

# **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

## Pain Management in Traumatic Brain Injury—A New Approach

Assessment and treatment of pain is important for all patients who have been injured, and people with traumatic brain injury (TBI) can have pain for many reasons. Some are related to the brain injury, like headaches, but other sources of pain come from the trauma itself, such as broken bones or abdominal injuries. The usual way to assess pain is to ask a patient where they are having pain and have them rate it on a scale from 0 (no pain at all) to 10 (the worst pain you can imagine). But many patients with TBI are unconscious, confused, or have communication problems that interfere with pain assessment. Clinicians and family members, therefore, are forced to use facial expressions, moaning, and other behavioral signs to indicate pain, but this isn't precise. TBI can cause changes in facial expressions and "agitation" in the absence of pain, and some patients who feel pain can't express it. The result is that some patients with TBI don't get adequate pain management, while others may be overmedicated – and sedated – for conditions that are not painful.

The goal of a new project, funded by NIDRR in our 2012-2017 TBI Model System, is to develop a rating scale that can consistently identify the presence and severity of pain in patients with TBI who can't report on their pain in the usual way. We are doing this project in collaboration with Glostrup Hospital in Copenhagen Denmark, with whom we have collaborated on previous research. **Continued on page 2** 



Our Denmark Collaborators, from left:

Anne Norup, Ingrid Poulsen, Benny Bardrum, Lars Westergaard and Rikke Guldager



#### The Faces of the Moss TBI Model System: Jen McKenzie

Jennifer McKenzie is the social worker for the inpatient unit of the Drucker Brain Injury Center, MossRehab. Jennifer has been a social worker for 14 years. She joined the Drucker Center in 2009 after 10 years working in a skilled nursing facility. Desiring something more challenging, she ventured into the field of brain injury and could not be happier with her decision. Being part of the recovery process and witnessing people getting better are some of the highlights of her job. Jen said, "Interacting with regular people who are put into extraordinary situations and handle it with strength and endurance shows the best of the human spirit." Jen's positive attitude and her gift for connecting with patients and families makes her a valuable asset to MossRehab and the Moss TBIMS.



Jen, thank you for all that you do!

#### Tessa Hart Receives Mitchell Rosenthal Award



Dr. Tessa Hart, Director of the Moss TBIMS, received the Mitchell Rosenthal Award in June, 2013 for the best manuscript published on the Traumatic Brain Injury Model System National Database. The paper, entitled "Participant-proxy agreement on objective and subjective aspects of societal participation following traumatic brain injury," was published in the Journal of Head Trauma Rehabilitation in 2010. Dr. Hart's co-authors on this paper included Dr. John Whyte, Moss TBIMS Co-Director, as well as collaborators at TIRR/Memorial Hermann in Houston, the University of Washington in Seattle, and the Rehabilitation Institute of Chicago.

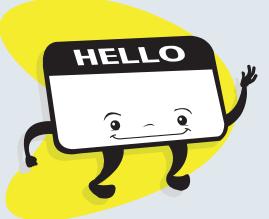
How does one begin to develop a rating scale Pain Management (con't) for pain? We started by identifying behaviors that might indicate pain, such as grimacing, rocking back

and forth, moaning, etc., as well as physiological measures that correlate with pain, such as heart rate and blood pressure. We then developed a system for rating the presence and intensity of these behaviors during a few minutes of observation. In order to tell which behaviors are reliable indicators of pain, we will classify patients according to the number of fractures, surgical incisions, and other painful conditions they have. If the scale works, people with more or worse sources of pain should also have higher ratings on the scale. We will also assess patients at rest and during Physical Therapy, on the idea that they are likely to have (and show) more pain during therapy. And we will assess them on and off acetaminophen (Tylenol), on the idea that they should show fewer of these pain behaviors when receiving this analgesic medication. By finding the behaviors that are most closely associated with painful conditions and painful activities, we hope to develop a final scale for nurses and other clinicians to assess patients for pain, and to determine that the correct amounts of pain medication are being used.

### **TBI Consumer Conference Planning Underway** for Fall, 2014

In the fall of 2014, MossRehab and the Moss TBIMS will host a day-long education and networking conference in downtown Philadelphia for people with brain injury and their families. As with previous Moss TBIMS conferences, professionals and people directly affected

by brain injury will develop and co-present many of the workshop offerings. We are fortunate to have the contribution of many local brain injury providers on our conference planning committee, including Bryn Mawr Rehabilitation, Magee Rehabilitation, ReMed Recovery Care Centers, Bancroft NeuroHealth, Beechwood NeuroRehab, and the Community Skills Program. The Brain Injury Association of Pennsylvania and the Brain Injury Alliance of New Jersey will also serve as collaborators. Keep an eye on our next issue for the date and other details so you can plan to join us!



### **Zolpidem study update**

We studied 84 individuals in the vegetative or minimally conscious states after traumatic or non-traumatic brain injuries to see how many would respond to the drug zolpidem (Ambien) with an improvement in level of consciousness. We had done a smaller study of 15 participants previously and 1 of them regained consciousness after the drug was given, but the other 14 showed no effects. In this larger study, about 5% of participants improved on the medication. There was no straightforward way to predict ahead of time who would respond, so one would have to try the drug to see if it works for a particular person.



### EMPOWERMENT & SUPPORT GROUP INFORMATION

#### **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. For more info, contact Debbi Eisen at 215-663-6857.

#### **NEW JERSEY SUPPORT GROUP**

The New Jersey Support Group meets on the Fourth Tuesday of most months from 3:00-4:00 at 135 S. Broad Street, Woodbury NJ 08096. For more info, contact Dayna Scott at 856-853-9900, ext. 102.



MossRehab at Elkina Park 50 E. Township Line Road Elkina Park, PA 19027 ATTN: Kelly Bognar

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

The National Institute on Disability and Rehabilitation Research has designated MossRehab as a Model System of Care 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 (2012-2017)

