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February 2008

The Messenger

News and information from Mayo Clinic Traumatic Brain Injury Model System Center

On impact: Change follows tragedy

The last thing Emerlee Stilley, a nurse practitioner, remembers of August 18, 2006, was driving out of the parking lot of the Alden, Minn. Clinic, a satellite of Albert Lea Medical Center where she worked, to pick up her niece. Only minutes later, she was T-boned on the driver's side of her Toyota Camry by another motorist.

Three good Samaritans helped pull her from her crumpled vehicle before it was engulfed in flames. Stilley had sustained a brain injury, a broken neck in two areas, a fractured skull, nose, left eye, cheek and jaw in multiple places. She was airlifted to Saint Marys Hospital in Rochester.

When she awoke, she wrote a note questioning her caregivers: Did I have a stroke? The losses and effects of the accident and of three weeks in the hospital are almost incalculable for

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Emerlee Stilley with husband, Bruce, daughter, Olivia, and son, Quentin, in July 2006.

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On impact: Change follows tragedy

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Stilley and the loved ones closest to her: husband, Bruce, and their two children: Quentin, then age 9, and Olivia, age 4.

In the months since, she has confronted major physical challenges on the road to recovery: three surgeries to repair the bony structures and cranial nerve damage which affected the position of her eyes, wearing a halo (a framework used to stabilize the head) for 10 weeks, and then a rigid neck collar, which made it difficult to sleep, loss of her sense of smell, facial weakness on the right side, and braces to correct her teeth.

Emerlee Stilley, November 2007, more than 15 months after the car accident.

As she regained her physical strength, she rallied mental and emotional resources to tackle the disappointments, frustrations and challenges of living in a body that was substantially changed after August 18. The self-described "over-achiever" had to relearn skills, such as helping her brain initiate the process of walking up stairs. She confronted disappointments: she missed sending her children off to the first days of school, decorating for Christmas, and along with her husband, was forced to delay plans to build a new home. Professionally, she was off of work for 13 months.

The emotional changes were most riveting. At times, she became disappointed with the pace of her own recovery. She faced numerous challenges: frustration and irritability over simple, everyday things like helping her son with homework, times of debilitating fatigue, feelings of depression and isolation because she could not drive for a year, and then distress as each time she looked in the mirror she saw how her appearance had changed. "People would say 'you're still you,'" she says. "But when I look in the mirror, it's not the same face and it's not me inside either."

Looking back, Stilley says, "I feel as though I lost myself." But she never lost her sense of determination, and she chooses not to live in the past.

After more than a year, on September 17, 2007, she returned to work and began a transition back to her responsibilities as a nurse practitioner. In spite of the toll the accident has taken on her life, Stilley sees the accident as an experience from

Emerlee (left) tubing in July 2006, just one month before the car accident.

Emerlee Stilley with her family, November 2005.

which to take lessons learned and share them, particularly with her patients and colleagues who care for people with brain injury. "I now empathize with patients in new ways on such issues as loss of independence, attention span, pain control and constipation," she says.

Stilley credits education as an important key to a successful recovery, along with the brain injury rehabilitation team. "Everyone on the brain injury rehab team helped me cope," she says. "I realized that the small stuff is big. For example, Sue Lepore, Mayo Clinic Occupational Therapist, encouraged me to think of my brain as a library and that my brain injury is akin to having all the books pulled off the shelf. The information is all there, but it has to be refiled in a way that works for me."

"Team members let me know what's normal now and taught me efficiency and time solving strategies like, stop and think, which is simple but very useful. Sue also helped me with practical things, such as helping me learn how to outline journal articles so that I could keep my professional skills fresh."

An important aspect of recovery for Stilley has been looking realistically at her goals for recovery and recognizing that each person will recover at his or her own pace. "As patients, we need to focus on what is right with the picture, rather than what is wrong throughout the recovery process," she says. "As caregivers, we are accountable for what we say to patients. Timelines can set patients up for discouragement if their progress doesn't follow an anticipated course."

She continues to become acquainted with a changed body, a changed personality, and a new way of perceiving herself. "I always wanted to be the caregiver, but not be taken care of," she says. "The accident has taught me how to be a recipient of care and concern as well."

