

Jens Bo Nielsen
Professor, Professor
Motor Control
Motor Control
Postadresse:
Blegdamsvej 3, 2200 København N.
Postadresse:
Blegdamsvej 3
2200
København N.
E-mail: jbn Nielsen@sund.ku.dk
Mobil: +4528757450
Telefon: +4535327450
Hjemmeside: <https://in.ku.dk/research/jens-bo-nielsen>, <http://in.ku.dk>,
<https://in.ku.dk/research/jens-bo-nielsen/>



Kort præsentation

I am interested in fundamental research questions to evaluate the effect of exercise and rehabilitation programs. Through animal models, studies on healthy subjects and patients, I together with my group aim to better understand the neural control of movement in health and disease.

!!Employments

Professor

Motor Control
Københavns Universitet
København N.
30 sep. 1999 → nu

Professor

Motor Control
Københavns Universitet
København N.
1 okt. 1999 → nu

Professor

Institut for Neurovidenskab
Københavns Universitet
København N.
5 jan. 2009 → 15 sep. 2020

Motor Control

Københavns Universitet
København N.
19 jul. 2021 → 18 jul. 2021

Publikationer

A scoping review on muscle cramps and spasms in upper motor neuron disorder-two sides of the same coin?
Therkildsen, Eva Rudjord, Kaster, Pernille Ulrik & Nielsen, Jens Bo, 2024, I: *Frontiers in Neurology*. 15, 9 s., 1360521.

Accurate Monitoring of 24-h Real-World Movement Behavior in People with Cerebral Palsy Is Possible Using Multiple Wearable Sensors and Deep Learning
Novosel, Ivana Bardino, Ritterband-Rosenbaum, Anina, Zampoukis, G., Nielsen, Jens Bo & Lorentzen, Jakob, 2023, I: *Sensors*. 23, 22, 13 s., 9045.

Dynamics of cortical and corticomuscular connectivity during planning and execution of visually guided steps in humans
Spedden, Meaghan Elizabeth, Beck, M. M., West, T. O., Farmer, S. F., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2023, I: *Cerebral Cortex*. 33, 2, s. 258–277 20 s.

Oral Motor Impairments Contribute to Weight Status of Adults with Severe Cerebral Palsy

Lyster, Aslak Emil, Hansen, S. L., Andersen, C. T., Nielsen, Jens Bo, Westerterp, K., Wouters, L., Kiens, Bente & Ritterband-Rosenbaum, Anina, 2023, I: *Nutrients*. 15, 24, 14 s., 5042.

Contribution of sensory feedback to soleus muscle activity during voluntary contraction in humans

Rasul, A., Lorentzen, Jakob, Frisk, Rasmus Feld, Sinkjær, T. & Nielsen, Jens Bo, 2022, I: *Journal of Neurophysiology*. 127, 4, s. 1147-1158 12 s.

Corticomuscular coherence is reduced in relation to dorsiflexion fatigability to the same extent in adults with cerebral palsy as in neurologically intact adults

Forman, C. R., Jacobsen, K. J., Karabanov, Anke Ninija, Nielsen, Jens Bo & Lorentzen, Jakob, 2022, I: *European Journal of Applied Physiology*. 122, 6, s. 1459-1471 13 s.

Editorial: Preterm brain injury: Understanding injurious processes and new strategies for promoting neuroprotection and neuro-repair

Finch-Edmondson, M., Hunt, R. W., Nielsen, Jens Bo & Paton, M. C. B., 2022, I: *Frontiers in Physiology*. 13, 3 s., 994521.

Muscle Contractures in Adults With Cerebral Palsy Characterized by Combined Ultrasound-Derived Echo Intensity and Handheld Dynamometry Measures

Svane, Christian, Forman, C. R., Rasul, A., Nielsen, Jens Bo & Lorentzen, Jakob, 2022, I: *Ultrasound in Medicine and Biology*. 48, 4, s. 694-701 8 s.

Sense of agency as synecdoche: Multiple neurobiological mechanisms may underlie the phenomenon summarized as sense of agency

Charalampaki, A., Karabanov, Anke Ninija, Ritterband-Rosenbaum, Anina, Nielsen, Jens Bo, Siebner, Hartwig Roman & Christensen, Mark Schram, 2022, I: *Consciousness and Cognition*. 101, 103307.

The effect of cathodal transspinal direct current stimulation on tibialis anterior stretch reflex components in humans

Therkildsen, Eva Rudjord, Nielsen, Jens Bo, Beck, M. M., Yamaguchi, T. & Lorentzen, Jakob, 2022, I: *Experimental Brain Research*. 240, s. 159–171 13 s.

A simple, clinically applicable motor learning protocol to increase push-off during gait: A proof-of-concept

Bertrand-Charette, M., Nielsen, Jens Bo & Bouyer, L. J., 2021, I: *PLoS ONE*. 16, 1, 14 s., e0245523.

COpenhagen Neuroplastic TRaining against Contractures in Toddlers (CONTRACT): Protocol of an open-label randomised clinical trial with blinded assessment for prevention of contractures in infants with high risk of cerebral palsy

Willerslev-Olsen, Maria, Lorentzen, Jakob, Røhder, Katrine, Ritterband-Rosenbaum, A., Justiniano, M., Guzzetta, A., Lando, A. V., Jensen, A. M. B., Greisen, Gorm, Ejlersen, S., Pedersen, L. Z., Andersen, B., Liphay Behrend, P. & Nielsen, Jens Bo, 2021, I: *BMJ Open*. 11, 7, e044674.

Cerebral Palsy and Stroke—Early and Late Brain Lesion Present Differences in Systemic Biomarkers and Gene Expression Related to Muscle Contractures

Pingel, Jessica, Potts, C., Petersen, T. W. & Nielsen, Jens Bo, 2021, I: *World Journal of Neuroscience*. 11, s. 34-47 14 s.

Gene expressions in cerebral palsy subjects reveal structural and functional changes in the gastrocnemius muscle that are closely associated with passive muscle stiffness

Pingel, Jessica, Kampmann, Marie-Louise, Andersen, Jeppe Dyrberg, Wong, Christian, Døssing, S., Børsting, Claus & Nielsen, Jens Bo, 2021, I: *Cell and Tissue Research*. 384, s. 513–526 14 s.

Increased Ankle Plantar Flexor Stiffness Is Associated With Reduced Mechanical Response to Stretch in Adults With CP
Lorentzen, Jakob, Frisk, Rasmus Feld, Nielsen, Jens Bo & Barber, L., 2021, I: *Frontiers in Bioengineering and Biotechnology*. 9, 12 s., 604071.

Motor-learning based activities may improve functional ability in adults with severe cerebral palsy: A controlled pilot study
Hüche Larsen, H., Frisk, Rasmus Feld, Willerslev-Olsen, Maria & Nielsen, Jens Bo, 2021, I: *NeuroRehabilitation*. 48, 3, s. 273-283 11 s.

Neuroplasticity at Home: Improving Home-Based Motor Learning Through Technological Solutions. A Review
Forman, C. R., Nielsen, Jens Bo & Lorentzen, Jakob, 2021, I: *Frontiers in Rehabilitation Sciences*. 2, 7 s., 789165.

Nonsurgical Treatment Options for Muscle Contractures in Individuals With Neurologic Disorders: A Systematic Review With Meta-Analysis
Svane, Christian, Nielsen, Jens Bo & Lorentzen, Jakob, 2021, I: *Archives of rehabilitation research and clinical translation*. 3, 1, 19 s., 100104.

Parent-Infant Interactions Among Infants With High Risk of Cerebral Palsy: A Protocol for an Observational Study of Infant and Parental Factors for Dyadic Reciprocity
Røhder, Katrine, Willerslev-Olsen, Maria, Nielsen, Jens Bo, Greisen, Gorm & Harder, Susanne, 2021, I: *Frontiers in Psychiatry*. 12, 11 s., 736676.

Philanthropic funding in cerebral palsy research: translating new knowledge into improved quality of life
Nielsen, Jens Bo & Sinkjær, T., 2021, I: *Developmental Medicine and Child Neurology*. 63, 2, s. 125 1 s.

Quantitative MRI and Clinical Assessment of Muscle Function in Adults With Cerebral Palsy
Svane, Christian, Forman, C. R., Rasul, A., Nielsen, C. H., Nielsen, Jens Bo & Lorentzen, Jakob, 2021, I: *Frontiers in Neurology*. 12, 771375.

Sleep Pattern and Night-Time Muscle Activity in Children With Cerebral Palsy Compared to Typically Developing Peers
Ritterband-Rosenbaum, Anina, Christensen, Mark Schram, Lund, M. C., Dyhr Thomsen, M., Haverberg, M. J. N., Nielsen, Jens Bo & Kjær, T. W., 2021, I: *Journal of Sleep Medicine*. 18, 2, s. 106-116 11 s.

Bilateral and asymmetrical contributions of passive and active ankle plantar flexors stiffness to spasticity in humans with spinal cord injury
Chen, B., Sangari, S., Lorentzen, Jakob, Nielsen, Jens Bo & Perez, M. A., 2020, I: *Journal of Neurophysiology*. 124, 3, s. 973-984 12 s.

Directed connectivity between primary and premotor areas underlying ankle force control in young and older adults
Spedden, Meaghan Elizabeth, Beck, M. M., Christensen, Mark Schram, Dietz, M. J., Karabanov, Anke Ninija, Geertsen, S. S., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2020, I: *NeuroImage*. 218, 11 s., 116982.

Gait training facilitates push-off and improves gait symmetry in children with cerebral palsy
Lorentzen, Jakob, Frisk, Rasmus Feld, Willerslev-Olsen, Maria, Bouyer, L., Farmer, S. F. & Nielsen, Jens Bo, 2020, I: *Human Movement Science*. 69, 12 s., 102565.

Immobilization leads to reduced stretch reflexes but increased central reflex gain in the rat
Nikitidou Ledri, L., Pingel, Jessica, Hultborn, Hans, Therkildsen, Eva Rudjord, Wienecke, Jacob & Nielsen, Jens Bo, 2020, I: *Journal of Neurophysiology*. 124, 3, s. 985-993 9 s.

