ASIA DATA SCIENCE PRECOURSE Unlock Al's Role in Spinal Cord Injury Research!

Sunday / June 1, 2025

TIME	TITLE	MODERATOR (S)	PRESENTERS	ROOM
8:15 AM - 8:30 AM	Opening Remarks	Ronald James Cotton, MD, PhD Sarah Brueningk, PhD		Arizona I
8.30 AM -10:00 AM	Data Science in SCI – the Hope, the Challenge, and the Current Status	Dennis Bourbeau, PhD Sarah Brueningk, PhD		Arizona I
	De-Mystifying Al		Ronald James Cotton, MD, PhD	
	Where Do We Stand, Where are We Limited?		Iris Leister, PhD	
	Al in SCI the Current Status and What the Future May Bring		Adam Ferguson, PhD	
10:00 AM -10.30 AM	Refreshment Break			
10.30 AM -12:00 PM	CONCURRENT SESSIONS			
	Session A: Hands-On Challenge (Small Groups, Targeted for Participants New to AI and Who Want to Learn More)	Dennis Bourbeau, PhD Olga Taran, PhD	Support: Louis Lukas, MSc Miklovana Tuci, MSc	Arizona I
	What Tools are Available?	Dennis Bourbeau, PhD		
	I. Data Visualization			
	II. Coding with Large Language Models			
	III. AI Basics (Dos and Don'ts)			
	Hands-On Session			
	Discussion			
	Session B: Tackling the Key Challenges in SCI AI – Technical Solutions (A Session for AI Experts to Deep Dive)	Alessandro Napoli, PHD Adam Ferguson, PhD		Arizona II
	Opening: The Big Challenges in SCI Data Science		Alessandro Napoli, PhD	
	Limited Data Learning		Abel Torres Espin, PhD	
	Learning from Incomplete Data: Review of Recent Cases		Gustavo Balbinot, PhD	
	Causal Frameworks		Ronald James Cotton, MD, PhD	
	Generalization and Robustness		Sarah Brueningk, PhD	

Reset and Relax Need a break from the conference?

Visit ASIA's "Quiet Zone" a curated, low-lit space for relaxation and silence.

No talking and no electronics allowed!

Let ASIA staff members know if you would like to be escorted to the Quiet Room.

ASIA QUIET ZONE Vaquero Office



	TITLE	MODERATOR (S)	PRESENTERS	ROOM
2:00 PM - 1:00 PM	Lunch Break			
1:00 PM - 2:30 PM	Problems that Have Been Solved – Or Have We?	Iris Leister, PhD Alessandro Napoli, PhD		Arizona I
	Talk 1 - Deep Learning to Measuring Hand Function in Egocentric Video - An Examination of Research vs Clinical Beeds		Jose Zariffa, PhD	
	Talk 2 - Enhancing Clinical Trial Design Using Historical Information		Miklovana Tuci, MSc	
	Talk 3 - The Synthetic Patient Generator: Initial Insights and Future Applications		Gustavo Balbinot, PhD	
	Talk 4 - Developing Models to Inform the SCI Journey: Lessons Learned and Future Directions'		Vanessa Noonan, BSc PT, MSc, PhD	
2:30 PM — 2:50 PM	Refreshment Break			
2:50 PM — 4:20 PM	The ASIA Data Science Challenge	Ronald James Cotton, MD, PhD Sarah Brueningk, PhD		Arizona I
	Background on the Challenge			
	Team 1 - Motor Score Sequences			
	Team 2 - Walking Prediction			
	Moderated Discussion		Panel: Invited Teams Keith Tansey, MD, PhD Abel Torres Espin, PhD Jose Zariffa, PhD Vanessa Noonan, BSc PT, MSc, PhD	Arizona I
4:20 PM - 4:30 PM	Closing Summary – What Have We Learned and What is the Next Step?	Ronald James Cotton, MD, PhD Sarah Brueningk, PhD		Arizona I

7:00 AM - 8:00 AM	Breakfast with Partner & Exhibitors –	Ballroom Fover		
8:00 AM - 8:30 AM	WELCOME/OPENING REMARKS Susie Charlifue, PhD, FASIA (ASIA President 2024-2025)	Mark S. Nash, PhD, FACSM, FASIA (ASIA President 2025 - 2027)	l	
	FELLOW OF OF ASIA (FASIA) AWAR 1. Kim Anderson-Erisman, PhD 2. Isa McClure, PT, MAPT	D 3. Ronald K. Reeves, MD 4. Cristina L. Sadowsky, MD		
8:30 AM - 9:15 AM	LIFETIME ACHIEVEMENT AWARD	Presented by Stacey Elliott, MD, F	ASIA	
	Andrei Krassioukov, MD, PhD, FR GF Strong Rehabilitation Centre, Van			
9:15 AM - 10:00 AM	James David Guest, MD, PhD, FAA	NS, FASIA	rom Neuroregeneration to Neuropl	
10:00 AM - 10:10 AM	Stretch Break / Transfer to Next Session	n		
10:10 AM - 11:10 AM	Partner / Exhibitor Recognition			
11:10 AM - 11:20 AM	Stretch Break / Transfer to Next Session	n		
	Arizona VII-XI (7-11)	Arizona III	Arizona I	Arizona II
11:20 AM - 12:20 PM	General Session 1: Sensory/Pain/Skin From Mechanisms to Management: Sensory Function, Neuropathic Pain, and Pressure Injuries	General Session 2: Respiratory Inhale the Future, Exhale the Past	General Session 3: Basic Science Basic Science Approaches to Enhancing Recovery Following Spinal Cord Injury: There is Nothing Basic About it!	ISNCSCI Workshop How Do I Correctly Classify this ISNCSCI Exam ? – Discussion of More Cases with Classification Challenges
12:20PM - 1:30PM	Overground Personal Exoskeleto Presented by: Lifeward Director of J	ed Non-CME Event) — Arizona VII-XI (7-11) ns: It's a Whole New World, Currer Medical Affairs, Keith D. Rose, MD, and , Keith E. Tansey, MD, PhD, FASNR, FAS	nt and Future Considerations Previous ASIA President &	Sponsored by
1:30 PM - 2:30 PM	Course 1 (RIP) Potential for Gabapentinoids as Agents for Neurorestoration: Clinical and Research Considerations	Course 2 (RP) Aging and Spinal Cord Injury: From Mechanisms to Quality of Life	Course 3 Filling the Gaps: Designing and Implementing Innovative Approaches to Community Integration After SCI	ISAFSCI Workshop International Standards to Document Autonomic Function Following SCI (ISAFSC Case Discussion
2:30 PM - 3:30 PM	* POSTER SESSION 1 – Arizona IV	-VI 苯		
2:30 PM - 3:30 PM	Break with Partners & Exhibitors			
3:30 PM - 4:30 PM	Course 4 Unveiling Strength: Progress and Perspectives in Research on Women with Spinal Cord Injury	Course 5 Disease Prognosis and Outcome Prediction In Spinal Cord Injury	Course 6 TRIP Don't Get TRIPped Up – Disentangling the Effects of Rehabilitation in Clinical Translation of Preclinical Research	
4:30 PM - 5:30 PM	EARLY CAREER * EARLY CAREER Bridging Clinicians, Scientists, and Inc	EARLY CAREER Spinal Tap: Earl	•	Sponsored by



