Smith: Curriculum Vitae – January 2017

# Dean L. Smith, DC, PhD, ICCSP

#### **Education**

PhD	2004	Psychology, Brain and Cognitive Science (Motor Behavior), Miami University
MS	1999	Exercise Science, Miami University
DC	1997	Doctor of Chiropractic, National College of Chiropractic
BS	1995	Human Biology, National College of Chiropractic
	1991-3	Undergraduate major in Zoology, Miami University
	1990	Undergraduate major in Human Kinetics, University of Guelph

## **Employment**

Clinical Faculty in Exercise Science: Kinesiology and Health Department, Miami University; Oxford, Ohio. 2007-present

**Visiting Assistant Professor in Exercise Science:** Department of Physical Education, Health and Sports Studies, Miami University; Oxford, Ohio. 2006-7

**Visiting Faculty**: Department of Physical Education, Health and Sport Studies; Department of Psychology, Miami University; Oxford, Ohio. 2005-2006

**Self-Employed**: Essence of Wellness Chiropractic Center; Eaton, Ohio. 2003 - present

**Graduate/Teaching Assistant:** Department of Psychology, Miami University; Oxford, Ohio. 1999-2004

**Self-Employed**: Private practice of chiropractic; Camden, Ohio. 1999 - 2003

**Graduate Assistant:** Department of Physical Education, Health and Sport Studies, Miami University; Oxford, Ohio. 1998-1999

**Self-Employed**: Private practice of chiropractic; Tillsonburg, Ontario, Canada. 1997-1998

## **Awards and Honors**

2016	Miami University Tech Grant for Heart Rate Variability – Team Member (\$14,200)
2015	Miami University Tech Grant for Rehabilitation Assessment Technology (\$21,775)

2014	Miami University Eloise Martin Grant for Anatomy Software (\$1514)
2013	Miami University Tech Grant for Anatomage Virtual Anatomy Dissection Table
	(\$72,500)
2009	Miami University, Small Research Grant, EHS Division (\$2450)
2004	Invited Participant of First Annual Motor Control Summer School (Penn State U.)
2003	Miami University Graduate Student Achievement Award (\$300), Spring 2003
2002-3	Foundation for Chiropractic Education and Research Fellowship (\$5000)
2002	Chiropractic Leadership Alliance – Chiropractor of the Month Award (March)
2002	Miami University Graduate Student Achievement Award (\$200), Spring 2002
2001-2	Foundation for Chiropractic Education and Research Fellowship (\$4800)
2000	Miami University Graduate Student Achievement Award (\$300), Fall 2000
2000	Miami University Graduate Student Achievement Award (\$500), Spring 2000
1997	National College of Chiropractic Scholarship (\$400)
1994-7	National College of Chiropractic Scholarship for foreign student (\$23,640)
1996	Kentucky Association of Chiropractors Auxiliary Scholarship (\$1500)
1996	NCC Alumni Association Scholarship (\$500)
1991-3	Athletic (Golf) Scholarship, Miami University (Ohio)

#### **Research Interests**

My research interests lie broadly in the areas of human movement and coordination. I am most interested in how chiropractic, exercise and rehabilitation affect human performance. Specifically, I study the stability and adaptability of motor control patterns and the factors that impact on that stability such as clinical intervention (e.g. chiropractic adjustments). My long-term goals are to develop and validate biomechanical measures that can be used to quickly assess the stability and efficiency of goal-directed movements along with interventions to maximize these functions and prevent injury.

#### **Peer-Reviewed Publications**

DeVocht JW, Smith DL, Long CR, Corber L, Kane B, Jones TM, Goertz CM. The effect of chiropractic treatment on the reaction and response times of special operation forces military personnel: study protocol for a randomized controlled trial. Trials. 2016 Sep 20;17(1):457.

Cramer GD, Smith DL. Correctly identify practitioners and put adverse events of spinal manipulation into perspective. Orthopedic Reviews. 2014; 6(5248):20.

Smith DL, Pohlman KA, Cramer GD. Chiropractors respond. Canadian Family Physician. 2013 Dec;59(12):1265-8.

Smith DL, Cramer GD. Spinal Manipulation is Not an Emerging Risk Factor for Stroke Nor is it Major Head/Neck Trauma. Don't Just Read the Abstract! The Open Neurology Journal 2011;5:46-47.

Potteiger JA, Smith DL, Maier ML, Foster TS. Relationship Between Body Composition, Leg Strength, Anaerobic Power, and On-Ice Skating Performance in Division I Men's Hockey Athletes. J Strength Cond Res. 2010 Jul;24(7):1755-62.

