, Perth, Western Australia. 1987

National (Invited)

- **Selkowitz DM.** Pain Control. In: Freeman L, **Selkowitz DM**, Herziger C, Baxter D, Belanger A, Ochoa S, Watson T: Biophysical Agents: What's with the Opposition? Come Ask the Experts. 2-hour Educational Session. Combined Sections Meeting (CSM) of the American Physical Therapy Association (APTA), Virtual. **(Canceled due to COVID-19-related organizational issues)** 2021, 2022
- **Selkowitz DM.** Evidence-Based Practice of Electrotherapy: Foundations, Strengthening, & Pain Control. In: Freeman L, Herziger C, Ochoa S, **Selkowitz DM:** Show Me the Value: Evidence-Base for Biophysical Agents in Post-Acute Practice. Pre-Conference Course, CSM of the APTA, Washington, DC. 2019
- **Selkowitz DM:** The Evidence for Strengthening. In: Greco J, Cesiro J, Conroy C, **Selkowitz DM:** Biophysical Agents: Linking the clinic, classroom and current evidence. 2-hour Educational Session. CSM of the APTA, San Antonio, TX. 2017
- **Selkowitz DM:** Stimulating Denervated Muscle: Should We or Shouldn't We? At: Show Me the Money: Applying the Evidence for Electrophysical Agents to Clinical Practice. CSM of the APTA Pre-Conference Symposium, sponsored by the World Confederation of Physical Therapy's (WCPT) International Society for Electrophysical Agents in Physical Therapy, Las Vegas, NV. 2014
- **Selkowitz DM:** Electrotherapy for the Treatment of Denervated Muscle. Aegis Ask the Expert Call Series, Aegis Therapies Clinical Services. (Webinar) 2013
- **Selkowitz DM:** Physiology of Denervation & Evidence for Use of Electrotherapy. In: Gersh G, Conroy C, **Selkowitz DM:** To Stim or Not to Stim: The Role of Electrical Stimulation in the Treatment of Muscle Denervation. 2-hour Educational Session. CSM of the APTA, San Diego, CA. 2013
- **Selkowitz DM:** Electrical Stimulation for Enhancing Strength of Denervated Muscle. 1st Congress of the International Society of Electro-Physical Agents, CSM of the APTA (Pre-Conference Symposium), Las Vegas, NV. 2009
- **Selkowitz DM:** Management of Musculoskeletal Disorders. 4th Symposium on Electrotherapy/Electrophysiology for Physical Therapy Educators and Clinicians, Pre-Conference Course of the CSM of the APTA, Nashville, TN. 2004
- **Selkowitz DM:** Issues in Selecting and Entering Articles for the HOE Project: NMES. 2003 CSM of the APTA, Tampa, FL. 2003
- **Selkowitz DM:** High Frequency Electrical Stimulation in Muscle Strengthening. CSM of the APTA, Anaheim, CA, February 1986. 1986

Regional (Invited)

- **Selkowitz DM.** Electrotherapy: Foundations Applied to NMES for Strengthening. Spaulding Rehab Hospital In-Patient Department, Charlestown, MA. (2 sessions) 2019
- **Selkowitz DM.** Electrotherapy for Muscle Strengthening: Evidence and Parameter Settings. Nevada Chapter of the APTA, Las Vegas, NV. 2019
- **Selkowitz DM.** An Example of the Evidence-Basis for Electrotherapy: Muscle Strengthening. University of Nevada-Las Vegas Department of Physical Therapy. 2019
- **Selkowitz DM.** Lower Extremity Exercise, Hip Muscle Activation, Pathomechanics, & Patellofemoral Pain: What's the Connection? APTA MA Chapter Annual Conference, Norwood, MA. 2018
- **Selkowitz DM:** NMES for Strengthening: Evidence-Based Decision-Making. California Physical Therapy Association (CPTA) Greater Los Angeles District (GLAD) Meeting, Los Angeles, CA. 2012
- Chaney C, **Selkowitz DM**, Warneke J, Vlad G, Bailey M: A Preliminary Report on the Effects of Scapular Taping on EMG of Shoulder Girdle Musculature During "Scaption" and a Functional Task. Annual State Conference, CPTA, Sacramento, CA. 2003

Technology Development

Patent

- Spine Sling Support, U.S. patent #5601527, issue date February 11, 1997. 1997

Devices and software applications

- Produced and co-edited videos on GPM-V (High Velocity Low Amplitude Manual Therapy Techniques) for continuing professional PT education course and entry-level DPT course, 2008-present 2008-present
- Produced videos for entry-level courses on evaluation and management of musculoskeletal dysfunction, 1993-present 1993-present
- Produced and co-edited videos on Gait for entry-level DPT course, 2008-2013 2008-2013
- Co-Wrote and Co-Produced Professionally-Made Videotape, Orthopedic Evaluation of Shoulder Joint (on colleague's grant from Samuel Merritt College Curriculum and Instruction Development Grant), 1997-8. 1997-8

Educational Activities

Courses taught

Recent Teaching Responsibilities (MGHIHP)

- Lumbar Spine – PT 606 (current)	2017-22
- Upper Extremity – PT 709 (current)	2019-22
- Electrotherapy Curriculum Thread – PT 671, 606, 607, 709 (current)	2015-22
- Capstone Projects (1-2/year) (current)	2016-22
- Spring Comprehensive and Curricular Comprehensive Exams Faculty (current)	2017-21
- Orthopedic Residency, Cervical, Thoracic, Lumbar Spine (anatomy/kinesiology content)	2019
- Cervicothoracic Spine – PT 608	2017-19
- Clinical Management of Musculoskeletal Disorders: Extremities – PT 671	2014-16
- Examination and Treatment of Upper & Lower Extremity Dysfunction – PT 642 (MS international student program)	2014-16
- Introduction to Patient Client Management Framework – PT 865 (MS program)	2014-16
- Therapeutic Exercise Lab – PT 659	2014-16

