

Education:

1. 1971 Central Washington State College, BA. Ed.
2. 1982 Palmer College of Chiropractic
3. Have accumulated approximately 1,500 - 1,700 post-graduate continuing education hours:
4. Chiropractic adjustment technique, radiology, chiropractic orthopedics, examination, case management, supportive/adjunctive therapies, orthopedics, athletic performance, whiplash traumatology, mild traumatic brain injury, dense connective tissue function/injury/repair.

Clinical Experience:

1. Chiropractic practice Ladner, British Columbia 1983-1987.
2. Chiropractic practice associateships Kent/Redmond, WA, 1988-1989
3. Chiropractic practice Vancouver, British Columbia 1989-2015
4. Chiropractic practice associateship, Bellingham, WA 2006
5. Chiropractic practice associateship, Lynnwood, WA 2007
6. Chiropractic practice Bellingham, WA 2008-present

Post-graduate Courses/Certifications:

1. Western Stages Chiropractic College, Portland, Oregon - Completion of Chiropractic Orthopedics Training, Tukwila, WA, 1988-1990
2. National Strength and Conditioning Association, Colorado Springs, CO - Certified Strength and Conditioning Specialist, (CSCS) 2003 (Examination taken at University of British Columbia)
3. National Strength and Conditioning Association, Colorado Springs, CO - Certified Personal Trainer (NSCA - CPT) 2004 (Examination taken at University of British Columbia)
4. Advanced Certification of Competency 2014. Whiplash and Brain Injury Traumatology, Spine Research Institute of San Diego

Recent Continuing Education

2010

March 27, 2010: ***"Neurophysiology of Pain and the Use of Chiropractic and Nutrition to Manage Pain"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA.

March 27, 2010: ***"Cervical Stenosis, Whiplash, and Spinal Trauma: Clinical Significance, Diagnosis, and Chiropractic Management and Treatment"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 27, 2010: "**Chiropractic Care and Neurology: Nerve Interference and Development of Degenerative Joint Disease (Denervation Supersensitivity)**" Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 27, 2010: "**Vertigo, Dizziness, Whiplash, and Spinal Trauma: Cervical Spine vs. Inner Ear Dysfunction**" Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 27, 2010: "**Gender: Whiplash and Spinal Trauma and How it Effects Treatment Protocol**" Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 27, 2010: "**Must Know Seminal Studies from Researchers and Clinicians and Spinal Trauma, and more**" Daniel J. Murphy, DC, DABCO. Bellevue, WA

2012

April 20, 2012: "**Primary Spine Conference**" - "**A half-day clinical case-based spine care continuing medical education conference**" Peace Health St. Joseph Medical Center. Presented by Spine Care Center. Skagit Valley Casino Resort, Bow, Washington.

2013

January 19, 2013: "**Designing Strength Programs: New School Strength Training**" Exercise Etc. Inc., Steve Bannerot, MA, CSCS*D. Exercise Etc. Inc. Seattle, WA.

January 19, 2013: "**Fitness 2013: Understanding Myofascial Release**" Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 19, 2013: "**Training the Core: 21st Century Core Training**" Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 19, 2013: "**Designing Cardio Programs: New Directions in Cardio Training**" Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 20, 2013: "**Making Fitness a Career; Exercise as Medicine**" Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 20, 2013: "**Designing Weight Management Programs: Progressive Weight Management Techniques**" Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 20, 2013: **"Athletic Fitness: Top Trends in Strength and Conditioning"** Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

January 20, 2013: **"Implementing Practical Programs: Current Techniques for Baby Boomeritis"** Steve Bannerot, MA, CSCS*D. Exercise Etc., Inc. Seattle, WA.

March 30, 2013: **National Strength and Conditioning Association. "Washington State Clinic"** Dale Cannavan, B.Sc, M.Sc., PhD, CSCS*D, Assistant Professor of Exercise Science, Seattle Pacific University. Seattle, WA.

April 26, 2013: **"Primary Spine Conference" - "A one day clinical case-based spine care continuing medical education conference"** Peace Health St. Joseph Medical Center, Joint Replacement Center, Pacific Rim Orthopedic Surgeons, Cascade Brain & Spine Center (Fourth Corner Neurosurgical Associates Inc. P.S. Presented by: Spine Care Center. Skagit Valley Casino Resort, Bow, Washington.

June 8, 2013: **"Mechanism of Injury and Repair of Whiplash and Spinal Trauma"** Daniel J. Murphy, DC, DABCO. Seattle, WA

June 8, 2013: **"Whiplash, Spinal Trauma, and the Evaluation and Treatment of Ligament Sprains in the Cervical Spine"** Daniel J. Murphy, DC, DABCO. Seattle, WA

June 8, 2013: **"Nutrition and Repair of Soft Tissue Injury"** Daniel J. Murphy, DC, DABCO. Seattle, WA

June 8, 2013: **"Spinal Trauma, Thoracic Outlet Syndrome (TOS) and Biomechanics, Diagnosis, and Treatment"** Richard Seroussi, MD. Seattle, WA

June 8, 2013: **"Whiplash, Spinal Trauma and the Emerging Use of Upright MRIs to Demonstrate Disc and Spinal Pathologies Necessitating Additional Treatment Needs"** Andrew Bronstein, MD/CDI. Seattle, WA

June 8, 2013: **"Whiplash, Spinal Trauma and the Neurology of Soft Tissue Injury and Repair"** Daniel J. Murphy, DC, DABCO. Seattle, WA

June 8, 2013: **"When Conservative and Manual Therapies are not enough: New Techniques in Minimally Invasive Surgery for Spinal Trauma"** Jeffrey S. Roh, MD (Orthopedic International); Paul E. Schwaegler, MD, (Seattle Spine Institute). Seattle, WA

June 8, 2013: **"Traumatic Brain Injury Updates and Non-Pharmacological Solutions"** Daniel J. Murphy, DC, DABCO. Seattle, WA

September 12, 2013: **"Keeping Your Center of Gravity Over Your Base of Support: Assessing and Treating Individuals with Balance and**

Mobility Problems" Raymond Hedenberg. PT. Cross Country Education . Renton, WA.

October 12, 2013: Washington State Chiropractic Association - Washington State Department of Labor & Industries sponsored ***"Independent Medical Examination Seminar"*** Moderated by lead presenter Les White, D.C. SeaTac, WA.

October 14, 2013: ***"Spinal Ligament Injury Testing Overview for Any Doctor Part One"*** Jeffrey Cronk, DC, Spinal Kinetics/American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 16, 2013: ***"Mechanism of Injury --- The Most Important Concept to Understanding"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 18, 2013: ***"Spinal Ligament Injury Testing Overview for Any Doctor Part Two"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 21, 2013: ***"CCP Guidelines for Utilization of CRMA"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 24, 2013: ***"Mechanism of Injury"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 28, 2013: ***"Smart Injury Testing and Results Documentation"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 28, 2013, January 3, 2014: ***"Systemizing Your Spinal Soft Tissue Injuries"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 29, 2013, January 3, 2014: ***"Spinal Instability Understanding in Under 5 Minutes"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 29, 2013, October 30, 2013, December 27, 2013: ***"Ligament Terminology to Improve Competency and Ability to Communicate"*** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

October 30, 2013, April 3, 2014: **"How to Read and Interpret a CRMA Report from Spinal Kinetics"** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
October 30, 2013, April 3, 2014: **"CRMA The Most Powerful Tool in Spine Care Today"** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
December 2, 2013, December 4, 2013, April 3, 2014, April 28, 2014: **"Determining the Severity and Location of a Spinal Sprain"** Jeffrey Cronk, DC, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

2014

January 2, 2014: **"Mechanism of Injury"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 2, 2014: **"The Degree of Impact Does Not Correlate to the Degree of Injury"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 2, 2014: **"Chiropractic Standard Subluxation Assessment"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 2, 2014: **"What Is Spinal Instability? (Spinal Ligament Injuries)"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 2, 2014: **"Spinal Ligament Injuries --- Was the AMA Wrong?"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 21, 2014: **"Chiropractic Adjustments and the Effect on Mechanoreceptors"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 21, 2014: **"Audible Sound of Adjustments---Osteopathic Research"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)
January 21, 2014: **"Forward Head Posture the Significance of the Findings--Renee Calliet, MD"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

January 21, 2014, February 5, 2014, February 6, 2014: **"Can You Manually Adjust Spinal Instabilities?"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

February 4, 2014: **"Mechanoreceptors"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

February 13, 2014, February 17, 2014: **"Spinal Ligament Failure Forces"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

February 19, 2014: **"Spinal Ligament Injury Imaging Algorithm"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

March 1-2, 2014: **"Whiplash Injury Biomechanics and Traumatology Module 1 Whiplash Advanced Topics: The Fundamental Science"** Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego. SeaTac, Washington.