Perhaps the real transformation lies in what is ahead for her in the form of new goals, among them, to become an educator. ■

Mayo TBIMS Staff Update

Staff Highlight: James Malec, Ph.D., LP

It is certainly with mixed emotions that the Mayo TBIMS bids farewell to Dr. Jim Malec, our fearless, flawless, and fun loving leader for the past 20 years. Dr. Malec worked at Mayo Clinic for 24 years and most recently served as co-chair of the Division of Tertiary Psychiatry & Psychology. He has been a full professor in Mayo Clinic College of Medicine since 1994 and a consultant since 1985.

Dr. Malec will assume the position of Director of Research at the Rehabilitation Hospital of Indiana. He will leave Mayo Clinic as a retiree and will do so in good standing as a full Emeritus Professor of Psychology.

No one at Mayo Clinic has had a more profound impact on the field of TBI rehabilitation and research.

Dr. Malec has been an originator, founder, and legendary leader with his eye always on the horizon of concerns and needs of people with TBI. His impressive list of accomplishments includes:

- Founded the Mayo Clinic Brain Injury Outpatient Program, Mayo Community Reintegration Outpatient Group, Mayo Interdisciplinary Program for Cognitive Rehabilitation, Mayo Support Group, and award winning Mayo Clinic Partnership Approach to Brain Injury education class
- Co-founded the Rochester Area Brain Injury Community Committee
- Developed the nationally recognized Mayo Clinic model of medical-vocational case management for individuals with TBI
- Developed and tested the nationally and internationally used Mayo Portland Adaptability Inventory brain injury outcome measure
- Successfully secured initial and ongoing funding for the Mayo TBI Model System

Dr. James Malec is relocating to Indiana.

Colleagues (left to right) Dr. Allen Brown, Mayo Clinic, Rochester, Minn.; Dr. Mark Sherer, The Institute on Rehabilitation and Research, Houston, Texas; Dr. James Malec; Dr. Joseph Giacino, JFK-Johnson Rehabilitation Institute, Edison,New Jersey

• Responsible for several million dollars in research funding during his time at Mayo Clinic

• Founding member of the Association of Postdoctoral Programs in Clinical Neuropsychology

• Long-time board member, committee member, and chair for countless professional groups including the American Congress of Rehabilitation Medicine TBI Special Interest Group

• Served on the Brain Injury Association of Minnesota and Southeastern MN Center for Independent Living Center Boards

• Served on numerous editorial, advisory, and grant review boards

• Provided hundreds of presentations to groups from around the region and world

• To date, has published an impressive 105 peer reviewed articles

Dr. Malec and friends. They did not speak the same language, but bonded nonetheless while attending an international rehabilitation meeting in Poland.

For his astounding and tireless efforts, Dr. Malec received several awards including an Excellence in Leadership Award from Mayo Clinic, the Harold Yuker Award for Research Excellence from *Rehabilitation Psychology*, the Edward W. Lohman Award from the American Congress of Rehabilitation Medicine, which also recognized Dr. Malec as a Fellow, the Career Achievement Award and the Elinor D. Hands Outstanding Achievement Award from the Brain Injury Association of Minnesota, and the Psychology Teacher of the Year from the

A message from Dr. Malec

Mayo Clinic Fellows' Association.

Dr. Malec has a masterful sense of vision and understanding of TBI. Adjectives used to describe Dr. Malec flowed easily from the mouths of his colleagues, led by the word 'humble.' Other descriptions included wickedly creative, nice, approachable, just a regular guy, admirably efficient, unrivaled sense of humor, generous, and zany.

Our gratitude knows no depths and several TBIMS staff readily and fully admit we owe our own careers to Dr. Malec's unflappable leadership and to the greatest gift he bestowed upon us — opportunity — the opportunity to get involved, to try new things, to do what we thought was best for our patients and families.

Dr. Malec and Anne Moessner worked together for all 24 of his years at Mayo Clinic.

Fortunately, Dr. Malec will continue to serve as a co-investigator for the Mayo Clinic TBIMS and we hope to collaborate with his new team on other endeavors in the future. So, to Jim, we will miss you dearly and daily, but understand the opportunity you have been given and would be remiss not to send you off with our best wishes and a big round of applause. Here's to our fearless leader, the nice guy in the office up the hall, the "thinker".

