

Enrico Rejc, Ph.D.

Piazzale Diego Simonetti 2 (Lavoro)

33013 Gemona (UD)

enrico.rejc@uniud.it

ISTRUZIONE E FORMAZIONE

- 10/2000 – 07/2004 Laurea triennale in Scienze Motorie (110 / 110), Università di Udine, Udine, Italia.
05 – 07/2004 *Visiting student* (Fisiologia dell'esercizio), Manchester Metropolitan University, Manchester, UK
- 11/2004 – 07/2007 Laurea specialistica in Scienza dello Sport (110 / 110 cum laude), Università di Udine, Udine, Italia.
- 01/2008 – 12/2010 Dottorato di ricerca in Fisiologia dell'esercizio, Dipartimento di Scienze e Tecnologie Biomediche, Università di Udine, Udine, Italia.
- 10/2009 – 04/2010 *Visiting researcher* (neurofisiologia, lesioni spinali), UCLA, Los Angeles, CA, USA.
- 01/2012 – 10/2012 Assegnista di ricerca (Fisiologia dell'esercizio), Università di Udine, Udine, Italia.
- 10/2012 – 01/2015 *Postdoctoral associate* (neurofisiologia, lesioni spinali), Università di Louisville, Louisville, KY, USA.

POSIZIONI ACCADEMICHE

- 11/2022 – Presente Ricercatore a tempo determinato di tipo B
Dipartimento di Area Medica
Università di Udine, Udine, Italia.
- 02/2015 – 10/2022 *Assistant Professor* (tempo determinato)
Kentucky Spinal Cord Injury Research Center
Dipartimento di Neurochirurgia
Università di Louisville, Louisville, KY, USA.
- 01/2016 – 10/2022 Direttore Scientifico
Laboratorio (*research core*) metabolico, neuromuscolare e scheletrico
Kentucky Spinal Cord Injury Research Center
Università di Louisville, Louisville, KY, USA.
- 06/2016 – 10/2022 Professore Aggregato
Dipartimento di Fisiologia
Università di Louisville, Louisville, KY, USA.
- 04/2017 *Visiting Professor*
Dipartimento di Scienze Motorie e del Benessere
Università di Napoli "Parthenope, Napoli, Italia.
- 03/2018 *Visiting Professor*
Corso di laurea magistrale in Scienza dello Sport
Università di Udine, Udine, Italia.

MEMBERSHIPS ED ATTIVITA' PROFESSIONALI

- 2009 – 2012 American Congress of Sports Medicine (Membro)
2012 – Presente Society for Neuroscience (Membro)
- 05/2017 *Chairman* della sessione: “Retraining the Skeletal Muscle System: Implications after Aging, Disuse or CNS Trauma”
Simposio “21st Annual Kentucky Spinal Cord and Head Injury Research Trust Symposium”
Louisville, KY, USA.
- 2016 – 2019 Membro valutatore di poster scientifici
Research!Louisville e Society for Neuroscience, Louisville Chapter.
Louisville, KY, USA.
- 10/2018 – 09/2021 Presidente-eletto; Presidente; Presidente-uscente
Society for Neuroscience, Louisville Chapter
Louisville, KY, USA.
- 05/2022 *Chairman* della sessione: “Hypoxia: the Good (the Bad and the Ugly)”
Simposio “27th Annual Kentucky Spinal Cord and Head Injury Research Trust Symposium”
Louisville, KY, USA.
- 06/2022 – 12/2024 Membro della commissione: “Trainee Professional Development Awards”, Society for Neuroscience.

RICONOSCIMENTI

- 2005 Premio “Stefano Benetton”. Concorso nazionale per tesi di laurea sullo sport.
Fondazione Stefano Benetton, Treviso, Italia
- 2006 Premio “Montagna e sport: tra tutela e sviluppo sostenibile”. Concorso nazionale.
Presidenza del Consiglio dei Ministri – Dipartimento per gli Affari Regionali.

COMMISSIONI E SERVIZIO AMMINISTRATIVO

Finanziamento di progetti di ricerca

- 2017 Revisore ad invito - *ad hoc*
Defense Medical Research and Development Program – Ricerca su riabilitazione delle condizioni neuro-muscolo-scheletriche
Dipartimento della Difesa, USA.
- 2020 Revisore ad invito
Catwalk Trust Project Grant
Neurological Foundation, New Zealand.
- 2021 Revisore ad invito - *full panel*
FY21 Spinal Cord Injury Research Program, Congressionally Directed Medical Research Programs

Dipartimento della Difesa, USA.

Commissioni di dottorato

- 2015-2018 Membro (Candidato: Robert Stallard)
Dipartimento di ingegneria elettrica ed informatica
Università di Louisville, Louisville, KY, USA.
- 2017 Revisore esterno (Candidato: Giuseppe Bellistri)
Istituto di bioimmagini e fisiologia molecolare
Consiglio Nazionale delle Ricerche, Milano, Italia.
- 2019-2022 Revisore esterno (Candidata: Federica Gonnelli)
Dipartimento di Area Medica
Università di Udine, Udine, Italia.

Commissioni di abilitazione

- 2021 Membro – abilitazione per la posizione di *Assistant Professor* in chinesiologia
(Candidato: Mitja Gerževič)
Euro-Mediterranean University, Piran, Slovenia.

Commissioni Università di Udine - Scienze motorie e Scienze e tecniche delle attività motorie preventive e adattate (STAMPA)

- 2023 Responsabile Erasmus (Scienze motorie e STAMPA)
- 2023 Tutor universitario per le attività di coordinamento dei tirocini (Scienze motorie e STAMPA)
- 2023 Componente - Commissione didattica (STAMPA)
- 2023 Componente - Commissione per l'Assicurazione della Qualità (STAMPA)
- 2023-24 Componente - Commissione di valutazione comparativa degli incarichi di insegnamento (STAMPA)

ATTIVITA' DIDATTICA

Insegnamento

- 2023-24 (i) Programmazione e conduzione delle attività motorie preventive e adattate (60 ore)
Corso di laurea specialistica STAMPA.
Università di Udine, Udine, Italia.
- 10/2011 – 07/2012 (i) Prevenzione e recupero funzionale (C.d.L. specialistica Scienza dello sport) -
Docente titolare
(ii) Fondamenti di fitness e wellness (C.d.L. Scienze Motorie)
(iii) Teoria e metodologia di studio della postura e del movimento umano (C.d.L. Scienze Motorie)
(iv) Laboratorio di valutazione funzionale (C.d.L. Scienze Motorie)
Università di Udine, Udine, Italia.
- 04/2017 (i) Controllo del movimento umano e lesione spinale - *Visiting professor*
C.d.L. specialistica - Dipartimento di Scienze Motorie e del Benessere
Università di Napoli "Parthenope, Napoli, Italia.

