

# TBI/Concussion

Association of Visual Tracking Metrics With Post-concussion Symptomatology

Maruta J, et al. *Frontiers*. 2018

Disrupted White Matter Microstructure of the Cerebellar Peduncles in Scholastic Athletes after Concussion Mallott JM, et al. *Frontiers*. 2019

Measuring Orientation: A New Approach to Concussion Screening and Treatment

Ghajar J. *Practical Neurology*. 2017

Frequency Responses to Visual Tracking Stimuli May Be Affected by Concussion.

Maruta J, et al. *Military Medicine*. 2017

Clinical Evaluation of Concussion: the evolving role of oculomotor assessments

Sussman E, et al. *Journal of Neurosurgery*. 2016

Filling in the gaps: Anticipatory control of eye movements in chronic mild traumatic brain injury. Dewakar, et al. *Neuroimage Clinical*. 2015

Ocular disconjugacy cannot be measured without establishing a solid spatial reference.

Maurta J. *F1000Research*. 2015

Concussion Guidelines Step 1: Systematic Review of Prevalent Indicators

Carney N, et al. *Neurosurgery*. 2014

Detecting Eye Movement Abnormalities from Concussion

Maruta J, Ghajar J. *Progress in Neurological Surgery*. 2014

Predictive visual tracking: Specificity in mild traumatic brain injury and sleep-deprivation

Maruta J, et al. *Military Medicine*. 2014

Cognitive processes involved in smooth pursuit eye movements: behavioral evidence, neural substrate and clinical correlation

Fukushima K, et al. *Frontiers in Systems Neuroscience*. 2013

EYE-TRAC: monitoring attention and utility for mTBI

Maruta J, et al. *Proceedings of SPIE*. 2012

Effect of Cognitive Load on Eye-Target Synchronization During Smooth Pursuit Eye Movement Contreras R, et al. *Brain Research*. 2011

Visual Tracking Synchronization as a Metric for Concussion Screening

Maruta J, et al. *The Journal of Head Trauma Rehabilitation*. 2010

### A Unified Science of Concussion

Maruta J, et al. *Annals of the New York Academy of Sciences*. 2010

### The Predictive Brain State: Timing Deficiency in Traumatic Brain Injury?

Ghajar J, Ivry R. *Neurorehabilitation and Neural Repair*. 2008

### Eye-target synchronization in mild traumatic brain-injured patients

Contreras R, et al. *Journal of Biological Physics*. 2008

### The Cognitive and Neurobiological Research Consortium: Deficits in Predictive Smooth Pursuit after Mild Traumatic Brain Injury

Suh M, et al. *Neuroscience Letters*. 2006

### Increased Oculomotor Deficits During Target Blanking as an Indicator of Mild Traumatic Brain Injury

Suh M, et al. *Neuroscience Letters*. 2006

## **Attention/ADHD**

### Possible Medication-Resistant Deficits in Adult ADHD

Maruta J, et al. *Journal of Attention Disorders*. 2014

### The Predictive Brain State: Asynchrony in Disorders of Attention

Ghajar J, Ivry R. *The Neuroscientist*. 2009

### The Predictive Brain State: Timing Deficiency in Traumatic Brain Injury?

Ghajar J, Ivry R. *Neurorehabilitation and Neural Repair*. 2008

### The Allocation of Attention During Smooth Pursuit Eye Movements

Donkelaar P, et al. *Progress in Brain Research*. 2002

### Visual and Cognitive Control of Attention in Smooth Pursuit

Chen Y, et al. *Progress in Brain Research*. 2002

## **Sleep Deprivation**

### Degradation of Binocular Coordination during Sleep Deprivation.

Tong J, et al. *Frontiers*. 2016

### Predictive visual tracking: Specificity in mild traumatic brain injury and sleep-deprivation

Maruta J, et al. *Military Medicine*. 2014

### Adaptation of visual tracking synchronization after one night of sleep deprivation

Tong J, et al. *Experimental Brain Research*. 2014

Attention and Visual Tracking Degradation During Acute Sleep Deprivation in a Military Sample Heaton KJ, et al. *Aviation, Space, and Environmental Medicine*. 2014

## Aging

Visual Tracking in Development and Aging Maruta J, et al. *Frontiers*. 2017

Cognitive processes involved in smooth pursuit eye movements: behavioral evidence, neural substrate and clinical correlation

Fukushima K, et al. *Frontiers in Systems Neuroscience*. 2013

## Eye Tracking

Visuomotor Synchronization: Military Normative Performance

Maruta J, et al. *Military Medicine*. 2021

Reliable Sideline Ocular-motor Assessment Following Exercise in Healthy Student-athletes Sundaram V, et al. *J Sci Med Sport*. 2019

Dynamic Visuo-motor Synchronization: Quantification of Predictive Timing

Maruta J, et al. *Behavior Research Methods*. 2013

Cognitive processes involved in smooth pursuit eye movements: behavioral evidence, neural substrate and clinical correlation

Fukushima K, et al. *Frontiers in Systems Neuroscience*. 2013

Individual Differences in Working Memory Capacity Determine the Effects of Oculomotor Task Load on Concurrent Word Recall Performance

Lee EJ, et al. *Brain Research*. 2011

Quantitative Synchronization Model for Smooth Pursuit Target Tracking

Voss HU, et al. *Biological Cybernetics*. 2007

The Control of Voluntary Eye Movements: New Perspectives

Krauzlis R J. *The Neuroscientist : A Review Journal Bringing Neurobiology, Neurology and Psychiatry*. 2005

The Allocation of Attention During Smooth Pursuit Eye Movements

Donkelaar P, et al. *Progress in Brain Research*. 2002

Visual and Cognitive Control of Attention in Smooth Pursuit

Chen Y, et al. *Progress in Brain Research*. 2002