Go forth and embrace the chaos. ■

Publications: *Peer-Reviewed Articles Published by TBIMS Staff*

• Flaada, J. T., Leibson, C. L., Mandrekar, J. N., Diehl, N., Perkins, P. K., Brown, A. W., and Malec, J.F. (2007). Relative risk of mortality after traumatic brain injury: a population-based study of the role of age and injury severity. *Journal of Neurotrauma,* 24(3), 435-45.

• Sander, A. M., Davis, L. C., Struchen, M. A., Atchison, T., Sherer, M., Malec, J. F., and Nakase-Richardson, R. (2007). Relationship of race/ethnicity to caregivers' coping, appraisals, and distress after traumatic brain injury. *NeuroRehabilitation,* 22 (1), 9-17.

• Malec, J. F., Testa, J. A., Rush, B. K., Brown, A. W., and Moessner, A. M. (2007). Self-assessment of impairment, impaired self-awareness, and depression after traumatic brain injury. *Journal of Head Trauma Rehabilitation,* 22 (3), 156-166.

• Brown, A. W., Malec, J. F., Diehl, N., Englander, J., and Cifu, D. X. (2007). Impairment at rehabilitation admission and one year after moderate to severe traumatic brain injury: A prospective multi-centre analysis. *Brain injury*, 21 (7), 673-680.

• Malec, J. F., Brown, A. W., Leibson, C. L., Testa, J. F., Mandrekar, J., Diehl, N., and Perkins, P. (2007). The Mayo Classification System for TBI Severity. *Journal of Neurotrauma*, 24 (9), 1417-1424. ■

Mayo TBIMS Staff Update

Eleanor Britt

Another notable change for our team is the retirement of our long-time secretary, Eleanor Britt. Eleanor has been with the TBIMS since its inception. Prior to that she spent many years supporting our clinical programs and staff. No one has displayed more wit and patience than Eleanor. Her spirited personality fit beautifully with our team and will be sorely missed.

Eleanor was extremely devoted to the patients and families affected by TBI and served by Mayo Clinic. By the time of her retirement, Eleanor was as proficient in her communication skills with our clients and family members as she was in her clerical skills.

Eleanor, to you we also bid adieu and wish you the very best as you retreat to a warmer climate filled with days off, grandchildren, hobbies, and did we mention a warmer climate? Thank you from the bottom of our hearts and dictaphones for all your dedicated, efficient, and fun-filled years of service. You're the best. ■

Eleanor Britt

Mayo TBIMS Staff Update

Pat Kiper

Pat Kiper has been the face behind the voice of TBIMS patients and families who have received research follow up phone calls over the past several years. Remarkably, Pat has worked for Mayo Clinic since she was a youngster and will retire with 44 years of continuous service.

Pat came to our team with considerable experience with rehabilitation and TBI and has been vigilant in her quest to reach research participants 1, 2, and 5 years past their date of injury. Due to Pat's efforts, the Mayo Clinic TBIMS was recently recognized by the the National TBI Data & Statistical Center as one of only three centers who met all follow up benchmarks in 2007.

Pat, to you we also wish the very best as you enjoy some time off to pursue other interests. Thank you kindly for your years of service and commitment to the TBI Model System. ■

Pat Kiper

Mayo TBIMS funded 2007 to 2012

The Mayo Clinic Traumatic Brain Injury Model System (TBIMS) is pleased to announce it has been selected for continued funding by the National Institute on Disability and Rehabilitation Research (NIDRR). Mayo Clinic represents the upper Midwest and was funded along with 13 other centers situated primarily in urban settings.

