SOTO-USA Research Update

SOTO-USA is dedicated to bringing you the most updated and comprehensive research relating to Sacro Occipital Technique (SOT). Research is the future of chiropractic and SOT. Publishing this research sets the foundation for the future of SOT and protects its future worldwide. Understanding the published research allows us to grow, learn and modify our technique and diagnostic methods to fit our discoveries and stay current in the scientific community. The research department of SOTO-USA is goal oriented and focuses on action and results. Please consider a tax-deductible donation to SOT research so SOTO-USA can help us further SOT's prominence in chiropractic healthcare.

SOTO-USA is an organization dedicated to the advancement of SOT and the work of Major Bertrand DeJarnette, DO, DC. One of the many ways in which we at SOTO-USA contribute to the chiropractic profession is through the publishing of articles, newsletters, compendiums, and manuals relating to the art, science and philosophy of SOT (please visit our website for a complete listing of publications; www.SOTO-USA.org).

Due to the Worldwide Covid 19 Pandemic there has been a lull in the SOT Research Conferences so sharing of SOT Research Information will focus on all the research that has been shared at research conferences and published in peer review literature since the last October 2019 SOT Research Conference

Association of Chiropractic Colleges – Research Agenda for Chiropractic (ACC RAC) Conferences - Papers Accepted for the 2020, 2021 and the 2022 Conferences

Papers Accepted for the 2022 ACC-RAC Conferences

Charles Blum, Sunny Kierstyn. A retrospective pre and post-assessment of cervical spine ranges-of-motion in 32-patients following the cervical stairstep technique intervention. J Chiropr Educ 2022;36(1):59.

Charles Blum. Chronic refractory adductor tendinitis treated with pelvic blocks/wedges for a sacroiliac joint sprain, myofascial release to hip joint capsule, and therapeutic exercises: A case report. J Chiropr Educ 2022;36(1):59.

Charles Blum. Benign joint hypermobility (BJHS) and sensory processing sensitivity syndromes (SPSS): A survey of patients over 5 years. J Chiropr Educ 2022;36(1):59.

Charles Blum. Sacro Occipital Technique assessment and treatment of two patients pre and post bilateral hip replacement surgery: Two case reports. J Chiropr Educ 2022;36(1):59.

Charles Blum. Intramedullary spinal cord tumor an unsuspected finding: A case report. J Chiropr Educ 2022;36(1):68.

Thomas Bloink, Charles Blum. A rare case of a patient presenting with Acoustic Neuroma and a Temporomandibular Joint Disorder treated with chiropractic and dental care: A case report. J Chiropr Educ 2022;36(1):58-59.



William Boro, Charles Blum. Ovarian cyst pain and low back pain, causal, casual, or coincidental: a case report. J Chiropr Educ 2022;36(1):68-69.

Rachel Hamel. SOT cranial therapy and nutrition for the treatment of Autism. J Chiropr Educ 2022;36(1):69.

TianYing Rebecca Huang. The effect of sacro-occipital technique on sensorineural and myogenic tinnitus: a case study. J Chiropr Educ 2022;36(1):70.

Caroline Vitez, Charles Blum. Postural Orthostatic Tachycardia Syndrome (POTS) in a Patient as a Consequence of a Concussion along with Occipital Headaches, Dizziness and Nausea: A Case Report. J Chiropr Educ 2022;36(1):67.

Papers Accepted for the ACC RAC 2021 Conferences

Charles Blum, Jeffrey Mersky. Utilizing cranial and infant inversion therapy in the treatment of plagiocephaly: two case reports. J Chiropr Educ. 2021;35(1):82.

William Boro, Charles Blum. Chiropractic comanagement of a patient with a blocked tear duct: a case report. J Chiropr Educ. 2021;35(1):90.

Marc Pick, Charles Blum. Immediate changes to lumbosacral dural regions upon simultaneous bilateral compression to the parieto-occipital (asterion) cranial region: a 2-cadaver dissection study. J Chiropr Educ. 2021;35(1):93.

Melissa Ferranti, Alexis Williams, Michelle Gingras. Chiropractic management of an infant fraternal twin with deformational plagiocephaly, facial asymmetry, congenital torticollis, chronic ear infections, and reflux. J Chiropr Educ. 2021;35(1):91.

