

The Cranial Letter

THE OSTEOPATHIC CRANIAL ACADEMY, INC.



A Component Society of the American Academy of Osteopathy

Quarter 1 | 2026

OCA 2026 Annual Conference

Development of the Cranium and Face:
Newborn to Adulthood

Indianapolis, IN
June 4-7, 2026

Dr. Tasha Turzo, DO, FCA
Conference Director

Inside

- President's Message
- New Management Partners
- Technical/Scientific Articles
- About the OCA Annual Conference
- Biomedical Excerpts



The Cranial Letter

The Official Newsletter of
 The Osteopathic Cranial Academy
 5133 Harding Pike, B-10, #380
 Nashville, TN 37205
 (913) 538-4536
 Email: office@cranialacademy.org
 www.cranialacademy.org

Board of Directors

- Julie Mai, DO
President
- Open
President-Elect
- Kathryn Perry, DO
Treasurer
- Walter Witryol, MD
Secretary
- Jim Binkerd, DO FCA
Immediate Past President
- Jay Danto, DO
- Bill Foley, DO
- Stephen Kisiel, DO
- April Smith, DO
- David Spencer, DO
- Robyn Young, DO

Amanda Bureau, MEd, CAE, CVA
Executive Director

Editorial/Advertising Deadline

Jan. 15, Apr. 15, Jul. 15, Oct. 15

The Cranial Letter is published four times annually by The Osteopathic Cranial Academy as a member service. Statements, opinions and advertising expressed by contributors are those of the authors and not necessarily those of The Osteopathic Cranial Academy. Publication of an article does not assume responsibility for statements therein, nor does printing an advertisement endorse a product or service.

Quarter 1 2026

Contents

President's Message	3
Julie Mai, DO, OCA President	
New Management Partners	4
OCA Annual Conference	5
Scientific/Technical	
Cranial Articular Surfaces	11
Postural Changes and Malocclusions	11
Laryngitis	12
Surgical Augmentation of Cerebral Lymphatic Flow	13
Noradrenergic Slow Vasomotion	14
Ligamentous-Articular Mechanisms and Membranous-Articular Mechanisms	15
Call for Papers	16
OCA Print/Media Resources	16

Mission

To teach, advocate and advance osteopathy, including osteopathy in the cranial field, as envisioned by Andrew Taylor Still, MD, and William Garner Sutherland, DO.

Vision

To promote mastery in the practice of osteopathy in the cranial field
 To support a vibrant professional environment so that osteopathy can flourish
 To establish osteopathy, including osteopathy in the cranial field, as a recognized cornerstone of complete patient care

President's Message



Julie Mai, DO

Dear OCA Members,

I hope 2026 has begun with fresh inspiration and motivation for all of you. May each of you thrive in the projects and endeavors you're pursuing this year.

The OCA has started the year strong with our new partnership with Oak Ridge Association Management Company, a highly respected firm specializing in osteopathic and healthcare associations. We are truly fortunate to have Amanda Bureau, CAE, CVA, MEd, step in as our full-time, dedicated Executive Director. Many of you have already connected with her by phone or email and experienced her prompt, helpful responses. I'm confident you'll continue to enjoy working with her. We continue to use a separate accounting firm for added financial oversight.

As the management transition wraps up by the end of March, I want to extend deep appreciation to CJ for his dedicated service as Executive Director these past months and for his smooth, collaborative handoff to Oak Ridge AMC. We wish him every success in his future endeavors.

Our March Pre-Convocation 40-hour Introductory Cranial Course at The Broadmoor in Colorado Springs filled quickly and has an active waitlist for future hybrid sessions. Oak Ridge AMC is thrilled to support their first OCA CME event. Right after our course, the AAO Convocation begins, chaired by Bill Foley, DO. If you're attending, please stop by OCA Booth 108, and Amanda would love to meet you in person.

Early Bird registration is now open for our 2026 Annual Conference, "Development of Cranium and Face: Newborn to Adulthood," directed by Tasha Turzo, DO, FCA. She has put together an outstanding lineup of speakers, and her promotional video on the OCA CME page is well worth watching. The updated schedule is posted on our website and appears in this issue of the Cranial Letter. We hope to see you June 4-7 in vibrant downtown Indianapolis.

We are deeply grateful to OCAF for their generous support: 50% tuition assistance for interns, residents, and early-career physicians, and 100% for medical students attending the Pre-Convocation Hybrid Course. OCAF has also provided a grant for a limited number of \$399 Tuition Assistance for students, interns/residents, and early-career physicians for the Annual Conference (first-come, first-served). Please apply through the CME page if interested.