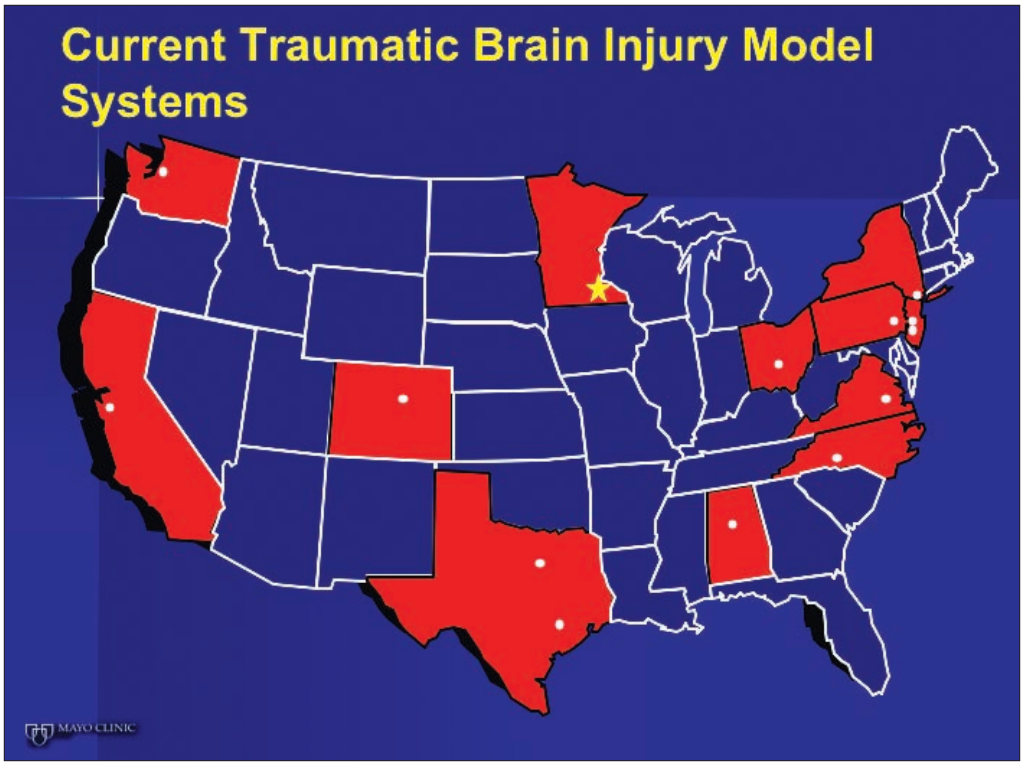
The Mayo TBIMS is part of Mayo Clinic Rochester and the Mayo College of Medicine. With more than 23,000 health care providers, extensive outpatient facilities, nearly 2,000 hospital beds, and a level I trauma center that serves people with moderate to severe TBI in the region, Mayo Clinic Rochester is a world resource. It hosts 1.5 million patient visits each year from people of diverse ethnic, racial, cultural, and religious backgrounds. Despite Mayo Clinic's status as a world class medical center, nearly 80 percent of its patients come from Minnesota and adjoining states. Most people with brain injury served at Mayo Clinic come from this largely rural region in the upper Midwest.

In its third funding cycle, the Mayo Clinic TBIMS will conduct one local research project. The Midwest Advocacy Project (MAP) represents the first randomized clinical trial studying the efficacy of community-based advocacy training to impart effective self and systems advocacy skills to individuals with TBI, their families, and significant others.

The MAP focuses on the National Institute on Disability and Rehabilitation Research research domain of participation and community living and was developed with substantial input from consumers and other stakeholders of the Mayo Regional TBI Advisory Council.

The project builds on a feasibility study conducted in the last funding cycle and will be carried out in collaboration with the Brain Injury Associations of Minnesota, Iowa, and Wisconsin. The anticipated long term outcome is the nation wide use of an effective advocacy training program.

In addition, the Mayo TBIMS will continue to work collaboratively with other



States in Red are currently funded NIDRR TBI Model Systems.

TBIMS centers. Specifically, it is joining forces with The Institute on Rehabilitation & Research (TIRR) to study sexuality after TBI, the University of Washington to investigate post-traumatic headaches, and Ohio State University to examine environmental influences affecting outcomes after TBI.

All TBIMS centers recruit new subjects and conduct long term follow up on previously recruited subjects for the national TBI data base housed at the TBI National Data & Statistical Center (**http://www.tbindsc.org/**). Located at Craig Hospital in Englewood, Colo., this center serves as a central resource for researchers and data collectors within the TBIMS program. The primary purpose of the center is to advance medical rehabilitation by increasing the rigor and efficiency of scientific efforts and to assess the experience of individuals with TBI over the long term. The National Data & Statistical Center provides technical assistance, training, and methodological consultation to all 14 TBIMS centers as they conduct research toward evidence-based TBI rehabilitation interventions.

New to the Model Systems this funding cycle is support from the NIDRR funded Knowledge Translation Center (**http://msktc.washington.edu/**).

The Knowledge Translation Center summarizes research, identifies health information needs, and develops systems for sharing information for the NIDRR model systems programs in TBI, spinal cord injury, and burn injury. Searchable databases of TBIMS research publications and a resource list of major TBI organizations are readily accessible. The Knowledge Translation Center will be conducting systematic reviews of research evidence through compiling, evaluating and summarizing the published research evidence relating to TBI in order to provide practitioners, consumers and others with the best and latest information available for making health decisions.

