FOUNDATIONS

VERTEBRAL SUBLUXATION







RESEARCH, POLICY, EDUCATION, & SERVICE

PUBLISHER

Foundation for Vertebral Subluxation

PRESIDENT

Christopher Kent, D.C., J.D.

VICE PRESIDENT

Matthew McCoy, D.C., MPH

SECRETARY

Veronica Gutierrez, D.C.

BOARD MEMBER

Curtis Fedorchuk, D.C.

EXECUTIVE DIRECTOR

Christie Kwon, MS, DC

CONTACT

Foundation for Vertebral Subluxation 4390 Bells Ferry Road Kennesaw Georgia 30144

Phone: 404.247.2550

FAX: 678.445.1459

E-Mail: vertebralsubluxation@gmail.com

www.vertebralsubluxation.org

facebook.com/subluxationfoundation



Advancing Futures is our best hope at accomplishing a collaborative, organized movement to research subluxation. We stand behind these principles:

- The body is a self-regulating, self-maintaining organism;
- The nervous system controls and coordinates all functions of the body;
- The spine and vertebrae house and protect the nervous system;
- Vertebral subluxations can occur and interfere with the function of the nervous system;
- Reducing and/or correcting vertebral subluxations allows the nervous system to function better and allows the fullest expression of life.

This research agenda seeks to validate the profession and position chiropractic as a vitalistic, scientific, evidence-informed clinical practice. The more research, the greater the chance the profession will have of gaining a higher degree of respect, understanding and acceptance in the health care marketplace, the scientific community and among the patients it serves. It is imperative to make these new research advancements available to the public, other health professions, and to legislators in order to promote and to systematically advance the field of subluxation centered chiropractic through the initiation of favorable public health policy.

Current evidence suggests that vertebral subluxation is detrimental to human health and function and as such chiropractors who manage subluxation feel an ethical and moral obligation to screen and educate the public on what it believes is a significant public health threat. To that effect this agenda also includes the marketing of the agenda itself and the results of its research endeavors in an effort to increase utilization of vertebral subluxation screening and management.

WHAT'S INSIDE

Messages from the President and Vice Presid	ent 5
Research Team	6-9
Leadership Spotlight - Kent	10
Leadership Spotlight - Gutierrez	11
Completed Research	12-21
Project Spotlight - Kwon	
Project Spotlight - Epidemiology	23-26
Project Spotlight - Senzon	27-28
Project Spotlight - UAC Scholarship Project.	29
Project Spotlight - Guidelines	30-31
Project Spotlight - Kwon, MRI Imaging	32-34
Project Spotlight - Advanced Imaging	35-36
Research Fellowships	38-39
Donor Form	



A MESSAGE FROM CHRISTOPHER KENT DC, JD

PRESIDENT

FOUNDATION FOR VERTEBRAL SUBLUXATION

A void in research conducted by chiropractic institutions are investigations focused specifically on vertebral subluxation. The chiropractic research agenda developed by the Foundation for Vertebral Subluxation addresses this challenge. The Foundation seeks to improve the practice of chiropractic by producing clinically relevant research. Evidence- informed chiropractic practice requires quality research addressing the reliability and validity of chiropractic analytical methods, efficacy and effectiveness of chiropractic adjusting techniques in reducing indicators of vertebral subluxation, and evaluating the health benefits and cost effectiveness of chiropractic care. The Foundation for Vertebral Subluxation is committed to developing a cadre of researchers through scholarship programs, and supporting investigations that support evidence- informed practice. The ultimate beneficiaries of the work are those we serve by providing chiropractic services.





A MESSAGE FROM MATTHEW MCCOY DC, MPH

VICE PRESIDENT

FOUNDATION FOR VERTEBRAL SUBLUXATION

We are at a crossroads in chiropractic. A time where we may lose our identity or forge forward with chiropractic leading the new paradigm of health and well-being. As practitioners, we see the evidence of chiropractic adjustments every day in our practices. To us, it is undeniable. But in terms of substantiating ourselves with the value and recognition we deserve, we are in dire need of a Research Agenda to forge forward and gain our rightful position: leaders in the location, analysis and correction of vertebral subluxation.

There are so many things we could focus on. The question is what should the focus be? We believe the focus should be on the role of vertebral subluxation and the result of its correction/reduction on health. Through basic and clinical science research, advocating for favorable policy, revising educational standards and service we seek to place vertebral subluxation at the forefront.

RESEARCH TEAM



CHRISTOPHER KENT DC, JD

President – Foundation for Vertebral Subluxation

Professor

Director of Evidence Informed Curriculum & Practice

Sherman College of Chiropractic

President – On Purpose

EDUCATION:

AA - Milwaukee Institute of Technology
DC - Palmer College of Chiropractic
BA, MA (psychology) - California Coast University
JD - British-American University School of Law
Certificate-Legislative Drafting for Democratic Social Change. Boston
University School of Law
Diplomate and Fellow--ICA College of Chiropractic Imaging



WATTHEW MCCOY DC, MPH

Vice President – Foundation for Vertebral Subluxation

CEO & Co-Founder ChiroFutures Malpractice Program

CEO – McCoy Press Publishing

Member Board of Trustees Sherman College of Chiropractic

Former Professor – Clinical Sciences Life University, College of Chiropractic

EDUCATION:

D.C. – Doctor of Chiropractic - Life College of Chiropractic
B.S. – Organizational Management - Covenant College
MPH – Health Outcomes - Emory University, Rollins School of Public Health
DACS (C) – Diplomate Applied Chiropractic Sciences - Candidate



CURTIS FEDORCHUK DC

Board Member & Researcher – Foundation for Vertebral Subluxation Private Practice – Cumming Georgia Instructor - Chiropractic Biophysics Non-Profit

EDUCATION:

DC – Life University College of Chiropractic



CHRISTIE KWON MS, DC

Research Fellow – Foundation for Vertebral Subluxation Executive Director – Foundation for Vertebral Subluxation Assistant Professor Clinical Sciences. Life University College of Chiropractic

EDUCATION:

D.C. – Doctor of Chiropractic – Life University College of Chiropractic BS - Biomedical Engineering. Minor Computer Science. Johns Hopkins University MS - Biotechnology – Johns Hopkins University Candidate for Masters in Public Health (MPH) Emory University



ANQUONETTE STILES DC, MPH

Research Fellow – Foundation for Vertebral Subluxation
Guidelines Committee – Foundation for Vertebral Subluxation
Private Practice – North Carolina
Immediate Past Director – Office of Sponsored Research & Scholarly Activity Life
University
St. Research Associate – Clinical Research Institute Walts Mod Health & Heapitals

Sr. Research Associate – Clinical Research Institute, WakeMed Health & Hospitals Raleigh, NC

EDUCATION:

DC – Doctor of Chiropractic. Life University College of Chiropractic
BS - Chemistry with Concentration in Molecular Biotechnology. University of North
Carolina - Pembroke (UNCP)
MPH - Walden University



VERONICA GUTIERREZ DC

Secretary & Board Member – Foundation for Vertebral Subluxation Independent Review Board Member – Foundation for Vertebral Subluxation Private Practice Washington State Past Chair – Washington State Chiropractic Quality Assurance Commission

EDUCATION:

DC – Doctor of Chiropractic. Palmer College of Chiropractic 1963. Post Graduate – Cleveland College of Chiropractic



JOEL ALCANTARA DC

Independent Review Board Member – Foundation for Vertebral Subluxation Director of Research – International Chiropractic Pediatric Association (ICPA)

EDUCATION:

DC – Doctor of Chiropractic. Palmer College of Chiropractic - West Master of Public Health Candidate - San Jose State University BS – Chemistry - University of Calgary

RESEARCH TEAM (cont.)



SIMON SENZON DC

Independent Review Board Member – Foundation for Vertebral Subluxation
Faculty – John F. Kennedy University (2007-2011)
Editorial Advisory Board - Journal of Complementary and Alternative Medicine
Editorial Advisory Board - Journal of Integral Theory and Practice. (2004-2016)
Director of the Integral Subtle Energies Center at the Integral Institute (2004-2011)
Co-Director of the Integral Consciousness Studies Center (2004-2011)
Private Practice Asheville, North Carolina
President, Integral Altitude, Inc. President, Senzon Learning, Inc.
Board Member – Society for Consciousness Studies
Research Committee – International Chiropractic Pediatric Association
Research Fellow Foundation for Vertebral Subluxation

EDUCATION:

DC – Doctor of Chiropractic. Sherman College of Chiropractic MA – Philosophy - Goddard College BS – History - Delta College program at SUNY Brockport Ph.D Candidate - Southern Cross University - Australia



ERIC ZIELINSKI BA, DC

Research Fellow - Foundation for Vertebral Subluxation Independent Review Board Member – Foundation for Vertebral Subluxation Private Practice – Acworth, GA

EDUCATION:

DC - Doctor of Chiropractic Life University College of Chiropractic BA – Honors English – Wayne State University



CHRISTI MCRAE BS, DC

Research Fellow – Foundation for Vertebral Subluxation Private Practice – Columbia, SC

EDUCATION:

DC – Doctor of Chiropractic. Life University College of Chiropractic BS – Biology - Life University





DOUG LIGHTSTONE BA, MS (C), DC

Research Fellow – Foundation for Vertebral Subluxation Private Practice – Cumming, Georgia

EDUCATION:

BA - Philosophy, Politics & Law - Binghamton University

MS - Candidate - Sport Health Science. Concentration: Exercise and Sports Science

DC - Doctor of Chiropractic. Life University College of Chiropractic



SHANNON O'BRIEN BS, DC

Foundation for Vertebral Subluxation Guidelines Committee – Team Leader Former ORISE Fellowship Recipient Former Research Scientist – Centers for Disease Control & Prevention Research Track – Life University COC (Current) GI Disorders, Children & Subluxation Webster's Scholarship Recipient (ChiroFutures) Private Practice Kennesaw, Georgia

EDUCATION:

BS – Biology - University of Georgia DC – Doctor of Chiropractic Life University College of Chiropractic



ANN BISHOP BS, DC

Foundation for Vertebral Subluxation Guidelines Committee Webster's Scholarship Recipient (ChiroFutures) Private Practice Grand Rapids, Michigan

EDUCATION:

BS – Mathematics. Minors in Biology & Physics. Aquinas College. DC - Doctor of Chiropractic Life University College of Chiropractic



STACY RAINEY BS, DC

Foundation for Vertebral Subluxation Guidelines Committee Private Practice Covington, Georgia Webster's Scholarship Recipient (ChiroFutures) Austin Peay State University

- Presidential Scholarship Recipient
- President's Emerging Leaders Program Scholarship Recipient
- Gamma Beta Phi Honors Society
- Leadership Minor

Research Assistant with State of Tennessee (Past)

EDUCATION:

BS – Biology - Austin Peay State University.

DC - Doctor of Chiropractic Life University College of Chiropractic

RESEARCH TEAM (cont.)



BETHANY CARILLI BS, DC

FVS Guidelines Committee – Member of the Literature Gathering & Organization Team

Webster's Scholarship Recipient (ChiroFutures)

Beta Beta – National Biological Honor Society.

Alpha Xi Delta – National Women's Fraternity. Chair of Alumnae Relations Private Practice Farmville, Virginia

EDUCATION:

BS – Biology. Minor in Chemistry. University of Mount Union.