Our intermediate course, The Cranial Base, directed by Jose Camacho, DO, is set for September 25-27 in Portland, Oregon. This hands-on program will sharpen your palpatory skills and precision in addressing restrictions across the cranium, cervical, and sacral regions. With a 1:4 faculty-to-participant ratio, you'll receive personalized, in-depth guidance from our excellent faculty.

We will once again offer our popular multi-site 40-hour Fall Hybrid Introductory Cranial Course starting in September—details coming this summer.

2026 is shaping up to be a year of renewal and growth for the OCA. I'm excited to see what unfolds and grateful to share it with all of you.

Serving in Gratitude,

Julie Mai DO
OCA President

New Management Partners



Amanda Bureau

Welcome Our Management Partner:

Oak Ridge Association Management Company

The Osteopathic Cranial Academy is pleased to partner with Oak Ridge Association Management Company (Oak Ridge AMC), an accredited association management firm dedicated to helping professional and trade associations grow, operate efficiently, and deliver greater value to their members. Oak Ridge AMC provides comprehensive management services including governance and board support, membership development, financial management, conferences and educational programming, marketing and communications, and strategic planning.

A hallmark of the Oak Ridge AMC approach is its team-based model. This structure allows Oak Ridge AMC to provide consistent support across key operational areas while helping volunteer leaders focus on advancing the organization's mission and strategic priorities.

Welcoming Executive Director Amanda Bureau

As part of this partnership, Amanda Bureau, MEd, CAE, CVA, serves as Executive Director. Amanda has more than 20 years of association leadership experience, guiding national and international nonprofit organizations through periods of growth, transformation, and strategic development. Her background includes credentialing and educational program development, membership engagement, conference revitalization, and expanding non-dues revenue opportunities. Amanda is widely respected for building strong partnerships with volunteer leadership and aligning organizational programs with long-term strategic goals. She holds the Certified Association Executive (CAE) credential and the Certificate in Volunteer Administration (CVA) and has served in leadership and volunteer roles with several association management organizations.

Working alongside the Oak Ridge AMC team and the organization's volunteer leaders, Amanda will help strengthen operations, enhance member engagement, and support the continued advancement of the association's mission.

2026 OCA Annual Conference, Part 1: Preview

Dr. Tasha Turzo, DO, FCA

The Osteopathic Cranial Academy's June Annual Conference, *Development of the Cranium and Face: Newborn to Adult*, offers a comprehensive, clinically grounded exploration of how craniofacial form and function emerge across the lifespan—and how osteopathic physicians can more effectively assess, support, and restore these processes in practice.

The conference will open by addressing the realities of the “modern face”—including narrowed oral volumes, compromised airways, altered swallowing mechanics, and unresolved cranial strain patterns. Environmental influences, nutritional decline, birth mechanics, and early-life functional disturbances are examined as key contributors to today's craniofacial limitations. Particular attention is given to airway compromise, nasal congestion, tongue-tie restrictions, and their downstream effects on facial development and systemic health. Practical solutions for supporting and recapitulating healthy facial growth are introduced within an osteopathic framework.

We will explore the effects of intrauterine positioning and birth forces on the cranial base, with special focus on occipital condylar compression and its impact on cranial nerves IX–XII and facial development. Participants will learn how early compromise of these nerves—particularly the hypoglossal nerve—can influence tongue function, swallowing, breathing, and dental arch development, contributing to patterns such as crowded teeth and airway restriction beginning in infancy.

Facial growth from birth through early childhood (0–3 years) is examined in detail, integrating prenatal and postnatal influences, functional drivers of facial form, and common obstacles to healthy development. Hands-on labs provide practical skills for assessing newborns, toddlers, and adults, including evaluation of tongue function, breathing patterns, and cranial base dynamics.

Practical labs will focus on the dynamic relationship between cranial motion and dental occlusion. Participants will explore how the cranial base influences the dental occlusion, how intraoral function affects cranial and cervical motion, and how swallowing, tongue posture, and breathing contribute to the unwinding of cranial strain patterns.

The craniofacial vasculature is presented not merely as a transport system, but as a bio-tensegrity and organizing network continuous with the dura and venous sinuses. Through perceptual training and hands-on labs, participants refine their ability to sense vascular tone, flow quality, and coherence.

The conference further explores the relationships between temporomandibular dysfunction, cranial base compromise, vagal tone, and glymphatic flow. These connections are contextualized within chronic illness, head injury, and central nervous system “whiplash,” with practical treatment strategies for optimizing brain drainage and neurologic recovery. Case-based presentations demonstrate the osteopathic application of the ALF (Alternative Lightwire Functional) Approach, highlighting its capacities, limitations, and biocompatible design principles. Participants gain a clearer understanding of what distinguishes a truly osteopathic dental appliance and how wire dynamics, function, and adaptability support cranial motion and whole-body integration.

