

Curriculum Vitae

Shawn C. Roll, PhD, OTR/L, RMSKS, FAOTA

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Academic Positions

University of Southern California, Chan Division of Occupational Science and Occupational Therapy

Associate Professor (Tenured), 2017 – Current

Director, PhD Program in Occupational Science, 2017 – Current

Assistant Professor, 2011 – 2017

The Ohio State University, School of Allied Medical Professions

Teaching/Research Assistant, 2007 – 2011

Education

The Ohio State University, 2011

Ph.D. in Health and Rehabilitation Sciences

Graduate Interdisciplinary Specialization in College and University Teaching

Dissertation: Relationship of ultrasonographic physiologic changes to personal factors and psychosocial stressors in the development and diagnosis of carpal tunnel syndrome. Advisor: Kevin D. Evans, PhD

The Ohio State University, 2006

M.S. in Allied Health Professions

Minor in Research Methods in Human Resources Development

Thesis: Discovery of interprofessional perceptions of Ohio bureau of workers' compensation vocational rehabilitation professionals during the provision of physical rehabilitation services for injured workers. Advisor: Sharon Flinn, PhD

The Ohio State University, 2002

B.S. in Allied Health Professions (Occupational Therapy), Magna Cum Laude with Distinction

Honors Thesis: Office ergonomics: A university departmental study. Advisor: Sandra Rogers, PhD

Licenses & Certifications

California Occupational Therapist # 12323 (Exp. 9/30/17)

Ohio Occupational Therapist # 5928 (Exp. 6/30/19)

Registered Occupational Therapist (NBCOT) # 1064868 (Exp. 3/31/19)

Registered Musculoskeletal Sonographer (ARDMS) # 168487 (Exp. 12/31/17)

Certified Work Capacity Evaluator # 900615 (No Longer Active as of 7/31/15)

Other Training

- 1. Fellow, US Bone & Joint Initiative Young Investigator Grant Mentoring Program** (November 2012 & May 2014)
Accepted through a competitive application process. This 2-part workshop provided directed mentoring for early-career scientists in grant development.
- 2. Training in Grantsmanship in Rehabilitation Research** (January 2013)
Accepted through a competitive application process. This workshop provided direct mentoring in grant development specific to rehabilitation research.
- 3. Advanced Training Institute in Health Behavior Theory** (July 2012)
Accepted through a competitive application process sponsored by NIH: NCI/OBSSR/NIAID/NIDCR/ NCCAM/NHLBI. This 8-day course provided knowledge of and experience with research methods for testing conceptual, methodological, & statistical underpinnings of health behaviors
- 4. Functional Capacity Evaluation Training Program** (February 2004; October 2009)
Clinical evaluation training through Roy Matheson & Associates

Research Interests

- Use of sonographic imaging to enhance the assessment, prevention, and treatment of musculoskeletal disorders with a focus on the upper extremities
- Investigation of the inter-relatedness of physical exposures, psychosocial factors, personality traits, productivity, performance, and musculoskeletal disorders in the promotion of prevention in the workplace and post-injury rehabilitation efforts

SCHOLARSHIP

Grant Funding: Current**1. Sonographic tissue morphology in early stage work-related median nerve pathology**

Sponsor: R01OH010665-01, CDC/NIOSH R01

Role: Principal Investigator, 50% Effort

Total Costs: \$2,324,186

Status: Funded, October 2015 – September 2019

Overall Goals: Evaluate impacts of intensive hand activity on sonographic measurements of tissue morphology, discomfort, and occupational performance in a longitudinal study to develop a predictive model of morphologic progression of pathology and screening techniques for early detection of median nerve injury in the workplace.

2. Identifying risk of musculoskeletal injury in dental hygiene practice

Sponsor: Undergraduate Research Associates Program Grant, USC Office of Undergraduate Programs

Role: Principal Investigator

Total Costs: \$9,000 (including \$4,500 cost-share)

Status: Funded, August 2017 – June 2018

Overall Goals: This project engages undergraduate students in the collection, processing, and analysis of videos of dental hygiene practice to examine dental scaling tasks and identify components related to symptomatology and morphologic changes in dental hygiene students. The outcome of the project will be the development of an educational or preventive intervention to reduce risk due to poor postures or practices.

Grant Funding: Completed**1. Rehabilitation Research Career Development Program**

Sponsor: K12-HD055929, NICHD/NINDS Rehabilitation Research Career Development Program Scholar

Principal Investigator: Kenneth J. Ottenbacher

Role: Scholar, 75% Effort

Total Sub-Award Costs: \$337,614

Status: Funded, September 2011 – August 2016

Overall Goals: Develop skills in qualitative inquiry and musculoskeletal sonography to evaluate the translation of sonographic imaging into a tool for prevention, assessment and rehabilitation of musculoskeletal disorders.

2. Effects of mind-body interventions on stress, anxiety, and pain in hand therapy patients

Sponsor: American Society of Hand Therapists – Founders Grant

Role: Principal Investigator, 20% Effort

Total Costs: \$3,135

Status: Funded, July 2014 – June 2015

Overall Goals: Evaluate the proximal effects of mindfulness and visual biofeedback on stress, anxiety and pain in patients receiving hand therapy for hand dysfunction due to an orthopedic injury.

3. Integrating electromyography and sonographic imaging for evidence-based therapy for chronic pelvic pain

Sponsor: Southern California Clinical and Translational Science Institute, Pilot Grant

Role: Principal Investigator (Multiple PI), 20% Effort

Total Costs: \$30,000

Status: Funded, July 2012 – June 2013

Overall Goals: Cross-sectional study utilizing multiple innovative sonographic techniques and EMG recordings to identify important biomarkers of CP/CPSP in order to improve clinical screening practices.

4. An experimental investigation utilizing portable ultrasound and Doppler as diagnostic alternative in CTS

Sponsor: 5R21OH009907-02, CDC/NIOSH Exploratory and/or Developmental Grant Program (R21)

Principal Investigator: Kevin D. Evans

Role: Co-Investigator, 8% Effort

Total Costs: \$265,834

Status: Funded, September 2010 – August 2012

Overall Goals: Assessment of the progression of MMN and utility of portable ultrasound as a sensitive means for tracking median nerve pathology by studying changes in morphology in a non-human primate model of CTS.

5. Partnering with stakeholders to develop new concepts for performing work of medical imaging technologists

Sponsor: R01OH009253, CDC/NIOSH R01

Principal Investigator: Carolyn M. Sommerich

Role: Graduate Research Assistant, 10% Effort

Status: Funded, July 2008 – June 2011

Overall Goals: Focus groups, qualitative analysis of written and verbal data, and review of products to improve the design of imaging technologies.