Lydia Knutson, Fred Langenegger, John Coleman, Stephanie Sullivan, Martha Herbert. A retrospective review of patient Optogait results and comparison to side of patient pelvic compensation. J Chiropr Educ. 2021;35(1):91.

Katherine Pohlman, Michael Swain. Practice characteristics of chiropractors with a pediatric certification. J Chiropr Educ. 2021;35(1):86.

Papers Accepted for the ACC RAC 2020 Conferences

Thomas Bloink, Charles Blum. Sacro occipital technique (SOT) and dental co-treatment of a patient with increased eye pressures while receiving orthodonture care: A case report. J Chiropr Educ. 2020;34(1):91.

Thomas Bloink, Charles Blum. Sacro occipital technique (SOT) and dental co-treatment of a pediatric patient with increased eye pressures while receiving orthodonture care: A case report. J Chiropr Educ. 2020;34(1):91-92.



Thomas Bloink, Charles Blum. Sacro occipital technique (SOT) and cranial treatment for a patient presenting with dysautonomia possibly secondary to vagal nerve entrapment in the jugular foramina: A case report. J Chiropr Educ. 2020;34(1):91.

Charles Blum. Sacro occipital technique (SOT) and cranial treatment for hemicranium continua: A case report. J Chiropr Educ. 2020;34(1):72.

Charles Blum. Whiplash-associated disorders (WAD) and temporomandibular joint disorders (TMD): A review of the literature. J Chiropr Educ. 2020;34(1):92.

Brian Gleberzon, Charles Blum, Christopher Roecker, Chris Good, Robert Cooperstein. Toward the development of a Standardized Chiropractic Technique program. J Chiropr Educ. 2020;34(1):77.

Rachel Hamel. SOT cranial therapy with light therapy for the treatment of trochlear nerve palsy and right eye concomitant deviation. J Chiropr Educ. 2020;34(1):78.

Jason Scoppa, David Buck. Sacro occipital technique (SOT) and dental treatment of dysfunctional breathing in a child: A case report. J Chiropr Educ. 2020;34(1):101.

Papers Accepted for the 2021 WFC Biennial Congress

Marc Pick. Immediate changes to lumbosacral dural regions upon simultaneous bilateral compression to the parietooccipital (asterion) cranial region: A dissection study. September 23-25, 2021 WFC Biennial Congress. Parker University, Dallas, Texas, United States of America.

Charles Blum. A survey of chiropractic students or recent graduates on their experiences in chiropractic college adjusting lab or class. September 23-25, 2021 WFC Biennial Congress. Parker University, Dallas, Texas, United States of America.

Papers Accepted for the 2021 Virtual World Congress on Brain Injury

Marilyn Holbeck. Chiropractic treatment of a post-concussion syndrome secondary to volleyball injury in a 14-year-old female: A case report. 2021 Virtual World Congress on Brain Injury.

Thomas Bloink, Charles Blum. Chiropractic Care of Professional Ice Hockey Player Suffering from Multiple Concussions: A Case Report. 2021 Virtual World Congress on Brain Injury.

Thomas Bloink, Charles Blum. Post Concussion Syndrome, Temporomandibular Joint Disorders, and Chiropractic Dental Co-treatment: A Case Report. 2021 Virtual World Congress on Brain Injury.



SOT or Cranial Related Papers Published in Peer Reviewed Journals - 2020-21

Pediatric Related

Robyn Stephenson. Coughing, croup and bronchitis: A paediatric case report. Asia-Pac Chiropr J. 2021;2.1:Online only.

Martin Rosen, Charles Blum. Resolution of a left sided 5th phalangeal 2nd inter-phalangeal joint stenosing tenosynovitis (trigger finger) in a 2½ year-old female. [Case Report]. Asia-Pac Chiropr J. 2021;2.1:Online only.

Martin Rosen, Charles Blum. Management of a 2½ year old female with a 35° scoliosis and 2 hemi-vertebrae (Case Report). Asia-Pac Chiropr J. 2021;2.1:Online only.