03/2018 (i) Controllo del movimento umano e lesione spinale - *Visiting professor*
C.d.L. specialistica Scienza dello sport
Università di Udine, Udine, Italia.

Relatore tesi di laurea

2006 –2010 Correlatore di 11 tesi di laurea triennale (Candidati: Anna Stefani, Alessandra Bressani, Stefano Micoli, Roberto Iezzi, Alessandro de Guidi, Silvia Masiero, Antonio Borriello, Elena Scotti, Giordano Francesco Jr., Manfredi Zampar, Alberto Botter)
Corso di laurea in Scienze motorie (n = 10) e Biotecnologie (n = 1)
Università di Udine, Udine, Italia.

2008-2011; 2019 Relatore (n = 1) e correlatore (n = 3) di tesi di laurea specialistica (Candidates: Ingrid Mattiuz, Enrico Di Doi, Alessandro Ganzini, Federica Gonnelli)
Corso di laurea specialistica Scienza dello Sport
Università di Udine, Udine, Italia.

Research career development awards advisor

2021 – 2023 Candidato: Andrew Smith, PT, PhD
NIH, *Comprehensive Opportunities in Rehabilitation Research Training, K12 award* (awarded).

Supervisore di Postdoctoral associates

2015 – 2016 Dr. Lian He
2016 – 2017 Dr. Ahmed Shalaby
2017 – 2019 Dr. David Arpin. *Riconoscimenti*: (i) Borsa di studio: *Helmsley Restorative Medicine Trainee fellowship* (2018); (ii) 3° posto alla presentazione di poster scientifici, *SfN Louisville Chapter* (2019).
2020 – 2022 Dr. Collin Bowersock. *Riconoscimenti*: Borsa di studio *Todd Crawford Scholarship* (2021); Invito a presentare una richiesta di finanziamento completa a: *Neilsen Foundation's 2022 SCIRTS Postdoc grant application*.
Università di Louisville, Louisville, KY, USA.

Supervisore di studenti impegnati in progetti di ricerca

05-07/2014; 09-11/2015 Nicole Bryant (C.d.L. triennale)
05-07/2017 Elizabeth Levay (C.d.L. triennale)
04-05/2018 Ethan Adams (C.d.L. triennale)
04-06/2018; 08-10/2019 Federica Gonnelli (C.d.L. specialistica). *Riconoscimenti*: Premio Panathlon per tesi di laurea (2019. Italia).
06-07/2022 Sacha Keenan (tirocinante di scuola superiore)
Kentucky Spinal Cord Injury Research Center
Università di Louisville, Louisville, KY, USA.

Relatore per un professional paper

08-12/2019 Hanna Martin
C.d.L. specialistica in *Clinical Investigation Sciences*
Università di Louisville, Louisville, KY, USA.

Conferenze ad invito

- 06/23/2010 Bilateral deficit during explosive lower limb extension: on its causes and adaptations to bed rest. Faculty of Human Movement Science, University of Verona, Verona, Italy.
- 03/12/2011 Novel approach for hamstrings active strengthening by Safe Leg. XX International Congress of Sports Rehabilitation and Traumatology. March 12, 2011, Bologna, Italy.
- 05/14/2015 Effects of lumbosacral spinal cord epidural stimulation for standing after chronic complete paralysis in humans. Neuroscience Grand Rounds, University of Louisville, Louisville, KY, USA.
- 06/18/2015 Epidural stimulation for standing: interaction among sensory information, training and stimulation parameters. Seminar Series, Kentucky Spinal Cord Injury Research Center, University of Louisville, Louisville, KY, USA.
- 07/22/2015 Lumbosacral spinal cord epidural stimulation for standing after chronic complete paralysis in humans. Dept. Medical and Biological Sciences, University of Udine, Udine, Italy.
- 10/01/2015 Effects of lumbosacral spinal cord epidural stimulation for the recovery of motor function after chronic complete paralysis in humans. Institute of Molecular Bioimaging and Physiology, National Research Council, Milano, Italy.
- 01/29/2016 Recovery of motor function for standing via lumbosacral spinal cord epidural stimulation and activity-based rehabilitation in chronic complete paraplegics. Seminar Series, Bioengineering Department, University of Louisville, Louisville, KY, USA.
- 02/19/2016 Effects of stand and step training with epidural stimulation on motor function for standing and muscle properties. Seminar Series, Kentucky Spinal Cord Injury Research Center, University of Louisville, Louisville, KY, USA.
- 03/02/2018 Task-specificity and variability of activity-based training with spinal cord epidural stimulation affect the recovery of standing in motor complete SCI individuals. Seminar Series, Kentucky Spinal Cord Injury Research Center, University of Louisville, Louisville, KY, USA.
- 03/21/2018 Spinal cord epidural stimulation and activity-based training for lower limb motor function recovery in individuals with chronic motor complete spinal cord injury. Seminar Series, Dept. of Medicine, University of Udine, Udine, Italy.
- 02/08/2019 Neurophysiological markers predicting independent standing enabled by spinal epidural stimulation in humans with motor complete spinal cord injury. Seminar Series, Kentucky Spinal Cord Injury Research Center, University of Louisville, Louisville, KY, USA.
- 02/25/2020 Spinal cord epidural stimulation for lower limb motor function recovery in individuals with chronic motor complete spinal cord injury. World Society for Stereotactic and Functional Neurosurgery, *Webinar*.
- 03/23/2020 Spinal cord epidural stimulation and recovery of motor function after chronic, complete spinal cord injury: details matter! American Congress of Rehabilitation Medicine, *Webinar*.
- 10/30/2020 Updates on motor and neuromuscular recovery by epidural stimulation after severe SCI. Seminar Series, Kentucky Spinal Cord Injury Research Center, University of Louisville, *Webinar*.
- 05/04/2021 The human spinal cord is smarter than we think - lessons learnt from 'complete' spinal cord injured individuals receiving epidural stimulation. Exercise Physiology Seminar Series, Dept. of Medicine, University of Udine, *Webinar*.
- 12/03/2021 Spinal cord epidural stimulation for motor recovery after complete spinal cord injury. Seminar series *Talk with the experts*, University of Pavia, *Webinar*.
- 03/14/2022 Recovery of Upright Postural Control with Epidural Stimulation and Robotic Postural Training in Individuals with Chronic Motor Complete Spinal Cord Injury. Gordon Research Conference

“*Bridging Neural Engineering and Neurobiology Edge Effects to Divergent Innovation*”.
Ventura, CA.