Publications: Peer-Reviewed Original Manuscripts

(*asterisk indicates student mentee, underline indicates senior/corresponding author when applicable)

1. Takata SC*, Wade ET*, **Roll SC**. Hand therapy interventions, outcomes, and diagnoses evaluated over the last 10-years: A systematic mapping review linking research to practice. *Journal of Hand Therapy, In Press*. doi: [10.1016/j.jht.2017.05.018](https://doi.org/10.1016/j.jht.2017.05.018) NIHMSID: 881417 (PMCID In Progress)
2. Dhyani M, **Roll SC**, Gilbertson MW, Anvari A, Li Q, Anthony B, **Samir AE**. Direct and precise quantification of forces applied by sonographers during abdominal imaging. *WORK, In Press*. (PMCID In Progress)
3. McLaughlin-Gray J, Frank G, **Roll SC**. Integrating musculoskeletal sonography into rehabilitation: Therapists' experiences with training and implementation. *Occupational Therapy Journal of Research (OTJR)*, 2017; 37:40-49. doi: [10.1177/1539449216681275](https://doi.org/10.1177/1539449216681275) (PMCID In Progress)
4. **Roll SC**, Hardison ME*. Effectiveness of occupational therapy interventions for adults with musculoskeletal conditions of the forearm, wrist, and hand: A systematic review. *American Journal of Occupational Therapy*, 2017; 71:7101180010p1-7101180010p12. doi: [10.5014/ajot.2017.023234](https://doi.org/10.5014/ajot.2017.023234) PMCID: PMC5182014
5. Marik T, **Roll SC**. Effectiveness of occupational therapy interventions for musculoskeletal shoulder conditions: A systematic review. *American Journal of Occupational Therapy*, 2017; 71:7101180020p1-7101180020p11. doi: [10.5014/ajot.2017.023127](https://doi.org/10.5014/ajot.2017.023127) PMCID: PMC5182015
6. Hardison ME*, **Roll SC**. Factors associated with success in an occupational rehabilitation program for work-related musculoskeletal disorders. *American Journal of Occupational Therapy*, 2017; 71:7101190040p1-7101190040p8. doi: [10.5014/ajot.2016.023200](https://doi.org/10.5014/ajot.2016.023200) PMCID: PMC5182016
7. Hardison ME*, **Roll SC**. Mindfulness interventions in physical rehabilitation: A scoping review. *American Journal of Occupational Therapy*, 2016; 70:7003290030p1-7003290030p9. doi: [10.2015/ajot.2016.018069](https://doi.org/10.2015/ajot.2016.018069) PMCID: PMC4834757
8. **Roll SC**, Asai C, Tsai J*. Clinical utilization of musculoskeletal sonography involving non-physician rehabilitation providers: A scoping review. *European Journal of Physical and Rehabilitation Medicine*, 2016; 52:253-262. PMCID: PMC4715790
9. **Roll SC**, McLaughlin-Gray J, Frank G, Wolkoff M*. Exploring occupational therapists' perceptions of the usefulness of musculoskeletal sonography in upper-extremity rehabilitation. *American Journal of Occupational Therapy*, 2015; 69(4):6904360010p1-6904360010p6. doi: [10.5014/ajot.2015.016436](https://doi.org/10.5014/ajot.2015.016436) PMCID: PMC4482581
10. **Roll SC**. Role of sonographic imaging in occupational therapy practice. *American Journal of Occupational Therapy*, 2015; 69(3):6903360010p1-6903360010p8. doi: [10.5014/ajot.2015.015941](https://doi.org/10.5014/ajot.2015.015941) PMCID: PMC4453043
11. **Roll SC**, Volz KR, Fahy C, Evans KD. Carpal tunnel syndrome severity staging using sonographic and clinical measures. *Muscle and Nerve*, 2015; 51:838-845. doi: [10.1002/mus.24478](https://doi.org/10.1002/mus.24478) PMCID: PMC4388767
12. **Roll SC**, Rana M, Sigward SM, Yani M, Kirages DJ, Kutch JJ. Reliability of superficial male pelvic floor structural measurements using transperineal linear-array sonography. *Ultrasound in Medicine & Biology*, 2015; 41:610-617. doi: [10.1016/j.ultrasmedbio.2014.09.008](https://doi.org/10.1016/j.ultrasmedbio.2014.09.008) PMCID: PMC4297525
13. **Roll SC**, Selhorst L, **Evans KD**. Contribution of positioning to work-related musculoskeletal discomfort in diagnostic medical sonographers. *WORK: A Journal of Prevention, Assessment, and Rehabilitation*, 2014; 47:253-60. doi: [10.3233/WOR-121579](https://doi.org/10.3233/WOR-121579) PMCID: PMC3840125

14. **Evans KD**, Volz KR, Pargeon RL, Fout LT, Buford J, **Roll SC**. Use of contrast enhanced sonography to investigate intraneural vascularity in a cohort of macaca fascicularis with suspected median mononeuropathy. *Journal of Ultrasound in Medicine*, 2014; 33:103-9. doi: [10.7863/ultra.33.1.103](https://doi.org/10.7863/ultra.33.1.103) PMID: PMC4040227
15. **Roll SC**, **Evans KD**, Volz KR, Sommerich CM. Longitudinal sonographic measurement of median nerve changes with controlled exposure to physical work in an animal model. *Ultrasound in Medicine & Biology*, 2013; 39:2492-2497. doi: [10.1016/j.ultrasmedbio.2013.08.008](https://doi.org/10.1016/j.ultrasmedbio.2013.08.008) PMID: PMC3834154
16. **Evans KD**, Volz KR, **Roll SC**, Hutmire CM, Pargeon RL, Buford JA, Sommerich CM. Establishing an imaging protocol for detection of vascularity within the median nerve using contrast-enhanced ultrasound. *Journal of Diagnostic Medical Sonography*, 2013; 29:201-7. doi: [10.1177/8756479313503211](https://doi.org/10.1177/8756479313503211) PMID: PMC3825188
17. **Roll SC**, Kutch JJ. Transperineal sonography evaluation of muscles and vascularity in the male pelvic floor. *Journal of Diagnostic Medical Sonography*, 2013; 29:3-10. doi: [10.1177/8756479312472394](https://doi.org/10.1177/8756479312472394) PMID: PMC3694581
18. **Roll SC**, **Evans KD**, Li X, Sommerich CM, Case-Smith J. Importance of tissue morphology relative to patient reports of symptoms and functional limitations due to median nerve pathology. *American Journal of Occupational Therapy*, 2013; 67:64-72. doi: [10.5014/ajot.2013.005785](https://doi.org/10.5014/ajot.2013.005785) PMID: PMC3654523
19. **Roll SC**, **Evans KD**, Hutmire CD, Baker JP. An analysis of occupational factors related to shoulder discomfort in diagnostic medical sonographers and vascular technologists. *WORK: A Journal of Prevention, Assessment, and Rehabilitation*, 2012; 42:355-365. doi: [10.3233/WOR-2012-1434](https://doi.org/10.3233/WOR-2012-1434) PMID: 22523028
20. **Evans KD**, **Roll SC**, Volz K, Freimer M. Relationship of intraneural vascular flow measured with ultrasound and carpal tunnel syndrome diagnosis based on electrodiagnostic testing. *Journal of Ultrasound in Medicine*, 2012; 31:729-736. PMID: PMC3676781
21. **Evans KD**, Volz K, Hutmire CD, **Roll SC**. Morphologic characterization of intraneural flow associated with median nerve pathology. *Journal of Diagnostic Medical Sonography*, 2012; 28:11-19. doi: [10.1177/8756479311426777](https://doi.org/10.1177/8756479311426777) PMID: PMC3681420
22. **Roll SC**, **Evans KD**, Li X, Freimer M, Sommerich CM. Screening for carpal tunnel syndrome using ultrasonography. *Journal of Ultrasound in Medicine*, 2011; 30:1657-1667. PMID: PMC3654536
23. **Roll SC**, Case-Smith J, **Evans KD**. Diagnostic accuracy of ultrasonography versus electromyography in carpal tunnel syndrome: A systematic review of literature. *Ultrasound in Medicine and Biology*, 2011; 37:1539-1555. doi: [10.1016/j.ultrasmedbio.2011.06.011](https://doi.org/10.1016/j.ultrasmedbio.2011.06.011) PMID: 21821353
24. **Roll SC**, **Evans KD**. Sonographic representation of bifid median nerve and persistent median artery. *Journal of Diagnostic Medical Sonography*, 2011; 27:89-94. doi: [10.1177/8756479311399763](https://doi.org/10.1177/8756479311399763)
25. **Evans KD**, **Roll SC**, Hutmire CD, Baker JP. Factors that contribute to wrist-hand-finger discomfort in diagnostic medical sonographers and vascular technologists. *Journal of Diagnostic Medical Sonography*, 2010; 26:121-129. doi: [10.1177/8756479310366471](https://doi.org/10.1177/8756479310366471)
26. **Evans KD**, **Roll SC**, Li X, Sammet S. A holistic evaluation of risk factors for work related musculoskeletal distress among asymptomatic sonographers performing neurosonology: A pilot study. *Journal of Diagnostic Medical Sonography*, 2010; 26:64-78. doi: [10.1177/8756479309352360](https://doi.org/10.1177/8756479309352360)
27. **Evans KD**, **Roll SC**, Baker J. Work-related musculoskeletal disorders among registered diagnostic medical sonographers and vascular technologists: A representative sample. *Journal of Diagnostic Medical Sonography*. 2009; 25:287-299. doi: [10.1177/8756479309351748](https://doi.org/10.1177/8756479309351748)
28. **Roll SC**, **Evans KD**. Feasibility of utilizing a hand-carried ultrasound unit for investigating median nerve pathology. *Journal of Diagnostic Medical Sonography*. 2009; 25:241-249. doi: [10.1177/8756479309345284](https://doi.org/10.1177/8756479309345284)

