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## **SELECTED OCCUPATIONAL HISTORY**

President and Chiropractor, Macomb Spine & Injury Center, Macomb, Michigan, 2017 - Present  
President and Chiropractor, Bence Chiropractic Wellness Center, Macomb, Michigan, 2015 - Present  
President and Chiropractor, Bence Chiropractic Wellness Center, Sterling Heights, Michigan, 2001 - Present  
President and Chiropractor, Bence Chiropractic Family Health Care, San Diego, California, 1986 - 2000  
Associate Chiropractor, Schultz Chiropractic, Santa Ana, California, 1985 - 1987

## **EDUCATION AND LICENSURE**

Doctor of Chiropractic, Licensed in the State of National Board of Chiropractic Examiners Certificate, License # 22079, 1993-Present  
Doctor of Chiropractic, Licensed in the State of Michigan, License # 2301005267, 1986-Present  
Doctor of Chiropractic, Licensed in the State of California, License # 16259, 1985-  
Doctor of Chiropractic, Licensed in the State of Ohio, License # 1042, 1984-2001  
Associate of Arts in General Studies, El Camino College, Torrance, California, 1981

## **SELECTED POST-GRADUATE EDUCATION, CERTIFICATIONS AND DIPLOMATES**

**Evidenced Based Care in a Collaborative Setting; Primary Spine Care 5**, A literature based model for collaborating with hospitals, medical primary care providers and specialists. Reviewing the documentation requirements to communicate the diagnosis, prognosis and treatment plans with medical entities and having the evidence as a basis for those recommendations Certification in PACE Approved for the Federation of Chiropractic Licensing Boards, Diplomate, College of Chiropractic, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Current Literature Standards of MRI Spine Interpretation; Primary Spine Care 5**, MRI Spine Interpretation of the spine. How to triage a trauma and non-trauma with advanced imaging and document the necessity. We will also cover the basics of MRI Spine Interpretation inclusive of all types of herniations, bulges Certification in PACE Approved for the Federation of Chiropractic Licensing Boards, Diplomate, College of Chiropractic, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Spine Brain Connection in Pain Pathways; Primary Spine Care 5**, MRI Spine The spine-brain connection in managing chronic pain patients. Understanding how chronic pain negatively effects brain morphology and potential pathology as sequella. The role of chiropractic in preventing the loss of gray matter and the most recent evidence as outlined in indexed peer reviewed literature over the last 10 years verifying chiropractic's role. Certification in PACE Approved for the Federation of Chiropractic Licensing Boards, Diplomate, College of Chiropractic, Academy of Chiropractic Post-Doctoral Division,, Cleveland University- Kansas City, Long Island , NY, 2018

**Bio-Neuro-Mechanical Mechanism of the Chiropractic Spinal Adjustment; Primary Spine Care 5,** The biological, neurological and mechanical mechanisms and pathways from the thrust to the lateral horn and brain connection and how the brain processes the chiropractic spinal adjustment based upon the literature. Care paths of chiropractic and physical therapy from an outcome basis. Certification in PACE Approved for the Federation of Chiropractic Licensing Boards, Diplomate, College of Chiropractic, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Neurodiagnostics, Imaging Protocols and Pathology of the Trauma Patient,** An in-depth understanding of the protocols in triaging and reporting the clinical findings of the trauma patient. Maintaining ethical relationships with the medical-legal community. Certification in Crash Dynamics and the Trauma Victim, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island , NY, 2018

**Diagnostics, Risk Factors, Clinical Presentation and Triaging the Trauma Patient,** An extensive understanding of the injured with clinically coordinating the history, physical findings and when to integrate neurodiagnostics. An understanding on how to utilize emergency room records in creating an accurate diagnosis and the significance of “risk factors” in spinal injury. Certification in Examination and Triaging the Trauma Patient, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Crash Dynamics and Its Relationship to Causality, Crash Dynamics and Its Relationship to Causality,** An extensive understanding of the physics involved in the transference of energy from the bullet car to the target car. This includes G's of force, newtons, gravity, energy, skid marks, crumple zones, spring factors, event data recorder and the graphing of the movement of the vehicle before, during and after the crash. Determining the clinical correlation of forces and bodily injury. Certification in Medical-Legal Documentation & Credentials, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018