Long-term motor skill training with individually adjusted progressive difficulty enhances learning and promotes corticospinal plasticity
Christiansen, L., Larsen, M. N., Madsen, M. J., Grey, M. J., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2020, I: *Scientific Reports*. 10, 15 s., 15588.

Spastic movement disorder: should we forget hyperexcitable stretch reflexes and start talking about inappropriate prediction of sensory consequences of movement?

Nielsen, Jens Bo, Christensen, Mark Schram, Farmer, S. F. & Lorentzen, Jakob, 2020, I: Experimental Brain Research. 238, s. 1627-1636 10 s.

The benefits of strength training in cerebral palsy

Lorentzen, Jakob & Nielsen, Jens Bo, 2020, I: Developmental Medicine and Child Neurology. 62, 11, s. 1232 1 s.

Transcranial alternating current stimulation of the primary motor cortex after skill acquisition improves motor memory retention in humans: A double-blinded sham-controlled study

Yamaguchi, T., Svane, Christian, Forman, C. R., Beck, M. M., Geertsen, S. S., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2020, I: Cerebral Cortex Communications. 1, 1, 11 s., tgaa047.

Transcutaneous spinal direct current stimulation increases corticospinal transmission and enhances voluntary motor output in humans

Yamaguchi, T., Beck, M. M., Therkildsen, Eva Rudjord, Svane, Christian, Forman, C. R., Lorentzen, Jakob, Conway, B. A., Lundbye-Jensen, Jesper, Geertsen, S. S. & Nielsen, Jens Bo, 2020, I: Physiological Reports. 8, 16, 12 s., e14531.

Wearable electromyography recordings during daily life activities in children with cerebral palsy

Michelsen, J. S., Lund, M. C., Alkjær, Tine, Finni, T., Nielsen, Jens Bo & Lorentzen, Jakob, 2020, I: Developmental Medicine and Child Neurology. 62, 6, s. 714-722 9 s.

Chemical denervation using botulinum toxin increases Akt expression and reduces submaximal insulin-stimulated glucose transport in mouse muscle

Li, Z., Näslund-Koch, L., Henriquez-Olguín, Carlos, Knudsen, Jonas Roland, Li, J., Madsen, A. L. B., Ato, S., Wienecke, Jacob, Ogasawara, R., Nielsen, Jens Bo & Jensen, Thomas Elbenhardt, jan. 2019, I: Cellular Signalling. 53, s. 224-233 10 s.

Sequence variants in muscle tissue-related genes may determine the severity of muscle contractures in cerebral palsy

Pingel, Jessica, Andersen, Jeppe Dyrberg, Christiansen, S. L., Børsting, Claus, Morling, Niels, Lorentzen, J., Kirk, H., Doessing, S., Wong, Christian & Nielsen, Jens Bo, jan. 2019, I: American Journal of Medical Genetics. Part B: Neuropsychiatric Genetics. 180, 1, s. 12-24

Are sensorimotor experiences the key for successful early intervention in infants with congenital brain lesion?

Ritterband-Rosenbaum, Anina, Justiniano, M. D., Nielsen, Jens Bo & Christensen, Mark Schram, 2019, I: Infant Behavior and Development. 54, s. 133-139 7 s.

Characterization of torque generating properties of ankle plantar flexor muscles in ambulant adults with cerebral palsy

Frisk, Rasmus Feld, Lorentzen, Jakob, Barber, L. & Nielsen, Jens Bo, 2019, I: European Journal of Applied Physiology. 119, 5, s. 1127-1136 10 s.

Contribution of corticospinal drive to ankle plantar flexor muscle activation during gait in adults with cerebral palsy

Frisk, Rasmus Feld, Lorentzen, Jakob & Nielsen, Jens Bo, 2019, I: Experimental Brain Research. 237, 6, s. 1457-1467 11 s.

Corticospinal control of normal and visually-guided gait in healthy older and younger adults

Spedden, Meaghan Elizabeth, Choi, J. T. L., Nielsen, Jens Bo & Geertsen, S. S., 2019, I: Neurobiology of Aging. 78, s. 29-41 13 s.

Effects on Parental Stress of Early Home-Based CareToy Intervention in Low-Risk Preterm Infants

Sgandurra, G., Beani, E., Inguaggiato, E., Lorentzen, Jakob, Nielsen, Jens Bo & Cioni, G., 2019, I: Neural Plasticity. 2019, 8 s., 7517351.

Maturation of feedforward toe walking motor program is impaired in children with cerebral palsy

Lorentzen, Jakob, Willerslev-Olsen, Maria, Larsen, H. H., Farmer, S. F. & Nielsen, Jens Bo, 2019, I: Brain. 142, 3, s. 526-541 16 s.

Recruitment gain of spinal motor neuron pools in cat and human

Nielsen, Jens Bo, Morita, H., Wenzelburger, R., Deuschl, G., Gossard, J. & Hultborn, Hans, 2019, I: *Experimental Brain Research*. 237, 11, s. 2897-2909 13 s.

Suboptimal nutrition and low physical activity are observed together with reduced plasma *brain-derived neurotrophic factor (BDNF)* concentration in children with severe cerebral palsy (CP)

Hansen, S. L., Lorentzen, Jakob, Pedersen, L. T., Hendrich, F. L., Jorsal, M., Pingel, Jessica, Nielsen, Jens Bo & Kiens, Bente, 2019, I: *Nutrients*. 11, 3, 16 s., 620.

Sustained involuntary muscle activity in cerebral palsy and stroke: same symptom, diverse mechanisms

Forman, C. R., Svane, Christian, Kruuse, Christina Rostrup, Gracies, J., Nielsen, Jens Bo & Lorentzen, Jakob, 2019, I: *Brain Communications*. 1, 1, 13 s., fcz037.

Systemic inflammatory markers in individuals with cerebral palsy

Pingel, Jessica, Barber, L., Andersen, I. T., Von Walden, F., Wong, Christian, Døssing, S. & Nielsen, Jens Bo, 2019, I: *European Journal of Inflammation*. 17, s. 1-6

The development of functional and directed corticomuscular connectivity during tonic ankle muscle contraction across childhood and adolescence

Spedden, Meaghan Elizabeth, Jensen, Peter, Terkildsen, C. U., Jensen, N. J., Halliday, D. M., Lundbye-Jensen, Jesper, Nielsen, Jens Bo & Geertsen, S. S., 2019, I: *NeuroImage*. 191, s. 350-360 11 s.

The neurophysiology of deforming spastic paresis: a revised taxonomy

Baude, M., Nielsen, Jens Bo & Gracies, J. M., 2019, I: *Annals of Physical and Rehabilitation Medicine*. 62, 6, s. 426-430 5 s.

Using corticomuscular and intermuscular coherence to assess cortical contribution to ankle plantar flexor activity during gait

Jensen, Peter, Frisk, Rasmus Feld, Spedden, Meaghan Elizabeth, Geertsen, S. S., Bouyer, L. J., Halliday, D. M. & Nielsen, Jens Bo, 2019, I: *Journal of Motor Behavior*. 51, 6, s. 668-680 13 s.

On Denny-Brown's 'spastic dystonia' - What is it and what causes it?

Lorentzen, Jakob, Pradines, M., Gracies, J. & Nielsen, Jens Bo, jan. 2018, I: *Clinical Neurophysiology*. 129, 1, s. 89-94

Assessment of intersegmental coordination of rats during walking at different speeds - Application of continuous relative phase

Raffalt, Peter Christian, Nielsen, L. R., Madsen, S., Højberg, L. M., Pingel, Jessica, Nielsen, Jens Bo, Alkjær, Tine & Wienecke, Jacob, 2018, I: *Journal of Biomechanics*. 73, s. 168-176 9 s.

Characterization of corticospinal activation of finger motor neurons during precision and power grip in humans

Svane, Christian, Forman, C. R., Nielsen, Jens Bo & Geertsen, S. S., 2018, I: *Experimental Brain Research*. 236, 3, s. 745-753 9 s.

Day-to-day reliability of gait characteristics in rats

Raffalt, Peter Christian, Nielsen, L. R., Madsen, S., Højberg, L. M., Pingel, Jessica, Nielsen, Jens Bo, Wienecke, Jacob & Alkjær, Tine, 2018, I: *Journal of Biomechanics*. 72, s. 247-251 5 s.

Feedforward neural control of toe walking in humans

Lorentzen, Jakob, Willerslev-Olsen, M., Hüche Larsen, H., Svane, Christian, Forman, C., Frisk, Rasmus Feld, Farmer, S. F., Kersting, U. & Nielsen, Jens Bo, 2018, I: *Journal of Physiology*. 596, 11, s. 2159-2172 14 s.

Impaired Ability to Suppress Excitability of Antagonist Motoneurons at Onset of Dorsiflexion in Adults with Cerebral Palsy

Geertsen, S. S., Kirk, H. & Nielsen, Jens Bo, 2018, I: *Neural Plasticity*. 2018, 11 s., 1265143.

Impaired muscle growth precedes development of increased stiffness of the triceps surae musculotendinous unit in children with cerebral palsy

Willerslev-Olsen, Maria, Choe Lund, M., Lorentzen, Jakob, Barber, L., Kofoed-Hansen, M. & Nielsen, Jens Bo, 2018, I: *Developmental Medicine and Child Neurology*. 60, 7, s. 672-679 8 s.

Increased central common drive to ankle plantar flexor and dorsiflexor muscles during visually guided gait

Jensen, Peter, Jensen, N. J., Terkildsen, C. U., Choi, J. T., Nielsen, Jens Bo & Geertsen, S. S., 2018, I: *Physiological Reports*. 6, 3, 11 s., e13598.

