# Brain-e-News



**RESOURCES** 

MOSS REHABILTATION RESEARCH INSTITUTE www.mrrl.org

MOSSREHAB RESOURCE NET www.mossresourcenet.org

THE CENTER FOR OUTCOME MEASUREMENT IN BRAIN INJURY www.tblms.org/combl

BRAIN INJURY ASSOCIATION OF AMERICA WWW.BIAUSA.ORG

BRAIN INJURY RESOURCE LINE 1-800-444-6443

BRAIN INJURY ASSOCIATION OF PENNSYLVANIA www.blapa.org 1-866-635-7097

BRAIN INJURY ALLIANCE OF NEW JERSEY www.blanj.org 1-732-745-0200 FAMILY HELPLINE 1-800-669-4323

BRAIN INJURY ASSOCIATION OF DELAWARE www.blausa.org/Delaware/bla.htm 1-800-411-0505

PENNSYLVANIA DEPARTMENT OF HEALTH BRAIN INJURY HELPLINE 1-866-412-4755 TTY 1-877-232-7640

MODEL SYSTEM KNOWLEDGE TRANSLATION CENTER (MSKTC) www.msktc.org

www.Brainline.org

### **Traumatic Brain Injury and Pain**



Pain is an important indicator of injury or disease, as well as a cause of subjective distress. Patients completely unconscious after a severe brain injury may not experience distress, but still may have undiagnosed injuries. Lower parts of the brain respond to painful events with changes in posture, facial expression, blood pressure, etc., even in unconscious patients. "Nociception" refers to these physical responses to painful stimulation, while "pain" refers to the conscious experience.

Nociception and pain are usually assessed by interviewing the patient, which often is not possible after a severe brain injury. An assessment tool based on patient observation has been developed, but scores differ based on the patient's level of consciousness as well as their level of pain. Since assessing

the changing level of consciousness, itself, is challenging, we sought to develop an assessment tool that performs similarly in conscious and unconscious patients but is sensitive to the presence and intensity of pain.

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### **Telerehab Demonstration Project**

MRRI has partnered with the Pennsylvania Department of Health, the Brain Injury Association of Pennsylvania (BIAPA), and other local rehabilitation providers to conduct a pilot demonstration study of remote delivery of cognitive rehabilitation for persons with TBI. Telehealth solutions for cognitive rehabilitation may be more effective and efficient than in-person services alone. Remote treatment-delivery holds the promise of reducing missed appointments, increasing access to services, and allowing therapists to work with clients in their daily home environments. Moreover, the need for remote treatment delivery in healthcare has been brought into stark prominence during the COVID-19 pandemic which has placed limitations and restrictions on traditional in-person visits.

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# EMPOWERMENT and SUPPORT GROUP INFORMATION

Support groups are often a refuge where people who have gone through similar experiences can find a sense of community. During this time of social isolation, many support groups are finding alternative ways to keep members connected. Moss's Brain Injury Empowerment group at Elkins Park, led by Debbi Eisen, began the transition to meeting virtually in July. After some minor technological hiccups, the group was finally able to share, listen, and laugh with each other again. They have had three successful meetings so far and plan to continue their virtual get-togethers through the end of the year. If you would like information about joining the group virtually, please contact Debbi Eisen at 215-663-6857 or eisend@einstein.edu.

There is another opportunity to connect with other individuals with brain injury and supporters. The Brain Injury Association of Pennsylvania started a Pop-Up Brain Injury Support Group that happens once a month. It's open to anyone and is a great opportunity to connect with people from all over Pennsylvania whom you wouldn't meet otherwise. There have been four meetings so far and others planned for the remainder of the year. If you would like to be included on the distribution list for this group, please send an email with your name to survivorsupport@biapa.org.

## PENNSYLVANIA EMPOWERMENT GROUP

The Elkins Park Empowerment Group meets on the second Monday of each month from 5-6:30 at 60 Township Line Road, Elkins Park, PA 19027.