Learning the anatomy of sleep is essential for diagnosing airway compromise. The power of photobiomodulation will be presented, showing transformational cases of plagiocephaly, tonsillar hypertrophy, and airway compromises. Photobiomodulation offers non-surgical treatment for craniofacial dysfunctions.

There is much to learn, and we are excited to present this conference in June. Looking forward to seeing you in Indianapolis.

2026 OCA Annual Conference, Part 2: The ALF Approach

Dr. Tasha Turzo, DO, FCA

The ALF Approach is an integrated, collaborative, holistic approach to treating facial growth and developmental dysfunctions (i.e., malocclusions). The team members include, but are not limited to, an ALF-trained dentist, a cranial osteopathic physician, and a myofunctional therapist. The goal of the approach is to address the underlying dysfunctional etiology of malocclusion and redirect these dysfunctions toward integrated physiological functioning that will continue to support the craniofacial-cervical (entire soma) in a healthy, unobstructed, and uninhibited neutral state for optimal growth, development, and Health. It is fundamental that all team members are educated in osteopathic principles, as the ALF appliances were created within these principles and practices, and the implementation of these principles is vital to an integrated, successful outcome. The osteopathic principles are the following (Cotton 2012):

1. The Body is a Functional Unit
2. Structure and Function are reciprocally interrelated
3. The Body has the capacity to heal itself.

Each body part moves and develops in relationship to the others and the whole. Isolation in diagnosis and treatment of the dental occlusion without recognition of the complex and vital connection to the craniofacial cervical (pelvic and feet) complex is limiting and potentially harmful to our patients. Newton's third law states that "for every action there is an equal and opposite reaction." The attempt to create isolated changes in the dental occlusion or anywhere in the human body does not exist. The heavier and more rapid the forces applied to the maxilla and mandible, the heavier and more restrictive the compensation patterns of the craniofacial cervical complex.

It is our functions that create our structures. Just as the river carves out the unique form of the riverbed, that form tells the story of the movement, volume, and direction of the water flow. The riverbed is the structure, and the flow of water is the function. They are interdependent on one another. This is the story of the functions of our bodies. They form our structure, and thus our structure holds the form for the functions to function. When the tongue is habitually low, the buccinator muscle's contractive forces overpower the non-existent counter force of the tongue in the palate, and hence a narrow palate is formed (Fabble 2015). Once the palate (the structure) is too narrow for the tongue to fit in, then the structure of the palate needs to change to restore health and enable the tongue to be able to rest in the palate, bringing stabilization to the cranial base, widening the oral volume in a three-dimensional experience, increasing the airway, and stimulating the cranial motion. The tongue and palate fit like a "hand in glove" experience. The shape of the palate tells the story of the motion and functional patterns of the tongue. Both the structure and function need to be assessed, and health restored, for a truly transformative experience.

The body has the capacity to heal itself. We are constantly healing ourselves. As health care practitioners, we need to be aware that placing a bandage on an abrasion doesn't heal our patients. It's creating an environment where patients can heal themselves. As osteopathic physicians and ALF-trained dentists, the goal of treatment is to remove obstacles and allow the body to heal itself. A very small activation in the right direction can create life-changing, transformative experiences, not because the system is being driven by human measurements, but because obstacles (restrictions on motion) are being removed, allowing our inherent capacity to heal ourselves to be unhindered. The ALF appliances are

The ALF Approach, continued

the only ones that do not obstruct the tongue plate connection. The entire tongue is in contact with the palate, allowing Nature to do her work. The appliances not only recruit but also integrate the myofunctional dysfunctions, thus removing the obstacles to a cure.

The ALF lightwire was created with the palpatory feedback from osteopathic physicians with the goals to create the perfect combination of strength and flexibility in order to provide stabilization and flexibility to the craniofacial cervical complex, stimulate the cranial rhythmic impulse, “unwind” cranial strain patterns, rehabilitate tongue to palate resting position, lip seal, nasal diaphragmatic breathing, and create osteoblastic activate developing the maxilla and mandible thus increasing oral volume. The flexibility of the ALF wires creates subtle expansion and contraction, which augments cranial motion. For example, the ALF can restore the function of the temporal bone by augmenting cranial motion, thereby addressing a commonly overlooked underlying etiology of TMD. The ALF wire “unwinds” cranial strain patterns, and because it synchronizes with cranial motion, the process is less likely to produce compensatory changes that create new strain patterns. In this way, the patient remains intact as a whole person with one soma, and the tissues

move together into greater motion, removing the obstacle to growth and thus creating an environment for healing. The initial phase of an ALF treatment is to restore inherent function and motion. The second phase, once the craniofacial cervical strain patterns have been removed, is to move the teeth to create a “functional” dental occlusion that stabilizes the integrated craniofacial complex.