Smith DL, Walsh M, Smith JP. Running posture and step length changes immediately after chiropractic treatment in a patient with Xeroderma Pigmentosum. Journal of Manipulative and Physiological Therapeutics 2009;32:93-98.

Stuber K, Smith DL. Chiropractic treatment of pregnancy-related low back pain: a systematic review of the evidence. Journal of Manipulative and Physiological Therapeutics 2008; 31:447-454.

Smith DL, Dainoff MJ, Smith JP. The effect of chiropractic adjustments on movement time: a pilot study using Fitts' Law. Journal of Manipulative and Physiological Therapeutics 2006;29(4):257-66.

Stuber K, Grod JP, Smith DL, Powers P. An online survey of chiropractors' opinions of continuing education. Chiropr Osteopat 2005;13:22

Smart LJ, Mobley BS, Otten EW, Smith DL, Amin MR. Not just standing there: the use of postural coordination to aid visual tasks. Human Movement Science 2004;22:769-780.

Smith DL. Letter to the editor regarding the locked-in syndrome. Brain Injury 2004;18(6):627-628.

Smith DL, Dainoff MJ, Mark LS, Oates SP, Davis NC. Effect of a back belt on reaching postures. Journal of Manipulative and Physiological Therapeutics 2004;27(3):186-196.

Smith DL, Spillman DM. University students' knowledge of cardiovascular health diseases risk factors. Journal of Medical Sciences 2003;3(4):263-273.

Smart LJ, Smith DL. Postural dynamics: clinical and empirical implications. Journal of Manipulative and Physiological Therapeutics 2001;24:340-349.

Smith DL, Spillman DM. A survey of chiropractors' use of nutrition in private practice. Journal of Chiropractic Humanities 2001;10(1):1-6.

Smith DL, Smith JP. Chiropractic research: focus on subluxation. Chiropractic Research Journal 2000;7:61-64.

Smith DL, Cox RH. Muscular strength and chiropractic: theoretical mechanisms and health implications. Journal of Vertebral Subluxation Research 2000; 3(4):1-13.

## Founder and Producer of Chiropractic Science Podcast Episodes (on iTunes)

Oct 2016	Chiropractic Dose-Response Relationship and Public Health with Dr. Mitch Haas
Sep 2016	Chiropractic and Response Time, EMG and TMD with James DeVocht, DC, PhD
Aug 2016	Chiropractic Research Utilization and Knowledge Translation with André Bussières,
	DC, PhD
July 2016	Chiropractic and Value in Spine Care with William Weeks, MD, PhD, MBA
July 2016	Evidence Based Practice with Jan Hartvigsen, DC, PhD
May 2016	Patient Centered Chiropractic Care with Dr. Kent Stuber
Apr. 2016	Life Course of Back Pain and Pediatric Chiropractic with Dr. Lise Hestbæk
Apr. 2016	Health Promotion, Wellness and Chiropractic Guidelines with Dr. Cheryl Hawk
Apr. 2016	Assessing Spinal Structure, Function and Intervention with Dr. Greg Kawchuk

Feb. 2016	Scott Haldeman, DC, PhD, MD: Pioneering and Contemporary Chiropractic Science
Dec. 2015	Spine Care Research with Dr. Michael Schneider
Nov. 2015	Advancing Chiropractic Research with Dr. Christine Goertz
Oct. 2015	Brain Adjustments with Dr. Heidi Haavik
Oct. 2015	Human Performance with Dr. Steven Passmore
Aug. 2015	Myofascial and Chiropractic Research with Dr. Srbely
Jan. 2015	Chiropractic Neurophysiology with Dr. Bernadette Murphy
Dec. 2014	Chiropractic Pediatric Research with Dr. Katherine Pohlman
Aug. 2014	Chiropractic Research with Dr. Gregory Cramer

## **Doctoral (PhD) Dissertation**

Smith, Dean L. Postural Coordination During Quiet Stance and Suprapostural Activity. Oxford, Ohio: Miami University, 2004. Internet resource.

http://rave.ohiolink.edu/etdc/view?acc\_num=miami1091063392.

## **Professional Magazine Articles**

Smith DL. Chiropractic Science Delivers the Evidence with Convenience. On Target Official Publication of the Ohio State Chiropractic Association 2016; 3rd Quarter:10-11.

Smith DL. Lower Medicare Costs for Chiropractic Users with Chronic Low Back Pain and Multiple Comorbidities. On Target Official Publication of the Ohio State Chiropractic Association 2016; 2nd Quarter:24-25.

Smith DL. The Cervical Spine and Concussion. On Target Official Publication of the Ohio State Chiropractic Association 2016; 2nd Quarter:24-25.

