

# **Sangwoo Mah, DC, DAAML**

154-19 Northern Blvd, Suite 2F-5

Flushing, NY 11354

Office (718) 746-4919

Fax (718) 746-4920

***NYDiscChiro@protonmail.com***

## **SELECTED OCCUPATIONAL HISTORY**

Doctor of Chiropractic, NY Disc Chiropractic, PC, Flushing, NY, 2022 - Present

Doctor of Chiropractic, Managing Member, Flushing Physical Therapy & Chiropractic, PLLC, Flushing, NY 2021

Doctor of Chiropractic, Managing Member, Northern Physical Therapy, Chiropractic, & Acupuncture, PLLC, Flushing, New York, 2015 – 2021

Doctor of Chiropractic, Northern Rehab & Chiropractic, Flushing, New York, 2007 – 2015

Doctor of Chiropractic, Whitestone Injury & Wellness Center, Whitestone, New York, 2005 – 2007

Doctor of Chiropractic, Tri-Star Comprehensive Pain Clinic, Flushing, New York, 2001 – 2004

Doctor of Chiropractic, Astoria Rehab Medical, Astoria, New York, 2001 – 2001

Doctor of Chiropractic, Holistic Chiropractic, Forest Hills, New York, 2000 – 2001

## **EDUCATION AND LICENSURE**

Doctor of Chiropractic, Licensed in the State of New York, License # X009835-1, 2000 – Present

Doctor of Chiropractic, New York Chiropractic College, Seneca Falls, New York, 2000

Internship, Levittown Health Center, Levittown, New York, 1999 – 2000

National Board of Chiropractic Examiners, Part I, 1999

National Board of Chiropractic Examiners, Part II, 1999

National Board of Chiropractic Examiners, Part III, 1999

National Board of Chiropractic Examiners, Part IV, 2000

National Board of Chiropractic Examiners, Physiotherapy, 2000

Bachelor of Arts in Biological Sciences, Binghamton University, Binghamton, New York, 1996

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

*Spinal Stenosis, a Comprehensive Review of Etiology, Imaging, and Treatment.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, live webinar, February 2022.

*Active Care for Injured Workers: Documentation, Treatment/ Spinal stabilization, Movement Education.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, live webinar, February 2022.

*Performing Impairment Rating in Personal Injury.* Details of performing impairment rating according to the AMA Guides to the Evaluation of Permanent Impairment, 5<sup>th</sup> Edition, for spine, extremities, central and peripheral nervous system, online, Provider Compliance Solutions, December 2021.

*The Hip, Pelvis, and Lumbar Spine: The Bread and Butter of Chiropractic, a review and treatment for the most conditions seen at a chiropractic office.* Live Webinar, Foot Levelers, November 2021.

*National Spinal Decompression Certificate Program, focusing on treatment options, programs and protocols, clinical aspects of decompression, medical outcome studies, manual technique methodology,*

*history of decompression, differences in machines, decompression vs. traction and surgery, spinal decompression for the regulatory community, compliance, billing and coding, liability and decompression.* Life University, Postgraduate Education, Jupiter, FL, November 2021.

*Dynamic Adjusting of the Cervical and Thoracic Spine, a hand-on course on advanced assessment and adjusting technique.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, Levittown, NY, October 2021

*Chiropractic Care of Patients with Chronic Pain Syndromes: Disc Disease - Mastering the Disc in Lower Back Pain.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, live webinar, October 2021

*Evidence Based Management of Low Back Disorders, an overview of assessment and treatment of the McKenzie Technique for the lumbar spine.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, Levittown, NY, September 2021

*Radiology Read-Out Session: MRI of the Shoulder, an overview of the most common pathologies of the shoulder.* Northeast College of Health Sciences, Frank J. Nicchi School of Continuing Education, live-webinar, October 2021

*Practical Method and Analysis of the Vertebral Subluxation, a detailed review of various procedures for assessing the location and nature of the vertebral subluxation.* Fetterman Events Chiropractic Continuing Education, live-webinar, October 2021

*Laser Basics Virtual Seminar with Dr. Kirk Gair, a presentation of assessment and treatment technique for various musculoskeletal conditions using low-level laser.* Northwestern Health Sciences University, live-webinar, October 2021

*Orthopedic Diplomate Program - Mastering the Assessment and Management of Shoulder and Upper Extremity Problems.* Health Sciences Postgraduate Education, University of Bridgeport, Bridgeport, CT November 2019.

*Orthopedic Diplomate Program - Best Practices for Managing Low Back Pain and Lower Extremity Disorders.* Health Sciences Postgraduate Education, University of Bridgeport, Bridgeport, CT, September 2019.