Publications: Edited Special Issues

1. Special Issue: Work-Related Musculoskeletal Injuries in Sonographers: *Journal of Diagnostic Medical Sonography*; **Roll SC**, Ed. 2017; 33(5). (*In Press*)
2. Special Issue: Occupational Therapy for Adults with Musculoskeletal Conditions. *American Journal of Occupational Therapy*; **Roll SC**, Ed. 2017; 71(1).
3. Special Issue: Injuries & Prevention in Health Care Providers. *Work: A Journal of Prevention, Assessment, and Rehabilitation*; **Roll SC**, Ed. 2012; 42(3).

Publications: In Review

(*asterisk indicates student mentee, underline indicates senior/corresponding author when applicable)

1. **Roll SC**. Training and competency development in point-of-care musculoskeletal sonography by rehabilitation providers. *Journal of Diagnostic Medical Sonography*, *In Review*

Publications: Published Books, Monographs, Chapters

1. Hegmann KT, Melhorn JM, Ausfahl J, Freshwater MF, Prezzia CP, Rempel DM, **Roll SC**, Rollins RJ, Werner RA, Zaremski J (ACOEM evidence-based practice panel). Hand, wrist, and forearm disorders guideline. MDGuidelines. Westminster, CO: Reed Group, Ltd.; 2016. Available at: www.MDGuidelines.com.
2. **Roll SC**. *Carpal Tunnel Syndrome: Improving intervention effectiveness*. Brockton, MA: Specialty Commerce Publishing; 2015. ISBN: [978-1-68041-060-0](https://www.isbn-international.org/product/978-1-68041-060-0)

Publications: Peer-Reviewed Conference Proceedings & Abstracts

(*asterisk indicates student mentee, underline indicates senior/corresponding author when applicable)

1. **Roll SC**, Gray JM, Frank G. Therapist perceptions of sonographic utility in musculoskeletal rehabilitation. *The Explorer: Journal of USC Student Research*, 2015; 7:38.
2. Hardison ME*, **Roll SC**. Mindfulness in rehabilitation: A scoping review. *The Explorer: Journal of USC Student Research*, 2015; 7:55.
3. **Roll SC**, Rana M*, Sigward S, Yani M, Kirages D, Kutch J. Cadaveric validation and in-vivo measurement reliability of a novel linear-array transperineal sonographic evaluation of male pelvic floor structures. *Ultrasound in Medicine and Biology*, 2015, 41(4):S103. doi: [10.1016/j.ultrasmedbio.2014.12.426](https://doi.org/10.1016/j.ultrasmedbio.2014.12.426)
4. **Roll SC**, Gray JM, Frank G. Competency development and complexities of clinical integration of musculoskeletal sonography by non-physician rehabilitation providers. *Ultrasound in Medicine and Biology*, 2015, 41(4):S20. doi: [10.1016/j.ultrasmedbio.2014.12.124](https://doi.org/10.1016/j.ultrasmedbio.2014.12.124)
5. **Roll SC**, Evans KD, Sommerich CM. Longitudinal analysis of grey scale imaging and electromyography in an animal model of carpal tunnel syndrome. *Journal of Ultrasound in Medicine*, 2013; 32:S49.
6. **Roll SC**, Kutch JJ. Transperineal sonographic evaluation of the male pelvic floor. *The Explorer: Journal of USC Student Research*, 2013; 5:33.
7. Rana M*, **Roll SC**, Kutch JJ. Identifying muscle hyperactivity in chronic pain. *The Explorer: USC Student Research*, 2013; 5:47.
8. **Roll SC**, Evans KD, Freimer ML, Case-Smith J, Sommerich CM. Relationship of median nerve ultrasonographic measures to anthropometric and demographic factors for diagnosis of carpal tunnel syndrome. *Ultrasound in Medicine and Biology*, 2011; 37:S6-7. doi: [10.1016/j.ultrasmedbio.2011.05.055](https://doi.org/10.1016/j.ultrasmedbio.2011.05.055)
9. Evans KD, **Roll SC**, Volz KR, Sommerich CM. Spectral Doppler measurement of perineural flow within the median nerve compared to nerve conduction studies. *Ultrasound in Medicine and Biology*, 2011; 37:S6. doi: [10.1016/j.ultrasmedbio.2011.05.052](https://doi.org/10.1016/j.ultrasmedbio.2011.05.052)

10. **Evans KD, Roll SC, Volz KR, Sommerich CM.** Ultrasound contrast enhanced interrogation of the median nerve to document peripheral vascular flow in an animal model. *Ultrasound in Medicine and Biology*, 2011; 37:S6. doi: [10.1016/j.ultrasmedbio.2011.05.054](https://doi.org/10.1016/j.ultrasmedbio.2011.05.054)
11. **Sommerich CM, Gumpina R, Roll SC, Le P, Chandler D.** Investigating effects of controller algorithm on torque tool operator. *Proceedings of the 2009 Industrial Engineering Research Conference*; Miami, FL. 2009.