**MRI, Bone Scan and X-Ray Protocols, Physiology and Indications for the Trauma Patient,** MRI, Bone Scan and X-Ray Protocols, Physiology and Indications for the Trauma Patient, MRI interpretation, physiology, history and clinical indications, bone scan interpretation, physiology and clinical indications, x-ray clinical indications for the trauma patient. Certification in Medical-Legal Protocols in Insurance, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island , NY, 2018

**Neurodiagnostics Testing: EMG/NCV, VEP, BAER, V-ENG and SSEP, Clinical Indications and Interpretation,** Neurodiagnostic Testing Protocols, Physiology and Indications for the Trauma Patient, Electromyography (EMG), Nerve Conduction Velocity (NCV), Somato Sensory Evoked Potential (SSEP), Visual Evoked Potential (VEP), Brain Stem Auditory Evoked Potential (BAER) and Visual-Electronystagmosgraphy (V-ENG) interpretation, protocols and clinical indications for the trauma patient. Certification in MRI,CAT SCAN, BONE SCAN INTERPRETATION, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, 2018

**Documentation and Working within Your State Laws to Ensure Compliant Paperwork and Reimbursement**, Chiropractors Documentation and Reporting for the Trauma Victim, Understanding the necessity for accurate documentation and diagnosis utilizing the ICD-9 and the CPT to accurately describe the injury through diagnosis. Understanding and utilizing state regulations on reimbursement issues pertaining to healthcare. Certification in NEURODIAGNOSTIC TESTING: EMG/NCV, SSEP, V-ENG, BAER, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division,, Long Island, NY, 2018

**Strategic Plan** , Documenting Clinically Correlated Bodily Injury to Causality Understanding the necessity for accurate documentation, diagnosis and clinical correlation to the injury when reporting injuries in the medical-legal community. Documenting the kinesiopathology, myopathology, neuropathology, and pathophysiology in both a functional and structural paradigm. Certification in TRAUMA AND PERSONAL INJURY PROTOCOLS, Diplomate, College of Chiropractic, Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island , NY, 2018

**MRI History and Physics**, Magnetic fields, T1 and T2 relaxations, nuclear spins, phase encoding, spin echo, T1 and T2 contrast, magnetic properties of metals and the historical perspective of the creation of NMR and MRI. Certification in MRI Disc Overview & Imaging Protocols, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Spinal Anatomy and Protocols**, Normal anatomy of axial and sagittal views utilizing T1, T2, 3D gradient and STIR sequences of imaging. Standardized and desired protocols in views and sequencing of MRI examination to create an accurate diagnosis in MRI. Certification in Lumbar MRI Bulge, Central Canal Stenosis and Degeneration, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Disc Pathology and Spinal Stenosis**, MRI interpretation of bulged, herniated, protruded, extruded, sequestered and fragmented disc pathologies in etiology and neurological sequelae in relationship to the spinal cord and spinal nerve roots. Certification in Lumbar MRI Herniation, Cauda Equina and Root Involvement, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Spinal Pathology**, MRI interpretation of bone, intradural, extradural, cord and neural sleeve lesions. Tuberculosis, drop lesions, metastasis, ependymoma, schwannoma and numerous other spinal related tumors and lesions. Certification in Cervical MRI Bulge, Central Canal Stenosis and Degeneration, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Methodology of Analysis**, MRI interpretation sequencing of the cervical, thoracic and lumbar spine inclusive of T1, T2, STIR and 3D gradient studies to ensure the accurate diagnosis of the region visualized. Certification in Cervial MRI Herniation, Spinal Cord and Root Invovlement, Diplomate, Academy of

Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Clinical Application**, The clinical application of the results of space occupying lesions. Disc and tumor pathologies and the clinical indications of manual and adjustive therapies in the patient with spinal nerve root and spinal cord insult as sequelae. Certification in Clinical Correlation of History, Physical Findings and MRI Images, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Disc Overview & Imaging Protocols**, MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images. Clinical indication for the utilization of MRI and pathologies of disc in both trauma and non-trauma sequelae, including bulge, herniation, protrusion, extrusion and sequestration. Certification in MRI Protocols Clinical Necessity, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Interpretation of Lumbar Bulges/Degenerative Disc Disease**, MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of lumbar degeneration. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Central canal and cauda equina compromise interpretation with management. Certification in MRI Interpretation of Lumbar Degeneration/Bulges, Diplomate, Academy of Chiropractic Post-Doctoral Division, Buffalo, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Interpretation of Lumbar Herniated Discs**, MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of lumbar herniations. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Morphology of lumbar disc pathologies of central and lateral herniations, protrusions, extrusions, sequestration, focal and broad based herniations are defined and illustrated. Central canal and cauda equina compromise interpretation with management. Certification in MRI Interpretation of Lumbar Herniations, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences,, Buffalo, NY, 2018

**MRI Interpretation of Cervical Bulges/Degenerative Disc Disease**, MRI slices, views, T1, T2, STIR axial, stacking, FFE, FSE and sagittal images in the interpretation of cervical degeneration. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. Spinal cord and canal compromise interpretation with management. Certification in MRI Interpretation of Cervical Degeneration/Bulges, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**MRI Interpretation of Cervical Herniated Discs**, MRI slices, views, T1, T2, STIR Axial, FFE, FSE and sagittal images in the interpretation of lumbar herniations. With the co-morbidities and complications of stenosis, pseudo-protrusions, cantilevered vertebrate, Schmorl's nodes and herniations. morphology of lumbar disc pathologies of central and lateral herniations, protrusions, extrusions, sequestration, focal and broad based herniations are defined and illustrated. Spinal cord and canal compromise interpretation with management. Certification in MRI Interpretation of Cervical Herniations, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Virtual Grand Rounds**, MRI slices, views, T1, T2, STIR Axial, FFE, FSE and sagittal images in the interpretation of degenerative spondylolesthesis, spinal canal stenosis, Modic type 3 changes, central herniations, extrusions, compressions, nerve root compressions, advanced spurring and thecal sac involvement from an orthopedic, emergency room, chiropractic, neurological, neurosurgical, physical medicine perspective. Certification in MRI Interpretation of Degenerative Spine and Disc Disease with Overlapping Traumatic Insult to Both Spine and Disc, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Cartesian Coordinate System**, The Cartesian Coordinate System from the history to the application in the human body. Explanation of the x, y and z axes in both translation and rotations (thetas) and how they are applicable to human biomechanics. Certification in Cartesian Coordinate System, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Cervical Pathobiomechanics**, Spinal biomechanical engineering of the cervical and upper thoracic spine. This includes the normal and pathobiomechanical movement of both the anterior and posterior motor units and normal function and relationship of the intrinsic musculature to those motor units. Nomenclature in reporting normal and pathobiomechanical findings of the spine. Certification in Cervical Pathobiomechanics, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Lumbar Pathobiomechanics**, Spinal biomechanical engineering of the lumbar spine. This includes the normal and pathobiomechanical movement of both the anterior and posterior motor units and normal function and relationship of the intrinsic musculature to those motor units. Nomenclature in reporting normal and pathobiomechanical findings of the spine. Certification in Lumbar Pathobiomechanics, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanics in Trauma**, To utilize whiplash associated disorders in various vectors of impact and whiplash mechanisms in determining pathobiomechanics. To clinically correlate annular tears, disc herniations, fractures, ligament pathology and spinal segmental instability as sequelae to pathobiomechanics from trauma. The utilization of digital motion x-ray in diagnosing normal versus abnormal facet motion along with case studies to understand the clinical application. Certification in