The dental occlusion participates in a complex, constantly shifting horizontal stabilizing system for the human body, which includes the eyes (vision), the temporal mandibular complex, the cranial base, the cervical vertebrae, and the pelvis. The interlocking of enamel, the hardest substance in the body, overpowers all the other more malleable structures and functions of the body. The dental occlusion will dictate the horizontal planes around which the body compensates to maintain balance. Thus, it is of utmost importance that we as osteopathic physicians learn to diagnose and assess the functions of the craniofacial cervical complex to integrate a wider and more holistic scope of treatments and consequences for the changes in the dental occlusion. The scope of practice of a dentist is from the clavicles upward, thus giving the basis and responsibility for the dentist to learn assessment and treatment of the craniofacial cervical complex in relation to the dental occlusion.



OCA2026

Development of the Cranium and Face: Newborn to Adulthood

Conference Director: Tasha Turzo, DO, FCA
Assistant Conference Director: Josh Krembs, DO

The 2026 OCA Annual Conference will explore the anatomical structures and functional systems that shape the human face across the lifespan. We will examine how these functions influence dental occlusion, cranial motion, and overall craniofacial harmony. Attendees will also review the embryologic forces that drive growth and development from newborn through adulthood, gaining a deeper understanding of the dynamic changes that occur throughout each phase of life.

A focused study of intraoral function, dental occlusion, and their interdependent relationships with cranial motion will further enrich the learning experience. Hands-on labs will offer practical, clinically relevant skills to support effective evaluation and treatment of craniofacial dysfunctions.

To learn more about the conference and to register, go to: <https://cranialacademy.org/events/cme/>, or the QR code to register for the Conference.

Register today!



Schedule-at-a-Glance

Thursday, June 4th			
12:00 PM		Registration	ED and Staff
3:30 PM	L	Welcome-Intro to/Overview of Conference	President/Turzo, DO
4:00 PM	L	The Fabulous Face	Turzo, DO
5:00 PM	S	Small Group Discussion	Faculty
5:15 PM	P	Returning to Neutral / Rebalancing Participants	Krembs, DO
6:15 PM	O	Adjourn	

Schedule-at-a-Glance *continued*

Friday, June 5th			
9:00 AM	L	Embryology of the Face	Kisiel, DO
9:30 AM	P	Biodynamic Treatment of the Infant's Face	Kisiel, DO
10:00 AM	L	Occipital Condylar Compression and Crowded Teeth Syndrome	Jones, DO
10:30 AM	S	Small Group Discussion	Faculty
10:45 AM	L	Facial Growth: 0-3 year old Part 1	Jones, DO
11:15 AM	L	Facial Growth: 0-3 year old Part 2	Jones, DO
11:45 AM	P	Assessing Facial Functions	Jones, DO
12:30 PM	M	LUNCH	All
1:45 PM	L	Cranial Motion and the Dental Occlusion	Turzo, DO
2:15 PM	P	Cranial Assessment of the Dental Occlusion	Turzo, DO
3:15 PM	S	Small Group Discussion	Faculty
3:30 PM	L	Cranio-Facial Vasculature and Flow Part 1	Krembs, DO

Saturday, June 6th			
9:00 AM	L	The Mandible	Blackman, DO
9:30 AM	P	Lab: Treating the Mandible	Blackman, DO
10:00 AM	S	Small Group Discussion	Faculty
10:15 AM	L	Joints of the Head: SBS and TMJ	Turzo, DO
10:45 AM	P	TMD Assessment	Turzo, DO
11:30 AM	L	TMD and Chronic Illnesses	Turzo, DO
12:15 PM	M	LUNCH	All
1:30 PM	L	Sutherland Memorial Lecture	Dart, MD

Schedule-at-a-Glance *continued*

2:30 PM	P	SML Lab	Dart, MD
3:15 PM	S	Small Group Discussion	Faculty
3:30 PM	L	Treating the Cranial Base After Head Injury	Hagopian, DO
4:15 PM	P	Lab: Treating the Cranial Base After Head Injury	Hagopian, DO
4:45 PM	L	The Dental Osteopathic Approach	Adams, DMD
5:45 PM	O	Adjourn	
6:30 PM	O	President's Reception	
7:00 PM	M	Recognition Banquet	President