March 24, 2014: **"Chiropractic Standard Subluxation/Spinal Instability Assessment"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

March 27, 2014: **"What My Final Law Project Taught Me About Pre-Existing Conditions"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

April 5-6, 2014: **"Whiplash Injury Biomechanics and Traumatology Module 2 Management Principles in Personal Injury and Forensic Documentation"** - Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego. SeaTac, Washington.

May 16, 2014: **"Evidence-Based Sports Enhancement Programs: From ACL Injury Prevention to Speed and Agility Coaching"** - Kevin McWilliams, MS, PT, OCS. Cross Country Education - Renton, WA.

May 19 -20, 2014: **"Chicago One-on-One Seminar Objectifying Spinal Ligament Injuries"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

May 20, June 16, June 17, June 26, 2014: **"Dynamic UpRight MRI 101 with Dr. Steven P. Brownstein, MD Medical Radiologist"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning live and replay with telephone enquiries)

June 28-29, 2014: **"Whiplash Injury Biomechanics and Traumatology Module 3 Principles in Impairment Rating and Forensic**

Reporting" Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - SeaTac, Washington.

July 28, 2014: **"The Work Flow of a Typical Spinal Ligament Injury Patient"** Jeffrey Cronk, DC, JD, Spinal Kinetics/ American Spinal Injury & Impairment Consultants, Eau Claire, WI (Distance Learning)

August 2, 2014: **"Functional Restoration Lecture Series Lumbar Spine, Hip and Knee"** Kevin Kerchansky, DC, DACRB, CSCS, CICE, Director of Physical Rehabilitation at Triad Pain Management Clinic, Tempe, AZ. Post-Graduate Faculty Northwestern Health Sciences University, Board Certified Diplomate to the American Chiropractic Rehabilitation Board, Certified Strength and Conditioning Specialist, Certified Independent Medical Examiner. Sponsor: Northwestern Health Sciences University. SeaTac, WA.

August 3, 2014: **"Functional Restoration Lecture Series Cervical Spine, Thoracic Spine and Shoulder"** Kevin Kerchansky, DC, DACRB, CSCS, CICE, Director of Physical Rehabilitation at Triad Pain Management Clinic, Tempe, AZ. Post-Graduate Faculty Northwestern Health Sciences University, Board Certified Diplomate to the American Chiropractic Rehabilitation Board, Certified Strength and Conditioning Specialist, Certified Independent Medical Examiner. Sponsor: Northwestern Health Sciences University. SeaTac, WA.

September 13, 2014: National Strength and Conditioning Association. **"Washington State Clinic"** Dale Cannavan, B.Sc, M.Sc., PhD, CSCS*D, Assistant Professor of Exercise Science, Seattle Pacific University. Seattle Pacific University. Seattle, WA. 1) **"Balancing Workload, When to Push Hard and When to Back Off"** 2) **"Biomechanics in Resistance Training"** 3) **"Mobility and Flexibility: Considerations in Strength Training"** 4) **"Olympic-Style Lifting for the Strength and Conditioning Coach"** 5) **"Overcoming the Myth of Proprioceptive Training"** 5) **"Running at the Threshold: Myths and Reality about the Lactate Threshold"**

October 4-5, 2014: **"Whiplash Injury Biomechanics and Traumatology Module 4 Medicolegal Fundamentals for Practitioners and Forensic Experts"** - Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - SeaTac. Washington.

November 22-23, 2014: **"19th Annual SRISD Scientific Conference"** - Arthur C. Croft, PhD., D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - Coronado Island, CA. **Keynote Speaker: Paul C. Ivancic**, Associate Research Scientist in Orthopaedics and Rehabilitation

at the Yale School of Medicine. B.Sc. in Mathematics & Applied Mechanics in 1995 from Queen's University; M.S.E. in Bioengineering (1997), M.S.E. in Computer & Information Science (1999), and M.A. in Mathematics (2000) from the University of Pennsylvania; M.S. (2002), M.Phil. (2003), and Ph.D. (2006) in Biomedical Engineering from Yale University where he conducted spine biomechanics research in the Yale Biomechanics Laboratory under the mentorship of Manohar Panjabi. He has published over 30 papers in peer-reviewed journals. Dr. Ivancic's research interests include human injury biomechanics, spine biomechanics, whiplash, and neck injury prevention.

November 30, 2014: **2014 Advanced Certification of Competency Spine Research Institute of San Diego Whiplash and Brain Injury Traumatology and Annual SRISD Scientific Conference**

Completion of Dr. Croft's comprehensive training program and qualifying examination in biomechanics, occupant kinematics, clinical diagnostics, and management of spinal trauma and mild traumatic brain injuries.

2015

March 21, 2015: ***"Whiplash, Spinal Trauma, and Cervicogenic Headache"*** Daniel -J. Murphy, DC, DABCO. Bellevue, WA

March 21, 2015: ***"Whiplash, Spinal Trauma, and Hidden Debilitating Neck Pain: Understanding and Managing the Longus Colli and the Styloid Process"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 21, 2015: ***"Whiplash, Spinal Trauma, and Permanent Injuries: Measuring Deficits"*** Theodore Becker, PhD with Everett Pacific Industrial Rehabilitation. Bellevue, WA

March 21, 2015: ***"Whiplash, Spinal Trauma, Upper Cervical and Sub-Occipital Injuries"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 21, 2015: ***"Whiplash, Spinal Trauma, and Radiology: The '800 Pound Invisible Gorilla' and Unintentional Misses on Films"*** Daniel J.

Murphy, DC, DABCO. Bellevue, WA March 21, 2015: ***"Review of Studies on Cost-Effectiveness of Chiropractic Treatment"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 21, 2015: ***"Understanding the Pathology of 'Mild' Traumatic Brain Injury and its Management"*** Daniel J. Murphy, DC, DABCO. Bellevue, WA

**NATIONAL STRENGTH AND CONDITIONING ASSOCIATION 2015
NORTHWEST REGIONAL CONFERENCE, RICHMOND, B.C.**

AUGUST 29 - AUGUST 30, 2015

August 29, 2015: "How to Program for Speed and Power Development" Scott Hebert, CSCS, NSCA-CPT. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 29, 2015: "How to Develop a Career as a Personal Trainer" Robert Linkul, MS, CSCS,*D, NSCA-CPT,*D. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 29, 2015: **"Purposeful Balance Training for Rehabilitation and Performance"** Grace Golden, PhD, CSCS. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 29, 2015: **"Skeletal Muscle Adaptations: Molecules to Hormones"** Dale Cannavan, PhD, CSCS,*D. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 29, 2015: "Introduction To Movement Training With The ViPR: What You are Missing in Your Program Design" Michol Dalcourt, MS. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C

August, 29, 2015: **"Visceral Restrictions - A missing link in articular mobility dyfunctions"** Ian McCarthy, MSc OST, GSR, CSCS,

CKTP. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 30, 2015: "**Barefoot Training**" Mike Martino, PhD, CSCS. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C

August 30, 2015: "**Training the Senior Athlete: Special Needs and Concerns**" Tim Vagen, MS, CSCS. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 30, 2015: "Block Power Training For Olympic Success" JC Cole, MS, CSCS, RSCC. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 30, 2015: "**The Internal Model of Learning - Complementary Theory of Motor Control**" Daehan Kim, MS, CSCS. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

August 30, 2015: "**Entering The Kettlebell**" Sheila Hamilton, RKC, NSCA-CPT. National Strength and Conditioning Association Northwest Regional Conference, Olympic Oval, Richmond, B.C.

