

# Proceedings of the Sacro Occipital Technique Research Conference

New Orleans, Louisiana - April 29, 2022

## Introduction

For Major Bertrand DeJarnette, DO, DC, research was an essential part of being a chiropractor and essential to the future of the chiropractic profession. As early as July 1935 Major Bertrand DeJarnette was a featured speaker at the 40th Anniversary Convention 1895-1935 of the National Chiropractic Association presenting clinical research. Always research was his passion and in an interview in 1982 DeJarnette reiterated, “as far back as chiropractic college, I saw the need for a more scientific basis for chiropractic theory. My own personal physical problems had not been solved by medicine, osteopathy, or chiropractic; so I began experimenting on myself. I’m still at it, and I can see no end of the need for continuous research in chiropractic <sup>1</sup>.”



Dr. DeJarnette saw the importance of sharing clinical experience through case report and self-analysis. This started as he first began to find that things he instinctively did for a patient would disappear from his memory if he did not outline them carefully. So before our day and age of computers, he recommended that to begin the first step in research, you would need to buy a notebook, an eraser and long pencil. He emphasized that, “those would be your first three pieces of research equipment. You use your notebook because it is not expensive. You use a pencil because it can be erased, and of course mistakes will be made so you must own an eraser <sup>2</sup>.” With those three pieces of equipment he sat down one evening and wrote his first case report of an unusual patient presentation and his treatment rendered. He recollected that he did not sit down to write until perhaps three months after that patient’s presentation. Dr. DeJarnette could not believe how much he had forgotten about the details. The lesson he learned was "write the unusual down now <sup>2</sup>".

When Dr. DeJarnette began to study the treatment he had rendered he realized that if any meaningful information were to evolve from his experience, he would have to resolve it himself. Dr. DeJarnette suggested that research has to be a free agency. Basically he saw a need and worked to fulfill that need. He realized that explaining how his discoveries evolved was more difficult than the process of developing new diagnostic and therapeutic interventions <sup>2</sup>.

Chiropractic techniques, innovative integrative collaborations, and methods such as sacro occipital technique, temporomandibular disorder co-management, chiropractic manipulative reflex technique, and cranial techniques need an arena to share clinical and other forms of research. Critical study of techniques and innovative methods are what will help propel healthcare forward in this era of evidence informed practice and best practice research.



The SOT Research Conference looks to offer a venue for research papers; specifically those, which investigate sacro occipital technique, dental chiropractic co-treatment, cranial techniques, viscerosomatic/somatovisceral, reflex techniques, and new ground-breaking creative ways of helping humanity without necessarily the use of drugs or surgical intervention. This year's proceedings, like all prior conferences, will be shared with the chiropractic profession, for review, dissemination, and in-depth study.

*“Research is a study of what you have, and what you need to make it better, and how to make it better is the final research step. S.O.T. never wants to be just good. It always wants to be better and best and greatest and most dependable<sup>3</sup>.”*

*“Research in Chiropractic must go on forever. Someone must do this type work, for it simply will not take care of itself. A profession cannot stand still. Momentum must constantly be generated. Chiropractic research needs many things it does not now have<sup>4</sup>.”* *“Sacro Occipital Technic, like all Chiropractic Technics, needs further study. We certainly do not have all the answers to all of man's problems, and neither does any other group of people<sup>4</sup>.”*

As a parting comment for his chiropractic colleagues Dr. DeJarnette said, “We must respect each other's beliefs. We must support our colleges and associations. We must work together and unite as a profession. And we must at all times be proud of chiropractic and proud of our calling as chiropractors<sup>1</sup>.”

- 
1. DeJarnette MB. **Cornerstone**. *The American Chiropractor*. Jul/Aug 1982; 82: 22,23,28,34.
  2. DeJarnette MB. **The Sacro Occipital Technique Bulletin**. Mar 1975.
  3. DeJarnette MB. **The Sacro Occipital Technique Bulletin**. Mar 1978: 2-3.
  4. DeJarnette MB. **The History of Sacro Occipital Technic**. Private Practice: Nebraska City, NB. 1958:27.



## Evidence-Based Practice

Evidence-based practice (EBP) refers to a decision-making process which integrates the best available research, clinician expertise, and client characteristics. EBP is an approach to treatment rather than a specific treatment.

Evidence-based practice (EBP) involves complex and conscientious decision-making which is based not only on the available evidence but also on patient characteristics, situations, and preferences. It recognizes that care is individualized and ever changing and involves uncertainties and probabilities <sup>1</sup>.