Sunday, June 7th			
9:00 AM	L	The Dynamics of an ALF Approach Part 1	A. Bronson, DDS
9:30 AM	L	The Dynamics of an ALF Approach Part 2	A. Bronson, DDS
10:00 AM	L	Osteopathic Assessment of dental appliances	Turzo, DO
10:30 AM	S	Small Group Discussion	Faculty
10:45 AM	L	Introduction to 2027 Conference	Foley, DO
11:00 AM	L	Sleep Anatomy	Mai, DO
11:30 AM	L	The Power and Potency of Photobiomodulation Part 1	J. Bronson, DDS
12:00 PM	L	The Power and Potency of Photobiomodulation Part 2	J. Bronson, DDS
12:30 PM	L	Panel Discussion	Faculty
1:00 PM	O	Adjourn Conference	Director/President

Cranial Articular Surfaces

From: "Commentaries on Dr. Sutherland's Recordings", compiled by Harold I. Magoun, Sr. SCTF, 1961.
Excerpted with kind permission of the Sutherland Cranial Teaching Foundation
<https://sctf.com/courses/>

"The cranium may be divided into three unit mechanisms for purposes of discussion. First there is the so-called "cranial bowl" or base consisting essentially of the ethmoid, sphenoid, occiput and the two temporals. The greater part of these bones originates in cartilage, characteristic of the cranial base.

The second unit is the vault, made up mainly of the frontal (sometimes two bones and so considered in the cranial concept) and the two parietals. These are formed in membrane and play a compensatory role throughout life, in relation to the sphenobasilar articulation and the rest of the base. The third unit is the facial area with its components hung from and mainly influenced by the sphenoid. Special significance is attached to certain structures in the facial area because of their physiological capacity as accommodative mechanisms or "speed reducers" for

stepping down motion in the facial area.

The two palatines function between the pterygoid processes of the sphenoid and the tuberosities of the maxillae. The two zygomae function between the temporals and the maxillae. The vomer acts as a movable link between the body of the sphenoid and the inter-maxillary nasal crest. All of these allow for considerable latitude in maxillary movement without excessive disturbance of the adnexa.

While accommodative function is present in all cranial articulations, pterion is somewhat unique with its beveled overlap of the frontal, parietal, sphenoid and temporal, from within outward in that order, resembling a camera shutter in arrangement. It is a very important adaptive mechanism when trauma crowds this area. And the same is true at the maxillary hiatus as partly closed by processes of the palatine, ethmoid, lacrimal and inferior turbinate."

Postural Changes and Malocclusions

Excerpted by kind permission of Tasha Turzo, D.O., from Turzo, 2023, The ALF Approach, pp.159-160
<https://www.drtashaturzo.com/book>

"How mouth breathing and a dysfunctional swallow creates postural changes

As the mouth opens, the mandibular condyles rotate anteriorly and inferiorly, which brings the head into a flexed position (forward on the spine). The head tilts up as the need for the eyes to be horizontal to the ground stimulates a neuro reflex, which activates and extends the cervical muscles to stabilize the head's anterior movement leading to cervical and spinal changes on down the body. The shoulder blades move forward with the shoulders, and the chain of muscles transmits changes in compensation all the way down to the feet. The connection between a pharyngeal airway blockage that creates head extension and forward head posture can be inferred

from findings that most children with swollen tonsils that block their airway have extended head posture. This condition normalizes quickly after a tonsillectomy. One study showed that children with nasal respiration age 8 and above present with better posture than those who continue oral breathing beyond age 8.

Any condition that creates open mouth breathing or posturing can stimulate a head forward posture. When oral breathing is required for a prolonged period of time, the tongue moves forward to create more space in the airways (obligatory tongue thrust). The tongue is attached to the jaw, so as the tongue moves into a low lying forward resting position it brings the mandible forward."

Laryngitis

From: Harold Ives Magoun, Sr.
Practical Osteopathic Procedures, 1976, p. 76

Editor's Note: Dr. Magoun's collection of techniques was assembled "intentionally a collection of those methods which have served the profession and enhanced its growth for the past one hundred years." As with other sections, the excerpt here represents osteopathic reasoning of many decades, rather than the full array of Magoun's techniques, William Garner Sutherland techniques, or recent developments.

"Free the cranio-cervical junction. Secure deep relaxation of the laryngeal area with special attention to the superior laryngeal nerve at the upper portion of the hyoid bone. Raise and tease the hyoid forward, one side at a time, and pull the jaw up and forward with the muscles relaxed. For the cervical sympathetics and the vagus nerves, place one hand back of the neck with the fingers on the transverse processes of the vertebrae. With the other hand, push the forehead towards the fingers, gently teasing until all is loose, especially the posterior deep muscles. Make sure C1-3 is free for the superior cervical ganglion. Cervical glands can be motivated by

correcting the clavicle, usually depressed at the sternal end and posterior at the outer end.