2016

**MVC Trauma Advanced Med-Legal Seminar for Today's Integrated
Healthcare Provider**

May 14, 2016: "**Mechanism of Injury in an Acceleration-Deceleration MC**" Presented by **Richard Seroussi, MD, Physiatrist, Physical Medicine & Rehabilitation specialist at Seattle Spine & Sports Medicine**

May 14, 2016: **"Treating Neck Trauma and Pain: From Conservative Care to Surgery"** Presented by Panel: **Brian O'Hea, DC, Pacific Chiropractic Clinic**

Scott Olson, PT, MTI Physical Therapy

Yung Lee, DO, Physical Medicine & Rehabilitation specialist, Evergreen Health Sport & Spine Center

Addison Stone, MD, Orthopedic Spine Surgeon at PRO ORTHO

May 14, 2016: **"Documentation of Injuries: New Trauma Superimposed on Pre-Existing Conditions; and Apportioning Multiple Traumatic Episodes"** Presented by **Richard H. Adler, JC, Adler Giersch PS Law Firm**

May 14, 2016: **"Etiology, Evaluation and Treatment of Shoulder Injuries Following MVC"** Presented by **Vincent Santoro, MD, Orthopedic Surgeon, Evergreen Health Orthopedic & Sports Care**

May 14, 2016: **"Evaluation and Treatment of Acceleration-Deceleration MVC Trauma to Elbow and Wrist"** Presented by **Rajiv Goel, MC, Orthopedic Surgeon, Sound Hand and Orthopedics, PLLC**

May 14, 2016: **"Evaluation and Treatment of Acceleration-Deceleration MVC Trauma to Knee"** Presented by **Neil Roberts, MD, Orthopedic Surgeon, PRO ORTHO**

ERCHONIA LOW LEVEL LASER HEALTH & WELLNESS SYSTEM

May 22- May 23, 2016: **"Biotensegrity Restoration Technique"** Jeffrey Spencer, BA, MA - University of Southern California, Los Angeles;. DC - Cleveland Chiropractic College, Los Angeles; Certified Chiropractic Sports Physician, Los Angeles College of Chiropractic. 1972 US Olympic Cycling Team, 2004 International Chiropractors Association "Sports Chiropractor of the Year".

**BRITISH COLUMBIA PROVINCIAL CLINIC - VANCOUVER COLLEGE,
VANCOUVER, BRITISH COLUMBIA**

May 28, 2016; 8:00-9:20 am: "**Development of Energy Systems**" This presentation will focus on key determinants of energy systems' contributions to sport performance and physical activity from a physiological perspective. In addition, relationships between the power-capacity spectrum will be discussed. Finally, examples from literature on elite endurance and elite team sport athletes will be used as models for training in sub-elite and general population environments. Greg Du Manoir, PhD

May 28, 2016; 9:30-10:30 am: "**Is it Coachable or Structural? Understanding Structural Variations and Practical Guidance for Incorporating this Knowledge Into Your Coaching**" This talk goes over many structural variations in the human anatomy, specifically addressing hips, backs, and limb length; and discussing implications with exercises including squats, deadlifts, push-ups, and planks. The discussion then moves to strategies for identifying whether limitations in the gym are structural or coachable, and for addressing them appropriately. Elsbeth Vaino, CSCS

May 28, 2016; 10:45-12:15 am: "**Building Performance from the Inside Out: The Importance of Structural Integrity**" Structural integrity is about creating joints that work for you - ones that can withstand the rigors of higher load and higher volume training. Connections and control, the keys to structural integrity - enable higher quality movement and better access to your potential than traditional training alone. In this session, Ingrid will lead you through simple exercise progressions that are easy to implement with almost any client and are a valuable addition to any program. Ingrid Marcum, CSCS

May 28, 2016; 1:05-1:50 pm: "**Occupational Burnout in Strength & Conditioning Coaches**" This presentation will define what burnout is, and discuss past and current literature. Catherine will cover her research on the prevalence of burnout in strength and conditioning coaches. Additionally, she will explore causes, prevention, and intervention programs. Catherine King, MSc, CSCS, NSCA-CPT

May 28, 2016; 2:00-3:30 pm: "**Somatics for Athletics; Movement Restoration Techniques**" Do you have clients or athletes that cannot seem to resolve their muscular tightness or improve their range of movement? They are likely suffering from Sensory Motor Amnesia (SMA). This type of exercise is excellent for stress management, recovery from hard training, post-rehabilitation of inefficient muscular activation patterns, improving movement, and slowing down the mind. This introduction to somatic exercises will include both a lecture and a lab. Brian Justin, MHK, CSCS

May 28, 2016: 3:40-4:40 pm: "**Disordered Eating and Sizeism in the Fitness Industry - How Does a Trainer Respond?**" This course will help trainers to understand and identify eating disorders, how to approach a client who may have an eating disorder, and how to train a client with an eating disorder, understand the health at any size paradigm, understand the damage of prescribing diets and where to refer clients for help. Carmen Kaufmann, MS

BRAINS AND BALANCE PAST 60 TM

June 19, 2016: "**Forever Young: Secrets of the Older Mind**" Loss of cognition is not inevitable! Discover the effects of hydration, nutrition, and medications on memory, problem solving, and language skills. Then learn specific "Train the Brain" drills to keep the older brain sharp and active! Steve Bannerot, Certified Strength and Conditioning Specialist

June 19, 2016: "**Balance, Stability & Fall Prevention**" Core strength is the foundation of any fall prevention program and this unique program's goal is to get seniors out of their chairs & onto their feet. Innovative age-appropriate drills improve 1-legged balance as well as weight shifting abilities. Steve Bannerot, Certified Strength and Conditioning Specialist

June 19, 2016: "**Balance, Mobility & Function**" The ultimate goal of any fall prevention program is to improve your senior's gait while developing their agility. This fast paced program uses a variety of fun, interactive drills

to keep you senior clients active and agile for years to come. Steve Bannerot, Certified Strength and Conditioning Specialist

June 19, 2016: "**Making Connections: Challenging the Older Brain**" This awesome workshop will teach you specific drills that are designed to improve your clients' processing speed as well as their ability to reason & process abstract thoughts. Learn that the older brain can be trained to make new connections. Steve Bannerot, Certified Strength and Conditioning Specialist

Steve Bannerot, MA, CSCS. Steve has been immersed in the fitness industry since 1988 when he retired from his 12 year athletic career in springboard diving. He earned his MA in psychology from Seattle University and is a Certified Strength and Conditioning Specialist as well as an ACE certified personal trainer and group exercise leader and outdoor boot camp instructor. Steve's passion is designing and developing strength and conditioning programs for high school and collegiate athletes and teams, and he is experienced in working with a variety of population groups from children to older adults to the overweight/obese population and he enjoys motivating and educating clients in a variety of environments. A former aerobics competitor, Steve is now a Family and Child Therapist who incorporates fitness, wellness and athletics as mechanisms for healing. An avid outdoorsman, Steve recently climbed to the summit of Mt. Rainier, WA. Steve joined our faculty in 2002.

October 2, 2016: "**Suicide Care for Chiropractors: Creating Connection and Hope**" The presentation materials are provided to registrants by **Jeffrey C. Sung, M.D.** and the Washington State Chiropractic Association, solely for personal, educational use in connection with such seminar.

