



TBI Model System Updates

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National Concussion Day was founded in 2016 by Brooke Mills, a freshman athlete, and was recognized by the United States Congress in 2023. The mission was to start a conversation to increase concussion awareness on a national level, raise money for brain injury charitable organizations and to show support for those who have had concussion(s). Brooke went on to be known as Miss New Hampshire in 2023 and recently graduated from Sherman College of Chiropractic. See her story here: [National Concussion Day](#). The Lystedt Law which passed fifteen years ago was the first comprehensive law mandated in the United States. It was aimed at reducing concussion risk and protect student athletes after head injuries. In 2006, Zachary Lystedt was a middle school student playing football when he was injured in a tackle. He left the game momentarily, but then proceeded to play. It was only after the game, that he collapsed. He had a severe brain injury. The law now prohibits young athletes from returning to play after an injury unless a licensed healthcare professional clears them.

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Tips for Maintaining Brain Health as We Age

Are brain games enough?

What is one thing all humans have in common? We get old. Our body isn't as nimble as it used to be. Our energy level isn't as high. And our mind isn't as sharp. While everyone may have fears about declining brain function, this can be especially worrisome for people who have had a TBI. University of Washington Associate Professor of neuroscience and neuroscience researcher, Dr. Tommy Wood, appeared on the Genius Life podcast talking about brain health throughout life. In this article, we will highlight some of his tips to keeping the brain strong during the aging process. In many ways, the brain has the same basic needs as the body. The brain needs healthy nutrition, rest and recovery, and the brain needs to exercise. We have all heard about playing "brain games", doing Sudoku or even learning a language to strengthen the brain. However, Dr. Wood explained that working to exercise the body and brain together may be most beneficial.

Coordinative exercise is the key!

Just like exercise helps strengthen the body, exercise also improves brain health. According to Dr. Wood, all physical activity is beneficial for the brain, but something called "coordinative exercise" is even better. This type of exercise includes physical activity and skill. Walking is a physical activity, but it only requires the brain to do one thing: walk.

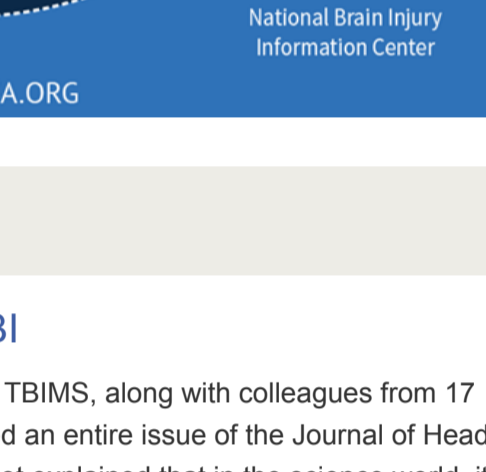
Dr. Wood suggests people do physical activities that also require thinking or decision making; activities like sports (pickleball, anyone?), martial arts, Tai Chi, dancing, etc. Activities that include exercise and coordination challenge the brain. Dr. Wood pointed to dancing as one of the best examples of this combination. Dancing gets the body moving in exercise. Dancing requires coordination challenging the brain and body to work together in space. Dancing promotes social connection which is linked to higher life quality. Also, unique to dancing is music. Music, both playing and listening to it, has positive effects on the brain.

Challenge is good for your brain

Wait! I can already hear you say, "Dancing? I have 2 left feet, forget it!" or you say, "Coordination? After my injury, just standing is hard." Dr. Wood argues that overcoming these challenges is probably most important for brain health. The brain needs to be challenged throughout life. He said, as adults, we avoid doing hard things or activities we are bad at. Dr. Wood emphasized that learning, making mistakes, and then succeeding is what truly pushes the brain to keep growing. So, what's the big secret to keeping the brain strong through life? First, get up and move your body as best you can. Second, move your body while challenging yourself to learn something new. Most importantly, if you can move your body in a challenging way and have fun while doing it, you're on the right path to a healthy future.

