Whiplash Traumatology: Assessment, Diagnosis and Treatment Expert

In <u>Graul v. Kansal, 2022 ONSC 1958</u>, Justice G.D. Lemon stated that "teaching" the material to other doctors was a key factor in determining expert qualification.

Summary Background and Specific Training Dr. Jason Mazzarella

Dr. Jason Mazzarella, the director of the North American Spine Institute has been actively engaged in Whiplash Traumatology, Treatment and Assessment for the past 19 years. He has developed and lectured on the topics of Whiplash Traumatology and Treatment that were accredited for Chiropractic and Medical continuing education.

Academically, Dr. Mazzarella has reviewed over 25,000 research articles to date on Whiplash Traumatology, Chronic Pain, Crash Forensics, mild Traumatic Brain Injury, has developed and lectured both nationally and internationally on the topics of Whiplash Traumatology and Chronic Pain.

His Whiplash Seminar Series (105 credit hours) was taught in 2008-2010 and is the only program on Whiplash ever to be accredited by both the Chiropractic and Medical community.

Academic Accreditation and Academic Endorsements:









Dr. Mazzarella has developed continuing education programs for the Toronto Police College on Accident Reconstruction, the Ontario Kinesiology Association on Nerve Mobilization, the American Chiropractic Association on Whiplash Traumatology and Treatment and Chronic Pain and has spoken at numerous Chronic Pain symposiums around the world.

In 2021, Dr. Mazzarella developed the second program on Whiplash ever accredited by both the Chiropractic and Medical communities, a Whiplash Seminar Series of 32 credit hours entitled "Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care" is the second program ever worldwide on Whiplash Traumatology. This program is currently accredited for continuing education in 29 countries until the end of 2023.











Most recently towards the end of 2023, Dr. Mazzarella re-accredited the above program on Whiplash entitled "Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care" and added a Research Symposium module. This program is currently accredited for continuing education in 29 countries.





Clinically, Dr. Mazzarella has treated and assessed over 50,000 motor vehicle accident patients and actively runs a Whiplash Traumatology and Chronic Pain treatment center located in Toronto, Ontario Canada. In 2016, Dr. Mazzarella was also asked to review and make recommendations on the Financial Service Commission of Ontario (FSCO) Minor Injury Guideline publication, "Enabling Recovery from Common Traffic Injuries: A Focus On The Injured Person" for a Nationally recognized Ontario Auto

Dr. Mazzarella has also been selected as a preferred treatment and assessment provider by multiple National Auto Insurance Companies in Canada and frequently performs medical legal assessments for both National Auto Insurance Companies and the Plaintiff Bar attorneys in Ontario.

Professionally, Dr. Mazzarella was elected as a board member by the Canadian Institute for the Relief of Pain and Disability, elected as a medical board journal review member by the Journal of Anesthesia & Pain Research, qualified as a Medical Expert in Virginia USA, and has appeared on Rogers TV on Daytime Toronto to discuss Physical Medicine Pain Management.

Dr. Jason Mazzarella has developed and taught the **ONLY Medical, Chiropractic and Physical Therapy accredited program on Whiplash in the World, not once, but twice.**

In 2021, the Whiplash Traumatology, Neurophysiology, Pain, and Treatment Seminar Series: A Multidisciplinary Approach to Care was accredited in 29 countries. As this is the <u>ONLY</u> Whiplash Educational program offered in the world that was accredited by Medical Schools for CME (Continuing Medical Education) and Chiropractic Schools for CCE (Continuing Chiropractic Education) credit, the recommendations made in the program would be considered the "Standard of Care" for whiplash patients being treated or assessed by Doctors, therapists and/or other healthcare providers.

Dr. Mazzarella's 2023 Program is a continuation of this program, with an additional research symposium, and is also accredited in 29 countries!

Documentation Examples of Accreditation:



August 12, 2021

Jason Mazzarella, DC 28 Finch Avenue West, Suite 212 Toronto, Ontario M2N2G7

Dr. Mazzarella,

Your request for accreditation of the "Whiplash Traumatology and Treatment" series which begins March 5, 2022, has been approved by the Michigan State University College of Osteopathic Medicine Office of Continuing Medical Education, for up to 31.75 AMA PRA Category 1 Credit(s)TM.