Contact Debbi Eisen at 215-663-6857.

#### NEW JERSEY SUPPORT GROUP

Unfortunately, the New Jersey Support Group is discontinued at this time.



#### TBI and Pain (con't from page 1)

Patients with severe brain injury and many known or potential sources of pain, who could not reliably communicate, participated at MossRehab and at Glostrup Hospital in Copenhagen by consent of their legal surrogate. Along with any regular analgesics, each patient received acetaminophen on one day and no acetaminophen on another. Trained staff rated 15 observable (e.g., facial expression) or measurable (e.g., heart rate) items 7 times in a 15-minute block, with 4 rating blocks each day during different activities thought to be more and less comfortable. We used statistical methods to determine that 10 of the 15 items performed reliably together. Scoring these 10 items as few as 5 times (10 minutes) provides a reliable nociception score – the BINAM (Brain Injury Nociception Assessment Measure). The BINAM score was lower when receiving acetaminophen and higher during less comfortable activities, and worked similarly in conscious and unconscious patients, as predicted. We believe the BINAM can help clinicians diagnose injuries and manage pain relief in patients with severe brain injury.

# **BIA-PA 2020 Brain Injury Conference: Educational Series**

BIAPA made the difficult decision to cancel the in-person Annual Conference that was originally scheduled for June 2020 in Lancaster. They have converted the event into a virtual Educational Series presented over a span of 6 months, from November 5, 2020 through April 22, 2021.

Through this series they bring attendees the high-quality content that the conference committee and speakers worked so hard to prepare prior to the onset of COVID-19.

The series will address a wide variety of topics including Cognitive Functioning and Treatment, Memory Difficulties, Comprehending Behaviors, Employability, Caregiver Support, Intimacy, Domestic Violence, Fitness Training, Sleep Disturbance, Quality of Life, and, a Mother's Perspective.

Go to https://biapa.org/2020-annual-conference/ to see the full program and details about registration.



#### The Faces of the TBI Model System: Brittany Vetter



The TBI lab is excited to introduce Brittany Vetter, who joined us in February of this year as a Research Assistant. Brittany graduated from the University of Delaware in 2019 with a bachelor's degree in neuroscience. Her undergraduate research focused on investigating correlations between brain activity and memory deficits in people with Alzheimer's disease.

In her spare time, Brittany enjoys exercising and painting. When asked what she likes most about her job at Moss so far, Brittany said, "helping patients and their families through the recovery process". Although she misses spending time with patients on the brain injury unit (pre-COVID), she knows that she is still making a difference while working remotely.

Welcome, Brittany!

### Telerehab (con't from page 1)

Dr. Amanda Rabinowitz is leading the program evaluation aspect of the project, which will evaluate feasibility and user-satisfaction with services delivered over the telehealth platform. One of the factors considered is the financial cost and technological support needed to establish clients with the videoconferencing. Treatment providers monitor attendance at appointments throughout the duration of treatment, keeping track of any barriers to treatment encountered along the way. At the conclusion of the trial, both clients and therapists report on the usability of the video conference platform and their satisfaction with experience. Both clients and providers are surveyed on the potential benefits and any potential disadvantages of working through remote mechanisms. At the time of this writing, we have enrolled 16 participants towards our goal of 20. The trial will conclude at the end of May 2021.

MossRehab at Elkins Park Hospital 50 E. Township Line Road Elkins Park, PA 19027 ATTN: Lauren McLaughlin



#### **The Moss TBI Model System**

The National Institute on Disability, Independent Living and Rehabilitation Research has designated MossRehab as a Model System for traumatic brain injury since 1997. The TBI Model System program seeks to improve lives by creating and disseminating new knowledge about the course, treatment and outcomes of TBI.

The Traumatic
Brain Injury
Model System
(TBIMS)
Centers for
the current
funding cycle
(2017-2022)