Mayo Clinic TBIMS staff who will be working on both local and national research projects during the 2007 to 2012 funding cycle include:

- Dr. Allen Brown, Project Director and Medical Director
- Dr. James Malec, Co-Investigator
- Anne Moessner, RN, MSN, Project Coordinator
- Nancy Diehl, MS, Data Manager
- David Barta, Study Assistant
- Kathy Kendall, RN, BSN, Module Coordinator ■

Mayo Classification System for Severity

A Summary: Mayo Classification System for Brain Injury Severity
(James Malec, Allen Brown, Cynthia Leibson, Julie Testa Flaada, Jayawant Mandrekar, Nancy Diehl, and Patrick Perkins)

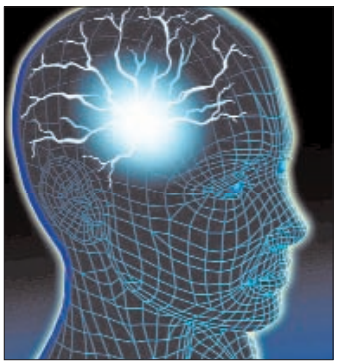
The complete article was published in the *Journal of Neurotrama*, 24:1417:1724 (September 2007).

The primary objectives of this project were to incorporate commonly used TBI severity measures and indicators to:

- develop a single system that maximally uses available positive evidence to classify TBI severity in three categories: Moderate-Severe (Definite) TBI; Mild (Probable) TBI; and Symptomatic (Possible) TBI
- reflect current clinical knowledge and relevance; and
- classify a larger number of cases than single indicator systems with reasonable accuracy.

Severity classification in traumatic brain injury (TBI) has been of long-standing interest because of its relationship to acute and postacute medical care and outcomes. In most research studies and often in clinical care, severity is classified according to single indicators such as the Glasgow Coma Scale (GCS), the duration of post-traumatic amnesia (PTA) and the duration of loss of consciousness (LOC).

Although the validity of these and other measures is well established, each may be influenced by factors unrelated or indirectly related to the severity of TBI. Unless specifically collected as part of the standardized clinical or research protocol, one or more of these injury severity indicators is often not recorded in the patient's medical record. Neuroimaging furnishes a directly observable indicator of TB severity, but is not obtained in all cases.



The vast majority of TBIs are not severe. Therefore, a TBI severity classification system should distinguish clinical characteristics of the least, as well as the most severe injuries. TBI may be present in cases in which none of the indicators previously reviewed are recorded. Such cases typically come to clinical attention when a patient with a history of head trauma reports "postconcussive" symptoms such as feeling dazed, dizziness, headache, or nausea.

Considering the unreliability of some TBI severity indicators and the frequency of missing documentation in the medical record, we sought to develop a system for severity classification that capitalizes on positive evidence available within the medical record for each case. Rather than use the absence of information about loss of consciousness as an indication of less severe injury, the proposed classification defers to other available positive indicators. Conversely, documentation of extended loss of consciousness provides substantial evidence of Moderate-Severe TBI even in the absence of other evidence.

The classification system described in this paper is conservative in that positive evidence is required for categorization at each level of TBI severity and more objective evidence is required for classifications of increasing severity.

Under the auspices of the Rochester Epidemiology Project (REP), the diagnostic index and records linkage system were expanded to include the few other providers of medical care to local residents, including the Olmsted Medical Center. TBI was described as a traumatically induced injury that contributed to physiological disruption of brain function and that was not

attributable to pre-existing or co-morbid conditions.

Applying the criteria in Table 1 (below), the review of the sample of 7,800 individuals with any diagnosis suggestive of TBI in Olmsted County from 1985 through 1999 resulted in the identification of 1,501 unique individuals who experienced a total of 1,678 confirmed injuries. All confirmed events were further characterized by severity using all available clinical data including emergency room, hospital, and office visit notes, radiological imaging findings, surgical records, and autopsy results.

The classification criteria described in Table 1 were applied to the 1,678 identified injuries and resulted in the classification of 139 of these events as Moderate-Severe (Definite) TBI; 633 injuries as Mild (Probable) TBI; and 906 injuries as Symptomatic (Possible) TBI.