07/27/2022 Spinal Cord Epidural Stimulation to Promote Standing Motor Function Recovery After Motor Complete Spinal Cord Injury. “*Moving beyond isolated systems*” Symposium. Louisville, KY.

Interviste ad invito

- 10/2022 ASIA (American Spinal Injury Association) SCI Science Perspectives Podcast – focus sul premio 2022 AISA TRoHNS relativo ad un Progetto di ricerca sul recupero della postura eretta mediante stimolazione elettrica del midollo spinale e caratteristiche del midollo spinale studiate tramite risonanza magnetica.
- 02/2022 DiSCIS (Discussions in Spinal Cord Injury Science) Podcast – focus sul recupero della postura eretta mediante stimolazione elettrica del midollo spinale e caratteristiche del midollo spinale studiate tramite risonanza magnetica.
- 06/2018 “UofL Today with Mark Hebert” intervista alla radio - focus sull’utilizzo del *foam rolling massage* in relazione alla performance fisica.
- 12/2017 “UofL Today with Mark Hebert” intervista alla radio - focus sull’utilizzo recovery of standing motor function in an individual with complete paralysis.
- 09/2015 “Ask Dr. Nandi” intervista TV - focus sul recupero della postura eretta mediante stimolazione elettrica del midollo spinale in persone con paraplegia.

FINANZIAMENTO DI PROGRETTI DI RICERCA

Finanziamenti attivi

1. DOH01-TRANS4-2022 Agrawal (PI) 10/01/2022 – 09/30/2027 2.4 calendar (20% effort)
“Improving Balance after spinal cord injury using a robotic upright stand trainer”
L’obiettivo principale e’ sviluppare un innovativo robot riabilitativo per la postura eretta, studiare e riabilitare il controllo posturale in individui con paralisi.
Ruolo: Co-Principal Investigator
Direct Subaward Costs: \$802,000 Total subaward costs: \$962,500
2. W81XWH2010348 Boakye (PI) 07/01/2020-06/30/2023 0.12 calendar
U.S. Department of Defense UofL Grant ID: OGMB200253
‘Epidural Stimulation Improvement of Neurogenic Bowel After Acute Spinal Cord Injury - A Large Animal Study’
L’obiettivo principale e’ migliorare la funzione intestinale in un modello suino con lesione spinale. Questo progetto triennale dara’ indicazioni ed evidenze sulla miglior strategia neuromodulatoria per questo obiettivo.
Ruolo: Co-Investigator
Direct Costs: \$1,250,000; Total Costs: \$1,846,434

Finanziamenti in fase di valutazione

1. 1R01HD112388-01 Behrman (PI) 07/01/2023-06/30/2028 2.4 calendar
“Sensorimotor principles to optimize trunk muscle activation in children with spinal cord injury”
L’obiettivo principale e’ definire principi neurofisiologici e biomeccanici dell’attivazione dei muscoli del tronco in bambini con lesione spinale.
Role: Co-Principal Investigator
2. 1R01NS133507-01 Boakye (PI) 07/01/2023-06/30/2028 2.4 calendar
“MRI optimization and prediction of stepping by epidural stimulation after SCI”

L'obiettivo principale e' utilizzare un modello suino per validare istologicamente misure di risonanza magnetica focalizzate su tessuto nervoso residuo e posizionamento dell'elettrodo stimolatore, le quali possono essere utilizzate come biomarkers di risposte promosse da stimolazione epidurale del midollo spinale.

Ruolo: Co-Principal Investigator

Finanziamenti di ricerca completati

1. ES_BI-2017(Harkema) Harkema (PI) Rejc (Co-I) 03/2017-12/2022
 Christopher and Dana Reeve Foundation UofL Grant ID: CCDN171218
 "Task and physiological specific stimulation for recovery of autonomic function, voluntary movement and standing using epidural stimulation and training after severe spinal cord injury".
 Direct Costs: \$7,934,243; Total Costs: \$8,690,519
2. Behrman (PI) Rejc (Pilot Study PI) 01/2018 - 12/2018
 Kosair Charities
 Pilot Study: "Activity-based training and skeletal muscle in children with spinal cord injury"
3. Harkema (PI) Rejc (Co-I) 02/2012 - 6/2018
 Leona M & Harry B Helmsley Charitable Trust
 "Recovery of Function, Health and Quality of Life for People with Paralysis"
4. Harkema (PI) Rejc (Co-I) 12/2015 - 12/2019
 Leona M & Harry B Helmsley Charitable Trust
 "Center for Restorative Medicine"
5. Research Grant Rejc (PI) 01/2019 – 04/2020
 University of Louisville School of Medicine
 Toward the recovery of postural control in individuals with severe spinal cord injury.
6. DOH01-C31290GG-3450000 Agrawal (PI) Rejc (Site Co-PI) 8/2016 - 8/2021
 New York State Spinal Cord Injury Research Board/Columbia University
 "TPAD- Tethered Pelvic Assist Device and Epidural Stimulation for Recovery of Standing in SCI".
7. Harkema (PI) Rejc (Co-I) 07/01/2019 - 06/30/2022
 Kessler Foundation UofL Contract ID: CCDN200245
 "Understand the Role of Lumbosacral scES in Recovery in Individuals with Severe SCI".

Non finanziati

- NIH NINDS R01-NS126276 Rejc (PI) 04/01/2022-03/31/2027
 Spinal cord lesion determinants of successful motor recovery promoted by epidural stimulation.
- NIH NIBIB R01-NS126313 Agrawal (PI) Rejc (Co-PI) 06/01/2022 – 05/31/2027
 Improving Posture and Balance Control in Individuals with SCI using a Robotic Stand Trainer.
- U of L School of Medicine. Rejc (PI) 2016
 Impact of stand and step training with epidural stimulation on aerobic metabolism in chronic complete paraplegics.
- Nielsen Foundation. Rejc (PI) 2016
 Recovery of standing balance control after severe spinal cord injury.

- Nielsen Foundation. Rejc (PI) 2017
Do spinal stimulation and training promote health after paralysis?
- Department of Defense. Rejc (PI) 2019
Neurophysiological biomarkers for standing rehabilitation with epidural stimulation in individuals with chronic complete spinal cord injury.
- U of L-ExCITE Product Development Grant – Cycle #7. Rejc (PI) 2019
Machine learning-based computer software for enhancing recovery of standing in humans with severe spinal cord injury. (invited to full proposal submission).
- Nielsen Foundation Rejc (PI) 2019
Epidural stimulation for standing rehabilitation after complete paralysis. (invited to full proposal submission).

