

# SPINAL CORD INJURY SPECIAL INTEREST GROUP

Academy of Neurologic Physical Therapy

# **NEWSLETTER**

#### In this newsletter...

- 2022 ANPT Award Nominations
- SCI SIG Calendar
- SCI Experienced Clinician List
- SCI Research In Review
- Two New DiSCIS Podcasts
- Student Social Media Coordinator Position
- New SCI SIG Instagram Page
- Upcoming Conferences 2021/2022

## 2022 ANPT AWARD NOMINATIONS

Know someone deserving?
Nominate them for one of the 2022 ANPT
Awards here!



- There are 2 SCI SIG-specific awards available
- **SIG Service Award** (for a SIG member who goes above and beyond through volunteer contributions to the SIG)
- **SIG Research Award** (for a SIG member who has demonstrated exemplary contributions to the body of research representative of the population the SIG serves)

Nominations are due August 1, 2021!

NOMINATE HERE

# SCI SIG CALENDAR

#### **NEW SCI SIG CALENDAR**

Check out the SIG's new calendar of SCI-related events and activities **here!** If you have any suggestions for additions to the calendar, or any comments or questions on events, please contact us at: **anptscisig@gmail.com** 



## SCI EXPERIENCED CLINICAN LIST



IF YOU WOULD LIKE YOUR NAME/CONTACT INFO ADDED TO THE LIST

PLEASE CONTACT CHRISTI HUTCHISON AT CHUTCHISON@CRAIGHOSPITAL.ORG

**Visit List** 

## SCI SIG RESEARCH IN REVIEW



# PLEASE SEE THIS MONTH'S RESEARCH ARTICLES BELOW



Berliner, J. C., O'Dell, D. R., Albin, S. R., Dungan, D., Sevigny, M., Elliott, J. M., Weber, K. A., Abdie, D.R., Anderson, J.S, Rich, A.A., Seib, C.A., Sagan, H.G, Smith, A. C. (April 02, 2021). The influence of conventional T 2 MRI indices in predicting who will walk outside one year after spinal cord injury. The Journal of Spinal Cord Medicine, 1-7.

Objective: The primary purpose was to see if these MRI indices predict the ability to walk outdoors one-year after SCI. The secondary purpose was to determine if MRI indices provide additional predictive value if initial lower extremity motor scores are available.

• Fahey, M., Brazg, G., Henderson, C. E., Hornby, T. G., Henderson, C. E., Plawecki, A., Lucas, E., Reisman, D.S., Schmit, B. D. (January 01, 2021). The Value of High Intensity Locomotor Training Applied to Patients With Acute-Onset Neurologic Injury. Archives of Physical Medicine and Rehabilitation.

Abstract Excerpt: The purpose of this review is to delineate some of the

evidence regarding the effects of exercise intensity during locomotor training in patients with stroke and iSCI.

Tamburella, F., Tagliamonte, N. L., Masciullo, M., Pisotta, I., Arquilla, M., van, A. E. H. F., van der Kooij, K., Wu, AR, Dzeladini, F, Ijspeert, AJ, Molinari, M. (January 01, 2020). <u>Gait training with Achilles ankle exoskeleton in chronic incomplete spinal cord injury subjects.</u> Journal of Biological Regulators and Homeostatic Agents, 34, 147-164.

Abstract excerpt: In a previous study we demonstrated that a period dedicated to train iSCI subjects in using the Achilles EXO as an assistive aid, improved robot-aided walking speed and surprisingly also generated a positive trend in free walking speed on long and short distances thus suggesting a possible unexpected rehabilitation effect. To further investigate this result, a case-control longitudinal study was conducted in the present work. The aim of this study was to test the hypothesis that Achilles-aided training could improve performance of free walking of chronic iSCI people more than conventional intensity-matched gait rehabilitation.

• Tan, A. Q., Sohn, W. J., Naidu, A., & Trumbower, R. D. (February 01, 2021). Daily acute intermittent hypoxia combined with walking practice enhances walking performance but not intralimb motor coordination in persons with chronic incomplete spinal cord injury. Experimental Neurology, 113669.

ABSTRACT EXCERPT: Recent studies in humans with SCI found that daily bouts of breathing low oxygen (acute intermittent hypoxia, AIH) prior to locomotor training elicited persistent (weeks) improvement in overground walking speed and endurance. AIH-induced improvements in overground walking may result from changes in control strategies that also enhance intralimb coordination; however, this possibility remains untested. Here, we examined the extent to which daily AIH combined with walking practice (AIH + WALK) improved overground walking performance and intralimb motor coordination in persons with chronic, incomplete SCI.

Unger, J., Musselman, K. E., Unger, J., Chan, K., Lee, J. W.,
 Theventhiran, P., Masani, K., Musselman, K. E. (January 01, 2020). <u>The measurement properties of the Lean-and-Release test in people with incomplete spinal cord injury or disease.</u> Journal of Spinal Cord <u>Medicine</u>.

Objective: To evaluate test-retest reliability, agreement, and convergent validity of the Lean-and-Release test for the assessment of reactive stepping among individuals with incomplete spinal cord injury or disease (iSCI/D).