Publications: Non Peer-Reviewed & Editorials

1. **Roll SC.** Embracing the expanding horizons of diagnostic medical sonography: Clinical innovation, interdisciplinary growth, and scientific discovery. *Journal of Diagnostic Medical Sonography*, 2017, 33. doi: [10.1177/8756479317698665](https://doi.org/10.1177/8756479317698665)
2. **Roll SC.** Current evidence and opportunities for expanding the role of occupational therapy for adults with musculoskeletal conditions. *American Journal of Occupational Therapy*, 2017; 71:7101170010p1-7101170010p5. doi: [10.5014/ajot.2017.711002](https://doi.org/10.5014/ajot.2017.711002) PMID: 28027037
3. **Roll SC, Darragh AR, Obrien JC, Fisher TF.** In Memoriam: Jane Douglas Case-Smith. *OTJR: Occupational, Participation, and Health*, 2014; 34:171-175. doi: [10.3928/15394492-20141006-03](https://doi.org/10.3928/15394492-20141006-03)
4. **Evans KD, Roll SC, Volz KR, Freimer M.** [Reply] Nerve Blood Flow. *Journal of Ultrasound in Medicine*, 2013; 32:188-9.
5. **Roll SC.** Injuries and prevention in health care providers. *WORK: A Journal of Prevention, Assessment, and Rehabilitation*, 2012; 42; 309-310. doi: [10.3233/WOR-2012-1439](https://doi.org/10.3233/WOR-2012-1439)
6. **WorkLife Connection** - Clinical Newsletter Editor – Fairfield Medical Center
2007 – Volume 3, Issues 1-2; 2006 – Volume 2, Issues 1-4; 2005 – Volume 1, Issues 1-4

Presentations: Peer-Reviewed, International

(* indicates student mentee)

1. **Beleno J, Melrose MD, Wilkins K, Forrest JL, Mack WJ, Roll SC.** Identifying risk of upper extremity injuries in dental hygiene professionals. Paper presentation at: Annual Meeting of the Canadian Dental Hygienists Association, 2017; Ottawa, Canada.
2. **Colclazier NL*, Sumi JY, Forrest JL, Roll SC.** An observational method for injury risk assessment of dental hygienists. Poster presentation at: Annual Meeting of the Canadian Dental Hygienists Association, 2017; Ottawa, Canada.
3. **Roll SC, Rana M, Sigward S, Yani M, Kirages D, Kutch J.** Cadaveric validation and in-vivo measurement reliability of a novel linear-array transperineal sonographic evaluation of male pelvic floor structures. Research poster presented at the 15th World Congress of Ultrasound in Medicine and Biology 2015; Orlando, FL.
4. **Roll SC, Gray JM, Frank G.** Competency development and complexities of clinical integration of musculoskeletal sonography by non-physician rehabilitation providers. Research paper presented at the 15th World Congress of Ultrasound in Medicine and Biology 2015; Orlando, FL.
5. **Evans KD, Volz KR, Pargeon R, Roll SC.** Musculoskeletal sonography: Evaluation of the carpal tunnel and median nerve. Research paper presented at International Foundation for Sonography Education and Research Symposium 2012; Las Cruces, New Mexico.
6. **Roll SC, Evans KD, Freimer ML, Case-Smith J, Sommerich CM.** Relationship of median nerve ultrasonographic measures to anthropometric and demographic factors for diagnosis of carpal tunnel syndrome. Research paper presented at 13th World Congress of Ultrasound in Medicine and Biology 2011; Vienna, Austria.
7. **Evans KD, Roll SC, Volz KR, Sommerich CM.** Spectral Doppler measurement of perineural flow within the median nerve compared to nerve conduction studies. Research paper presented at 13th World Congress of Ultrasound in Medicine and Biology 2011; Vienna, Austria.
8. **Evans KD, Roll SC, Volz KR, Sommerich CM.** Ultrasound contrast enhanced interrogation of the median nerve to document peripheral vascular flow in an animal model. Research paper presented at 13th World Congress of Ultrasound in Medicine and Biology 2011; Vienna, Austria.

Presentations: Peer-Reviewed, National

(* indicates student mentee)

1. Hardison ME*, Takata SC*, Carandang K, **Roll SC**. Using patient experiences of health management occupations to guide research on medical adherence. Panel presentation at: Research Conference of the Society for the Study of Occupation: USA, 2017; Seattle, WA.
2. Takata SC*, Wade E*, **Roll SC**. Linking research to practice in hand therapy: A mapping review. Paper presentation at: 40th Annual Conference of the American Society of Hand Therapists, 2017; Anaheim, CA.
3. **Roll SC**, Mitchell J. Dynamic sonographic evaluation of median nerve changes during hand grasp. Poster presentation at: Society of Diagnostic Medical Sonography Annual Conference, 2017; Dallas, TX.
4. Melrose D, Wilkins MA, Forrest JL, **Roll SC**. Identifying risk of hand injuries in dental hygienists: A longitudinal cohort study. Poster presentation at: American Dental Education Association Allied Dental Program Directors Conference, 2017; Baltimore, MD
5. Takata SC*, **Roll SC**. Relationship of internal carpal tunnel measurements to external wrist-ratio: Implications for prevention of carpal tunnel syndrome. Paper presentation at: 6th Annual Occupational Therapy Summit of Scholars, 2017; Boston, MA.
6. Hardison ME*, Colclazier NL*, **Roll SC**. Risk assessment for musculoskeletal strain among dental hygienists using video observation. Poster presentation at: 6th Annual Occupational Therapy Summit of Scholars, 2017; Boston, MA.
7. Colclazier NL*, Sumi JY, Forrest JL, **Roll SC**. An observational method for injury risk assessment of dental hygienists. Poster presentation at: 94th Annual Conference of the American Dental Hygienists' Association, 2017; Jacksonville, FL.
8. **Roll SC**, Mitchell J. Relationship of internal carpal tunnel measurement to external wrist-ratio: Implications for prevention and diagnosis. Paper presentation at: Annual Convention of the American Institute of Ultrasound in Medicine, 2017; Orlando, FL.
9. **Roll SC**, Forrest JL, Mack WJ. Identification of early-stage median nerve pathology using sonographic imaging: Longitudinal, multiple cohort study protocol. Electronic Poster presentation at: Annual Convention of the American Institute of Ultrasound in Medicine, 2017; Orlando, FL.
10. **Roll SC**, Aguillon A. Diagnostic ultrasonography: A clinical tool for occupational therapists. Tech Day presentation at: 95th Annual Conference of the American Occupational Therapy Association, 2017; Philadelphia, PA.
11. **Roll SC**, Gray JM, Frank G. Training and competency development for the clinical implementation of musculoskeletal sonography by hand therapists. Paper presentation at: 39th Annual Meeting of the American Society of Hand Therapists, 2016; Washington, DC.
12. **Roll SC**, Hardison ME*, Black DS. Effects of mind-body intervention on anxiety, stress, and pain in patients receiving hand therapy. Poster presentation at: 39th Annual Meeting of the American Society of Hand Therapists, 2016; Washington, DC.
13. Hardison ME*, **Roll SC**. Integrating evidence and client perspectives for the use of mindfulness interventions in hand therapy. Paper presentation at: 39th Annual Meeting of the American Society of Hand Therapists, 2016; Washington, DC.
14. **Roll SC**, Hardison ME*, Black DS. Effects of mind-body interventions on stress, anxiety, and pain in hand therapy. Poster presentation at: Rehabilitation Research at NIH Meeting, 2016; Bethesda, MD.
15. **Roll SC**, Mack WJ, Forrest JL, Baker LL, Baker NA. Identification of early-stage median nerve pathology: Protocol for a longitudinal, multiple cohort study. Paper presentation at: 5th Annual Occupational Therapy Summit of Scholars, 2016; Pittsburgh, PA.
16. Hardison ME*, Black DS, **Roll SC**. Effects of mind-body interventions on stress, anxiety, and pain in hand therapy. Paper presentation at: 5th Annual Occupational Therapy Summit of Scholars, 2016; Pittsburgh, PA.
17. **Roll SC**, Gray JM, Hardison ME*. Musculoskeletal sonography of the upper extremity: Training and implementation in the rehabilitation clinic. Poster presentation at: 96th Annual Conference of the American Occupational Therapy Association, 2016; Chicago, IL.
18. Hardison ME*, **Roll SC**. Mindfulness in rehabilitation: A scoping review. Poster presentation at: 96th Annual Conference of the American Occupational Therapy Association, 2016; Chicago, IL.