Microvascularization is not a limiting factor for exercise in adults with cerebral palsy

Andersen, I. T., Harrison, Adrian Paul, Broholm, R., Harder, A., Nielsen, Jens Bo, Bülow, J. & Pingel, Jessica, 2018, I: *Journal of Applied Physiology*. 125, 2, s. 536-544

Modulation of task-related cortical connectivity in the acute and subacute phase after stroke

Larsen, Lisbeth Højtkjær, Zibrandtsen, I. C., Wienecke, Troels, Kjær, T. W., Langberg, Henning, Nielsen, Jens Bo & Christensen, Mark Schram, 2018, I: *European Journal of Neuroscience*. 47, 8, s. 1024-1032 9 s.

Oscillatory corticospinal activity during static contraction of ankle muscles is reduced in healthy old versus young adults

Spedden, Meaghan Elizabeth, Nielsen, Jens Bo & Geertsen, S. S., 2018, I: *Neural Plasticity*. 2018, 13 s., 3432649.

Progressive practice promotes motor learning and repeated transient increases in corticospinal excitability across multiple days

Christiansen, L., Madsen, M. A. J., Bojsen-Møller, E., Thomas, R., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2018, I: *Brain Stimulation*. 11, 2, s. 346-357 12 s.

Variable impact of tizanidine on the medium latency reflex of upper and lower limbs

Kurtzer, I., Bouyer, L. J., Bouffard, J., Jin, A., Christiansen, Line ladsatian, Nielsen, Jens Bo & Scott, S. H., 2018, I: *Experimental Brain Research*. 236, 3, s. 665-677 13 s.

Injection of high dose botulinum-toxin A leads to impaired skeletal muscle function and damage of the fibrillar and non-fibrillar structures

Pingel, Jessica, Nielsen, M. S., Lauridsen, T., Rix, K., Bech, M., Alkjær, Tine, Andersen, I. T., Nielsen, Jens Bo & Feidenhans'l, Robert Krarup, 7 nov. 2017, I: *Scientific Reports*. 7, 14746.

Corticomuscular coherence in the acute and subacute phase after stroke

Larsen, Lisbeth Højtkjær, Zibrandtsen, I. C., Wienecke, Troels, Kjaer, T. W., Christensen, Mark Schram, Nielsen, Jens Bo & Langberg, Henning, nov. 2017, I: *Clinical neurophysiology : official journal of the International Federation of Clinical Neurophysiology*. 128, 11, s. 2217-2226 10 s.

To be active through indoor-climbing: an exploratory feasibility study in a group of children with cerebral palsy and typically developing children

Christensen, Mark Schram, Jensen, T., Voigt, C. B., Nielsen, Jens Bo & Lorentzen, Jakob, 15 jun. 2017, I: *B M C Neurology*. 17, 20 s., 112.

A critical period of corticomuscular and EMG-EMG coherence detection in healthy infants aged 9-25weeks

Ritterband-Rosenbaum, Anina, Herskind, A., Li, X., Willerslev-Olsen, Maria, Olsen, M. D., Farmer, S. F. & Nielsen, Jens Bo, 15 apr. 2017, I: *The Journal of Physiology*. 595, 8, s. 2699-2713

A randomized clinical trial in preterm infants on the effects of a home-based early intervention with the 'CareToy System'

Sgandurra, G., Lorentzen, Jakob, Inguaggiato, E., Bartalena, L., Beani, E., Cecchi, F., Dario, P., Giampietri, M., Greisen, Gorm, Herskind, A., Nielsen, Jens Bo, Rossi, G. & Cioni, G., 2017, I: *P L o S One*. 12, 3, 13 s., e0173521.

Acute exercise improves motor memory consolidation in preadolescent children

Lundbye-Jensen, Jesper, Skriver, K. C., Nielsen, Jens Bo & Roig, M., 2017, I: *Frontiers in Human Neuroscience*. 11, 10 s., 182.

Contribution of sensory feedback to plantar flexor muscle activation during push-off in adults with cerebral palsy
Frisk, Rasmus Feld, Jensen, Peter, Kirk, H., Bouyer, L. J., Lorentzen, Jakob & Nielsen, Jens Bo, 2017, I: Journal of Neurophysiology. 118, 6, s. 3165-3174 10 s.

Convergence of ipsi- and contralateral muscle afferents on common interneurons mediating reciprocal inhibition of ankle plantarflexors in humans
Mrachacz-Kersting, N., Geertsen, S. S., Stevenson, A. J. T. & Nielsen, Jens Bo, 2017, I: Experimental Brain Research. 235, 5, s. 1555-1564 10 s.

Development and aging of human spinal cord circuitries
Geertsen, S. S., Willerslev-Olsen, Maria, Lorentzen, J. & Nielsen, Jens Bo, 2017, I: Journal of Neurophysiology. 118, 2, s. 1133-1140 8 s.

How plastic are human spinal cord motor circuitries?
Christiansen, L., Lundbye-Jensen, Jesper, Perez, M. A. & Nielsen, Jens Bo, 2017, I: Experimental Brain Research. 235, 11, s. 3243-3249 7 s.

Long-term progressive motor skill training enhances corticospinal excitability for the ipsilateral hemisphere and motor performance of the untrained hand
Christiansen, L., Larsen, M. N., Grey, M. J., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2017, I: European Journal of Neuroscience. 45, 12, s. 1490-1500 11 s.

Modulation of fronto-parietal connections during the rubber hand illusion
Karabanov, Anke Ninija, Ritterband-Rosenbaum, Anina, Christensen, Mark Schram, Siebner, Hartwig Roman & Nielsen, Jens Bo, 2017, I: European Journal of Neuroscience. 45, 7, s. 964-974 11 s.

Muscle disuse caused by botulinum toxin injection leads to increased central gain of the stretch reflex in the rat
Pingel, Jessica, Hultborn, Hans, Naslund-Koch, L., Jensen, Dennis Bo, Wienecke, Jacob & Nielsen, Jens Bo, 2017, I: Journal of Neurophysiology. 118, 4, s. 1962-1969 8 s.

New perspectives on the development of muscle contractures following central motor lesions
Pingel, Jessica, Bartels, E. M. & Nielsen, Jens Bo, 2017, I: Journal of Physiology. 595, 4, s. 1027-1038 12 s.

Non-invasive assessment of changes in corticomotoneuronal transmission in humans
Taube, W., Leukel, C., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2017, I: Journal of Visualized Experiments. 123, 8 s., e52663.

Spatial facilitation of reciprocal inhibition and crossed inhibitory responses to soleus motoneurons during walking
Stevenson, A. J. T., Geertsen, S. S., Nielsen, Jens Bo & Mrachacz-Kersting, N., 2017, *Converging Clinical and Engineering Research on Neurorehabilitation II: Proceedings of the 3rd International Conference on NeuroRehabilitation (ICNR2016), October 18-21, 2016, Segovia, Spain*. Ibáñez, J., González-Vargas, J., Azorín, J. M., Akay, M. & Pons, J. L. (red.). Cham, Switzerland: Springer, s. 1031-1036 6 s. (Biosystems and Biorobotics, Bind 15).

Supplementation of docosahexaenoic acid (DHA), vitamin D₃ and uridine in combination with six weeks of cognitive and motor training in prepubescent children: A pilot study
Hansen, S. L., Ritterband-Rosenbaum, Anina, Voigt, C. B., Hellgren, L., Sørensen, A. M., Jacobsen, C., Greve, L. Z., Jørgensen, K. D., Bilde, P. E., Kiens, Bente & Nielsen, Jens Bo, 2017, I: BMC Nutrition. 3, 12 s., 37.

Treadmill training with an incline reduces ankle joint stiffness and improves active range of movement during gait in adults with cerebral palsy
Lorentzen, Jakob, Kirk, H., Fernandez-Lago, H., Frisk, Rasmus Feld, Nielsen, N. S., Jorsal, M. & Nielsen, Jens Bo, 2017, I: Disability and Rehabilitation. 39, 10, s. 987-993 7 s.

A pilot study on early home-based intervention through an intelligent baby gym (CareToy) in preterm infants

Sgandurra, G., Bartalena, L., Cecchi, F., Cioni, G., Giampietri, M., Greisen, Gorm, Herskind, A., Inguaggiato, E., Lorentzen, J., Nielsen, Jens Bo, Orlando, M., Dario, P. & CareToy Consortium, C. C., 2016, I: *Research in Developmental Disabilities*. 53-54, s. 32-42 11 s.

Aldring

Geertsen, S. S. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 198-209 12 s.

Basal neurofysiologi

Nielsen, Jens Bo & Petersen, Nicolas Caesar, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 52-63 12 s.

Botulinum toxin injection causes hyper-reflexia and increased muscle stiffness of the triceps surae muscle in the rat

Pingel, Jessica, Wienecke, Jacob, Lorentzen, Jakob & Nielsen, Jens Bo, 2016, I: *Journal of Neurophysiology*. 116, 6, s. 2615-2623 9 s.

Changes in corticospinal drive to spinal motoneurons following tablet-based practice of manual dexterity

Larsen, Lisbeth Højkjær, Jensen, T., Christensen, Mark Schram, Lundbye-Jensen, Jesper, Langberg, Henning & Nielsen, Jens Bo, 2016, I: *Physiological Reports*. 4, 2, 11 s., e12684.

Det autonome nervessystem

Christiansen, L. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København, s. 177-183 7 s.

Det motoriske systems neuroanatomi

Nielsen, Jens Bo & Christiansen, L., 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 64-80 17 s.

Error signals driving locomotor adaptation: Cutaneous feedback from the foot is used to adapt movement during perturbed walking

Choi, J. T., Jensen, Peter, Nielsen, Jens Bo & Bouyer, L. J., 2016, I: *Journal of Physiology*. 594, 19, s. 5673-5684 12 s.

Explosive resistance training increases rate of force development in ankle dorsiflexors and gait function in adults with cerebral palsy

Kirk, H., Geertsen, S. S., Lorentzen, Jakob, Krarup, K. B., Bandholm, Thomas Quaade & Nielsen, Jens Bo, 2016, I: *Journal of Strength and Conditioning Research*. 30, 10, s. 2749-2760 12 s.

Forord

Christiansen, L., Geertsen, S. S., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 10-11 2 s.