BREVETTI

- A. Shalaby, S. Mesbah , A. El-Baz , **E. Rejc** and S. Harkema. “Automated segmentation of tissue in magnetic resonance imaging”. PCT/US2018/064760
- S Harkema, **E Rejc**, S. Mesbah. “Determination of stimulation parameters for muscle activation”. US Non-Provisional Patent Application Serial No. 16/906,443 (2020).
- S Harkema, **E Rejc**, S. Angeli C, Hubscher C, Herrity A, Chen Y, Aslan S. “Closed loop control system”. U.S. Provisional Patent Application No. 62/945,702.

ATTIVITA' EDITORIALI

- 2023 *-Guest Editor* in: Wearable Technologies.
Special Issue “Neuromodulation, Robotics, and Wearable Technologies - Promoting Sensorimotor Function”.
- 02/2022 Rejc, E., Ichiyama, R. M., Angeli, C. A., eds. (2022). Advances in Spinal Cord Epidural Stimulation for Motor and Autonomic Functions Recovery After Severe Spinal Cord Injury. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88974-391-9 (E-book)
- 09/2019 – 09/2021 *Guest Associate Editor* in Frontiers in Systems Neuroscience.
Research Topic: “Advances in Spinal Cord Epidural Stimulation for Motor and Autonomic Functions Recovery after Severe Spinal Cord Injury”.
- 2014 – 2022 Revisore di articoli scientifici *ad hoc* per: Human Movement Science (2014), System (2014), Journal of Musculoskeletal and Neuronal Interactions (2015), Journal of Neurotrauma (2016), The Journal of Spinal Cord Medicine (2019), Annals of Neurology (2020), Annals of Clinical and Translational Neurology (2020), Frontiers Systems Neuroscience (2021), Science Advances (2021), Nature Medicine (2022), Nature Communications (2022), Science Robotics (2022).

PUBBLICAZIONI

Articoli pubblicati su riviste internazionali indicizzate in Pubmed (* senior / corresponding author)

h-index (Scopus): 21 Totale citazioni (Scopus): 2023

-) *Angeli C, Rejc E, Boakye M, Herrity A, Mesbah S, Hubscher C, Forrest G, Harkema S*. Targeted selection of stimulation parameters for restoration of motor and autonomic function in individuals with spinal cord injury. Inviato a: *Neuromodulation*

-) *Smith A, Draganich C, Thornton W, Berliner J, Lennarson P, Rejc E, Sevigny M, Charlifue S, Tefertiller C, Weber K*. A single dermatome clinical prediction rule to predict independent walking one year after traumatic spinal cord injury. Inviato a: *JAMA Network Open*

46) *Gonnelli F, Rejc E, Floreani M, Lazzer S*. Effects of NMES-elicited versus voluntary low-level conditioning contractions on explosive knee extensions. *J Musculoskelet Neuronal Interact*. 2022 Dec 1;22(4):465-473.

45) *Bowersock C, Pisolkar T, Omofuma I, Luna T, Khan M, Santamaria V, Stein J, Agrawal S, Harkema S, Rejc E**. Robotic upright stand trainer (RobUST) and postural control in individuals with spinal cord injury. *J Spinal Cord Med*. *in press*

44) *Rejc E*, Angeli CA, Ichiyama RM*. Editorial: Advances in Spinal Cord Epidural Stimulation for Motor and Autonomic Functions Recovery After Severe Spinal Cord Injury. *Front. Syst. Neurosci.*, 06 Jan 2022.

43) *Smith AC, Angeli CA, Ugiliweneza B, Weber KA, Bert RJ, MohammadJavad N, Mesbah S, Boakye M, Harkema SJ, Rejc E**. Spinal cord imaging markers and recovery of standing with epidural stimulation in individuals with clinically motor complete spinal cord injury. *Exp Brain Res*. 2022 Jan;240(1):279-288.

42) *Floreani M, Rejc E, Gambin S, Vavassori L, Lazzer S*. Effects of gravitational and iso-inertial resistance trainings using rating of perceived exertion on lower limbs muscle force and power abilities and metabolic cost of walking in healthy older adults. *J Sports Med Phys Fitness*. 2022 Jul;62(7):910-920.

41) *Ibáñez J, Angeli C, Harkema SJ, Farina D, Rejc E**. Recruitment order of motor neurons promoted by epidural stimulation in individuals with spinal cord injury. *J Appl Physiol* (1985). 2021 Sep 1;131(3):1100-1110.

40) *Gonnelli F, Rejc E*, Giovanelli N, Floreani M, Porcelli S, Harkema SJ, Willhite A, Stills S, Richardson T, Lazzer S*. Long-pulse high-frequency neuromuscular electrical stimulation promotes higher fractional oxygen extraction in healthy able-bodied but not in spinal cord injured individuals during low-level fatiguing contractions. *Eur J Appl Physiol*. 2021 Jun;121(6):1653-1664.

39) *Mesbah S, Ball T, Angeli C, Rejc E, Dietz N, Ugiliweneza B, Harkema S, Boakye M*. Predictors of Volitional Motor Recovery with Spinal Cord Epidural Stimulation in Individuals with Chronic Traumatic Spinal Cord Injury. *Brain*. 2021 Mar 3;144(2):420-433.

38) *Rejc E*, Smith AC, Weber KA, Ugiliweneza B, Bert RJ, MohammadJavad N, Boakye M, Harkema SJ, Angeli CA*. Spinal cord imaging markers and recovery of volitional leg movement with spinal cord epidural stimulation in individuals with clinically motor complete spinal cord injury. *Front. Syst. Neurosci*. doi: 10.3389/fnsys.2020.559313.

37) *Ditterline B, Harkema SJ, Willhite A, Stills S, Ugiliweneza B, Rejc E**. Epidural stimulation for cardiovascular function increases lower limb lean mass in individuals with chronic motor complete spinal cord injury. *Exp Physiol*. 2020 Oct;105(10):1684-1691.

36) *Arpin D, Ugiliweneza B, Forrest G, Harkema SJ, Rejc E**. Optimizing neuromuscular electrical stimulation pulse width and amplitude to promote central activation in individuals with severe spinal cord injury. *Front Physiol*. 2019 Oct 18;10:1310.

35) *Mesbah S, Gonnelli F, Angeli CA, El-Baz A, Harkema SJ, Rejc E**. Neurophysiological markers predicting recovery of standing in humans with chronic motor complete spinal cord injury. *Sci Rep*. 2019 Oct 9;9(1):14474.