19. Hardison ME*, **Roll SC**. How does mindfulness impact the experience of healing in clinical environments? Poster presentation at: 14th Annual Research Conferences of the Society for the Study of Occupation USA, 2015; Ft. Lauderdale, FL.
20. **Roll SC**, Gray JM, Frank G, Wolkoff M*. Therapist perceptions of the utility of sonographic imaging in the rehabilitation of musculoskeletal disorders. Paper presentation at: 4th Annual Occupational Therapy Summit of Scholars, 2015; Los Angeles, CA.
21. Hardison ME*, **Roll SC**. Mindfulness in rehabilitation: A scoping review. Poster presentation at: 4th Annual Occupational Therapy Summit of Scholars, 2015; Los Angeles, CA.
22. **Roll SC**, Gray JM, Frank G. Therapist perceptions of the utility of sonographic imaging in the rehabilitation of musculoskeletal disorders. Poster presentation at: 95th Annual Conference of the American Occupational Therapy Association, 2015; Nashville, TN.
23. **Roll SC**, Evans KD, Sommerich CM. Longitudinal changes in median nerve morphology due to physical work exposure. Paper presentation at: 3rd Annual Occupational Therapy Summit of Scholars, 2014; Philadelphia, PA.
24. **Roll SC**, Rocker JD, Aguillon A. Enhancing treatment for patients with pain and limitations in functional hand use with sonography. Short course presentation at: 94th Annual Conference of the American Occupational Therapy Association, 2014; Baltimore, MD.
25. **Roll SC**, Rocker JD, Aguillon A. Dynamic, real-time visualization of musculoskeletal tissues using sonography. Tech presentation at: 94th Conference of the American Occupational Therapy Association, 2014; Baltimore, MD.
26. Wolkoff M*, Frank G, Mclaughlin-Gray J, **Roll SC**. Therapist perception of the implementation of musculoskeletal sonography in hand rehabilitation. Poster presentation at: 36th Annual Meeting of the American Society of Hand Therapists, 2013; Chicago, IL.
27. Tsai J*, **Roll SC**. Use of musculoskeletal ultrasonography in orthopedic rehabilitation: A scoping review. Poster presentation at: 36th Annual Meeting of the American Society of Hand Therapists, 2013; Chicago, IL.
28. **Roll SC**, Rocker JD, Aguillon A, Wolkoff M. If only I could see inside! Cutting-edge use of sonography to enhance upper extremity orthopedic rehabilitation. Workshop presented at: 93rd Annual Conference of the American Occupational Therapy Association, 2013; San Diego, CA.
29. **Roll SC**, Selhorst L*, Evans KD. Using the Rapid Upper Limb Assessment to associate upper extremity positioning with musculoskeletal discomfort. Research paper presentation at: 93rd Annual Conference of the American Occupational Therapy Association, 2013; San Diego, CA.
30. **Roll SC**, Evans KD, Sommerich CM. Longitudinal analysis of grey scale imaging and electromyography in an animal model of carpal tunnel syndrome. New Investigator Award Competition Presentation at: Annual Convention of the American Institute of Ultrasound in Medicine, 2013; New York, NY.
31. Fahy C*, **Roll SC**. Sonographic evaluation of median nerve excursion. Poster presented at: Annual Conference of the Society of Diagnostic Medical Sonography, 2012; Seattle, WA.
32. **Roll SC**, Evans KD, Case-Smith J. Predicting symptoms and decreased function due to carpal tunnel syndrome with sonographic imaging. Research platform presentation at: 92nd Annual Conference of the American Occupational Therapy Association, 2012; Indianapolis, IN.
33. **Roll SC**, Evans KD. Visualization of changes in the median nerve in carpal tunnel syndrome. Research platform at: 92nd Annual Conference of the American Occupational Therapy Association, 2012; Indianapolis, IN.
34. **Roll SC**. Diagnostic ultrasonography: A clinical tool for occupational therapists. Tech day presentation at: 92nd Annual Conference of the American Occupational Therapy Association, 2012; Indianapolis, IN.
35. **Roll SC**, Evans KD. Relationship of psychosocial, personal, and physical factors to physiologic changes in the median nerve. Research in progress poster presented at: 91st Annual Conference of the American Occupational Therapy Association, 2011; Philadelphia, PA.

36. **Roll SC**, Evans KD. Validation of ultrasonographic methods for investigation of carpal tunnel syndrome in surgical candidates. Research in progress poster presented at: 91st Annual Conference of the American Occupational Therapy Association, 2011; Philadelphia, PA.
37. Evans KD, **Roll SC**, Main J, Sommerich CM. Utilizing an animal model to validate a sonographer scanning protocol for the median nerve. Poster presented at: Annual Conference of the Society of Diagnostic Medical Sonography Annual, 2010; Denver, CO.
38. **Roll SC**. A novel method for measuring acute physiologic changes in the median nerve at the worksite. Research paper presented at: 90th Annual Conference of the American Occupational Therapy Association, 2010; Orlando, FL.
39. **Roll SC**, Harpster K. Simple, efficient outcomes measurement and reporting for accreditation and marketing. Poster presented at: 89th Annual Conference of the American Occupational Therapy Association, 2009; Houston, TX.
40. **Roll SC**, Rogers S. Office ergonomics: A university departmental study. Poster presented at: 83rd Annual Conference of the American Occupational Therapy Association, 2003; Washington, DC.

Presentations: Peer-Reviewed, State/Regional

(* indicates student mentee)

1. Takata SC*, Wade E*, **Roll SC**. Linking research to practice in hand therapy: A mapping review. Poster presentation at: USC Ostrow School of Dentistry Research Day, 2017; Los Angeles, CA.
2. Colclazier NL*, Sumi JY, Forrest JL, **Roll SC**. Developing an observational method for assessing dental hygienists' injury risk. Poster presentation at: USC Ostrow School of Dentistry Research Day, 2017; Los Angeles, CA.
3. Melrose D, Wilkins K, Forrest JL, **Roll SC**. Identifying risk of upper extremity injuries in dental hygiene professionals. Poster presentation at: USC Ostrow School of Dentistry Research Day, 2017; Los Angeles, CA.
4. **Roll SC**, Mack WJ, Forrest JL, Baker LL, Baker NA. Identification of early-stage median nerve pathology: Protocol for a longitudinal, multiple cohort study. Poster presentation at: USC Ostrow School of Dentistry Research Day, 2016; Los Angeles, CA.
5. Hardison ME*, **Roll SC**. Effects of mind-body interventions on anxiety, pain and stress in hand therapy. Poster presentation at: USC Ostrow School of Dentistry Research Day, 2016; Los Angeles, CA.
6. **Roll SC**, Gray JM, Frank G. Therapist perceptions of sonographic utility in musculoskeletal rehabilitation. Poster presented at: USC Ostrow School of Dentistry Research Day, 2015; Los Angeles, CA.
7. Hardison ME*, **Roll SC**. Mindfulness in rehabilitation: A scoping review. Poster presented at: USC Ostrow School of Dentistry Research Day, 2015; Los Angeles, CA.
8. **Roll SC**, Black DS, Rucker JD, Aguillon A. Visual biofeedback and mindfulness training for hand rehabilitation. Poster presented at: USC Jacquelin Perry Research Day (Institute for Integrative Health), 2014; Los Angeles, CA.
9. **Roll SC**, Kutch JJ. Reliability of transperineal sonographic evaluation of male pelvic floor structures. Poster presented at: USC Ostrow School of Dentistry Research Day, 2014; Los Angeles, CA.
10. **Roll SC**, Kutch JJ. Transperineal sonographic evaluation of the male pelvic floor. Poster presented at: USC Ostrow School of Dentistry Research Day, 2013; Los Angeles, CA.
11. Rana M*, **Roll SC**, Kutch JJ. Identifying muscle hyperactivity in chronic pain. Poster presented at: USC Ostrow School of Dentistry Research Day, 2013; Los Angeles, CA.
12. **Roll SC**. Can I return to work? Evaluation of physical capacities and work-readiness. Workshop presented at: Annual Conference of the Occupational Therapy Association of California, 2012; Pasadena, CA.
13. **Roll SC**. Relationship of tissue morphology to symptoms of carpal tunnel syndrome. Poster presented at: USC Ostrow School of Dentistry Research Day, 2012; Los Angeles, CA.
14. **Roll SC**, Evans KD. Feasibility of utilizing a hand-carried ultrasound unit for investigating median nerve pathology. Poster presented at: Ohio State University Medical Center Research Day, 2009; Columbus, OH.