DC - Doctor of Chiropractic Life University College of Chiropractic



ANDREW RUPP DC

Research Fellowship Foundation for Vertebral Subluxation Guidelines Committee Private Practice Cranberry Township, PA

EDUCATION:

BA – Grace College. Winona Lake, Indiana

DC - Doctor of Chiropractic Life University

Certified in Webster Technique

Candidate for Certification by the Academy Council of Chiropractic Pediatrics (CACCP)



NIKKI HIRSHOWITZ DC

Research Fellowship Foundation for Vertebral Subluxation - Epidemiology Private Practice Cumming, Georgia

EDUCATION:

DC - Doctor of Chiropractic Life University



KATHRYN HEIDT BS, MS, DC (C)

Research Fellow - Foundation for Vertebral Subluxation Foundation for Vertebral Subluxation Guidelines Committee Graduate Student Teacher Auburn University Abroad Ariccia, Italy Graduate Student Teacher Auburn University - Biomedical Physiology

EDUCATION:

Bachelor of Science, Biology & Minor in Chemistry Catawba College Salisbury, NC Master's in Nutritional Science Auburn University Graduate School Auburn, AL DC - Candidate Doctor of Chiropractic Sherman College of Chiropractic



ROBERT D. COMER DC

Research Fellowship Foundation for Vertebral Subluxation - Epidemiology Private Practice Cumming, Georgia

EDUCATION:

DC - Doctor of Chiropractic Life University



KATHLEEN COSTELLO MS, BS, DC

Research Fellow - Foundation for Vertebral Subluxation Foundation for Vertebral Subluxation Guidelines Committee Private Practice

EDUCATION:

Master of Science - Positive Psychology Life University BS Business Administration University of Delaware DC - Doctor of Chiropractic Sherman College of Chiropractic



HUI ZHEN LIM BS, DC

Research Fellow - Foundation for Vertebral Subluxation Foundation for Vertebral Subluxation Guidelines Committee

EDUCATION:

Bachelor of Social Sciences - National University of Singapore Postgraduate Diploma in Education - Nanyang Technological University DC - Candidate Doctor of Chiropractic Sherman College of Chiropractic



LEADERSHIP SPOTLIGHT

CHRISTOPHER KENT DC, JD PRESIDENT

Foundation for Vertebral Subluxation

Dr. Kent's passion for facilitating human empowerment led him to the chiropractic profession, where he has served as a practitioner, educator, author, lecturer, and researcher following his graduation from Palmer College of Chiropractic in Davenport, IA, in 1973.

Following graduation, Dr. Kent joined the Palmer faculty. While at Palmer, he was elected president of the faculty senate and worked as a principal investigator in the research department. Dr. Kent left Davenport and moved to Florida to practice full-time. He qualified as a specialist in chiropractic diagnostic imaging, was named a Fellow of the College of Chiropractic Imaging, and completed visiting fellowship programs in magnetic resonance imaging. He also served as an associate professor at Palmer-West in California.



Acknowledged as one of the brightest minds in chiropractic, Dr. Kent returned to New Jersey in 1990 to continue the in-depth research on surface EMG that he had started several years earlier. His vision was to develop technologies that would objectively demonstrate manifestations of nerve interference and ultimately provide certainty for chiropractors and their patients. Along the way, Dr. Kent was recognized as "Chiropractic Researcher of the Year" in 1991 by the International

Chiropractors Association (ICA). He was also named ICA's "Chiropractor of the Year" in 1998. In June 2001, Dr. Kent was elected Chair of the United Nations Non-Governmental Organization (NGO) Health Committee, the first chiropractor to hold that office. The NGO Health Committee is in Special Consultative Status with the Economic and Social Council of the United Nations. He served as a member of the Executive Board of the UN Health Committee from 2000-2007. Dr. Kent also served as a Representative to the Department of Public Information affiliated with the United Nations from 1999-2008.

In 2007, Dr. Kent was honored with the first Lifetime Achievement Award bestowed by Life University. He is a co-founder of the Chiropractic Leadership Alliance, Co-Founder of On Purpose, Founder of Advanced Subluxation Training, Founder of ChiroStrokeMyth, and the author of Chiropractic Insights. He is the author of over 38 peer reviewed scientific research papers, three books and four book chapters and over 100 articles in chiropractic trade publications. For over 35 years, Dr. Kent has been committed to developing improved clinical strategies, and

securing the future of chiropractic. An attorney as well as a chiropractor, Dr. Kent is a member of the California bar. Dr. Kent's ability to integrate the philosophy and science of chiropractic is legendary.



VERONICA GUTIERREZ DC SECRETARY & BOARD MEMBER

Foundation for Vertebral Subluxation

Dr. Gutierrez received her Doctor of Chiropractic degree from Palmer College of Chiropractic in 1963 and did post-graduate work at Cleveland College of Chiropractic. She is the recipient of numerous awards and has served on numerous boards and commissions for chiropractic.

Active in health policy for decades, Gutierrez was a member of the United Chiropractors of

Washington and the Chiropractic Society of Washington, making valuable contributions to each. In 1993, she was appointed to the Washington State Chiropractic Examining Board and from 1994 to 1998, she was a member of the State Chiropractic Quality Assurance Commission, serving as its chairperson from 1995 to 1996. She also served on the Washington Governor-Elect's Health Care Advisory Committee.

Dr. Gutierrez was the only chiropractor to serve on the United States White House Commission on Complementary and Alternative Medicine Policy during the Clinton Administration. She made numerous presentations regarding that work as well as her work and advocacy on behalf of women's health issues.

She has worked tirelessly on managed care issues, health care reform, public policy and standards of care for subluxation-centered chiropractic. She was a founding Board Member of the Council on

Chiropractic Practice - the first chiropractic standard of care guidelines to be included in the National Guideline Clearinghouse and served on the Standards of Care committee for the Washington State Chiropractic Association. She served on the Washing State Department of Social and Health Services/DSHS Interdisciplinary Advisory Committee member and the Center for Health Statistics, 1980-1981.

Dr. Gutierrez has represented chiropractic internationally in such places as Russia, Costa Rica, Croatia and Peru and has presented at the United Nations on chiropractic. She has received numerous awards in her profession, including those from the Chiropractic Society of Washington, the Straight Chiropractic Academic Standards Association (SCASA), and the International Chiropractic Association. Dr. Gutierrez served on the Board of Directors, Chairwoman of the Board and President of SCASA.



COMPLETED RESEARCH, PROJECTS & PRESENTATIONS

McCoy M, Kent C. Vertebral Subluxation Research: An Agenda to Explore the Epidemiology of Vertebral Subluxation and the Clinical Outcomes Related to Management. Annals of Vertebral Subluxation Research. August 5, 2013. Pages 29-32.

McCoy M, Kent C, Decken W, George H, Brown M, Risser B, Ross N, Thompson J, Nay F. A Survey of Chiropractors Attitudes and Opinions Regarding Chiropractic College Curricular Content, Length, Relationship to Practice Success and Recommendations for Change. Journal of Philosophy, Principles & Practice of Chiropractic. Volume 2011. Issue 2. Pages 10-11.

McCoy M, Decken W, Kent C, Alcantara J, Tullius S, Burnier A. Attitudes of Students and Recent Graduates of Chiropractic Educational Programs Regarding Curricular Content, Preparation for Practice and the Future of the Chiropractic Profession: a Delphi Consensus Process & Survey. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 20-21, 2012.

Gutierrez V. Political Action and the Subluxation Centered Chiropractor – Steps to Engagement. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 2011.

McCoy M. The Economic, Academic and Political State of the Chiropractic Profession and its Implications for the Subluxation Centered Community. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 2011

Kwon C, McCoy M, Kent C, Gutierrez V, Fedorchuk C. The Importance of Research, Education, Policy, and Service in Protecting the Future of Subluxation-Based Chiropractic. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 2010.

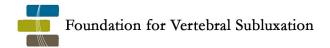
Kent C: Sustainability of Vertebral Subluxation Centered Chiropractic – Strategies. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 17-19, 2014.

Kent C. Chiropractic and Mental Health: A Brief Overview. Chiropractic Dialogues. Journal of Philosophy, Principles & Practice of Chiropractic. October 24, 2013. Pages 1-3.

Kent C. A New Direction in Chiropractic Education. Platform Presentation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 20-21, 2012.

Kent C: An Analysis of the General Chiropractic Council's Policy on Claims Made for the Vertebral Subluxation Complex. Journal of Philosophy, Principles & Practice of Chiropractic. May 16, 2011. P. 1-9.

Kent C: Chiropractic and Mental Health. Platform Presentation. International Research and Philosophy Symposium. Spartanburg, SC. 2010.



Kent C, McCoy M: A Review of the Council on Chiropractic Education's Proposed Changes to Accreditation Standards. Foundation for Vertebral Subluxation - September 21, 2010.

McCoy M. A Review and Analysis of the Office of Inspector General's Report: Inappropriate Medicare Payments for Chiropractic Services. May 2009. Foundation for Vertebral Subluxation.

Kent C. Testimony before the National Advisory Committee on Institutional Quality and Integrity. December 2012.

Kent C. Public Session: Presentation at Council on Chiropractic Education Public Comment Hearing. 2012.

Kent C. Public Testimony at Florida Board of Chiropractic Medicine. Board Legislative Workshop. Orlando. June 2015.

Gerdel A. Chiropractic's History and Future: Implications of the Council on Chiropractic Education's Revised Standards. Journal of Philosophy, Principles & Practice of Chiropractic. Volume 2011. Issue 3. Pages 70-76.

Kwon C. Invited Presentation: Developing and Writing Case Study Research. League of Chiropractic Women. Atlanta GA. April 2014.

Kent C. Defining Scope of Coverage for Care of Vertebral Subluxation under Medicare. J. Philosophy, Principles & Practice of Chiropractic - January 2, 2010.

Kwon C, McCoy M. Evidence-based healthcare in patient centered chiropractic education: the development of an evidence based healthcare track in a chiropractic program. Accepted. Sherman College of Chiropractic International Research and Philosophy Symposium 2016 platform presentation.

Kwon C, Stiles A, O'Brien S, McCoy M, Kent C. Patient centered guidelines for the clinical management of vertebral subluxation. Accepted. Sherman College of Chiropractic International Research and Philosophy Symposium 2016 platform presentation.

Kwon C. Establishing a research agenda: directing chiropractic's future through research. (League of Chiropractic Women 2016)

Kwon C, McCoy M. Educating, Mentoring and Nurturing Chiropractic Practitioner/Scientists: The Development and Implementation of a Research Track within a Doctor of Chiropractic Program. Sherman College of Chiropractic International Research and Philosophy Symposium (IRAPS) 2015 Platform Presentation.

Kwon C. Establishing a research agenda: directing chiropractic's future through research. Sherman Connect. Sherman College of Chiropractic 2016.

COMPLETED RESEARCH, PROJECTS & PRESENTATIONS (cont.)

Kwon, C. Directing chiropractic's future through research. LIFE Vision Seminars 2015. Invited Presentation.

Medicare Task Force/Coalition 2016. Members included: The International Federation of Chiropractors and Organizations (IFCO), The Foundation for Vertebral Subluxation (FVS), The Chiropractic Society of Texas (CST), The Florida Chiropractic Society (FCS), The Palmetto State Chiropractic Association (PSCA), The Chiropractic Fellowship of Pennsylvania (CFOP), the Sustainability Group (SG). Developed proposal for revised legislative language in Medicare.

