

Reaction Time Analysis Testing:

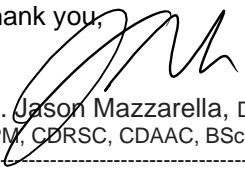


Computerized Reaction time analysis testing uses specialized equipment which requires the examinee to execute a series of planned and unplanned movements. These movements are then recorded and can be used to evaluate the examinee's range of motion, strength, coordination, movement patterns, short term memory, movement recall, coordination, speed, and proprioception as well as brain lobe function. Reaction time is defined as the time interval between a visual stimulus presentation and the initiation of a movement action. With repetition of a motion, a person's conscious effort is decreased, and the motion becomes more and more automatic. [1] We can use this understanding to assess the examinee's overall mental and cognitive functional ability, as the effort is not yet learned, and thus dependent on the overall brain function listed in the text of this report.

1. Marsden CD, Obeso JA. The functions of the basal ganglia and the paradox of stereotaxic surgery in Parkinson's disease. *Brain* 1994;117:877-97
2. The Effect of Concussion on Reaction Time and Dual Tasking Ability in a Simulated Driving Environment: Some Preliminary Results. *International Society of Biomechanics in Sports*. July 2016 Conference.
3. Scorza, K., Raleigh, M., & O'Connor, F. (2012). Current concepts in concussion: Evaluation and management. *American Family Physician*, 85(2), 123-132. Retrieved from <http://www.aafp.org/afp/2012/0115/p123.pdf>
4. E-Book (Netter Clinical Science) (Kindle Locations 8686-8688). Elsevier Health Sciences. Kindle Edition.
5. American Medical Association, American Medical Association. *Guides to the Evaluation of Permanent Impairment*, sixth edition. American Medical Association. Kindle Edition.
6. Mazzearella, Jason (2021-Present) *Whiplash Traumatology, Neurophysiology, Pain and Treatment Seminar Series: A Multidisciplinary Approach To Care*. Toronto Canada.

Please feel free to contact this office with any questions.

Thank you,


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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

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 - 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