Pay attention to the inferior laryngeal nerve inside the sternocleidomastoid near the sternum. The upper eight ribs on either side must be freed to relax ligaments and muscles. The first ribs are especially important with the external carotid and subclavian arteries lying underneath. Correcting lower ribs will foster kidney function. In all this be gentle and specific. Stop with a good response. Do not over-treat."



Magoun 1976 Prac Osteo Proc, Fig 41, Laryngitis

Noradrenergic Slow Vasomotion

Noradrenergic Slow Vasomotion: The Hidden Fluid Pump Linking Sleep, Brain Clearance, and Dementia Pathogenesis. Dabija MG, Tataru CI, Dumitru AV, et al. Int J Mol Sci. 2025;26(23):11444. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12692548/>

Editor's note: In multiple passages of talks & writing, Dr. Sutherland called attention to the physiologic centers in the floor of the fourth ventricle.

For instance, one passage in "Teachings in the Science of Osteopathy" <http://shop.btpubservices.com/Title/9781930298002> ("Clinical Experiences in the Practice of Osteopathy", p.185) says;

"Additional physiologic centers in the floor of the fourth ventricle are a sweating center; a heat control center; the respiratory center; controls for the functions of sneezing and coughing; and centers for regulating salivation, vomiting, blood glucose, and the digestive tract. Note that the nuclei of the eighth nerves lie in the brain stem and that the cerebellum lies above the roof of the fourth ventricle. Thus, the functions of hearing and control of equilibrium and posture are centered in this region."

Since Dr. Sutherland's primary teaching era, many more findings about physiologic centers in the floor of the fourth ventricle have emerged.

The locus coeruleus (LC) is another structure in floor of the fourth ventricle, at its lateral aspect, in the posterior area of the rostral pons. This recent finding describes effect on cerebral vasomotion, through influence on pericytes

"...brain clearance is in fact an active process that is dependent upon both the current regulatory state of the brain and the presence of noradrenergic slow vasomotion, which is generated by rhythmic output from the locus coeruleus (LC). The LC-generated output has been found to influence the degree of contraction exhibited by pericytes, the geometric shape of astrocytic end-feet, and vascular tone, ultimately impacting the rate of exchange between cerebrospinal fluid (CSF), interstitial fluid (ISF), and the blood-brain barrier through aquaporin-4 (AQP4) channels. These LC-generated rhythmic changes are thought to provide the mechanical forces necessary for sustaining the metabolic clearance of waste products within the parenchyma."

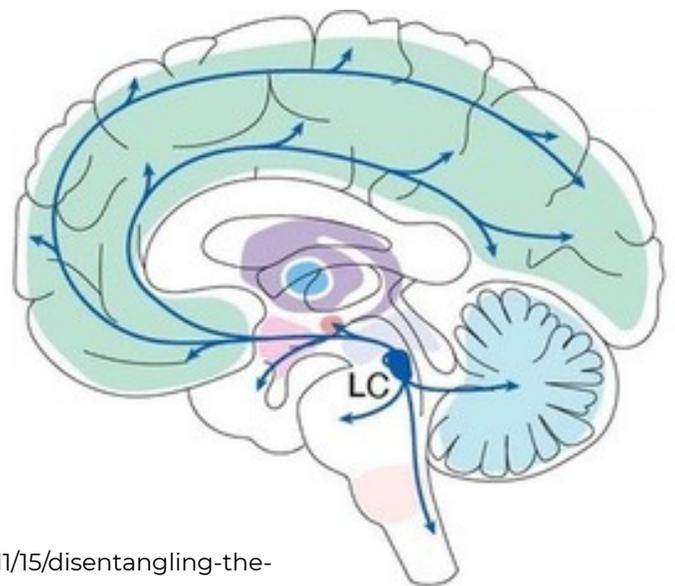


Figure: Locus Coeruleus, <https://www.sydney.edu.au/science/news-and-events/news/2022/11/15/disentangling-the-evolved-brain-from-its-primitive-state.html>

Surgical Augmentation of Cerebral Lymphatic Flow

Deep cervical lymphatic–venous anastomosis attenuates cognitive dysfunction and biomarker abnormalities in severe Alzheimer's disease: A prospective single-arm study.