EBP develops individualized guidelines of best practices to inform the improvement of whatever professional task is at hand. Evidence-based practice is a philosophical approach that is in opposition to rules of thumb, folklore, and tradition. Examples of a reliance on "the way it was always done" can be found in almost every profession, even when those practices are contradicted by new and better information <sup>1</sup>.

*“It's about integrating individual clinical expertise and the best external evidence <sup>2</sup>.”*

However, in spite of the enthusiasm for EBP evinced over the last decade or two, some authors have redefined EBP in ways that add other factors to the original emphasis on empirical research foundations. For example, EBP may be defined as treatment choices based not only on outcome research but also on practice wisdom (the experience of the clinician) and on family values (the preferences and assumptions of a client and his or her family or subculture) <sup>1</sup>.

- 
1. Buysse V, Wesley PW. **Evidence-based practice: How did it emerge and what does it really mean for the early childhood field?** *Zero to Three*. 2006;27(2), 50-55.
  2. Sackett DL, Rosenberg WMC, Muir Gray JA, Haynes RB, Richardson WS. **Evidence based medicine: what it is and what it isn't.** *BMJ*. 1996;312:71-72.



## Evidence Based Practice: The Hierarchy of Evidence

In biomedical science there is general agreement over an evidence based hierarchy: the higher up a methodology is ranked, the more robust and closer to objective truth it is assumed to be. The orthodox hierarchy looks something like the following table:

| Rank: | Methodology                          | Description  |
|-------|--------------------------------------|--|
| 1     | Systematic reviews and meta-analyses | <p>Systematic review: review of a body of data that uses explicit methods to locate primary studies, and explicit criteria to assess their quality.</p> <p>Meta-analysis: A statistical analysis that combines or integrates the results of several independent clinical trials considered by the analyst to be "combinable" usually to the level of re-analyzing the original data, also sometimes called: pooling, quantitative synthesis.</p> |
| 2     | Randomized controlled trials         | Individuals are randomly allocated to a control group and a group who receive a specific intervention. Otherwise the two groups are identical for any significant variables. They are followed up for specific end points.   |
| 3     | Cohort studies                       | Groups of people are selected on the basis of their exposure to a particular agent and followed up for specific outcomes   |
| 4     | Case-control studies                 | "Cases" with the condition are matched with "controls" without, and a retrospective analysis used to look for differences between the two groups.  |
| 5     | Cross sectional surveys              | Survey or interview of a sample of the population of interest at one point in time.  |
| 6     | Case reports                         | A report based on a single patient or subject; sometimes collected together into a short series.   |
| 7     | Expert opinion                       | A consensus of experience from the "good and the great."   |
| 8     | Anecdotal                            | An interesting story.  |



## **Evidence Informed Practice**

The term evidence based medicine (EBM) has traditionally been used to describe a means of treating patients based on research published in biomedical journals. Even though EBM also incorporated expert opinions and a doctor's clinical experience, it was common that insurance companies and other agencies - presumably seeking to protect patients or save money - would focus solely on the randomized controlled trial as the backbone of EBM.

When EBM appeared to be too restrictive or just clearly misinterpreted new terms such as Evidence Based Practice and now Evidence Informed Practice (EIP) have appeared. The value of EIP is that it takes research into account when making a clinical decision but also utilizes patient values and preferences, risk benefit ratio of related or chosen therapy, and the doctor's clinical experience. Because this represents a clearer depiction of an actual clinical experience and at the same time seeks to offer the patient the highest level of care, the belief is that EIP is the best of what EBM has to offer.

It is important that a practitioner is aware of the current research on effectiveness of their care so that they do not inadvertently make false or exaggerated claims regarding the potential benefits of the treatment rendered. Therefore keeping up to date on the research and literature, while time consuming, is an ethical obligation of doctors in practice.

Ideally doctors practicing EIP would best be able to predict and provide outcome expectations against which progress could be measured. In essence we all, as patients or doctors, should receive or offer treatment based on research and clinical experience. New research can uncover therapeutic interventions or benefits of certain types of care that were never before discovered. Also this research may determine that prior care that was customarily rendered is now inappropriate.

The challenge with chiropractic and its various techniques is that we are functioning from a situation where we have limited funds and limited methods to adequately study our innovative therapeutic applications. This conference attempts to offer a tempered and reasonable voice for practitioners on the forefront of care, such as has been the case with Sacro Occipital Technique (SOT) for years. Incorporating current research performed in the patient's best interest with one's own clinical experience is the hallmark of a responsible and ethical physician. Allied healthcare practitioners, chiropractors, and particularly SOT doctors have a responsibility to lead the way with EIP and focus first and foremost on patient based care.