Clinical supervision

- Physical Therapy Supervisor, MPI (now Summit) Sports Medicine and Orthopedic Rehabilitation, Oakland, CA, 1982-1988	1982-1988
---	-----------

External Educational Activities

Continuing Education Courses/Workshops Taught: (* peer-reviewed) († invited)

- Evidence-Based Practice of Electrotherapy: Foundations & Pain Control. In: **Selkowitz DM**, Freeman L, Herziger C, Ochoa S: Show Me the Value: Evidence-Based Clinical Decision-Making for & Application of Biophysical Agents: Pain Management. Pre-Conference Course, Combined Sections Meeting of the APTA, Denver, CO, 2/12/20. * 2020
- Evidence-Based Practice of Electrotherapy: Foundations, Strengthening, & Pain Control. In: Freeman L, Herziger C, Ochoa S, **Selkowitz DM**: Show Me the Value: Evidence-Base for Biophysical Agents in Post-Acute Practice. Pre-Conference Course, Combined Sections Meeting of the APTA, Washington, DC, January 22-23, 2019. * † 2019
- User-Friendly Electrotherapy: A Framework for Selecting Parameters and Devices, Days 1 & 2. Academy of Clinical Electrophysiology and Wound Management (ACEWM) Pre-Conference Course, Combined Sections Meeting (CSM) of the APTA, San Antonio, TX, February 14-15, 2017 * 2017
- Evidence-Based Practice of Electrotherapy: From Parameter Settings, to Treatment Uses, to Device Selection. Academy of Clinical Electrophysiology and Wound Management (ACEWM) Pre-Conference Course, Combined Sections Meeting (CSM) of the APTA, Anaheim, CA, February 16-17, 2016 (expanded, 1.5-day course) * 2016
- Evidence-Based Practice of Electrotherapy: From Parameter Settings, to Treatment Uses, to Device Selection. Section on Clinical Electrophysiology and Wound Management (SCEWM) Pre-Conference Course, CSM of the APTA, Indianapolis, IN, February 4, 2015 * 2015
- Spending a Day with Master Clinicians – The Richard Erhard Memorial Symposium, Oakland, CA, 10/3/10, T. Davenport, R. Landel, C. Lewis, Y. Ghandour (D. Selkowitz, moderator) † 2010
- Teaching & Performing Grade V Mobilization: An Evidence-Based Approach to the Cervical and Upper Thoracic Regions, Ithaca College, Rochester, NY, February 6-7 & March 7, 2010 † 2010
- Teaching & Performing Grade V Mobilization: An Evidence-Based Approach, Ithaca College, Rochester, NY, February 4-5 & March 6, 2010 † 2010
- Teaching & Performing Grade V Mobilization: An Evidence-Based Approach, Ithaca College, Rochester, NY, June 14-15 & July 12, 2008 † 2008
- Hooked on Electrotherapy (and Other Selected Modalities): A User-Friendly Approach to Clinical Practice, Western University of Health Sciences, Pomona CA, February 2004 (organized course; taught 3.5 of 4 days solo for electro portion) * † 2004
- 4th Symposium on Electrotherapy/Electrophysiology for Physical Therapy Educators and Clinicians, Pre-Conference Course of the 2004 CSM of the APTA, Nashville, TN, February 2004; Lead faculty for Management of Musculoskeletal Disorders workshop section, co-instructor for various other sessions * † 2004
- A Rational Approach to the Use of Electrical Stimulation in Physical Therapy. Franceschi and Heintzelman Physical Therapy, San Rafael, CA, October and December 1997 † 1997

- Ultrasound, Electrical Stimulation, and Modalities and Wound Healing, Reno, NV, Lab instructor; M. Cameron primary instructor. November 1997 †
- 15th Anniversary of the Kaiser Hayward Orthopedic Manual Therapy Residency Program, Spinal Anatomy Cadaver Dissection with Lance Twomey; for instructors and current residents in the program. Samuel Merritt College, Oakland, CA, assistant lab instructor; Lance Twomey primary course instructor, May 1996 †
- A Rational Approach to the Use of Electrical Stimulation in Physical Therapy. (in-service) SHARE, Oakland, CA, April – June 1995 †
- Evaluation and Treatment of the Lumbar Spine. Folsom Physical Therapy, Folsom, CA, assistant lab instructor; Tim McGonigle primary course instructor, June 1993 †
- Musculoskeletal Spine Evaluation. A Physical Therapy Approach. Oak Knoll Naval Hospital Anesthesiology Department, Oakland, CA, May 1992 †
- Electrical Stimulation for Muscle Strengthening. University of California-San Francisco Curriculum in Physical Therapy, San Francisco, CA (presented to faculty) May 1989 †
- Basic Kinesiology. Aerobic Dance Instructors Workshop, California State University at Hayward, February 1986 †

Mentoring

Doctoral (PhD) Students

- Asavasopon S, Loma Linda University, PhD Research Mentor 2008-10

Advanced Master's (MS) Students

- Drashti Shah, MGHHP Advanced Master's Degree, Research Mentor
- Hiral Maru, MGHHP Advanced Master's Degree, Research Mentor
- Prajakta Mithbavkar, MGHHP Advanced Master's Degree, Research Mentor 2016
2015
2014

Orthopedic Residents

- Chris Poirier, MGHHP Clinical Residency in Orthopedics, Research Mentor 2018-19
- Jessica Ford, MGHHP Clinical Residency in Orthopedics, Research Mentor 2017-18
- Matthew Devine, MGHHP Clinical Residency in Orthopedics, Research Mentor 2017-18
- Carrie Robinson, MGHHP Clinical Residency in Orthopedics, Research Mentor 2016-17
- Lynn Gray-Meltzer, MGHHP Clinical Residency in Orthopedics, Research Mentor 2015-16
- Stacie Lue, MGHHP Clinical Residency in Orthopedics, Research Mentor 2014

Clinical Innovations and Quality Improvement Projects

Invention:

- Spine Sling Support, U.S. patent #5601527, issue date February 11, 1997.
Device designed to support person while working in a forward-bent position, to decrease compressive forces on the spine. Research demonstrated a decrease in lumbar muscular activity compared to elasticized lumbosacral support and to no external/added support.