- 34) Khan M, Luna T, Santamaria V, Omofuma I, Martelli D, **Rejc E**, Stein J, Harkema S, Agrawal S. Stand Trainer with Applied Forces at the Pelvis and Trunk: Response to Perturbations and Assist-As-Needed Support. *IEEE Trans Neural Syst Rehabil Eng*. 2019 Sep;27(9):1855-1864.
- 33) Mesbah S, Shalaby AM, Stills S, Soliman AM, Willhite A, Harkema SJ, **Rejc E**, El-baz AS. Novel Stochastic Framework for Automatic Segmentation of Human Thigh MRI Volumes and Its Applications in Spinal Cord Injured Individuals. *PLoS One*. 2019 May 9;14(5):e0216487.
- 32) **Rejc E***, Angeli C. Spinal cord epidural stimulation for lower limb motor function recovery in individuals with motor complete spinal cord injury. *Phys Med Rehabil Clin N Am*. 2019 May;30(2):337-354.
- 31) Šimunič B, Koren K, Rittweger J, Lazzer S, Reggiani C, **Rejc E**, Pišot R, Narici M, Degens H. Tensiomyography detects early hallmarks of bed-rest-induced atrophy before changes in muscle architecture. *J Appl Physiol* (1985). 2019 Apr 1;126(4):815-822.
- 30) Arpin D, Forrest G, Harkema S, **Rejc E***. Submaximal marker for investigating peak muscle torque using NMES after paralysis. *J Neurotrauma*. 2019 Mar 19;36(6):930-936.
- 29) Aslan S, Legg Ditterline BE, Park MC, Angeli CA, **Rejc E**, Chen Y, Ovechkin AV, Krassioukov A, Harkema SJ. Epidural Spinal Cord Stimulation of Lumbosacral Networks Modulates Arterial Blood Pressure in Individuals with Spinal Cord Injury-Induced Cardiovascular Deficits. *Frontiers in Physiology*, May 2018,9:565.
- 28) Giovannelli N, Vaccari F, Floreani M, **Rejc E**, Copetti J, Garra M, Biasutti L, Lazzer S. Short-term effects of rolling massage on energy cost of running and power of the lower limbs. *Int J Sports Physiol Perform*. 2018 Nov 1;13(10):1337-1343.
- 27) Floreani M, **Rejc E**, Taboga P, Ganzini A, Pišot R, Šimunič B, Biolo G, Reggiani C, Passaro A, Narici M, Rittweger J, di Prampero PE, Lazzer S. Effects of 14 days of bed rest and following physical training on metabolic cost, mechanical work, and efficiency during walking in older and young healthy males. *PLoS One*. 2018 Mar 12;13(3):e0194291
- 26) **Rejc E**, Floreani M, Taboga P, Botter A, Toniolo L, Cancellara L, Narici M, Simunic B, Pisot R, Biolo G, Passaro A, Rittweger J, Reggiani C, Lazzer S. Loss of maximal explosive power of lower limbs after two weeks of disuse and incomplete recovery after retraining in older adults. *J Physiol*. 2018 Feb 15;596(4):647-665
- 25) **Rejc E**, Angeli C, Atkinson D, Harkema S. Motor recovery after activity-based training with spinal cord epidural stimulation in a chronic motor complete paraplegic. *Scientific Reports* 2017 7: 13476
- 24) Giovanelli N, Taboga P, **Rejc E**, Lazzer S. Effects of strength, explosive and plyometric training on energy cost of running in ultra-endurance athletes. *Eur J Sport Sci*. 2017 Aug;17(7):805-813
- 23) **Rejc E**, Angeli C, Bryant N, Harkema S. Effects of stand and step training with epidural stimulation on motor function for standing in chronic complete paraplegics. *J Neurotrauma*. 2017 May 1;34(9):1787-1802.
- 22) Passaro A, Soavi C, Marusic U, **Rejc E**, Sanz JM, Morieri ML, Nora ED, Kavcic V, Narici MV, Reggiani C, Biolo G, Zuliani G, Lazzer S, Pišot R. Computerized cognitive training and brain derived neurotrophic factor during bed rest: mechanisms to protect individual during acute stress. *Aging (Albany NY)*. 2017 Feb 3;9(2):393-407.
- 21) Moreno C, Mattiussi G, Nunez F, Messina G, **Rejc E***. Intratissue Percutaneous Electolysis (EPI®) combined with Active Physical Therapy for the treatment of Adductor Longus Enthesopathy-related Groin Pain: a randomised trial. *J Sports Med Phys Fitness*. 2017 Jan 23 [Epub ahead of print]
- 20) Nagahara R, Botter A, **Rejc E**, Koido M, Shimizu T, Samozino P, Morin JB. Concurrent Validity of GPS for Deriving Mechanical Properties of Sprint Acceleration. *Int J Sports Physiol Perform*. 2017 Jan;12(1):129-132
- 19) Porcelli S, Pugliese L, **Rejc E**, Pavei G, Bonato M, Montorsi M, La Torre A, Rasica L, Marzorati M. Effects of a Short-Term High-Nitrate Diet on Exercise Performance. *Nutrients*. 2016 Aug 31;8(9).
- 18) Giovanelli N, Taboga P, **Rejc E**, Simunic B, Antonutto G, Lazzer S. Effects of an Uphill Marathon on Running Mechanics and Lower-Limb Muscle Fatigue. *Int J Sports Physiol Perform*. 2016 May;11(4):522-9.