December 8, 2016: "**(Re) Defining the Core. The Key to Functional & Corrective Exercise**" Clinicians understand the pain relief and truly improved fitness depend on core stability and peripheral mobility. However, long-term results are elusive! It is generally agreed that to have peripheral

mobility, you must have core stability. Functional exercise is any exercise which acknowledges this and engages the body for this express purpose.

Course Content: 1. "Vital Definitions: Essential Elements of Core Communication"

2. "Lab: Kinesiological surface Electromyography EMG Testing"

3. "Muscles 101"

4. "Introducing the Twist: How the Human Motor System Trains Itself"

5. "Training Functional Chains: Exercising out of the Twist"

6. "Lab: The Functional Chain Game"

Course Director: David Lemke, LMP, NMT, sEMG Tech. Mr. Lemke was the primary consultant to Champions Sports Medicine (Dr. P.Z. Pearce, Ironman Medical Director, Spokane, WA) in the creation of their Biomechanics Lab.

"HEALTHY AGING"

December 10 - 11, 2016: 1. **"Identifying the primary health care issues in America today."**; 2. **"An overview of our current healthcare delivery system concepts in improving America's healthcare."**;

3. **"Photobiology/Low Level Laser and how it applies to the office visit;** Attended application/(Upregulation) Hoppenfeld Myotome Testing C5-T1/Integration of Low Level Laser and Percussion/Unattended application for posture correction/Posture Pump.";4. **"Adenosine**

Triphosphate (ATP)." Discuss the importance of ATP in human physiology. Learn key physiological functions of ATP. Discuss problems with inadequate production of ATP.; 5. **"Mitochondria."** Discuss the importance of the mitochondria in health and disease. Discuss the relationship between the mitochondria, free radicals, and ATP.; 6. **"Laser Photon Therapy."** Discuss the relationship between mitochondria, free radicals, ATP, cytochrome c oxidase enzyme, and laser photon therapy.;

7. **"Laser Physiology."** Discuss the biphasic nature of laser photon therapy, wavelengths, amperage, penetration, secondary and primary

influences.; 8. **"Brain Function: trauma, degenerative, vascular."**; 9. **"Systemic Wellness and Peak Performance (Upregulation)."**; 10. **"Chronic Low Back Pain."**; 11. **"Acute Whiplash."**; 12. **"Scar Tissue and the Fibrosis of Repair."** Dan Murphy, DC, DABCO and Jerome Rerucha, BS, CSCS, DC.

2017

January 21, 2017: 1. **"Foundation For Chiropractic Progress report on the ongoing opioid epidemic."** Dr. Gerald Clum, President Emeritus of Life Chiropractic West. Seattle, WA.

January 21, 2017: 2. **A presentation summarizing research into the science of chiropractic and the neurophysiology associated with the chiropractic adjustment.** Dr. Heidi Haavik, B. Sc., University of Auckland, DC New Zealand College of Chiropractic, PhD University of Auckland, Director of Research at the New Zealand College of Chiropractic, Adjunct Professor at the University of Ontario Institute of Technology, Oshawa, Ontario, Canada. Seattle, WA. 2014 published textbook: **"The Reality Check" A quest to understand Chiropractic from the Inside out.** Haavik Research - www.heidihaavik.com. In association with NEW ZEALAND COLLEGE OF CHIROPRACTIC, AUCKLAND, NEW ZEALAND.

"Posture, Mobility, & Performance" Training

Seattle, WA: Saturday, February 4, 2017

February 4, 2017: **"Integrated Postural Training"** Core strength is the foundation of any strength & conditioning program. This outstanding class will teach you to assess core strength & postural stability and then integrate upper body, lower body & core training into a cohesive whole. Steve Bannerot, Certified Strength and Conditioning Specialist

February 4, 2017: **"The Shoulder: New School Training Techniques"** Savvy trainers don't train "muscles" - they train specific functional movement patterns. This reality-based program will show you

exercise progressions to cement your understanding of shoulder movement & improve performance while minimizing injury risk. Steve Bannerot, Certified Strength and Conditioning Specialist

February 4, 2017: "**The Knee: Top Trends in Training**" The ultimate goal of any mobility program is to improve performance by coordinating movement at the knee, hip, and ankle. Learn to maximize function by with innovative strength building exercises that allow the client to move effortlessly and without pain. Steve Bannerot, Certified Strength and Conditioning Specialist

February 4, 2017: "**Three Dimensional Flexibility**" This awesome workshop will teach you specific drills & activities that are designed to integrate myofascial release, dynamic flexibility & facilitated stretching. Discover how pre- and post-workout soft tissue release can have a huge effect on a client's results. Steve Bannerot, Certified Strength and Conditioning Specialist

May 30, 2017: "**Optimal Muscle Training**" Authored by Exercise ETC. Faculty: Guy Andrews, MA CSCS*D

September 23-24, 2017: "A Successful Practice: Examining, Imaging, and Great Patient Care" Dr. Alicia M. Yochum, RN, DC, DACBR, RMSK; Dr. Jeffrey McKinley, DC, CCSP; Foot Levelers, Vancouver, B.C.

TRIWEST HEALTHCARE ALLIANCE

TriWest is On a Mission to Serve[®] our nation's Veterans and military community in partnership with the Department of Veterans Affairs (VA) in administering the Veterans Choice Program (VCP) and Veterans Affairs Patient-Centered Community Care Program (PC3). It is our privilege to work alongside VA as we provide Veterans with access to high-quality health care through our network of community providers.

May 14, 2017: Triwest Behavioral Health Department offered Dr. Hargreaves free continuing education credits by learning behavioral health

care skills to treat Veterans, and learn about military culture - all in one easy-to-navigate place.

Operation Treat a Vet (OTV) is a joint initiative developed by PsychArmor for TreWest Healthcare Alliance in collaboration with the Department of Veterans Affairs (VA) and the Defense Centers of Excellence (DCOE) Center for Deployment Psychology (CDP). The PsychArmor site offers training to help you better understand the unique challenges our nation's Veterans and their families face, equipping you with the skills necessary to offer the best care possible

Prior to receiving the "Comorbid Issues for Veterans" learning path, the following modules were completed:

1. May 16, 2017: "15 Things Veterans Want You to Know"
2. May 24, 2017: "Understanding Stress"
3. May 24, 2017: "The Brain and Combat Stress."

The learning path selected for Dr, Hargreaves is "Comorbid Issues CPT" (Cognitive Processing Therapy). This path explores how certain diagnoses interrelate.

The following training modules have been completed by Dr. Hargreaves within the "Comorbid Issues CPT for Veterans Path"

1. May 16, 2017: "15 Things Veterans Want You to Know"
2. May 24, 2017: "Understanding Stress"
3. May 24, 2017: "The Brain and Combat Stress."
4. May 31, 2017: "Connecting with the VA for Providers"
5. June 7, 2017: "Invisible Wounds of War Overview"
6. June 8, 2017: "Traumatic Brain Injury" Part 1,2,3.
7. June 8, 2017: "Substance Abuse in Military and Veteran Populations"
8. October 31, 2017: "Inner Conflict and Survivor's Guilt"

9. November 1-2, 2017: "Introduction to Cognitive Processing Therapy (CPT)"
10. November 2, 6, 2017: "CPT Efficacy Studies"
11. November 9, 2017: "PTSD Symptoms and Tx Progression"
12. November 13, 2017: "Theories of Treatment for PTSD"
13. November 13, 2017: "Overview of CPT"
14. November 14 - 15 - 16: "Phase 1 Pretreatment Considerations"
15. November 16, 2017: "Phase 2 Session 1"
16. November 20, 2017; "Session 2"
17. November 21, 2017: "Session 3"
18. November 21, 2017: "Phase 3 Session 4 Processing the Trauma"
19. November 27, 2017: "Socratic Dialogue"
20. November 27, 2017: "Session 5 Second Account"
21. November 28, 2017: "Phase 4 Session 6 Learning to Challenge"
22. December 1, 2, 2017: "Phase 5 Sessions 8 - 11 Trauma Themes"
23. December 5, 2017: "Phase 6 Session 12 Facing the Future"
- 24: December 5 - 6, 2017: "Case Consultation"

2018

January 20, 2018: "**FMT Basic Certification**" This course introduces the concept of movement therapy and enhancement via functional taping methods. It includes a review of the current literature supporting the theory of kinesiology taping for the purposes of rehabilitation, edema/swelling management, neuropathic pain, scar mobility and postural management. FMT Basic is an evidence-informed kinesiology taping course that redefines our understanding of the effects of elastic therapeutic taping on pain mitigation, circulation and proprioception. FMT Basic lays the groundwork for a practical framework of 'taping movement, not

muscles' to replace an outdated model focused on directional taping to activate or inhibit muscles. Presented by Shante Cofield, PT, DPT. Seattle, WA.