7:00 AM - 8:00 AM	Breakfast with Partner & Exhibitors – Ballroom Foyer				
8:00 AM - 9:30 AM	AWARDS SESSIONS / Oral Presentations / TOP 6 Prognostic Value of Tissue Bridges in Cervical Spinal Cord Injury: A Longitudinal, Multicenter, Retrospective Cohort Study			Dario Pfyffer, PhD	
	The Association Between Mean Arter Hemorrhage After Acute Human Spin	rial Blood Pressure Augmentation and nal Cord injury	Intraparenchymal	Brian Kwon, MD, PHD, FRCSC, FASIA	
	The Effects of Targeting Spinal Cord F Drainage in Acute Spinal Cord Injury	Perfusion Pressure Through Cerebrosp	inal Fluid	Cameron Gee, PhD	
	Upper Extremity Function Classificati Injury: Novel Insights from a Nationa	ion for Tailored Rehabilitation in Cervi Ily Diverse Cohort	cal Spinal Cord	Jia Liu, PhD	
	Data-Driven Characterization of The Database Using Graph-Based Cluster	Spinal Cord Inj <mark>ury Landscape: An Anal</mark> ing	ysis of The EMSCI	Louis Philipp Lukas, MSc	
	Ventral Epidural Stimulation Restore Microglial Phenotype after Cervical S	s Forelimb Function and Promotes a L pinal Cord Injury	esion Repair	Philip Horner, PhD	
	Craig H. Neilsen 2022 Award Upd Clinical Strategy to Reduce Incidence	late: Reversing the Trend: and Impact of Wheelchair Repairs in 1	Spinal Cord Injury Rehabilitation	Blake Edwin Perkins, PT, DPT, AT	
	Engineering the Future of Acute Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae	ANS	ng / Johns Hopkins University School of	Medicine	
10:30 AM - 10:40 AM	Nicholas Theodore, MD, FACS, FA	ANS dic Surgery and Biomedical Engineeri	ng / Johns Hopkins University School of	Medicine	
10:30 AM - 10:40 AM	Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae	ANS dic Surgery and Biomedical Engineeri	ng / Johns Hopkins University School of Arizona I	Medicine Arizona II	
10:30 AM - 10:40 AM 10:40 AM - 11:40 AM	Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae Stretch Break / Transfer to Next Sessi	ANS dic Surgery and Biomedical Engineerin			
	Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae Stretch Break / Transfer to Next Sessi Arizona VII-XI (7-11) General Session 4: Measurements & Outcomes If You are Not Measuring, You are Just Practicing SPONSORED LUNCH (Industry-Sponsor Empowering Independence: Ear Speakers: Dr. Candace Tefertiller, DPT, PhD – C	dic Surgery and Biomedical Engineeri ion Arizona III General Session 5: Cardiovascular Getting to the Heart of the Issue: SCI Cardiovascular Topics red Non-CME Event) — Arizona VII-XI (7-11 Iy Real-World Experience with the	Arizona I General Session 6: Clinical Trial Updates Clinical Trials: What's the Latest and When Will it Get Here?	Arizona II TSCIR Workshop Topics in Spinal Cord Injury	
10:40 AM - 11:40 AM	Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae Stretch Break / Transfer to Next Sessi Arizona VII-XI (7-11) General Session 4: Measurements & Outcomes If You are Not Measuring, You are Just Practicing SPONSORED LUNCH (Industry-Sponsor Empowering Independence: Ear Speakers: Dr. Candace Tefertiller, DPT, PhD – C	ANS dic Surgery and Biomedical Engineeri ion Arizona III General Session 5: Cardiovascular Getting to the Heart of the Issue: SCI Cardiovascular Topics red Non-CME Event) — Arizona VII-XI (7-11 Iy Real-World Experience with the raig Hospital, Denver I, Regulatory & Quality - ONWARD Me	Arizona I General Session 6: Clinical Trial Updates Clinical Trials: What's the Latest and When Will it Get Here?	Arizona II TSCIR Workshop Topics in Spinal Cord Injury and Rehabilitation	
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10:40 AM - 11:40 AM 11:40 AM - 1:00 PM	Nicholas Theodore, MD, FACS, FA Professor of Neurosurgery, Orthopae Stretch Break / Transfer to Next Sessi Arizona VII-XI (7-11) General Session 4: Measurements & Outcomes If You are Not Measuring, You are Just Practicing SPONSORED LUNCH (Industry-Sponsor Empowering Independence: Ear Speakers: Dr. Candace Tefertiller, DPT, PhD – C Erika Ross Ellison – VP Global Clinica Bridging Clinicians, Scientists, and In Course 7 Age Effects: The Impact of Aging Population on the Epidemiology of Traumatic Spinal Cord Injuries, Older Age on Individuals' Recovery,	ANS dic Surgery and Biomedical Engineeri ion Arizona III General Session 5: Cardiovascular Getting to the Heart of the Issue: SCI Cardiovascular Topics red Non-CME Event) — Arizona VII-XI (7-11 Ty Real-World Experience with the raig Hospital, Denver I, Regulatory & Quality - ONWARD Me dustry Collaboration. Making a Course 8 A Bird's Eye Meta-View on Spinal Cord Injury Research: What Can we Learn from Researching How We Do Research (Sponsored By SCOPE)	Arizona I General Session 6: Clinical Trial Updates Clinical Trials: What's the Latest and When Will it Get Here? ONWARD ARC-EX System dical, USA Course 9 CRIP Solving the Post-SCI Neuropathic Pain Problem: Can What We Learn from Animal Models Really Translate to the Human Experience	Arizona II TSCIR Workshop Topics in Spinal Cord Injury and Rehabilitation	

Tuesday / June 3

3:00 PM - 4:00 PM

Arizona VII-XI (7-11)

General Session 7:

Activity-Based Training

Importance and Challenges of

Movement and Exercise to Improve Outcomes in Acute through Chronic

Get Up and Get Moving:

Stages of SCI

Arizona III

General Session 8: Psychosocial Navigating the SCI Landscape: The Interplay of Health, Technology, and Social Factors

Arizona I

General Session 9: Mixed Papers 1 Risk-y Business in SCI: Predictive Analytics and Practical Aspirations

Arizona II

E-ISNCSCI Workshop New Version 2 of the Expedited-ISNCSCI Exam

4:00 PM - 4:10 PM	Stretch Break / Transfer to Next Se	ssion		
4:10 PM - 5:10 PM	Course 10	Course 11	Course 12 TRIP	ISAFSCI Workshop
	Diagnosis and Management of	Advancing Innovative Practices in	Strategies Across the Translational	International Standards
	Lower Extremity Bone Loss in	SCI Rehabilitation: Combining	Spectrum to Improve Recovery	to Document Autonomic
	Persons with Acute and Chronic	Neuromodulation Therapies to	after SCI	Function following SCI (ISAFSCI):
	Spinal Cord Injury	Enhance Functional Recovery		Case Discussion