- 17) **Rejc E**, *Angeli C, Harkema S*. Effects of Lumbosacral Spinal Cord Epidural Stimulation for Standing after Chronic Complete Paralysis in Humans. *PLoS One*. 2015 Jul 24;10(7):e0133998.
- 16) **Rejc E***, *di Prampero PE, Lazzer S, Grassi B, Simunic B, Pisot R, Antonutto G, Narici M*. A 35-day bed rest does not alter the bilateral deficit of the lower limbs during explosive efforts. *Eur J Appl Physiol*. 2015 Jun;115(6):1323-30
- 15) **Rejc E***, *di Prampero PE, Lazzer S, Grassi B, Simunic B, Pisot R, Antonutto G, Narici M*. Maximal explosive power of the lower limbs before and after 35 days of bed rest under different diet energy intake. *Eur J Appl Physiol*. 2015 Feb;115(2):429-36.
- 14) *Lazzer S, Salvadego D, Taboga P, Rejc E, Giovanelli N, di Prampero PE*. Effects of the Etna Uphill Ultra-Marathon on Energy Cost and Mechanics of Running. *Int J Sports Physiol Perform*. 2015 Mar;10(2):238-247.
- 13) *Lazzer S, Taboga P, Salvadego D, Rejc E, Simunic B, Narici M, Buglione A, Giovanelli N, Antonutto G, Grassi B, Pisot R, di Prampero PE*. Factors affecting metabolic cost of transport during a multi-stage running race. *J Exp Biol*. 2014 Mar 1;217(Pt 5):787-95.
- 12) *Samozino P, Rejc E, di Prampero PE, Belli A, Morin JB*. Force-Velocity Properties Contribution to Bilateral Deficit during Ballistic Push-Off. *Med Sci Sports Exerc*. 2014 Jan;46(1):107-14.
- 11) *Lazzer S, Salvadego D, Porcelli S, Rejc E, Sartorio A, Grassi B*. Skeletal muscle oxygen uptake in obese patients: functional evaluation by knee-extension exercise. *Eur J Appl Physiol*. 2013 Aug;113(8):2125-32.
- 10) *Salvadego D, Lazzer S, Marzorati M, Porcelli S, Rejc E, Simunic B, Pisot R, di Prampero PE, Grassi B*. Functional impairment of skeletal muscle oxidative metabolism during knee-extension exercise after bed rest. *J Appl Physiol*. 2011 Dec;111(6):1719-26.
- 9) *Lazzer S, Salvadego D, Rejc E, Buglione A, Antonutto G, di Prampero PE*. The energetics of ultra-endurance running. *Eur J Appl Physiol*. 2011 May;112(5):1709-15.
- 8) *Samozino P, Rejc E, Belli A, di Prampero PE, Morin JB*. Optimal force-velocity profile in ballistic movements. *Altius: citius or fortius? Med Sci Sports Exerc*. 2012 Feb;44(2):313-22.
- 7) *Harkema SJ, Gerasimenko Y, Hodes J, Burdick J, Angeli CA, Chen Y, Ferreira C, Willhite A, Rejc E, Grossman RG, Edgerton VR*. Effect of epidural stimulation of the lumbosacral spinal cord on voluntary movement, standing, and assisted stepping after motor complete paraplegia: a case study. *Lancet*. 2011 Jun 4;377(9781):1938-47.
- 6) **Rejc E***, *Lazzer S, Antonutto G*. Energy expenditure and dietary intake of athletes during an ultraendurance event developed by hiking, cycling and mountain climbing. *J Sports Med Phys Fitness*. 2010 Sep;50(3):296-302.
- 5) **Rejc E***, *Lazzer S, Antonutto G, Isola M, di Prampero PE*. Bilateral deficit and EMG activity during explosive lower limb contractions against different overloads. *Eur J Appl Physiol*. 2010 Jan;108(1):157-65.
- 4) *Lazzer S, Pozzo R, Rejc E, Antonutto G, Francescato MP*. Maximal explosive muscle power in obese and non-obese prepuberal children. *Clin Physiol Funct Imaging*. 2009 May 29(3):224-8.
- 3) *Onambélé GL, Maganaris CN, Mian OS, Tam E, Rejc E, McEwan IM, Narici MV*. Neuromuscular and balance responses to flywheel inertial versus weight training in older persons. *J Biomech*. 2008 Nov 14;41(15):3133-8.
- 2) *Onambélé GL, Narici MV, Rejc E, Maganaris CN*. Contribution of calf muscle-tendon properties to single-leg stance ability in the absence of visual feedback in relation to ageing. *Gait & Posture* 2007; 26: 343–348.
- 1) *Zamparo P, Tomadini S, Didonè F, Grazzina F, Rejc E, Capelli C*. Bioenergetic of a Slalom Kayak (K1) Competition. *Int J Sports Med* 2005; 26: 1 – 7.

Articoli pubblicati su riviste con comitato editoriale e capitoli di libro

13) **Rejc E**, Vaccari F, Botter A, Floreani M, Ganzini A, Lazzer S. Effects of underweight-plyometric training on the neuromuscular characteristics in professional rugby players. *Gazz Med Ital.* 2021 November;180(11):722-9.

12) Smith A, Tefertiller C, Joyce M, Tappan RS, Lubahn A, Hahn C, **Rejc E**. Spinal cord epidural stimulation for voluntary movement after spinal cord injury: current state of the research. August 1, 2019. *Academy of Neurologic Physical Therapy.*

11) Mesbah S, Gonnelli F, El-Baz A, Angeli C, Harkema S, **Rejc E**. Spectral analysis of lower limb EMG activity in individuals with motor complete SCI during standing with epidural stimulation. 2018 IEEE International Symposium on Signal Processing. doi:10.1109/ISSPIT.2018.8705098 (2019).

10) Harkema S, **Rejc E**, Angeli C. Neuromodulation of the Spinal Cord for Movement Restoration. Book chapter, in: Krames, E., Peckham, P., & Rezai, A. (Eds.). (2018). *Neuromodulation : Comprehensive textbook of principles, technologies, and therapies*(Second edition. ed.). London, United Kingdom: Academic Press is an imprint of Elsevier.

9) **Rejc E**, Del Torto A, Lazzer S. Benefits of aerobic exercise training with recommendations for healthy aging. *Annales Kinesiologiae* 8 – 2017 - 2, pp.111-124.

8) Mesbah S, Shalaby A, Stills S, Soliman A, Willhite A, Harkema S, **Rejc E**, El-baz A. A Novel Automatic Segmentation Method to Quantify the Effects of Spinal Cord Injury on Human Thigh Muscles and Adipose Tissue. Book chapter: *Medical Image Computing and Computer-Assisted Intervention – MICCAI 2017*, pp.703-711.

7) Mesbah S, Shalaby A, Willhite A, Harkema S, **Rejc E**, El-baz A. Automatic 3-D muscle and fat segmentation of thigh magnetic resonance images in individuals with spinal cord injury. *Proceedings - International Conference on Image Processing*, Vol. 2017-September, 20 February 2018, Pages 3280-3284.

6) Stallard R, **Rejc E**, Welch K. Wavelet-Derived Features as Indicators of Physiological Changes Induced By Bed Rest. *j.eswa.2017.08.024.*

5) Botter A, **Rejc E**, Tonizzo F, Bastiancig D, Falco D, D'Urso A. Metabolic and muscular demands of two different small-sided games in young professional soccer players. *Scienza e sport*, April 2016.

4) Koren K, Šimunič B, **Rejc E**, Lazzer S, Pisot R. Differences between skeletal muscle contractile parameters estimated from transversal tensiomyographic and longitudinal torque twitch response. *Kinesiology* 47(2015)1:19-26

3) **Rejc E**, Botter A, Floreani M, Ganzini A, Lazzer S, Antonutto G. Effects of underweight-plyometric training on the maximal explosive power of lower limbs in professional rugby players. *Scienza e sport*, n° 17, January 2013.

2) **Rejc E**, Benis R, Lazzer S, Pozzo R, Micoli S, Antonutto G. Training the maximal explosive power with overloads: a critical review. *Scuola Dello Sport*, n° 81 (June 2009).

