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SPRING IS IN THE AIR

Hello from the University of Washington Traumatic Brain Injury Model System,

As we come into spring, we are feeling some renewed hope. The flowers are in bloom, we've now had some sunny days and multiple COVID vaccines are available. We don't yet know what 2021 will bring. Will we be able to have backyard BBQs with friends? Will we be traveling? Yet we can continue to engage with our friends and family in new ways, and take the time to take care of ourselves. In this issue we will meet the awardees of the Adler Endowed Fund for TBI research. These people are leading the way for new insights. We also highlight some recently published research and we will have an introduction to one of the many wonderful therapists in the Comprehensive Outpatient Rehabilitation Program (CORP) at Harborview.

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Meet the 2020 Adler Grant Awardees



Natasha Mehta, MD: Rehabilitation Medicine TBI Fellow, *"Investigating the Role of Diet in Mild Traumatic Brain Injury: A Pilot Study"*

Q: Congratulations to you Dr. Mehta! Tell us about your se-

lected proposal.

A: I am interested in whether there is a relationship between what you eat and how you heal after experiencing mild-TBI. In my pilot study, I am trying to determine if responding to questions on a website can provide good information about their daily diet (<u>Diet ID</u>). I plan to compare this information to information about how they are recovering after concussion to begin to understand if different types of diets are associated with different outcomes.

Q: Q: How will these findings be useful?

A: This pilot study will help us learn about the potential to more easily collect information about a person's diet and how diet can influence outcomes. It will set the stage for future research on the relationship between diet and outcomes and I hope to eventually test out dietary interventions to improve recovery after mild TBI. Although we don't now know whether one type of diet or quality of diet is better for mild traumatic brain injury, This data will add to that discussion.

RICHARD H. ADLER ATTORNEY AT LAW & THE ADLER-GIERSCH LAW FIRM ENDOWED FUND FOR TRAUMATIC BRAIN INJURY RESEARCH

Madeline Greil, MD: Neurological Surgery Resident, PGY4, "Using Automated Pupillometry for Prediction of Intracranial Hypertension in Severe Traumatic Brain Injury"



Q: Congratulations Dr. Greil! Please say a bit of background about your selected proposal.

A: A severe brain injury can lead to growing pressure inside your skull which can cause additional damage or death if not addressed. As a neurosurgery resident at Harborview, the concern of intracranial pressure (ICP) is something that we closely watch and we are always making decisions on trauma patients who come in about whether they require an invasive pressure monitor, called a bolt, which is a small-probe inserted through the skull. This is a common neurosurgical procedure, but it does carry risks, and we have to balance that with the risk of missing someone who has high pressure. This project is really about whether we can we use a strategy (automated pupillometry) that is much less invasive than a bolt, but be as accurate as a bolt to identify patients with higher ICP.

Q: How will these findings be useful?

A: These findings will apply to level one trauma centers, such as Harborview, where there are always specialists available, but will also be helpful for more community hospitals, where they may not have a neurosurgeon on site. It may allow these smaller hospitals to say "okay, this person's measurement is xx, which means they are at a higher risk, and I need to get them to Harborview more quickly." My hope is that this data will help to answer that question. Continued on page 7

Who's Who? - Becky Hansen, PT, NCS

Becky Hansen is a physical therapist (PT) on the Comprehensive Outpatient Rehabilitation Program (CORP) at Harborview Medical Center. She has been practicing PT for 16 years. She is a Neurologic Certified Specialist and works with patients who have experienced brain injury,



stroke, and spinal cord injury. She is passionate about vestibular rehabilitation, and has had specialized training to help people who have dizziness and balance problems after injury to the brain or inner ear.

Becky knew she wanted to be a PT in high school, after injuring her ankle dancing and being a patient herself. It was a natural fit as she loves anatomy and physiology, physical activity, and interacting with people. She completed her undergraduate degree at McGill University in Anatomy and Cell Biology. She went on to earn a Master's Degree in PT from the University of Vermont. During graduate school, she had an internship on the rehabilitation unit at Virginia Mason Medical Center in Seattle and fell in love with the city. After a year in Philadelphia gaining more experience in her specialty, she returned to Seattle and started her job at Harborview.