Spinal Biomechanics in Trauma, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering & Organizational Analysis** , Integrating spinal biomechanics and pathobiomechanics through digitized analysis. The comparison of organized versus disorganized compensation with regional and global compensation. Correlation of the vestibular, ocular and proprioceptive neurological integration in the righting reflex as evidenced in imaging. Digital and numerical algorithm in analyzing a spine. Certification in Spinal Biomechanical Engineering & Organizational Analysis , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Cervical Digital Analysis** , Digitizing and analyzing the cervical spine in neutral, flexion and extension views to diagnose pathobiomechanics. This includes alteration of motion segment integrity (AMOSI) in both angular and translational movement. Ligament instability/failure/pathology are identified all using numerical values and models. Review of case studies to analyze pathobiomechanics using a computerized/numerical algorithm. Certification in Cervical Digital Analysis , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Lumbar Digital Analysis**, Digitalizing and analyzing the lumbar spine images to diagnose pathobiomechanics. This includes anterior and posterior vertebral body elements in rotational analysis with neutral, left and right lateral bending in conjunction with gate analysis. Ligament instability/failure/pathology is identified all using numerical values and models. Review of case studies for analysis of pathobiomechanics using a computerized/numerical algorithm along with corrective guidelines. Certification in Lumbar Digital Analysis, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Spinal Biomechanical Engineering: Full Spine Digital Analysis**, Digitalizing and analyzing the full spine images to diagnose pathobiomechanics as sequelae to trauma in relation to ligamentous failure and disc and vertebral pathology as sequelae. This includes anterior and posterior vertebral body elements in rotational analysis with neutral, left and right lateral bending in conjunction with gate analysis. Ligament instability/failure/pathology is identified all using numerical values and models. Review of case studies for analysis of pathobiomechanics using a computerized/numerical algorithm along with corrective guidelines. Certification in Full Spine Digital Analysis, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Accident Reconstruction: Terms, Concepts and Definitions**, The forces in physics that prevail in accidents to cause bodily injury. Quantifying the force coefficients of vehicle mass and force vectors that can be translated to the occupant and subsequently cause serious injury. Certification in Terms, Concepts & Definitions, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Causality, Bodily Injury, Crumple Zones, Force & Critical Documentation**, Factors that cause negative acceleration to zero and the subsequent forces created for the vehicle that get translated to the occupant. Understanding critical documentation of hospitals, ambulance reports, doctors and the legal profession in reconstructing an accident. Certification in Casualty, Bodily Injury, Crumple Zones, Force & Critical Documentation, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Accident Reconstruction: Skid Marks, Time, Distance, Velocity, Speed Formulas and Road Surfaces**, The mathematical calculations necessary utilizing time, distance, speed, coefficients of friction and acceleration in reconstructing an accident. The application of the critical documentation acquired from an accident site. Certification in Skid Marks, Time, Distance, Velocity & Speed Formulas, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Accident Reconstruction: Research, Causality and Bodily Injury**, Delta V issues correlated to injury and mortality, side impact crashes and severity of injuries, event data recorder reports correlated to injury, frontal impact kinematics, crash injury metrics with many variables and inquiries related to head restraints. Certification in Research, Causality & Bodily Injury, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Orthopedic Testing: Principles, Clinical Application and Triage**, Integration of orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae. Certification in Basics of Orthopedic Testing, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Orthopedic Testing: Cervical Spine**, Integration of cervical orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae. Certification in Cervical Spine Orthopedic Testing, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Orthopedic Testing: Cervical Spine**, Integration of cervical orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a treatment plan as sequelae. Certification in Cervical Spine Part 2, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Orthopedic Testing: Lumbar Spine**, Integration of lumbar orthopedic testing in the clinical setting to develop a differential diagnosis. Utilizing radiographic and advanced imaging inclusive of MRI and CAT scan findings to verify tissue pathology suspected by orthopedic testing conclusions and developing a