Martin Rosen, Charles Blum. Chiropractic Care of paediatric non-musculoskeletal conditions: A retrospective patient survey. Asia-Pac Chiropr J. 2021;1.3:Online only.

Arthur Tovar, Charles Blum. Conservative chiropractic management of 13-month old patient with facial palsy [Case Report]. Asia-Pac Chiropr J. 2021;1.3:Online only.

Steve Williams, Charles Blum, Simon Billings. Plagiocephaly: The Oblique Skull; A method of chiropractic correction, with a case report. Asia-Pac Chiropr J. 2021;1.3:Online only.

Martin Rosen, Charles Blum. SOT Chiropractic Care of a 6yo boy diagnosed with Asperger's Syndrome and related conditions [Case Report]. Asia-Pac Chiropr J. 2021;1.3:Online only.

Annie Bishop. Improvement in positional plagiocephaly and tolerance of tummy time in an infant undergoing chiropractic care: A case study and selective review of literature. J Pediatr Matern & Fam Health - Chiropr: Apr 2021(2021:) 19-25.

Fannie Lacerte. Positive outcome from a chiropractic multidisciplinary approach for congenital torticollis in an infant three-weeks of age: A case report. J Clin Chiropr Pediatr: Jun 2020(19:1) 1638-1642.

Nikki Hirshowitz, Curtis Fedorchuk, Darrien Drummond. Resolution of failure to thrive following birth trauma in a 2-month old undergoing chiropractic care: A case study and review of the literature. J Pediatr Matern & Fam Health – Chiropr. Feb 2020. Online access only p 1-6.

Kristen Hosaka, Joel Alcantara. Resolution of breastfeeding difficulties following chiropractic in a neonate with birth trauma, plagiocephaly and edema from an asynclitic presentation: A case report. J Pediatr Matern & Fam Health - Chiropr: Nov 2019(2019:) Online access only p 134-138.



Nikki Hirshowitz, Shayla Swenson. Improvement of plagiocephaly and improved health outcomes in three infants following chiropractic care to reduce vertebral subluxations: A case series. J Pediatr Matern & Fam Health - Chiropr: Oct 2019(2019:) Online access only p 105-108.

Nonmusculoskeletal Related

Benner CD, Blum C. CMRT and acupuncture in the treatment of dysmenorrhea (oligomenorhea)[Case Report]. Asia-Pac Chiropr J. 2021;1.3:Online only.

Zablotney J, Blum C. Chiropractic care and the Situs Inversus patient: Modifying technique to match anatomy. Asia-Pac Chiropr J. 2021;1.3:Online only.

David Cameron, Chaz Kountz. Resolution of hyper frequent nightly bowel movements in a 98-year-old male following chiropractic care: A case study. Ann Vert Sublux Res. 2020 Nov:143-149.

Pine D. Introduction of Ayurveda to Chiropractic, Building a Functional Bridge. Nat Ayurvedic Med. 2020;4(4):000283.

Cervical Spine Related

Bloink TE, Blum C. Two patients presenting with cervical spine disc replacement surgery with complications: Two case reports. Asia-Pac Chiropr J. 2021;2.1:Online only.

Pick M. Cranial optokinetic reflex and cervical dystonia. Asia-Pac Chiropr J. 2021;1.3:Online only.

Getzoff H. Anterior Thoracic adjusting and the relationship to cervical flexion: A retrospective case series of twenty-four patients. Asia-Pac Chiropr J. 2020;1.2.

Cranial TMJ Related

David Shirazi, Adam Del Tonto, Charles Blum. Dental chiropractic non-surgical co-treatment of a 48-year-old male patient with a deviated septum, headaches, and TMJ dysfunction. Chiropractic Journal of Australia. 2021;48(1):5-13.

Blum CL, Mersky JA. Dizziness in A Patient with Airway Compromise and TMD: A Case Report. On J Otolaryngol & Rhinol. 2020;2(3).

Chiropractic Education Related

Gleberzon BJ, Cooperstein R, Good C, Roecker C, Blum C. Developing a standardized curriculum for teaching chiropractic technique. J Chiropr Educ. 2021;35(2):249-257.