Single measures of TBI severity were not available in a large percentage of these events, i.e. Glasgow Coma Scale was absent in 1,242 (74 percent); loss of consciousness, absent in 178 (70.2 percent), post-traumatic amnesia, absent in 974 (58.1 percent); head CT, not done in 827 (49.3 percent). For the Moderate-Severe (Definite) TBI classification, estimated sensitivity was 89 percent and estimated specificity was 98 percent.

The Mayo system has considerable construct validity since it is based on indicators which each have an established relationship to TBI severity. Retrospective research is often compromised by missing injury severity values and indicators.

In this type of research, the Mayo system should be of value to describe study subjects. The Mayo system may also be useful in post-acute clinical evaluation of patients with TBI, as well as in consideration of options for clinical treatment and management. By maximally using relevant available positive evidence, the Mayo system classifies a larger number of cases than single indicator systems. ■

Table 1 Mayo TBI Severity Classification System

A. Classify as Moderate-Severe (Definite) TBI if one or more of the following criteria apply:

1. Death due to this TBI
2. Loss of consciousness of 30 minutes or more
3. Post-traumatic anterograde amnesia of 24 hours or more
4. Worst Glasgow Coma Scale full score in first 24 hours; less than 13 (unless invalidated upon review, e.g., attributable to intoxication, sedation, systemic shock)
5. One or more of the following present:
   - Intracerebral hematoma
   - Subdural hematoma
   - Epidural hematoma
   - Cerebral contusion
   - Hemorrhagic contusion
   - Penetrating TBI (dura penetrated)
   - Subarachnoid hemorrhage
   - Brain stem injury

B. If none of Criteria A apply, classify as Mild (Probable) TBI if one or more of the following criteria apply:

1. Loss of consciousness of momentary to less than 30 minutes
2. Post-traumatic anterograde amnesia of momentary to less than 24 hours
3. Depressed, basilar or linear skull fracture (dura intact)

C. If none of Criteria A or B apply, classify as Symptomatic (Possible) TBI if one or more of the following symptoms are present:

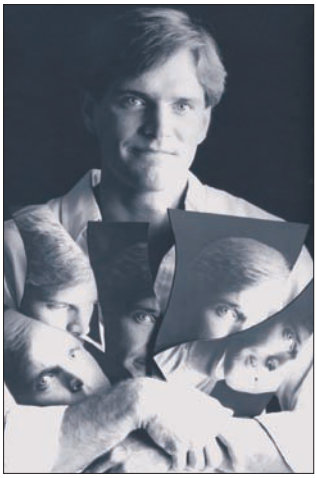
- Blurred vision
- Confusion (mental state changes)
- Dazed
- Dizziness
- Focal neurologic symptoms
- Headache
- Nausea ■

Brain Injury Coping Skills Group

The Mayo Clinic TBIMS, in conjunction with the Rehabilitation Hospital of Indiana in Indianapolis, Ind., and Brooks Rehabilitation Center in Jacksonville, Fla., are conducting research on the effectiveness of a specially designed group therapy to help people with brain injury and their families. The group is designed to provide:

- Education about brain injury and its impact on daily life
- Information about what to do and not to do for the best recovery
- Ways to manage difficult situations and changes in behavior or in the family
- Coping strategies for stress and depression
- Ways of working with health care professionals to get the information you need

Previous research shows that many people with TBI and their families have difficulties adjusting to the effects of a brain injury. Depression and stress can affect recovery in a negative way and prevent people from resuming usual activities and enjoying life. Much of the time depression and stress occurs after rehabilitation therapies have stopped. The focus of this research is to determine if this group therapy, specifically designed for people with brain injury and their families, helps reduce psychological distress and improves quality of life.



Who can take part in the initial phase of this research study? Active Mayo Clinic patients who have had a brain injury and who are currently involved in acute rehabilitation. In addition, participants must be between the ages of 18 and 65, speak English, and have a family member willing to participate. Interested participants will undergo an initial screening to determine if the final criteria are met, and if so, will be invited to start the group in the spring or summer of 2008. The group will meet in two-hour sessions for 12 weeks in Rochester. Since this is a research study, these services will be provided free of charge; research subject remuneration is also available.