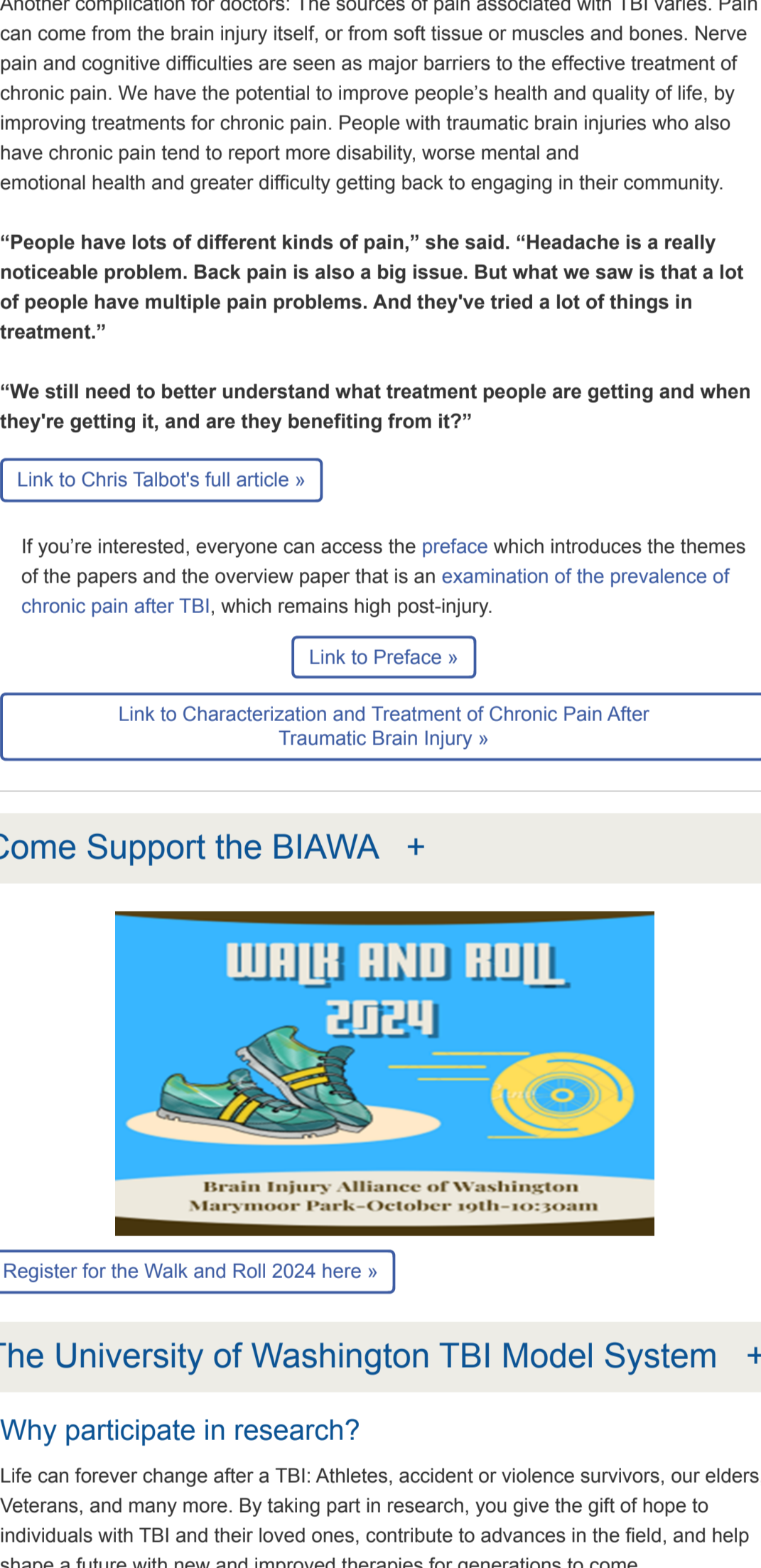
[Listen to the full episode here »](#)

Dr. Tommy Wood, an expert in the field of neuroscience and performance coaching and an Associate Professor of Pediatrics and Neuroscience at the University of Washington



Know the signs

Feeling puzzled about head injuries? Concussions are about as unique as we are. While some signs are easily noticed, others are more challenging to recognize. Symptoms can range from mild to severe, and each person will have a different combination of symptoms. Signs of a concussion usually fall under one of these four domains: physical, sleep, cognitive, and emotional. Learn more by clicking on the chart below or from Concussion Awareness Now by clicking here!