Instructional Videotape:

- Produced and co-edited videos on GPM-V (High Velocity Low Amplitude Manual Therapy Techniques) for continuing professional PT education course and entry-level DPT course, 2008-present
- Produced videos for entry-level courses on evaluation and management of musculoskeletal dysfunction, 1993-present
- Produced and co-edited videos on Gait for entry-level DPT course, Western University of Health Sciences, 2008-2013
- Co-Wrote and Co-Produced Professionally-Made Videotape, Orthopedic Evaluation of Shoulder Joint (on colleague's grant from Samuel Merritt College Curriculum and Instruction Development Grant), 1997-8.

Curriculum:

- Adapt course content, organization, and delivery to conditions created by COVID-19 pandemic, including completely virtual and hybrid courses, including use of Zoom and Flipgrid to create student and faculty videos and projects, 2020-21

Professional Development

Professional Development

- EMG & Nerve Studies – A Clinical Applications Webinar, D. Kostopoulos, October 28, 2020 (webinar)	2020
- Neurofascia Revealed: A Concept Beyond Neuromobilization. D. Kostopoulos, October 24, 2020 (virtual course)	2020
- XXIII rd Virtual Congress of the International Society of Electrophysiology and Kinesiology (ISEK), (Japan-based organizers), July 12-14, 2020 (numerous educational/scientific/clinical programs and presentations)	2020
- 2020 CSM of the APTA, Denver, CO, 2/12-1/20 (educational/scientific/clinical programs and presentations)	2020
- 2019 CSM of the APTA, Washington, DC, 1/22-23/19 (presentations on biophysical agents)	2019
- Massachusetts Chapter of the APTA (APTAMA) Annual Conference, October 2018 (educational/scientific/clinical programs and presentations)	2019
- XXII nd Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Dublin, Ireland, June 29-July 2, 2018 (numerous educational/scientific/clinical programs and presentations)	2018
- 2018 CSM of the APTA, New Orleans, LA, 2/21-24/18 (numerous educational/scientific/clinical programs and presentations)	2018
- Massachusetts Chapter of the APTA (APTAMA) Annual Conference, November 2017 (educational/scientific/clinical programs and presentations)	2017
- 2017 CSM of the APTA, San Antonio, TX, 2/14-18/17 (numerous educational/scientific/clinical programs and presentations)	2017
- 5 th International Patellofemoral Pain Research Retreat, Gold Coast, July, August 18-20, 2017 (numerous educational/scientific/clinical programs and presentations)	2017
- 2016 CSM of the APTA, Anaheim, CA, 2/17-20/16 (numerous educational/scientific/clinical programs and presentations)	2016
- Massachusetts Chapter of the APTA (APTAMA) Annual Conference, November 2015 (educational/scientific/clinical programs and presentations)	2015
- 4 th International Patellofemoral Pain Research Retreat, Manchester, UK, September 2-4, 2015 (numerous educational/scientific/clinical programs and presentations)	2015
- XVII th International Congress of the World Confederation for Physical Therapy (WCPT), Singapore, May 1-4, 2015 (numerous educational/scientific/clinical programs and presentations)	2015
- Team-Based Learning, MGHHP, Charlestown, MA, August 27-28, 2014, L. Michaelsen	2014
- XX th Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Rome, Italy, July 15 –18, 2014 (numerous educational/scientific/clinical programs and presentations)	2014
- 2014 CSM of the APTA, Las Vegas, NV, 2/3-6/14 (numerous educational/scientific/clinical programs and presentations)	2014

- Spending a Day with Master Clinicians – The 4th Annual Richard Erhard Memorial Symposium, Pasadena, CA, 9/22/13, S. Asavasapon, M. Leal, D. Kirages
- Annual State Conference, CPTA, Pasadena, CA, 9/20-21/13 (numerous educational/scientific/clinical programs and presentations)
- 3rd International Patellofemoral Research Retreat, Vancouver, Canada, September 18-20, 2013 (numerous educational/scientific/clinical programs and presentations)
- American Heart Association Health Care Provider Certification in Basic Life Support (CPR & AED), 3/6/13 (through 03/2015), D. Najera
- 2013 CSM of the APTA, San Diego, CA, 1/21-24/13 (numerous educational/scientific/clinical programs and presentations)
- Movement System Impairment Syndromes of the Lumbar Spine and Hip: Interactions and Evidence, Western University of Health Sciences, Pomona, CA 11/3-4/12, S. Sahrmann
- Recent Developments in Pain Sciences and Implications for Clinical Practice, Mount St. Mary's College, Los Angeles, CA, 10/16/12, L. Moseley
- Spending a Day with Master Clinicians – The 3rd Annual Richard Erhard Memorial Symposium, Long Beach, CA, 9/29/12, M. Brame, M. Merrill, A. Kachingwe
- Annual State Conference, CPTA, Santa Clara, CA, 9/27-28/12 (numerous educational/scientific/clinical programs and presentations)
- XIXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Brisbane, Australia, July 19-21, 2012 (numerous educational/scientific/clinical programs and presentations)
- Academic Boot Camp, Center for Academic and Professional Enhancement (CAPE), Western University of Health Sciences, July 11-13, 2012
- Physical Agents, CPTA GLAD Meeting, Los Angeles, CA, June 21, 2012
- 2012 CSM of the APTA, Chicago, IL, 2/9-12/12 (numerous educational/scientific/clinical programs and presentations)
- Spending a Day with Master Clinicians – The 2nd Annual Richard Erhard Memorial Symposium, Long Beach, CA, 9/24/11, R. Seivert, C. Frank, J. Tonley
- Annual State Conference, CPTA, Long Beach, CA, 9/22-23/11 (numerous educational/scientific/clinical programs and presentations)
- Patellofemoral Pain Syndrome: Proximal, Local and Distal Factors, An International Research Retreat. International Patellofemoral Research Consortium, Ghent, Belgium, August 31 – September 2, 2011 (numerous educational/scientific/clinical programs and presentations)
- Recent Developments in Pain Sciences and Implications for Clinical Practice, Mount St. Mary's College, Los Angeles, CA, 10/16/12, L. Moseley
- Spending a Day with Master Clinicians – The 3rd Annual Richard Erhard Memorial Symposium, Long Beach, CA, 9/29/12, M. Brame, M. Merrill, A. Kachingwe
- Annual State Conference, CPTA, Santa Clara, CA, 9/27-28/12 (numerous educational/scientific/clinical programs and presentations)
- XIXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Brisbane, Australia, July 19-21, 2012 (numerous educational/scientific/clinical programs and presentations)
- Academic Boot Camp, Center for Academic and Professional Enhancement (CAPE), Western University of Health Sciences, July 11-13, 2012
- Physical Agents, CPTA GLAD Meeting, Los Angeles, CA, June 21, 2012

