A N N U A L SCIENTIFIC MEETING 0CT 4&5 · 2020

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A PROUD SPONSOR OF THE 2020 ANNUAL SCIENTIFIC MEETING

The Craig H. Neilsen Foundation's funding is dedicated to supporting both programs and scientific research to improve the quality of life for those affected by and living with spinal cord injury.

American Spinal Injury Association

To learn more about funding opportunities, visit our website at www.chnfoundation.org.

Moderator:

an Obesity paradox - Jan Schwab, MD, PhD

John Steeves, PhD, FASIA

SUNDAY, OCTOBER 4TH

TIME (EST)	CONFERENCE ROOM 1	CONFERENCE ROOM 2	CONFERENCE ROOM 3
9:00 – 10:00 am	Mentor/Mentee Breakfast: Meet the ASIA Early Career Committee and learn about the new ASIA Mentorship Program		
10:00 – 10:05 am	Welcome and Introduction Andrei Krassioukov, MD, PhD, FRCPC ASIA President (2019 - 2021) ICORD-BCSS, UBC GF Strong Rehabilitation Centre Vancouver, Canada		
10:05 – 10:35 am	Presented by Am Diana Cardena Achievement A career of more	chievement Award – Dia <i>nie McLain, MD, FASIA</i> is, MD, MHA will be honored a ward recipient. Dr. Cardenas is than 40 years and a clinical, teac primarily focused on spinal cord	as the ASIA 2020 Lifetime a physiatrist with an academic ching, administrative, and
10:35 – 11:25 am	"Brain-machin Miguel Nicolel and founder of	ell Lecture – Miguel Nicole e interfaces: from Basic Science lis, MD, PhD, Distinguished P. Duke's Center for Neuroengin nalian brain circuits have guided thine interfaces.	to Neurological Rehabilitation" rofessor at Duke University eering, whose influential
11:25 – 11:35 am	Passing Period		
11:35 am – 1:00 pm	COURSE 1 SCI Clinical Trials by SCOPE: Considering Traditional RCT Study Protocols with Adaptive Design Approaches	COURSE 2 The Hand and Upper Extremity in Spinal Cord Injury – The Full Spectrum of Management	General Session: Acute Care & Mixed Papers O-7, O-8, O-9, O-10, O-11, O-32, O-33

1:00 – 1:05 pm **Passing Period** 1:05 – 2:00 pm Moderator: Mark Nash, PhD AWARD ELIGIBLE ORAL PRESENTATIONS O-1. Development of a Standardized Normative Pediatric Spinal O-4. A deep learning approach for detecting hand-object interactions from Cord structural template - Shiva Shahrampour, MS egocentric videos after cervical spinal cord injury: First results in the home environment – Andrea Bandini, PhD O-2. Transplantation of autologous human Schwann cells accompanied by rehabilitation in participants with chronic O-5. Targeted spinal cord stimulation and neurorehabilitation for spinal cord injury - Katie Gant, PhD restoring leg motor control in individuals with spinal cord injury -Laura McCrac<mark>ken</mark> O-3. Survival in Patients after Spinal Cord Injury - Evidence for

Moderator: Allan Peljovich, MD

O-6. Cardiac-focused hemodynamic management mitigates increases to spinal cord anaerobic metabolism in a porcine model of acute high-thoracic spinal cord injury – *Alexandra Williams, PhD*