15. **Roll SC**, Evans KD. Feasibility of utilizing a hand-carried ultrasound unit for investigating median nerve pathology. Poster presented at: Annual Conference of the Ohio Occupational Therapy Association, 2009; Dayton, OH.
16. **Roll SC**, Flinn S, Case-Smith J, Clutter J. Discovery of interprofessional perceptions of Ohio Bureau of Workers' Compensation professionals during the provision of physical rehabilitation services for injured workers. Poster presented at: Annual Conference of the Ohio Occupational Therapy Association, 2006; Zanesville, OH.
17. **Roll SC**, Rogers S. Office ergonomics: A university departmental study. Poster presented at: Annual Conference of the Ohio Occupational Therapy Association, 2002; Cleveland, OH.

Presentations: Invited, National

1. **Roll SC**. Inter-relationships among participation in physical tasks and tissue morphology: Evaluating bidirectional pathways (*Working Title*). Keynote speaker at: *Physical Stresses – Keeping us Alive and Well*, an interdisciplinary research conference on mechanotransduction, 2018 (invited); Oklahoma City, OK.
2. **Roll SC**, Takata SC, Aguillon A, Rucker J. Musculoskeletal sonography: Introductory training and clinical application for hand therapy. Pre-Conference Institute at: 40th Annual Conference of the American Society of Hand Therapists, 2017; Anaheim, CA.
3. **Roll SC**. Musculoskeletal ultrasound: Techniques, pearls, and pitfalls. Instructional session at: Annual Convention of the American Institute of Ultrasound in Medicine, 2017; Orlando, FL.
4. Nagdev, A...**Roll SC**. Peripheral nerve blocks in the emergency department. Hands-on Scanning Workshop at: Annual Convention of the American Institute of Ultrasound in Medicine, 2017; Orlando, FL.
5. **Roll SC**, Marik TL. AOTA EBP system reviews of interventions for musculoskeletal conditions of the upper extremity. Instructional course at: 39th Annual Meeting of the American Society of Hand Therapists, 2016; Washington, DC.
6. **Roll SC**. Becoming an evidence-based practitioner. Sonography community instructional session at: Annual Convention of the American Institute of Ultrasound in Medicine, 2016; New York, NY.
7. **Roll SC**, et. al. What makes a winning proposal: Perspectives from grant reviewers. Panel presentation at: 4th Annual Occupational Therapy Summit of Scholars, 2015; Los Angeles, CA.
8. Lieberman D, Arbesman M, Dorsey J, Marik TL, Poole J, **Roll SC**, Siegel P, Snodgrass J. Systematic review on occupational therapy and adults with musculoskeletal disorders and arthritis. Panel presented at: 95th Annual Conference of the American Occupational Therapy Association, 2015; Nashville, TN.
9. **Roll SC**. Introducing musculoskeletal sonography, part I: Structures and pathologies of the hand. Instructional course at: 37th Annual Meeting of the American Society of Hand Therapists, 2014; Boston, MA.
10. **Roll SC**. Introducing musculoskeletal sonography, part II: Clinical applications for hand therapy. Instructional course at: 37th Annual Meeting of the American Society of Hand Therapists, 2014; Boston, MA.

Presentations: Invited, State/Regional

1. **Roll SC**. Musculoskeletal sonographic imaging of the upper extremity: Current trends in practice and research. Keynote Speaker, Annual Meeting, Central Ohio Ultrasound Society, 2016; Columbus, OH.
2. **Roll SC**. Innovative approaches to advancing occupational performance in individuals with upper extremity musculoskeletal disorders. Keynote Speaker, Occupational Therapy Association of California (Region 2), 14th Annual Afternoon Tea with a Scholar, 2015; Los Angeles, CA.
3. **Roll SC**. Hands-on sonographic imaging for hand therapists. Continuing Education Course (6 CEUs), Hand Therapy Society of Greater Los Angeles, 2013; Los Angeles, CA.
4. **Roll SC**. Evidence based practice from classroom to clinic. Keynote Speaker, Wisconsin Council on Education, Annual State Conference, 2010; Milwaukee, WI.
5. **Roll SC**. Advanced sub-acute & chronic rehabilitation. Presentation in *Return-to-work Process: Orthopedic Surgeries & Rehab*, Continuing Education Course (4.5 CEUs), Fairfield Medical Center, 2007; Lancaster, OH.

6. **Roll SC.** Office ergonomics. Luncheon speaker, Fairfield County Business & Industry Safety Council, 2005; Lancaster, OH.
7. **Roll SC.** An introduction to functional capacity evaluations. Presentation in *Evaluations in Industrial Rehabilitation*, Continuing Education Course (4.5 CEUs), Fairfield Medical Center, 2004; Lancaster, OH.

TEACHING & MENTORING

Curriculum & Course Development

1. **PhD in Occupational Science**

University of Southern California – Major Curriculum Revision – Spring 2016

Chaired the committee for the revision of the PhD curriculum, which included: revision of degree requirements, development of an advanced standing program track, conceptualization and preparation of three new courses, revision of the program description for the university catalogue, and completion of all supporting rationale documents required for curriculum review. Also, current courses and programmatic requirements were reviewed and updated to ensure a well-rounded full curriculum.

2. **Grant Writing for Occupational Science (OT 661)**

University of Southern California – New Course Development – Spring 2016

8-week intensive, 2-unit, workshop as a capstone for the USC PhD program to provide students with practical applied training in the development of federal grant applications. Developed the course syllabus, description, and grading requirements as part of a full PhD curriculum revision. Graduate/PhD.

Teaching Experience

1. **Advanced Seminar in Occupational Science (OT 545)**

Assistant Professor – University of Southern California – Spring 2017

Seminar course reviewing the historical foundations and key areas of scholarship for the discipline of occupational science, with discussion of the relationship of occupational science to occupational therapy practice. Graduate/Professional.

2. **The Nature of Occupation (OT 641)**

Assistant Professor – University of Southern California – Fall 2015, Fall 2017

Seminar course providing a theoretical foundation for the study of occupation using cross-disciplinary perspectives to discuss domains of human engagement in living and learning in everyday life. Graduate/PhD.

3. **Functional Anatomy for Occupational Therapists (OT 260)**

Assistant Professor – University of Southern California – 2011-2016 (10 Times)

Anatomical survey of the human musculoskeletal, nervous, cardiovascular, respiratory, digestive, and urinary systems with functional relevance to the practice of occupational therapy, including lecture and human cadaver lab sessions. Undergraduate/Pre-Professional.

