

MAR 2024

APTA NC NEURO SIG

Quarterly Newsletter



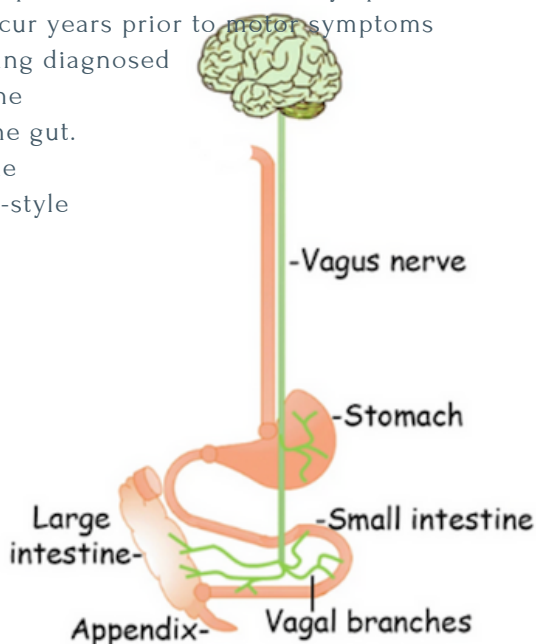
Cranial Crossovers

Each quarter, the NSIG will highlight neuro diagnoses and how they relate to other systems!

April: Parkinson's Disease awareness month

ALL IN YOUR HEAD OR IN YOUR GUT?

We know PD is a loss of dopaminergic neurons, however we don't fully understand what triggers this brain cell death. There is growing evidence PD may start in the gut and move to the brain via the vagus nerve. Studies have found that alpha-synuclein aggregates in the enteric system before they are found in the brain, and once in the brain it may trigger the loss of dopaminergic neurons in people with PD. Non-motor symptoms, such as constipation, can occur years prior to motor symptoms developing and a person being diagnosed with PD, further leading to the belief that PD may start in the gut. It's recommended that people with PD eat a Mediterranean-style diet to improve gut health.



Mazursky, A., Howitt, J. Initiation and Transmission of α -Synuclein Pathology in Parkinson's Disease. *Neurochem Res* 44, 2685-2694 (2019). <https://doi.org/10.1007/s11064-019-02896-0>

Neuro Nuggets

Each quarter, the NSIG will feature conferences, presentations or articles relating to neuro PT!

CSM BOSTON 2024 ANPT SECTION

- 16,000 + attendees
- 257 posters
- 25 platform presenters
 - Subsections: CVA, TBI, SCI, vestibular, degenerative diseases
- 25 education sessions
- 4 social events
 - ANPT Networking Mixer
 - NCS and PTA AAP Breakfast
 - Residency Breakfast
 - ANPT Myelin Melter and Business Meeting
- APTA CSM On-Demand: March 15-April 15 Link: [CSM Rates and Registration | APTA](#)
 - Complimentary access for in-person full registration CSM attendees
- On-Demand sessions preview link: [On Demand Sessions](#)
 - 11 education sessions with Primary Neuro section sponsorship

Myelin Mapping

Each quarter, the NSIG will highlight PT and PTA programs and appreciate what makes their program, neurology curriculum, and students special!

CAMPBELL UNIVERSITY'S DOCTOR OF PHYSICAL THERAPY PROGRAM

What makes Campbell's DPT program unique?

The Campbell DPT program is on a mission to develop physical therapists who can treat any patient, any time, anywhere. Our focus is on building a strong foundation across all practice patterns and all ages across the lifespan, versus specialization. This will position our graduates to see a patient holistically with consideration for how all systems interact in the experience of any health condition.

Tell us about your neurology curriculum.

The Campbell DPT students engage in 3 Neuro Specific courses (general assessment, neuro conditions, and interventions), a Motor Control course, Neuroscience course, and 2 Pediatric courses. Additional courses in Orthotics & Prosthetics and Adaptive & Assistive Equipment occur as their own individual courses to support both adult and pediatric populations. This is a robust combination of courses which occurs over 5 semesters. Our program provides students an opportunity to work with community participants with a variety of neurologic conditions for about 2 hours each week within lab for the entire 2nd year of the program. This occurs in both the neuro and pediatric courses.

What is one recent service outreach project that you would like to highlight?

The Life Rolls on Carolina Beach Adaptive Surf program was a goal for a few of our community participants, so the students worked with the participants over the summer session to get them ready for the surf boards! The students then volunteered and assisted at this great event! We are excited to return this summer! (picture attached)

Our students are engaged in advancing their knowledge of the evidence related to high-intensity gait training. The concepts are able to be immediately applied to the community participants and the results have been impressive! The students are improving their confidence in administration of this technique and the participants are increasing their walking ability! Win-win! The students have been working on transferring this concept to functional circuit intervals to aide in cardiovascular training within functional practice.



Synaptic Spotlight

A space for member highlights!

TREVOR BRANNOCK, SPT

Where are you from and where did you go for PT school?

I am from Marysville Washington which is about an hour north of Seattle. I am currently in my 3rd year of PT school at Wingate University in Wingate NC.

What is your favorite population to work with?

Currently with my clinical experience I have enjoyed working with all of the different populations I have encountered. If I had to choose one, I would probably go with working with patients with Parkinsons using the LSVT BIG program and protocol.

What do you like to do outside of Physical Therapy?

Outside of Physical Therapy, I like to be outside exploring nearby parks, going to the beach, or hiking. Especially with my wife and pup. I haven't had any training, but I have always enjoyed and have gotten more into photography of nature as well.