Fra Tanke til Handling - Bevægelsens Neurobiologi

Christiansen, L. (red.), Geertsen, S. S. (red.), Lundbye-Jensen, Jesper (red.) & Nielsen, Jens Bo (red.), 2016, København: Hjerneforum. 352 s.

Fundamentale kontrolmekanismer

Christensen, Mark Schram & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 81-90 10 s.

Gang og andre rytmiske bevægelser

Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 248-259 12 s.

Hjernens styring af bevægelser

Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 144-160 17 s.

Human spinal motor control

Nielsen, Jens Bo, 2016, I: *Annual Review of Neuroscience*. 39, s. 81-101 21 s.

Kognition, opmærksomhed og følelser i bevægelse

Christensen, Mark Schram & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 161-176 16 s.

Kroppens atomer, molekyler, celler og energiomsætning

Christiansen, L. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L. & Geertsen, S. S. (red.). København: Hjerneforum, s. 13-51 39 s.

Livsstil og hjernen

Herskind, A. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 335-345 11 s.

Locomotor sequence learning in visually guided walking

Choi, J. T., Jensen, Peter & Nielsen, Jens Bo, 2016, I: *Journal of Neurophysiology*. 115, 4, s. 2014-2020 7 s., jn.00938.2015.

Motorisk indlæring

Lundbye-Jensen, Jesper, Christiansen, L., Christensen, Mark Schram & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 277-298 22 s.

Muscle growth is reduced in 15-month-old children with cerebral palsy

Herskind, A., Ritterband-Rosenbaum, A., Willerslev-Olsen, M., Lorentzen, Jakob, Hanson, L., Lichtwark, G. & Nielsen, Jens Bo, 2016, I: *Developmental Medicine and Child Neurology*. 58, 5, s. 485-491 7 s.

Muskelfysiologi

Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 115-125 11 s.

Nervesystemets udvikling og børns motorik

Petersen, Nicolas Caesar, Meehan, Claire Francesca, Hultborn, Hans, Petersen, T. H. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 184-197 14 s.

Neuroplasticitet

Lundbye-Jensen, Jesper, Christiansen, L. & Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 260-276 17 s.

Rygmarvens motoriske mekanismer

Nielsen, Jens Bo, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 126-143 18 s.

Sanserne og motorisk kontrol

Nielsen, Jens Bo, Christiansen, L. & Christensen, Mark Schram, 2016, *Fra Tanke til Handling - Bevægelsens Neurobiologi*. Christiansen, L., Geertsen, S. S., Lundbye-Jensen, J. & Nielsen, J. B. (red.). København: Hjerneforum, s. 210-234 25 s.

Assessment of transmission in specific descending pathways in relation to gait and balance following spinal cord injury
Barthélemy, D., Willerslev-Olsen, Maria, Lundell, H., Biering-Sørensen, Fin & Nielsen, Jens Bo, 2015, *Sensorimotor Rehabilitation: At the Crossroads of Basic and Clinical Sciences*. Dancause, N., Nadeau, S. & Rossignol, S. (red.). Elsevier, Bind 218. s. 79-101 23 s. (Progress in Brain Research).

Den gennemskuende hjerne

Martiny, K. M. M. & Nielsen, Jens Bo, 2015, *Den menneskelige hjerne*. Gjedde, A., Nielsen, J. B. & Martiny, K. M. M. (red.). Hjerneforum, s. 59-73

Disruption of locomotor adaptation with repetitive transcranial magnetic stimulation over the motor cortex

Choi, J. T. L., Bouyer, L. J. & Nielsen, Jens Bo, 2015, *Cerebral Cortex*. 25, 7, s. 1981-1986 6 s.

Early identification and intervention in cerebral palsy

Herskind, A., Greisen, Gorm & Nielsen, Jens Bo, 2015, *Developmental Medicine and Child Neurology*. 57, 1, s. 29-36 8 s.

Gait training facilitates central drive to ankle dorsiflexors in children with cerebral palsy

Willerslev-Olsen, Maria, Petersen, T. H., Farmer, S. F. & Nielsen, Jens Bo, 2015, *Brain*. 138, 3, s. 589-603 15 s.

Impaired gait function in adults with cerebral palsy is associated with reduced rapid force generation and increased passive stiffness

Geertsen, S. S., Kirk, H., Lorentzen, Jakob, Jorsal, M., Johansson, C. B. & Nielsen, Jens Bo, 2015, *Clinical Neurophysiology*. 126, 12, s. 2320-2329 10 s.

Interlimb communication following unexpected changes in treadmill velocity during human walking

Stevenson, A. J. T., Geertsen, S. S., Sinkjær, T., Nielsen, Jens Bo & Mrachacz-Kersting, N., 2015, *Journal of Neurophysiology*. 113, 9, s. 3151-3158 8 s.

Model-based motion tracking of infants

Olsen, M. D., Herskind, A., Nielsen, Jens Bo & Paulsen, R. R., 2015, *Computer Vision - ECCV 2014 Workshops: Zurich, Switzerland, September 6-7 and 12, 2014. Proceedings, Part III*. Agapito, L., Bronstein, M. M. & Rother, C. (red.). Zurich: Springer, s. 673-685 13 s. (Lecture notes in computer science, Bind 8927).

New ways, new moves: treatment of children with disabilities

Nielsen, Jens Bo, 2015, *Developmental Medicine and Child Neurology*. 57, 5, s. 400 1 s.

Repetitive activation of the corticospinal pathway by means of rTMS may reduce the efficiency of corticomotoneuronal synapses

Taube, W., Leukel, C., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2015, *Cerebral Cortex*. 25, 6, s. 1629-1637 9 s.

Science-based neurorehabilitation: Recommendations for neurorehabilitation from basic science

Nielsen, Jens Bo, Willerslev-Olsen, Maria, Christiansen, L., Lundbye-Jensen, Jesper & Lorentzen, Jakob, 2015, *Journal of Motor Behavior*. 47, 1, s. 7-17 11 s.

Twenty weeks of home-based interactive training of children with cerebral palsy improves functional abilities

Lorentzen, J., Greve, L. Z., Kliim-Due, M., Rasmussen, B., Bilde, P. E. & Nielsen, Jens Bo, 2015, *B M C Neurology*. 15, 12 s., 75.

Using motion tracking to detect spontaneous movements in infants

Olsen, M. D., Herskind, A., Nielsen, Jens Bo & Paulsen, R. R., 2015, *Image Analysis - 19th Scandinavian Conference, SCIA 2015, Proceedings*. Pedersen, K. S. & Paulsen, R. R. (red.). Springer Verlag, s. 410-417 8 s. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Bind 9127).

10 Hz rTMS over right parietal cortex alters sense of agency during self-controlled movements

Ritterband-Rosenbaum, Anina, Karabanov, Anke Ninija, Christensen, Mark Schram & Nielsen, Jens Bo, 2014, I: *Frontiers in Human Neuroscience*. 8, 7 s., 471.

Acute exercise improves motor memory: Exploring potential biomarkers

Skriver, K. C., Roig, M., Lundbye-Jensen, Jesper, Pingel, Jessica, Helge, Jørn Wulff, Kiens, Bente & Nielsen, Jens Bo, 2014, I: *Neurobiology of Learning and Memory*. 116, s. 46-58 13 s.

Aging increases the susceptibility to motor memory interference and reduces off-line gains in motor skill learning

Roig, M., Ritterband-Rosenbaum, Anina, Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2014, I: *Neurobiology of Aging*. 35, 8, s. 1892-1900 9 s.

Body part tracking of infants

Olsen, M. D., Herskind, A., Nielsen, Jens Bo & Paulsen, R. R., 2014, *2014 22nd International Conference on Pattern Recognition (ICPR)*. IEEE, s. 2167-2172 6 s.

Botulinum neurotoxin treatment for spasticity: The role of electromyography guidance

Vilholm, O. J. & Nielsen, Jens Bo, 2014, I: *Journal of Rehabilitation Medicine*. 46, 7, s. 715-716 2 s.

Functionality of the contralateral biceps femoris reflex response during human walking

Stevenson, A. J. T., Geertsen, S. S., Sinkjaer, T., Nielsen, Jens Bo & Mrachacz-Kersting, N., 2014, *Replace, Repair, Restore, Relieve - Bridging Clinical and Engineering Solutions in Neurorehabilitation: Proceedings of the 2nd International Conference on NeuroRehabilitation (ICNR2014), Aalborg, 24-26 June, 2014*. Jensen, W., Andersen, O. K. & Akay, M. (red.). Heidelberg: Springer VS, s. 765-773 9 s. (Biosystems and Biorobotics, Bind 7).

Gait training reduces ankle joint stiffness and facilitates heel strike in children with Cerebral Palsy

Willerslev-Olsen, Maria, Lorentzen, J. & Nielsen, Jens Bo, 2014, I: *NeuroRehabilitation*. 35, 4, s. 643-655 13 s.

Home-based, early intervention with mechatronic toys for preterm infants at risk of neurodevelopmental disorders (CARETOY): a RCT protocol

Sgandurra, G., Bartalena, L., Cioni, G., Greisen, Gorm, Herskind, A., Inguaggiato, E., Lorentzen, J., Nielsen, Jens Bo, Sicola, E. & CareToy Consortium, C. C., 2014, I: *B M C Pediatrics*. 14, 1, 9 s., 268.

Sense of agency is related to gamma band coupling in an inferior parietal-preSMA circuitry

Ritterband-Rosenbaum, Anina, Nielsen, Jens Bo & Christensen, Mark Schram, 2014, I: *Frontiers in Human Neuroscience*. 8, 10 s., 510.

Sensory feedback to ankle plantar flexors is not exaggerated during gait in spastic children with cerebral palsy

Willerslev-Olsen, Maria, Andersen, J. B., Sinkjær, T. & Nielsen, Jens Bo, 2014, I: *Journal of Neurophysiology*. 111, 4, s. 746-754 9 s.