2020 ANNUAL SCIENTIFIC MEETING October 4&5

SUNDAY, OCTOBER 4TH

TIME (EST)	CONFERENCE ROOM 1	CONFERENCE ROOM 2	CONFERENCE ROOM 3
2:00 – 3:00 pm	Lunch Break		
3:00 – 4:00 pm	COURSE 4 TRIP Recommendations for Evaluation of Neurogenic Bladder and Bowel Dysfunction after Spinal Cord Injury and/or Disease Moderator: <i>Tracey Wheeler, PhD</i>	COURSE 5 Refining Outcome Measurements in Humans with Spinal Cord Injury Moderators: Monica Perez, PhD & Allen Heinemann, PhD	
4:00 – 4:30 PM	SPONSOR EVENT Please join and thank our generous conference supporters who remain loyal to our mission and annual meeting. Online attendees will have an opportunity to win several prizes during this session. Win prizes during this session!		
4:30 – 4:40 pm	Passing Period		
4:40 – 5:40 pm	COURSE 6 TRIP Novel Findings in the Development and Prevention of Neuropathic Pain and the Impact on Neurological Recovery: Findings from Bench to Bedside to Bench. Moderator: Linda Jones, PT, PhD	COURSE 7 A Critical Analysis of Four Major New Technological Innovations for Treatment of Chronic Incomplete Spinal Cord Injury Moderator: <i>William Rymer, MD, PhD</i>	COURSE 8 Networking Tips for Early Career Members: Conquering an International Conference and Identifying Opportunities for Meeting New Mentors Moderator: <i>Stephanie Kolakowsky-Hayner</i> , <i>PhD, CBIST</i>

5:40 pm

Presidential Reception

Hosted by Andrei Krassioukov, MD, PhD, FRCPC



Hors d'oeuvres and Cocktails with Andrei and Chef Richard Sudberry



MONDAY, OCTOBER 5TH

TIME (EST)	CONFERENCE ROOM 1	CONFERENCE ROOM 2	CONFERENCE ROOM 3	
10:00 – 10:30 am	Virtual Coffee with ASIA President Andrei Krassioukov, MD, PhD, FRCPC			
10:30 – 10:40 am	Passing Period			
10:40 – 11:40 am	COURSE 9 TRIP Breathing after Spinal Cord Injury: Plasticity and Therapeutic Advances Moderator: Warren Alilain, PhD	COURSE 10 Transitions of Care: Why They Matter for People with SCI, Clinicians, and Researchers Moderator: <i>Chloe Slocum, MD</i>	General Session: Outcomes & Craig H. Neilsen 2017 & 2018 Awardees O-12, O-13, O-14, O-15	
11:40 am – 12:10 pm	scitrialsfinder.net Get Updates on this new, invaluable website that provides individuals with SCI, their families and health care professionals information about clinical trials. Presenters: <i>Paulina Scheuren and Robin Lütolf</i>			
12:10 – 12:20 pm	Passing Period			
12:20 – 1:20 pm	COURSE 11 TRP The Continuum Between Swallow and Dysphagia is Not Simple Following Neural Injury Moderator: <i>Teresa Pitts</i>	COURSE 12 The Official Positions of the International Society for Clinical Densitometry: Indications for Bone Density Testing in Spinal Cord Injury Moderator: <i>Leslie Morse, DO</i>	General Session: Cardiovascular & DiMarco 2019 Awardees O-16, O-17, O-18, O-19	
1:20 – 2:20 pm	Lunch Break			
2:20 – 2:50 pm	General Session: Upper Extremity Function O-20, O-21, O-22	General Session: Mixed Topics O-24, O-25, O-34		
2:50 – 3:00 pm	Passing period			
3:00 – 4:00 pm		en Foundation Allied Health Prof Mulcahey Award • TRoHNS A	essional Research Award of ASIA ward	



MONDAY, OCTOBER 5TH

TIME (EST)	CONFEREN	CE ROOM 1	CONFERENCE ROOM 2	CONFERENCE ROOM 3
4:00 – 4:45 pm		<i>Presented by Cam</i> "Spinal Cord Inj and Perspective of Federico Monter	Caker – Dr. Federico Montero <i>nilo Castillo, MD</i> juries in Latin America and the C of a Journey" ro, MD, Deputy Director at the	Caribbean (LAC) History National Rehabilitation

Centre of Costa Rica. Dr. Montero has worked for the World Health Organization as the Coordinator of the Disability and Rehabilitation Team, and is an expert on advocacy, access, and rights for persons with disabilities.