*Quantum Neurology Module I & II: Motor & Sensory Rehab.* Office of Postgraduate Programs, Life University, Atlanta, GA, August 2019.

*New York State Chiropractic Association 2018 Fall Convention.* NYCC Post Graduate Department, New York Chiropractic College, Roslyn, NY, May 2018, September 2018.

*Connective Tissue Pathology, Spinal Biomechanics as Sequela to Trauma, MRI Spine Interpretation, Ordering Protocols & Triaging the Injure, The latest research on the 6 ways to age-date disc herniations and bulges from trauma inclusive of disc pathology nomenclature. MRI ordering protocols, inclusive of Dixon format and fat-suppressed images. The neurology and pathology of connective tissue and the sequela of trauma at the biomechanical level leading to bio-neuro-mechanical failure. Contemporary*

*"evidenced-based building blocks" for triaging and in a collaborative environment.* Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, September 2018

*Spinal Biomechanical Engineering Digitizing, integrating automated mensuration into creating treatment plans and determining maximum medical improvement. A literature-based study of normal vs. abnormal motor until function. Determining ligamentous laxity, alteration of motion segment integrity and pathological stress units and whole person impairments based upon the literature and academic standards.* Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, September 2018

*Science of the Chiropractic Spinal Adjustment and Vertebral Subluxation, the literature-based definitions of both the mechanisms the chiropractic adjustment and how it affects the central nervous system in pain pathways and systemic issues that is the arbiter for normal vs. abnormal function. The "physiological mechanisms" of how the chiropractic spinal adjustment affects the peripheral and central nervous systems. Subluxation degeneration/Wolff's Law will be detailed from a literature perspective combined with the mechanism of subluxation (bio-neuro-mechanical lesion). A literature perspective why "long-term" chiropractic care is clinically indicated as usual and customary to effectuate demonstrable biomechanical changes in the spine.* Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, September 2018

*Documentation, Collaboration, and Primary Spine Care, An academic basis for documentation that is usual and customary across professions in collaborative care. Maintaining ethical medical-legal relationships based upon Voir Dire and Daubert standards with ensuring a "4-corners" inclusive report. Ensuring Primary Care Status based upon academic standards.* Cleveland University Kansas City, Chiropractic and Health Sciences, Academy of Chiropractic Post-Doctoral Division, Long Island, NY, September 2018

*Extremity Influences: Low Back/Pelvis/Hip/Knee.* Life University and International Chiropractic Association, Milford, CT, August 2018.

*Clinical Examination & Treatment of Muscle Dysfunction plus Recordkeeping, Coding & Compliance.* NYCC Post Graduate Department, New York Chiropractic College, Plainview, NY, May 2018

*Scar Tissue and Rehabilitation, TTAPS Part II.* Texas Chiropractic Association, Hartford, CT, January 2018

*Primary Spine Care Symposium - Interprofessional Spine Care, Clinical analysis of anatomic versus biomechanical spine pain and clinical triage protocols. Relating current research trends in the Whole Spine Model of patient including normal versus abnormal sagittal curvature in the adolescent and adult spine, pelvic incidence as a parameter for sagittal balance in the human spine and current methods of assessment. Patient centered approach to Evidenced Based Spine care with a focus on diagnosis, prognosis and triage of the spine pain patient,* Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, September 2017

*Primary Spine Care Symposium - Epidemiology of Spine Pain, Review of the current Centers for Disease Control data on the frequency of musculoskeletal pain in the United States population with emphasis on pain of spinal origin. CDC guidelines on opioid medication were discussed and correlated to persistent pain syndromes. Research was reviewed showing the importance of managing the spine pain patient*

*properly from the entry point of care with a concentration on maintenance of spinal biomechanics, Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, September 2017*

*Primary Spine Care Symposium - Connective Tissue and Spinal Disc Pathology, the morphology and pathology of connective tissue, inclusive of spinal disc disorders and prognosticating wound repair with permanency implications. Disc bulge, herniation, protrusion and extrusion classifications based upon contemporary literature and how to age-date disc pathology, Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, September 2017*

*Primary Spine Care Symposium - Physiology and Anatomy of Spinal Manual Adjusting, Understanding the role of mechanoreceptors, proprioceptors and nociceptors with facets, ligaments, tendons and muscles in aberrant spinal biomechanics. MRI and imaging studies of decompressing via a chiropractic spinal adjustment of the bio-neuro-mechanical lesion and its effects on the central nervous system both reflexively and supratentorially. Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, September 2017*