Central common drive to antagonistic ankle muscles in relation to short-term co-contraction training in non-dancers and professional ballet dancers

Geertsen, S. S., Kjær, M., Pedersen, K. K., Petersen, T. H., Perez, M. A. & Nielsen, Jens Bo, 2013, I: *Journal of Applied Physiology*. 115, 7, s. 1075-1081 7 s.

Cutaneous mechanisms of isometric ankle force control

Choi, J. T., Lundbye-Jensen, Jesper, Leukel, C. & Nielsen, Jens Bo, 2013, I: *Experimental Brain Research*. 228, 3, s. 377-384 8 s.

Failure of normal development of central drive to ankle dorsiflexors relates to gait deficits in children with cerebral palsy

Petersen, T. H., Farmer, S. F., Kliim-Due, M. & Nielsen, Jens Bo, 2013, I: *Journal of Neurophysiology*. 109, 3, s. 625-639 15 s.

Fast diffusion tensor imaging and tractography of the whole cervical spinal cord using point spread function corrected echo planar imaging

Lundell, H. M. H., Barthelemy, D., Biering-Sørensen, Fin, Cohen-Adad, J., Nielsen, Jens Bo & Dyrby, T. B., 2013, I: *Magnetic Resonance in Medicine*. 69, 1, s. 144-149 6 s.

Functional implications of corticospinal tract impairment on gait after spinal cord injury

Barthélemy, D., Knudsen, H., Willerslev-Olsen, Maria, Lundell, H., Nielsen, Jens Bo & Biering-Sørensen, Fin, 2013, I: *Spinal Cord*. 51, 11, s. 852-856 5 s.

Fører spasticitet til kontrakturer?

Nielsen, Jens Bo, Willerslev-Olsen, Maria, Lorentzen, J. & Sinkjær, T., 2013, I: *Ugeskrift for Læger*. 175, 9, s. 600 1 s.

Interactive technologies for diagnosis and treatment in infants with cerebral palsy

Nielsen, Jens Bo, 2013, *Cerebral Palsy in Infancy: Targeted Activity to Optimize Early Growth and Development*. Elsevier, s. 323-327 5 s.

Interlimb communication to the knee flexors during walking in humans

Stevenson, A. J. T., Geertsen, S. S., Andersen, J. B., Sinkjær, T., Nielsen, Jens Bo & Mrachacz-Kersting, N., 2013, I: *Journal of Physiology*. 591, 19, s. 4921-4935 15 s.

Passive muscle properties are altered in children with cerebral palsy before the age of 3 years and are difficult to distinguish clinically from spasticity

Willerslev-Olsen, Maria, Lorentzen, J., Sinkjær, T. & Nielsen, Jens Bo, 2013, I: *Developmental Medicine and Child Neurology*. 55, 7, s. 617-623 7 s.

Seeing or moving in parallel: the premotor cortex does both during bimanual coordination, while the cerebellum monitors the behavioral instability of symmetric movements

Christensen, Mark Schram, Ehrsson, H. H. & Nielsen, Jens Bo, 2013, I: *Experimental Brain Research*. 230, 1, s. 101-115 15 s.

The effects of cardiovascular exercise on human memory: A review with meta-analysis

Roig, M., Nordbrandt, S., Geertsen, S. S. & Nielsen, Jens Bo, 2013, I: *Neuroscience & Biobehavioral Reviews*. 37, 8, s. 1645-1666 22 s.

A single bout of exercise improves motor memory

Roig, M., Skriver, K. C., Lundbye-Jensen, Jesper, Kiens, Bente & Nielsen, Jens Bo, 2012, I: *P L o S One*. 7, 9, 8 s., e44594.

Adaptive plasticity of gait

Bouyer, L., Grey, M. J. & Nielsen, Jens Bo, 2012, *Routledge Handbook of Motor Control and Motor Learning*. Gollhofer, A., Taube, W. & Nielsen, J. B. (red.). London: Routledge, s. 213-230 18 s.

Assessment of a portable device for the quantitative measurement of ankle joint stiffness in spastic individuals

Lorentzen, Jakob, Grey, M. J., Geertsen, S. S., Biering-Sørensen, Fin, Brunton, K., Gorassini, M. & Nielsen, Jens Bo, 2012, I: *Clinical Neurophysiology*. 123, 7, s. 1371-1382 12 s.

Fictive locomotion in the adult decerebrate and spinal mouse in vivo

Meehan, Claire Francesca, Grøndahl, L., Nielsen, Jens Bo & Hultborn, Hans, 2012, I: *Journal of Physiology*. 590, 2, s. 289-300 12 s.

Neural control of walking

Grey, M. J., Bouyer, L. & Nielsen, Jens Bo, 2012, *Routledge Handbook of Motor Control and Motor Learning*. Gollhofer, A., Taube, W. & Nielsen, J. B. (red.). London: Routledge, s. 197-212 16 s.

Neural tension technique is no different from random passive movements in reducing spasticity in patients with traumatic brain injury

Lorentzen, Jakob, Nielsen, D., Holm, K., Baagøe, S., Grey, M. J. & Nielsen, Jens Bo, 2012, I: Disability and Rehabilitation. 34, 23, s. 1978-1985 8 s.

Ny viden om spasticitet og dens behandling

Lorentzen, J., Willerslev-Olsen, Maria, Crone, C., Sinkjær, T. & Nielsen, Jens Bo, 2012, I: Ugeskrift for Læger. 174, 9, s. 569-573 5 s.

Rapid changes in corticospinal excitability during force field adaptation of human walking

Barthélemy, D., Alain, S., Grey, M. J., Nielsen, Jens Bo & Bouyer, L. J., 2012, I: Experimental Brain Research. 217, 1, s. 99-115 17 s.

Routledge Handbook of Motor Control and Motor Learning

Gollhofer, A. (red.), Taube, W. (red.) & Nielsen, Jens Bo (red.), 2012, London: Routledge. 420 s.

Subconscious visual cues during movement execution allow correct online choice reactions

Leukel, C., Lundbye-Jensen, Jesper, Christensen, Mark Schram, Gollhofer, A., Nielsen, Jens Bo & Taube, W., 2012, I: P L o S One. 7, 9, s. e44496 8 s.

The motor cortex drives the muscles during walking in human subjects

Petersen, T. H., Willerslev-Olsen, Maria, Conway, B. A. & Nielsen, Jens Bo, 2012, I: Journal of Physiology. 590, 10, s. 2443-2452 10 s.

Twenty weeks of computer-training improves sense of agency in children with spastic cerebral palsy

Ritterband-Rosenbaum, Anina, Christensen, Mark Schram & Nielsen, Jens Bo, 2012, I: Research in Developmental Disabilities. 33, 4, s. 1227-1234 8 s.

Voluntary movement: Limitations and consequences of the anatomy and physiology of motor pathways

Rothwell, J. C. & Nielsen, Jens Bo, 2012, *Routledge Handbook of Motor Control and Motor Learning*. Gollhofer, A., Taube, W. & Nielsen, J. B. (red.). London: Routledge, s. 304-318 15 s.

Altered sense of agency in children with spastic cerebral palsy

Ritterband-Rosenbaum, Anina, Christensen, Mark Schram, Kliim-Due, M., Petersen, L. Z., Rasmussen, B. & Nielsen, Jens Bo, 2011, I: B M C Neurology. 11, 1, s. 150 (1-12) 12 s.

Cerebral activation is correlated to regional atrophy of the spinal cord and functional motor disability in spinal cord injured individuals

Lundell, H., Christensen, Mark Schram, Barthélemy, D., Willerslev-Olsen, Maria, Biering-Sørensen, Fin & Nielsen, Jens Bo, 2011, I: NeuroImage. 54, 2, s. 1254-1261 8 s.

Distribution of collateral fibers in the monkey cervical spinal cord detected with diffusion-weighted magnetic resonance imaging

Lundell, H., Nielsen, Jens Bo, Ptito, M. & Dyrby, T. B., 2011, I: NeuroImage. 56, 3, s. 923-929 7 s.

Independent spinal cord atrophy measures correlate to motor and sensory deficits in individuals with spinal cord injury

Lundell, H. M. H., Barthélemy, D., Skimminge, A., Dyrby, T. B., Biering-Sørensen, Fin, Nielsen, Jens Bo, Lundell, H., Barthélemy, D., Skimminge, A., Dyrby, T. B., Biering-Sørensen, Fin & Nielsen, J. B., 2011, I: Spinal Cord. 49, 1, s. 70-5 5 s.

Individualized, home-based interactive training of cerebral palsy children delivered through the Internet

Bilde, P. E., Kliim-Due, M., Rasmussen, B., Petersen, L., Petersen, T. H. & Nielsen, Jens Bo, 2011, I: B M C Neurology. 11, s. 32 (1-9) 9 s.

Interference in ballistic motor learning: specificity and role of sensory error signals

Lundbye-Jensen, Jesper, Petersen, T. H., Rothwell, J. C. & Nielsen, Jens Bo, 2011, I: P L o S One. 6, 3, s. e17451 (1-15) 15 s.

Involvement of the corticospinal tract in the control of human gait

Barthélemy, D., Grey, M. J., Nielsen, Jens Bo & Bouyer, L., 2011, I: Progress in Brain Research. 192, s. 181-197 17 s.

Reciprocal Ia inhibition contributes to motoneuronal hyperpolarisation during the inactive phase of locomotion and scratching in the cat

Geertsen, S. S., Stecina, K., Meehan, Claire Francesca, Nielsen, Jens Bo & Hultborn, Hans, 2011, I: Journal of Physiology. 589, 1, s. 119-134 16 s.

Seeing or moving in parallel: Premotor cortex does both during bimanual coordination

Christensen, Mark Schram, Ehrsson, H. & Nielsen, Jens Bo, 2011. 1 s.

Spinal inhibition of descending command to soleus motoneurons is removed prior to dorsiflexion

Geertsen, S. S., van de Ruit, M., Grey, M. J. & Nielsen, Jens Bo, 2011, I: Journal of Physiology. 589, 23, s. 5819-5831 13 s.