treatment plan as sequelae. Certification in Lumbar Spine, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Orthopedic Testing: Clinical Grand Rounds**, How to integrate orthopedic testing in the clinical setting utilizing both simple and complex patient scenarios. It includes potential stroke, or vertebrobasilar insufficient patients and understanding the nuances in a clinical evaluation with orthopedic testing as a critical part of the evaluation and screening process. How to integrate orthopedic testing in the clinical setting utilizing both simple and complex patient scenarios. It includes potential stroke, or vertebrobasilar insufficient patients and understanding the nuances in a clinical evaluation with orthopedic testing as a critical part of the evaluation and screening process. Certification in Clinical Grand Rounds, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Impairment Rating**, The understanding and utilization of the protocols and parameters of the AMA Guide to the Evaluation of Permanent Impairment 6th Edition. Spine, neurological sequelae, migraine, sexual dysfunction, sleep and arousal disorders, station and gait disorders and consciousness are detailed for impairment rating. Herniated discs, radiculopathy, fracture, dislocation and functional loss are also detailed in relation to impairment ratings Certification in Impairment Rating Spine and Nervous System, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Mild Traumatic Brain Injury/Traumatic Brain Injury/Concussion**, Differentially diagnosing mild traumatic brain injury vs. traumatic brain injury and the clinical and imaging protocols required to conclude an accurate diagnosis for head trauma. Certification in Mild Traumatic Brain Injury/Traumatic Brain Injury/Concussion, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island , NY, 2018

**Interprofessional Hospital Based Spine Care**, Trends in hospital and emergent care in the healthcare delivery system inclusive of policies, hospital staffing and current care paths for mechanical spine issues. Cleveland University – Kansas City, Academy of Chiropractic Post-Doctoral Division, Long Island , NY, 2018

**Stroke Anatomy and Physiology Part 1**, The anatomy and physiology of the brain and how blood perfusion effects brain function. A detailed analysis of the blood supply to the brain and the physiology of ischemia. Certification in Stroke Anatomy and Physiology: Brain Vascular Anatomy, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Stroke Anatomy and Physiology Part 2**, Various types of stroke identifying ischemia, hypoperfusion, infarct and penumbra zones and emboli. Cardiac etiologies and clinical features as precursor to stroke with associated paradoxical emboli and thrombotic etiologies. Historical and co-morbidities that have etiology instroke inclusive of diabetes, coagulopathy, acquired and hereditary deficiencies. Certification in Stroke Anatomy and Physiology: Stroke Types and Blood Flow, Diplomate, Academy of Chiropractic Post-



Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Stroke Principles of Treatment an Overview for the Primary Care Provider** , The goals of treatment with the physiology of the infarct and penumbra zones and the role of immediate triage in the primary care setting. Detailing the complications of stroke and future care in the chiropractic, primary care or manual medicine clinical setting. Certification in Stroke Principles of Treatment an Overview for the Primary Care Provider, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Clinical Evaluation & Protocols for Identifying Stroke Risk**, The neurological history and examination for identifying stroke risks with a focus on supra and infratentorial regions, upper and lower motor lesions, cranial nerve signs, spinal cord pathology, motor and sensory pathology and gait abnormalities. Examining genetic and family histories along with dissection risk factors. Stroke orthopedic testing and clinical guidelines pertaining to triage for the primary care provider. Certification in Clinical Evaluation and Protocols for Identifying Stroke Risk, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Buffalo, NY, 2018

**Medical-Legal-Insurance Documentation**, Accurate and compliant documentation of history and clinical findings inclusive of functional losses, loss of activities of daily living, duties under duress and permanent loss of enjoyment of life. Prognosing static vs. stable care, gaps in care both in the onset and in the middle of passive care with a focus on detailed diagnosing. The integration of chiropractic academia, the court system and the insurance reimbursers' requirements for complete documentation. Certification in Medical-Legal-Insurance Documentation, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island , NY, 2018

**Primary Spine Care - Credentials and Knowledge Base**, The credentials and knowledge based from an academia perspective when cooperatively treating in a collaborative environment inclusive of understanding pathology and mechanical spine issues. Certification in Primary Spine Care, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Primary Spine Care - Spinal Biomechanical Engineering and MRI Spine Interpretation**, Integrating Spinal Biomechanical Engineering and MRI Spine Interpretation into a primary spine care model, inclusive of necessity and acquisition protocols. A comprehensive review the latest evidence in documenting mechanical issues. Certification in Primary Spine Care , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Primary Spine Care - Hospital Administration, Triage, Clinical Requirements and Collaborative Relationships with Medical Specialists**, Understanding hospital and medical specialist's care paths for mechanical spine pathology and integrating the doctor of chiropractic in the hospital and allopathic treatment protocols. Certification in Primary Spine Care , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Primary Spine Care - Contemporary Spine Research and Documentation**, Central nervous system connection and the thalamus, hypothalamus connection in both ascending and descending central pathways with neuro-endocrine implications that have the mechanisms to be a component of Schizophrenia, Dementia and Alzheimer's with a linear relationship to the chiropractic spinal adjustment and chronic pain. Certification in Primary Spine Care , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University- Kansas City, Long Island , NY, 2018