Major Bertrand DeJarnette DO, DC developed SOT with outcome based assessment protocols and with research accountability as its backbone. The onus is upon us, those who learn and utilize his methods, to be informed of the evidence and evolving research and utilize this in the clinical application of SOT and its related methods.



## The Case Report: How the Doctor in Practice Communicates to the Research Community

While low on the evidence-based practice hierarchy of evidence the case report is an extremely valuable manner for doctors in clinical practice or “in the trenches” to communicate what is taking place in their practices. Until the doctors in clinical practice publish their case reports, researchers in a college setting can only attempt to guess what is taking place out there in the field.

There are significant limitations to case reports, such as no control subjects, the doctor and subjects are not blinded to the study, and the doctor’s bias may cloud the study. So while the case report is an important tool for communication, the doctor authoring these studies needs to exercise caution to not over-interpret his or her findings. Dr. Robert Ward of Southern University of Health Sciences and past editor of *The Journal of Chiropractic Education* answers the question:

“*Why it is important to write a case report?*”

“Most persons believe that the case report is used to describe unique, or at least highly rare, clinical presentations or diagnostic entities (e.g., “prostatic hypertrophy mimicking as ingrown toenail”). This is the most common use of the case report. However, equally important is the use of the case report to describe novel management approaches to more ordinary conditions.

“Another aspect of why case reports are written involves the audience. Case reports are generally considered as a communication from clinicians to scientists. The pointy-headed ivory tower population doesn’t get to see the interesting things that happen in clinical practice. They often rely on case reports from the field in deciding what sorts of pilot studies to run, and those often lead to real full-scale clinical trials (the sort of research that field clinicians generally don’t have the time, resource or interest to undertake).

“Case reports are a vital aspect of our literature base, and more of our practitioners need to write them. Until you write up that wonderful method that works in your office, the rest of the world cannot share in its benefits. Without publication, when you die or retire, your discoveries die with you <sup>1</sup>.”

1. Ward RW. **Why it is Important to Write a Case Report.** *Dural Connection Internet Edition*. 2006;3(3). [<http://soto-usa.com/writing-a-case-report/>] Last accessed April 30, 2018.



## SOT Research Conference Proceeding Author Biographies (Listed in alphabetical order)



**Thomas Bloink, DC** specializes in cranial-dental integration in Silicon Valley at the California Cranial Institute, which was founded in 1992. Dr. Bloink was on the board of advisors to help create SOTO USA and is actively involved in promoting the organization, presenting at research conferences throughout the world, and developing novel treatment approaches for functional neurological conditions. He works closely with many different specialists including dentists, orthodontists, and oral-maxilla surgeons. ENT's and others to ensure the best possible outcome for his patients.



**Charles L. Blum, DC** is in private practice Santa Monica, California and past president of SOTO – USA, now their research chair. Adjunct research faculty at Cleveland Chiropractic College, associate faculty at Southern California University of Health Sciences and Palmer College of Chiropractic West teaching the SOT Elective. Dr. Blum is a Certified SOT Cranial Practitioner, and on the peer review board of the Journal of Craniomandibular and Sleep Practice (CRANIO), Association of Chiropractic College Conference Peer Review Committee, and Journal of Chiropractic Medicine. He has lectured nationally and internationally, has written various SOT related texts, compiled SOT and cranial related research, and has extensively published in multiple peer reviewed indexed journals and at research conferences from 1984 to the present.



**William J. Boro, DC** has been in private practice in Annapolis, Maryland for over 30 years. Dr. Boro uses sacro occipital technique, applied kinesiology, and Van Rumpst technique, in addition to using other standard methods of diagnosis, for the evaluation of structural, chemical and mental aspects of health. He is intent on increasing other doctor's knowledge and understanding of how chiropractic is beneficial in cases other than strictly musculoskeletal problems. He has taught and presented papers nationally and internationally and looks forward to presenting more case studies in the future.



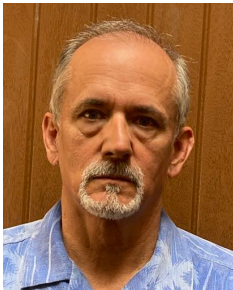
**Henry Cheng, DC** graduated from Palmer Chiropractic College – West in 2019. He is a passionate chiropractor currently practicing at Mount Pleasant Wellness Center in Vancouver, British Columbia, Canada. He utilizes his knowledge of human anatomy and Sacro Occipital Technique to assess and treat patients. Dr. Cheng believes that the balance in the neuromusculoskeletal system can optimize a person's health and well being.