Wanlass P, Dirks S. Chiropractic technique elective courses: A survey of faculty perceptions. J Contemp Chiropr. 2021;4(1):45-51.

Miscellaneous SOT Related Papers

Sherif EMH, Abd El-Mageed SF, Abd El-Ghaffar MMI. Efficacy of Sacro-Occipital Technique on Sacroiliac Joint Instability in Females. Med. J. Cairo Univ. 2019;87(2):987-993.

Jeong, Ji-Moon, Kim, Jaehee. Effects of Chiropractic Using Sacro Occipital Technique on Pain and Physical Function in Patients with Low Back Pain. Journal of the Korea Academia-Industrial Cooperation Society. 2013;14(9): 4402–11. [Korean]

Blum C. A pocket review of clinical research for chiropractors. Asia-Pac Chiropr J. 2021;2.2.

Charles Blum. The many faces of forward head posture: The importance of differential diagnosis Cranio. 2019 May;37(3):143-146.

Getzoff H. Sitting disc technique and the relationship to the straight leg raise: A retrospective case series of thirty patients. Asia-Pac Chiropr J. 2020;1.2.

Blum C. Chiropractic and the Immune System: Disentangling Context and Looking at the Big Picture. Asia-Pac Chiropr J. 2020;1:00.

Blum C. Yesterday when I was young [Reflection]. Asia-Pac Chiropr J. 2020;1:025.

Cashman S, Blum C. Trapezius fibre muscle analysis: A pilot inter/intra-examiner reliability study. Asia-Pac Chiropr J. 2020;1.2.

Rosen MG. The Art of Chiropractic: Structural / Sacro Occipital Technique® (SOT®). Life West Chiropractic Magazine. April 2020;41(01):7.

SOT Related Papers Published in the Asia Pacific Chiropractic Journal's Special Concussion Issue - Autumn 2021

Ryan Pollard, Charles Blum. Chiropractic care and its effects on a patient with a moderate traumatic brain injury. Asia-Pac Chiropr J. 2021;2.2.

Esther M. Remeta, Charles L. Blum. Chiropractic cranial treatment protocol increases successful outcome of the multidisciplinary care model for traumatic brain injury (TBI) patients: A case series. Asia-Pac Chiropr J. 2021;2.2.

Esther M. Remeta, Charles L. Blum. Chiropractic sacro occipital technique (SOT) and cranial treatment model for traumatic brain injury along with monitoring and supplementing for neurotransmitter balance: A case report. Asia-Pac Chiropr J. 2021;2.2.



Esther M. Remeta, Charles L. Blum. Chiropractic cranial treatment model and neuroplasticity in a post stroke 72-year-old male: A case report. Asia-Pac Chiropr J. 2021;2.2.

Marylyn Holbeck. Charles Blum. Chiropractic treatment of a post-concussion syndrome secondary to volleyball injury in a 14-year-old female: A case report. Asia-Pac Chiropr J. 2021;2.2.

Richard C. Gerardo, Charles L. Blum. Sacro occipital technique and stomatognathic interventions in the treatment of a professional football player with multiple concussions, TBI, TMD, and OSA: A case report. Asia-Pac Chiropr J. 2021;2.2.

Thomas Bloink, Charles L. Blum. Post concussion syndrome, temporomandibular joint disorders, and chiropractic dental co-treatment. [Case Report]. Asia-Pac Chiropr J. 2021;2.2.

Thomas Bloink, Charles L. Blum. Chiropractic as part of an interdisciplinary team for the care of a patient with an orbital pseudotumor: A case report. Asia-Pac Chiropr J. 2021;2.2.

Thomas Bloink, Charles L. Blum. Chiropractic care of professional hockey player suffering from multiple concussions: A case report. Asia-Pac Chiropr J. 2021;2.2.

Charles L. Blum. Chiropractic treatment of mild head trauma: A case history. Asia-Pac Chiropr J. 2021;2.2.

Papers from the two 2019 SOT Research Conference Proceedings

Paradise Island, Bahamas - February 27-March 1, 2019

Bloink T, Blum CL. Chiropractic care of professional hockey player suffering from multiple concussions: A case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 13-18

Blum CL. A chiropractic and dental perspective the three faces of forward head posture: Differential diagnosis is the key for optimal outcomes. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 19-25.