Fedorchuk C. Treatment and Recovery of a Patient Suffering From Muscular Dystrophy, and Hypertension Utilizing Chiropractic Care. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008

McCoy M. Science, Vertebral Subluxation, and the Importance of Research to the Chiropractic Profession. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008.

Stiles A, McCoy M. Heart Rate Variability and Chiropractic: A Review of Literature. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008.

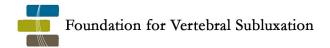
Fedorchuk C. Restored Hearing from Subluxation Reduction in a Female Patient Who Suffered From Stroke-Induced Hearing Loss: A Case Report. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008.

McCoy M. Reliability, Clinical Meaningfulness and Pattern Analysis of Paraspinal Surface EMG and Thermal Scanning. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008.

Fedorchuk C. Prevention and Avoidance of Stroke and Brain Aneurysm as a Result of Chiropractic Care. Proceedings of the 2008 International Research and Philosophy Symposium. Sherman College of Straight Chiropractic. October 17-19, 2008.

McCoy M, Campbell I, Stone P, Fedorchuk C, Wijayawardana S, Easley K. Intra-examiner and Inter-examiner Reproducibility of Paraspinal Thermography. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009.

Fedorchuk C. Clinical Outcome in a Case of Fibromyalgia Through Utilization of Chiropractic Care, Specifically Clinical Biomechanics of Posture. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009



McCoy M, Stone P, Kwon C. Retrospective, Longitudinal Outcomes Study of Pregnant Women Undergoing Subluxation Based Chiropractic Care. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009.

Fedorchuk C, Duer T. Do Decreased Health Scores Correlate to High Surface Electromyography Readings of the Spine. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009.

McCoy M. The Use of Objective Measures of the Biomechanical and Neurological Components of Vertebral Subluxation to Develop a Composite Measure of Spinal Health. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009.

McCoy M, Stiles A, Stone-McCoy P, Crews R. A Randomized Controlled Trial of Health Outcomes Following the Introduction of a Standardized, Stretching Protocol Combined with Chiropractic Intervention: A Pilot Study. Abstracts of Invited Papers Presented at the 2010 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 2010.

Brewer J. Critical Evaluation of the California Board of Chiropractic Examiners' Scope of Practice Interpretation and Policy Implementation: 2009-2014. Journal of Philosophy, Principles & Practice of Chiropractic. December 28, 2015. Pages 21-27.

Kent C: Prevalence of abnormal findings in a cohort of patients referred for cervical spine MRI examination by doctors of chiropractic and potential neurological consequences associated with vertebral subluxation. Global Congress on Neurology & Neuroscience. Kuala Lumpur, Malaysia. July 17-18, 2019.

Kent C: Neurological Consequences of Spinal Degenerative Disease Associated With Vertebral Subluxations. European Neurology Congress. Venice, Italy. June 19-20, 2019.

Kent C: Proposed Neurobiological Processes Associated with Models of Vertebral Subluxation: Dysafferentation, Dyskinesia, Dysponesis, Dysautonomia, Neuroplasticity and Ephaptic Transmission. Archives in Neurology & Neuroscience 2019;3(1):1-3.

Kent C: Chiropractic and Mental Health: History and Review of Putative Neurobiological Mechanisms. Journal of Neurology, Psychiatry and Brain Science 2018 (103), 1-10.

Fedorchuk C, Comer RD, Lightstone D, McCoy M, Kent, C, Boningo J: The Prevalence of Vertebral Subluxation in Patients Presenting to a Private Chiropractic Clinic over a Six Year Period. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 6-7, 2018.

Kent C: Vertebral Subluxation: Semantic Pathology, Epistemic Trespassing, and Ethics. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 6-7, 2018.

COMPLETED RESEARCH, PROJECTS & PRESENTATIONS (cont.)

Kwon C, McCoy M, Kent C: An Advanced Imaging Research Agenda for the Evaluation of Vertebral \Subluxation and Clinical Outcomes Related to its Management. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 6-7, 2018.

Kent C: Heart Rate Variability: Vertebral Subluxation vs. Spinal Manipulation: A Review. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 6-7, 2018.

Kent C: Vertebral Subluxation: Semantic Pathology, Epistemic Trespassing, and Ethics. J Philosophy, Principles & Practice of Chiropractic. July 23, 2018. Pages 1-7.

Kent C: Vertebral Subluxation, Critical Thinking and Evidence Informed Practice. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 7-8, 2017.

Kent C: Heart Rate Variability to Assess the Changes in Autonomic Nervous System Function Associated With Vertebral Subluxation. Research & Reviews: Neuroscience September 2017. Volume1, Issue 3, Pages 14-21.

Kent C: An Evidence-Informed Approach to Spinal Radiography in Vertebral Subluxation Centered Chiropractic Practice. Annals of Vertebral Subluxation Research ~ August 31, 2017 ~ Pages 142-146.

Kent C: Vertebral Subluxation, Patient Care and Evidence-Informed Curriculum and Practice. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 8-9, 2016.

Kwon C, Stiles A, O'Brien S, McCoy M, Kent C: Patient Centered Guidelines for the Clinical Management of Vertebral Subluxation. International Research and Philosophy Symposium (IRAPS). Sherman College of Chiropractic. Spartanburg, SC. October 8-9, 2016.

Becker CM, Glascoff MA, Felts WM, Kent C: Adapting and using quality management methods to improve health promotion. Explore (NY). 2015 May-Jun;11(3):222-8.

Kwon C. Subluxation Centered Chiropractic Care: A Public Health Assessment. (Sherman College of Chiropractic International Research and Philosophy Symposium 2019 platform presentation; October 2019

Kwon C. Subluxation Centered Chiropractic Care in the Improvement of Lung Function and Quality of Life for Asthmatic Patients. (Sherman College of Chiropractic International Research and Philosophy Symposium 2019 platform presentation October 2019

Kwon C. (Mile High Chiropractic Seminar invited speaker; August 2019

Kwon C. TBA. (Axiom Seminar Amsterdam invited speaker; August 2019

Kwon C. Exploring the science of chiropractic through a philosophical lens. Massachusetts Alliance of Chiropractic Philosophers; July 2019

Kwon C. Finding your way in chiropractic. World Congress of Chiropractic Students (WCCS) - Connection; April 2019

Kwon C. Do what you love, know what you do. (International Chiropractic Pediatric Association - Life University Chapter; May 2019).

Kwon C. Empowering birth outcomes: the utilization of chiropractic care for safe, healthy pregnancies and a better future. Partners in Perinatal Health 30th Annual Conference keynote speaker; May 2019.

Kwon C. If you can't measure it, it doesn't exist. League of Chiropractic Women - Life University Chapter; January 2019

Kwon C, McCoy M, Kent C. An Advanced Imaging Research Agenda for the Evaluation of Vertebral Subluxation and Clinical Outcomes Related to its Management. Sherman College of Chiropractic International Research and Philosophy Symposium 2018 platform presentation

Senzon S, Kwon C (presenting). The Crisis in the Chiropractic Peer Reviewed Literature in Regards to Vertebral Subluxation: A Critical Discourse Analysis. Sherman College of Chiropractic International Research and Philosophy Symposium 2018 platform presentation

Kwon C. Subluxation Science Panel. Mile High Chiropractic Seminar 2018 invited panel participant; August 2019

Kwon C. The Future of Subluxation Based Chiropractic Research: Uniting Chiropractic Science, Philosophy, and Art. Sherman College of Chiropractic Lyceum invited speaker; May 2018

Kwon C. How Does Your Garden Grow? Subluxation-Based Research Rooted in Chiropractic Philosophy. Berkshires Philosophy Event invited speaker; April 2018

Kwon C. Why Research? World Congress of Chiropractic Students Americas Regional Congress invited speaker; February 2018

Kwon C. Chiropractic Research: Science, Philosophy, and Art – The Essential Questions. LifeVision Raw invited speaker; January 2018

Kwon C. Establishing and Engaging in Vertebral Subluxation Based Research. ABQ Brazilian Chiropractic Association 25th Congress keynote speaker; November 2017

Kwon C. Research for Future Advancement of the Subluxation-Based Chiropractic Profession. Mile High Chiropractic Seminar 2017 invited speaker; August 2017

COMPLETED RESEARCH, PROJECTS & PRESENTATIONS (cont.)

Kwon C. International Chiropractic Pediatric Association Mastery Workshop 2017 invited speaker and facilitator March 2017

Damaske D, McCrossin P, Santoro F, Alcantara J. The beliefs and attitudes of chiropractors and their patients utilising an open practice environment. January 2016. European Journal of Integrative Medicine 8(4) DOI: 10.1016/j.eujim.2016.02.008

Feeley K. Inter-Examiner & Intra-Examiner Reliability Study of the Achilles Heel Tension Test: A Neurological Indicator for Adverse Mechanical Cord Tension. Annals of Vertebral Subluxation Research. March 30, 2017. Pages 55-60

Jaszewski E, Harden J, Smith M. Improvement in Idiopathic Scoliotic and Sub-Scoliotic Curvatures in Children Following Subluxation Correction Utilizing the Pierce Results System: A Retrospective Analysis of Outcomes. Journal of Pediatric, Maternal & Family Health-Chiropractic. Volume 2016 Issue 4. Pages 118-126

Harden J, Jaszewski E, Galgano J. Additional Reduction and Maintenance of Scoliotic and Sub-Scoliotic Curvatures: A Follow-Up Study on Children with Idiopathic Scoliosis Undergoing Subluxation Correction with Pierce Results System. Journal of Pediatric, Maternal & Family Health-Chiropractic. Volume 2017. Issue 1. Pages 16-23

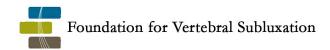
Fedorchuk CA, McCoy M, Bak D, Lightstone DF, Kubricht B, Moser J, Packer J, Walton D, Binongo J. Impact of Isometric Contraction of Anterior Cervical Muscles on Cervical Lordosis: A Pilot Study. Published. Radiology Case. 2016 Sep; 10(9):13-25

Fedorchuk C, Lightstone DF, McCoy M, Harrison DE (2017) Increased Telomere Length and Improvements in Dysautonomia, Quality of Life, and Neck and Back Pain Following Correction of Sagittal Cervical Alignment Using Chiropractic BioPhysics® Technique: a Case Study. J Mol Genet Med 11: 269 doi:10.4172/1747-0862.1000269

Fedorchuk C, McCoy M, Lightstone, DF, Comer. R. Reduction in Insulin usage, improvement in Blood-Glucose, A1C Levels and Subluxation in a 26 year old male Type 1 Diabetic using the Dexcom G4 Continuous Glucose Monitoring System. Platform Presentation. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2016.

Fedorchuk CA, Snow E. Reduction in Thoracic Hyperkyphosis with Increased PEF, FEV and SF-36 Scores Following CBP Protocols in Asymptomatic Patients: A Case Series. Platform Presentation. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2016.

Fedorchuk C, Lightstone DF, Comer RD, Weiner MT, McCoy M (2018) Improved Glycosylated Hemoglobin, Hyperglycemia, and Quality of Life Following Thoracic Hypokyphosis Vertebral Subluxation Correction Using Chiropractic BioPhysics®: A Prospective Case Report. J Diabetes Metab 9: 807.



Fedorchuk C, Lightstone DF, McRae C, Kaczor D. Correction of Grade 2 Spondylolisthesis Following a Non-Surgical Structural Spinal Rehabilitation Protocol Using Lumbar Traction: A Case Study and Selective Review of Literature. Journal of Radiology Case Reports, Vol 11, No 5 (2017)

McCoy, M. Primary Care Provider, Portal of Entry and the Disconnect in Chiropractic Education, Training and Practice: Is the Patient or the Profession at the Center? Platform Presentation. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2016.