**Kenneth Y. Davis, DC** earned a doctoral degree in chiropractic from the Columbia Institute of Chiropractic in 1976, and was one of the youngest instructors in Sacro Occipital Technique and Soft Tissue Orthopedics, having been certified by the late Dr. M. B. DeJarnette, and the late Dr. M. L. Rees. Dr. Davis is a Charter Member of the International Craniopathy Society. Considered one of the foremost researchers and developers of Energetic and Bio-Vibrational Therapy, co-founder of Natural Force Healing with his wife Lisa V. Davis.



**Lisa V. Davis** is a medical intuitive, spiritual teacher, life coach, motivational speaker, author, developer and co-creator of Natural Force Healing, Energetic Nutritional Assessment Technique (ENAT), and Piezo-E Sternal Technique; revolutionary systems of healing that incorporate energetic and vibrational therapies that have been taught around the world to physicians and health care practitioners. Early in her career, Lisa worked closely with and was the protégé of Doctor M.L. Rees and was also the only layperson on the board of directors of the International Systemic Health Organization (ISHO). Among her other accomplishments, Lisa holds two U.S. technology patents, pioneered work with Hackensack University Medical Center and Johns Hopkins resulting in the development of an Emergency Preparedness Manual, as well as is the co-author of "To the Fullest" with actress Lorraine Bracco.



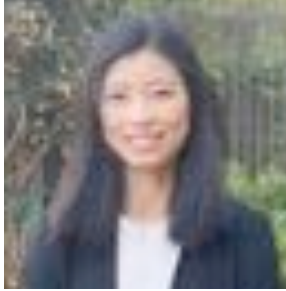
**Richard C. Gerardo, DC** has been in private practice in Burbank, California, since 1985 and in the past years with a second private practice in Thousand Oaks, California. He is a certified Sacro Occipital Technique Cranial Practitioner and a Cranial TMJ Specialist. He has lectured nationally for 25 years on the interdisciplinary approach to treating TMJ and associated issues. Dr. Gerardo has authored several published case studies as well as a paper on the Cranial Dental Functional Model and has co-treated over 3000 TMJ and orthodontic patients with numerous dentists over the last 25 years.



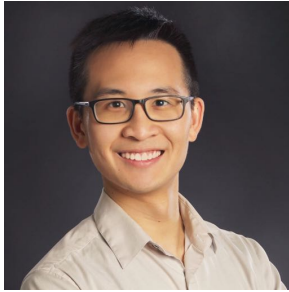
**Rachel Hamel, DC** has completed advanced training in Applied Kinesiology, Sacro-Occipital technique, SOT Cranial Technique, Craniobiotic Technique, IASTM, Rocktape, Webster Technique, Neuro Emotional Technique; and is working towards her ACN in nutrition, as well as certification in Cranial-Dental diplomat. She is a member of ACA, SOTO-USA, BABI (Bay Area Birth Information) and ICPA (International Chiropractic Pediatric Association). She received her Bachelor's with honors in Health Science from Whitworth University in Washington State, and her doctorate degree where she was valedictorian from Palmer West Chiropractic College.



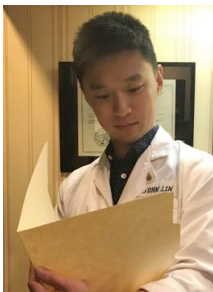




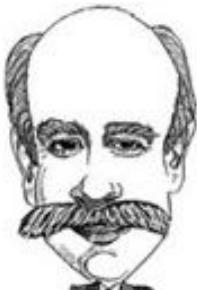
**Rebecca Huang, DC** became a Certified Sacro Occipital Technique Practitioner in 2020. She is currently practicing in Los Altos, California and graduated from Palmer College of Chiropractic West in 2019. Dr. Huang is a Canadian and hopes to eventually start a practice in Canada sometime in the future. She is becoming active in chiropractic research and recently had a paper accepted for the 2022 Association of Chiropractic College, Research Agenda of Chiropractic Conferences in San Diego, California.