Boro WJ. Intervention in gall bladder dysfunction through chiropractic adjustment and nutritional therapy: A case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 26-30.

Boro WJ. Intervention in tachycardia through chiropractic adjustment, sacro occipital technique's chiropractic manipulative reflex technique: A case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 31-34.

Hamel R, Blum CL. SOT cranial therapy for the treatment of pediatric torticollis: A chiropractic case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 35-41.



Nichols K, Blum CL. Two sisters with plagiocephally treated with one treated with a cranial band and the other with sacro occipital technique (SOT) cranial care: A comparative case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 42-49.

Pick MG. Immediate changes to lumbosacral dural regions upon bilateral alternating pressure to the parietooccipital (asterion) cranial region: A dissection study. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 50-56.

Scoppa J. Hypertensive 80 year-old male treated with cranial therapy: A case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 57-63.

Tovar A, Blum CL. Conservative chiropractic management of 13-month old patient with facial palsy: A case report. Sacro Occipital Technique Research Conference: Nassau, Bahamas. 2019: 64-68.

San Jose, California - October 26-27, 2019

Thomas Bloink, DC, Charles Blum, DC. Sacro occipital technique (SOT) and dental cotreatment of two patients (11 and 52 year old) with increased eye pressures and related dysfunction: Two case reports.

Charles L. Blum, DC. Sacro occipital technique (SOT) care of a patient with acute low back pain utilizing R+C factor analysis and orthopedic pelvic block placements: A case report.

Charles L. Blum, DC. Sacro Occipital Technique (SOT) assessment and treatment of two patients pre and post bilateral total hip replacement (THR) surgery: Two case reports.

Charles L. Blum, DC. Sacro occipital technique (SOT) and cranial treatment for hemicrania continua: A case report.

Charles Blum, DC. Whiplash and temporomandibular joint disorders: A review of the literature.

Charles Blum, DC, Gary Globe, DC, MBA, PhD. Assessing The Need for Dental/Chiropractic TMJ Co-Management: The Development of a Prediction Instrument.

Burno Bordoni, Bruno Morabito, Marta Simonelli. Cranial Osteopathy: Obscurantism and Enlightenment.

Bruno Bordoni, Emiliano Zanier. The Continuity of the Body: Hypothesis of Treatment of the Five Diaphragms.

Bruno Bordoni, Bruno Morabito, Marta Simonelli, Luigi Nicoletti, Riccardo Rinaldi, Filippo Tobbi, and Philippe Caiazzo. Osteopathic approach with a patient undergoing cardiac transplantation: the five diaphragms.



Robert Cooperstein, DC. Forward head syndrome and upper dorsal hyperkyphosis: A multifactorial approach.

John Edwards, DC, Jeanne Ohm, DC, Charles Blum, DC, Allison Union. Identifying the frequency of perinatal sacroiliac hypermobility indicators in a chiropractic clinic.

Harvey Getzoff, DC. The management and care of three older patients with neck pain: A case series.

Harvey Getzoff, DC. The SOT Indicator System with Additions: Pre and Post Adjustment Analysis.

Rachel Hamel, DC, Charles Blum, DC. SOT cranial therapy with light therapy for the treatment of trochlear nerve palsy and right eye concomitant deviation.

Jason Scoppa, DC, David Buck, DDS. Sacro occipital technique (SOT) and dental treatment of sleep disordered breathing (SDB) in a child: A case report.

The SOT Research Conference Proceedings (Now indexed and searchable!)

Many of the SOT Research Conferences have now been or will be published in the Annals of Vertebral Subluxation Research as well as in the Asia Pacific Chiropractic Journal and are available for searching through chiroindex.org (a major chiropractic search engine).

1st Annual Sacro Occipital Technique Research Conference Proceedings. Las Vegas, Nevada October 22, 2009. Annals of Vertebral Subluxation Research ~ Sept 29, 2011 ~ Pages 104-132.

2nd Annual Sacro Occipital Technique Research Conference Proceedings. New Orleans, Louisiana 2010. Annals of Vertebral Subluxation Research ~ October 17, 2011 ~ Pages 133-164.