4. **Introduction to Evidence and Careers in Radiologic Sciences and Therapy (RST 200)**

Instructor – The Ohio State University – Autumn 2009, Spring & Autumn 2010

Information related to the scientific writing process and brief reviews of timely issues and innovations affecting practice in allied health and radiologic sciences are used to implement the process of synthesizing credible evidence and perform scientific writing skills. Undergraduate.

5. **Occupational Therapy in Physical Function I (OT 743)**

Graduate Teaching Associate – The Ohio State University – Spring 2008

Evaluation, remediation principles, and disability prevention used in occupational therapy practice with a focus on musculoskeletal diagnoses. Developed course syllabus, provided instruction for 2 of 3 units, developed student evaluation materials, assisted with lab sessions and graded practicum. Graduate/Professional.

6. **Occupational Therapy for Neurological Conditions (OT 747)**

Graduate Teaching Associate – The Ohio State University – Winter 2008

Examines performance abilities in persons with central nervous dysfunction. Course also includes principles and strategies for evaluation and treatment. Developed & scored case study assignment, provided instructional lectures. Graduate/Professional.

7. Occupational Therapy in Physical Function II (OT 744)

Graduate Teaching Associate – The Ohio State University – Autumn 2007

Application of assessment techniques and intervention strategies for clients with physical dysfunction. Created evaluations, provided instructional lectures, assisted with lab sessions. Graduate/Professional.

Guest Lectures & Other Presentations**1. “Exploring Functional Hand Anatomy Using Sonographic Imaging”**

University of Southern California Chan Division of OSOT – Feb 10, 2016; Feb 8, 2017

2. “Work: An Occupational Therapy Perspective”

University of Southern California Chan Division of OSOT – Provided 11 Times 2012-2017

3. “Work Related Musculoskeletal Disorders & Ergonomics in the Sonography Lab”

The Ohio State University Radiologic Sciences – Oct 20, 2009; Oct 19, 2010

4. “Anatomy of the Upper Arm: A Primer for Vascular Sonographers”

The Ohio State University Radiologic Sciences – Oct 22, 2008

5. “An Introduction to Job Analysis”

The Ohio State University Occupational Therapy – Mar 6, 2007; Feb 28, 2008; Mar 2, 2009

6. “Work: An Occupational Therapy Perspective”

The Ohio State University Occupational Therapy – Nov 16, 2005; Nov 28, 2006; Dec 1, 2008; Nov 30, 2009

7. “Low Back Injury: Implication & Intervention”

The Ohio State University Occupational Therapy – May 12, 2003; Oct 26, 2004

8. “The Industrial Occupational Therapist” / “Industrial Rehabilitation: Evaluation and Treatment”

The Ohio State University Occupational Therapy – May 2, 2003; Feb 4, 2004; Mar 12, 2005

Student Advising & Mentoring in Research

Name	Level	University	Year(s)	Involvement	Co-Authored Publications	Co-Authored Presentations
Maku Rana	Post-Doc	USC	2012-2013	Ad Hoc Advising	1	2
Sandy Takata	PhD	USC	2016-	Committee Chair	1	5
Awards: Student Travel Award, OT Summit of Scholars, AOTA/AOTF, 2017						
Mark E. Hardison	PhD	USC	2014-	Committee Chair	3	12
Awards: 1 st Place Poster Presentation, School of Dentistry Research Day, 2015						
Brian van der Wyk	OTD	USC	2016	Committee Chair	-	-
Emily Wade	OTD	USC	2015-2016	Academic Advisor	1	1
Monique Wolkoff	OTD	USC	2012-2013	Independent Study	1	1
Daniel Luo	MA (OT)	USC	2017	Independent Study	-	-
Cassie Tseng	MA (OT)	USC	2017	Independent Study	-	-
Nikki Colclazier	MS (DH)	USC	2016	Capstone Advisor	-	4
Tina Sehermelis	MA (OT)	USC	2015-2016	Research Volunteer	-	-
Sarah Chang	MA (OT)	USC	2016	Independent Study	-	-
Katharine Saley	MA (OT)	USC	2016	Independent Study	-	-
Heather Van Buren	MA (OT)	USC	2016	Independent Study	-	-
Justina Wong	MA (OT)	USC	2015-2016	Research Assistant	-	-
Naoya Ogura	MA (OT)	USC	2014-2015	Research Assistant	-	-
Delila Newman	MA (OT)	USC	2014	Independent Study	-	-
Phillip Lin	MA (OT)	USC	2013-2014	Research Assistant	-	-
Gabriel Messenger	MA (OT)	USC	2012-2014	Research Assistant	-	-
Julieann Tsai	MA (OT)	USC	2012-2013	Independent Study	1	1
Rachel Eckerling	BS	USC	2017-	Research Assistant	-	-
Yiyang Fang	BS	USC	2017-	Research Assistant	-	-
Samantha Randolph	BS	USC	2017-	Research Assistant	-	-
Ariana Cristino	BS	USC	2016-2017	Independent Study	-	-
Tiffany Tung	BS	USC	2016	Research Volunteer	-	-
Heng (Hannah) Chang	BS	USC	2014	Independent Study	-	-
Christina Fahy	BS	OSU	2011-2012	Thesis Committee	1	-
Thesis: Utilizing multi-sonographic measures in the detection of clinically diagnosed carpal tunnel syndrome compared to nerve conduction studies: A pilot study.						
Lauren Selhorst	BS	OSU	2010-2011	Thesis Committee	1	1
Thesis: Direct measures of physical factors contributing to work-related musculoskeletal pain among diagnostic medical sonographers: A pilot study.						
Kathryn Zale	BS	OSU	2009-2010	Thesis Committee	-	1
Thesis: Utilizing Doppler ultrasound to detect arteriole blood flow within the median nerve sheath.						

Notes: DH, Dental Hygiene; OT, Occupational Therapy; OSU, Ohio State University; USC, University of Southern California

CLINICAL EXPERIENCE

Clinical Experience**WorkLife – Fairfield Medical Center, Lancaster, OH***Program Coordinator/Occupational Therapist – (2003 – 2011)*

Coordinated referral, intake, evaluation, treatment, & discharge of clients in a CARF accredited occupational rehabilitation program; provided industrial rehabilitation services: functional capacity evaluations, transitional work, ergonomic assessments, and job site analyses. Assessed, planned, and applied acute & outpatient OT for adults with neurological, orthopedic, & mental health diagnoses.

SERVICE

Professional Associations: Membership**American Occupational Therapy Association (2002 – Current)****American Institute of Ultrasound in Medicine (2012 – Current)****American Society of Hand Therapists (2012 – Current)****Ohio Association of Rehabilitation Facilities (2003 – 2011)****Ohio Occupational Therapy Association (2001 – 2011)****Occupational Therapy Association of California (2012 – Current)****Society of Diagnostic Medical Sonography (2009 – Current)****Student Occupational Therapy Association, The Ohio State University (2000 – 2002)****Professional Associations: Elected Positions****Ohio Association of Rehabilitation Facilities***Board of Directors (2010 – 2011)**Industrial Division Chair (2006 – 2008)***Student Occupational Therapy Association, The Ohio State University***President (2001 – 2002)***Professional Associations: Committee & Other Service****American College of Occupational and Environmental Medicine***Panelist/Reviewer, Practice-Based Hand, Wrist, and Forearm Disorders Guidelines (2014 – Current)***American Occupational Therapy Association***Review Author, Upper Extremity Musculoskeletal Disorders, Evidence-Based Practice Committee (2014-2016)**Research Abstract Reviewer, Annual Conferences (2012 – Current)**Work & Industry SIS Nomination Committee (2010)***American Society of Hand Therapists***Grant Committee (2015 – 2016)***Ohio Association of Rehabilitation Facilities***Outcomes Coordinator (2005 – 2011)***Occupational Therapy Association of California***Centennial Vision Float Ad-Hoc Committee (2013 – 2016)**Conference Committee Volunteer (2015)***Ohio Bureau of Workers' Compensation***Ohio Legislature: Labor, Management, Government Council - Nominated for Rehabilitation Provider Seat (2009)**S.M.A.R.T. Provider Credentials & Outcomes (June 2008-August 2008)**Vocational Rehabilitation Redesign/LMG Council (September 2007-March 2008)**Vocational Rehabilitation/MCO Outcome Measures (February 2005-July 2005)*