- 2012 CSM of the APTA, Chicago, IL, 2/9-12/12 (numerous educational/scientific/clinical programs and presentations)
- Spending a Day with Master Clinicians – The 2nd Annual Richard Erhard Memorial Symposium, Long Beach, CA, 9/24/11, R. Seivert, C. Frank, J. Tonley
- Annual State Conference, CPTA, Long Beach, CA, 9/22-23/11 (numerous educational/scientific/clinical programs and presentations)
- Patellofemoral Pain Syndrome: Proximal, Local and Distal Factors, An International Research Retreat. International Patellofemoral Research Consortium, Ghent, Belgium, August 31 – September 2, 2011 (numerous educational/scientific/clinical programs and presentations)
- CPTA Physical Therapy Legislative Day, Sacramento, CA, 3/23/11, J. Syms et al.
- American Heart Association Health Care Provider Certification in Basic Life Support (CPR & AED), 3/9/11 (through 03/2013), D. Najera
- 2011 CSM of the APTA, New Orleans, LA, 2/9-12/10 (numerous educational/scientific/clinical programs and presentations)
- Spending a Day with Master Clinicians – The Richard Erhard Memorial Symposium, Oakland, CA, 10/3/10, T. Davenport, R. Landel, C. Lewis, Y. Ghandour
- Annual State Conference, CPTA, Oakland, CA, 10/1-2/10 (numerous educational/scientific/clinical programs and presentations)
- XVIIIth Congress of the ISEK, Aalborg, Denmark, June 16 –19, 2010, (numerous educational/scientific/clinical programs and presentations)
- California Practice Act Update (CA Ethics CEU licensure requirement – 2 hrs), San Gabriel Valley District Meeting, Los Angeles, CA 4/21/10, C. Resnik & M. Simpson
- 2010 CSM of the APTA, San Diego, CA, 2/17-20/10 (numerous educational/scientific/clinical programs and presentations)
- Integrating Modern Pain Science with Clinical Practice, Los Angeles, CA, 2/13-14/10, G.L. Moseley
- Spending a Day with Master Clinicians, Pasadena, CA, 10/1/09, Y. Brody, Y. Ghandour, R. Landel, L. Meyer
- Annual State Conference, CPTA, Pasadena, CA, 10/2-3/09 (numerous educational/scientific/clinical programs and presentations)
- Advanced Manual Therapy with Olaf Evjenth, Folsom, CA, 5/16-17/09, O. Evjenth
- [attendance by invitation only for advanced clinicians]**
- International Patellofemoral Pain Syndrome Research Retreat, International Patellofemoral Research Consortium, Baltimore, MD, April 30 – May 2, 2009 (numerous educational/scientific/clinical programs and presentations)
- Screening for Medical Referral: Musculoskeletal Complaints and Conditions, APTA, Western University of Health Sciences, Pomona, CA, 4/18-19/09, W. Boissonnault
- 2009 CSM of the APTA, Las Vegas, NV, 2/9-12/09 (numerous educational/scientific/clinical programs and presentations)
- 1st Congress of the International Society of Electro-Physical Agents, CSM of the APTA (Pre-Conference Symposium), Las Vegas, NV, February 8-9, 2009
- Annual State Conference, CPTA, Oakland, CA, 9/26-27/08 (numerous educational/scientific/clinical programs and presentations)
- XVIIth Congress of the ISEK, Niagara Falls, Ontario, Canada, June 18 – 21, 2008, (numerous educational/scientific/clinical programs and presentations)
- A Special Course with Olaf Evjenth, Folsom, CA, 4/18-20/08, O. Evjenth
- [attendance by invitation only for advanced clinicians]**