Kwon C, McCoy M. Evidence-Based Healthcare in Patient Centered Chiropractic Education: The Development of an Evidenced Base Healthcare Track in a Chiropractic Program. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2016.

McCoy M. Vertebral Subluxation Models & Definitions: Is There Really Anything New? Invited Keynote Lecture. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2017.

McCoy M. The Epidemiology of Vertebral Subluxation. Platform Presentation. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2018.

Fedorchuk C, Comer R, Lightstone D, McCoy M, Kent C, Boningo J. The Prevalence of Vertebral Subluxation in Patients Presenting to a Private Chiropractic Clinic over a Six Year Period. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2018.

Kwon C, McCoy M, Kent C. An Advanced Imaging Research Agenda for the Evaluation of Vertebral Subluxation and Clinical Outcomes Related to its Management. International Research & Philosophy Symposium (IRAPS) Sherman College of Chiropractic. October 2018.

Zielinski E. The Effects of Subluxation Based Chiropractic Care on Cardiovascular Disease Risk Factors: Platform Presentation - Baker IDI Heart & Diabetes Institute Melbourne Australia 2012.

Zielinski E. 2012 Heart & Mind – Platform Presentation. Psychogenic Cardiovascular Disease Conference – Italy.

Zielinski E, Borkhuis S. Epidemiological Approach to the Effects of Subluxation Based Chiropractic Care on Autism. Platform Presentation: 2012 Sherman College International Research & Philosophy Conference

Zielinski E, Acanfora M. Trigeminal Neuralgia & Subluxation Based Chiropractic Care. Platform Presentation: 2011 Sherman College International Research & Philosophy Symposium.

Zielinski E. Can Chiropractic Save Clinical Research? Journal of Philosophy, Principles & Practice of Chiropractic. December 30, 2012. Pages 51-54

Zielinski E, Blume N. The Effects of Subluxation Based Chiropractic Care on Dyslipidemia. Poster Presentation. 2011 American Public Health Association Annual Convention.

COMPLETED RESEARCH, PROJECTS & PRESENTATIONS (cont.)

Zielinski E. Invited Presentation. University California Irvine 2014. Subluxation Based Chiropractic Research.

Zielinski E. Platform Presentation. Texas Chiropractic Association Annual Convention 2014. Subluxation Based Chiropractic Research.

Zielinski E. Invited Platform Presentation. KR Jones Philosophy Forum - South Carolina Chiropractic Association. March 2014.

Zielinski E. Platform Presentation. Subluxation Adaptability Symposium 2014 – Chicago (Sept 2014)

Zielinski E. Invited Presentation. Global Burden of Vertebral Subluxation. EPOC Indiana, June 2014.

Zielinski E. Invited Presentation Life Chiropractic College West. The Global Burden of Vertebral Subluxation. October 2014.

Yoshimura R, Lathrop JM. Improvement in Sensory Modulation & Functional Disorders in a Female Pediatric Patient Undergoing Chiropractic Care. Annals of Vertebral Subluxation Research ~ May 5, 2015~ Pages 108-118

Lombardi P, Revels K. Resolution of Infertility Following Subluxation Based Chiropractic Care: A Case Study. Annals of Vertebral Subluxation Research ~ April 27, 2015 ~ Pages 99-107

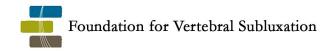
Windwer S, Wolfman M. Efficacy of Chiropractic Adjustments versus Self-Manipulation of the Lumbar Spine in a 17-Year-Old Male with Chronic Low Back Pain: A Case Study. Annals of Vertebral Subluxation Research ~ April 22, 2015 ~ Pages 43-47

Geanopulos SG, Harris J. Chiropractic Care of a Patient with Low Back Pain, Radiculopathy and Concomitant Depression: A Case Report. Annals of Vertebral Subluxation Research ~ April 20, 2015 ~ Pages 39-42

Syn G, Harper J, Fedorchuk C. Increase in Disc Height and Improved Autonomic Function in a 59 year old Male Undergoing Chiropractic Care. Annals of Vertebral Subluxation Research ~ April 13, 2015 ~ Pages 34-38

Gibson M, Gallagher S. Chiropractic care of a 36 year old female with multiple sclerosis for the correction of vertebral subluxations: a case report. Annals of Vertebral Subluxation Research ~ December 11, 2014 ~ Pages 200-205

Zielinski E, Mankal K, Pirini J. Resolution of Trigeminal Neuralgia Following Chiropractic Care Utilizing Chiropractic Biophysics and Diversified Techniques: A Case Study. Annals of Vertebral Subluxation Research ~ November 6, 2014 ~ Pages 177-183



Zielinski E, Mankal K. An Epidemiological Approach to the Effects of Subluxation-Based Chiropractic Care on the Management of ADHD, Depression and Learning Disabilities in an 8-Year Old: A Case Study. Annals of Vertebral Subluxation Research ~ September 15, 2014 ~ Pages 153-160

Slinger A, Lesho S. Reduction in Cardiovascular Disease Risk Factors Following Chiropractic Care: A Case Study & Selective Review of the Literature. Annals of Vertebral Subluxation Research ~ April 23, 2014 ~ Pages 80-88

Brown C, Swenson A. Resolution of Recurrent Tonic-Clonic Seizures in 14-Year-Old Female Using Torque Release Technique: A Case Study. Annals of Vertebral Subluxation Research ~ April 10, 2014 ~ Pages 49-54

Eulitt HK, Giannakakis V. Resolution of Chronic Constipation, Fecal Incontinence, and Abdominal Pain in an 8 Year Old Child Following Chiropractic Care: A Case Study & Selective Review of the Literature. Annals of Vertebral Subluxation Research ~ January 20, 2014 ~ Pages 1-7

Zielinski E, Blume N. An Epidemiological Approach to Subluxation-Based Chiropractic Care and CVD Risk Factors: A Case Study and Review of the Literature. Annals of Vertebral Subluxation Research ~ November 4, 2013 ~ Pages 77-99

Zielinski E, Borkhuis SJ. An Epidemiological Approach to the Effects Subluxation-Based Chiropractic Care had in Managing a Three Year Old Girl with Autism, Acid Reflux, Bilateral Head Pain, Seizures, and Vomiting: A Case Study and Review of the Literature. Annals of Vertebral Subluxation Research ~ September 12, 2013 ~ Pages 51-65

Zielinski E, Acanfora M. Resolution of Trigeminal Neuralgia Following Subluxation Based Chiropractic Care: A Case Study & Review of the Literature. Annals of Vertebral Subluxation Research ~ August 12, 2013 ~ Pages 33-45



PROJECT SPOTLIGHT



KWON AWARDED PUBLIC HEALTH RESEARCH SCHOLARSHIP BY FOUNDATION FOR VERTEBRAL SUBLUXATION

FOCUS ON PUBLIC HEALTH, PREVENTION SCIENCE & VERTEBRAL SUBLUXATION

Christie Kwon DC, MS was recently awarded an Advancing Futures Research Scholarship by the Foundation for Vertebral Subluxation (FVS) to complete her Master's in Public Health at Emory University in Atlanta, Georgia.

Dr. Kwon, who is a chiropractor and also holds a Master's Degree in Biomedical Engineering, stated "Emory's focus on health promotion and prevention fits perfectly with the Foundation's research agenda. I look forward to obtaining additional skills to more effectively study the nature of subluxation and its role in health and well-being, and I am incredibly grateful for this opportunity to do so."

Remarking on the awarding of the Advancing Futures Scholarship, Dr. Christopher Kent DC, JD President of the FVS, and Professor and Director

"I COULD NOT BE MORE EXCITED THAT DR. KWON WAS AWARDED THIS SCHOLARSHIP AND FOR THE CRUCIAL WORK OF THE FOUNDATION THAT SHE WILL BE ADDRESSING. DR. KWON EPITOMIZES EVERYTHING WE NEED TO SECURE A FUTURE FOR CHIROPRACTIC RESEARCHERS WHO FOCUS ON THE VERTEBRAL SUBLUXATION WITHOUT THE COMPROMISE SO MANY OTHERS HAVE GIVEN IN TO."

MATTHEW MCCOY DC, MPH -VICE PRESIDENT FOUNDATION FOR VERTEBRAL SUBLUXATION



of Evidence Informed Practice at Sherman College of Chiropractic stated: "Christie Kwon is an underappreciated polymath. Her commitment to chiropractic is steadfast. This scholarship will enable Dr. Kwon to be even more effective in securing the future of chiropractic research."

Vice President of the FVS, Matthew McCoy DC, MPH commented on the awarding of the scholarship to Dr. Kwon stating "I could not be more excited that Dr. Kwon was awarded this scholarship and for the crucial work of the Foundation that she will be addressing. Dr. Kwon epitomizes everything we need to secure a future for chiropractic researchers who focus on the vertebral subluxation without the compromise so many others have given in to."

Dr. Kwon anticipates that the program will create tremendous opportunities for knowledge and the building of new, professional relationships for exploring subluxation research.

THE EPIDEMIOLOGY OF VERTEBRAL SUBLUXATION

WHAT IS THE INCIDENCE & PREVALENCE OF VERTEBRAL SUBLUXATION?



SUBLUXATIONS POSE A HINDRANCE TO THE FULLEST EXPRESSION OF LIFE

All too often, chiropractic is criticized as an "unscientific" discipline, lacking empirical research to validate the assertion that vertebral subluxations have an adverse effect on the human nervous system, on general health and well-being and by extension, society as a whole.^{1,2}

It is the extension to society as a whole where subluxation has been theorized to have its most detrimental effects. If this is true, then this is also where its elucidation holds the greatest promise for influencing and affecting communal expression.^{3,4}

The systematic study of the epidemiology and global burden of vertebral subluxation should be carried out by individuals and groups with a worldview towards chiropractic that is consistent with the theory that subluxations pose a hindrance to the fullest expression of life.⁵

The results of this type of research can then be used to drive policy, not only in health care, but in education and other sociocultural arenas.

Epidemiology of Vertebral Subluxation

It is a well-entrenched belief within the community of chiropractors who practice the clinical science and art of locating analyzing and correcting vertebral subluxations that vertebral subluxations are in and of themselves a detriment to the fullest expression of life and as a result are a significant public health threat. This threat includes the widespread belief among certain segments of the chiropractic profession that vertebral subluxations lead to increased morbidity and mortality and that it represents a serious burden because it effects a large proportion of the world's population. Indeed, some go so far to suggest that everyone is susceptible

PROJECT SPOTLIGHT

beginning at an early age. Additionally, it is a long standing philosophical tenet of the profession that vertebral subluxations develop as a failure of the body to adapt to physical, chemical and emotional challenges.⁹

Global Burden of Vertebral Subluxation

One of the premises in this whole discussion is that vertebral subluxation is in fact a pathophysiological process that can be measured, quantified and characterized. Given this, vertebral subluxation also has an epidemiology. It has rates of occurrence, distribution, determinants, and incidence rates. Because of this, it is possible to relate the incidence and prevalence of subluxation to such things as genetic and environmental factors.