January 21, 2018: **"FMT Performance"** This course expands on the concepts of movement therapy and performance enhancement via functional taping methods that are taught in FMT BASIC. The anatomy and physiology of myofascial slings is covered. Movement assessment to determine dysfunction in specific slings and how to apply tape in a manner that improves movement and function is done in a workshop, hands-on environment. Corrective exercise techniques to address joint mobility and stability dysfunctions along these myofascial pathways are presented. Presented by Shante Cofield, PT, DPT. Seattle, WA.

March 10 - 11, 2018: **(SECOND ENROLLMENT FOR DR. CROFT'S BIOMECHANICS AND TRAUMATOLOGY TRAINING) "Whiplash Injury Biomechanics and Traumatology Module 1 Whiplash Advanced Topics: The Fundamental Science"** Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego. SeaTac, Washington.

March 24, 2018: **"Trauma, Pain, Inflammation, Fibrosis, Chronic Pain, and the Role of Gut Health in Healing."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **"Trauma, Upper Cervical Imaging: MRIs, Mismatch of C1-C2, Impinging Flow of Cerebral Spinal Fluid; The Potential Role of Spinal Adjustment."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **"Opioid Crisis, Pharmacology and Receptors."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **"Aggravation of Pre-Existing Conditions: Trauma Superimposed on Prior Condition; Apportioning Multiple Trauma - The Law and Clinical Best Practices in Documentation."** Melissa D. Carter, Attorney at Law, Adler Giersch ps

March 24, 2018: **"Live Demonstration of Chiropractic Practice Techniques for TMJ, Uncinate Process, and Positional Vertigo."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **"Vertebral Artery Subluxation/Dissection: Research Update."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **"Mild Traumatic Brain Injury (mTBI): Proper Diagnosis, Error Rate, and Best Practices for Documentation.** Richard H. Adler, Attorney at Law; Adler Giersch ps

March 24, 2018: **"Mild Traumatic Brain Injury (mTBI) and the Risk of Neurodegenerative Disorders."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

March 24, 2018: **Must Know Key Medial Research and its Impact on Understanding Whiplash and Spinal Trauma: What They Got Right v. What they Got Wrong."** Daniel J. Murphy, DC, DABCO. Bellevue, WA

During June, 2018: **"Functional Testing, Evaluation and Assessment"** JTECH's Functional Testing, Evaluation and Assessment 1-Day course is provided as an introductory lesson into the use of JTECH's advanced functional testing tools. Learn the benefits of objective testing and how to best make use of your systems. JTECH Medical.com

May 19-20, 2018: **(SECOND ENROLLMENT FOR DR. CROFT'S BIOMECHANICS AND TRAUMATOLOGY TRAINING) "Whiplash Injury Biomechanics and Traumatology Module 2 Management Principles in Personal Injury and Forensic Documentation"** - Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego. SeaTac, Washington.

September 29-30, 2018: **(SECOND ENROLLMENT FOR DR. CROFT'S BIOMECHANICS AND TRAUMATOLOGY TRAINING) "Whiplash Injury Biomechanics and Traumatology Module 3 Principles in Impairment Rating and Forensic Reporting"** Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - SeaTac, Washington.

November 3-4, 2018: **(SECOND ENROLLMENT FOR DR. CROFT'S BIOMECHANICS AND TRAUMATOLOGY TRAINING) "Whiplash Injury Biomechanics and Traumatology Module 4 Medicolegal Fundamentals for Practitioners and Forensic Experts"** - Arthur C. Croft, PhD. ©, D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - SeaTac. Washington.

November 17-18, 2018: **"23rd Annual SRISD Scientific Conference"** - Arthur C. Croft, PhD., D.C., M.Sc., M.P.H. Spine Research Institute of San Diego - Coronado Island, CA. **Keynote Speaker: Narayan Yoganandan, PhD**, is Professor and Chairman of Biomedical Engineering in the Department of Neurosurgery, and Professor of Biomedical Engineering at Marquette University. He is one of the pioneers in whiplash

traumatology, having authored hundreds of professional papers. He returns to SRISD as one of our most popular guest speakers.

2019

March 30, 2019: **"Understanding the Benefits and Risks of Spinal Musculoskeletal X-Rays Post-Traums"** Daniel J. Murphy, DC, DABCO. Seattle, WA

March 30, 2019: **Review of Anatomy of Cervical Spine with Deep Dive into Anatomy of Cervical Facet Joints" (video).** Dr. R. Shane Tubbs, Ph.D., PA-C. Editor Grey's Anatomy (41st edition). Professor, Chief Scientific Officer - Seattle Science Foundation. Expertise: Anatomical Research; Anatomy; Neuroanatomy; Neuroscience; Teaching; Translational Research; Neurosurgery; Pediatric Neurosurgery.

March 30, 2019: **"The 'Text-Neck': Emerging Syndrome and Barriers to Optimum Recovery."** Daniel J. Murphy, DC, DABCO. Seattle, WA.

March 30, 2019: **"The Craniocervical Syndrome and MRI."** Daniel J. Murphy, DC, DABCO. Seattle, WA.

March 30, 2019: **Research Update on Traumatic Brain Injury; What Today's Health Care Professional Needs to Know."** Daniel J. Murphy, DC, DABCO. Seattle, WA.

March 30, 2019: **Fact vs. Fiction: Chiropractic as Cost-Effective, Medical Necessity of Maintenance Care Post-Trauma."** Daniel J. Murphy, DC, DABCO. Seattle, WA.

March 30, 2019: **Overcoming the Missed Diagnosis of Mild Traumatic Brain Injury (mTBI).** Richard Adler, Attorney at Law, Adler Giersch.

March 30, 2019: **"Must Know Key Medical Research Impacting Today's Practitioner."** Daniel J. Murphy, DC, DABCO. Seattle, WA.

July 19 -July 21, 2019: **"Perform Better 3-Day Functional Training Summit."**

July 19, 9:15- 10:30: **"The Nervous System: What Do You Really Need to Know?"**

Sue Falsone, PT, MS, SCS, ATC, CSCS, COMT, RYT. Associate Professor, Athletic Training, A.T. Still University; Former Head Athletic Trainer, Los Angeles Dodgers and US Men's National Soccer Team; Author: **"Bridging the Gap from Rehab to Performance."**

July 19, 10:45 - 12:00: **"Current Concepts in Core Training."** Mike Boyle, MA, ATC. Internationally recognized expert in strength and conditioning; former Strength and Conditioning Consultant for the Boston Red Sox.

July 19, 1:15 - 2:30: **"Purpose Driven Performance through Position, Pattern and Power Progressions."** Mark Verstegen, MS, CSCS.

Consultant for many top professional teams, serves as the Director of Performance for the National Football League Players Association:

Author: **"Core Performance Series"** and **"Every Day is Game Day."**

July 19, 2:45 - 4:00: **"Improving Mobility & Stability for Injury**

Prevention." Lee Burton, PhD, ATC, CSCS. Co-Founder of the Functional Movement Screen, Former Program Director for Athletic Training at Averett University, Doctorate degree from Virginia Tech University with an emphasis on Health Promotion.

