CHRP INTERNATIONAL presents

A Conference on Traumatic Brain Injury and
Post Traumatic Stress Disorder

21-22 October 2016
University of Prince Edward Island
Bill and Denise Andrew Hall, Room 142
Brain Issues: TBI and PTSD
Methods of Identification and Rehabilitation

Friday Oct 21 2016
Itinerary

8:00 - 8:30 Registration

8:30-9:30 “Osteopathic Treatment and Assessment of Traumatic Brain Injuries”: Dr. Laura MacKinnon

9:30-9:45 Break

9:45-10:45 “NeuroMovement®: Transforming Clinical Outcomes”: Lorrie Jollimore Certified Anat Baniel Method (ABM) Practitioner

10:45-11:45 “VOD and PTVS and the relation to TBI”: Shannon Estabrooks

11:45-1:00 Lunch on your own

1:00-2:00 Keynote - “Management of PTSD and TBI”: Dr. Neil McLure

2:00-3:00 “Why balance is an important consideration in TBI”: Dr. Rebecca Reed-Jones

3:00-3:15 Break

3:15-4:15 “Rhythmic Auditory Feedback”: Dr. Andrew Godbout

4:15-5:15 “Developing innovative tools for the diagnosis and treatment of TBI-related challenges”: Chris Vessey
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Saturday Oct 22 2016
Itinerary

8:15–8:30  Announcements
8:30–9:00  “A Survivor’s Story”: Tom/Gineen Nicholls
9:00–10:00 Active Management of TBI: Dr. Linda Ferguson
10:00–11:00 The Ambient Visual Process and TBI: VMSS and PTVS:
Drs. Burbine, Dobson and Rusk.
11:00–11:15 Break
11:15–12:15 The Ambient Visual Process and TBI (continued)
12:30–1:30 Lunch on your own.
1:30–4:30 Workshop: Neuro-Optometric Rehabilitation of TBI
including VMSS and PTVS
Dr. Murray Rusk (FCOVD), Stacy McFadden (OT)
Dr. Wm. Neil McLure

Psy.D., C.Psych
Clinical Psychology & Neuropsychology

Keynote Address: Management of PTSD and TBI

Dr. Wm. Neil McLure is a Neuropsychologist and Clinical Psychologist working in private practice in Summerside, PE. He was educated at the Harvard University Medical School, American School of Professional Psychology, Pacific Institute of Behavioural Medicine, Forest Institute, Oklahoma State University, Saint Francis Xavier University and Mount Allison University. Dr. McLure's Areas of clinical practice include Neuropsychology, Acquired Brain Injury (Traumatic Brain Injury), Concussion (Post Concussive Syndrome), PTSD (Post Traumatic Stress Disorder), ADHD (Attention Deficit/Hyperactivity Disorder) and Learning Disability.

Dr. McLure has been a Neuropsychology Consultant with the Quebec Major Junior Hockey League for several years. He has consulted with the Canadian Broadcasting Corporation (specifically, CBC Radio) concerning Learning Disabilities, Neuropsychology, and Psychoeducational Assessments. Dr. McLure has been awarded the Certificate of Professional Qualification in Psychology by the Association of State and Provincial Psychology Boards. He has also been awarded the Elizabeth Fox Percival Professional Award by the Psychological Association of Prince Edward Island.

Dr. McLure has enjoyed coaching minor hockey, baseball and basketball for the past 17 years.

Dr. Linda Ferguson

BSc (Honours), Dip Sport Med Sci (St. Andrews), MD Dip Sport Med(Canada), CCFP, FCFP

Active Management of Concussion

Dr. Linda Ferguson's medical training includes an Honours BSc in Neuropsychiology, an MD from University of Glasgow (a world leading university for head injury research) where she was trained by the neurosurgeons who devised the Glasgow Coma Scale, a two year ophthalmology residency, and twenty-five years’ experience in emergency and sports medicine.

She has acted as a team physician for local school and university sports and has cared for athletes at provincial, national and international levels including Olympic and Paralympic levels. She served as a Canadian Team physician for the Canada Games, Commonwealth Games, Torino, Beijing, Vancouver and Sochi Games.

To further her education regarding the management of concussions, Dr. Ferguson attended the University Of Pittsburgh Concussion Center to train with Dr. Michael Collin’s team. She became a Certified ImPACT Consultant and brought back novel, evidence based treatment protocols for optimal concussion management. She built a team of oculovestibular therapists, neuro-optometrists, neuropsychologists, neurologists, kinesiologists and team trainers. The clinic sees referrals from physicians, WCB and insurance case workers.