Continuing Professional Development (CPD) Office

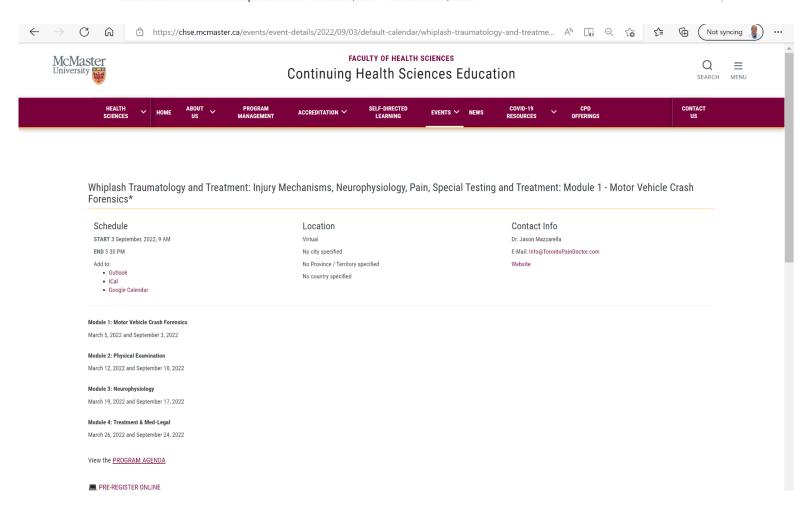
November 17, 2021

Dr. Jason Mazzarella 28 Finch Avenue West, Suite 212 Toronto, Ontario M2N2G7

RE: Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment

Dear Dr. Mazzarella,

We have reviewed the application for the Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment Program to commence as of March 5, 2022. We are pleased to inform you that this program has received endorsement for the period from December 1, 2021 – November 30, 2023.





November 17, 2021

North American Spine Institute 28 Finch Avenue West Suite 212 Toronto, ON M2N2G7

Dear Jason Mazzarella,

To encourage lifelong training of healthcare professionals, Northeast College assists in processing accrediting documentation for continuing postgraduate education instruction through its Frank J. Nicchi School of Continuing Education. Your organization has professional knowledge and skills pertinent to the postgraduate training and continuing professional education, and accordingly contract with Northeast College to process documents associated with your postgraduate instructional offering. Particulars of the agreement are shown on the following pages.

PROGRAM AGREEMENT

Pursuant to the Master Contractual Agreement between Organization and Northeast College of Health Sciences:

| Course Title | Location | Credit Hrs | Start Date | End Date |
|---|----------|------------|------------|-----------|
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 1 | Webinar, | 8 | 3/5/2022 | 3/5/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 2 | Webinar, | 8 | 3/12/2022 | 3/12/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 3 | Webinar, | 8 | 3/19/2022 | 3/19/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 4 | Webinar, | 8 | 3/26/2022 | 3/26/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 1 | Webinar, | 8 | 9/3/2022 | 9/3/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 2 | Webinar, | 8 | 9/10/2022 | 9/10/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 3 | Webinar, | 8 | 9/17/2022 | 9/17/2022 |
| Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment - Module 4 | Webinar, | 8 | 9/24/2022 | 9/24/2022 |



NATIONAL UNIVERSITY OF HEALTH SCIENCES CONTINUING EDUCATION MASTER PROCESSING SERVICES AGREEMENT

THE NATIONAL UNIVERSITY OF HEALTH SCIENCES (the "University" or "NUHS") and

North American Spine Teaching Organization") enter into this Agreement (referred to as "Agreement" or "Contract" herein) with the terms and stipulations set forth below. NUHS and Teaching Organization may be collectively referred to as the "Parties" or individually referred to as a "Party" herein.



Search: Whiplash



Whiplash Traumatology and Treatment: Injury Mechanisms, Neurophysiology, Pain, Special Testing and Treatment

Course Presenter: Jason Mazzarella, DC, DAAPM, DCAPM, DAAETS, FIAMA, MVC-FRA, CATSM, CBIS, CMVT, CPM, CDRSC,...

Read more



Managing the Cervicogenic Patient a Vestibular Neuro-Rehabilitation Approach to better Spinal Care. Management for Whiplash, Dizziness, Chronic Pain and Poor Balance

Dr Carlo Rinaudo is a registered Chiropractor with post-graduate training in Functional Neuro-Rehabilitation (Functional Neurology)....

Read more

Course Outline:

Seminar Topics - Tentative Topics 35 Credit Hours (8 credit hours per module, 3 hours for Module 5)

Module 1: Motor Vehicle Crash Forensics

- What is Crash Forensics
- Types of Collision Vectors / PDOF
 - Roll over
- Rear Impact
 - o Phases of Injury/Sequence of Events
 - o General Crash Times Kinematic response in msec.
 - Reverse S Curve
 - o Neurophysiological consequences
 - o Example Live Crash Testing
 - Common Injury Patterns Assessment and Diagnosis
 - Acceleration Deceleration Injury Patterns
- Front Impact
 - Phases of Injury/Sequence of Events
 - Kinematic Response
- Side Impact
 - Phases of Injury/Sequence of Events
 - o Kinematic Response Near Side Collision
 - o Kinematic Response Far Side Collision
- Special Considerations
 - Elastic vs. Plastic Collisions
 - o Human factors affecting injury outcome
 - o Force loads acting on the spine
- Accident Risk Factors
 - Acute Risk Factors
 - Late/Chronic Risk Factors
- Accident Reconstruction and Injury
 - o ACR it's start in personal injury
 - o General objective of ACR
 - ACR and Injury Analysis
 - ACR and court rulings on injury
- Introduction to Event Data Recorders