- Advanced Manual Therapy Techniques for the Spine: Mobilization/Manipulation, Masterclass, USC, Los Angeles, CA, 3/17/08, P. Gibbons & P. Tehan
[attendance by invitation only for advanced clinicians]
- Advanced Manual Therapy Techniques for the Spine: Mobilization/Manipulation, Module 2, USC, Los Angeles, CA, 3/15-16/08 P. Gibbons & P. Tehan
[attendance by invitation only for advanced clinicians]
- Textbook Writing 101: Nuts and Bolts, Claremont Graduate University, Claremont, CA, 2/15/08, M. Spiegler
- 2008 CSM of the APTA, Nashville, TN, 2/6-9/08 (numerous educational/scientific/clinical programs and presentations)
- Examination and Selected Interventions of the Shoulder, APTA, Western University of Health Sciences, Pomona, CA, 12/8-9/07, G. Davies
- Advanced Manual Therapy Skills Development with Olaf Evjenth, Folsom, CA, 10/5-7/07, O. Evjenth **[attendance by invitation only for advanced clinicians]**
- Annual State Conference, CPTA, Los Angeles, CA, 9/28-29/07 (numerous educational/scientific/clinical programs and presentations)
- Mechanobiology of Articular Cartilage and Joints: Restoration by Regeneration and Rehabilitation, R. Sah.
- Advanced Cartilage MR Imaging and Bone Marrow MR Spectroscopy: Basic Principles, Technique Development and Clinical Applications, X Li. California Research Special Interest Group Retreat, Los Angeles, CA, 9/27/07
- XVth International Congress of the World Confederation for Physical Therapy (WCPT), Vancouver, Canada, June 2-6, 2007 (numerous educational/scientific/clinical programs and presentations)
- 2007 CSM of the APTA, Boston, MA, 2/14-18/07 (numerous educational/scientific/clinical programs and presentations)
- Management of Cervical Disorders: A Mechanisms Based Approach, Samuel Merritt College, Oakland, CA, 2/10-11/07, G. Jull
- Teaching Grade V Mobilization: An Evidence Based Approach, Samuel Merritt College, Oakland, CA, 12/2-3/06, S. Bell, W. Diamond, I. Matsui, C. Tichenor **[I also presented on literature]**
- Annual State Conference, CPTA, San Jose, CA, 10/12-13/06 (numerous educational/scientific/clinical programs and presentations)
- Mechanobiology of Articular Cartilage and Joints: Restoration by Regeneration and Rehabilitation, California Research Special Interest Group Retreat, San Jose, CA, 10/12/06, R. Sah
- XVIth Congress of the ISEK, Torino, Italy, 6/28-7/1/06, (numerous educational/scientific/clinical programs and presentations)
- Spinal Manipulation Faculty Workshop, USC, Los Angeles, CA, 5/4/06, O. Evjenth
- Shoulder Syndromes: Assessment and Treatment, APTA, Pomona, CA, 4/23-24/06, L. Watson
- Local V Mobilization of the Spine, Los Angeles, CA, 3/9-10/06, P. Tehan, P. Gibbons
- 2006 CSM of the APTA, San Diego, CA, 2/01-05/06 (numerous educational/scientific/clinical programs and presentations)
- Pathomechanics, Surgical Interventions, Rehabilitation and Conditioning of the Overhead Throwing Shoulder and Elbow, Los Angeles, CA, 11/19/05, R. Escamilla **[I was also a course organizer]**

- Annual State Conference, CPTA, Ontario, CA, 10/21-24/05 (numerous educational/scientific/clinical programs and presentations)
- Southern California Conference on Biomechanics, Fullerton, CA, 4/22-23/05 (numerous scientific presentations)
- 2005 CSM of the APTA, New Orleans, LA, 2/23-27/05 (numerous educational/scientific/clinical programs and presentations)
- Annual State Conference, CPTA, Anaheim, October 2004 (numerous educational/scientific/clinical programs and presentations)
- Manipulation in First Professional Physical Therapist Programs – An Academic Faculty Workshop, Regis University, Denver, CO, 7/30-31/04, T. Flynn, J. Fritz, R. Wainner, et al.
- NIH 2004 Regional Seminar, Seattle, WA, 6/24-25/04, A. Coelho et al
- XIVth Congress of the ISEK, Boston, MA, 6/18-21/04, (numerous educational/scientific/clinical programs and presentations)
- NIH Grant Development Workshop, Pomona, CA, 5/19/04, A. Coelho et al
- 2004 CSM of the APTA, Nashville, TN, 2/4-8/04 (numerous educational/scientific/clinical programs and presentations)
- Stability Training: Isolation & Integration – How to Groove Functional Movement Patterns, Santa Monica, CA, 1/23/04, S. McGill et al
- Dissecting the Low Back Dilemma Within an Evidence Driven Environment: The Anatomy of the Lumbopelvic Region, The Anatomy of Practice, Linkages Between Clinical and Research Communities, Pomona, CA, 4/26/03, C. DeRosa, J. Porterfield
- Annual State Conference, CPTA, San Francisco, 9/27-28/02 (numerous educational/scientific/clinical programs and presentations)
- Developing Quality Multiple Choice Items for Your Examinations: A Workshop for PT and PTA Educators, San Diego, CA, 7/26-27/02, Federation of State Boards of Physical Therapy
- XIVth Congress of the ISEK, Vienna, Austria, 6/22-25/02, (numerous educational/scientific/clinical programs and presentations)
- Sharp Debridement of Wounds, Pomona, CA, 3/4-6/02, C. Sussman
- CSM of the APTA, Boston, MA, February 2002 (numerous educational/scientific/clinical programs and presentations)
- Leadership Academy, Center for Academic and Professional Enhancement, Western University of Health Sciences, Pomona, CA, February – May, 2002
- CORE21 Technology Forum Series: Fostering Entrepreneurs in the University Setting, University of California, Riverside, Extension, Riverside, CA, 1/24/02; (multiple presentations on technology, research, intellectual property, legal, business, and commercialization issues)
- Evaluation and Treatment of the Cervical Spine, Pomona, CA, 12/7/01, J. Jones, M. Seffinger, D. Redding
- Advanced Course – Patellofemoral Dysfunction: Examination & Treatment Methods, Pomona, CA, 4/21/01, K. Grace, A. Fonte
- CSM of the APTA, San Antonio, TX, 2/14-18/01 (numerous educational/scientific/clinical programs and presentations)
- Ortho-Bionomy, Oakland, CA, 11/13,14/99, A. Zuber, J. DeBettignies, et al.
- Annual Conference and Exposition of the APTA, Washington, DC, 6/5-8/99 (numerous educational/scientific/clinical programs and presentations)
- Examination in Physical Therapy Practice: Screening for Medical Disease, 4/9/99, W. Boissonault