4:45 – 4:55 pm	Passing Period		
4:55 – 5:55 pm	COURSE 13 THE The Spectrum of Translational Research in Spinal Cord Injury: Examples, Obstacles, and Victories Moderator: Argyrios Stampas, MD	COURSE 14 America's Perspectives on Spinal Cord Injury Care Moderator: Camilo Castillo, MD	COURSE 15 Spinal Cord Injury, Disasters and Climate Change: What Professionals Need to Know Moderator: <i>Marcalee Alexander, MD, FASIA</i>
5:55 – 6:05 pm	Passing Period		
6:05 – 7:05 pm	COURSE 16 TRIP	COURSE 17	General Session:

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6:05 – 7:05 pm	COURSE 16 TRIP	COURSE 17	General Session:	
	Predictive Value of Animal 🧲	International Standards to	Secondary Conditions	
	Research Experiments for	Document Autonomic	O-26, O-27, O-28, O-29	
	Emerging Clinical Studies	Function after SCI:	O-30, O-31	
	in SCI	Revision 2020		
	Moderator:	Moderator:		
	Karim Fouad, PhD 👝	Jill Wecht, EdD		



GENERAL SESSIONS

ACUTE CARE & MIXED PAPERS: Meegan Van Straaten, PT Sunday, Oct. 4, 2020 /11:35 am – 1:00 pm • Oral Talks 7-11, 32 and 33

ORAL TALK 7

Posterior Cervical Spine Fusion Increases the Risk of Feeding Gastrostomy Using a Propensity Score Matched Cohort *Brett Tracy*

ORAL TALK 8

Ketogenic diet (kd) for improving neurorecovery after acute spinal cord injury – from rodents to humans *Ceren Yarar-Fisher, PT, PhD*

ORAL TALK 9

Topological network analysis of high frequency intra-operative monitoring in patients with spinal cord injury reveals precise blood pressure range associated with neurological recovery *Abel Torres Espin*

ORAL TALK 10

During an epidemic of gun violence in the United States, analyzing cervical spinal cord injury from gunshot wounds with respiratory compromise: the role of diaphragm pacing *Raymond Onders, MD, FACS, FASIA*

ORAL TALK 11

Acute Care Protocol to Assess Bladder Voiding in Traumatic Spinal Cord Injury Patients *Victor Lim*

ORAL TALK 32

Toward Developing a National Spinal Cord Injury Care, Health and Wellness Strategy in Canada: Building the Foundations *Charlene Yousefi*

ORAL TALK 33

Implanted neuroprostheses to maximize functional outcomes in spinal cord injury *Kevin L. Kilgore, Ph.D.*

OUTCOMES & CRAIG H. NEILSEN FOUNDATION ALLIED HEALTH 2017 & 2018 AWARDEES: Heather Russell, PhD

Monday, Oct. 5, 2020 / 10:40 am – 11:40 am • Oral Talks 12-15

CRAIG H. NEILSEN FOUNDATION 2017 ALLIED HEALTH AWARDEE

Evaluation of Splinting in Tetraplegia Sara Kate Frye, MS OTR/L ATP

CRAIG H. NEILSEN FOUNDATION 2018 ALLIED HEALTH AWARDEE

Seated Trunk Stability and Orthostatic Tolerance in SCI: Targeting the Diaphragm." *Anne E. Palermo PT, DPT*

ORAL TALK 12

Evaluation of a self-report method to obtain ASIA Impairment Scale in people with SCI who reside in the community *Jennifer Coker, PhD, MPH*

ORAL TALK 13

Comparing SCI Data from Three SCI Registries: Results from the International Spinal Data Network (ISDN) Vanessa Noonan, MSc, PT, PhD

CARDIOVASCULAR & 2019 ANTHONY DIMARCO FELLOWSHIP AWARD RECIPIENTS: Trevor Dyson-Hudson, MD Monday, Oct.5, 2020 / 12:20 pm – 1:20 pm • Oral Talks 16-19

2019 Anthony DiMarco Fellowship Award Recipient

2019 Anthony DiMarco Fellowship Award Recipient: Validity of an Interview Based Examination for Spinal Cord Injury (VIBES): Sacral Sparing in the Acute Inpatient Rehabilitation Setting *Audrey Chun, MD*