Module 2: Physical Examination

- History and Intake
- Relevant Past Medical History
- Physical Examination Muscle
- Physical Examination Neurological
 - Trauma Neurology
 - o Spinal Cord Hypersensitivity after Trauma
 - o Glia Cell Response
 - o Brain fMRI studies and pain
 - Receptive Field enlargement
- Consideration of alterations in Endocrine function
 - $\circ \qquad \text{Hypothalamus controls limbic system and affect on autonomic and endocrine function}.$
 - O Hypothalamus role in regulating neuroendocrine and immune response.
- Physical Examination Vestibular
- Physical Examination Orthopedic
- Types of Referred Pain
 - Neurotome
 - Angiotome
 - Dermatome

- o Myotome
- Sclerotome
- > Viscerotomes
- Whiplash Traumatology Associated Common Syndromes/Disorders
 - o Thoracic Outlet Syndrome
 - Carpal Tunnel Syndrome
 - Headaches
 - Sacroiliac Joint Injury
 - Vestibular Injury
 - o Tinnitus
 - o Traumatic Stress Psychological components of Injury and Pain
 - Memory Acquisition and Storage

Module 3: Neurophysiology

- Concussion Injury Mechanisms
 - Coup Counter Coup Injuries
 - Pressure Gradient Injuries
 - Diffuse Axonal Injuries
 - Closed Head Injuries
- Concussion Sub-Types
 - Mild Traumatic Brain Injury
 - o Blood Brain Barrier Disruption
 - o White Matter Disruption
 - Grey Matter Disruption
 - Head Injury
 - o Post-Concussion Syndrome
 - General Cognitive Processing Ability
 - o Reduced Cerebral Metabolism
- Neuropathy Injury Mechanisms
 - Human Factors Steering Wheel
 - Crash Factors Offset Collision
 - Vehicle Factors Seatbelt and Airbag
- Traumatic Stress
- Pain Pathophysiology
 - Pain Terminology
 - Pain Pathophysiology
 - Pain Generators
 - Pain Fiber Evaluation and Testing
 - Pain Neurotransmitters
 - Pain Response
 - Inflammation
 - Muscle Guarding/Splinting
 - Altered Biomechanics
 - Digital Algometry Testing
 - Nerve Adhesion Testing
 - Biomechanics in Pain Assessment
- Neurophysiological Special Testing
 - Quantitive Electroencephalography (qEEG)
 - Surface Electromyography (sEMG)
 - Electromyography (EMG)
 - Nerve Conduction Velocity (NCV)
 - Motor NCV study
 - Sensory NCV study
 - o AMA Guidelines 6° Edition Impairment

Module 4: Treatment and Medicolegal Concepts

- Vestibular Testing
 - Electronystagmography (ENG)
 - Visual Evoked Potentials (VEP)
 - Somatosensory Evoked Potentials (SEP)
 - Posturography Computerized Testing
 - o AMA Guidelines 6° Edition Impairment

Physical Medicine Treatment Options and Protocol

- Postural Analysis
- Cervical Traction
- Alpha Stimulation
- Photobiomodulation
- Pulsed Radio Frequency
- Neurofeedback
- Biofeedback
- Nutrition
- Spinal Manipulation
- Acupuncture
 - Traditional Chinses Acupuncture
 - C-Fiber / Chronic
 - Auricular Acupuncture
 - o fMRI Studies
 - Whiplash Treatment Options
- Electrical Therapy

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- Laser Therapy
- Exercise
 - Strengthening
 - o Neurokinetic Exercises
 - o Muscle Re-Education
 - Vestibular Exercises
 - o Nerve Mobilization
- Massage Therapy
 - Lymph Drainage
 - Trigger Point Therapy
 - Counter Rotation
- Medical
 - Opioid Usage
 - Pharmaceuticals
 - Injections
 - Trigger Point Injections
 - Nerve Blocks
 - Epidural Steroid Injections (ESI)
 - Botox
 - Radiofrequency Neurotomy (RFN)
 - Surgery
- Complimentary Care Post Rehabilitation
 - o Yoga
 - Pilates
- Consequences of Inadequate or Under Treatment

Additional Special Testing

- Radiographic Examination
 - o Primary Viewsof Consideration
 - Primary Lines of Measurement
 - Standard of Care Davis Series
- Videofluroscopy Examination