7:00 AM - 8:00 AM	Membership Breakfast – Arizona II <i>Non-membes have breakfast in the foyer.</i>				
8:00 AM - 9:00 AM		I) al Research Award of ASIA / Anthony F. DiMarco ME ward / TRoHNS Award / Top 3 Oral Talk Awards / To			
	Arizona VII-XI (7-11)	Arizona III	Arizona I		
9:00 AM - 10:00 AM	Course 13 CRIP Spinal Stimulation: Bridging the Gap Between Research and Clinical Translation	General Session 10 Mixed Papers 2: Movin', Eatin', and Livin' Right!	Course 14 UE Step: Development, Implementation, and Early Access Preview		
0:00 AM - 10:10 AM	Stretch Break / Transfer to Next Session				
10:10 AM - 11:10 AM	Course 15 The Common Thread of Struggle after SCI: How Can Policy Unravel the Ties that Bind People with SCI, their Support Persons, and Rehabilitation Professionals from Achieving the Shared Goal of Societal Participation?	Course 16 TRIP Learning How to Use Spinal Cord Neuromodulation to Activate Propriospinal Neurons and Sympathetic Targets to Improve	Course 17 The Good, The Bad, The Ugly: Al for SCI Clinicians		
11:10 AM - 12:30 PM	Lunch				
12:30 PM - 1:30 PM	Course 18 Accessible Airline Travel: Updates and Advancements in Engineering, Policy and Rehab Medicine	Course 19 Path to Recovery after Spinal Cord Injury: Priorities, Personal Experience and Potential Predictors	Course 20 TRD Boosting Lower Limb Recovery after Spinal Cord Injury: The Role of Non-Invasive Electrical Stimulation and Activity-Based Therapies		

ednesday / June 4	Arizona VII-XI (7-11)	Arizona III	Arizona I	
1:30 PM - 1::40 PM	Stretch Break / Transfer to Next Sessi	ion TRIP		
1:40 PM - 2:40 PM	Course 21 Windows into Daily Life after SCI: Protocols for Egocentric Video and Photovoice Data Collection	Course 22 Consensus Statements Regarding the Use of Blood Bone Biomarkers in Human and Animal Models of Spinal Cord Injury: Systematic Review & E-Delphi Consensus Methods from the ReCON Team	Course 23 From Patients to Models and Back. The Use of Real-World Data to Model the Complexity of SCI Through the Patient Journey	
2:40 PM - 2:50 PM	Stretch Break / Transfer to Next Sess	ion	TRIP	
2:50 PM - 3:50 PM	Course 24 Length of Stay Following Spinal Cord Injury: Associations with Predictors, Outcomes, and Stakeholders Experiences in Inpatient Rehabilitation	Course 25 The Art of Diagnosis: Navigating Uncertainty in Myelopathy Cases	Course 26 Using Neuromodulation to Understand and Improve Neurogenic Bowel Dysfunction after Spinal Cord Injury (SCI)	

MEETING ADJOURNED

WORKSHOPS

Monday / June 2	Session Title	Chair/Moderator	Presenters
11:20 AM - 12:20 PM	How do I Correctly Classify this ISNCSCI Exam? Discussion of More Cases with Classification Challenges		Brittany Snider, DO Christian Schuld, Dipl-Inform. Med. Steffen Franz, MD
1:30 PM - 2:30 PM	International Standards to Document Autonomic Function Following SCI (ISAFSCI): Case Discussion	Jill M. Wecht, BS, MS, EdD	Jill M. Wecht, BS, MS, EdD Steve McKenna, MD Gianna Rodriguez, MD Andrei Krassioukov, MD, PHD, FRCPC, FASIA
Tuesday / June 3	Session Title	Chair/Moderator	Presenters
10:40 PM - 11:40 PM	Latest Updates on Topics in Spinal Cord Injury and Rehabilitation (TSCIR)	Monica Perez, PT, PhD	Kathy Zebracki, PhD, FASIA
3:00 PM - 4:00 PM	New Version 2 of the Expedited-ISNCSCI Exam		Stephen P. Burns, MD, FASIA Keith E. Tansey, MD, PhD, FASNR, FASIA
4:10 PM - 5:10 PM	International Standards to Document Autonomic Function Following SCI (ISAFSCI): Case Discussion	Matthias Walter, MD, PhD	Chloe Slocum, MD, MPH Ellen M. Hagen, MD, PhD Michelle B. Trbovich, MD

COURSES Monday / June 2, 2025

COURSE	COURSE CHAIR/MODERATOR	PRESENTERS
COURSE 1 TRIP Potential for Gabapentinoids as Agents for Neurorestoration: Clinical and Research Considerations	James Wilson, DO	Andrea Tedeschi, PhD John Kramer, PhD Kim Anderson-Erisman, PhD, FASIA Mike Kelly, MD
COURSE 2 TRIP Aging and Spinal Cord Injury: From Mechanisms to Quality of Life	Monica Perez, PT, PhD	Cedric Geoffroy, PhD John C. Gensel, PhD Jennifer Coker, PhD James Krause, PhD Monica Perez, PT, PhD
COURSE 3 Filling the Gaps: Designing and Implementing Innovative Approaches to Community Integration After SCI	Keara McNair, MS, OTR/L, BCPR, ATP	Denise Fyffe, PhD Kassandra Boyd, OTD Monifa Brooks, MD Keara McNair, MS, OTR/L, BCPR, ATP
COURSE 4 Unveiling Strength: Progress and Perspectives in Research on Women with Spinal Cord Injury	Jennifer Coker, PhD, MPH, FASIA	Chloe Slocum, MD, MPH Heather Taylor, PhD Yuying Chen, MD, PhD, FACRM, FASIA
COURSE 5 Disease Prognosis and Outcome Prediction In Spinal Cord Injury	Sarah Brüningk, PhD	Abel Torres Espin, PhD Olga Taran, PhD Adam Ferguson, MS, PhD Sarah Brüningk, PhD
COURSE 6 TRIP Don't Get TRIPped Up – Disentangling the Effects of Rehabilitation in Clinical Translation of Preclinical Research	Edelle Field-Fote, PT, PhD, FASIA, FAPTA	Edelle Field-Fote, PT, PhD, FASIA, FAPTA Kim Anderson-Erisman, PhD, FASIA David Magnuson, PhD, FASIA



COURSES Tuesday / June 3, 2025

COURSE	COURSE CHAIR/MODERATOR	PRESENTERS
COURSE 7 Age Effects: The Impact of Aging Population on the Epidemiology of Traumatic Spinal Cord Injuries, Older Age on Individuals' Recovery, and Individuals Aging after Injury	Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC, FAAN, FASIA	Vanessa Noonan, MD, DO, PhD Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC, FAAN, FASIA Sunil Sabharwal, MD
COURSE 8 A Bird's Eye Meta-View on Spinal Cord Injury Research: What Can we Learn from Researching How We Do Research (Sponsored By SCOPE)	Paulina Scheuren, PhD	John L K. Kramer, PhD Paulina Scheuren, PhD Jan Schwab, MD, PhD Abel Torres Espin, PhD
COURSE 9 TRIP Solving the Post-SCI Neuropathic Pain Problem: Can What We Learn from Animal Models Really Translate to the Human Experience of Chronic Pain?	Elizabeth R. Felix, PhD	Elizabeth R. Felix, PhD Stanislava Jergova, PhD Thomas N Bryce, MD
COURSE 10 Diagnosis and Management of Lower Extremity Bone Loss in Persons with Acute and Chronic Spinal Cord Injury.	Brittany Snider, DO	Christopher M. Cirnigliaro, PhD Cristina Sadowksy, MD, FASIA B. Catharine Craven, BA, MD, MSc, FRCPC, FASIA, FCAHS
COURSE 11 Advancing Innovative Practices in SCI Rehabilitation: Combining Neuromodulation Therapies to Enhance Functional Recovery	Rebecca Martin, OTR/L, OTD	Rebecca Martin, OTR/L, OTD Randy D. Trumbower, PT, PhD Elizabeth Neighbors, PT, DPT
COURSE 12 TRIP Strategies Across the Translational Spectrum to Improve Recovery after SCI	Meifan Chen, PhD	Meifan Chen, PhD Jennifer Dulin, PhD Kajana Satkunendrarajah, PhD Dana McTigue, PhD Monica Perez, PT, PhD