She has met with the Nova Scotia Department of Education to devise a standardized return to school plan for students with concussion and has presented numerous education sessions for principals, teachers and university professors, athletes, coaches and parents.
This is a very exciting, dynamic field in medicine. Dr. Ferguson is happy to share some of the latest concussion management strategies.

Dr. Rebecca Reed-Jones

PhD (Guelph)

Why balance is an important consideration for the assessment and management of traumatic brain injuries

Dr. Reed-Jones is a biomechanist specializing in the control of gait and posture. She received her PhD from the University of Guelph in Ontario in 2009. In 2010, she became an assistant professor with the Department of Kinesiology with a cross appointment to the Doctor of Physical Therapy program at the University of Texas at El Paso. While there, she began collaborative work in concussion management, and applied her knowledge of gait and posture to the assessment and management of concussion injuries. Dr. Reed-Jones joined the University of Prince Edward Island in the Department of Applied Human Sciences in September 2013 where she is continuing her work in concussion assessment and management as well as other neurological disorders.

Dr. Andrew Godbout

PhD (Calgary)

Rhythmic Auditory Feedback:
Synchronizing rhythmic movements and sound feedback

Andrew received his PhD in Computer Science from the University of Calgary in 2016 and is currently an Assistant Professor at the University of Prince Edward Island in the School of Mathematical and Computational Sciences. Andrew is interested in using computers to improve people’s movements. His original motivation was a greedy investigation into how to use computers to aid his own speed skating technique when he was a member of Canada’s national speed skating team. Andrew is interested in analyzing input from wearable sensors and cameras and implementing real-time feedback that a user can interact with. Recently, he is investigating how to sense the rhythm of a movement and communicate that back to users in the form of an auditory rhythm.
Laura McKinnon
Osteopath (Collège D'Etude Ostéopathique, Halifax), Registered Massage Therapist

Osteopathic Treatment and Assessment of TBI

Laura completed a seven year osteopathic program at the Collège D'Etude Ostéopathique in Halifax. She was the recipient of the Andrew Taylor Still, D.O. Award for her thesis comparing osteopathic principles and neuroplastic principles in relation to pain and movement. She is the owner of McKinnon Health, a multidisciplinary clinic in Charlottetown offering Osteopathy, Massage Therapy, and ABM (Anat Baniel Method).

Osteopaths are concerned with restoring proper biomechanics to allow for unobstructed nerve conduction and movement of fluids throughout the body.

Neuroplastic research has found that movement, experience, and thought rewire the brain. Movement patterns are continuously reorganizing brain maps by peripheral afferent information. Adaptive neuroplasticity occurs with balanced, coordinated movement; and maladaptive neuroplasticity is associated with uncoordinated movement. Coordinated movement is the balance between agonistic and antagonistic muscle contraction. Restoring coordinated movement in the body has been shown to improve the functional connectivity of the brain. Functional connectivity of the brain relates to the correlation of activities between different brain regions.

Osteopaths assess the interconnectedness of the body, how the communication between structures dictates how the body as a functional unit will express itself. This is assessed throughout the body including the brain. The four principles of osteopathy, tensegrity, and neuroplastic discoveries will be discussed in relationship to osteopathic assessment and treatment of traumatic brain injuries.

Lorrie Jollimore
Certified Anat Baniel Method® Practitioner
Certified ABM® for Children Practitioner

NeuroMovement®: Transforming Clinical Outcomes

In the Anat Baniel Method (ABM) the brain is understood to be a large, non-linear, self-organizing dynamic information system that, in turn, organizes the person as a whole – physically, emotionally, cognitively and socially. Movement is seen as "the language of the brain" and the non-separation of mind and body are central to this approach.

Scientific research is demonstrating the ability and propensity of the brain to change at any age and that positive brain change can reverse loss of function.

This method offers a scientifically based clinical NeuroMovement approach for recovery of function, which is a true paradigm shift. The method takes advantage of the remarkable capacities of the brain to change itself, offering concrete and practical ways to wake up the brain and drive positive changes, changing the trajectory of progress in ways that defy traditional expectations.
Shannon Estabrooks
Physiotherapist

Vestibular-ocular therapy following concussion: A physiotherapy perspective

Shannon will provide a review of the vestibular system and equilibrium, introduce types of vestibular-ocular conditions associated with concussion, describe the signs and symptoms of patients with vestibular-ocular dysfunction and PTVS, and provide an introduction into physiotherapy evaluation techniques and treatment options, including NVPT.