- MRI Examination
 - o Diffuse Tensor Imaging (DTI)
 - Magnetic Transfer Imaging (MTI)
 - Magnetic Resonance Spectroscopy (MRS)
 - Magnetic Source Imaging (MSI)
 - Functional MRI (fMRI)
 - o BOLD fMRI (Blood Oxygen Level Dependent fMRI)
 - Contrast-Enhanced MRI
 - PET (Positron Emission Tomography)
 - o Radionuclide Bone Scan
 - SPECT (Single Photon Emission Computed Tomography)
- CT Examination
 - Myelography
- Discography
- Bone Scan
- Thermography
- Regional Cerebral Bloodflow Perfusion Examination
- POCUS US
 - Angiography and Color-Coded Duplex Sonography (CCDS)
 - o Muscular Evaluation

Sample Assessment and Report Writing - MedLegal

- Sample report review
 - Documentation
 - o Intake and Examination Forms
 - Outcome Assessments
 - o Report Writing for Success
 - o Medical Review and Rebuttals
 - Example Rebuttal Reports.
 - What I learned as a Preferred Provider for Allstate.

Module 5: Research Symposium

- Review of the relevant research published every 3 months.
- Recommendations on how to implement this into Whiplash Traumatology Assessment, Diagnosis, Treatment and Patient Care.

Dr. Jason Mazzarella, DC, DAAPM, DCAPM, DAAETS, DqEEG (c), DWTT (D), FIAMA, MVC-FRA, CATSM, CBIS, CMVT, CPM, CDRSC, CDAAC, BSc Kin, BSc HPA

Doctor of Chiropractic

Director North American Spine Institute

Medical Board Member Editor: Journal of Clinical Research in Pain and Anesthesia.

Elected Board Member – Canadian Institute for the Relief of Pain and Disability 2013

International Post Graduate Developer and Educator: Medical Curriculum (CME Accreditation USA and Canada)

- Whiplash Traumatology and Treatment: A Multidisciplinary Approach to Care: 2008-2011
- Crash Forensics, Injury Biomechanics, Occupant Kinematics and the Biopsychosocial Model of Pain
- Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care: 2021 Present

International Post Graduate Developer and Educator: Chiropractic Curriculum (CCE Accreditation USA, Canada and Europe)

- Whiplash Traumatology and Treatment: A Multidisciplinary Approach to Care: 2008-2011
- Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care: 2021 Present
- Whiplash Injury: Guidelines and Rebuttal/IME Report Writing
- Chiropractic Treatment of Whiplash:

International Post Graduate Developer and Educator: Physical Therapy and Massage Therapy Curriculum (Accreditation USA)

 Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care: 2021 – Present

Graduate Certification Developer and Lecturer Accident Reconstruction

• Occupant Kinematics, Injury Biomechanics and Crash Forensics

Diplomate American Academy of Pain Management 2011 and 2016

Diplomate Canadian Academy of Pain Management 2011

Diplomate American Academy of Experts in Traumatic Stress 2010

Diplomate Quantitative Electroencephalogram -qEEG (C) 2021

Diplomate Whiplash Traumatology and Treatment (D) 2022

Fellowship International Academy of Medical Acupuncture 2006

Registered Acupuncturist CTCMPAO 2014

Certification Motor Vehicle Trauma 2011

Certification Pain Management 2010

Certification Acute Traumatic Stress Management 2011

Certification Motor Vehicle Crash – Forensics Risk Analysis 2006

Certification Brain Injury 2009

Certificate Whiplash and Brain Traumatology 2005

Advanced Certificate of Competency Whiplash and Brain Traumatology 2011

NBCE Certified Physiotherapy Competency 2005

BSc. Kinesiology Movement Science 2001

BSc. Health Policy and Administration 2001

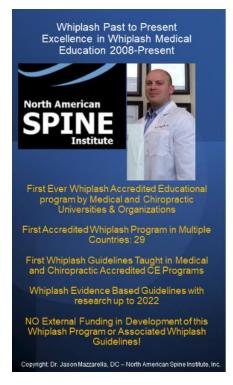
Crash Data Retrieval System Operators (Technician) Certification 2012

Crash Data Analysis and Application Certification 2013

Certification Accident Investigation 2011

Certification Accident Investigation and Reconstruction Level 2 2012

Certification Accident Investigation and Reconstruction Level 3 2013



- Whiplash Education and Training for Healthcare Professionals:
- Academic Accreditation and/or Endorsement partners for both Whiplash Programs shown below
- · Dr. Jason Mazzarella, DC
 - Whiplash Traumatology & Treatment: A Multidisciplinary Approach to Care.
 - 108 Medical, Chiropractic and AAFP Continuing Education Credit Hours
 - Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach to Care.
 - 32 Medical, Chiropractic, Physical Therapy, and Massage therapy Continuing Education Credit Hours

















Continuing Medical Education