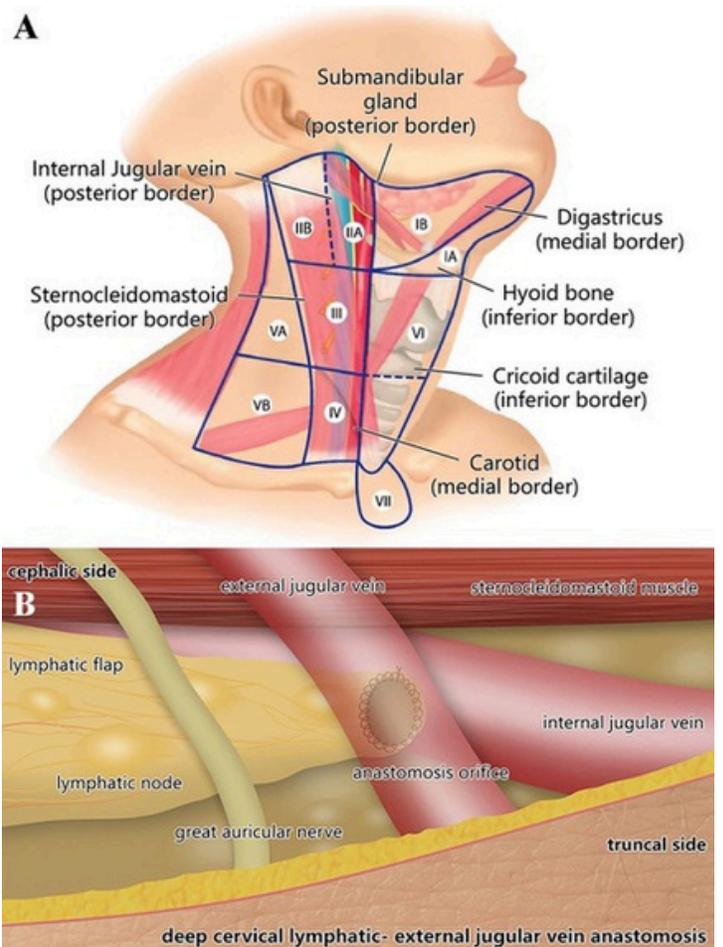
Fu X, Zhang J, Xiao Q, et al. *Alzheimers Dement*. 2026;22(2):e71150
<https://alz-journals.onlinelibrary.wiley.com/doi/10.1002/alz.71150>

Editor's Note: Though a surgical procedure study, the recent finding advances the importance of cranio-cervical lymphatic drainage in reducing brain decline. Improving lymphatic efflux through anastomosis of deep cervical lymph vessel with the external jugular vein modestly improved function in severe Alzheimer's disease, with corresponding improvement of biomarkers. Other drainage flow augmentation may also be relevant.

"Deep cervical lymphatic-venous anastomosis (dcLVA) is a novel surgical intervention designed to augment cerebral lymphatic drainage by creating direct shunts between deep cervical lymphatic vessels and adjacent veins. By bypassing obstructed or functionally inefficient lymphatic pathways, dcLVA can rapidly reduce intracerebral lymphatic pressure and facilitate the efflux of accumulated metabolic proteins, including $A\beta$ and Tau, from the brain parenchyma"

- Deep cervical lymphatic-venous anastomosis (dcLVA) was evaluated in 139 patients with severe Alzheimer's disease (AD).
- The dcLVA was associated with modest postoperative improvements in global cognition, functional status and neuropsychiatric symptoms over 6 months.
- Cerebrospinal fluid (CSF) β -amyloid ($A\beta$) and tau levels decreased, while corresponding plasma biomarkers increased after surgery."

Figure: Chen, Jing-Yu
 Deep cervical lymphovenous anastomosis *Alzh Int J Surg*
 2025 Jul 1;11(7):4211



Ligamentous-Articular Mechanisms and Membranous-Articular Mechanisms

Excerpted from *Balanced Ligamentous Tension in Osteopathic Practice*, 2024, p. 29
<https://us.singingdragon.com/products/balanced-ligamentous-tension-in-osteopathic-practice>
With kind permission of Handspring/JKP and Susan Turner

“Realising that ‘the ligaments...are the natural agencies for correcting the relations and positions of joints’, he came to refer to the gross joints of the body as ‘ligamentous-articular mechanisms’, and the fine sutures of the cranium as ‘membranous-articular mechanisms’. By placing the words ‘ligamentous’ and ‘membranous’ before ‘articular’ in each case, Sutherland was emphasising that, to his perception, the ligaments and membranes were primary and the bones functionally secondary in the organisation of the joints.

In ‘balanced ligamentous tension’, an injured joint is held and the ligaments guided to a place of equally balanced tension from which the correction can then unfold. In a similar way but on a different scale, ‘balanced membranous tension’ (BMT) uses the dural membrane for the correction of osseous strains of the cranium and sacrum.

In 1919, after 19 years in practice, Sutherland’s sense of the key role of the ligaments was confirmed at the

AOA Convention in Chicago. Here, he had the opportunity to handle Virgil Halladay’s seated dissection of the spine, pelvis and ribcage which left only the bones and ligaments in situ. The ligaments had been treated so as to keep them pliable, enabling Sutherland to manually explore their relationship to articular movement. Through this he was inspired to revise his ideas on pelvic diagnosis and devise several of the pelvic techniques described in Chapter 3 (Sutherland 1998, COT p.132).