COURSES Wednesday / June 4, 2025

COURSE	COURSE CHAIR/MODERATOR	PRESENTERS
COURSE 13 CRIP Spinal Stimulation: Bridging the Gap Between Research and Clinical Translation	Megan Gill, PT, DPT, NCS	Megan Gill, PT, DPT, NCS Candace Tefertiller, PT, DPT, PhD, NCS Chet Moritz, PhD
COURSE 14 UE Step: Development, Implementation, and Early Access Preview	Amy Bohn OTR/L, CPAM, FASIA	Amy Bohn OTR/L, CPAM, FASIA Isa McClure PT, MAPT Marissa Malady OTR/L
COURSE 15 The Common Thread of Struggle after SCI: How Can Policy Unravel the Ties that Bind People with SCI, their Support Persons, and Rehabilitation Professionals from Achieving the Shared Goal of Societal Participation?	Anne Bryden, PhD, OTR/L	Kim Anderson-Erisman, PhD, FASIA Susan Hinze, PhD Tanjulla Tyson-Wearren, MSSA Brian Gran, PhD
COURSE 16 COURSE 16 COURS	Linda Jones, PT, PhD	Linda Jones, PT, PhD Noam Harel, MD, PhD Jill M. Wecht, BS, MS, EdD Jeremy W. Chopek, BSc, MSc, PhD Kristine C. Cowley, BSc, PhD
COURSE 17 The Good, Bad, and Ugly of Al	Ronald James Cotton, MD, PhD	Ronald James Cotton, MD, PhD Ryan Solinsky, MD Jose Zariffa, PhD
COURSE 18 Accessible Airline Travel: Updates and Advancements in Engineering, Policy and Rehab Medicine	Niña Carmela R. Tamayo, DO, MS, MPH	Alexandra Bruce, OTD, OTR/L Capt. Sheyna Gifford, MD, MPH, MBA, MS, MA, USAF Jessica Presperin Pedersen, OTD, BSOT, MBA, FAOTA, ATP/SMS Sivashankar Sivakanthan, PhD
COURSE 19 Path to Recovery after Spinal Cord Injury: Priorities, Personal Experience and Potential Predictors	Andrei Krassioukov, MD, PHD, FRCPC,	Andrei Krassioukov, PhD, MD, FRCPC, ICORD-BCSS, FASIA ICORD-BCSS, FASIA Raza Malik, PhD Rahul Sachdeva, PhD Mujtaba Saloojee



COURSES Wednesday / June 4, 2025

COURSE	COURSE CHAIR/MODERATOR	PRESENTERS
COURSE 20 TRIP Boosting Lower Limb Recovery after Spinal Cord Injury: The Role of Non-Invasive Electrical Stimulation and Activity-Based Therapies	Kristin Musselman, PT, PhD	Marie-Pascale Côté, PhD Kei Masani, PhD Kristin Musselman, PT, PhD
COURSE 21 Windows into Daily Life after SCI: Protocols for Egocentric Video and Photovoice Data Collection	Jose Zariffa, PhD, PEng	Kristin Musselman, PT, PhD Olga Taran, PhD
COURSE 22 TRIP Consensus Statements Regarding the use of Blood Bone Biomarkers in Human and Animal Models of Spinal Cord Injury: Systematic Review & E-Delphi Consensus Methods from the ReCON Team	B. Catharine Craven, BA, MD, MSc, FRCPC, FASIA, FCAHS	B. Catharine Craven, BA, MD, MSc, FRCPC, FASIA, FCAHS Kristine Cowley, BSc, PhD Philemon Tsang, PhD
COURSE 23 From Patients to Models and Back. The Use of Real-World Data to Model the Complexity of SCI Through the Patient Journey	Abel Torres Espin, PhD	Abel Torres Espin, PhD John Chernesky Vanessa Noonan, MD, DO, PhD Marzieh Mussavi Rizi
COURSE 24 Length of Stay Following Spinal Cord Injury: Associations with Predictors, Outcomes, and Stakeholders Experiences in Inpatient Rehabilitation	Sherri L. LaVela, PhD, MPH, MBA	Alex W.K. Wong, PhD, DPhil Sherri L. LaVela, PhD, MPH, MBA Allen W. Heinemann, PhD
COURSE 25 The Art of Diagnosis: Navigating Uncertainty in Myelopathy Cases	Cristina Sadowsky, MD, FASIA	Keara McNair, MS, OTR/L, BCPR, ATP Ronald Reeves, MD, FASIA Cristina Sadowsky, MD, FASIA Brittany Snider, DO
COURSE 26 TRIP Using Neuromodulation to Understand and Improve Neurogenic Bowel Dysfunction after Spinal Cord Injury (SCI)	Kim Anderson-Erisman, PhD, FASIA	Kim Anderson-Erisman, PhD, FASIA Cedric Geoffrey, PhD Robert Hoey, PhD Dennis Bourbeau, PhD

GENERAL SESSIONS

Award-Eligible Oral Presentations

TUESDAY JUNE 3, 2025 / 8:00 AM - 9:30 AM

Moderator: Steven W. Brose, DO

AWARD-ELIGIBLE ORAL PRESENTATIONS	PRESENTERS
Prognostic Value of Tissue Bridges in Cervical Spinal Cord Injury: A Longitudinal, Multicenter, Retrospective Cohort Study	Dario Pfyffer, PhD
The Association Between Mean Arterial Blood Pressure Augmentation and Intraparenchymal Hemorrhage After Acute Human Spinal Cord injury	Brian Kwon, MD, PHD, FRCSC, FASIA
The Effects of Targeting Spinal Cord Perfusion Pressure Through Cerebrospinal Fluid Drainage in Acute Spinal Cord Injury	Cameron Gee, PhD
Upper Extremity Function Classification for Tailored Rehabilitation in Cervical Spinal Cord Injury: Novel Insights from a Nationally Diverse Cohort	Jia Liu, PhD
Data-Driven Characterization of The Spinal Cord Injury Landscape: An Analysis of The EMSCI Database Using Graph-Based Clustering	Louis Philipp Lukas, MSc
Ventral Epidural Stimulation Restores Forelimb Function and Promotes a Lesion Repair Microglial Phenotype after Cervical Spinal Cord Injury	Philip Horner, PhD
Craig H. Neilsen 2022 Award Update: Reversing the Trend: Clinical Strategy to Reduce Incidence and Impact of Wheelchair Repairs in Spinal Cord Injury Rehabilitation	Blake Edwin Perkins, PT, DPT, ATP