*Primary Spine Care Symposium - Medical-Legal Documentation, the contemporary documentation required in a medical-legal environment that is evidenced based and meets the standards of the courts and academia. Utilizing the scientific data to support a diagnosis, prognosis and treatment plan while meeting the admissibility standards based upon a professional's credentials. Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, September 2017*

*Mid Back Pain: Common Concerns and Assessment Protocols. NYCC Post Graduate Department, New York Chiropractic College, Levittown Health Center, Levittown, NY, July 2017.*

*Collision Reconstruction & Biomechanical Engineering, Analyzing the integration of collision reconstruction and spinal biomechanics utilizing a mathematical model. Understanding the model and transference of energy from the bullet car to the target car to the occupant to aberrant spinal biomechanics. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Understanding the mathematical models required to analyze a collision and create coefficients of forces transferred in a collision that effect the automobile and the occupant. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Calculation worksheets in the mathematical models required to analyze a collision and create coefficients of forces transferred in a collision that effect the automobile and the occupant. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, an analysis of vehicle parts and construction design that contribute to the energy translated to the human body and spine inclusive of seatbelts, airbags, bumpers, event data recorders, tires, axles and auto frames, Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, when correlating crash to injury, inspecting the vehicle for evidence of damage to verify causality and extent of malformation of the vehicle beyond that of the outer shell of the vehicle. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Newton's laws of inertia and the determinant calculations required based upon the action of the vehicle and how spinal biomechanics are affected. Analyzing the vehicle and accident site to reconstruct the actions of the car to create a model. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Reconstructing and calculating minimal speed and velocity as injury and damage factors based upon skid marks considering coefficients of friction based upon various road surfaces. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Reconstructing and calculating speed and velocity as injury and damage factors based upon yaw marks considering coefficients of friction based upon various road surfaces. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Coefficients of momentum and calculating plastic vs. elastic deformation. Direction of forces as mathematical determinants of collision and resultant bodily injury forces. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Coefficients of acceleration, negative acceleration and G-forces in collisions that contribute to vehicular and bodily injuries. Analyzing time, speed and weight of bullet and target automobiles to reconstruct the energy of a collision and injury potential. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, the osseous and ligamentous structures that are subject to pathology in bodily injury. The pathological reaction of connective tissue when it exceeds its parapsychological limits and the bio-neuro-mechanical changes the connective tissue undergoes as sequela to trauma. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Energy and momentum coefficients and data utilized as determinants and error ranges in calculations. Considering the stiffness of the vehicle, air bag function and formulation of timing in its release point and injury potential to facial and spinal structures. Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Mathematical worksheet reviewing kinetic and work energy, momentum, acceleration and G-forces in numerically quantifying a collision, the energy created to deform an automobile and the transference of forces creating connective tissue pathology and altered spinal biomechanics, Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017*

*Collision Reconstruction & Biomechanical Engineering, Analyzing sample accidents utilizing all the vehicle, road surface combining standardized calculation variables in reconstructing an accident and the resultant energy considered for connective tissue pathology and resultant aberrant spinal biomechanics.* Academy of Chiropractic Post-Doctoral Division, Texas Chiropractic College, Long Island, NY, June 2017

*Certificate of Specialization: advanced examination and proficiency for spinal ligament injury specialist certification and adherence to the best practices set forth for accurate and complete diagnosis of this condition.* American Spinal Injury & Impairment Consultants, March 2017

*Stroke Anatomy and Physiology: Brain Vascular Anatomy, the anatomy and physiology of the brain and how blood perfusion affects brain function. A detailed analysis of the blood supply to the brain and the physiology of ischemia.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, March 2017

*Stroke Anatomy and Physiology: Stroke Types and Blood Flow, 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 in stroke inclusive of diabetes, coagulopathy, acquired and hereditary deficiencies.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, March 2017

*Stroke Principles of Treatment an Overview for the Primary Care Provider, Stroke type and treatments performed by vascular specialists. 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.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, March 2017

*Clinical Evaluation and 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.* Texas Chiropractic College, ACCME Joint Providership with the State University of New York at Buffalo Jacobs School of Medicine and Biomedical Sciences, Academy of Chiropractic Post-Doctoral Division, Buffalo, NY, March 2017

*Diagnosis and Management of Headaches.* NYCC Post Graduate Department, New York Chiropractic College, Levittown Health Center, Levittown, NY, February 2017.