Becky loves the diversity and complexity of the patients she sees at Harborview and the chance to work on a team with smart, passionate, and caring professionals. She is a representative for Harborview and the University of Washington at the annual TBI Model Systems Leadership Conference. This has been a great opportunity for her to learn and share information with providers that work in other TBI Model System sites around the country.

Becky also recently did a presentation on the role of PT in management of concussions for the BIAWA Health & Wellness series (see page 5 for a summary).

When Becky is not at work she enjoys dancing, interior design, and spending time with her husband, friends, family and her 2 Persian cats.



Becky's kitties Midgie (left) and Harriet (below)



Update on Research

Our own Chuck Bombardier, PhD recently contributed to a publication on "Return to driving following moderate-to-severe traumatic brain injury," in *Archives of Physical Medicine and Rehabilitation*. The study found that over a span of 30 years, three-quarters of people experiencing



moderate-to-severe TBI return to driving (RTD) a personal vehicle, although not everyone maintains this activity. Employment, race, family income, and seizures

are strongly associated with RTD. Authors are from the following currently-funded TBI Model System centers: University of Alabama at Birmingham Traumatic Brain Injury Model System (Thomas A. Novack, PhD, ABPP; Yue Zhang, PhD; Richard Kennedy, PhD; Laura Dreer, PhD; Robert Brunner, MD; and Janet Niemeier, PhD), Southeastern Michigan Traumatic Brain Injury System (Lisa Rapport, PhD), Moss Traumatic Brain Injury Model System (Thomas K. Watanabe, MD), Rocky Mountain Regional Brain (Kimberley R. Injury System Monden, PhD), Mayo Clinic Traumatic Brain Injury Model <u>System</u> (Thomas Bergquist, PhD, LP), <u>University</u> of Washington Traumatic Brain Injury Model System (Charles Bombardier, PhD), <u>JFK Johnson Rehabilitation Institute Traumatic Brain Injury Model System</u> (Yelena Goldin, PhD), and <u>Virginia</u> <u>Commonwealth Traumatic Brain Injury Model</u> <u>System</u> (Jenny Marwitz, MA, MA). View the abstract here.



Model Systems Knowledge Translation Center

The Model Systems Knowledge Translation Center (MSKTC) is a national center operated by the American Institutes for Research (AIR) that translates health information into easy to understand language and formats for patients with spinal cord injury, traumatic brain injury, and burn injury and their families and caregivers.

To learn more information about Model System news across all of the centers, sign up for the MSKTC's monthly newsletter list <u>here</u>.

Parmesan Orzo and Peas

2 tbsp. butter (unsalted)1 onion, chopped2 cloves of garlic

1 1/2 cups orzo (uncooked)
3 cups chicken or vegetable broth
1/2 tsp. salt
1 1/2 cups frozen peas thawed



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In a pan over medium heat, melt the butter. Add onions and cook about 5 minutes. Add garlic and stir an additional 1 minute. Add uncooked orzo, chicken broth, salt and pepper. Bring to a boil, cover and reduce heat to low. Simmer for 10 min or until most of the liquid is absorbed. Add peas and Parmesan cheese. Toss for about a minute and remove from heat. Allow to sit for 5 minutes before serving. Makes about 5 servings. ENJOY!

Recent BIAWA Health & Wellness Classes



This year the UW TBI Model System has had the pleasure of continuing our partnership with BIAWA and their wonderful, free classes. They have moved to an online format over Zoom. This has had the benefit of being able to reach more people who had not been able to attend in-person. Thank you BIAWA for all the great work you do and to our presenters. All slides can be found on our <u>website</u>

JANUARY: Physical Therapy's Role in the Management of Concussions– Becky Hansen, PT, NCS– Becky first walked us through the definition of a concussion and then some of the symptoms that physical therapy can help with. With her passion in vestibular rehabilitation, she shared some of the many ways PT can assist with balance, headaches, dizziness and so much more.

FEBRUARY: Mindfulness and Relaxation– Mary Curran, MSW, LICSW– It's always a pleasure having Mary discuss the benefits of mindfulness and relaxation. People were also taken through a guided session to help understand how the practice works.

MARCH: Self-Advocacy– Silas James, MPA– Silas took us through situations and scenarios and provided language to better self-advocate.