IT IS A WELL-ENTRENCHED BELIEF WITHIN THE COMMUNITY OF CHIROPRACTORS WHO PRACTICE THE CLINICAL SCIENCE AND ART OF LOCATING ANALYZING AND CORRECTING VERTEBRAL SUBLUXATIONS THAT VERTEBRAL SUBLUXATIONS ARE IN AND OF THEMSELVES A DETRIMENT TO THE FULLEST EXPRESSION OF LIFE AND AS A RESULT ARE A SIGNIFICANT PUBLIC HEALTH THREAT.

Unfortunately, the chiropractic profession has not systematically studied the epidemiology of vertebral subluxation by collecting and analyzing the necessary statistical data. While some attempts have been made in chiropractic as well as osteopathy to determine the prevalence of vertebral subluxation and somatic dysfunction, a great deal more needs to be done. Minimally, the chiropractic profession has not studied how many people have vertebral subluxation, who gets specific types of subluxations and what factors (such as environment, occupation, family patterns, and personal habits, such as smoking and diet) play in the development of vertebral subluxation.

A multitude of internal and external factors have existed to thwart the profession from engaging in such a systematic study. These include internal cultural issues within certain factions of chiropractic where research and science are not valued as they should be and they include factions with chiropractic worldviews in which subluxation is not viewed as a pathophysiological process.

External factors include the historical struggles the profession has faced in regards to legitimization, licensing, insurance equality, the AMA boycott and a host of other issues that vied for scant resources. However, these factors can no longer be used as excuses for developing and implementing the infrastructure needed to elucidate the epidemiology of vertebral subluxation. The profession has run out of time to answer these questions.

Operational Models of Vertebral Subluxation

In the now famous McDonald study, 687 randomly selected chiropractors in the United States, Canada and Mexico were surveyed in 2003.¹³ The report revealed that in spite of differences in scope of practice (broad scope, middle scope and focused scope), adjusting technique and philosophy, as a group chiropractors are surprisingly homogeneous. In particular, 88.1% agree that the term Vertebral



Foundation for Vertebral Subluxation

Subluxation should be retained, 89.8% state that adjustments should not be limited to musculoskeletal conditions and rate the subluxation as a significant contributing factor in 62.1% of visceral ailments.

Despite the widespread agreement on fundamental issues related to vertebral subluxation, some detractors still argue that vertebral subluxation cannot be measured directly, that there is no agreement on a definition of vertebral subluxation or that there are too many different techniques within chiropractic to conduct large health outcomes studies. However, this is simply not the case.

The notion that there is no agreed upon definition of vertebral subluxation is false. Common to all models of vertebral subluxation are TWO components:^{6,7,14}

- NEUROLOGICAL (Dysautonomia and Dysponesis)
- 2. BIOMECHANICAL (Dyskinesia, Kinesopathology, and Misalignment)

The notion that the subluxation cannot be measured using valid and reliable means is also false. The following are just some of the OBJECTIVE, VALID and RELIABLE outcome measures for the BIOMECHANICAL (Dyskinesia, Kinesopathology, and Misalignment) component of subluxation:^{67,14}

- 1. X-ray (static, flexion/extension etc)
- 2. Videoflouro
- 3. MRI
- 4. CT scan
- 5. ROM using inclinometers

The following are just some OBJECTIVE, VALID

and RELIABLE outcome measures for the NEUROLOGICAL (Dysautonomia and Dysponesis) component of subluxation:

- 1. SSEP's
- 2. DEP's
- 3. Auditory & Visual Evoked Potentials
- 4. Thermal scanning
- 5. SEMG (static and dynamic)
- 6. HRV
- 7. Algometry
- 8. Computerized muscle testing

In addition there are health related quality of life surveys such as the SF 36 and/or condition specific surveys that are objective, valid and reliable and can be used to measure health outcomes following interventions to reduce or correct vertebral subluxations.^{6,7}

Discussion

In the field of public health, large networks are established for syndromic surveillance and newly conceived systems for tracking possible bioterrorism outbreaks. Once a disease is identified as reportable, such as cancer or STDs, this information is transmitted immediately by emergency room personnel or practice-based physicians to these computerized networks. Similarly, medical insurance companies and managed care organizations maintain large centralized patient databases to: monitor costs, comply with reporting requirements to regulatory agencies, and conduct market forecasting. In many instances, they use these powerful data sets to influence health policy reform. For example, tainted food (mad cow disease) or drugs with severe adverse effects (Thalidomide) have been recalled by public health authorities as a result of such an oversight process involving

ACCORDING TO THE MOST AUTHORITATIVE STUDY ON THE TOPIC, 88.1% OF CHIROPRACTORS AGREE THAT THE TERM VERTEBRAL SUBLUXATION SHOULD BE RETAINED, 89.8% STATE THAT ADJUSTMENTS SHOULD NOT BE LIMITED TO MUSCULOSKELETAL CONDITIONS AND RATE THE SUBLUXATION AS A SIGNIFICANT CONTRIBUTING FACTOR IN VISCERAL AILMENTS.

PROJECT SPOTLIGHT

centralized databases.

Chiropractic has no such similar surveillance data, nor infrastructure to gather it, in regards to the very clinical entity for which it exists to manage. As a result, the profession does not know the incidence, prevalence, distribution, occurrence and determinants of vertebral subluxation - while at the same time believing that it is a significant public health threat.

The monitoring of public health threats, practitioner outcomes, choice of outcome measures, favorable and adverse events are the concern of all health professions because such monitoring allows the field to evolve newer strategies, procedures and technologies while maintaining the highest assurance of quality in patient care. In an age of evidence-based health care the need for central data repositories and linked clinical research sites is quickly becoming a standard that the profession must embrace.

Conclusion

The community of chiropractors focused on vertebral subluxation is encouraged to develop models for surveillance of vertebral subluxation on a large scale. Data should be gathered from several geographical locations around the world to determine the global burden of vertebral subluxation and depending on the magnitude of the burden institute public health policy to address it as

an important public health issue.

These data are necessary to develop an evidence informed, worldwide, public health communications plan centered on the need for screening and management of vertebral subluxation. This includes the development of a related training program in public health communications for practicing chiropractors.

The writing of policy on the federal and state level is needed that explicitly includes and protects the management of vertebral subluxation as an important public health issue. This will involve assisting health policy experts to implement health policy related to vertebral subluxation.

The provision of this evidence in regulatory environments will help ensure the adoption of regulations that support subluxation centered practice and the public health and to repeal regulations that are detrimental to subluxation centered practice and the public health.

Beyond developing and compiling epidemiological and clinical evidence regarding vertebral subluxation and its perceived detrimental effects on populations, these efforts could provide the evidence needed to develop and provide information and resources for chiropractors, trade organizations and associations to communicate the necessary public health messages for a vertebral subluxation public health agenda in an evidenced based model.⁵

References

1. Goncalves G, Le Scanff C, Leboeuf-Yde C. Primary prevention in chiropractic practice: a systematic review. Chiropractic & Manual Therapies. 2017;25:9. doi:10.1186/s12998-017-0140-4.

2. Mirtz TA, Morgan L, Wyatt LH, Greene L. An epidemiological examination of the subluxation construct using Hill's criteria of causation. Chiropractic & Osteopathy. 2009;17:13. doi:10.1186/1746-1340-17-13.

3. Filippi M. Subluxation As A Social/Cultural Imitation: Resolving A Phylobiological Epiphenomenon, Part 1. Annals of Vertebral Subluxation Research. Volume 3. Number 3. Pages 1-14.

4. Filippi M. Subluxation As A Social/Cultural Imitation: Resolving A Phylobiological Epiphenomenon, Part 2. Annals of Vertebral Subluxation Research. Volume 3. Number 4. Pages 1-13.

5. McCoy M, Kent C. Vertebral Subluxation Research: An Agenda to Explore the Epidemiology of Vertebral Subluxation and the Clinical Outcomes Related to Management. Annals of Vertebral Subluxation Research, Volume 2013. August 5, 2013. Pages 29-32.

6. Vertebral Subluxation in Chiropractic Practice. Council on Chiropractic Practice.

Note that a sublikation in Chicopractics and Organizations. Policy Statements.
 Rest Practices & Practice Guidelines. International Chiropractors Association.
 Falls Church, VA
 International Federation of Chiropractors and Organizations. Policy Statements. if if cochiro.org Accessed April 20, 2018.

9. Sinnott, R. Vertebral Subluxation: Positive Adaptation or Absolute Disadvantage? A Commentary. Journal of Philosophy, Principles & Practice of Chiropractic, Volume 2017. December 14, 2017. Pages 27-3010. Decken B, Santos M, Santos J. The Prevalence of Vertebral Subluxation in Children Ten Years of Age and Younger. Proceedings of the 8th Annual International Research and Philosophy Symposium. Sherman College of Chiropractic Spartanburg, South Carolina. October 22-23, 2011 A. Vertebral Subluxation Res. November 28, 2011

11. Bowler B. The Prevalence of Subluxation of the Occipital-Atlanto-Axial Complex in a Population Seeking Chiropractic Care. Proceedings of the 14th Annual International Research and Philosophy Symposium. Sherman College of Chiropractic Spartanburg, South Carolina. October 7-8, 2017. Journal of Philosophy, Principles & Practice of Chiropractic. Volume 2017. December 4, 2017.

12. Waddington EL, Smider KT, Lockwood MD, Pazdernik VK. Incidence of Somatic Dysfunction in Healthy Newborns. J Am Osteopath Assoc. 2015

Nov;115(11):654-65.

13. McDonald W, Durkin K, Pfefer M. How Chiropractors Think and Practice: The Survey of North American Chiropractors. Seminars in Integrative Medicine 2(3):92-98. September 2004.

14. McCoy M. The Use of Objective Measures of the Biomechanical and Neurological Components of Vertebral Subluxation to Develop a Composite Measure of Spinal Health. Proceedings of the 2009 International Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009. Annals of Vertebral Subluxation Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009. Annals of Vertebral Subluxation Research and Philosophy Symposium. Sherman College of Chiropractic. October 17-18, 2009. Annals of Vertebral Subluxation Research and Philosophy Symposium.

SIMON SENZON AWARDED ACADEMIC SCHOLARSHIP BY FOUNDATION FOR VERTEBRAL SUBLUXATION

FOCUS IS ON ERRORS IN LITERATURE REGARDING VERTEBRAL SUBLUXATION

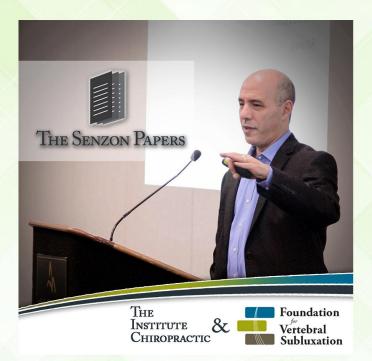
Simon Senzon MA, DC, a prolific historical researcher on the chiropractic profession, has been awarded an Advancing Futures Scholarship by the Foundation for Vertebral Subluxation (FVS).

The scholarship is for Dr. Senzon to complete a Ph.D at Southern Cross University located in Australia. The focus of his scholarship and dissertation will be correcting the errors in the



literature regarding vertebral subluxation placed by numerous "subluxation deniers" who have peppered the scientific and historical literature with unreferenced and unsupported statements regarding the nature and historical issues surrounding vertebral subluxation.

According to Matthew McCoy DC, MPH Vice President of the FVS, "Many chiropractors do not realize how inaccurate the anti-subluxation rhetoric actually is in the peer reviewed literature and this has been allowed to continue for too long."



McCoy added, "All these subluxation deniers purposely inject anti-subluxation statements into their papers and then journal editors within the profession practice professional birth control by publishing those false statements. Then those papers are used against subluxation chiropractors in regulatory board and malpractice actions - never mind in the popular press to tarnish the whole profession."

