Call for Social Media Coordinator!

Calling all DPT and PTA Students!

Are you interested in getting more involved? Are you interested in spinal cord injury?

We are opening applications for a new student position -

Social Media Coordinator

- The position is a 1-year term starting July 1, 2019.
- You will receive mentorship completing the tasks.
- Requirements to apply:
  - Currently enrolled in a physical therapy or physical therapy assistant program
  - Eager to learn through mentorship and to get involved
  - That's it! No neurologic PT knowledge or experience is necessary!

Interested? Apply here! Applications due May 25, 2019!

Questions? Contact Christi Hutchison, PT, MPT, NCS.

CSM 2019 Highlights and Summary

Thank you!!

A big thanks to the 16,000+ PTs, PTAs, and students who made CSM 2019 in Washington, DC one of the best ones yet!

The Outcome Measures Clinical Practice Guideline (CPG)
Implementing a Core Set of Outcome Measures for Adults with Neurologic Conditions.

This CPG was developed to help streamline and standardize the assessments used to assess balance, walking speed/endurance, and transfers in patients with neurologic conditions.

Detailed descriptions of the outcome measures, standardized instructions for administering the outcome measures, as well as a "Quick Guide" can all be found here.

Other SCI platforms and presentations included:

- **SCI and Neuroplasticity.** D. Michelle Basso, PT, Ed.D; Deb Larson, PT, PhD, FAPTA, FASAHP; Timothy Faw, PT, DPT, NCS, NRSA Fellow.

- **Why We Love and Hate Our Robots: Implications for Everyday Clinical Practice.** Julius Dewald, PT, PhD; Edelle Field-Fote, PT, PhD, FAPTA; Kristen Hohl, PT, DPT; Arun Jayaraman, PT, PhD; Catherine Lang, PT, PhD.

- **Dealing with the Dark Side of Plasticity.** Stephen Schmidt, PT, MPhysio; Adriaan Louw, PT, PhD.

- **Budget Impact Analysis of Robotic Exoskeleton Use for Locomotor Training Following Spinal Cord Injury in Three Model Health Systems.** Daniel Pinto, PT, PhD.

- **Transcutaneous Spinal Cord Stimulation Generates Reciprocal Lower Extremity Movement in Pediatric Patients with Motor Complete Spinal Cord Injury.** Brooke Meyer, PT, DPT.

- **Skilled Aquatic-Based Therapies for Chronic Spinal Cord Injury with Complex Co-Morbidities and Invasive Appliances.** Albert Recio, MD.

- **The Degree of Sympathetic Interruption Predicts Core Temperature Lability and Cognitive Performance During Heat Exposure in Persons With Higher Spinal Cord Injuries.** John Handrakis, PT, DPT, EdD.

- **Intramuscular Diaphragm Stimulation to Enhance Respiratory Function After Cervical Spinal Cord Injury.** Emily Fox, PT, DPT, PhD.

There were also almost 20 great SCI posters presented! They can be found here.

CSM Handouts will be available to download through July 7, 2019. (Password: DC2019)
Please see this month's research articles below!

  - **Study Design:** This work is a systematic review with meta-analysis. **Objective:** Evaluate the effect of electrical stimulation (ES) on skeletal muscle volume and spasticity in individuals with spinal cord injury (SCI).

  - **Abstract Excerpt:** The purpose of this study was to understand how high and low intensity locomotor training (LT) affects sympathetic-somatomotor coupling in people with incomplete spinal cord injury (SCI). Proper coupling between sympathetic and somatomotor systems allows controlled regulation of cardiovascular responses to exercise. In people with SCI, altered connectivity between descending pathways and spinal segments impairs sympathetic and somatomotor coordination, which may have deleterious effects during exercise and limit rehabilitation outcomes. We postulated that high-intensity LT, which repeatedly engages sympathetic-somatomotor systems, would alter sympathetic-somatomotor coupling.

  - **Abstract Excerpt:** Pressure ulcer interventions are commonly assessed with measures of seating interface pressure, such as peak pressure gradients (PPGs). Decreases in PPG magnitudes may reduce pressure ulcer risk by decreasing tissue deformation and increasing tissue perfusion of at-risk weight-bearing tissues. Changes in PPG directions, which have previously been overlooked in the seating pressure literature, may provide a transient increase in blood flow to at-risk tissues, even if the PPG magnitude and location remain the same. The purpose of this study was to assess both PPG components in response to combinations of wheelchair tilt and recline angles.

  - **Background:** Cervical spinal cord injury can result in catastrophic respiratory failure requiring mechanical ventilation with high morbidity, mortality, and cost. Diaphragm pacing was developed to replace/decrease mechanical ventilation. We report the largest long-term results in traumatic cervical spinal cord injury. **Methods:** In this retrospective review of prospective institutional review board protocols, all patients underwent laparoscopic diaphragm mapping and implantation of electrodes for diaphragm strengthening and ventilator weaning.

If you have suggestions or interest in participating in this SCI Research Review, please contact us [here](#)!
Upcoming Conferences: 2019

**ASIA SCI Summit 2019**
*Annual Scientific Meeting*
April 2-5, 2019 - Waikiki, Hawaii ([Hilton Hawaiian Village](#))
- Online registration is available [here](#)
- Join other ASIA attendees at the Aloha Welcome / Pre-Registration Event on Monday April 1, 4:00 - 6:00 pm at the Palace Lounge, Hilton Hawaiian Village!
- Check out the [ASIA Meeting Website](#) for more information!

**Rehab Week 2019**
June 24 - 28, 2019 - Toronto, Canada ([Metro Toronto Convention Centre](#))
- Early bird registration is available until **April 15, 2019**. Register [here](#)
- For more information, visit the Rehab Week [website](#)

**Paralyzed Veterans of America (PVA) 2019**
*Annual Summit*
August 15 - 17, 2019 - Orlando, FL ([Renaissance Orlando at SeaWorld Hotel](#))
- Click [here](#) to register!
- Review the program [here](#)
- Check out the PVA Annual Summit [website](#) for more information!

**58th International Spinal Cord Society (ISCoS) Meeting 2019**
*Annual Scientific Meeting*
November 5 - 7, 2019 - Nice, France
- Abstract Submission is open until **Tuesday April 30, 2019**. Submit [here](#)
  - 2019 Abstract themes include: Respiratory Issues; Musculoskeletal Complications; Autonomic Nervous System; Neurological Complications; and Sexuality and Fertility.
- Registration will be opening soon!
- Check out the ISCoS [website](#) for more information!
Upcoming Conferences: 2020

APTA Combined Sections Meeting (CSM) 2020
February 12 - 15, 2020 - Denver, CO

Submit your Poster and Platforms Abstracts now!
- Research Posters and Platforms: due Friday July 12, 2019

Visit the ANPT online!

Thank you!

ANPT SCI SIG Officers
Rachel Tappan, PT, DPT, NCS, Chair
Meghan Joyce, PT, DPT, NCS, Vice-Chair
Casey Kandilakis, PT, DPT, NCS, Secretary
Cathy Larson, PT, PhD, Nominating Committee Chair
Christi Hutchison, PT, MPT, NCS, Nominating Committee
Sara Hobbs, PT, DPT, NCS, Nominating Committee