If you are an active Mayo Clinic patient and think you may be interested in taking part in this study, please call Anne Moessner, RN, at 507-255-5109 ■

Education Corner

Mayo has recently completed work on a new pediatric brain injury educational booklet. Copies of *Understanding Pediatric Brain Injury: A Guide for Parents and Teachers* will be available on the TBIMS web site in the near future. ■

http://mayoresearch.mayo.edu/mayo/research/tbims/

Support of Returning Soldiers

Like other model systems around the country, the Mayo Clinic TBIMS is becoming increasingly involved with Department of Defense and Veterans Administration (VA) efforts to better screen for and most effectively treat and rehabilitate soldiers returning with possible, probable, or definite TBI. Federal efforts have focused on every aspect of the TBI continuum from initial injury through acute care through long term community reintegration. Long-time providers of brain rehabilitation are being asked to provide input and collaborate in order to promote the best possible recovery for soldiers returning with a TBI diagnosis at any level of severity. To date, Mayo TBIMS staff have been involved in the following ways:

Dr. James Malec and Anne Moessner, RN, presented the "Mayo Model of TBI Case Management & Vocational Services" at the Compensated Work Training/Supported Employment Services for Veterans with Polytrauma and TBI conference. This national training, held in Atlanta, Ga., on November 8, 2007, centered on the vocational needs of veterans with polytrauma and TBI.

Dr. James Malec and Anne Moessner, RN, were invited to present "Traumatic Brain Injury Rehabilitation: Pulling Together for the Long Haul" at the National Museum of Health & Medicine, located on the Walter Reed Army Hospital campus on March 21, 2007. Attendees from the VA and several branches of the military and federal government were in attendance, as were individuals personally affected by TBI.

On Nov 15, 2007, Dr. Allen Brown participated in the Mild Traumatic Brain Injury Rehabilitative Care Consensus Summit. The goal of the one day summit was to review, refine, and reach a consensus to produce final products for OT/PT clinical management protocols to set the standard for rehabilitative care for mild TBI. Partners in the effort included the Department of Defense, Department of Veterans Affairs, and university and civilian sector experts.

Anne Moessner, RN, along with many other civilian, VA, and military panel members from around the nation, is consulting with the Defense and Veterans Brain Injury Center (DVBIC) to develop and widely disseminate a standardized TBI education curriculum for families and other care- givers of soldiers returning with TBI. This panel convened for its first meeting early in January 2008, with additional meetings planned in the coming months. ■

Educational Conferences: Mark your calendar today

Mayo Clinic Annual Conference for Professionals
June 19-20 • Rochester, Minn.

Conference brochures and abstracts for poster submissions are available by contacting 507-284-0499 or on line:

For the conference:
www.mayoclinic.org/ jobs-nursing-rst/cne.html
And for the abstract:
www.mayoclinic.org/jobs-nursing-rst/abstracts.html for the abstract.

The 15th annual conference will celebrate 20 years of outpatient brain rehabilitation at Mayo Clinic. This year's two day conference will feature nationally and internationally known speakers who will review the history and future of brain rehabilitation.

Other invited speakers will round out the conference with discussions on cutting edge interventions, clinical programs, current research, and education initiatives. In addition, the conference will be highlighted by a gala evening poster reception. Invited keynote speakers for the 2008 conference include:

• James F. Malec, Ph.D., Rehabilitation Hospital of Indiana, Indianapolis, Emeritus Professor, Mayo Clinic

• Jennie Ponsford, Ph.D., Associate Director for Rehabilitation, National Trauma Research Institute, Melbourne, Australia

• Donald Stein, Ph.D., Former Vice President for Research, Emory University, Atlanta, Georgia

• Angelle Sander, Ph.D., Associate Director, Brain Injury Research Center, The Institute on Rehabilitation and Research, Houston, Texas

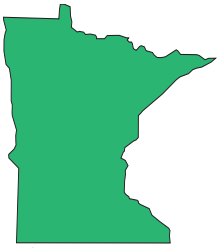
• Barbara Wilson, Ph.D., Founder, Oliver Zangwill Center for Neuropsychological Rehabilitation, Cambridge, England ■

Taking Cognitive Rehabilitation to the Next Level: Tools for Working with Individuals who have Deficits in Awareness, Memory, and Executive Function • Saturday April 5 • Rochester, Minn.

This first-ever course offered by the Mayo Brain Rehabilitation Outpatient Program staff is designed to provide clinical assessment and treatment strategies for individuals with brain injury. Focus will be on practical tools that can be used in assessment and treatment with emphasis on vocational and independent living skills.