The main plan for Senzon's dissertation is to contribute to knowledge by exploring the professionalization of chiropractic by developing a new understanding of how intellectual fields develop. This will be conducted by using eight

SENZON'S WORK WILL EMPHASIZE
HISTORICAL AND SCHOLASTIC ERRORS IN
THE LITERATURE AS WELL AS SOCIAL
SCIENCE VIEWS OF THE PROFESSION. IT IS
HOPED THAT THIS UNIQUE CONTRIBUTION
TO KNOWLEDGE WILL ESTABLISH A NEW
FOUNDATION FOR RESEARCH INTO
CHIROPRACTIC, THE CHIROPRACTIC
SUBLUXATION, HEALTH CARE, AND
PROFESSIONALIZATION.

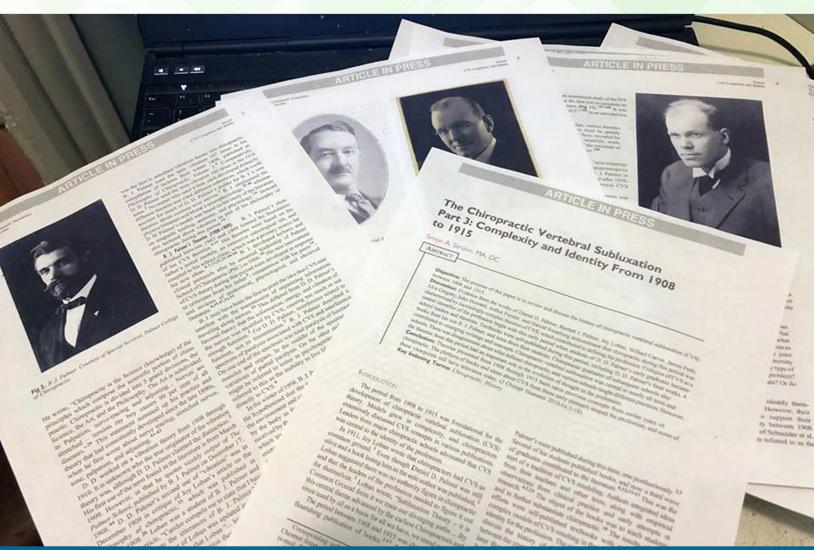
PROJECT SPOTLIGHT

perspectives along with an in-depth literature review. The review will emphasize historical and scholastic errors in the literature as well as social science views of the profession. It is hoped that this unique contribution to knowledge will establish a new foundation for research into chiropractic, the chiropractic subluxation, health care, and professionalization.

The President of the Foundation for Vertebral Subluxation, Christopher Kent DC, JD, expressed his excitement at "...the prospect of righting the wrong that has been committed in the scientific and historical literature on chiropractic" adding "There is no one better than Dr. Senzon with his in-depth

knowledge of the literature and its historical underpinnings to shine a bright light on those who have perpetrated this historical injustice on the chiropractic profession."

Dr. Senzon stated he was "...thrilled to finally be embarking on this endeavor as fixing this issue has been something I have wanted to do for some time and while I have been lecturing and writing about some of it, we need to formalize it and correct the literature once and for all."



UAC RESEARCH SCHOLARSHIP PROJECT

Beginning in 2011 a group of dedicated, committed and successful chiropractors got together to discuss some of the challenging issues involving research facing the chiropractic profession. They sought to add to the literature base and at the same time to support students with an interest in research and scholarly activity.

These 12 members of the UAC committed to providing \$2500.00 scholarships to students in exchange for completing case study research papers on their practice members who had experienced positive health outcomes as a result of chiropractic care.

Funding for the scholarships was donated to the Foundation for Vertebral Subluxation and a group of 10 chiropractic students enrolled at Life University received all funds related to these scholarships totaling \$30,000.00. These students completed a total of 12 case study research papers with these doctors.

We highlight this project to show what can be done when a committed group of chiropractors puts their heads together to support chiropractic research and chiropractic students with an interest in research

Here is the result of that effort.

Yoshimura R, Lathrop JM. Improvement in Sensory Modulation & Functional Disorders in a Female Pediatric Patient Undergoing Chiropractic Care. Annals of Vertebral Subluxation Research ~ May 5, 2015~ Pages 108-118

Lombardi P, Revels K. Resolution of Infertility Following Subluxation Based Chiropractic Care: A Case Study. Annals of Vertebral Subluxation Research ~ April 27, 2015 ~ Pages 99-107

Windwer S, Wolfman M. Efficacy of Chiropractic Adjustments versus Self-Manipulation of the Lumbar Spine in a 17-Year-Old Male with Chronic Low Back Pain: A Case Study. Annals of Vertebral Subluxation Research ~ April 22, 2015 ~ Pages 43-47

Geanopulos SG, Harris J. Chiropractic Care of a Patient with Low Back Pain, Radiculopathy and Concomitant Depression: A Case Report. Annals of Vertebral Subluxation Research ~ April 20, 2015 ~ Pages 39-42

Syn G, Harper J, Fedorchuk C. Increase in Disc Height and Improved Autonomic Function in a 59 year old Male Undergoing Chiropractic Care. Annals of Vertebral Subluxation Research ~ April 13, 2015 ~ Pages 34-38

Gibson M, Gallagher S. Chiropractic care of a 36 year old female with multiple sclerosis for the correction of vertebral subluxations: a case report. Annals of Vertebral Subluxation Research ~ December 11, 2014 ~ Pages 200-205

Zielinski E, Mankal K, Pirini J. Resolution of Trigeminal Neuralgia Following Chiropractic Care Utilizing Chiropractic Biophysics and Diversified Techniques: A Case Study. Annals of Vertebral Subluxation Research ~ November 6, 2014 ~ Pages 177-183

Zielinski E, Mankal K. An Epidemiological Approach to the Effects of Subluxation-Based Chiropractic Care on the Management of ADHD, Depression and Learning Disabilities in an 8-Year Old: A Case Study. Annals of Vertebral Subluxation Research ~ September 15, 2014 ~ Pages 153-160

Slinger A, Lesho S. Reduction in Cardiovascular Disease Risk Factors Following Chiropractic Care: A Case Study & Selective Review of the Literature. Annals of Vertebral Subluxation Research ~ April 23, 2014 ~ Pages 80-88

Brown C, Swenson A. Resolution of Recurrent Tonic-Clonic Seizures in 14-Year-Old Female Using Torque Release Technique: A Case Study. Annals of Vertebral Subluxation Research ~ April 10, 2014 ~ Pages 49-54

Eulitt HK, Giannakakis V. Resolution of Chronic Constipation, Fecal Incontinence, and Abdominal Pain in an 8 Year Old Child Following Chiropractic Care: A Case Study & Selective Review of the Literature. Annals of Vertebral Subluxation Research ~ January 20, 2014 ~ Pages 1-7

Zielinski E, Blume N. An Epidemiological Approach to Subluxation-Based Chiropractic Care and CVD Risk Factors: A Case Study and Review of the Literature. Annals of Vertebral Subluxation Research ~ November 4, 2013 ~ Pages 77- 99

Zielinski E, Borkhuis SJ. An Epidemiological Approach to the Effects Subluxation-Based Chiropractic Care had in Managing a Three Year Old Girl with Autism, Acid Reflux, Bilateral Head Pain, Seizures, and Vomiting: A Case Study and Review of the Literature. Annals of Vertebral Subluxation Research ~ September 12, 2013 ~ Pages 51-65

Zielinski E, Acanfora M. Resolution of Trigeminal Neuralgia Following Subluxation Based Chiropractic Care: A Case Study & Review of the Literature. Annals of Vertebral Subluxation Research ~ August 12, 2013 ~ Pages 33-45

PROJECT SPOTLIGHT

FOUNDATION FOR VERTEBRAL SUBLUXATION ESTABLISHES PERMANENT BEST PRACTICES INITIATIVE

PROJECT WILL SEARCH, GATHER, REVIEW & COMPILE VERTEBRAL SUBLUXATION RESEARCH ON ONGOING BASIS

Several years ago the Foundation for Vertebral Subluxation (FVS) embarked on an ambitious effort to develop a clinical practice guideline/best practices project that would search, gather, compile and review the scientific literature going as far back as January 2007. The FVS saw a crucial need to develop this project because other practice guidelines that included the management of vertebral subluxation were about to become outdated leaving chiropractors who practice in a subluxation model vulnerable in malpractice claims, regulatory board witch hunts and the insurance industry.

That project involving twelve topic areas is nearing completion and the Guidelines Committee is beginning the next steps of developing Best Practices Recommendations based on that review. The review involves over 4000 research papers and covers the following topic areas:

- History and chiropractic examination
- Instrumentation
- Radiographic and other imaging
- Clinical impression, assessment and recordkeeping
- Reassessment and outcomes assessment
- Modes of adjustive care
- Duration of care for correction of vertebral subluxation
- Chiropractic care for children
- Maternal chiropractic care
- · Vertebral subluxation and well being
- Behavioral and mental health issues
- Patient safety, privacy and advocacy



According to FVS President Christopher Kent DC, JD "This was a Herculean task accomplished by a team of dedicated researchers and we are forever grateful for their service in carrying out this project."

FVS Board Member Veronica Gutierrez DC, who worked on practice guideline development along with Kent and McCoy in the 90's, praised the work of the team. "They have done an outstanding job and anyone that has ever suffered through guideline development knows all too well the pain and personal sacrifice it brings with it. But they also know the satisfaction that comes with being involved in such important work."

As the project came together the FVS realized that this was no longer the way to manage guideline development for subluxation management. Matthew



Foundation for Vertebral Subluxation

McCoy DC, MPH Vice President of the FVS related his experience in guideline development going back to the early 90's. "The guideline development projects myself and Dr. Kent had been involved in, along with other efforts, basically involved killing oneself every five years by starting over where the last iteration left off and digging through five years of research all over again. We realized this is not sustainable."

Over the past several months the FVS has held a series of conference calls and meetings to discuss a long term solution and that has resulted in a plan laid out during this years' IRAPS at Sherman College to develop a permanent and ongoing best practices initiative. In addition to being FVS President, Dr. Kent is the Director of Evidence Informed Curriculum and Practice at Sherman College. He will provide additional oversight of the project.

At this point in time a team has been established to oversee this ongoing initiative. To accomplish this, several Research Fellowship Scholarships have been developed in order to staff the initial team and their training.

Anquonette Stiles DC, MPH has been granted a Research Fellowship and accepted the role as Project Manager. Dr. Stiles has already begun working with two students from Sherman College of Chiropractic who were awarded Research Fellowships from the FVS for their participation.





"THIS WAS A HERCULEAN TASK
ACCOMPLISHED BY A TEAM OF DEDICATED
RESEARCHERS AND WE ARE FOREVER
GRATEFUL FOR THEIR SERVICE IN CARRYING
OUT THIS PROJECT."