MONDAY JUNE 2, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS	
GENERAL SESSION 1: Sensory/Pain/Skin: From Mechanisms to Management: Sensory Function, Neuropathic Pain, and Pressure Injuries 11:20 AM - 12:20 PM / Moderator: Paulina Scheuren, PhD • Co-Moderator: Abel Torres Espin, PhD		
A Consumer Perspectives and Effects of a Multimodal Pain Program on Spinal Cord Injury Related Pain	Eva Widerstrom-Noga, DDS, PhD, FASIA	
Nociceptor-Driven SCI-Induced Neuropathic Pain	Norbert Weidner, MD	
Validity and Reliability of a Fully Automated Computer-Controlled Electrical Perceptual Threshold System for Sensory Assessment in Individuals with Spinal Cord Injury	Siti Nurfaezah Binti Zahari	
Development and Testing of an Automated Computer-Controlled Electrical Perceptual Threshold Device for Sensory Assessment in Individuals with Spinal Cord Injury	Siti Nurfaezah Binti Zahari	
Opportunities for Health System Improvement: Concerning Trends in Pressure Injury Prevalence at Rehab Admission Despite Reductions in Pressure Injury Incidence During Inpatient Rehabilitation	B. Catharine Craven, BA, MD, MSc, FRCPC, FASIA, FCAHS	
A Proof-Of-Concept Study of Cutaneous Pressure Induced Vasodilation Alteration in Persons with Spinal Cord Injury; Implication for Pressure Ulcers	Michelle Trbovich, MD	



GENERAL SESSIONS

MONDAY JUNE 2, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 2: Respiratory: Inhale the Future, Exhale the Past 11:20 AM - 12:20 PM / Moderator: Cristina Sadowsky, MD • Co-Moderator: Shane Stone, MD	
Implementing a Multi-Modality Respiratory Weaning Intervention for Adult Critical Care Patients Mechanically Ventilated with Cervical Spinal Cord Injury: A Quality Improvement Project (QIP)	Tammy Lea, Clinical Specialist Physiotherapist
Correlation of Diaphragmatic Ultrasound with Pulmonary Function Testing in Patients with Chronic Cervical Spinal Cord Injury: A Single Center Pilot Study	Shane Stone, MD
Depletion of Peripheral Monocyte-Derived Macrophages and COX-2 Inhibition Differentially affect Ventilatory and Locomotor Recovery Following Cervical Spinal Cord Injury in Rats	Aaron Silverstein, BS, BS
Anthony F. DiMarco MD 2025 Award Recipient Mild Intermittent Hypoxia May Improve Sleep Quality and Cognition in Individuals with SCI	Lexi Soltesz, BS, BA
Diaphragm Pacing and Colostomies in Ventilator Dependent Cervical Spinal Cord Injured Patients: Optimizing Timing of Each Therapy Can Improve Care and Quality of Life	Raymond Onders, MD, FACS, FASIA

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 3: Basic Science: Basic Science Approaches to Enhancing Recovery Following Spinal Cord Injury: There is Nothing Basic About it! 11:20 AM - 12:20 PM / Moderator: Linda Jones, PT, PhD • Co-Moderator: Ahad Siddiqui, PhD	
Enhancing Stem Cell Therapy for Chronic Spinal Cord Injury via Transient Opening of Blood-Spinal Cord Barrier Using Low-Intensity Focused Ultrasound	F M Moinuddin, PhD
Immunomodulatory and Regenerative Effects of Electrical Stimulation following Spinal Cord Injury	Ahad M. Siddiqui, PhD
miR-19a-3p and miR-19b-3p Promote Microglia Activation Associated with Neuroinflammation	Ricardo Battaglino, PhD
miR-19a and miR-19b Mediate Neuroinflammation and Neuropathic Pain through Nurr1 and Nur77 Downregulation Following Spinal Cord Injury	Ricardo Battaglino, PhD
Preclinical Efficacy and Clinical Pathway of ExoPTEN: A Novel Exosome-Based Therapy for Acute Spinal Cord Injury	Nachshon Knoller, MD

GENERAL SESSIONS

TUESDAY JUNE 3, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 4: Measurements & Outcomes: If You are Not Measuring, You are Just Practicing 10:40 AM - 11:40 AM / Moderator: Rajiv Saigal, MD, PhD • Co-Moderator: Bing Chen, PhD, MD, Med	
Revisiting the Definition of Complete SCI in the International Standards for Neurological Classification of Spinal Cord Injury (ISNCSCI)	Rüdiger Rupp, Prof. DrIng., FASIA
The Sodium-Glutamate Antagonist Riluzole Improves Outcome after Acute Spinal Cord Injury: Results from RISCIS Randomized Controlled Trial Using a Global Statistical Analytic Technique	Karlo Pedro, MD
The Disability Tax: Developing a Person-Centered Economic Model to Calculate the Real Cost of Living with SCI	John Chernesky
The Electrosacrogram (ESG): A Point-of-Care Electrophysiological Method for Transforming Neuro-Sacral Assessment Following Spinal Cord Injury/Lesion	Andreane Richard-Denis, MD, MSc
Early Surgery Improves Neurological, Functional, and Quality of Life Outcomes in Acute Traumatic Spinal Cord Injury: A Global Endpoint Analysis of 470 Patients from the Spine Trauma Study Group (STSG) Prospective Cohort	Karlo Pedro, MD
Local Motor Score Context Provides Additional Insights into Neurological Recovery after Spinal Cord Injury	Louis Philipp Lukas, MSc

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 5: Cardiovascular: Getting to the Heart of the Issue: SCI Cardiovascular Topics 10:40 AM - 11:40 AM / Moderator: Gary Farkas, PhD • Co-Moderator: Kajana Satkunendrarajah, PhD	
Risk of Ischemic Stroke is Elevated in the First Five Years after Onset of Spinal Cord Injuries and Disorders in US Veterans	Rafer Willenberg, MD, PhD
The Systemic Impact of Mild Intermittent Hypoxia on Autonomic Function, Sleep, Cognition, and Mitochondrial Function in Individuals with Incomplete SCI	Gino Panza, PhD
Physiological Adaptations Following 16-Weeks of Functional Electrical Stimulation with Dietary Intervention in Spinal Cord Injury	Jesse Brenman, BS
Safe Sex: Reducing Autonomic Dysreflexia During Sexual Vibrostimulation using Non-Invasive Neuromodulation	Thomas Thordarson, BSc
Cardiovascular Safety of Transcutaneous Spinal Cord Stimulation in Cervical Spinal Cord Injury	Soshi Samejima, DPT, PhD



GENERAL SESSIONS

TUESDAY JUNE 3, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 6: Clinical Trial Updates: Clinical Trials: What's the Latest and When Will it Get Here? 10:40 AM - 11:40 AM / Moderator: Isa McClure, PT, MAPT • Co-Moderator: James Hamer	
Multistakeholder Panel Discussion Aimed at Optimizing Clinical Trials in Spinal Cord Injury	Kim Anderson-Erisman, PhD, FASIA
A 16-week Placebo-controlled Phase 1b/2a Study of NVG-291: Results for the Chronic Cohort	Daniel D Mikol, MD, PhD
Cognitive Alteration in Patients with Acute and Chronic Spinal Cord Injury and Their Comparison with Hospitalized Trauma Patients and Healthy Individuals	Carolina Bravo Lanz
Clinical Protocol for Gait Facilitation after SCI Using Electrical Stimulation of Midbrain Locomotor Circuits	Brian Noga, PhD
Safety and Feasibility of Spinal Cord Transcutaneous Stimulation in the Early Time Period After Spinal Cord Injury	Einat Haber, MD
Spinal Cord Transcutaneous Stimulation for Cardiovascular Regulation Early After Spinal Cord Injury. Is it Safe, Feasible and Effective? Preliminary Findings	Einat Haber, MD