Smith DL. Do Responders to Spinal Manipulative Therapy Differ Biomechanically From Nonresponders or Controls? On Target Official Publication of the Ohio State Chiropractic Association 2015; November/December:16-17.

Smith DL. Spinal Manipulation Versus Usual Medical Care for Acute and Subacute Low Back Pain. On Target Official Publication of the Ohio State Chiropractic Association 2015; July/August:16-17.

Smith DL. Chiropractic Adjustments Reduce Fatigue and Increase Neural Drive. On Target Official Publication of the Ohio State Chiropractic Association 2015; March/April:18-19.

Smith DL. Lower Cost and Less Drug Use in the Workplace with Chiropractic. On Target Official Publication of the Ohio State Chiropractic Association 2015; January/February:20-21.

Smith DL. Biochemical Markers of Pain Perception and Stress Response Following Spinal Manipulation. On Target Official Publication of the Ohio State Chiropractic Association 2014; Nov/Dec:18-19.

Smith DL. Update on the Magnitude and Time Course of Low Back Pain. On Target Official Publication of the Ohio State Chiropractic Association 2014; July/Aug:22-23.

Smith DL. Chiropractic and Exercise for Seniors with Chronic Neck Pain. On Target Official Publication of the Ohio State Chiropractic Association 2014; May/June:22-23.

Smith DL. Guidelines of Chiropractic Treatment of Neck Pain. On Target Official Publication of the Ohio State Chiropractic Association 2014; March/April:22-23.

Smith DL. Chiropractic and Hip Osteoarthritis. On Target Official Publication of the Ohio State Chiropractic Association 2014; Jan/Feb:22-23.

Smith DL. Chiropractic and Immediate Pain Relief. On Target Official Publication of the Ohio State Chiropractic Association 2013; November/December:22-23.

Smith DL. Manipulation and Acute Low Back Pain - Two New Studies. On Target Official Publication of the Ohio State Chiropractic Association 2013; July/Aug:22-23.

Smith DL. Manual Therapy and Childhood Respiratory Disease. On Target Official Publication of the Ohio State Chiropractic Association 2013; May/June:22-23.

Smith DL. Chiropractic and Infant Colic. On Target Official Publication of the Ohio State Chiropractic Association 2013; March/April:14-15.

Smith DL. Chiropractic Interventions and Routine Obstetric Care. On Target Official Publication of the Ohio State Chiropractic Association 2013; January/February:14-15.

Smith DL. Manipulation and Pain Sensitivity. On Target Official Publication of the Ohio State Chiropractic Association 2012; Nov/Dec:16-17.

Smith DL. Spinal Manipulation Outcome Measures Review. On Target Official Publication of the Ohio State Chiropractic Association 2012; Sep/Oct:21.

Smith DL. Spinal Manipulation Cost Effectiveness Review. On Target Official Publication of the Ohio State Chiropractic Association 2012; Jul/Aug:21.

Smith DL. Cerebral Metabolic Changes in Men After Chiropractic Spinal Manipulation for Neck Pain. On Target Official Publication of the Ohio State Chiropractic Association 2012; May/Jun:15.

Smith DL. Neck Pain: Manipulation More Effective. On Target Official Publication of the Ohio State Chiropractic Association 2012; Mar/Apr:15.

Smith DL. Growing like a weed: a look at the development of postural and motor control in children. Canadian Chiropractor 2003;8(3):6,8-9.

Smith DL. Motor control and chiropractic. Canadian Chiropractor 2002;7(4):17.

Smith DL, Dainoff MJ. The three guiding principles of ergonomics. Today's Chiropractic 2001;30(6):51-53.

Smith DL. Sporting good posture. Canadian Chiropractor 2001;6(4):6,8-9.

Smith DL, Cox RH. Biodynamic performance and strength through chiropractic care. International Review of Chiropractic 2001;57:39-42.

Smith DL. Strength training combined with chiropractic adjustments. Canadian Chiropractor 2000;5:10,12-13.

Smith DL. Swinging Right. Canadian Chiropractor 1999;4:14-17,44.

## **Scientific Conference Presentations (posters and talks)**

Smith DL, Haworth JL, Brooks E, Cousins JM. Changes in postural control and dual task performance following an ultramarathon. XXIth Congress of the International Society of Electrophysiology & Kinesiology, July 5-8, 2016, Chicago, IL.

Rasicci VM, Smith DL, Williems C, Smith E, Groezinger EY, Cousins JM. Body mass, fat mass, and extracellular water decrease following a 27 km and 50 km trail race. American College of Sports Medicine National Conference. May 31-June 4, 2016, Boston, MA

Smith DL, Nock L, Claytor RP. The effect of an acute bout of exercise on movement time. American College of Sports Medicine National Conference. May 26-30, 2015, San Diego, California.