*Primary Spine Care Symposium- Connective Tissue and Spinal Disc Pathology, the morphology and pathology of connective tissue, inclusive of spinal disc disorders and prognosticating wound repair with permanency implications. Disc bulge, herniation, protrusion and extrusion classifications based upon contemporary literature and how to age-date disc pathology,* Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, January 2017

*Primary Spine Care Symposium – Medical-Legal Documentation, the contemporary documentation required in a medical-legal environment that is evidenced based and meets the standards of the courts and academia. Utilizing the scientific data to support a diagnosis, prognosis and treatment plan while meeting the admissibility standards based upon a professional’s credentials.* Texas Chiropractic College Post-Doctoral Division, Academy of Chiropractic Post-Doctoral Division, Melville, NY, January 2017

*Common Medicine Your Patients Are Taking.* NYCC Post Graduate Department, New York Chiropractic College, Levittown Health Center, Levittown, NY, November 2016.

*Dizziness, Vertigo, & Balance Problems in the Chiropractic Patient.* New York Chiropractic College Department of Postgraduate and Continuing Education, Levittown, NY, October 2016

*Magnetic Resonance Imaging: Past, Present, & Future.* New York State Chiropractic Association 2016 Fall Convention, Hauppauge, NY, October 2016

*Translating Research into Practice: Essentials of Evidence-Based Clinical Practice.* New York State Chiropractic Association 2016 Fall Convention, Hauppauge, NY, October 2016

*Diagnosis & Evaluation of Concussion.* New York State Chiropractic Association 2016 Fall Convention, Hauppauge, NY, October 2016

*Chiropractic Care of Temporomandibular Joint.* New York State Chiropractic Association 2016 Fall Convention, Hauppauge, NY, October 2016

*Diagnosis and Practical Application of Biopsychosocial Factors in Managing Back pain.* New York State Chiropractic Association Spring Convention, Uncasville, CT March 2016

*Musculoskeletal Nutrition: Proven Protocols for Clinical Success.* New York State Chiropractic Association 2016 Spring Convention, Uncasville, CT March 2016

*Evidence-Based Practice in the Modern Healthcare Landscape.* New York State Chiropractic Association 2016 Spring Convention, Uncasville, CT, March 2016

*Clinical Utilization and Decision Making Using Electrodiagnosis in the Chiropractic Practice.* New York State Chiropractic Association 2016 Spring Convention, Uncasville, CT March 2016

*Primary Spine Care with Interdisciplinary Collaborative Care, Triage of patients based upon MRI finding of disc herniation, disc bulge, protrusion, extrusion or sequestrations and spinal cord or nerve root negative sequelae, clinical findings of neuro-compressive pathologies and neurodiagnostic findings of EMG-NCV, SSEP, VEP, BAER, VEP and V-ENG findings.* Recognized by the PAVE Program of the Federation of Chiropractic Licensing Boards, Texas Chiropractic College, New York State Department of Education Board for Chiropractic, Academy of Chiropractic, Islandia, NY 2015

*Primary Spine Care, Neurophysiological central and peripheral nervous systems mechanisms of pain with integrated higher cortex functions of thalamus, cingulate, amygdala, pre-frontal, motor and sensory cortexes, trauma and chronic pain care effecting mechanoreceptors, nociceptors and proprioceptors through adjustive therapy based upon evidence based care and current literature verification.* Recognized by the PAVE Program of the Federation of Chiropractic Licensing Boards,

Texas Chiropractic College, New York State Department of Education Board for Chiropractic, Academy of Chiropractic, Islandia, NY 2015

*Pragmatic MRI of the Spine and the Extremities: Imaging* New York Chiropractic College, Post-Grad Department, Levittown, NY 2015.

*Practicing in New York: How to Maintain Compliance with Legal Issues Confronting Chiropractors.* New York Chiropractic College, Post-Grad Department, Flushing, NY 2015.

*MRI History & Physics, 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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*MRI Clinical Application, The clinical application of the results of space occupying lesions. Disc and tumor pathologies and the clinical indications of manual and adjective therapies in the patient with spinal nerve root and spinal cord insult as sequelae.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, NY 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014



*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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-Electronystagmography (V-ENG) interpretation, protocols and clinical indications for the trauma patient.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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 kinesio pathology, myopathology, neuropathology, and pathophysiology in both a functional and structural paradigm.* Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*Spinal Biomechanical Engineering: Cartesian System, The Cartesian Coordinate System from the history to the application in the human body. Explanation of the x, y, and z axis in both translation and rotations (thetas) and how they are applicable to human biomechanics.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences, Academy of Chiropractic Post Doctoral Division, Long Island, NY 2014

*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.* ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*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. ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014*

*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. ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014*

*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. ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014*

*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. ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014*

*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. ACCME Joint Sponsorship with the State University of New York at Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014*