2019 Anthony DiMarco Fellowship Award Recipient

2019 Anthony DiMarco Fellowship Award Recipient: DiMarco Award Recipient: Autologous Micro-Fragmented Adipose Tissue Injection under Ultrasound Guidance for Chronic, Recalcitrant Shoulder Pain in Manual Wheelchair Users with Spinal Cord Injury *Chris Cherian, MD*

ORAL TALK 16

Noninvasive Chronic Spinal Stimulation as a Multi-session Therapy to Improve Cardiovascular Function After Spinal Cord Injury *Kiran Pawar, PhD*

ORAL TALK 14

Development of Crosswalks to Aggregate International Spinal Cord Injury Functional Data

Linda Jones, PT, PhD

ORAL TALK 15

Development of the PedsQL SCI Module *Miriam Hwang, MD, PhD*

ORAL TALK 17

High-level experimental spinal cord injury impairs the cardiac inotropic response to baroreceptor unloading *Christopher West, PhD*

ORAL TALK 18

Heart rate changes associated with spontaneous episodes of autonomic dysreflexia *Belinda Yee, BSc*

ORAL TALK 19

Diverse Cognitive Impairment After Spinal Cord Injury is Associated with Symptoms of Aberrant Cardiovascular Changes *Tom Nightingale, PhD*



GENERAL SESSIONS

UPPER EXTREMITY FUNCTION: *Jennifer Coker, PhD, MPH* Monday, Oct. 5, 2020 / 2:20 pm – 2:50 pm • Oral Talks 20-22

ORAL TALK 20

The graded redefined assessment of strength sensibility and prehension version 2 (GV2): Psychometric properties *Sukhvinder Kalsi-Ryan, PhD*

ORAL TALK 21

Content-Dependent Modulation of Trunk Muscle Activity Improves Manual Wheelchair Propulsion Efficiency *Stephanie Bailey*

ORAL TALK 22

Lower Motor Neuron Damage in Wrist Extension after Tetraplegia Anne Bryden, MA, OTR/L

MIXED TOPICS: Meegan Van Straaten, PT

Monday, Oct. 5, 2020 / 2:20 pm - 2:50 pm • Oral Talks 24, 25 and 34

ORAL TALK 24

Time needed to perform intermittent catheterization: A randomized controlled cross-over study using hydrophilic and nonhydrophilic catheters in adults with spinal cord injury *Karthik Gopalakrishnan*

ORAL TALK 25

Individuals with Spinal Cord Injuries Who Use a Manual Wheelchair Spend More Time in Humeral Elevation Angles Associated with Supraspinatus Tendon Compression than Able-Bodied Controls *Brianna Goodwin*

ORAL TALK 34

The Canadian Activity-Based Therapy Summit: Developing a 5-Year Action Plan *Kristen Walden, PT*

SECONDARY CONDITIONS: *Maureen Miner, MD*

Monday, Oct. 5, 2020 / 6:05 pm - 7:05 pm • Oral Talks 26-31

ORAL TALK 26

A case comparison of endogenous fat metabolism during a prandial challenge *David McMillan, MS*

ORAL TALK 27

Increased levels of matrix metalloproteinase-8 & 9 against TIMP-1 predicts poor healing of pressure injury in people with spinal cord injury *Perioducan Spingergue MS*

Rajeshwar Srivastava, MS

ORAL TALK 28

A qualitative study of negative health spirals among aging civilians and veterans spinal cord injury

James Krause, PhD

ORAL TALK 29

Risk Factors for Heterotopic Ossification Development after Spinal Cord Injury: A Systematic Review and Meta-Analysis *Yagiz Yolcu, MD*

ORAL TALK 30

Electrically Induced Interval Cycling and Nutritional Counseling Produces Healthy Body Composition Changes In Individuals with Spinal Cord Injury *David Dolbow*

ORAL TALK 31

Behavioral Factors and Unintentional Injuries after Spinal Cord Injury *Yue Cao, PhD, MSPH*

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A standing ovation, Dr. Cardenas.

In honor of you and all those you've helped get back on their feet.



Diana Cardenas, MD, MHP

Congratulations to our distinguished colleague on your ASIA Lifetime Achievement Award. It is well deserved. JacksonRehabCare.org **UHealth Jackson** Rehabilitation Care





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