Funding Agencies: Grant Review Panels**American Hand Therapy Foundation***Bell Grab the Evidence Grant Review Panel (2016)***Patient Centered Outcomes Research Institute (PCORI)***Stakeholder Reviewer; Assessment of Diagnosis, Prevention & Treatment Options (2017 Cycle 1)**Stakeholder Reviewer; Assessment of Diagnosis, Prevention & Treatment Options (2016 Cycle 1)**Stakeholder Reviewer; Assessment of Diagnosis, Prevention & Treatment Options (2015 Cycle 3)**Stakeholder Reviewer; Assessment of Diagnosis, Prevention & Treatment Options (2015 Cycle 1)**Stakeholder Reviewer; Assessment of Diagnosis, Prevention & Treatment Options (2014 Fall Cycle)***Southern California Clinical and Translational Science Institute (SC-CTSI)***Clinical Pilot Program (2016, 2017)**Dean's Pilot Program (2016)***Scholarly Journals: Editorial & Review Boards****American Journal of Occupational Therapy***Editorial Board (2014 – Current)***Journal of Diagnostic Medical Sonography***Associate Editor, Original Research & Musculoskeletal Applications (2017 – Current)**Editorial Board (2016 – Current)***WORK: A Journal of Prevention, Assessment, and Rehabilitation***Editorial Board (2009 – Current)***Scholarly Journals: Peer-Review Ad-Hoc****American Journal of Occupational Therapy (2014 – Current)****Archives of Physical Medicine and Rehabilitation (2015 – Current)****Arthritis Care & Research (2013)****BMJ Open (2015)****European Radiology (2015 – Current)****Human Factors (2016)****Industrial Health (2013)****Journal of Diagnostic Medical Sonography (2009 – Current)****Journal of Plastic Surgery and Hand Surgery (2015)****Journal of Ultrasound in Medicine (2012 – Current)****Muscle & Nerve (2017 – Current)****Occupational Therapy Journal of Research (2017 – Current)****PLoS One (2016)****Ultrasound in Medicine and Biology (2011 – Current)****WORK: A Journal of Prevention, Assessment, and Rehabilitation (2007 – Current)****University, School, and Division: Committee & Other Service****University of Southern California***Advisory Board, Edmondson Faculty Center (2014 – 2015)***Ostrow School of Dentistry***Associate Dean Search Committee (2015 – 2016)**Judge, Research Day (2013, 2014, 2016)***Chan Division of Occupational Science & Occupational Therapy***Chair, PhD Curriculum Revision Committee (2016 – 2017)**Chair, ReHaB Research Core (2015 – Current)**Merit Review Committee (2012, 2013, 2014, 2015, 2016)**Renovations Committee (2012 – 2014)*

Community Organizations: Volunteering & Activism**Columbus Softball Association***Secretary (2007-2011)**NAGAAA Delegate (2007-2011)**Conference Chief (2007)**Team Manager (2004-2008)***NAGAAA 2010 Softball World Series***Secretary (2008-2010)**NAGAAA 2010 Bid Committee (2008)*

AWARDS & HONORS

Senior Membership – *American Institute of Ultrasound in Medicine (March 2016)***Roster of Fellows** – *American Occupational Therapy Association (April 2015)***Kenneth R. Gottesfeld Award, 2nd Place** – *Outstanding Publication, Journal of Diagnostic Medical Sonography (2013)***Kenneth R. Gottesfeld Award, 3rd Place** – *Outstanding Publication, Journal of Diagnostic Medical Sonography (2013)***Sonographer Scientific Poster Competition, 1st Place** – *Society of Diagnostic Medical Sonography (October 2013)***New Investigator Award, Finalist** – *American Institute of Ultrasound in Medicine (April 2013)***Outstanding PhD Graduate Student** – *School of Allied Medical Professions, The Ohio State University (May 2010)***Kenneth R. Gottesfeld Award, 1st Place** – *Outstanding Publication, Journal of Diagnostic Medical Sonography (2009)***Phi Kappa Phi** – *Inducted, Graduate Honor Society, The Ohio State University (2008)***Award of Merit** – *School of Allied Medical Professions, The Ohio State University (June 2002)***Denman Undergraduate Research Forum** – *Selected Participant (May 2002)***Ohio State University Undergraduate President's Salute** – *Honoree, President William Kirwin (February 2002)***Pi Theta Epsilon** – *Inducted, National Occupational Therapy Honor Society, The Ohio State University (2001)***National Collegiate Scholars** – *Inducted, National Undergraduate Society; The Ohio State University (2000)***Alpha Lambda Delta/Phi Eta Sigma** – *Inducted, National Undergraduate Honor Society; Miami University (1999)*

MEDIA & PRESS

1. **TONIC (Vice)** (March 7, 2017): "The people who make you look good are suffering." Available 3/7/17 at: https://tonic.vice.com/en_us/article/the-people-who-make-you-look-good-are-suffering
2. **US Bone & Joint Initiative Newsletter** (July 2016): "Innovating musculoskeletal injury prevention, assessment, and rehabilitation." Available as of 7/1/16 at: <http://www.usbji.org/news/newsletters/july-2016>
3. **ASHT Times** (Summer 2016; Volume 23, Issue 2): "Advancing the field through research." Available 6/20/16 at: <http://ahint.epubxp.com/t/166675-asht-times>
4. **USC News** (January 21, 2016): "Can pictures prevent carpal tunnel syndrome? Using sonographic imaging, a USC professor seeks to detect the earliest signs of the disorder." Available 3/31/16 at: <http://news.usc.edu/90994/can-pictures-prevent-carpal-tunnel-syndrome/>
5. **USC Chan Magazine** (Winter 2015): "Picturing prevention." Available 3/31/16 at: <http://chan.usc.edu/alumni/magazine/winter2015/picturing-prevention>
6. **USC Chan Magazine** (Fall 2014): "Game changer: Sonography and mind-body techniques could revolutionize the way we practice hand rehabilitation." Available 3/31/16 at: <http://chan.usc.edu/uploads/magazine/USC-Chan-Magazine-fall2014.pdf>
7. **USC Chan Magazine** (Fall 2011): "Party of five." Available 3/31/16: <http://chan.usc.edu/alumni/magazine/fall2011/party-of-five>
8. **Radiology Today** (November 16, 2009): "Scanning in pain – Sonographers seek relief from job-related hazard." Available as of 3/31/16 at: <http://www.radiologytoday.net/archive/rt111609p24.shtml>
9. **SDMS NewsWave (August 2009)**: "Latest survey shows musculoskeletal injuries among sonographers not abating." Available 3/31/16: <https://www.yumpu.com/en/document/view/4152186/latest-survey-shows-musculoskeletal-injuries-among-sonographers->