The effect of baclofen and diazepam on motor skill acquisition in healthy subjects

Willerslev-Olsen, Maria, Lundbye-Jensen, Jesper, Petersen, T. H. & Nielsen, Jens Bo, 2011, I: Experimental Brain Research. 213, 4, s. 465-474 10 s.

Impaired transmission in the corticospinal tract and gait disability in spinal cord injured persons

Barthélemy, D., Willerslev-Olsen, Maria, Lundell, H., Conway, B. A., Knudsen, H., Biering-Sørensen, Fin, Nielsen, Jens Bo, Barthélemy, D., Willerslev-Olsen, M., Lundell, H. M. H., Conway, B. A., Knudsen, H., Biering-Sørensen, Fin & Holm-Nielsen, J. B., 1 aug. 2010, I: Journal of Neurophysiology. 104, 2, s. 1167-76 10 s.

Childhood development of common drive to a human leg muscle during ankle dorsiflexion and gait

Hvass Petersen, T., Kliim-De, M., Farmer, S. F. & Nielsen, Jens Bo, 2010, I: Journal of Physiology. 588, 22, s. 4387-4400 14 s.

Contribution of afferent feedback and descending drive to human hopping

Zuur, A. T., Lundbye-Jensen, Jesper, Leukel, C., Taube, W. J., Grey, M. J., Gollhofer, A., Nielsen, Jens Bo & Gruber, M., 2010, I: Journal of Physiology. 588, 5, s. 799-807 9 s.

Corticospinal contribution to arm muscle activity during human walking

Barthélemy, D. & Nielsen, Jens Bo, 2010, I: Journal of Physiology. 588, 6, s. 967-979 13 s.

Enhanced spinal excitation from ankle flexors to knee extensors during walking in stroke patients

Achache, V., Mazevet, D., Iglesias, C., Lackmy, A., Nielsen, Jens Bo, Katz, R. & Marchand-Pauvert, V., 2010, I: Clinical Neurophysiology. 121, 6, s. 930-938 9 s.

Ia inhibitory neurons are involved in the hyperpolarization of motoneurons during their inactive phases in locomotion and scratching in the cat

Geertsen, S. S., Stecina, K., Meehan, Claire Francesca, Nielsen, Jens Bo & Hultborn, Hans, 2010.

Illusory sensation of movement induced by repetitive transcranial magnetic stimulation

Christensen, Mark Schram, Lundbye-Jensen, Jesper, Grey, M. J., Vejlbj, A. D., Belhage, B., Nielsen, Jens Bo, Christensen, M. S., Jensen, J. L., Grey, M. J., Vejlbj, A. D., Belhage, B. & Holm-Nielsen, J. B., 2010, I: P L o S One. 5, 10, s. e13301

Illusory sensation of movement induced by repetitive transcranial magnetic stimulation

Christensen, Mark Schram, Lundbye-Jensen, Jesper, Grey, M. J., Vejlbj, A. D., Belhage, B. & Nielsen, Jens Bo, 2010.

Intrinsic properties of lumbar motor neurones in the adult G127insTGGG superoxide dismutase-1 mutant mouse *in vivo*: evidence for increased persistent inward currents

Meehan, Claire Francesca, Moldovan, Mihai, Marklund, S. L., Graffmo, K. S., Nielsen, Jens Bo & Hultborn, Hans, 2010, I: *Acta Physiologica (Print Edition)*. 200, 4, s. 361-376 16 s.

Intrinsic properties of mouse lumbar motoneurons revealed by intracellular recording *in vivo*

Meehan, Claire Francesca, Sukiasyan, N., Zhang, M., Nielsen, Jens Bo & Hultborn, Hans, 2010, I: *Journal of Neurophysiology*. 103, 5, s. 2599-2610 12 s.

Learning without knowing: subliminal visual feedback facilitates ballistic motor learning

Lundbye-Jensen, Jesper, Leukel, C. & Nielsen, Jens Bo, 2010.

Load rather than length sensitive feedback contributes to soleus muscle activity during human treadmill walking

af Klint, R., Mazzaro, N., Nielsen, Jens Bo, Sinkjaer, T. & Grey, M. J., 2010, I: *Journal of Neurophysiology*. 103, 5, s. 2747-2756 10 s.

Mind the body in the brain

Nielsen, Jens Bo, 2010, I: *Scandinavian Journal of Medicine & Science in Sports*. 20, 5, s. 709-710 2 s.

Modulation of sensory inhibition of motor evoked potentials elicited by TMS prior to movement?

Leukel, C., Lundbye-Jensen, Jesper, Nielsen, Jens Bo, Gollhofer, A. & Taube, W., 2010.

Nye teknologier til fremme af fysisk aktivitet - perspektiver

Nielsen, Jens Bo, 2010, *Fysisk Aktivitet for Sundhed*. Bangsbo, J. & Ibsen, B. (red.). København: Kulturministeriet, s. 33-34 2 s.

Repetitive activation of the corticospinal tract by means of rTMS may reduce the efficiency of corticomotoneuronal synapses

Taube, W., Leukel, C., Schubert, M., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2010.

Rhythmic movement of one leg elicits modulation of spinal reflexes in the other leg

Stecina, K., Nissen, U. V. & Nielsen, Jens Bo, 2010. 1 s.

The role of plastic changes in the motor cortex and spinal cord for motor learning

Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2010, I: *Acta Physiologica (Print Edition)*. Suppl. 677, s. 19-20 2 s.

Voluntary activation of ankle muscles is accompanied by subcortical facilitation of their antagonists

Geertsen, S. S., Zuur, A. T. & Nielsen, Jens Bo, 2010, I: *Journal of Physiology*. 588, 13, s. 2391-2402 12 s.

Bevægelsessygdomme: Manden der pludselig blev stiv som et brædt og andre historier om bevægelsessygdomme

Crone, C. & Nielsen, Jens Bo, 2009, *Hjernen i Bevægelse*. Bøgeskov, J., Ellemann, K. & Nielsen, J. B. (red.). København: Hjerneforum, s. 68-79 12 s.

Cortical involvement in anticipatory postural reactions in man

Petersen, T. H., Rosenberg, K., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2009, I: *Experimental Brain Research*. 193, 2, s. 161-171 11 s.

Food for Brains

Kiens, Bente, Kliim-Due, M., Nielsen, Jens Bo, Rasmussen, B. & Bilde, P. E., 2009, Helene Elsass Center. 201 s.

Fysisk aktivitet og hjernen

Nielsen, Jens Bo, 2009, *Forskning i Bevægelse: Et nyt forskningsfelt i et 100-årigt perspektiv*. Poulsen, A. L., Trangbæk, E., Jørgensen, K. & Nordsborg, N. (red.). København: Museum Tusulanum, s. 322-325 4 s.

Genoptræning af hjernen: Neuroplasticitet og neurorehabilitering

Grey, M. J. & Nielsen, Jens Bo, 2009, *Hjernen i Bevægelse*. Bøgeskov, J., Ellemann, K. & Nielsen, J. B. (red.). København: Hjerneforum, s. 104-113 10 s.

Hjernen i Bevægelse

Bøgeskov, J. (red.), Ellemann, K. (red.) & Nielsen, Jens Bo (red.), 2009, København: Hjerneforum. 143 s.

Hvad der gør bevægelser lette

Nielsen, Jens Bo, 2009, *Hjernen i Bevægelse*. Bøgeskov, J., Ellemann, K. & Nielsen, J. B. (red.). København: Hjerneforum, s. 33-40 8 s.

Interference in ballistic motor learning - is motor interference really sensory?

Lundbye-Jensen, Jesper, Petersen, T. H., Rothwell, J. C. & Nielsen, Jens Bo, 2009.

Interference in motor learning - is motor interference sensory?

Lundbye-Jensen, Jesper, Petersen, T. H., Rothwell, J. C. & Nielsen, Jens Bo, 2009.

Introduktion

Nielsen, Jens Bo, 2009, *Hjernen i Bevægelse*. Bøgeskov, J., Ellemann, K. & Nielsen, J. B. (red.). København: Hjerneforum, s. 6-7 2 s.

Optimal spectral tracking - with application to speed dependent neural modulation of tibialis anterior during human treadmill walking

Brittain, J., Catton, C., Conway, B. A., Nielsen, Jens Bo, Jenkinson, N. & Halliday, D. M., 2009, I: *Journal of Neuroscience Methods*. 177, 2, s. 334-347 14 s.

Spasticitet: hvad er det nu lige det er

Nielsen, Jens Bo & Lorentzen, Jakob, 2009, I: *Fysioterapeuten*. 4, s. 12-20 9 s.

Sudden drop in ground support produces force-related unload response in human overground walking

Af Klint, R., Nielsen, Jens Bo, Sinkjaer, T. & Grey, M. J., 2009, I: *Journal of Neurophysiology*. 101, 4, s. 1705-1712 8 s.

Tibialis anterior stretch reflex in early stance is suppressed by repetitive transcranial magnetic stimulation

Zuur, A. T., Christensen, Mark Schram, Sinkjær, T., Grey, M. J. & Nielsen, Jens Bo, 2009, I: *Journal of Physiology*. 587, 8, s. 1669-1676 8 s.

Action-blindsight in healthy subjects after transcranial magnetic stimulation

Christensen, Mark Schram, Kristiansen, L., Rowe, J. B. & Nielsen, Jens Bo, 2008, I: *Proceedings of the National Academy of Science of the United States of America*. 105, 4, s. 1353-1357 5 s.

Central nervous adaptations following 1 week of wrist and hand immobilization

Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2008, I: *Journal of Applied Physiology*. 105, 1, s. 139-151 13 s.

Corticospinal inhibition of transmission in propriospinal-like neurones during human walking

Iglesias, C., Nielsen, Jens Bo & Marchand-Pauvert, V., 2008, I: *European Journal of Neuroscience*. 28, 7, s. 1351-1361 11 s.

Facilitation of soleus but not tibialis anterior motor evoked potentials before onset of antagonist contraction

Geertsen, S. S., Zuur, A. T. & Nielsen, Jens Bo, 2008, I: Brain Stimulation. 3, s. 275 1 s.