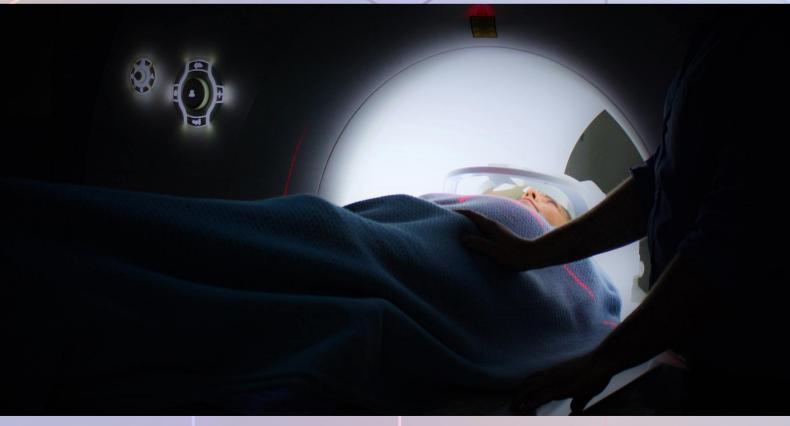
CHRISTOPHER KENT DC, JD
PRESIDENT - FOUNDATION FOR VERTEBRAL SUBLUXATION

Those recipients are Kathryn Heidt MS and Hui Zhen Lim. Christie Kwon MS, DC, who was the Project Manager for the initial project that began in 2015 will remain involved and provide oversight and guidance to the developing team.

"We are taking a train the trainers approach moving forward with the intention that we will establish a permanent team with ongoing expertise in best practices work" stated Kwon. "The profession desperately needs people who are committed to the development of these guidelines given the upheaval currently going on in the profession."

The FVS intends to make all of its work available to the profession and is currently addressing legal and technical issues relate to copyright, reproduction issues, database and website development. Once that is complete the team will produce an ongoing monthly update of all the scientific literature published. This means the FVS will have the most current evidence impacting subluxation management. Then every five years the FVS will update the Recommendations based on the literature. The five year process will be made much easier because the literature is being searched, gathered and reviewed on a regular basis instead of just every five years.

PROJECT SPOTLIGHT



KWON AWARDED SCHOLARSHIP FOR ADVANCED IMAGING FELLOWSHIP

FVS DEVELOPING ADVANCED IMAGING RESEARCH AGENDA

Christie Kwon DC, MS was recently awarded a scholarship by the Foundation for Vertebral Subluxation (FVS) to participate in a Functional MRI Visiting Fellowship through Harvard University. The Fellowship resulted in a flurry of activity and excitement at the FVS because of the potential this holds for subluxation research.

It's been known for almost 100 years that neural activity causes localized changes in blood flow and researchers have demonstrated that neural activity causes localized changes in blood oxygenation. Physicists, radiologists, and neuroscientists have now demonstrated that blood flow and blood oxygenation can be detected by the noninvasive technology of MRI. This has led to a dramatic increase in functional brain imaging work with humans. Because this noninvasive technique permits

many repetitions of experimental procedures on a single subject, it is rapidly becoming the method of choice for neuroscience research in functional brain mapping.

In addition to her other work overseeing the FVS's Practice Based Research Network (PBRN) and several studies that fall under it, Dr. Kwon has developed a keen interest in advanced imaging and its role as an objective assessment of vertebral subluxation.

While there are a few folks in chiropractic that have been making the seminar rounds showing pre and post advanced imaging studies from their practice very little of anything has actually been studied or published on some of the most valuable tools available to chiropractic for researching the

Foundation for Vertebral Subluxation

the subluxation.

"We plan on changing that" stated Matthew McCoy DC, MPH Vice President of the FVS. McCoy continued "Chiropractors have long utilized plain film imaging as an objective means of analysis, and in recent times, some practitioners have incorporated the use of advanced imaging methods such as CT, MRI and fMRI. Through the development of an Advanced Imaging Research Agenda the FVS plans on being at the forefront of this."

Dr. Kwon, who is a chiropractor and also holds a Master's Degree in Biomedical Engineering, stated she is "Excited to be able to explore these untapped resources for researching vertebral subluxation. For example, functional MRI technology allows researchers to observe hemodynamic responses by imaging changes in blood flow which represent changes in neural activity." Kwon went on "Another example is task-oriented physiological responses and flow of cerebrospinal fluid which can also be measured utilizing MRI."

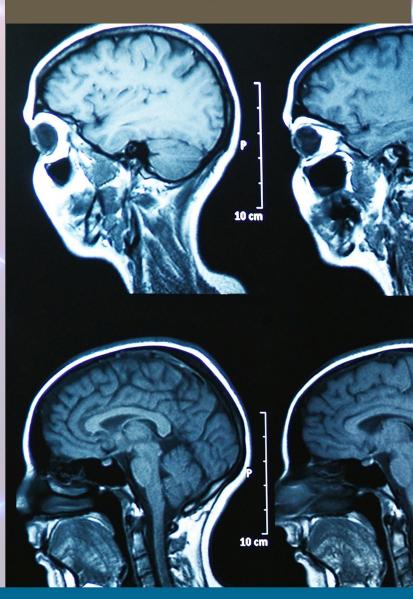
The Fellowship Program was intensive and included several guest lecturers and visiting instructors adding to the wealth of information shared. The Fellowship included a group project where each group was assigned a project to design an fMRI research project. These were presented on the last day.

According to Kwon this experience demonstrated the complexity of fMRI as well as the wealth of information that can be obtained from small numbers of scans. Kwon cautioned "With so many considerations in research design, every decision in an fMRI study comes with implications for other factors of the study."

One of the most exciting topics covered was resting state functional connectivity and we particularly look forward to applying this information to FVS' research agenda on Advanced Imaging. Even more exciting were presentations on utilizing EEG and fMRI simultaneously. Measuring brain function has become the newest craze in chiropractic even though none of

"I AM EXCITED TO BE ABLE TO EXPLORE THESE UNTAPPED RESOURCES FOR RESEARCHING VERTEBRAL SUBLUXATION. FUNCTIONAL MRI TECHNOLOGY ALLOWS RESEARCHERS TO OBSERVE HEMODYNAMIC RESPONSES BY IMAGING CHANGES IN BLOOD FLOW WHICH REPRESENT CHANGES IN NEURAL ACTIVITY. ANOTHER EXAMPLE IS TASK-ORIENTED PHYSIOLOGICAL RESPONSES AND FLOW OF CEREBROSPINAL FLUID WHICH CAN ALSO BE MEASURED UTILIZING MRI."

CHRISTIE KWON MS, DC - EXECUTIVE DIRECTOR FOUNDATION FOR VERTEBRAL SUBLUXATION



the work being promoted even uses subluxation terminology or objective, valid and reliable methods to measure whether or not a subluxation even existed at the time of intervention.

Even worse is that the researchers in these studies equate spinal manipulation with adjustment and joint dysfunction with vertebral subluxation even though these terms are not synonymous.

According to Dr. Christopher Kent DC, JD President of the FVS, and Professor and Director of Evidence Informed Practice at Sherman College of Chiropractic:

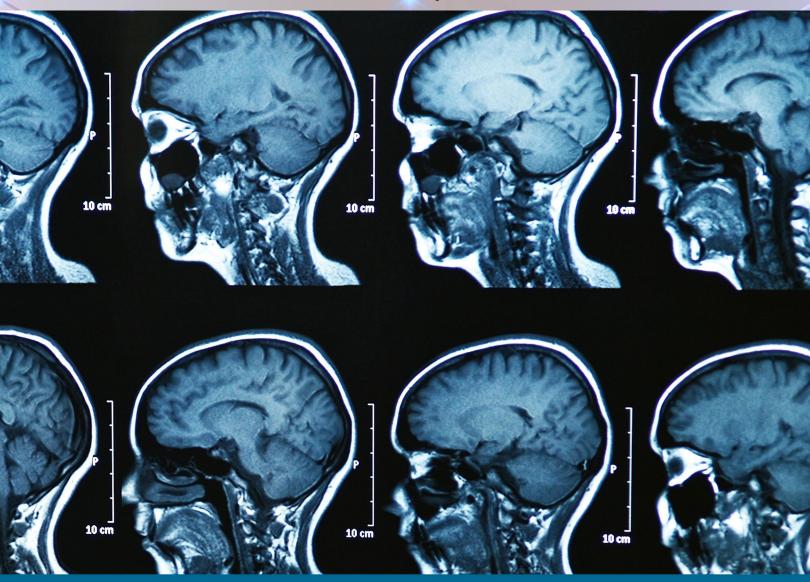
"The Foundation for Vertebral Subluxation is

PROJECT SPOTLIGHT

committed to utilizing chiropractic's unique methods and lexicon in its research as these are the only things that separate us from other purveyors of spinal manipulation."

Dr. Kwon along with Kent and McCoy has developed a document titled: An Advanced Imaging Research Agenda for the Evaluation of Vertebral Subluxation and Clinical Outcomes Related to its Management.

This Agenda will be presented at various conferences and the roll out of specific projects related to the agenda will be announced as they are implemented.



AN ADVANCED IMAGING RESEARCH AGENDA FOR THE **EVALUATION OF VERTEBRAL** SUBLUXATION AND CLINICAL **OUTCOMES RELATED TO ITS** MANAGEMENT

FOUNDATION'S LEADERS DEVELOP CRUCIAL PLAN

The Foundation for Vertebral Subluxation (FVS), in its commitment to research pertaining to the vertebral subluxation, will engage a research agenda focused on means to detect and observe outcomes of subluxation-corrective care utilizing advanced imaging. The Agenda was developed by Christie Kwon MS, DC, Matthew McCoy DC, MPH and Christopher Kent DC, JD.

Chiropractors have long utilized plain film imaging as an objective means of analysis, and in recent times, some practitioners have incorporated the use of advanced imaging methods such as CT, MRI and fMRI. The scientific understanding of the nature of the vertebral subluxation suggests that there are effects to the central and peripheral nervous system and the physiology of the body. Functional MRI technology allows researchers to observe hemodynamic responses by imaging changes in blood flow which represent changes in neural activity. Task-oriented physiological responses and flow of cerebrospinal fluid can also be measured utilizing MRI.1-13

Methodology related to the agenda will be project specific and initially will include formal training in the area of functional MRI (fMRI) and other advanced imaging for researcher(s) through the Foundation for Vertebral Subluxation.

Pilot and feasibility studies will also be designed and conducted including task-oriented imaging, pre-/post chiropractic care in healthy populations



and the use of a Practice Based Research Network for multi-site studies.

This agenda's work will serve as an opportunity for collaboration with institutions such as Emory University, Harvard University, and the Veterans' Administration. Outcomes of this research will influence patient management, quality and scope of legislation and policy related to utilization of advanced imaging modalities by the chiropractic profession.

References

1. Ogura T, Tashiro M, Masud M, Watanuki S, Shibuya K, Yamaguchi K, Itoh M, Fukuda H, Yanai K; Cerebral metabolic changes in men after chiropractic spinal manipulation for neck pain; Alternative Therapies Health Medicine; Nov-Dec 2011;Vol. 17; No. 6; pp. 12-7.

2. Cagnie B1, Jacobs F, Barbaix E, Vinck E, Dierckx R, Cambier D. Changes in cerebellar blood flow after manipulation of the cervical spine using Technetium 99m-ethyl cysteinate dimer. J Manipulative Physiol Ther. 2005 Feb;28(2):103-7.

3. Lystad RP, Pollard H. Functional neuroimaging: a brief overview and feasibility for use in chiropractic research. The Journal of the Canadian Chiropractic Association. 2009;53(1):59-72.