**Triaging the Trauma and Non-Trauma Patients**, Correlating clinical findings and the patient history in determining the correct course of care in triaging the patient utilizing orthopedic and neurological evaluations in the clinical setting. Understanding the parameters for immediate referrals vs. following the continuum of care to determine the necessity for referrals. Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Utilization of Research in the Clinical setting**, Utilizing peer reviewed scientific literature in creating a diagnosis, prognosis and treatment plan for the chronic and acute patient. How to implement and stay current on techniques and technology in healthcare. Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Spinal Trauma Pathology, Triage and Connective Tissue Injuries and Wound Repair**, Triaging the injured and differentially diagnosing both the primary and secondary complaints. Connective tissue injuries and wound repair morphology focusing on the aberrant tissue replacement and permanency prognosis potential. Certification in Diagnostic dilemmas and connective tissue Morphology, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Trauma Pathology, Ligament Anatomy and Injury Research and Spinal Kinematics**, Spinal ligamentous anatomy and research focusing on wound repair, future negative sequelae of abnormal tissue replacement and the resultant aberrant kinematics and spinal biomechanics of the spine. Certification in Ligament anatomy and injury research and spinal kinematics, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Trauma Pathology, Spinal Biomechanics, Central Nervous System and Spinal Disc Nomenclature**, The application of spinal biomechanical engineering models in trauma and the negative sequelae it has on the central nervous system inclusive of the lateral horn, periaqueductal grey matter, thalamus and cortices involvement. Certification in Spinal Biomechanics, Central Nervous System and Spinal Disc Nomenclature, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Trauma Pathology, Biomechanics of Traumatic Disc Bulge and Age Dating Herniated Disc Pathology**, The biomechanics of traumatic disc bulges as sequelae from trauma and the comorbidity of ligamentous pathology. Age-dating spinal disc pathology in accordance with Wolff's Law. Certification in Biomechanics of Traumatic Disc Bulge and Age Dating Herniated Disc Pathology , Diplomate, Academy of

Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Trauma Pathology, Clinical Grand Rounds**, The review of case histories of mechanical spine pathology and biomechanical failures inclusive of case histories, clinical findings and x-ray and advanced imaging studies. Assessing comorbidities in the triage and prognosis of the injured. Certification in Spinal trauma pathology, clinical grand rounds , Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Trauma Pathology, Research Perspectives**, The review of current literature standards in spinal trauma pathology and documentation review of biomechanical failure, ligamentous failure and age-dating disc pathology. Certification in Spinal trauma pathology, Research and documentation Review, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Long Island, NY, 2018

**Spinal Disc and Ligaments Neurology and Pathology**, Normal Morphology and Tissue Damage, Connective tissue morphology, embryology and wound repair as sequelae to trauma. Full components of strain-sprain models and permanency implications with wound repair and osseous aberration with aberrant structural integrity. Certification in Neurology of Ligament Pathology- Normal Morphology and Tissue Damage, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Spinal Disc and Ligaments Neurology and Pathology**, Disc pathology as sequella to trauma; herniation, extrusion, protrusion, sequestration and how the spinal unit as one system creates homeostasis to balance the pathology. Certification in Neurology of Ligament Pathology- Spinal Biomechanics and Disc Pathology, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Spinal Disc and Ligaments Neurology and Pathology**, The peripheral and central innervation of the disc and spinal ligaments of the dorsal root ganglion, spinal thalamic tracts, periaqueductal gray areas innervating the Thalamus and multiple regions of the brain. The efferent neurological distribution to disparate areas of the spine to create homeostasis until tetanus ensues creating osseous changes under the effect of Wolff's Law. Certification in Neurology of Ligament Pathology- Neurological Innervation, Diplomate, Academy of Chiropractic Post-Doctoral Division, Cleveland University – Kansas City, Long Island, NY, 2018