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 7: Activity-Based Training: Get Up and Get Moving: Importance and Challenges of Movement and Exercise to Improve Outcomes in Acute through Chronic Stages of SCI 3:00 PM - 4:00 PM / Moderator: Margaret Finley, PT, PhD • Co-Moderator: Jacob Goldsmith MS, PhD	
Changes in Physical Activity Determinants and Behavior Based on Exerciser Status after Group Exercise	Margaret Finley, PT, PhD
Do Overground Robotic Exoskeletons Enhance Mobility During Inpatient Rehabilitation after Incomplete Spinal Cord Injury?	Lindsey Wynne, PT, DPT, NCS
Enhancing Exercise Adherence in Individuals with Spinal Cord Injury Through a Home Exercise App: Development and Usability Testing	Alex W.K. Wong, PhD, DPhil
A Novel Combined Neuromodulation Therapy to Enhance Balance and Neuroplasticity after Incomplete SCI	Shirin Tajali, MD
Final Results from The PROMPT-SCI Study : A Single-Arm Proof-of-Concept Trial of Early In-Bed Leg Cycling Following Acute Traumatic Spinal Cord Injury	Andreane Richard-Denis, MD, MSc
Effectiveness of a Community-Based Exercise Program for Individuals with Motor Incomplete Spinal Cord Injury: A Randomized Controlled Trial	Sungchul Huh, MD, PhD

GENERAL SESSIONS

TUESDAY JUNE 3, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 8: Psychosocial: Navigating the SCI Landscape: The Interplay of Health, Technology, and Social Factors 3:00 PM - 4:00 PM / Moderator: Jennifer Coker, PhD • Co-Moderator: David McMillan, PhD	
Hazard of Early Departure from The Labor Force after Spinal Cord Injury: Relationship with Employment Factors, Socioeconomic Status, and Race Ethnicity	James Krause, PhD
Self-Reported Use of Benzodiazepines Among a Cohort with Chronic Spinal Cord Injury In the Southeastern USA: Associations with Demographic, Injury, and Opioid Use Characteristics	Maria Nicole D. DiPiro, PhD
Lived Experience with Implanted Neurotechnology: How Individuals with Spinal Cord Injury Make Meaning of Technology Use and Clinical Trial Participation	Anne Bryden, PhD, OTR/L
Influence of Psychosocial Resources in the Relationship Between Pain and Quality of Life in Adults with Spinal Cord Injury	Muna Bhattarai, PhD, RN, CRC
Quality Improvement Initiative to Identify Individuals with SCI/D at Risk for Major Depression and Anxiety During Inpatient Rehabilitation	B. Catharine Craven, BA, MD, MSc, FRCPC, FASIA, FCAHS
Does Resilience Mitigate the Extent of Prescription Opioid Use and Misuse Among People with Chronic Spinal Cord Injury?	James Krause, PhD

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 9: Mixed Papers 1: Risk-y Business in SCI: Predictive Analytics and Practical Aspirations 3:00 PM - 4:00 PM / Moderator: Elizabeth Roy Felix, PhD • Co-Moderator: Alex Benedetto, BS	
Development of Acute and Late Spasticity following Traumatic Spinal Cord Injury: Prevalence, Clinical Predictors and the Impact of Initial Severity of The Injury	Andreane Richard-Denis, MD, MSc
A Qualitative Examination of the Life Course Considerations Influencing the Housing Experiences of Persons with Spinal Cord Injury / Dysfunction	Sander L. Hitzig, PhD
Performance of Clinical Experts in Predicting Walking after Spinal Cord Injury in Comparison with Machine Learning	Louis Philipp Lukas, MSc
Bedside Sacral Electromyography as a Novel Method for Early Detection of Neurogenic Bladder Dysfunction following Acute Incomplete Thoracolumbar Injury/Trauma: A Proof of Concept Study	Andreane Richard-Denis, MD, MSc
Association of DNA Methylation Signatures with Traumatic Spinal Cord Injury	Ricardo Battaglino, PhD
Clinical Factors Associated with Neurological Recovery following Acute Traumatic Cervical Spinal Cord Injury: Analysis of 655 Prospectively-Accrued Cases from the NASCIS 2 and NASCIS 3 Clinical Trials.	Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC, FAAN, FASIA



GENERAL SESSIONS

WEDNESDAY JUNE 4, 2025 All Program times are in Mountain Standard Time (MST)

ORAL PRESENTATIONS	PRESENTERS
GENERAL SESSION 10: Mixed Papers 2: Movin', Eatin', and Livin' Right! 9:00 AM - 10:00 AM / Moderator: James Wilson, DO • Co-Moderator: Soshi Samejima DPT, PhD	
The Effect of Home-Based Neuromuscular Electrical Stimulation-Resistance Training and Protein Supplementation on Lean Mass in Persons with Spinal Cord Injury	Sven Hoekstra, PhD
Content Validity of a New Nutrition Knowledge Questionnaire for Individuals with Spinal Cord Injuries and Disorders	Rena Steiger-Chadwick, MPH Sherri LaVela, PhD, MPH, MBA
Diagnoses and Procedures During "Treat and Release" Emergency Department Visits for Pediatric Traumatic Spinal Cord Injury in the United States	James A.G. Crispo, MSc, PhD
Two versus Four Doses of Intravesical Lactobacillus Among People who Manage their Bladders by Intermittent Catheterization	Suzanne Groah, MD, MSPH
Quality Improvement Project for the Gynecological Care of Women after Spinal Cord Injury: Step I, Discovery	Claudia I. Martinez, MD



AWARD-ELIGIBLE POSTERS MONDAY / JUNE 2 / 2:30-3:30 PM AND TUESDAY / JUNE 3 / 2:00-3:00 PM

1 Rapid-Onset, Short-Duration Induction of Colorectal Contractions and Defecation in Spinal Intact and Spinal Cord Injured Rats Lesley Marson, PhD

2 Responding to Transcutaneous Spinal Stimulation for Upper Extremity Recovery: A Midsagittal Tissue Bridge Case Series Andrew C. Smith, PT, DPT, PhD

3 Acute Effects of taVNS on Wrist Extensor or Extensor Digitorum Corticospinal Excitability in People with Chronic Incomplete Cervical Spinal Cord Injury Allison Foster Lewis, DPT, PhD

4 Midbrain Locomotor Circuit Activation of Periaqueductal Grey – Potential Role in Locomotion and Pain Modulation after SCI? Brian Noga, PhD 5 Predicting Functional Walking at Discharge from Inpatient Rehabilitation After Traumatic Spinal Cord Injury: A Single-Site Retrospective Validation Study Jonathan Ripic, PT, DPT, NCS

6 Recovery of Sensory Function after Traumatic or Ischemic Spinal Cord Injury (SCI) Christian Schuld, Dipl.-Infom. Med

7 Fatigue Properties of the First Dorsal Interosseous after Incomplete Spinal Cord Injury Christina Whang, B.Kin., MSc Candidate

8 Developing the PedsADAPSS: A New Measure for Assessing Cognitive Appraisals in Pediatric Spinal Cord Injury Justine Stewart, PsyD 9 Midsagittal Tissue Bridges and Walking Ability 1-Year Post Spinal Cord Injury Wesley Thornton, PT, DPT, PhD(c)