Immobilization induces changes in presynaptic control of group Ia afferents in healthy humans

Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2008, I: Journal of Physiology. 586, 17, s. 4121-4135 15 s.

Increased central facilitation of antagonist reciprocal inhibition at the onset of dorsiflexion following explosive strength training

Geertsen, S. S., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2008, I: Journal of Applied Physiology. 105, 3, s. 915-922 8 s.

Modulation of recurrent inhibition from knee extensors to ankle motoneurons during human walking

Lamy, J., Iglesias, C., Lackmy, A., Nielsen, Jens Bo, Katz, R. & Marchand-Pauvert, V., 2008, I: Journal of Physiology. 586, 24, s. 5931-5946 16 s.

Motorisk kontrol

Nielsen, Jens Bo, 2008, *Træning: i forebyggelse, behandling og rehabilitering*. Beyer, N., Lund, H. & Klinge, K. (red.). København: Munksgaard, s. 67-78 12 s.

Reduction of common motoneuronal drive on the affected side during walking in hemiplegic stroke patients

Nielsen, Jens Bo, Brittain, J., Halliday, D. M., Marchand-Pauvert, V., Mazevet, D. & Conway, B. A., 2008, I: Clinical Neurophysiology. 119, 12, s. 2813-2818 6 s.

Soleus H-reflex excitability during pedaling post-stroke

Schindler-Ivens, S., Brown, D. A., Lewis, G. N., Nielsen, Jens Bo, Ondishko, K. L. & Wieser, J., 2008, I: Experimental Brain Research. 188, 3, s. 465-474 10 s.

Speed-related spinal excitation from ankle dorsiflexors to knee extensors during human walking

Iglesias, C., Nielsen, Jens Bo & Marchand-Pauvert, V., 2008, I: Experimental Brain Research. 188, 1, s. 101-110 10 s.

Task-and phase-related changes in cortico-muscular coherence

Masakado, Y. & Nielsen, Jens Bo, 2008, I: Keio Journal of Medicine. 57, 1, s. 50-56 7 s.

The olympic brain. Does corticospinal plasticity play a role in acquisition of skills required for high-performance sports?

Nielsen, Jens Bo & Cohen, L. G., 2008, I: Journal of Physiology. 586, 1, s. 65-70 6 s.

Within-step modulation of leg muscles activity by afferent feedback in human walking

Klint, R. A., Nielsen, Jens Bo, Cole, J. D., Sinkjær, T. & Grey, M. J., 2008, I: Journal of Physiology. 586, 19, s. 4643-4648 6 s.

Premotor cortex modulates somatosensory cortex during voluntary movements without proprioceptive feedback

Christensen, Mark Schram, Lundbye-Jensen, Jesper, Geertsen, S. S., Petersen, T. H., Paulson, Olaf B. & Nielsen, Jens Bo, 1 apr. 2007, I: Nature Neuroscience. 10, 4, s. 417-9 3 s.

Evaluation of transcranial magnetic stimulation for investigating transmission in descending motor tracts in the rat

Nielsen, Jens Bo, Perez, M. A., Oudega, M., Enriquez-Denton, M. & Aimonetti, J., 2007, I: European Journal of Neuroscience. 25, 3, s. 805-814

Plasticity and regeneration of the spinal cord and peripheral nervous system

Hultborn, Hans, Nielsen, Jens Bo & Krarup, Christian, 2007, I: Acta Physiologica (Print Edition). 189, 2, s. 109-110

Positive force feedback in human walking

Grey, M. J., Nielsen, Jens Bo, Mazzaro, N. & Sinkjær, T., 2007, I: Journal of Physiology. 581, 1, s. 99-105 7 s.

Reduced reciprocal inhibition is seen only in spastic limbs in patients with neurolathyrism

Crone, C., Petersen, Nicolas Caesar, Giménez-Roldán, S., Lungholt, B., Nyborg, K. & Nielsen, Jens Bo, 2007, I: *Experimental Brain Research*. 181, 1, s. 193-197

Single-trial multiwavelet coherence in application to neurophysiological time series

Brittain, J. S., Halliday, D. M., Conway, B. A. & Nielsen, Jens Bo, 2007, I: *IEEE Transactions on Biomedical Engineering*. 54, 5, s. 854-862 9 s.

Spinal control of locomotion - from cat to man

Hultborn, Hans & Nielsen, Jens Bo, 2007, I: *Acta Physiologica (Print Edition)*. 189, 2, s. 111-121 10 s.

Task-specific depression of the soleus H-reflex after cocontraction training of antagonistic ankle muscles

Perez, M. A., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2007, I: *Journal of Neurophysiology*. 98, 6, s. 3677-3687 11 s.

The spinal pathophysiology of spasticity - from a basic science point of view

Nielsen, Jens Bo, Crone, C. & Hultborn, Hans, 2007, I: *Acta Physiologica (Print Edition)*. 189, 2, s. 171-180 10 s.

Up-regulation of reciprocal inhibition by explosive strength training

Geertsen, S. S., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2007. 1 s.

Watching your foot move - an fMRI study of visuomotor interactions during foot movement

Christensen, Mark Schram, Lundbye-Jensen, Jesper, Petersen, Nicolas Caesar, Geertsen, S. S., Paulson, Olaf B. & Nielsen, Jens Bo, 2007, I: *Cerebral Cortex*. 17, 8, s. 1906-1917 12 s.

An fMRI study of cerebral activity during voluntary movements without sensory feedback due to ischemic nerve block

Christensen, Mark Schram, Lundbye-Jensen, Jesper, Geertsen, S. S., Petersen, T. H., Paulson, Olaf B. & Nielsen, Jens Bo, 2006.

Changes in corticospinal drive to spinal motoneurons following visuo-motor skill learning in humans

Perez, M. A., Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2006, I: *Journal of Physiology*. 573, 3, s. 843-855

Det motoriske system

Nielsen, Jens Bo, 2006, *Neurologi og Neurorehabilitering*. Wæhrens, E., Winkel, A. & Gyiring, J. (red.). København: Munksgaard, s. 35-59

Growth-rate regulated genes have profound impact on interpretation of transcriptome profiling in *Saccharomyces cerevisiae*

Regenberg, Birgitte, Grotkjaer, T., Winther, Ole, Fausbøll, A., Akesson, M., Bro, C., Hansen, L. K., Brunak, Søren & Nielsen, Jens Bo, 2006, I: *Genome Biology (Online Edition)*. 7, 11, s. R107

Motor cortical adaptations following 2 weeks of lower limb immobilization

Lundbye-Jensen, Jesper, Christensen, Mark Schram, Petersen, T. H., Geertsen, S. S. & Nielsen, Jens Bo, 2006, *Strength Training for Sport, Health, Aging and Rehabilitation*. Aagaard, P., Madsen, K., Magnusson, P. & Bojsen-Møller, J. (red.). University of Southern Denmark, s. 183-184

Motor cortical adaptations to 2 weeks of lower limb immobilization

Lundbye-Jensen, Jesper, Christensen, Mark Schram, Petersen, T. H., Geertsen, S. S. & Nielsen, Jens Bo, 2006. 1 s.

Neural adaptations to progressive resistance training investigated by fMRI and transcranial magnetic stimulation

Geertsen, S. S., Petersen, T. H., Lundbye-Jensen, Jesper, Christensen, Mark Schram & Nielsen, Jens Bo, 2006, *Strength Training for Sport, Health, Aging and Rehabilitation*. Aagaard, P., Madsen, K., Magnusson, P. & Bojsen-Møller, J. (red.). University of Southern Denmark, s. 110

Spasticity-assessment: a review

Biering-Sørensen, F., Nielsen, Jens Bo & Klinge, K. P., 2006, I: *Spinal Cord*. 44, 12, s. 708-722

Spinal reflex adaptations following 2 weeks of lower limb immobilization

Lundbye-Jensen, Jesper & Nielsen, Jens Bo, 2006, *Strength Training for Sport, Health, Aging and Rehabilitation*. Aagaard, P., Madsen, K., Magnusson, P. & Bojsen-Møller, J. (red.). University of Southern Denmark, s. 181-182

Increase in H-reflex gain following 1 week of immobilization

Lundbye-Jensen, Jesper, Sørensen, M. & Nielsen, Jens Bo, 2005. 1 s.

Motor skill training and strength training are associated with different plastic changes in the central nervous system

Lundbye-Jensen, Jesper, Marstrand, P. C. D. & Nielsen, Jens Bo, 2005, I: *Journal of Applied Physiology*. 99, 4, s. 1558-1568

Organization of common synaptic drive to motoneurons during fictive locomotion in the spinal cat

Nielsen, Jens Bo, Conway, B. A., Halliday, D. M., Perreault, M. & Hultborn, Hans, 2005, I: *Journal of Physiology*. 569, 1, s. 291-304

Physiological roles for persistent inward currents in motoneurons: Insights from the central respiratory drive

Kirkwood, P., Denton, M. E., Wienecke, Jacob, Nielsen, Jens Bo & Hultborn, Hans, 2005, I: *Biocybernetics and Biomedical Engineering*. 25, 3, s. 31-38 8 s.

Presynaptic control of group Ia afferents in relation to acquisition of a visuo-motor skill in healthy humans

Perez, M. A., Lungholt, B. K. S. & Nielsen, Jens Bo, 2005, I: *Journal of Physiology*. 568, 1, s. 343-354

Reduction of common synaptic drive to ankle dorsiflexor motoneurons during walking in patients with spinal cord lesion

Hansen, N. L., Conway, B. A., Halliday, D. M., Hansen, S., Pyndt, H. S., Biering-Sørensen, F. & Nielsen, Jens Bo, 2005, I: *Journal of Neurophysiology*. 94, 2, s. 934-942

Short-term adaptations in spinal cord circuits evoked by repetitive transcranial magnetic stimulation: possible underlying mechanisms

Perez, M. A., Lungholt, B. K. S. & Nielsen, Jens Bo, 2005, I: *Experimental Brain Research*. 162, 2, s. 202-212

Stretch reflex regulation in healthy subjects and patients with spasticity

Nielsen, Jens Bo, Petersen, Nicolas Caesar, Crone, C. & Sinkjær, T., 2005, I: *Neuromodulation: Technology at the Neural Interface*. 8, 1, s. 49-57

The effect of penile vibratory stimulation on male fertility potential, spasticity and neurogenic detrusor overactivity in spinal cord lesioned individuals

Biering-Sørensen, F., Læssøe, L., Sønksen, Jens Otto Reimers, Bagi, P., Nielsen, Jens Bo & Kristensen, J. K., 2005, I: *Acta Neurochirurgica - Supplements only*. 93, s. 159-163 13 s.