July 19, 4:15 - 5:30: **"Improving Mobility & Stability for Injury**

Prevention - Hands-On." Lee Burton, PhD, ATC, CSCS. Co-Founder of the Functional Movement Screen, Former Program Director for Athletic Training at Averett University, Doctorate degree from Virginia Tech University with an emphasis on Health Promotion.

July 20, 8:00 - 9:15: **"Recovery & Regeneration: Promoting Recovery**

for Enhanced Performance." Brandon Marcello, PhD, RSCC*E. Currently tasked with defining the future of soldier performance for the US Department of Defense, Formerly served as the Director of Sports Performance at Stanford University, Served as the Director of Performance for USA Softball.

July 20, 9:30 - 10:45: **"Changing Movement: Why Some Correctives**

Work and Others Don't." Grey Cook, MSPT, OCS, CSCS. Co-Founder of the Functional Movement Screen, Consultant for many universities and professional sports teams in all four major sports, Board Certified Orthopedic Clinical Specialist with American Physical Therapy Association.

July 20, 11:00 - 12: 15: **"The Body-Sport Connection."** Greg Rose, DC.

Cohost of the Golf Fitness Academy sponsored by Titleist on the Golf Channel, Advisory Board for the National Pitching Association.

July 20, 1:30 - 2:45: **"The Odd Couple: The Relationship between**

Strength and Mobility." Josh, Henkin, CSCS. Creator of the Ultimate Sandbag and the Dynamic Variable Resistance Training System, Developer of US Army Special Forces Recruiting Battalion Fitness Preparation Program, Consultant to professional and collegiate sports programs.

July 20, 3:00 - 4:15: **"Fascia in Training - What it is and Why it**

Matters." Todd Wright, CSCS, FAFS. Assistant Coach - Head of Strength and Conditioning, Philadelphia 76ers, Fellow of Applied Functional Science, Over 20 years of coaching experience in collegiate basketball

(Clemson and Texas), Consultant for Nike Global Basketball, Nike SPARQ and the Nike Performance Council.

July 20, 4:30 - 5:45: **"Fascia in Training - What it is and Why it Matters - Hands-On."** Todd Wright, CSCS, FAFS. Assistant Coach - Head of Strength and Conditioning, Philadelphia 76ers, Fellow of Applied Functional Science, Over 20 years of coaching experience in collegiate basketball (Clemson and Texas), Consultant for Nike Global Basketball, Nike SPARQ and the Nike Performance Council.

July 21, 8:00 - 9:15: **"Mechanism of Low Back Pain & Injury in Strength Training."**

Richard Ulm, DC. MS, CSCS. International Instructor for Dynamic Neuromuscular Stabilization (NMS), Team Physician for Columbus Weightlifting Club & Project Lift, Head treating physician, at Columbus Chiropractic & Rehabilitation Center.

July 21, 9:30 - 10:45: **"Speed Training the Athlete in All of Your Clients"** Duane Carlisle, MSC, MSCC. Performance Consultant to the NFL, Pac-12, Started the first full-time Sports Performance Facility - Lightning Fast Training Systems, LLC in Philadelphia, Served as the Director of Sports Performance at Purdue University, Former Strength and Conditioning Coach for the Philadelphia Eagles, Former Strength and Conditioning Coach of the San Francisco 49ers.

July 20, 11:00 - 12:15: **"Speed Training the Athlete in All of Your Clients - Hands-On."** Duane Carlisle, MSC, MSCC. Performance Consultant to the NFL, Pac-12, Started the first full-time Sports Performance Facility - Lightning Fast Training Systems, LLC in Philadelphia, Served as the Director of Sports Performance at Purdue University, Former Strength and Conditioning Coach for the Philadelphia Eagles, Former Strength and Conditioning Coach of the San Francisco 49ers.

2020

March 5, 2020. **"Backward Running: The Why and How to Program for Better Athleticism"** National Strength and Conditioning Association Continuing Education.

March 15, 2020. **"A Swim-Specific Shoulder Strength and Conditioning Program"**

CEU Quiz National Strength and Conditioning Association Continuing Education.

July 8-12. ***"Improving Mechanical Effectiveness During Sprint Acceleration"*** CEU Quiz National Strength and Conditioning Association Continuing Education.

Continuing Sigma Instruments Proadjuster 360/Prosoft 360 chiropractic spine and joint instruments online training.

SIGMA INSTRUMENTS - TRAINING ARCHIVE - PROADJUSTER 360

SPINE SOFTWARE - EDUCATION

1. Physics Review - 12:34
2. Screen Navigation - 14:04
3. Picking Waves - 6:35
4. Explaining the Spine Screen to Patients - 1:26
5. Understanding Patient Education in 2020 - 10:36
6. Interexaminer Reliability Study - In Print - 2+ hours rereading and rereading
7. Master Research Database - 45+ minutes perusal
8. Research Packet - ongoing reference and study - 3+ hours to date (to date October 26, 2020)
9. Roger Tepe Research at Logan College of Chiropractic - examine when able to do so

SPINE SOFTWARE - TECHNIQUE

1. Chair Settings - 1:10
2. Patient Position - 1:38
3. Proper Grip - 0:53
4. Stabilization - 1:00
5. Touch Drill - 1:20
6. T6 Drill - 1:27
7. Thoracic Analysis - 1:35

8. Cervical Analysis - 1:14
 9. Lumbar Analysis - 1:14
 10. Proadjuster Zoom Webinar - 34:50 (May 15, 2020)
 11. Proadjuster Zoom Webinar - 34:43 (June 12, 2020)
 12. Proadjuster Zoom Webinar - 39:04 (July 17, 2020)
 13. Trigger Point Therapy - 4:04
 14. Proadjuster Zoom Webinar - 43:34 (October 16, 2020)
- Total training time to date - 8 hours 39 minutes and 01 seconds.

JOINT SOFTWARE - EDUCATION

1. Introduction to the Proadjuster 360 - Joint Software Navigation - 3:43
2. Difference Between the Proadjuster and the Prosoft - 3:22

JOINT SOFTWARE - TECHNIQUE

1. Shoulder - 3:10
2. Knee - 2:04
3. Elbow - 2:24
4. Wrist and Hand - 1:44
5. Hip (seated) - 1:53
6. Hip (standing) - 2:10
7. Ankle/Foot - 1:32

SIGMA PROADJUSTER 360 AND PROSOFT 360 TRAINING WEBINARS

December 15, 10:00 am - 11:00 am: "***ProAdjuster 360/Prosoft 360 Headache Protocol Sequence/Balance/Hip Rotation Sequencing/Neural Pathway Recalibration.***" Dr. Maurice Pisciotano.

December 22: 10:am - 11:00am: **"Long Horn Unlock and Extension Protocol/Joint Function Compliance."** Dr. Maurice Pisciotano.

2021

January 25 - January 29 (11 hours initial reading, reading review, attention to questions): **"What's New in Chiropractic / Spinal Fitness & Conditioning: Applying Methods of Physical Fitness to the Spinal Motor Unit Components"** Dr. Craig S. Martin, DC

February 27: 10:am - 2:00pm: **"Prediction of Injuries; Knee Protocol; Balance Test and Protocol; Joint Compression by Muscles; Nachlas Test Heel-to-Buttock Measurement and Protocol; Anterior Compartment Syndrome Function."** Dr. Maurice Pisciotano.

March 25: 10:am - 11:00am: **"Composite Waves; Nachlas Test and Proadjuster Knee Analysis and Protocol; Proadjuster Lumbar Analysis and Protocol; Apley Scratch Test and Proadjuster Analysis and Protocol; First Sign Joint Stiffness Eventually Resulting in Joint Arthritis > Lowered Quality of Life"** Dr. Maurice Pisciotano.