1) Lazzer S, Muraro L, **Rejc E**, Antonutto G. Evaluation of the maximal explosive power of lower limbs in volleyball players. *Nuova Atletica* (2009).

ABSTRACTS E PRESENTAZIONI A CONVEGNI

Presentazioni orali (* su invito)

8) **Rejc E**, Gonnelli F, Mesbah S, Angeli C, Harkema S. Characteristics of lower limb EMG activity and standing ability in individuals with motor complete spinal cord injury using spinal cord epidural stimulation. Annual Meeting, Society for Neuroscience, San Diego, CA; November 2018, 356.05.

7) **Rejc E**, Angeli C, Harkema S. Activity-based training with spinal cord epidural stimulation for the recovery of standing in individuals with chronic motor complete spinal cord injury. Annual Meeting, American Spinal Cord Injury Association, Rochester, MN, May 2-4, 2018.

- 6) * **Rejc E.** Exercise training with spinal cord epidural stimulation for improving lower limb motor function and health in individuals with chronic complete spinal cord injury. International Workshop “Exercise therapy and health”, AMASF Study Group, Napoli, Italy. April 4, 2017.
- 5) * **Rejc E, Angeli C, Harkema S.** Lumbosacral spinal cord epidural stimulation for standing after chronic complete paralysis in humans. 33rd Annual Neurotrauma Symposium, Santa Fe, NM, USA. June 28 - July 1, 2015.
- 4) * **Rejc E.** Effect of epidural stimulation of the lumbosacral spinal cord on voluntary movement and standing after motor complete paraplegia: a case study. XV SOMIPAR (Italian Medical Society of Paraplegia) National Congress. March 23, 2012.
- 3) * **Rejc E.** The bilateral deficit during maximal efforts. Symposium “Exercise physiology and the limits of human performance. A tribute to prof. Pietro Enrico di Prampero”. Gemona del Friuli (UD), Italy, October 6-7, 2010.
- 2) **Rejc E, Lazzer S, Antonutto G, di Prampero PE.** Bilateral deficit and EMG activity during explosive lower limb contractions against different overloads. XIX Conference of the International Society for Posture and Gait Research; Bologna, Italy; June 21-25, 2009.
- 1) **Rejc E, Pozzo R.** Postural and training effects on neuromuscular and bioenergetic adaptations in cycling. Young Researchers Seminar, Innsbruck (Austria), 2004.

Posters

- 37) **Rejc E, Bowersock C, Pisolkar T, Ai X, Zhu C, Angeli C, Agrawal S, Harkema S.** Upright reactive postural responses promoted by epidural stimulation in individuals with motor complete SCI are enhanced when upper limbs are not used for self-balance assistance. Annual Meeting, Society for Neuroscience, San Diego, CA; November 13, 2022, 126.12.
- 36) **Fatima F, Willhite A, Shekhovstov I, Ditterline B, Angeli C, Rejc E, Harkema S, Ovechkin A.** Spinal cord epidural stimulation and respiratory training in patients with chronic spinal cord injury. Annual Meeting, Society for Neuroscience, San Diego, CA; November 13, 2022, 126.10.
- 35) **Joshi K, Angeli C, Harkema S, Rejc E.** Sitting postural improvements promoted by spinal cord epidural stimulation following cervical motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, San Diego, CA; November 13, 2022, 126.16.
- 34) **Bowersock CD, Pisolkar T, Omofuma I, Luna T, Khan M, Santamaria V, Angeli C, Stein J, Agrawal S, Harkema S, Rejc E.** Robotic postural stand training with epidural stimulation improved reactive standing postural control in individuals with motor complete SCI. Annual Meeting, Society for Neuroscience, Virtual; November 8-11, 2021; P368.08.
- 33) **Joshi K, Smith N, Rejc E, Harkema S, Angeli C.** The effects of core-specific and non-specific training with epidural stimulation on trunk kinematics of individuals with chronic motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, Virtual; November 8-11, 2021, P368.10.
- 32) **Smith N, Joshi K, Rejc E, Harkema S, Angeli C.** The effect of epidural stimulation targeted at trunk stability on trunk kinematics of individuals with chronic motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, Virtual; November 8-11, 2021, P368.12.
- 31) **Anders L, Vandhanam M, Mohamed E, Gobejishvili L, Rejc E, Stocker A, Barve S, Abell T.** Chemokine elevation in patients with the symptoms of gastroparesis. Digestive Disease Week® (DDW) 2020.
- 30) **Rejc E, Angeli C, Harkema S.** The human spinal cord can concurrently learn standing and stepping after chronic motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.08.
- 29) **Mesbah S, Pisolkar T, Angeli C, Harkema S, Rejc E.** Neurophysiological markers and machine learning to support the selection of epidural stimulation parameters for standing rehabilitation in humans with

chronic motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.09.

28) *Kirshblum S, Angeli C, Guest J, Forrest G, Wecht J, Harel N, Bloom O, Ovechkin A, Rejc E, Harkema S.* Documentation of clinical benefits of epidural stimulation and proposal of a new multidimensional outcome measure for individuals with spinal cord injury. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.15.

27) *Harkema S, Gerasimenko Y, Herrity A, Hubscher C, Rejc E, Angeli C.* Human spinal circuitry can integrate somatic-visceral functions with neuromodulation in individuals diagnosed with motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.18.

26) *Angeli C, Rejc E, Ferreira C, Harkema S.* Human spinal circuitry generates intentional individual joint flexion after clinically diagnosed motor complete spinal cord injury with subthreshold lumbosacral epidural stimulation. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.02.

25) *Ball T, Angeli C, Rejc E, Mesbah S, Harkema S, Boakye M.* Correlation of radiographic spinal cord parameters with volitional movement after spinal cord epidural stimulation for chronic traumatic spinal cord injury. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2019, 481.14

24) *Dietz N, Vadhanam M, Ugiliweneza B, Harkema S, Abell T, Boakye M, Whittemore S, Rejc E, Barve S.* Correlation of Inflammatory Biomarkers with Neurogenic Bowel Dysfunction and Gut Microbiota Dysbiosis in Patients with Chronic Spinal Cord Injury. Annual Meeting, Congress of Neurological Surgeons, San Francisco, CA, October 2019.

23) *Arpin D, Forrest G, Harkema S, Rejc E.* Submaximal marker for investigating peak muscle torque using NMES after paralysis. Annual Meeting, Society for Neuroscience, San Diego, CA; November 2018, 771.15 / WW4.