Chris Vessey, B.Sc.

Computer Scientist

School of Mathematical and Computational Sciences, University of Prince Edward Island

Developing innovative tools for the diagnosis and treatment of TBI-related challenges

Chris Vessey is an award-winning instructor in Computer Science at the University of Prince Edward Island School of Mathematical and Computational Sciences. His area of focus is in software-defined hardware systems and ubiquitous computing via embedded systems, an emerging area which is witnessing the development of computational technologies in novel applications and situations.

In this talk, he will outline some technologies that have moved to the forefront of the Maker Movement, where innovative hardware development platforms are enabling people to create new technologies rapidly and at significantly lower cost. He will specifically address issues relating to the measurement of minute postural changes for TBI patients in response to stimuli, with a hope of providing more information on how TBI has affected the patient with respect to responses of neurotypical baseline data, leading to tools to aid in the diagnosis, treatment and monitoring of TBI-affected patients.

Group Topic Presentation: Brain Issues and the Ambient Visual Process

Dr. Sue Burbine
Optometry (UW 1997)
Private Practitioner in St. Stephen, NB

Dr. Sue Burbine was first introduced to Neuro-Optometry in 2011 when she attended lectures by Dr. Padula, optometrist, on Post Trauma Vision Syndrome (PTVS) and Visual Midline Shift Syndrome (VMSS). Since then, she has been busy attending courses, close to home and across North America,
to learn from the many great minds knowledgeable about Neuro-Optometry and Neuro Visual Postural Rehabilitation.

In 2013, Dr. Sue opened a Vision Development and Rehabilitation Clinic in her primary care practice where she, and a full time assistant, is seeing patients for diagnosis and treatment of functional visual deficits, including PTVS, VMSS and other forms of visual processing dysfunctions; treatment is a team of people and disciplines that are needed to help patients on their journey to wellness.

Dr. Angela Dobson
Rehabilitation and Developmental Optometry
Private Practitioner in Halifax, NS

Dr. Angela Dobson is a rehabilitation and developmental optometrist, who specializes in assessing and treating the visual process. In her clinic Vision Sense she offers new visual treatments for people with concussions, whiplash, traumatic and acquired brain injuries, people with learning difficulties and binocular vision difficulties, including strabismus and amblyopia. Her treatments include the use of ophthalmic lenses, yoked prism lenses, and visual, perceptive, and neuropostural therapy. She works closely with other health care practitioners to develop a custom and effective treatment plan for each individual.

Angela has been practicing optometry in Nova Scotia for well over 20 years. Several years ago she was introduced to visual development and visual recovery from brain injuries, and she found her passion! She feels fortunate to have realized her dream of opening a specialty vision clinic in Halifax, N.S.
Dr. Murray Rusk, FCVO
Behavioural and Developmental Optometry
Private Practitioner in Charlottetown, PE

Dr. Murray Rusk has been in practice for 40 years. He became a Fellow in the COVD in 1994, and has been a member of the Neuro-Optometric Rehabilitative Association (NORA) since its foundation. He has also been a long-time member of the Syntonic phototherapy association. Murray has been working in the area of behavioural and developmental optometry since the mid-1980s and has interest in research in learning disabilities, special populations and those with brain injury. His latest research will be in the area of autism and NVPT. Future work will be related to the importance of gaze. Founder of CHIRP, Murray works with departments in UPEI as an Adjunct Professor.

Stacy McFadden, O.T. (Dalhousie U. 2000)
Occupational Therapist
Private Practitioner in Moncton, NB

Stacy McFadden graduated from the School of Occupational Therapy at Dalhousie University in 2000. She started her career in community Mental Health working in North Vancouver. She is originally from Moncton, New Brunswick, and returned in 2007 to work at the Moncton Hospital. Stacy worked in different clinical settings before finding her passion of working with children in the outpatients Pediatric Department. In 2012 she started her own private practice, “at play Occupational Therapy”, and continues to grow and focus her practice around school aged children. Stacy has continued her professional development by completing levels 1-3 of the Neuro-Visual Processing Rehabilitation training courses through the Padula Institute of Vision. She has since had the opportunity to work more closely with other professionals, such as Behavioural Optometrists Dr. Murray Rusk, and Dr. Sue Burbine. Stacy’s collaboration with these professionals has resulted in a team-based approach to helping children reach their true potential.

Weekend Workshop in Brain Issues and the Ambient Visual Process

Dr. Rusk and Ms. McFadden are happy to bring information regarding optometric relationships with TBI through workshops this weekend!