**Academy of Chiropractic - Active Trauma Qualified , 2018**

**Interprofessional Hospital Qualified, 2018**

**Primary Spine Care Qualified, 2018**

**Primary Spine Care Qualified**, This qualification includes graduate chiropractic education in healthy and traumatically altered spinal morphology inclusive of osseous, connective tissue and neurological structure, function and pathology. This certifies you are qualified in assessing predictive models in spinal biomechanics and devising engineering paradigms for treatment plans to maximize spinal homeostasis in an evidenced based conclusion. In addition, this qualification acknowledges your expertise in triaging the injured and coordinating collaborative care from the trauma through conclusion of rehabilitation. Certification in Primary Spine Care Qualified, Diplomate, Cleveland University-Kansas City, College of Chiropractic, Academy of Chiropractic Post-Doctoral Division, Long Island , NY, 2018

**Primary Spine Care 2: Spinal Trauma Pathology**, Morphology of healthy and traumatized connective tissue and the permanency implication of adhesions, spinal disc morphology in the healthy and pathological patient as sequella to trauma in relationship to bulges, herniations, protrusions, extrusions and sequestrations. Aberrant spinal biomechanics and negative sequella to trauma. Certification in Primary Spine Care 2, Diplomate, Academy of Chiropractic, Texas Chiropractic College, Setauket, NY, 2018

**Primary Spine Care2: Utilizing Research in Trauma**, The ability of your electronic health records to convey tissue pathology while documenting case studies, field experiments, randomized trials and systematic literature reviews, Introducing evidence based macros in documentation to support the literature and necessity of care. Certification in Primary Spine Care 2, Diplomate, Academy of Chiropractic, Texas Chiropractic College, Setauket, NY, 2018

**Primary Spine Care 2: Chiropractic Evidence**, Analyzing segmental pathology, adjusting vs. mobilization with cervicogenic headaches, Opioid alternatives and case management of mechanical spine pain based upon outcome studies. Certification in Primary Spine Care 2, Diplomate, Academy of Chiropractic, Texas Chiropractic College, Setauket, NY, 2018

**Primary Spine Care 2: Chiropractic Spinal Adjustment Central Nervous System Processing**, Literature reviews of mechanoreceptor, proprioceptor and nociceptor stimulation of later horn gray matter with periaqueductal stimulation affecting the thalamus and cortical regions with efferent distribution in disparate regions of the body in both pain and systemic stimulation. Certification in Primary Spine Care 2, Diplomate, Academy of Chiropractic, Texas Chiropractic College, Setauket, NY, 2018

**Connective Tissue Spinal Disc Permanent Pathology**, Herniated, bulged, protruded and extruded discs, etiology and morphology. Age-dating disc pathology inclusive of Modic changes, piezoelectric effect, Wolff's Law and radicular clinical presentation. Certification in Primary Spine Care 3, Diplomate, Academy of Chiropractic Post-Doctoral Division, Primary Spine Care 3 - The Neurology of Chiropractic Care and Ligament Pathology from Trauma, Texas Chiropractic College, Long Island, NY, 2018

**Bio-Neuro-Mechanical Lesions and Spine Care**, Mechanoreceptor, proprioceptor, nociceptor innervation and control of the spinal system with central nervous system action and interaction. The integration of the pain processing network and the HPA Axis (hypothalamus, adrenal and pituitary) with the chiropractic spinal adjustment. Certification in Primary Spine Care 3, Diplomate, Academy of Chiropractic Post-Doctoral Division, Primary Spine Care 3 - The Neurology of Chiropractic Care and Ligament Pathology from Trauma, Texas Chiropractic College, Long Island, NY, 2018

**Connective Tissue Pathology and Research**, Utilization in spinal models considering the opioid abuse and various spinal models in contemporary health care. Care paths for mechanical spine pain and the evidence for conservative chiropractic care. Certification in Primary Spine Care 3, Diplomate, Academy of Chiropractic Post-Doctoral Division, Primary Spine Care 3 - The Neurology of Chiropractic Care and Ligament Pathology from Trauma, Texas Chiropractic College, Long Island, NY, 2018