10 A Single Center Evaluation of adherence to the PVA SCI Clinical Practice Guidelines Nikhil Nair, BA

11 From Homefront to Battlefield: A Comparative Study on the Priorities for Recovery in Individuals with Spinal Cord Injury Omer Faraz, MD Candidate

12 Development of a Reusable Smart-Catheter System for Improved Urinary Health Monitoring **Zhi Dou, MS**

POSTER SESSION 1 monday / june 2 / 2:30-3:30 pm

Accessibility / Public Health

13 Assessing Community Needs of Individuals with Spina Bifida and their Families Ava S. Jefson

14 Clinical And Sociodemographic Characteristics In Non-Traumatic Spinal Cord Injury At The National Rehabilitation Institute "Luis Guillermo Ibarra Ibarra" 2015-2023, Mexico. **Valeria Polet Olivares González, MD**

15 Costs of Treatment of Patients with Post-Traumatic Spinal Cord Injury in a Reference Hospital In Mexico Carlos Fernando Godínez González, MD, MsC

Activity-Based Training

16 Impact of the Americas Committee of ASIA Research Course on Professional Practices **Melina Longoni, MD**

Acute Care

17 A Comprehensive Analysis of Traumatic Atlanto-Occipital and Atlanto-Axial Dislocations: A Case Series from a Level One Trauma Center **Henry Krasner, BS**

18 Autonomic Dysreflexia Complicated by Metastatic Paraganglioma **Zakari R Dymock, MS, MD**

Aging

19 Engaging the Spinal Cord Injury Inter-professional Team to Advance Age-Friendly Care **Sunil Sabharwal, MD, SCI Chief, VA**

Assistive Technology

20 Reversing the Trend: Clinical Strategy to Reduce Incidence and Impact of Wheelchair Repairs in Spinal Cord Injury Rehabilitation

Blake Edwin Perkins, PT, DPT, ATP

21 Effects on Pressure Relief Activity and Technology Adoptability by A Real-Time System for Monitoring, Feedback, and Training to Prevent Pressure Injuries In Individuals With Spinal Cord Injury Jack Janett, BS

Basic Science / Animal Models

22 Bioengineering Strategies to Facilitate Axon Growth after Spinal Cord Injury Matthew Neehouse, PT, DPT



POSTER SESSION 1 monday / june 2 / 2:30-3:30 pm

Basic Science / Animal Models, continued

23 Tissue Engineering Approach for Functional Recovery Following Spinal Cord Injury Leena Rajendra Chaudhari, PhD, MS

Cardiovascular

24 Stabilizing the Blood Pressure Pendulum Following Spinal Cord Injury using Noninvasive Spinal Neuromodulation

Rahul Sachdeva, PhD

25 Long-Term Facilitation of Heart Rate and Blood Pressure Variability Following Daily Mild Intermittent Hypoxia in Individuals with Motor Incomplete Spinal Cord Injury

Gino Panza, PhD

26 Postprandial Satiety and Metabolic Responses in Men With and Without a Spinal Cord Injury Gary J. Farkas, PhD, MSCTI

27 Passive Heat Therapy to Improve Cardiometabolic Health in Persons with a Spinal Cord Injury Sven Hoekstra, PhD

Case Study

28 Experience with Diaphragmatic Pacemaker in a Person with Spinal Cord Injury: Single Case Report Dr. Diego uberti,Licenciado en kinesiologia y fisioterapia. Medico especialista en rehabilitacion

29 Neurological Sequelae of Restrictive Dietary Practices: The Role of Multidisciplinary Rehabilitation, Education, and Primary Care Ashley Covatto, DO

30 Overcoming Diagnostic Oversights in a Traumatic Spinal Cord Injury Patient with Delayed Diagnosis of Multiple Myeloma: A Case Report Ashley Covatto, DO

31 Posterior Spinal Artery Syndrome in the Cervical Cord: A Misdiagnosed Case Elena Posanti, MD

32 Successful Completion of Medical School with Physical Disability from Cervical Spinal Cord Injury: A Case Report Claudia I. Martinez, MD **33** A Case Study on Historic Controls for Clinical Trial Designs

Miklovana Tuci, MSc

34 Heterotopic Ossification in Spinal Cord Injury with a Normal Alkaline Phosphatase in the Setting of an Inpatient SCI Rehabilitation: A Case Report Isabel Nip, MD, MS

35 Secondary Blood Pressure Effects of a Neuroprosthesis for Trunk Control **C. Eric Heidorn, MS, ABD**

Chronic Care

36 Factors that Restrict Standing in the Daily Life Routine of Persons with Spinal Cord Injury in Argentina **Federico Nicolas Llanos, OT**

Clinical Trial Updates

37 Study Design: Delivery of Oligodendrocyte Progenitor Cells for Spinal Cord Injury: Evaluation of a Novel Device (DOSED) Study Duke Ohash

Community Re-Integration and Participation

38 Use and Type of DME In Activities of Daily Living in Patients with Spinal Cord Injury after Discharge from a Neurorehabilitation Center: Preliminary Results **Paula Teresa Cañás, OT**

39 Life After Spinal Cord Injury: Latin American Experiences Melina Longoni, MD

COVID 19

40 Mortality due to COVID-19 Among Persons with Spinal Cord Injury in the United States: 2020-2022 Michael J DeVivo, DrPH, FASIA

Electrophysiology

41 Motor Unit Properties of Key Upper Limb Muscles after Incomplete Spinal Cord Injury Mathew Debenham, PhD

Health Access for Mobility Impaired

42 Barriers and Facilitators to Breast Cancer Screening with Mammography Among Women Veterans with Spinal Cord Injuries and Disorders Elizabeth Hulen, PhD

43 Plans to Improve the Gynecological Care of Women after Functional Decline **Claudia I. Martinez, MD**

Imaging

44 Validation of Novel Mathematical Model of Muscle Thickness for Quantitative Neuromuscular Ultrasound in Spinal Cord Injury Emmanuel Ogalo, Bkin, MSc

Measurement and Outcomes Instruments

45 Hounsfield Units and Association with Outcomes in Acute Traumatic Spinal Cord Injury: A TRACK-SCI Study John H. Kanter, MD

46 Associations between Spatially Adjacent Below-Level Dermatomes in Spinal Cord Injury with a Focus on Dermatomes Innervated by Distant Roots **Christian Schuld, Dipl.-Infom. Med**

47 Data-Driven Prediction of Spinal Cord Injury Recovery: An Exploration of Current Status and Future Perspectives

Miklovana Tuci, MSc

48 Design and Development of Flexible Potentiometric pH Sensors for a Reusable Smart-Catheter Platform **Erika Solano, MS**

Metabolic / Obesity / Nutrition

49 Status of the Knowledge that Health Professionals Have about the Nutrition of People with Spinal Cord Injuries in Latin America (LA) **Melina Longoni, MD**

50 Management of Obesity and GLP-1 agonists; Does the Prescription Rates vary among obese SCI Vs Non-SCI Patients? a Retrospective Cohort Study Dilshad Hunain Al Arabia, MD

POSTER SESSION 1 monday / june 2 / 2:30-3:30 pm

Mixed

51 A Comprehensive Systematic Review on Sleep Disorders in People Living with Spinal Cord Injury Julio Furlan, MD, LLB, MBA, PhD, MSc, FRCPC, FAAN, FASIA