- 18TH Annual Meeting of the Society for Physical Regulation in Biology and Medicine, Long Beach, CA, 11/11-14/98 (numerous educational/scientific/clinical programs and presentations)
- XIIth Congress of the ISEK, Montreal, Canada, 6/27-30/98 (numerous educational/scientific/clinical programs and presentations)
- CSM of the APTA, Boston, MA, 2/12-15/98 (numerous educational/scientific/clinical programs and presentations)
- Scientific Meeting and Exposition of the APTA, San Diego, CA, 5/29-6/2/97 (numerous educational/scientific/clinical programs and presentations)
- Annual State Conference, CPTA, San Francisco, CA, 10/25-26/96 (numerous educational/scientific/clinical programs and presentations)
- S-6: Course on spinal manipulation at the Orthopedic Manual Physical Therapy Residency Program in Physical Therapy, Oakland University, Michigan, 5/7-10/96, O. Evjenth, et al.
- [attendance by special invitation]**
- Emergency Department Care of Major and Minor Hand Problems (including dissection), 2/10/96, L. Gordon, et al.
- Differential Diagnosis in Physical Therapy, 6/3/95, C. Goodman
- Mobilization of the Nervous System: Level II, 11/19-20/94, D. Butler, H. Slater, et al.
- Canadian Physiotherapy Association (CPA)/APTA Joint Congress, Toronto, Canada 6/4-8/94 (numerous educational/scientific/clinical programs and presentations)
- Diagnosis and Treatment of Muscle Imbalances and Musculo-Skeletal Pain Syndromes: Level II, 3/12-13/94, S. Sahrmann
- The Lumbar Spine with Olaf Evjenth: New Concepts for Evaluation and Treatment, 5/21-24/93, O. Evjenth, et al.
- DPT Entry Colloquium, Institute of Physical Therapy, 5/3-8/93, S. Paris, B. May, C. Davis, B. Connolly, P. Loubert
- Mobilization of the Nervous System, 4/17-18/93, D. Butler, B. Guth
- Advanced Concepts in Foot and Ankle Dysfunction, 4/1-2/93, S. Reischl, J. De Bettignies
- A Biomechanical Approach to the Assessment and Treatment of the Pelvic Girdle, 2/27-28/93, D. Lee
- CSM of the APTA, San Antonio, TX 2/3-7/93 (numerous educational/scientific/clinical programs and presentations)
- Societa Italiana di Neurologica, 6th Riunione del Gruppo di Studio sul Sistema Nervoso Vegetativo, Pavia, Italy 9/20-21/91 (numerous educational/scientific/clinical programs and presentations)
- Muscle Stretching for the Spine, 5/31-6/3/91, O. Evjenth et al.
- Annual State Conference, CPTA, San Francisco, CA, 10/12-13/90 (numerous educational/scientific/clinical programs and presentations)
- Training the Patient With Low Back Dysfunction, 7/21-22/90, D. Morgan, M. Moore, et al.
- Muscle Stretching for the Spine, 6/14-17/90, O. Evjenth, et al.
- Diagnosis and Treatment of Movement System Imbalances Associated With Musculoskeletal Pain Syndromes, 3/31-4/1/90, S. Sahrmann
- Eccentric Muscle Exercise: A New Dimension in Exercise and Rehabilitation, 11/21/89, W. Stauber, S. Burkart
- Strain and Counterstrain, 8/25-27/89, L. Jones, R. Dalby, R. Kusunose
- S-2 Advanced Evaluation and Manipulation of the Pelvic, Lumbar, and Thoracic Spines, 11/17-20/88, S. Irwin, R. Nyberg

- Problem Solving in the Clinical Management of Patients With Upper Quarter Dysfunction, 2/27-28/88, A. Lee
- Treating the Spine as an Extremity, 1/29-31/88, A. Lee
- Australian Approach to Evaluation and Treatment of the Cervical Spine, 12/5-6/87, B. Stevens, M. Anderson, E. Scarpelli
- S-3 Advanced Evaluation and Manipulation of the Craniofacial, Cervical, and Upper Thoracic Spines, 10/1-4/87, S. Paris, S. Kraus
- Post-Conference Symposium of the Tenth WCPT Conference on Exercise and Rehabilitation, Perth, Australia, 5/29-30/87 (numerous educational/scientific/clinical programs and presentations)
- Tenth International Congress of the WCPT, including International Federation of Orthopedic Manipulative Therapy (IFOMT) meetings, Sydney, Australia, 5/17-22/87 (numerous educational/scientific/clinical programs and presentations)
- Training the Patient With Low Back Dysfunction, 3/13-14/87, M. Moore, D. Morgan, et al.
- Sequence Exercise Training, 2/27-28/87, P. Christensen, H. Gunnari
- Myofascial Release I, 12/6-8/86, J. Barnes
- Evaluation and Treatment of the Cervical Spine, 8/16-17/86, M. Moore, et al.
- Treating the Cervicals and Thoracic Cage – Direct and Indirect Technique, 3/21-23/86, L. Rex
- CSM of the APTA, Anaheim, CA, 2/7-8/86 (numerous educational/scientific/clinical programs and presentations)
- Evaluation and Treatment of the Thoracic Spine and Ribs, 1/10-12/86, M. Moore, et al.
- Podiatric Physical Therapy, 4/26-28/85, R. Donatelli, M. Wooden
- S-1 Introduction to Spinal Evaluation and Manipulation, 10/13-21/84, A. Lee
- Functional Electrical Stimulation Workshop, 9/29-30/84, L. Baker
- Acupressure Workshop, 6/2-3/84, A. Vertel
- Basic Orthopedic Radiology, 3/17/84, M. Dillingham, et al.
- Shoulder Rehab '84, 11/12-13/84, Burkart, et al.