March 25: 8:00am - 9:00am: **"Rear-End and Broadside MVCs: How the Biomechanical Issues Impact the Evaluation, Treatment, Frequency of Care, and Duration of Care for Whiplash and Spinal Trauma Patients"** Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 9:00am - 9:30am: **"Uncinate Process: Its Role in Post-Traumatic Pain and Demonstration on How to Evaluate and Adjust"** Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 10:45am - 11:15am: **"Lumbar Spine Trauma and MVCs: Effectively Responding to Insurer's Denial of Causation and Payment"** Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 1:00pm - 1:30pm: **"Arterial Dissection: What Every Provider Must Know the Signs and Symptoms and 3 Steps to Assess"** Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 1:30pm - 2:00pm: "**COVID 19 and Non-Pharmacological Alternatives for**

Inflammation" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 2:00pm - 2:30pm: "**Post MVC Trauma and Inflammation: Anti-Inflammatory Protocol**" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 3:15pm - 3:45pm: "**Cervical Spine Trauma, MVCs, and Concussion/Mild**

Traumatic Brain Injury (mTBI)" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 3:45pm - 4:15pm: "**Youth Sports Concussions/Traumatic Brain Injuries**

From Washington's 1st-in-Nation Lystedt Law in 2009 to the Kenny Bui Case in 2020" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 4:15pm - 4:45pm: "**Nutrition Needs following Concussion/mTBI and**

Cervical Spine Trauma" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 5:30pm - 6:00pm: "**Sleep Dysfunction Following Whiplash and Spinal Trauma**" Daniel J. Murphy, DC, DABCO, In-office webinar.

March 25: 6:00pm - 7:00pm: "**Questions from Participants. Discussion by Panel**"

Total presentation hours - 6.

Posture, Rehab & MCE - Part 1

INTRO: POSTURE IN MODERN SOCIETY

Get Started

Introduction to StrongPosture

Sitting is the New Smoking: A Composite Meme

Aging and Work in a Sitting Society

Lesson 1: Benchmarking Posture Begins with Balance

Posture Biomechanics I

The Question of Balance I

The Question of Balance II

Postural Balance Assessment

Lesson 2: Motor Control Exercise (MCE)

StrongPosture® begins with Strong Balance

StrongPosture® Balance 1.0

Retraining Motion with Attentional Focus

Lesson 3: Clinical Implementation and Communication

Bio-mechanic Education: StrongPosture® for Strong Motion

MUST vs TRY- the Key to Strong Posture

StrongPosture® Exercise Inductions: Alignment Track

From Posture Awareness to Consciousness

Lesson 4: What are you doing to balance?

Posture Bio-mechanics II: Finding the Core

Alignment for Everyone- The Public Health Message

StrongPosture® Alignment 1.0 Demonstration

StrongPosture® Alignment 1.0- Induction Detail

Lesson 5: Retraining Motion

Breathe Strong to Move Strong

StrongPosture® Motion 0.9

StrongPosture® Motion 1.0

StrongPosture® Motion 1.1 CONCEPTS

StrongPosture® Motion 1.1 Demonstration

PBR Module 1 Quiz

Posture, Rehab & MCE - Part 2

Lesson 1:

Posture Practice Trends Individual & Societal Behaviors

What is Balance?

StrongPosture®: Show & Converse

StrongPosture® Stork by PostureZone® Review

Stork Progression

Lesson 2:

Posture, Pain and PostureZone Bio-mechanics

Assessing Posture by PostureZone - Visually

5 Posture Principles in 3 BAM Elements of Posture

Motion the 1st Posture Principle - 3 Subsystems

StrongPosture® BAM Protocols - Alignment & Stabilization

Complexity of Simply Standing

Pelvic Tilt

WallLean with Shoulder Focus

Forward Head Posture & Upper Crossed Syndrome PBR Part 1

Forward Head Posture & Upper Crossed Syndrome PBR Part 2

Deep Muscle - Dura Connection

StrongPosture® Alignment 1.2

StrongPosture® Alignment 1.3

Lesson 3:

Stand Taller Live Longer

5 Breaths

StrongPosture® Alignment 1.29

Ball Squat

StrongPosture® Alignment 1.3

Sitting Anti-Stretch

PosturePractice Strategy

PBR Module 2 Quiz

Posture, Rehab & MCE - Part 3

Lesson 1:

Science & Society - the Cascade of Posture Breakdown

Sitting Is The New Smoking

Low Back Pain, Weak Balance, Weak Posture

Rehab: Muscle or Motion

From Gait Patterns to Lower Crossed Syndromes

StrongPosture® Biomechanics

Sitting & Back Pain

StrongPosture® to Strong Breathing

External Attentional Focus

Band Breathing

Lesson 2:

Retraining Motor Control

Core Focus for Motion Control

Building a Body-Mind Foundation

From Balance, to Alignment, to Motion

Postural Imperatives

Forward Head Posture

From Forward Head to Upper Crossed

Functional Symmetry Assessment

StrongPosture® Alignment 1.4

StrongPosture® Alignment 1.4 Continued

Lesson 3:

Torso Patterns in Open and Closed Chains

Aligning Head-Torso-Pelvis with Spinal motion

CatStretch

Chiropractic & SMT in the PosturePractice

Posture Practice Model

Patient Choice Posture Practice Model

PBR Module 3 Quiz

Posture, Rehab & MCE - Part 4

Lesson 1:

Retraining Whole Body Patterns

Aging Boomers, Back Pain & Wellness

Arthritis, DJD, Bio-mechanic Breakdown

StrongPosture® Perspective on Posture & Balance Degeneration

Cervical Spine & Motion Breakdown

Head & Torso Focus on BAM Tracks

Pain, Falls & Aging Poorly

Impending Fall Epidemic

Fall Risk Assessment

Lesson 2:

ACE Framework for Fall Risk Management & Injury Mitigation

Clinical Strategies to Quantify & Document Fall Risk & Posture

Posture, Motor Control & Fall Risk

Challenging BAM & Bipedal Locomotion

Lateral Observations

Postural Motor Control Progressions

StrongPosture® Stork with Stability

Individualizing StrongPosture® Cueing & Assessment

Leg Control & Core Engagement

Lesson 3:

Alignment, Control & Motion

StrongPosture® BallSit with Stability

Connecting & Correcting Perception with Reality

Most Essential Motion & Muscle

Catstretch with Core Breathing

StrongPosture® Squat

Passive Therapies
Gait: Static to Dynamic
StrongPosture® Arms Up Progression
StrongPosture® Ball Lift
Awareness to Consciousness
PBR Module 4 Quiz

2022

National Strength and Condition Association 2022 Coaches Conference (via Zoom)

January 6: 12:00 PM - 2:50 PM, Central: **"Creating Your Coaching & Training Philosophy"** Presented By: Scott Caulfield, M A, SCS,*D, RSCC*D; Doug Lentz, MS, CSCS,*D, RSCC*

January 6: 3:00 PM - 4:50 PM, Central: **"Strength Training Without Lower Back Pain"** Presented By: Richard Ulm, DC, MS, CSCS

January 7: 8:45 AM - 9:35 AM, Central: **"Attacking the Deceleration Epidemic in Sports"** Presented By: Lance Walker, MS, PT

January 7: 9:45 AM - 10:35 AM, Central: **"Doing the Simple Things Savagely Well"** Presented By: Jim Malone, CSCS, RSCC*E

January 7: 12:00 PM - 12:50 PM, Central: **"Modeling Mindful Movement Skills for Coaches"** Presented By: Ed Yong, MS, CSCS, RSCC*D

January 7: 1:00 PM - 1:50 PM, Central: Training Trunk Stability: **"A Deep Dive into Core Training"** Presented By: Rich Ulm, DC, MS, CSCS

January 7: 2:00 PM - 2:50 PM, Central: **"Detailed Coaching and Programming for Quad-Dominant vs. Posterior Chain Dominant Athletes"** Presented By: Cal Dietz, MEd, CSCS

January 7: 3:00 PM - 3:50 PM, Central: **"Monitoring Training-Induced Stress: Strategies to find the Upper Limit of Work"** Presented By: Bill Amonette, PhD, CSCS