3rd Annual Sacro Occipital Technique Research Conference Proceedings. Nashville, Tennessee May 19, 2011. Annals of Vertebral Subluxation Research ~ Nov 10, 2011 ~ Pages 165-182.

4th Annual Sacro Occipital Technique Research Conference Proceedings. Atlanta, GA May 3, 2012. Annals of Vertebral Subluxation Research ~ May 24, 2012 ~ Pages 41-59.

5th Annual Sacro Occipital Technique Research Conference Proceedings. Atlanta, GA May 2, 2013. Annals of Vertebral Subluxation Research ~ March 27, 2014~ Pages 22-48.

6th Annual Sacro Occipital Technique Research Conference Proceedings. Redondo Beach, CA May 15, 2014. Annals of Vertebral Subluxation Research ~ July 14, 2014 ~ Pages 129-144.

7th Annual Sacro Occipital Technique Research Conference, New Orleans, LA May 7, 2015. Annals of Vertebral Subluxation Research ~ June 8, 2015 ~ Pages 135-145

8th Annual Sacro Occipital Technique Research Conference, New Orleans, LA May 13-14, 2016.



9th Annual Sacro Occipital Technique Research Conference, Marina Del Rey, California. May 12-13, 2017.

10th Annual Sacro Occipital Technique Research Conference Proceedings: Kauai, Hawaii. February 28 – March 2, 2018. Ann Vert Sublux Res: Mar 2019(2019:): 29-33

11th Annual Sacro Occipital Technique Research Conference, Nassau, Bahamas, February 27 – March 1, 2019 Ann Vert Sublux Res: Jan 2020(2020:): 1-10

Many thanks go to the editors of the Annals of Vertebral Subluxation Research, Drs. Pamela Stone and Matthew McCoy. Their continued support of chiropractic clinical research and of SOT is greatly appreciated.

At the inaugural 2009 Sacro Occipital Research Conference, Las Vegas, Nevada we had 28 abstracts accepted. At subsequent Sacro Occipital Research Conferences many of the submissions have led to paper submissions to various other research conferences and peer review journals. All SOT practitioners and allied healthcare partners are encouraged to be a part of our future research conferences. Check the SOTO-USA website [www.SOTO-USA.org] or be aware for the call for papers.

Our ongoing commitment continues into the future with papers submitted to chiropractic and allied healthcare conferences and journals. One of the easiest ways research can be facilitated by a doctor in clinical practice is through the publishing of individual research papers and case histories. These lay the groundwork for future research directions and projects. If the need arises, we will be happy to assist the doctor in writing the paper or case history in order to get it submitted for publishing.

Please take a moment to review our landmark SOT and cranial research texts, which will eternally preserve SOT related published research. These can all be purchased online at www.soto-usa.org or by calling (336) 793-6524.

- 1st Sacro Occipital Technique Research Conference Proceedings: 2009.
- 2nd Sacro Occipital Technique Research Conference Proceedings: 2010.
- 3rd Sacro Occipital Technique Research Conference Proceedings: 2011.
- 4th Sacro Occipital Technique Research Conference Proceedings: 2012.
- 5th Sacro Occipital Technique Research Conference Proceedings: 2013.
- 6th Sacro Occipital Technique Research Conference Proceedings: 2014.



7th Sacro Occipital Technique Research Conference Proceedings: 2015.

8th Sacro Occipital Technique Research Conference Proceedings: 2016.

9th Sacro Occipital Technique Research Conference Proceedings: 2017.

10th Sacro Occipital Technique Research Conference Proceedings: 2018.

11th Sacro Occipital Technique Research Conference Proceedings: 2019.

12th Sacro Occipital Technique Research Conference Proceedings: 2019.

13th Sacro Occipital Technique Research Conference Proceedings: 2022.

In Print:

The Compendium of Sacro Occipital Technique: Peer-Reviewed Literature 2000-2005.

The Compendium of Sacro Occipital Technique: Peer-Reviewed Literature 1984-2000.

The SOT Collection: To the Year 2000.

The SOT Collection: Supplement: To the Year 2000.