Research Round Up +

Chronic pain is prevalent after TBI

Dr. Jeanne Hoffman, project director of the UW TBIMS, along with colleagues from 17 other TBIMS sites published 10 papers that filled an entire issue of the Journal of Head Trauma Rehabilitation. In his article, Chris Talbot explained that in the science world, it could be compared to a baseball triple play, a rare and remarkable accomplishment.

Dr. Hoffman co-authored the introduction and nine of the 10 articles in the series. The last paper, on the use of cannabis and opiates in people with TBI, was co-authored by another UW TBIMS investigator, Amy Starosta.

Research has shown a high occurrence of long-term chronic pain among people who have experienced traumatic brain injury. In questioning more than 3,800 people, this group found that about 60% reported current or previous chronic pain. "What we saw was really high rates of chronic pain across many years after the injury," Hoffman said. "These are people who even 25 or 30 years out, report about the same rate of chronic pain. Around 46% of our group are experiencing current chronic pain, which tells us that they're probably not getting the right kind of treatments."

Another complication for doctors: The sources of pain associated with TBI varies. Pain can come from the brain injury itself, or from soft tissue or muscles and bones. Nerve pain and cognitive difficulties are seen as major barriers to the effective treatment of chronic pain. We have the potential to improve people's health and quality of life, by improving treatments for chronic pain. People with traumatic brain injuries who also have chronic pain tend to report more disability, worse mental and emotional health and greater difficulty getting back to engaging in their community.

"People have lots of different kinds of pain," she said. "Headache is a really noticeable problem. Back pain is also a big issue. But what we saw is that a lot of people have multiple pain problems. And they've tried a lot of things in treatment."

"We still need to better understand what treatment people are getting and when they're getting it, and are they benefiting from it?"

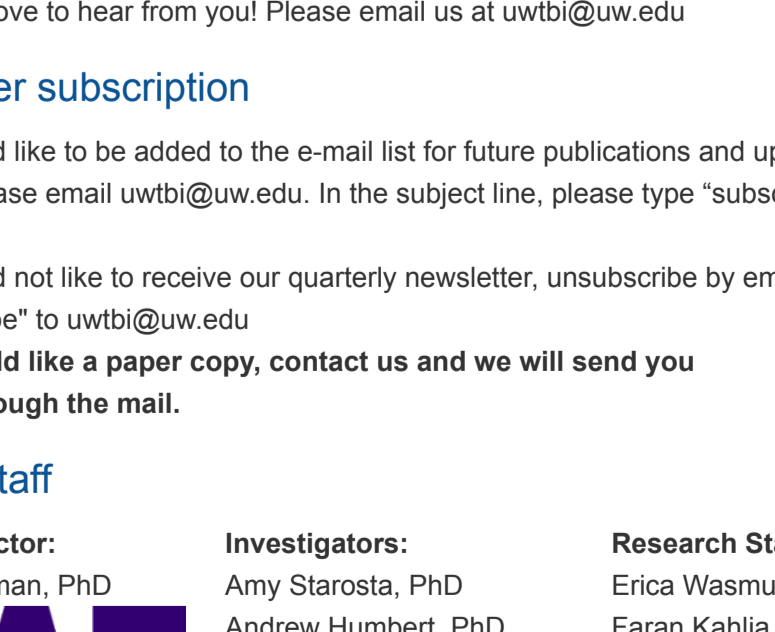
[Link to Chris Talbot's full article »](#)

If you're interested, everyone can access the [preface](#) which introduces the themes of the papers and the overview paper that is an examination of the prevalence of chronic pain after TBI, which remains high post-injury.

[Link to Preface »](#)

[Link to Characterization and Treatment of Chronic Pain After Traumatic Brain Injury »](#)

Come Support the BIAWA +



[Register for the Walk and Roll 2024 here »](#)

The University of Washington TBI Model System +

Why participate in research?

Life can forever change after a TBI: Athletes, accident or violence survivors, our elders, Veterans, and many more. By taking part in research, you give the gift of hope to individuals with TBI and their loved ones, contribute to advances in the field, and help shape a future with new and improved therapies for generations to come.

[Explore TBI Resources »](#)

Currently Enrolling: The Late Effects of Traumatic Brain Injury - Military Personnel

Are you a Veteran who has experienced a head injury? You may be eligible for the LETBI-MIL study! Sign up using this [confidential survey form](#).