Professional Memberships and Activities

- Board of Directors, California Physical Therapy Fund, 2004-present.
- State Assembly Representative, American Physical Therapy Association Massachusetts Chapter (APTAMA) North Metro District (NMD), 2017-2018, 2021-present
- Member, APTAMA NMD, 2014-present
- Co-Chair, Treatment of Patellofemoral Pain 2, Session 8, 5th International Patellofemoral Pain Research Retreat (iPFRR), Gold Coast, Australia, July 18-20, 2017
- Member, Standards Committee, International Society for Electro-Physical Agents (ISEPA), 2007-2015 (from inception)
- Council Member, International Society of Electrophysiology and Kinesiology (ISEK), 2008-2014 (3 consecutive terms).
- Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XXth Congress of the ISEK, Rome, Italy, July 15 –18, 2014
- Proposer & Founding Member, Vice Chairperson, California Orthopedic Manual Physical Therapy Special Interest Group (COMPTSIG) 2009-2013 (3 consecutive terms); including Chairperson of Nominating and Program Committees, and liaison of Executive Committee to these and the Research Committee; drafted & submitted proposal to create SIG, 2008.
- Chair, Biomechanics Platform Presentation Track, XIXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Brisbane, Australia, July 19 – 21, 2012
- Co-Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XIXth Congress of the ISEK, Brisbane, Australia, July 19 – 21, 2012
- Member, California Physical Therapy Association (CPTA) Education Committee, 2008-2010.
- Moderator, Spending a Day with Master Clinicians – The Richard Erhard Memorial Symposium, Oakland, CA, October 3, 2010.
- Member, International Scientific Committee & Awards Committee, XVIIIth Congress of the ISEK, Aalborg, Denmark, June 16 – 19, 2010
- Co-Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XVIIIth Congress of the ISEK, Aalborg, Denmark, June 16 – 19, 2010
- Member, California Academic and Residency Collaborative, (CAREC), (formerly Southern California Committee on Manipulation in Physical Therapy Education), 2005-2008 (from inception), Steering Committee (2007-2008).
- Chairperson, California Research Special Interest Group (CRSIG), 2004-2007 (2 consecutive terms).
- Chair, Abstract Review Committee and Presentation Awards Committee, CPTA Annual Conference, 2004-2007 (Consultant/Reviewer 2003-2008, 2010-2013)
- Chair, CRSIG Platform Presentation Session, CPTA Annual Conference, 2007.
- Member, CPTA Committee on Districts and Special Interest Groups, 2004-2006.

- Member, CRSIG; 2002-2012.
- Member, ISEK; 1998-2021.
- Member, American Academy of Pain Management; 1992-2020.
- Member, CPTA; 1986-2013.
- Member, APTA: Clinical Electrophysiology, Orthopedics, and Research Sections; 1986-present (Education Section 1997-1999).
- Member, American Academy of Orthopedic Manipulative Physical Therapy (AAOMPT), 2001-2003.
- Participant in "Hooked On Evidence" Retreat for CRSIG, Santa Barbara, CA, July 2001.

Reviewing & Consulting Activities

- | | |
|---|--|
| - International Panel of Experts, ElectroPhysical Forum [1 of 20] | 2016-present |
| - Journal Manuscript Reviewer, Physiotherapy Theory & Practice [personal requests from editor] | 2015-present
2011-present
2009-present |
| - Journal Manuscript Reviewer, Journal of Orthopedic & Sports Physical Therapy | 2008-present |
| - Journal Manuscript Reviewer, Journal of Neurologic Physical Therapy | 2006-present |
| - Journal Manuscript Reviewer, American Journal of Physical Medicine and Rehabilitation | 2017 |
| - Journal Manuscript Reviewer, Journal of Neuroengineering and Rehabilitation | 2015-2016
2011-2014 |
| - Co-Chair, Treatment of Patellofemoral Pain 2, Session 8, 5 th International Patellofemoral Pain Research Retreat (iPFRR), Gold Coast, Australia | 2014 |
| - Journal Manuscript Reviewer, Physiotherapy Canada | 2014 |
| - Journal Editorial Board Member, World Journal of Orthopedics | 2014 |
| - Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Rome, Italy. | 2012 |
| - Abstract Reviewer, XXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Rome, Italy | 2012 |
| - Chair, Biomechanics Platform Presentation Track, XIXth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), Brisbane, Australia. | 2012 |
| - Co-Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XIXth Congress of the ISEK, Brisbane, Australia. | 2010-11 |
| - Abstract Reviewer, XIXth Congress of the ISEK, Brisbane, Australia | 2011 |
| - Journal Creation Task Force, American Physical Therapy Association (APTA) Section on Clinical Electrophysiology, Electrotherapy, & Wound Management | 2008-10 |
| - Abstract Reviewer, XVIth Congress of the World Confederation for Physical Therapy (WCPT), Amsterdam, Netherlands | 2010 |
| - Reviewer, Continuing Education Course Applications for CEUs from the | 2010 |

California Physical Therapy Association (CPTA), for evidence basis	2010
- Scientific Committee Member, Abstract Reviewer, XVIIIth Congress of the ISEK, Aalborg, Denmark	2010
- Moderator, Spending a Day with Master Clinicians – The Richard Erhard Memorial Symposium, Oakland, CA.	2002-8
- Co-Chair, Physical Medicine & Rehabilitation Platform Presentation Track, XVIIIth Congress of the ISEK, Aalborg, Denmark.	2002-8
- Journal Manuscript Reviewer, Journal of Applied Biomechanics	2002-8
- Group Leader, “Hooked On Evidence” Sub-Committee for review of articles on electrical stimulation for strengthening in patients with ACL injuries	2003-8
- Group Member, “Hooked On Evidence” Sub-Committee for review of articles on scapular taping in patients with shoulder impingement	2008
- Group Leader, “Hooked On Evidence” Committee for review of articles on NMES for urinary incontinence.	2008
- Reviewer, “Hooked On Evidence” project.	2004-7
- Journal Manuscript Reviewer, Journal of Rehabilitation Medicine	2007
- Journal Manuscript Reviewer, Journal of Sport Rehabilitation	2006
- Journal Manuscript Reviewer, Clinical Medicine: Case Reports	2006
- Coordinator, Grant Proposal Reviews, California Physical Therapy Fund, Inc.	2006
- Chair, CRSIG Platform Presentation Session, CPTA Annual Conference.	2004
- Journal Manuscript Reviewer, Pain Journal	2003
- Journal Manuscript Reviewer, Research Quarterly for Exercise and Sport	2002
- Book Manuscript Reviewer, Prentice-Hall	1998-2001
- Co-Chair, two Physical Medicine & Rehabilitation Platform Presentation Sessions, XIVth Congress of the ISEK, Boston, MA	1992-2001
- Book Manuscript Reviewer, McGraw-Hill	1991-2001
- Participant in Retreat for CRSIG, Santa Barbara, CA.	2001
- Consultant/Member, Clinical Electrophysiology Section of the APTA Committee for Revision of Electrotherapy Terminology Monograph	2001
- Abstracter, Physical Therapy (Journal of the APTA).	1996
- Book Reviewer, Physical Therapy.	1995-6
- Participant in “Hooked On Evidence” Retreat for California Research Special Interest Group (CRSIG), Santa Barbara, CA.	1994
- Electrotherapy Consultant, Smith & Nephew, Inc.	1994
- Electrotherapy Consultant, DEM, Italy.	1992
- Electrotherapy Consultant, Fisioline s.n.c., Italy.	1990
- Book Manuscript Reviewer, Appleton & Lange.	
- Book Manuscript Reviewer, W.B. Saunders Co.	
- Electrotherapy Consultant, Chattanooga Corp.	
- Journal Manuscript Reviewer, European Journal of Clinical Investigation.	