**Ethics, Documentation and Research**, Maintaining ethical Interprofessional relationships based upon an evidenced based practice inclusive of triage, diagnostics and reporting. Creating thorough documentation that reflects your complete findings encompassing descriptive ICD-10 codes and concludes the presence or absence of pathology. Certification in Primary Spine Care 3, Diplomate, Academy of Chiropractic Post-Doctoral Division, Primary Spine Care 3 - The Neurology of Chiropractic Care and Ligament Pathology from Trauma, Texas Chiropractic College, Long Island, NY, 2018

**TMJD**, Skills taught to treat patients with TMJD. Certification in TMJD, Vidan Ventures, Vidan Ventures, Chicago, Illinois, 2015

**SHINE-Special Help Integrating Neurological Experience**, Indepth study of combining the knowledge and expertise of Dr. Ned Hallowell, MD and the results of chiropractic care to give increased productivity to individuals with ADD/ADHD. Certification in ADD/ADHD, Diplomate, Chiropractic Leadership Alliance, CLA- Chiropractic Leadership Alliance, CLA, N. Billerica, Massachusetts, 2008

**Certified Chiropractic Wellness Practitioner**, Extensive instruction in a scientifically relevant, clinically practical format, addressing advanced aspects of wellness and optimal health in the context of the chiropractic paradigm. Certification in Certified Chiropractic Wellness Practitioner ID#CWS2547, Diplomate, International Chiropractic Association of Science, International Chiropractic Association of Science, International Chiropractic Association of Science, Falls Church, Virginia, 2006

**Certified Chiropractic Wellness Practitioner - Module 1**, The Scientific & Philosophical Validation of the Chiropractic Wellness Paradigm Certification in Certified Chiropractic Wellness Practitioner, Diplomate, International Chiropractic Association of Science, The Wellness Council, International Chiropractic Association of Science, Falls Church, Virginia, 2006

**Certified Chiropractic Wellness Practitioner - Module 2**, Wellness Nutrition and Natural Health Certification in International Chiropractic Association of Science, Diplomate, International Chiropractic Association of Science, International Chiropractic Association of Science, International Chiropractic Association of Science, Falls Church, Virginia, 2006

**Certified Chiropractic Wellness Practitioner - Module 3**, Wellness based Exercise and Fitness Certification in International Chiropractic Association of Science, Diplomate, International Chiropractic Association of Science, International Chiropractic Association of Science, International Chiropractic Association of Science, Falls Church, Virginia, 2006

**Certified Chiropractic Wellness Practitioner - Module 4, Think Well: The Science, Paradigm, and Clinical Application of Wellness Emotional, Intellectual, and Spiritual Fitness Protocols Certification in International Chiropractic Association of Science, Diplomate, International Chiropractic Association of Science, International Chiropractic Association of Science, International Chiropractic Association of Science, Falls Church, Virginia, 2006**

### **SELECTED MEMBERSHIPS**

Academy of Chiropractic , Active Trauma Qualified, 2018 - Present

Academy of Chiropractic, S, Primary Spine Care Qualified, 2018 - Present

Kiwanis of Sterling Heights High-Noon, member, 2006 - Present

Michigan Association of Chiropractors, member, 2001 - Present

Apostolic Christian Church (Nazarean), member, 1976 - Present

Los Angeles College of Chiropractic Alumni Association, member, 1984 - 2000

Cleveland Chiropractic College Alumni Association, member, 1984 - 2000

### **SELECTED HONORS AND AWARDS**

Top Chiropractor, Detroit Hour Magazine, 2018

Top Chiropractor, Detroit Hour Magazine, 2017

Top Chiropractor, Detroit Hour Magazine, 2016

Top Chiropractor, Detroit Hour Magazine, 2015

Top Chiropractor, Detroit Hour Magazine, 2014

### **SELECTED COMMUNITY SERVICE**

Michigan, Community Wellness Day, Sterling Heights, Michigan, 2011 - 2012

Michigan, Kids Day America host, Sterling Heights, Michigan, 2003 - 2004