*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. ACCME Joint Sponsorship with the State University of New York at*

Buffalo, School of Medicine and Biomedical Sciences and Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*Accident Reconstruction: Causality, Bodily Injury, Negative Acceleration Forces, Crumple Zones and 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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*Impairment Rating Certification, 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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*Head Trauma, Brain Injury and Concussion, Brain and head physiology, brain mapping and pathology as sequelae to trauma. Traumatic brain injury, mild traumatic brain injury, axonal shearing, diffuse axonal injury and concussion are detailed in etiology and clinically. Clinical presentation, advanced diagnostic imaging and electrodiagnostics are detailed in analysis to create a differential diagnosis. Balance disorders that often occur as a result of trauma are also explored from clinical presentation to advanced imaging and differential diagnosis.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*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.* Academy of Chiropractic Post Doctoral Division, Long Island, NY, 2014

*Selective Functional Movement Assessment, Comprehensive movement assessment protocol certification seminar. Main goal is to categorize improper movement patterns of the spine and the extremities to direct manual therapy and therapeutic exercise choices. EBP Partners, LLC, Philadelphia, PA, 2012*

*Kennedy Decompression Technique, Non-surgical spinal decompression certification seminar for disc herniation, spinal stenosis, radiculopathy, and other common cervical and lumbar spine disorders. Johnstown, PA, 2012*

*Mastering the Disc, Seminar on manual treatment of disc herniation with emphasis on McKenzie Technique. New York Chiropractic College, Post-Grad Department, Levittown, NY, 2011*

*Upper & Lower Extremity Adjusting, Seminar on manual manipulation technique of extremity joint dysfunction. New York Chiropractic College, Post-Grad Department, Levittown, NY, 2010*

*Manipulation Under Anesthesia, Certification seminar on basis, procedure, and practice of manipulation under anesthesia. American Academy of Manual and Physical Medicine, Jersey City, NJ, 2009*

*Neuromechanical Solution, Seminar on advanced instrument adjusting and rehabilitation protocols. Jersey City, NJ, 2006*

*Low Level Laser Workshop, Seminar on background, theory, and use of therapeutic low level laser for physical injuries. New York Chiropractic College, Post-Grad Department, Levittown, NY, 2005*

*Rehabilitation for the Chiropractor, Cervical Spine and Upper Extremity, Seminar on rehabilitation of the cervical spine and the upper extremity. New York Chiropractic College, Post-Grad Department, Levittown, NY, 2004*

*Segmental Drop Table Adjusting, Seminar on drop table adjusting technique using the Thompson chiropractic analysis and treatment protocols. Foot Levelers, INC, Philadelphia, PA, 2003*

*Whiplash and Brain Injury Traumatology, Seminar on accident reconstruction, advanced diagnostics and treatment of low speed, rear-impact collision of motor vehicle accident injuries. Spine Research Institute of San Diego, Philadelphia, PA, 2003*

*Precision Adjusting for the Master Chiropractor, Seminar on precision manual adjusting techniques. Manhattan, NY, 2003*

*Rehabilitation of the Spine, Seminar on spinal rehabilitation and postural corrections using patient specific exercise sequences. New York Chiropractic College, Post-Grad Department, Levittown, NY, 2002*

*Activator Methods, Seminar on the Activator Chiropractic Technique analysis and treatment protocol for spinal conditions. Activator Methods, Flushing, NY, 2001*

*Active Release Technique, Seminar on diagnosis and treatment of soft tissue injuries of the upper extremity using advanced and specific manual soft tissue technique. Colorado Springs, CO, 2000*

## **MEMBERSHIPS**

*New York State Chiropractic Association, Member, 2012 – Present*

*American Academy of Medical Legal Professionals, Diplomate, 2014*

*Academy of Chiropractic, Member, 2014 – 2016*

## **PROFESSIONAL PRESENTATION**

*Diagnosing Soft Tissue Injury with Computerized Radiographic Mensuration Analysis, Jamaica, NY June 2016. A Continuing Law Education lectured sponsored by the Queens County Bar Association.*

## **HONORS AND AWARDS**

*Citation, Office of the President, Borough of Brooklyn, City of New York, 2015*

*Certificate of Appreciation, NYPD Korean American Officers Association, INC, 2014*

*Citation for Exemplary Service, New York State Senate, 20th District, 2011*

## **COMMUNITY SERVICE**

*United States Taekwondo Education Foundation – Field Doctor for NY Chapter, Wilbraham, Massachusetts, 2014*

*Korean Christian Broadcasting Network - Monthly Live Clinical Consultation, Flushing, New York, 2014 – 2015*