BLT as a therapeutic principle

The corrective procedure using ‘the gentle exaggeration of the lesion’ involves enabling the ligaments to find a position of equally balanced tension around the displaced fulcrum of the strained joint. In the words of Anne Wales, ‘If we position the bones so that the ligaments are relieved of the strain then the bones can move spontaneously back to their correct position. Astonishing!’ (Wales 1978).”



Call for Papers

The Cranial Letter is seeking original scholarly studies, case studies, reviews, and engaged commentary from OCA members, for its technical/scientific section. We hope to continue the Cranial Letter tradition of sharing new information, research, and new applications of “old information” to our osteopathic endeavors. We expect this work to have relevance to Osteopathy in the Cranial Field. Please send your work to office@cranialacademy.org.

OCA Print/Media Resources

Recent topical Books/Media projects by OCA authors include:

Rachel Brooks, “Three Great Teachers of Osteopathy”

<https://www.stillnesspress.com/three-great-teachers-of-osteopathy>

Maxwell Fraval, “Osteopathy Is In the Blood”

<https://the-promise.org/osteopathy-is-in-the-blood/>

Susan Turner, “Balanced Ligamentous Tension in Osteopathic Practice”

<https://us.singingdragon.com/products/balanced-ligamentous-tension-in-osteopathic-practice>

Tasha Turzo-Moore, The ALF Approach:

Changing the Face of Orthodontics
<https://www.drtashaturzo.com/book>

Sources for Osteopathic & OCF Texts include:

OCA Bookstore

<https://members.cranialacademy.org/Online-Store>

SCTF

<https://sctf.com/publications/books/>

Stillness Press

<https://www.stillnesspress.com/stillnesspress-books>

Mel Friedman, “Where Spirit Meets Matter”

<https://www.melfriedmando.com/author>
<https://torchflamebooks.com/books/where-spirit-touches-matter/>

Bobby Nourani, “Long Lever Techniques: An Osteopathic Manual”

<https://drnourani.com/llt/>

Bonnie Gintis & Steve Paulus

Osteopathy Unplugged Podcast
<https://osteopathyunplugged.com/>

Lawrence J. Bellew, D.O. "Tensegrity and the Primary Respiratory Mechanism" (Forthcoming on Amazon)

AAO

<https://www.academyofosteopathy.org/bookstore>

The Promise/OPC

<https://promise.ce21.com/search?product-Type=9&latestSelection=ProductTypeId>

Osteopathic History website (including works by A.T. Still)

<https://osteopathichistory.com/library>



STEPHEN DAVIDSON
DO, C-SPOMM, DO(H)

STEPHEN DAVIDSON, DO LEGACY ENDOWMENT EDUCATIONAL GRANT FUND



DONATIONS WILL BE
MATCHED TWO TO ONE
WITHIN 30 MONTHS
STARTING OCT 1ST, 2025
UP TO

\$ 250K

THE FUND WILL PROVIDE GRANTS THAT SUPPORT
TUITION FOR EDUCATION IN CRANIAL
OSTEOPATHY TO DESERVING PHYSICIANS IN
TRAINING; AND PHYSICIANS IN THEIR FIRST 3
YEARS OF PRACTICE WHO ARE INTERESTED IN
OMM/OMT.



GRETCHEN WEINZIMER,
OCAF EXECUTIVE ADMINISTRATOR

(818) 796-6750 OSTEOPATHICCAF.ORG
 OSTEOPATHICCAF@GMAIL.COM | INFO@OSTEOPATHICCAF.ORG

POST GRADUATE COURSE

IN CLASSICAL HOMEOPATHY

Classes begin January 2026

INSTRUCTOR:

Donmenick J. Masiello, DO, C-SPOMM, DABHM

For more information:

<https://drmasiello.com/post-grduate-course>

SCTF Sutherland Cranial Teaching Foundation

Basic Course: *Osteopathy in the Cranial Field*

May 29-June 2, 2026 | BUCOM, Memphis, TN

Course Director: Kathleen Meyer, DO

Tuition: \$2,200

CME: 40 hours Cat 1A anticipated

Eligibility: DO, MD, DDS, Resident
Physicians and Medical Students

Registration is open! Scan the QR code
for more information and to register.



COMING SOON

Continuing Studies: *Entrapment Neuropathy*

October 2-4, 2026 | UNECOM, Portland, ME

Course Directors: Katrina Rakowsky, DO
and Simeon Hain, DO

Prerequisites: Completion of 2 approved
basic/introductory cranial courses, one
must be an SCTF basic course

Scan the QR code for more information.



These events co-sponsored with