Institutional Service

Service to MGH Institute of Health Professions (MGHIHP)

Service to the MGHIHP Department of Physical Therapy:

- Physical Therapy Club, 2021-present.
- Awards Committee, 2014-present; Chairperson, 2017-2021.
- Residency Admissions Committee, 2016-2019.
- MS Program Administration Committee, 2014-2016.
- MS Program Curriculum Committee, 2014-2016.

Participated in Development of Self-Study Report for DPT Degree Program for the Commission on Accreditation in Physical Therapy Education (CAPTE) of the APTA, 2014-2015.

Service to the Institute of Health Professions:

- Chair-elect, Faculty Senate, 2020-2021.
- Nominating Committee, Faculty Senate 2017-2021; co-Chair 2019-2021.
- Associate Dean of Nursing School Search Committee, 2017.

Service to Western University of Health Sciences (WUHS)

Service to the Department of Physical Therapy Education (DPTE):

- Participated in development of DPT curriculum, 1998-2000.
- Participated in MPT Applicant Interview Process, 1993-2000.
- Conducted Student Internship Site Visits, 1996-9.
- Consulted with committee on adoption, development, and implementation of Generic Abilities, 1999.
- Participated in Open House for Newly Admitted MPT Students, 1998.
- Conducted First Welcome and Information Session for Newly Admitted MPT Students, 1997.
- Member, Informed Consent Policy Committee, 1997.
- Participated in Development of Self-Study Report for MPT Degree Program for CAPTE of the APTA, 1997.

Service to the College of Allied Health Professions (CAHP) & University:

- WUHS Academic Senate, 2009-2013 (2 terms).
- WUHS Grievance Committee, 2003-2005, 2006-2008, 2010- 2013.
- CAHP Interprofessional Clinical Research Center Committee, & Environmental Scan Sub-committee, 2010-2012.
- WUHS Awards Committee, 2008-2009.
- CAHP Faculty Evaluation (Promotion & Tenure) Committee, 2001-2004, 2006-2007; Co-Chair, 2002; Chair, 2002-2004.
- WUHS Library Committee, 2001, 2006-2008.
- CAHP Search Committee for Chair of DPTE, 2005-2006.
- Center for Academic and Professional Development (CAPE) Committee for Faculty Development, 2005-2006.
- CAHP Bylaws Committee, 2005-2006.

- CAHP Faculty Handbook Committee, 2002-2006.
- CAHP Awards Sub-Committee, 2001-present.
- WUHS Research Advisory Council, 2001-2002.
- WUHS Instructional Technology Advisory Committee, 2001-2002.
- CAHP Student Academic Progression Committee, 2001.

Service to Samuel Merritt College (SMC)

Service to the Department of Physical Therapy (DPT):

- Participated in development of DPT curriculum, 1998-2000.
- Participated in MPT Applicant Interview Process, 1993-2000.
- Conducted Student Internship Site Visits, 1996-9.
- Consulted with committee on adoption, development, and implementation of Generic Abilities, 1999.
- Participated in Open House for Newly Admitted MPT Students, 1998.
- Conducted First Welcome and Information Session for Newly Admitted MPT Students, 1997.
- Member, Informed Consent Policy Committee, 1997.
- Participated in Development of Self-Study Report for MPT Degree Program for CAPTE of the APTA, 1997.

Service to the College (SMC):

- Member, Educational Policies Committee, 1993-2000.
- Member, Library Committee, 1994-2000.
- Chair, Ad Hoc Judicial Hearing Committees, 1997-2000.
- Member, Baldrige Leadership Committee, 1997-2000.
- Chair, Baldrige Leadership Committee Subgroup 1.2, 1997-2000.
- Member, Ad Hoc Grievance Hearing Committee, 1999.
- Consultant to Faculty Affairs Committee on development of Committee on Academic Integrity, Professionalism, and Honesty, 1999.
- Member, Physician Assistant Program Academic Coordinator Search Committee, 1998.
- Member, Library Director Search Committee, 1997.
- Chair, Code of Ethics Ad Hoc Committee, 1995-7.
- Chair, Educational Policies Committee, 1994-6.
- Member, Curriculum Committee, 1992-3.

Community Service

- Pro Bono Physical Therapy Clinical Consultation/Examination/Treatment, 1991-present
- Volunteer, Special Olympics of MA, Athlete screening and exercise prescription, 2016-2017, 2019
- Volunteer, MGHHP Community Day, Charlestown, MA, Community service & student supervision, 2015-2019
- APTAMA Day on the Hill, Participant in meeting with State Legislators, & APTAMA Movement Matters – Scope of Practice Day, Boston, MA, 2017, 2019
- Physical Therapy Faculty Mentor and Consulting (examination, treatment) Physical Therapist, Pomona Community Health Action Team (PCHAT), 2001-2013
- Participant in meeting with State Legislators, CPTA Physical Therapy Legislative Day, Sacramento, CA, March 23, 2011
- Staff Physical Therapist, pro bono, Western University of Health Sciences Department of Physical Therapy, San Dimas, CA, 2006, 2007