4. Lystad RP, Pollard H. Neurophysiological evidence of changes in brain function following chiropractic spinal manipulative therapy: a systematic review. J Manipulative Physiol Ther. 2008

5. Freeman M, Rosa R, Harshfield D, Smith F, Bennett R, Centeno C, Kornel E, Nystrom A, Heffez D, Kohles S. (2010) A case-control study of cerebellar tonsillar ectopia (Chiari) and head/neck trauma (whiplash), Brain Injury, 24-7-8, 988-994.

6. Whedon JM, Glassey D. Cerebrospinal fluid stasis and its clinical significance. Alternative therapies in health and medicine. 2009;15(3):54-60.

7. Enzmann D, Pele N. Cerebrospinal fluid flow measured by phase-contrast cine MR. AJNR Am J Neuroradiol. 1993;14(6):1301-7

8. Damadian R, Chu D. The Possible Role of Cranio-Cervical Trauma and Abnormal CSF Hydrodynamics in the Genesis of Multiple Sclerosis. Chem. Phys. & Med. NMR (20 September 2011) 41: 1-17

9. Flanagan MF. The Role of the Craniocervical Junction in Craniospinal Hydrodynamics and Neurodegenerative Conditions. Neurology Research International. 2015;2015:794829.

10. Mandolesi S, Marceca G, Conicello S, Harris E. Upper Cervical Vertebral Subluxation in Multiple Sclerosis Subjects with Chronic Cerebrospinal Venous Insufficiency: A Pilot Study, Journal of Upper Cervical Chiropractic Research, Volume 2013. September 23, 2013. Pages 65-70

11. The Crani

PROJECT SPOTLIGHT

OBJECTIVES INCLUDE:

- To elucidate the nature of the vertebral subluxation, and its location, analysis, and correction via the chiropractic adjustment
- To explore the feasibility and usefulness of MRI, CT, Cone Beam CT, PET scanning and other imaging modalities in measuring components of vertebral subluxation and outcomes related to chiropractic care.
- To improve means of subluxation-correction outcomes assessment
- To observe outcomes in healthy populations under subluxation care
- To observe outcomes in special patient populations undergoing management of vertebral subluxation including:
 - o Military veterans
 - o Post Traumatic Stress Disorder
 - o Traumatic Brain Injury
 - o Neurodevelopmental Disorders
 - o Neurodegenerative Disorders
 - o Dysautonomia
 - o Depression
 - o Cardiac Sympathetic Disorders/Cardiac Coherence

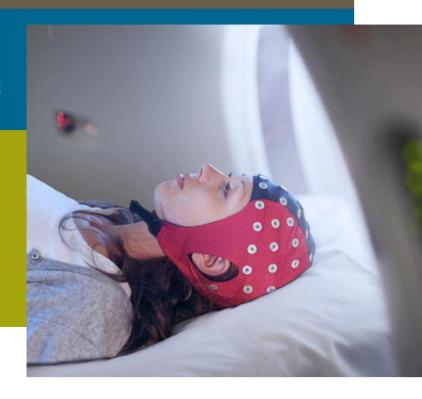
NEEDS ASSESSMENT

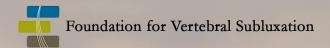
- 1. Funding for fMRI scan time
- 2. Research time and resources
- 3. Determination of the variables to be measured
- 4. Development of study designs

OUTCOMES

This agenda is intended to inform:

- 1. Chiropractic practitioners
- 2. Chiropractic researchers
- 3. Other health care providers
- 4. Education
- 5. Policy and legislation





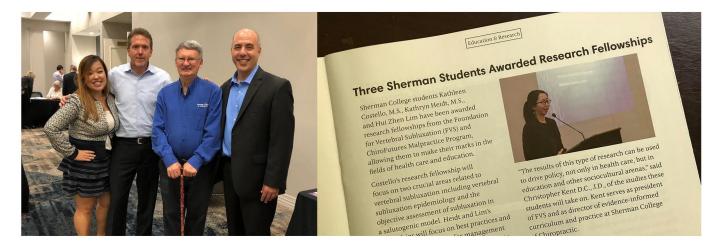
"HAVING ALREADY BEGUN TO LOSE THE EXCLUSIVE PRACTICE OF SPINAL MANIPULATION TO ALLOPATHS AND PHYSIOTHERAPISTS, ONLY THE CHIROPRACTIC PHILOSOPHY SIGNIFICANTLY DISTINGUISHES THE CHIROPRACTIC PRACTITIONER, AND YET THE PHILOSOPHY IS KEPT HIDDEN AWAY.

IN RESPONSE TO SOCIAL THREATS TO ITS EXISTENCE, CHIROPRACTIC HAS ACCEPTED THE MATERIALIST WORLD OF THE ALLOPATHS. IT HAS DONE SO IN FEAR OF BEING LABELLED QUACKERY AND THIS WAS UNDOUBTEDLY A GOOD STRATEGY TO FOLLOW AT ONE TIME. THE PUBLIC KNOWS NEXT TO NOTHING OF CHIROPRACTIC PHILOSOPHY OF HEALING AND ITS MECHANISMS.

IF HOSPITALS OFFER SPINAL MANIPULATION, A CHIROPRACTOR OFFERS NOTHING ELSE. THIS DISTORTION OF THE CHIROPRACTIC TRADITION CAN ONLY BE OVERCOME BY A REEVALUATION OF THE PLACE OF THEORY IN CHIROPRACTIC... DISPOSSESSED OF ITS PHILOSOPHY, CHIROPRACTIC IS DISPOSSESSED OF ITS UNIQUENESS, AND PERHAPS ITS FUTURE."

EA MORINIS - MEDICAL ANTHROPOLOGIST

RESEARCH FELLOWSHIP



Christie Kwon MS, DC: The Foundation for Vertebral Subluxation provided a scholarship for a three month internship at the United Nations Health Committee in New York. The Health Committee is a Non-Governmental Organization (NGO) working with the UN. Dr. Kwon worked with Dr. Christopher Kent who was Chair of this Committee. Dr. Kwon is currently an Advancing Futures Research Fellowship Recipient working on her Masters in Public Health at Emory University in Atlanta Georgia with a full scholarship from the Foundation. Dr. Kwon was also awarded a Scholarship for a Functional MRI Visiting Fellowship through Harvard University. She is the Project Manager for the Foundation's Best Practices/Guidelines initiative on the management of vertebral subluxation.

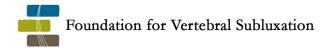
Anquonette Stiles DC, MPH: Dr. Stiles received a Research Fellowship for completion of her Practicum in fulfillment of her requirements for a Master in Public Health. Her project was the development of a guidelines development process. Dr. Stiles is currently an Advancing Futures Research Fellowship Recipient for the Development of Guidelines for the Management of Vertebral Subluxation and is the Director of this initiative.

Simon Senzon MA, DC: Dr. Senzon has been awarded an Advancing Futures Scholarship by the Foundation for Vertebral Subluxation (FVS). The scholarship is for Dr. Senzon to complete a Ph.D at Southern Cross University located in Australia. The focus of his scholarship and dissertation will be correcting the errors in the literature regarding vertebral subluxation placed by numerous "subluxation deniers" who have peppered the scientific and historical literature with unreferenced and unsupported statements regarding the nature and historical issues surrounding vertebral subluxation.

Kathleen Costello DC: Dr. Costello is a Research Fellow with the Foundation for Vertebral Subluxation. Her areas of focus include: guidelines development, epidemiology of vertebral subluxation and salutogenesis and its relationship to verterbal subluxation.

Hui Zhen Lim BS: Ms. Lim is a Research Fellow with the Foundation for Vertebral Subluxation working on the Foundation's Guidelines Committee. She is currently a student at Sherman College of Chiropractic.

Kathryn Heidt BS, MS: Ms. Heidt is a Research Fellow with the Foundation for Vertebral Subluxation working on the Foundation's Guidelines Committee. She is currently a student at Sherman College of Chiropractic.



Aryn Gabai DC: The Foundation for Vertebral Subluxation provided scholarship funding for Dr. Gabai's participation in the World Health Organization's Internship program in Geneva.

Christi McRae BS, DC: Dr. McRae received an Advancing Futures Research Fellowship in the area of spinal biomechanics, vertebral subluxation and clinical science under the direction of Curtis Fedorchuk DC.

Doug Lightstone BA, MS, DC: Dr. Lightstone received an Advancing Futures Research Fellowship in the area of spinal biomechanics, vertebral subluxation and clinical science under the direction of Curtis Fedorchuk DC.

Bethany Carilli BS, DC: Dr. Carilli was the recipient of an Advancing Futures Research Fellowship with her work focused on vertebral subluxation guidelines development.

Stacy Rainey BS, DC: Dr. Rainey was the recipient of an Advancing Futures Research Fellowship with her work focused on vertebral subluxation guidelines development.

Shannon O'Brien BS, DC: Dr. O'Brien is the recipient of a Research Fellowship with her work focused on vertebral subluxation guidelines development. Her efforts are on loan to the Foundation thanks to the Larry Webster DC Memorial Scholarship through the ChiroFutures Malpractice Program.

Ann Bishop BS, DC: Dr. Bishop is the recipient of a Research Fellowship with her work focused on vertebral subluxation guidelines development. Her efforts are on loan to the Foundation thanks to the Larry Webster DC Memorial Scholarship through the ChiroFutures Malpractice Program.

Eric Zielinski DC: Dr. Zielinski was the recipient of a Research Fellowship through the Foundation and completed numerous research projects, presentations and papers during his tenure.

Nikki Hirshowitz DC: Dr. Hirshowitz was the recipient of a Research Fellowship through the Foundation with her work focused on the epidemiology of vertebral subluxation.

Robert Comer DC: Dr. Comer was the recipient of a Research Fellowship through the Foundation with his work focused on the epidemiology of vertebral subluxation.



THE FOUNDATION FOR VERTEBRAL SUBLUXATION NEEDS YOU!

Name
Address
Phone
FAX
E-mail
YES - Please add me to the President's Circle for the Foundation for Vertebral Subluxation. I am making a one-time donation of \$1200.00.
YES - Please add me to the President's Circle for the Foundation for Vertebral Subluxation. I want to make monthly contributions of \$100.00 each month.
O I want to donate at a different level - please choose.
O Supporter - \$5.00 per month - \$60.00 year O Patron - \$10.00 per month - \$120.00 year O Fellow - \$25.00 per month - \$300.00 year O Benefactor - \$50.00 per month - \$600.00 year O Associate - \$150.00 per month - \$1800.00 year O Guardian - \$200.00 per month - \$1800.00 year O Diplomate - \$425.00 per month - \$5100.00 year O Ambassador - \$800.00 per month - \$9600.00 year O Knight - \$1000.00 per month - \$12,000.00 year O Legacy - \$2000.00 per month - \$24,000.00 year
CREDIT CARD INFORMATION
Name on Card
Card Number
Expiration Date
Security Code
Signature



"CHIROPRACTIC CARE IS CONCERNED WITH THE TOTALITY OF THE HUMAN EXPERIENCE. VERTEBRAL SUBLUXATIONS MAY RESULT IN AUTONOMIC DYSREGULATION, COMPROMISING THE ADAPTIVE CAPACITY OF THE ORGANISM. BY ANALYZING AND CORRECTING VERTEBRAL SUBLUXATIONS, A PATIENT IS PLACED ON A MORE OPTIMUM PHYSIOLOGICAL PATH, POTENTIALLY INCREASING RESILIENCE AND ADAPTABILITY."

- CHRISTOPHER KENT DC. JD



ADVANCING FUTURES
RESEARCH & SCHOLARSHIP INITIATIVE
VERTEBRALSUBLUXATION.ORG