Venis K, Staniskyte M, Smith DL, Alessio H. The comparison of anatomical models and the anatomage table as effective teaching modalities. Midwest Regional Chapter of the American College of Sports Medicine. November 7-8, 2014, Merrillville, Indiana.

Nock LA, Smith DL, Inman JA, Costanzo C, Claytor RP. The effect of an acute bout of exercise on movement time. Midwest Regional Chapter of the American College of Sports Medicine. November 7-8, 2014, Merrillville, Indiana.

Inman J, Costanzo C, Nock L, Smith DL, Claytor RP. An acute bout of exercise enhances cognitive performance in college-age males. Midwest Regional Chapter of the American College of Sports Medicine. November 7-8, 2014, Merrillville, Indiana.

Smith DL, Venis K, Feczer R, Walsh M, Haug M, Slattery E, Blasi S. Effect of posture on a head repositioning and 'head still' task. International Society for Ecological Psychology 2014 North American Meeting. June 5-7, 2014, Miami University, Oxford, Ohio.

Potteiger, J.A., J. Hamm, M. Walsh, and D. Smith. No difference in power output for seated versus standing position during the Wingate anaerobic power test. American College of Sports Medicine Annual Meeting, 2012.

Rodger Tepe, Dean Smith, Kevin Ward, John Ellis, and Jonathan Emlet. A Single-Blind Randomized Controlled Trial of the Effects of Spinal Manipulative Therapy on Fitts' Law Performance. The Journal of Chiropractic Education, Vol. 25, No. 1, 2011, page 64.

Jeffrey A. Potteiger, FACSM, Dean L. Smith, Mark Maier, Tim Foster. Relationship Between Laboratory Testing And On-ice Skating Performance In Division I Men's Hockey Athletes. ACSM

Annual Conference 2009, Seattle, Washington. May 27-30, 2009.

Smith DL, Walsh M, Smith JP. The effect of chiropractic adjustments on locomotion in a patient with xeroderma pigmentosum. ACC-RAC 2007, Phoenix, AZ. March 15-17, 2007.

Smith DL, Smart LJ, Otten EW. Postural coordination dynamics during voluntary suprapostural activity. XVth Congress of the International Society of Electrophysiology & Kinesiology, Boston University, Boston, MA, June 18-21, 2004.

Davis NC, Smith DL, Smith JP. University students' knowledge of and attitudes toward chiropractic. Research Agenda Conference IX. Las Vegas, NV. March 10-13, 2004.

Smith DL, Smart LJ, Otten EW, Pecorak K, Amin M, Bidwell B. Investigating behavioral modes of postural control and coordination. International Society for Ecological Psychology, 2003 International Meeting. Griffith University, Australia, July, 2003.

Amin M, Bidwell B, Johnson B, Pecorak K, Riggs M, Otten E, Smith D, Smart LJ. The effect of field-of-vision on coordination in virtual environments. International Society for Ecological Psychology, 2003 International Meeting. Griffith University, Australia, July, 2003.

Smith DL, Otten EW, Hinton K, Smart LJ, Mobley B, Amin M, Graban L, Crompton K, Manuel J. Surface and visual constraints on postural motion. International Society for Ecological Psychology 2002 North American Meeting. Miami University, Oxford, Ohio, May 23-25, 2002.

Davis NC, Smith DL. Attitudes toward chiropractic. Miami University, Oxford, Ohio, May 2002.

Mobley B, Smart LJ, Amin M, Graban L, Otten E, Hinton K, Smith DL. Task specific postural adaptation. International Society for Ecological Psychology 2002 North American Meeting. Miami University, Oxford, Ohio, May 23-25, 2002.

Smith DL. Postural dynamics following chiropractic adjustment: Preliminary findings. International Society for Ecological Psychology 2002 North American Meeting. Miami University, Oxford, Ohio, May 23-25, 2002.

Smith DL, Otten E, Smart LJ. Postural mode changes with support surface but not vision. Coordination Dynamics 2002. Florida Atlantic University, Delray Beach, Florida. May 10-11, 2002.

Smith DL. Fitts' law and the effect of chiropractic adjustments on movement time. Research Agenda Conference VII. New Orleans, LA, March 13-16, 2002.

Smith DL. Postural control and chiropractic: clinical and empirical issues. Ninth Annual Vertebral Subluxation Research Conference. Sherman College of Straight Chiropractic, SC, Oct. 13-14, 2001.