January 7: 4:00 PM - 4:50 PM, Central: **"Weightlifting Derivatives to Meet Your Force-Velocity Profile"** Presented By: Bryan Mann, PhD, CSCS,*D, TSAC-F,*D, FNCSA, RSCC*D & Tim Suchomel, PhD, CSCS,*D, RSCC

January 8: 8:00 AM - 8:50 AM, Central: **"Mechanical Perspectives on Injury Prevention"** Presented By: Luke Bradford, CSCS

January 8: 9:00 AM - 9:50 AM, Central: **"The Evolution of the Strength and Conditioning Role"** Presented By: Brendon Huttmann, CSCS, RSCC*D

January 8: 10:00 AM - 10:50 AM, Central: **"Micro-Dosing Strength Training - a Conceptual Framework"** Presented By: Paul Comfort, PhD, CSCS,*D

January 8: 11:00 AM - 11:50 AM, Central: **"Bridge the Gap Practical: Consistency is Key: Implications for Motor Control Theories in Sport and Athletic Performance"** Presented By: Keith Scruggs, PhD, CSCS,*D

January 8: 12:00 PM - 12:50 PM, Central: **"Bridge the Gap Practical: Weight Room Triage for Strength Coaches"** Presented By: Chris "Tex" McQuilkin, CSCS

March 12, 2022: 9:00 AM - 4:00 PM: **"Washington Personal Injury Summit"** Presented by Paul Reed, DC; Rob Sears, Esq.; Richard Seroussi, MD; Brain Chan, DC; Kenneth Nwosu, MD; Parker Davidson, Esq.; and JT Hochstrasser. Program topics included: Diagnosis within the scope of practice; Adjustive Technique; Detection of Subluxation; Physical Examination; Symptomatology; Neurology; Pathology; Patient/case management and documentation; and Government regulations relevant to chiropractic and public health.

"Whiplash, Spinal Trauma, and the Personal Injury Case for Today's Health Care Professional"

May 14, 2022: **"Whiplash, Spinal Trauma, Mechanisms of Injury; How it Impacts Evaluation, Frequency of Care, and Duration of Care"** Daniel J. Murphy, DC, DABCO. SeaTac, WA.

May 14, 2022: **"Med-Legal: Documenting Mechanism of Injury to Support Treatment Plan"** Richard H. Adler, JD, Adler Giersch. Sea-Tac, WA.

May 14, 2022: **"Whiplash, Spinal Trauma, and the Elderly: How Age Impacts Treatment and Prognosis"** Daniel J. Murphy, DC, DABCO. SeaTac, WA.

May 14, 2022: **"Med-Legal, Trauma Superimposed on Prior Conditions: Apportioning Old vs New"** Steven J. Anglis, JD, Adler Giersch. Sea-Tac, WA

May 14, 2022: **"Whiplash, Spinal Trauma, Disc Injuries, Differences in Cervical and Lumbar Disc Injuries: Terminology, Anatomy, Symptoms, and Treatment"** Daniel J. Murphy, DC, DABCO. SeaTac, WA.

May 14, 2022: **"Med-Legal: Elderly, MVCs, and Payment: PIP vs. Medicare vs. Defer until Liability Settlement"** Melissa D. Carter, JD, Adler Giersch and Daniel J. Murphy, DC, DABCO. Sea-Tac, WA.

May 14, 2022: **"Whiplash, Spinal Trauma: Women and Men in Same Car. Who Needs More Treatment and Why?"** Daniel J. Murphy, DC, DABCO. Sea-Tac, WA.

May 14, 2022: **"Ride Share MVCs: Who Pays for Treatment When Your Patient is a Driver or Passenger in Uber/Lyft?"** Arthur D. Leritz, JD Adler Giersch. Sea-Tac, WA.

May 14, 2022: **"Med-Legal: Immigration Status and Patient's Legal Rights in a Personal Injury Case"** Steven J. Angles, JD, Adler Giersch. Sea-Tac, WA.

May 14, 2022: **"Effectively Responding to Denials of Treatment Bills from PIP and eviCore"** Arthur D. Leritz, JD and Richard H. Adler, Adler Giersch. Sea-Tac. WA.

May 14, 2022: **"Delayed Arterial Dissection Even after a Low-Speed MVC"** Daniel J. Murphy, DC, DABCO. Sea-Tac, WA.

May 14, 2022: **"Must Know Key Medical Research and Its Impact on Residuals and Prognosis in Whiplash and Spinal Trauma Cases"** Daniel J. Murphy, DC, DABCO. Sea-Tac, WA.

May 14, 2022: Panel Discussion and Q & A session.

10/5/2022 - 10/8/2022 LAS VEGAS, NV (Live In-person)

The following participant

Richard Hargreaves

License Number: CH00001968

has completed the following conference sessions:

102: **"Neuropathy: Advancing Your Practice in Recognition and Treatment"**

with Speaker(s) MIKE STUDER, PT, MHS, NCS, CEEAA, CWT, CSST, FAPTA

204: **"Instrument Assisted Soft Tissue Mobilization (IASTM) Applications for Runners and Lower Extremity Injuries"** with

Speaker(s) PAUL COLOSKY, PT, LAT, CSCS

303: ***"Differentiating Hip Injuries: Structural vs. Muscular vs. Neurological"*** with Speaker(s) REID NELLES, DC

403: ***"Evidence-Based Examination of the Shoulder Complex & Criteria to Return to Sport"*** with Speaker(s) GEORGE DAVIES, DPT, MED, PT, SCS, ATC, LAT, CSCS, PES, FAPTA, ROBERT MANSKE, PT, DPT, MPT, MED, SCS, ATC, CSCS

501: ***"The Diaphragm: Understanding the Key Role in Core Stabilization and Optimal Movement"*** with Speaker(s) ERIN MCGUIRE, PT, OCS

603: ***"Cannabinoid Science: Pharmacology for Rehab Professionals"*** with Speaker(s) JOSEPH LAVACCA, PT, DPT, OCS, CFSC, FMS, FMT-C, FRCMS, SFMA

702: ***"Understanding the Nervous System: Stress Resilience and Neuroplasticity for Kids and Adults"*** with Speaker(s) MICA FOSTER, DC

801: ***"Look Up, Look Down, Look All Around: A Comprehensive Treatment Approach to Neck Pain and Carpal Tunnel Syndrome"*** with Speaker(s) MICA FOSTER, DC

March 27, 2010 through May 14, 2022:

Through May 14, 2022

Continuing Education Total Individual Training Topics/Sessions:

1,191.

Memberships:

Washington State Chiropractic License to practice chiropractic

Washington Chiropractic Association

National Strength and Conditioning Association (Certified Strength and Conditioning Specialist (CSCS), NSCA Certified Personal Trainer

Sigma Instrument Methods Member (Sigma Instruments is the manufacturer of the ProAdjuster chiropractic instrument.

Previous licenses to practice chiropractic:

Canadian Chiropractic Association: January 1983 through July 2005

British Columbia Chiropractic Association: January 1983 through July 2005

Co-operative Multidisciplinary Professional Memberships:

1989: Founding member of "Physical Medicine Research Foundation"
Vancouver, British Columbia

2013 - Present: Founding member of "American Spinal Injury & Impairment
Consultants" Doctor Training Center

Valid licenses to practice chiropractic:

Washington State

Selected Honors and Awards:

Senior Intern Palmer College of Chiropractic Clinic ,Palmer College of
Chiropractic, 1982

Selected Community Service:

1. South Delta Minor Hockey Association, Ladner British Columbia. Team Athletic Trainer/On-ice Concussion Assessment via Canadian Hockey Association Concussion Management Training. 1997-1999
2. Vancouver Selects Provincial Hockey Club, Delta, British Columbia. Travel Chaperone
3. Premier Baseball League, White Rock Tritons, White Rock, British Columbia. Assistant Coach; Team Trainer
4. Ladner Minor Baseball, Ladner, British Columbia, Assistant Coach, 1994