Neural Plasticity

52 Ventilatory and Cardiovascular Plasticity following Acute and Daily Mild Intermittent Hypoxia in those with Motor Incomplete SCI Gino Panza, PhD

Pediatrics

53 "I Was a Wheelchair Kid" Podcast Series: Introducing a New Resource For Adolescents **Allen Heinemann, PhD**

POSTER SESSION 2 TUESDAY / JUNE 3 / 2:00-3:00 PM

Neuromodulation

54 Implanted Myoelectric Control for Trunk and Exercise for Neuromuscular Stimulation Kevin Foglyano

55 Notes from the Field: Spinal Stimulation in a Community-Based Clinic Emma Buckley, PT, DPT, ATC

56 The Neuromodulatory Effect of Different Parameters of Transcutaneous Spinal Stimulation in Humans with Spinal Cord Injury Matthias Krenn, PhD

Nursing

57 Prevalence of Mucus and Sediment in Urine and their Association with Urinary Tract Infections in Spinal Cord Injury Patients Using Intermittent Catheterization Jessica Simmons, DNP, APRN, FNP-C, CWON, DNC

58 Exploring Preferences for Intermittent Catheterization: Results from a Continence Care Registry Jessica Simmons, DNP, APRN, FNP-C, CWON, DNC

Primary Care

59 Enhancing Healthcare for SCI/D Veterans with Diabetes and Hypertension: A Quality Improvement Initiative Centered on Patient-Oriented Evidence That Matters (POEMs) Pavel Burskii, SCI Fellow

Psychosocial

60 Health Disparities and Individual-Specific Factors Predicting Functional Outcomes at 12 Months: Results from the SCI Model Systems Ana Valeria Aguirre Guemez, MD **61** A Scoping Review on the Influence of Housing on the Health and Wellbeing of People with Spinal Cord Injury/ Dysfunction

Sander L. Hitzig, PhD

62 Interpersonal Violence Against People with SCI: A Qualitative Study Susan Robinson-Whelen, PhD

Rehabilitation

63 Developing a Continuum of Women's Health to Identify Gaps In Research and Areas to Intervene Jennifer Coker, PhD, MPH, FASIA

64 Neurophysiological Recovery following Nerve Transfer Surgery to Restore Upper Limb Function in Acute Cervical Spinal Cord Injury Kyle Missen, PhD

65 The Effect of Tamoxifen on the Gut Microbiome of Female Rats After Spinal Cord Injury Luis H. Pagan Rivera, PhD Student

66 Comparative Analysis of Recovery Trajectories in Spinal Cord Injury: The Impact of Polytrauma on Rehabilitation Outcomes Sean Li, BS

67 Heart Rate Variability During Urinary Bladder Catheterization in Individuals with Spinal Cord Injury: Anxiety vs. Sensory Activation During Catheterization **Fiona Huang, MHSc, BKin**

68 What Factors Influence the Acceptance and Use of Generative Artificial Intelligence (AI) Among Graduate Students in Rehabilitation Medicine? Alberto Isaac Perez Sanpablo, PhD

69 The Role of Androgens in Neurophysiological and Autonomic Function in Men With SCI Jacob A. Goldsmith, PhD **70** Functional Electrical Stimulation combined with Respiratory Muscle Training Improves Cough Effectiveness in Tetraplegic Patient

Stephane Philippe-Ratway, MS, CCC-SLP

71 Sleep Disturbances in Individuals with Spinal Cord Injury Treated at the National Institute of Rehabilitation **Ana Karen García Ramírez, MD**

72 Rehabilitation Challenges and Management of Autonomic Dysreflexia in a Patient with Chronic Spinal Cord Injury Following Diaphragmatic Pacer Placement: A Case Report

Alexandra Wolfe, DO

73 Kayak Training vs Aerobic Resistance Exercise: Effects on Cardiovascular Condition in Patients with Spinal Cord Injury, Preliminary Results Javier Antonio Veliz Chinchilla

74 Characterization of the Center of Mass in Post-Spinal

Cord Injury Gait Gabrielle Labrozzi, PhD Candidate

75 Effect of Kayak Ergometer Training Compared with

Aerobic Endurance Circuit Exercise on the Metabolism of Individuals with Spinal Cord Injury. Preliminary Results Erika Carolina Zenteno Castro

76 Inclusion of Non-Traumatic Spinal Cord Injury in National Traumatic Spinal Cord Injury Registries: Preliminary Findings and Lessons Learned from the United States and Canada

Yuying Chen, MD, PhD

77 Functional Prognosis of Patients with Spinal Cord Injury using Machine Learning Eduardo Cabanas, PhD

SCOTTSDALE / ARIZONA / ASIA-SPINALINJURY.ORG



POSTER SESSION 2 TUESDAY / JUNE 3 / 2:00-3:00 PM

Rehabilitation Therapy

78 Effect of Immersive Virtual Reality Rehabilitation Based on Kayak Paddling on Trunk Independence and Balance in Spinal Cord Injury Patients: A Pilot Study Irma Guadalupe Lozano Rodriguez

79 Impact of the Community Environment on Wheelchair Propulsion In Individuals with Spinal Cord Injury

Martín del Castillo, PT

80 Paired Vagus Nerve Stimulation and Upper Extremity Rehabilitation Following Spinal Stroke Ashley Miller, PT, DPT, NCS

SCI Knowledge Dissemination/ Implementation into the Community

81 Cognitive Impairments in Individuals with Spinal Cord Injury and Their Association with Respiratory Parameters Miyuki Mariana Takata Rodríguez, MD

Sex / Fertility

82 Complications of Intrauterine Devices in Patients with Spinal Cord Injury Hans Anderson, MD, PhD

Skin

83 Long Term Follow-Up of Wounds after Discharge from Acute Inpatient Rehabilitation Radhika Sharma, MD

Spine Surgery

84 Optimizing Outcomes for Spinal Cord Injury Patients: Insights from a 3-Tier Health Service Delivery Model in Nepal

Haley Nadone, BS

Translational Research

85 Standardized Thoracic Spinal Cord Injury Model Platform for SCI Research Johana Bastidas, MD

Upper Extremity Function

86 The Impact of the Novel ExaStim® Device on the Targeted Recovery of Upper Extremity Motor Function in an Individual with Tetraplegia: A Case Study Emily Leonard, PhD



Late Breaking Posters

88 A Qualitative Exploration of Appraisals of Disability for Youth with Spinal Cord Injury Justine Stewart, PsyD

89 Comparison of Mechanical Ventilation with Low and High Tidal Volumes in Acute Spinal Cord Injury: A Pilot Randomized Clinical Trial Radha Korupolu, MD 90 Intravenous Injection of Novel Lipid Nanoparticles for Astrocyte Transfection and Local Immunosuppression After Spinal Cord Injury Daniel Hellenbrand, PhD

91 Toward Deeper Understanding of Interactions Between Sleep and Recurrent Pressure Injuries After Traumatic SCI Letitia Graves, PhD, RN **92** The Development of Cervical Spinal Cord Diffusion MRI Near Metal **Thammathida Ketsiri**, **PhD**

93 Portable Leg Stretching Device for Management of Spasticity in Patients with SCI/D **Murtaza Syed, MD**

94 Neuroprosthesis Providing Grasp Function in Cervical Spinal Cord Injury Kevin Kilgore, PhD