• Zhang, F., Momeni, K., Ramanujam, A., Ravi, M., Carnahan, J., Kirshblum, S., & Forrest, G. F. (December 01, 2020). <u>Cervical Spinal</u> Cord Transcutaneous Stimulation Improves Upper Extremity and Hand

Function in People With Complete Tetraplegia: A Case Study.

Transactions on Neural Systems and Rehabilitation Engineering, 28, 12, 3167-3174.

Abstract Excerpt: The goal of this study was to investigate whether scTS can also facilitate UE functional restoration in an individual with motor and sensory complete tetraplegia.



# **Just Released - TSCIR TOPICS journal**

Special Issue on Neurogenic Obesity after Spinal Cord Injury TSCIR Guest Editor: David Gater, MD, PhD, MS

This special issue on Neurogenic Obesity after Spinal Cord injury outlines the pathophysiology and scope of a problem that has been insidiously growing over the past several decades. Body composition changes masked by low or normal body weight have lulled clinicians and patients into a false sense of security, despite expanding evidence of metabolic melee, upper extremity overuse, neuropathic pain and disordered sleep. Metabolic assessment to direct dietary, exercise and behavioral interventions is reviewed and future directions for research and management are explored.

The latest TSCIR journal is available online here - free to ASIA members.

# New Discussions in Spinal Cord Injury Science (DiSCIS) Podcasts

# Spinal Cord Injury SIG: Interview with Jonathan Tsay about early-phase clinical research – Episode 9



POSTED BY

ADMIN APRIL 5, 2021

In this episode, we talk to Jonathan (JT) Tsay about his recent paper: Tsay JS, Winstein CJ. Five features to look for in early-phase clinical intervention studies. Neurorehabil Neural Repair. 2021;35:3-9.

The Spinal Cord Injury Special Interest Group is part of the Academy of Neurologic Physical Therapy – <a href="https://www.neuropt.org">www.neuropt.org</a>

Podcast: Play in new window | Download (Duration: 24:51 - 56.9MB)

Transcription of this podcast can be found

here: https://app.box.com/s/62d6za8i692rov46pz7gd5zbaappezks.

# Spinal Cord Injury SIG: Bonus Conversation with Jonathan Tsay and Nayo Hill about pursuing a DPT and PhD – Episode 10

POSTED BY

ADMIN APRIL 21, 2021

In this episode, we talk to Jonathan (JT) Tsay, PT, DPT and Nayo Hill, PT, DPT, PhD about their experiences pursuing both a DPT and a PhD.

The Spinal Cord Injury Special Interest Group is part of the Academy of Neurologic Physical Therapy – <a href="https://www.neuropt.org">www.neuropt.org</a>

Podcast: Play in new window | Download (Duration: 30:42 - 70.3MB)

# STUDENT SOCIAL MEDIA COORDINATOR POSITION



Find Out More
About The
Student Social
Media
Coordinator
Position



Click for Description

Deadline to Apply: June 18, 2021



Students Click Here To Apply ----->

# **NEW SCI SIG INSTAGRAM PAGE**







Just Click The Icon To Visit Our Page

#### **SUBMIT A PHOTO!**



We are collecting pictures to post to our Social Media Accounts and website.

Send your pictures, including the names of anyone in the picture and a 1-sentence caption, to our SCI SIG Social Media Coordinator **Kathryn McLeland**.

# UPCOMING CONFERENCES

ACADEMY OF NEUROLOGIC PHYSICAL THEREAPY

VIRTUAL CONFERENCE 2021

SEPT-NOV ON-DEMAND | OCTOBER 1-3 LIVE CONTENT

#### **CONFERENCE DESCRIPTION**

The Academy of Neurologic Physical Therapy (ANPT) is excited to host its 1st Annual Conference in 2021!

- On-demand content will be available September 8
- Virtual "Live" Conference October 1-3
- Content offerings through November 22

As a leading innovator in neurologic physical therapy, the ANPT conference will focus on **examining recommendations and research evidence**, **exploring examples of successful efforts in knowledge translation** as well as offering opportunities for meaningful engagement and collaborations among participants.

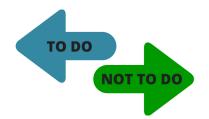
**REGISTRATION OPENS: JUNE 28,2021** 

**CONFERENCE WEBSITE** 



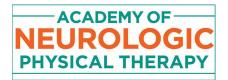
#### **CSM 2022 Submissions**

https://www.apta.org/csm/programming/csm-submissions



Platform / Poster Proposals Due July 19th

# VISIT THE SCI SIG ONLINE!









### **ANPT SCI SIG Officers**

Casey Kandilakis, PT, DPT, Chair Cathy Larson, PT, PhD, Vice-Chair Christi Hutchison, PT, MPT, Secretary Sara Hobbs, PT, DPT, Nominating Committee Chair Andrea Stump, PT, DPT, ATP, Nominating Committee Andrew Smith, PT, DPT, PhD, Nominating Committee Kathryn McLeland, PT, DPT, Lead Social Media Coordinator Jane Mongkolvipakul, PT, DPT, Social Media Coordinator



Academy of Neurologic Physical Therapy info@neuropt.org | www.neuropt.org

**ANPT Social Media** 