Because this will be an interactive conference, registration will be limited to the first 60 applicants. Please call 507-266-0940 with questions.

Registration forms are available at **pmrconf@mayo.edu** or by calling Jennifer Homewood (507-266-0940) or Pamela Darcy at (507-284-2608). ■



Brain Injury Association of Minnesota, April 17-18 • St. Cloud, Minn.

The 23rd Annual Conference for Professionals in Brain Injury, "Asking the Right Questions: Sharing New Answers," will be held at the St. Cloud Civic Center, St. Cloud, Minn., on April 17 and 18, 2008.

Keynote speakers Dr. George Prigatano and Dr. Tim Feeney will kick off the conference. The Brain Injury

Association of Minnesota is excited to have as a featured guest speaker Trisha Meili, author of the book "I Am the Central Park Jogger." Meili will speak about her personal journey to recovery and give her perspective on nonclinical aspects of recovery. While her appearance will be open to all conference attendees, special tickets to her appearance will be made available to the general public by contacting the Association directly (1-800-669-6442). Registration information is available by calling 1-800-669-6442 and will be on line at **info@braininjurymn.org** in the near future. ■

16th Annual Conference of Brain Injury Association of Iowa: "Best Practices in Brain Injury Service Delivery" March 6-7 • Des Moines , Iowa

The Brain Injury Association of Iowa's Best Practices in Brain Injury Service Delivery XVI conference will be held at the Hotel Fort Des Moines in Des Moines, Iowa. Additionally, on March 5 there will be pre-conference training and activities focused on education and the Medicaid Home and Community Based Services Brain Injury Waiver.

Among the speakers will be:

• Tim Feeney, Executive Director and President of School and Community Support Services and Project Director of the New York Neurobehavioral Resource Project. He will present on self-regulation in neuro-behavioral management, with a specific focus on educators.

• Al Condelucci, CEO of United Cerebral of Pittsburgh, will speak on Interdependence and Social Capitol.

• Joseph Richert, Michigan's Special Tree Rehabilitation System, will present on post-concussion syndrome in student athletes, providing effective supplemental educational supports and reviewing necessary counseling and evaluation services.

• Michael Mason, former brain injury case manager and current author from Oklahoma, will recount personal insights of brain injury survivors he encountered while writing his book, "Head Cases: Stories of Brain Injury and Its Aftermath," For more information call the Brain Injury Association at 1-800-444-6443 or e-mail us at **info@biaia.org** ■

20th Annual Conference on Brain Injury – "A Celebration of Courage, Compassion & Commitment" Brain Injury Association of Wisconsin, May 5-6 • Wisconsin Dells

The Brain Injury Association of Wisconsin will present its 20th annual statewide conference on brain injury on May 5-6, 2008 at the Kalahari Resort in Wisconsin Dells. Keynote speakers include Mark Ashley, ScD, BIAA Board President and CEO of Center for Neuro Skills; Janelle Breese Biagioni, Spouse and author of "A Change of Mind;" Tina Trudel, Ph.D., Professor of Clinical Psychiatric Medicine, University of Virginia Medical School; and Diana Lund, Survivor and author of "Remind Me Why I am Here." Brochures will be available in February. For registration call 262-790-9660 or visit **www.biaw.org**. ■

OUR MISSION:

The primary mission of the Mayo Clinic TBI Model System is (1) to study the course of long-term recovery after traumatic brain injury (TBI), and (2) to develop, provide and evaluate innovative services to address identified needs for service coordination and community reintegration for persons with TBI.

MAYO CLINIC

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ADDRESS SERVICE REQUESTED

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507-255-3116

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Brain Rehabilitation Day Program (BRDP) Monthly Support Group

Current and past participants of the Mayo BRDP or former BIOP are invited to attend a monthly support group, held the second Wednesday evening of each month, at 7 p.m. at Saint Marys Hospital, 1-Domitilla (Room 1-314). Meetings are also open to current and past family members. ■

Partnership Approach to Brain Injury

Family members, friends, and interested persons are invited to attend *The Partnership Approach to Brain Injury* offered twice a year, usually in the fall and spring. This educational program teaches ways to cope with common problems following brain injury. For more information, or to be added to the mailing list for the *Partnership* program, call 507-255-3116. ■