**Ethan Lee, DC**, originally from Taiwan, moved to Seattle with his family at the age of 18. Immediately following graduation from Palmer Chiropractic College, Dr. Lee worked in an intense clinical environment focusing on nutritional protocols treating complex pain conditions such as Lyme, SIBO, and fibromyalgia. Aside from nutritional health, Dr. Lee utilizes kinesiology muscle testing to help patients maintain neuromuscular integrity. He has certifications in Sacro Occipital Technique (SOT) and Applied Kinesiology (AK) and is currently completing a PhD in Integrative Medicine.



**John Lin, DC** graduated from Palmer West in 2018 and has been actively working with athletes of various fields in his clinic. After returning to Taiwan, Dr. Lin decided to expand his scope of practice in the healthcare field and is currently enrolled in Medical College. He hopes to bring these two professions closer together both locally in Taiwan as well as internationally.



**Robert Monk, DC** is one of the founding members of the Sacro Occipital Technique Organization (SOTO) - USA. He is the author of the SOT Manual most of the other texts utilized in the SOTO-USA certification program. He is a graduate of New York Chiropractic College now called Northeast College of Health Sciences. Dr. Monk has been in private practice in Briarcliff, NY since 1987.



**Marc G. Pick, DC** has internationally lectured since 1979 and has been in private practice in Beverly Hills, California since 1973. He has earned his Diplomate status in neurology through the American Chiropractic Neurology Board, and a Fellowship in Craniopathy through the International Craniopathy Society. Since 1998, Dr. Pick has taught through Marc Pick Creations and the John Burns School of Medicine in Honolulu Hawaii an ongoing postgraduate continuing education course in human dissection, which is offered every year.





**Yi Aida Ru, DC** graduated from Palmer West Chiropractic College in 2020. In the United States she extensively studied Sacro Occipital Technique (SOT) and Cranial Techniques with Charles Blum, DC, taking both the SOT and cranial certification courses. She also preceptored with Martin Rosen, DC, with an emphasis in pediatric chiropractic care. Dr. Ru also studied Applied Kinesiology and functional neurology and her practice is predominately SOT-based, combining neurological muscle testing and functional neurology. She is a Certified SOT and Cranial Practitioner with the Sacro Occipital Technique Organization – USA and started practicing in China in March 2021 at an international hospital, the SinoUnited Health Hangzhou Kerry Center.



**Albert R Salem, DC** is a 1980 graduate of the Los Angeles College of Chiropractic with early career years in California, where he became immersed in sacro occipital technique (SOT), the only therapy to stabilize his repeated soccer injuries. Learning from Dr. DeJarnette and his faculty at Craniopathy Instructor's Courses in Omaha solidified SOT and craniopathy as the truest physical medicine. For the last thirty years Dr. Salem is based in Adelaide, Australia, in private clinical practice of wholistic focus on the tenets and therapeutics of SOT and cranial physical medicine and homeopathic constitutional medicine.



**Dr. Jason Scoppa** practices at his clinic, Northwest Structural Medicine, located in Bellevue, WA, as well as in Lynwood, WA at Balance Epigenetic Orthodontics as part of a Cranial-Dental comanagement team. He is a certified SOT Craniopath (CSCP), certified chiropractic sports practitioner (CCSP), and has a TMD and cranially focused practice.



**Rick Serola, DC** graduated Summa Cum Laude from Palmer College of Chiropractic in 1983. In 1988, after noticing that muscle strength increased throughout the body after sacroiliac stabilization, he began research into the underlying biomechanics and the kinematic chain. Dr. Serola developed his own theory on biomechanics, the Musculoskeletal Integration Theory, and founded Serola Biomechanics Incorporated, developing various orthopedic products such as the Serola Sacroiliac Belt. He seeks to share information about the sacroiliac joint, which he believes is the most common cause of back, pelvic, and leg pain.





**Caroline Vitez, DC** graduated from Palmer College of Chiropractic in Davenport, Iowa in 1996 and has been in private practice since. She is a postgraduate, Diplomate in Chiropractic Neurology, having completed all requirements established by the American Chiropractic Neurology Board (DACNB) of which she is an active member. She recently co-authored a 2020 publication in the Journal of Craniomandibular and Sleep Practice (CRANIO) entitled "Cranio-cervical Misalignment Masquerading as Facial Pain: Options for Diagnosis and Management".



**Gilbert Weiner, DC** is a graduate of New York Chiropractic College, now called Northeast College of Health Sciences in 1978 going directly to Puerto Rico to begin his private practice. There he had an interest in scoliosis and noticed various comorbidities, mainly temporomandibular joint disorders (TMD). Since beginning his private practice he has actively been investigating scoliosis, its cause and treatment.