22) *Rejc E, Angeli CA, Harkema S.* Interleaving stand-step training with spinal cord epidural stimulation effectively improved standing in individuals with chronic complete spinal cord injury. Annual Meeting, Society for Neuroscience, Washington, DC; November 2017, 53.26 / Z4.

21) *Forrest G, Rejc E, Ramanujam A, Garbarin E, Harkema S.* Patterns of stimulation effect on muscle volume. Annual Meeting, Society for Neuroscience, Washington, DC; November 2017, 142.03 / CC18

20) *Herrity A, Angeli C, Rejc E, Harkema S, Hubscher C.* Spinal cord epidural stimulation effects on urogenital and bowel outcomes. Annual Meeting, Society for Neuroscience, Washington, DC; November 2017, 53.23 / Z1

19) *Rejc E, Angeli CA, Atkinson D, Harkema S.* Activity-based training with spinal cord epidural stimulation promoted the recovery of lower limb motor function independent from spinal stimulation in a chronic motor complete paraplegic. Annual Meeting, Society for Neuroscience, San Diego, CA; November 2016, 323.21/AA17.

18) *He L, Willhite A, Harkema S, Rejc E.* Structural and functional changes in lower limb skeletal muscle after chronic complete spinal cord injury. Annual Meeting, Society for Neuroscience, San Diego, CA; November 2016, 158.12/RR19.

17) *Forrest G, Rejc E, Garbarin E, Ramanujam A, Augustine J, Harkema S.* Parameters of multi muscle neuromuscular stimulation: Effect on Muscle Volume. Annual Meeting, Society for Neuroscience, San Diego, CA; November 2016, 158.06/RR13.

16) *Rejc E, Angeli CA, Harkema SJ.* Activity-dependent improvement of full weight-bearing standing with epidural stimulation in chronic complete paraplegics. Annual Meeting, Society for Neuroscience, Chicago, IL; October 2015, 337.04/U36 (selected for the *Hot Topics* books).

15) *Rejc E, Angeli CA, Harkema SJ.* Lumbosacral spinal cord epidural stimulation enables full weight bearing standing in motor complete paraplegics. Annual Meeting, Society for Neuroscience, Washington, DC; November 2014, 629.15/HH8.

14) **Rejc E**, Botter A, Floreani M, Pisot R, di Prampero P, Lazzer S. Effects of 14 days of bed rest and following physical training on the maximal explosive power of lower limbs in elderly and young healthy males. 7th international scientific conference on kinesiology, Opatija (HR), May 22-25 2014.

13) Koren K, Simunic B, **Rejc E**, Lazzer S, Pisot R. Skeletal muscle's contractile parameters differ when measured from longitudinal than from transversal twitch deformation. 7th international scientific conference on kinesiology, Opatija (HR), May 22-25 2014.

12) Lazzer S, Taboga P, Salvadego D, **Rejc E**, Simunic B, Narici M, Buglione A, Giovannelli N, Antonutto G, Grassi B, Pisot R, di Prampero P. Factors affecting energy cost of running during an ultra-endurance race. 61st Annual Meeting, ACSM; Orlando, Florida (USA); May 27-31 2014.

11) **Rejc E**, Angeli CA, Edgerton VR, Gerasimenko Y, Harkema SJ. Effects of epidural stimulation of the lumbosacral spinal cord in standing after motor complete spinal cord injury. Annual Meeting, Society for Neuroscience, S Diego (CA); November 2013, 466.21/DDD5.

10) Sayenko D, Atkinson D, DY C, **Rejc E**, Gurley K, Smith V, Ferreira C, Angeli C, Edgerton VR, Gerasimenko Y, Harkema SJ. Location-specific effects of transcutaneous lumbar spinal stimulation on the recruitment of proximal and distal leg muscles in healthy individuals. Annual Meeting, Society for Neuroscience, S Diego (CA); November 2013, 745.05/SS1.

9) **Rejc E**, Angeli CA, Harkema S. Effects of epidural stimulation of the lumbosacral spinal cord in standing after motor complete spinal cord injury. 19th Annual KSCHIRT Symposium; Louisville, KY (USA); May 6-7 2013.

8) Dunbar C, **Rejc E**, Zdunowski S, Sotolongo A, Jindrich D, Roy RR, Zhong H, Courtine G, Liu J, Bernot T, Moseanko R, Tuszyński M, Edgerton V R. Role of motor pool recruitment and coordination in food-grasping and spring-pull tasks by Rhesus monkeys after a spinal hemisection. 40th Annual Meeting – Neuroscience; San Diego, California (USA); November 13-17 2010.

7) Harkema SJ, Gerasimenko Y, Hodes J, Burdick JW, Angeli C, Chen Y, Ferreira C, **Rejc E**, Edgerton VR. Sensory control of standing and stepping enabled by epidural stimulation after a human motor complete spinal cord injury. 40th Annual Meeting – Neuroscience; San Diego, California (USA); November 13-17 2010.

6) Salvadego D, Lazzer S, Marzorati M, Porcelli S, **Rejc E**, di Prampero PE, and Grassi B. Impairment of skeletal muscle oxidative metabolism during knee-extension exercise after bed rest. Annual Meeting, American College of Sports Medicine; Baltimore, Maryland (USA); June 2-5 2010.

5) di Prampero PE, **Rejc E**, Lazzer S, Antonutto G, Salvadego D, Grassi B, Porcelli S, Marzorati M, Simunic B, Pisot R. Effects of bed rest on the bilateral deficit and maximal explosive power of lower limbs. XXIII National Congress of Italian Association of Aero-Space Medicine (AIMAS). Pozzuoli (Italy), 20-22 May 2010.

4) di Prampero PE, Lazzer S, **Rejc E**. The muscle fatigue. XXIV National Congress of the National Association of Sports Medicine – University “G. d’Annunzio” (Italy), 2008.

3) Pozzo R, Pasutto C, Casasola S, Grazzina F, **Rejc E**, Cotelli F, Canclini A. Loading conditions and neuromuscular activity during “curve movements” in alpine skiing and in a new ski simulator. Abstract “Isokinetic 2006 – XV international congress on sports rehabilitation and traumatology”.

2) Pozzo R, **Rejc E**, Cotelli C, Guerrini G, Morandini F, Canclini A. Kinematics and kinetics comparative analysis of ski jumping during competition and specific training exercise. Abstract “International congress – Mountain and Sport”, Rovereto (Italy) 2005.

1) Pozzo R, Pasutto C, Casasola S, Grazzina F, **Rejc E**, Cotelli C, Canclini A. Kinematic, kinetic and neuromuscular comparative analysis of the “curve movement” between alpine skiing and a new ski simulator. Abstract “International congress – Mountain and Sport”, Rovereto (Italy) 2005.