The LETBI project is ultimately a brain donor program. We understand that this is a very personal decision and encourage you to discuss with your next of kin before enrolling. While brain donation projects are not uncommon in the realm of research, this is actually one of the only studies in the nation that does brain donation specifically for people who have had a TBI, and so we really are grateful to our participants for choosing to be a part of this. By comparing the data collected during life with the data collected from the neuropathology report completed postmortem, our hope is that we can find patterns and correlations that could ultimately help inform future treatments for TBI and understanding of other neurodegenerative disorders.

In addition to making your wishes known about brain donation, participants are asked to complete an MRI, blood draw, and neuropsych testing at the UW Medical Center - Montlake in Seattle. The in-person portion takes about 5 hours, with an additional 2 hours of health and behavioral questionnaires answered over the phone and through an online survey. There are many elements but we guided you through everything! Compensation was just raised to \$200, in addition to a \$15 lunch voucher.

STUDY: 23-00621

Help Advance Military Brain Injury Research

Your involvement can help our future service members

Who can participate?

- Military Veterans who have sustained a head injury OR repetitive head impacts
- Participants will be asked to consider brain donation at the end of life to support future generations of Veterans

What will participants be asked to do?

- Brief set of cognitive tests
- Interview and questionnaires
- Blood draw
- MRI scan

Where will the study be conducted?

In-person visits will be conducted at the University of Washington Medical Center - Montlake in Seattle, WA

Compensation?

- In-person: \$200 OR Telephone: \$25
- Travel reimbursement
- A copy of the completed MRI scan
- After Visit Summary

How do I know if I had a head injury?

- Head injuries are common following a fall, vehicle accident, an assault, contact sports, and military service.
- Often times, head injuries go unreported or undiagnosed, so if you are still unsure if you have had a head injury, contact us or scan our QR code to find out if you qualify.

Will participation affect my VA benefits? No. Participating in this research will **NOT** affect your ability to receive VA benefits. All study information is federally protected by a Certificate of Confidentiality and will not be shared without your permission.

For further information please call **206-744-3607** or scan the QR code

late effects of traumatic brain injury project

Enrollment Goal Reached: The Late Effects of Traumatic Brain Injury Project (LETBI-2)

August marked the end of enrollment for the LETBI-2 study - thank you to all of the amazing people who chose to be part of this important project, both from the Model System and from the greater community. We were able to not only meet but exceed our goal for enrollment!

LETBI-2 participants will return every 2-3 years for follow-up visits. To schedule a follow-up visit, please email letbi@uw.edu or call Laurie at 206-744-3607.

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NATIONAL INSTITUTE ON DISABILITY, INDEPENDENT LIVING, AND REHABILITATION RESEARCH

The contents of this newsletter was developed under a grant from the [National Institute on Disability, Independent Living, and Rehabilitation Research \(NIDILRR grants 90DPTB0008 and 90DPTB0024\)](#). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS).

UW TBIMS Equity Statement

The Traumatic Brain Injury Model System team does research to improve the health of people who have had traumatic brain injuries. Structural racism, which is any policy or procedure that contributes to inequality, can make people sicker, especially people who are Black, Indigenous, and other people of color, as well as LGBTQ+ communities, people with low income, and those with disabilities. We are committed to improve the lives and well being of people who have experienced traumatic brain injuries, and that includes using our research to increase awareness of the effects of racism.

Shared stories

Do you have a story you would like to share? We would love to hear from you! Please email us at utwbi@uw.edu

Newsletter subscription

If you would like to be added to the e-mail list for future publications and upcoming events, please email utwbi@uw.edu. In the subject line, please type "subscribe newsletter". If you would not like to receive our quarterly newsletter, unsubscribe by emailing "unsubscribe" to utwbi@uw.edu

If you would like a paper copy, contact us and we will send you a copy through the mail.

TBIMS Staff

<p>Project Director: Jeanne Hoffman, PhD</p>	<p>Investigators: Amy Starosta, PhD Andrew Humbert, PhD Chuck Bombardier, PhD Cherry Junn, MD Kati Magulayan, PhD Nicole Pazawi, MD</p>	<p>Research Staff: Erica Wasmund Faran Kahlia Jason Barber, MS Laurie Peabody Mary Curran, MSW Melissa Mayes, MSW Nyx Ward Silas James, MPA</p>
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1959 NE Pacific St,
Box 356490
Seattle, WA 98195

Email:
utwbi@uw.edu

Main office:
206-897-6322

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