Dainoff MJ, Mark LS, Oates SP, Smith DL. Wearing a back belt effects reaching posture. Human Factors and Ergonomics Society 45th Annual Meeting. Minneapolis, Minnesota, October 8-12, 2001.

Smart LJ, Smith DL. Crossing borders: implications for postural stability and coordination. Eleventh International Conference on Perception and Action. University of Connecticut, Storrs, CT, June 25-29, 2001.

Smith DL. The perceived spinal performance questionnaire. Miami University, Oxford, Ohio, May 3, 2001.

Dainoff MJ, Mark LS, Oates S, Smith DL. Wearing a Back Belt Affects Working Posture During Reaching. 4th Annual Applied Ergonomics Conference. Orlando, Florida, March 12-15, 2001.

Smart LJ, Smith DL. Clinical utility of postural dynamics. Spring 2000 meeting of the North American section of the International Society for Ecological Psychology. Clemson University, Clemson, SC, June 23, 2000.

Smith DL, Spillman D. A survey of chiropractors' use of nutrition in private practice. Paper presented at the Ohio Academy of Science annual meeting. Cleveland State University, Cleveland, Ohio, April 1999.

## **Invited Talks and Media Interviews**

2016	"Changes in postural control and dual task performance following an ultramarathon" National University of Health Sciences, Lombard, Ill, July 7, 2016. Invited by Gregory
	Cramer, DC, PhD.
2008	"Evidence Based Chiropractic." National University of Health Sciences, Lombard, Ill,
	March 5, 2008. Invited by Gregory Cramer, DC, PhD.
2005	"Sports chiropractic." FitTalk program co-hosted by Dr. Jay Kimiecik. Sound Health
	Talk Show, WMUB, National Public Radio, May 25, 2005.
2005	"Spinal Fitness: From Reconditioning to Performance." Northeast Ohio Strength Clinic
	(National Strength and Conditioning Association), March 12, 2005. Strongsville, Ohio.
2005	"Chiropractic: Principles, Practice and Research." Miami University Colloquium Series,
	PHS Department, February 2, 2005. Invited by Mark Walsh, Ph.D.
2002	"Perception and Action in Motor Control." New York Chiropractic College, Seneca Fall,
	NY, November, 2002. Invited by Kevin A. Ball, Ph.D.

#### **Professional and Review Positions**

2001-present	Postgraduate Continuing Education Instructor for ChiroCredit.com
2016	Peer reviewer for the Journal of the Canadian Chiropractic Association
2008-9	Peer reviewer for the Journal of Manipulative and Physiological Therapeutics

## **Teaching Interests**

My teaching interests relate to teaching future health and exercise professionals. I am most interested in teaching courses dealing with health professional education, anatomy, kinesiology, rehabilitation, research methods and exercise science.

## **Teaching Experience**

2015-present	Motor Skills and Motor Learning (KNH 184)
2012-present	Musculoskeletal Disorders and Corrective Exercise (KNH 453/553)
2006-present	Exercise and Health (KNH 188)
2005-present	Human Functional Anatomy (KNH 244)
2005	Introduction to Psychology (PSY 111)
2002-3	Introduction to Cognition (PSY 271)
2001-2	Introduction to Statistics Laboratory (PSY 293)
2000	TA - Introduction to Psychology (PSY 111)
2000	TA - Introduction to Perception (PSY 273)
1999	TA - Psychology Capstone: Ecological approaches to perception (PSY 480)
1999	TA - Cognitive Psychology (PSY 271)
1999	TA - Physiology & Biophysics of Human Activity (PHS 468)
1998-9	Advanced Golf (PHS 130)
1998	Biodynamics of Human Performance Laboratory (PHS 381)
1994-6	TA – Gross Human Anatomy, National College of Chiropractic

#### Certifications

- \* International Chiropractic Sport Science Diploma (ICSSD), October, 2005
- \* Certified Strength and Conditioning Specialist (CSCS) NSCA, April, 2003
- \* Certified in CPR, June, 2005
- \* Certificate of Registration by the Canadian Chiropractic Examining Board, June, 1997
- \* Certificate of Registration by the College of Chiropractors of Ontario, June, 1997
- \* Certificate of Registration by the National Board of Chiropractic Examiners for Parts I, II, III, IV and Physiological Therapeutics, June 1997

## **Clinical Licenses**

Current active chiropractic license held in Ohio.

# **Professional Memberships**

\* International Society of Motor Control, International Federation of Sports Chiropractic, Ohio Chiropractic Association, World Spine Care, American Association of Clinical Anatomists, Ohio Public Health Association, American Public Health Association