APRIL: Acupuncture and Brain Injury– Mark Sodder, DAOM– Mark walked us through the history of acupuncture. He talked about what to expect during an acupuncturist visit, and some common things it can be used for, like treating headache and other types of pain.



Upcoming Brain Health & Wellness Classes

Post-Traumatic Headache (Headache after Brain Injury) August 13th, 2021 12PM-1PM

Facilitated by Natalia Murinova, MD, MHA, Tara Sharma, DO and Ami Cuneo, MD

Frequent or continuous headache is a common symptom after traumatic brain injury (TBI) and can be one of the most persistent and disabling symptoms. Studies indicate that 18 - 58% of those who've had a TBI will experience significant headaches at 1 year following the trauma. The purpose of this class is to discuss:

- How commonly post-traumatic headaches occur
- Why people get headaches and persistent headaches after trauma
- What can be done to help people experiencing post-traumatic headache both immediately and long-term

Click <u>here</u> to register through BIAWA. To learn more about upcoming Health & Wellness classes check our <u>website</u>.



In the Community



LISTEN HERE Latest Episode—<u>Laughing With The</u> Lystedts: The First Family of Brain Injury

In the latest episode of *Brain Injury Today*, host Deborah Crawley, BIAWA Executive Director, talks with Zackery, Victor and Mercedes Lystedt also known as the "first family of prevention". In 2006, Zack suffered a preventable brain injury playing football which led to the state of Washington passing the <u>Zack Lystedt Law</u> in 2009. It was a long road to recovery, which is still Zack's full time job, but the family is stronger than ever and has always shared their story to help others.

The BIAWA offers helpful information and resources, including information about how to attend an online support group, as well as comfort and strategies to get through this time of isolation and



Friday where you can connect with staff.

BIAWA Resource Center 1-877-982-4292

uncertainty. The BIAWA also has a Resource Center Monday thru

BIAWA 11th Annual Walk Run & Roll AND RIDE



Photos of the University of Washington TBI Model System Research Team supporting the BIAWA for their 11th Annual Walk Run & Roll AND RIDE fundraiser. This year the UW TBI Model System team raised more than \$1,000.



UNIVERSITY OF WASHINGTON TRAUMATIC BRAIN INJURY MODEL SYSTEM



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Tracy Herring, PhD and Orli Shulein, MA, Proposal: "Primary Care Practice for Concussion Management: A Health Services Study of UW Medicine"

2020 Adler Fund Awardees, cont. from page 2



Dr. Herring is a Rehabilitation Psychology Fellow and Orli Shulein is a speech pathologist and a PhD student in Rehabilitation Sciences.

Q: Congratulations to you both! Please say a bit about your selected proposal.

A: We want to learn more about how UW Medicine patients who have a diagnosis of concussion receive care, especially those who are continuing to have post concussion symptoms at 3 months. Clinical practice guidelines recommend receipt of a referral to a specialist. We want to understand whether individuals with concussion are receiving those referrals and to what specialty they are referred. We are also interested to learn if a person's race and/or ethnicity influence referral patterns.

People who receive a diagnosis of concussion and experience post-concussive symptoms (such as headache, dizziness, problems with concentration and/or memory) may have their symptoms resolve within the first few months, but this isn't the case for everyone. We want to understand more about how people with concussions receive care within UW Medicine.

Q: How will these findings be useful?

A: We will determine if primary care providers are following the guidelines. If they are, that is great! If they are not, we can then begin to determine whether there are opportunities for education and identify barriers that may exist to helping patients after concussion. In addition, we will be looking closely at health disparities which will help inform a larger health services study and get us closer to ensuring all people get the care they need.

The purpose of the Richard H. Adler Attorney at Law & Adler Giersch Law Firm Endowed Fund is to provide support for efforts to find more effective evaluation and treatment protocols for those with traumatic brain injuries given the long term cognitive, behavioral, and physical consequences and impairments which may result from the underlying trauma. You can find more information about this annual award <u>here</u>.

The Washington Traumatic Brain Injury Resource Center

BIAWA is first and foremost a source of support for those affected by Brain Injury, of which the Resource Center is a critical part.

Brain Injury Alliance of Washington: www.biawa.org/

BIAWA Support Center: www.biawa.org/getsupport.php







TBIMS Updates

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