Ankle extensor proprioceptors contribute to the enhancement of the soleus EMG during the stance phase of human walking

Grey, M. J., Mazzaro, N., Nielsen, Jens Bo & Sinkjær, T., 2004, I: *Canadian Journal of Physiology and Pharmacology*. 82, 8-9, s. 610-616

Antispastic effect of penile vibration in men with spinal cord lesion

Læssøe, L., Nielsen, Jens Bo, Biering-Sørensen, F. & Sønksen, Jens Otto Reimers, 2004, I: *Archives of Physical Medicine and Rehabilitation*. 85, 6, s. 919-924

Menneskets motoriske funktioner: Kompendium

Nielsen, Jens Bo, 2004, København: Institut for Idræt, Københavns Universitet. 98 s.

Motor skill training induces changes in the excitability of the leg cortical area in healthy humans

Perez, M. A., Lungholt, B. K. S., Nyborg, K. & Nielsen, Jens Bo, 2004, I: *Experimental Brain Research*. 159, 2, s. 197-205

Reciprocal inhibition and corticospinal transmission in the arm and leg in patients with autosomal dominant pure spastic paraparesis (ADPSP)

Crone, C., Petersen, Nicolas Caesar, Nielsen, J. E., Hansen, N. L. & Nielsen, Jens Bo, 2004, I: *Brain*. 127, 12, s. 2693-2702

Sensorimotor integration at spinal level as a basis for muscle coordination during voluntary movement in humans

Nielsen, Jens Bo, 2004, I: *Journal of Applied Physiology*. 96, 5, s. 1961-1967 7 s.

The effect of transcranial magnetic stimulation and peripheral nerve stimulation on corticomuscular coherence in humans

Hansen, N. L. & Nielsen, Jens Bo, 2004, I: *Journal of Physiology*. 561, 1, s. 295-306

The suppression of the long-latency stretch reflex in the human tibialis anterior muscle by transcranial magnetic stimulation

Van Doornik, J., Masakado, Y., Sinkjær, T. & Nielsen, Jens Bo, 2004, I: *Experimental Brain Research*. 157, 3, s. 403-406

Appearance of reciprocal facilitation of ankle extensors from ankle flexors in patients with stroke or spinal cord injury

Crone, C., Johnsen, L. L., Biering-Sørensen, F. & Nielsen, Jens Bo, 2003, I: *Brain*. 126, 2, s. 495-507 13 s.

Changes in reciprocal inhibition across the ankle joint with changes in external load and pedaling rate during bicycling

Pyndt, H. S., Laursen, M. & Nielsen, Jens Bo, 2003, I: *Journal of Neurophysiology*. 90, 5, s. 3168-3177

Functional coupling of motor units is modulated during walking in human subjects

Halliday, D. M., Conway, B. A., Christensen, L. O. D., Hansen, N. L., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2003, I: *Journal of Neurophysiology*. 89, 2, s. 960-968

How we walk: Central control of muscle activity during human walking

Nielsen, Jens Bo, 2003, I: *Neuroscientist*. 9, 3, s. 195-204 10 s.

Investigating human motor control by transcranial magnetic stimulation

Petersen, Nicolas Caesar, Pyndt, H. S. & Nielsen, Jens Bo, 2003, I: *Experimental Brain Research*. 152, 1, s. 1-16 16 s.

Modulation of transmission in the corticospinal and group Ia afferent pathways to soleus motoneurons during bicycling

Pyndt, H. S. & Nielsen, Jens Bo, 2003, I: *Journal of Neurophysiology*. 89, 1, s. 304-314

Variable amplification of synaptic input to cat spinal motoneurons by dendritic persistent inward current

Hultborn, Hans, Denton, M. E., Wienecke, Jacob & Nielsen, Jens Bo, 2003, I: *Journal of Physiology*. 552, 3, s. 945-952

Afferent feedback in the control of human gait

Nielsen, Jens Bo & Sinkjær, T., 2002, I: *J Electromyogr Kinesiol.* 3, s. 213-217

Cortical excitability and motor task in man: an investigation of the wrist extensor motor area

Aimonetti, J. P. G. & Nielsen, Jens Bo, 2002, I: *Experimental Brain Research*. 4, s. 431-439

Corticospinal transmission to leg motoneurons in human subject with deficient glycinergic inhibition

Nielsen, Jens Bo, Tijssen, M. A., Hansen, N. L., Crone, C., Petersen, Nicolas Caesar, Brown, P., Van Dijk, J. G. & Rothwell, J. C., 2002, I: *Journal of Physiology*. 544, 2, s. 631-640 10 s.

Coupling of antagonistic ankle muscles during co-contraction in humans

Hansen, S., Hansen, N. L., Christensen, L. O. D., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2002, I: *Experimental Brain Research*. 146, 3, s. 282-292 11 s.

Interaction between peripheral afferent activity and presynaptic inhibition of Ia afferents in the cat

Enriquez-Denton, M., Morita, H., Christensen, L. O. D., Petersen, Nicolas Caesar, Sinkjær, T. & Nielsen, Jens Bo, 2002, I: *Journal of Neurophysiology*. 88, 4, s. 1664-1674

Modulation of heteronymous reflexes from ankle dorsiflexors to hamstring muscles during human walking

Marchand-Pauvert, V. & Nielsen, Jens Bo, 2002, I: *Experimental Brain Research*. 142, s. 402-408

Modulation of non-monosynaptic excitation from ankle dorsiflexor afferents to quadriceps motoneurons during human walking

Marchand-Pauvert, V. & Nielsen, Jens Bo, 2002, I: *Journal of Physiology*. 538, s. 647-657

Motoneuronal drive during human walking

Nielsen, Jens Bo, 2002, I: *Brain Research*. 40, 1-3, s. 192-201

Reflex excitation of muscles during human walking

Nielsen, Jens Bo & Sinkjær, T., 2002, I: *Advances in Experimental Medicine and Biology*. 508, s. 369-375 7 s.

Muscle afferent feedback during human walking

Sinkjær, T., Nielsen, Jens Bo, Voigt, M., Ladouceur, M., Grey, M. & Andersen, J. B., 1 jan. 2001, *Motor Neurobiology of the Spinal Cord*. CRC Press, s. 215-230 16 s.

Cerebral functional anatomy of voluntary contractions of ankle muscles in man

Johannsen, P., Christensen, L. O. D., Sinkjær, T. & Nielsen, Jens Bo, 2001, I: *Journal of Physiology*. 535, s. 397-406

Changes in intracortical excitability induced by stimulation of wrist afferents in man

Aimonetti, J. P. G. & Nielsen, Jens Bo, 2001, I: *Journal of Physiology*. 534, s. 891-902

Group II muscle afferents probably contribute to the medium latency soleus stretch reflex during walking in humans

Grey, M. J., Ladouceur, M., Andersen, J. B., Nielsen, Jens Bo & Sinkjær, T., 2001, I: *Journal of Physiology*. 534, 3, s. 925-933 9 s.

Modulation of presynaptic inhibition and disynaptic reciprocal Ia inhibition during voluntary movement in spasticity

Morita, H., Crone, C., Christenhuys, D., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2001, I: *Brain*. 124, 4, s. 826-837 12 s.

Patients with the major and minor form of hyperekplexia differ with regards to disynaptic reciprocal inhibition between ankle flexor and extensor muscles

Crone, C., Nielsen, Jens Bo, Petersen, Nicolas Caesar, Tijssen, M. & van Dijk, J., 2001, I: *Experimental Brain Research*. 140, s. 190-197 8 s.

Suppression of EMG activity by transcranial magnetic stimulation in human subjects during walking

Petersen, Nicolas Caesar, Butler, J. E., Marchand-Pauvert, V., Fisher, R., Ledebt, A., Pyndt, H. S., Hansen, N. L. & Nielsen, Jens Bo, 2001, I: *Journal of Physiology*. 537, 2, s. 651-656 6 s.

Synchronization of lower limb motor unit activity during walking in human subjects

Hansen, N. L., Hansen, S., Christensen, L. O. D., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2001, I: *Journal of Neurophysiology*. 86, 3, s. 1266-1276 11 s.

Transcranial magnetic stimulation and stretch reflexes in the tibialis anterior muscle during human walking

Christensen, L. O. D., Andersen, J. B., Sinkjær, T. & Nielsen, Jens Bo, 2001, I: *Journal of Physiology*. 531, s. 545-557

Cerebral activation during bicycle movements in man

Christensen, L. O. D., Johannsen, T., Sinkjær, T., Petersen, N., Pyndt, H. S. & Nielsen, Jens Bo, 2000, I: *Experimental Brain Research*. 135, s. 66-72

Differential changes in corticospinal and Ia inputs to tibialis anterior and soleus motor neurones during voluntary contraction in man.

Morita, H., Olivier, E., Baumgarten, J., Petersen, Nicolas Caesar, Christensen, L. & Nielsen, Jens Bo, 2000, I: *Acta Physiologica Scandinavica*. 170, 1, s. 65-76 12 s.

Distribution of non-monosynaptic excitation to early and late recruited units in human forearm muscles

Marchand-Pauvert, V., Mazevet, D., Nielsen, Jens Bo, Petersen, Nicolas Caesar & Pierrot-deseilligny, E., 2000, I: *Experimental Brain Research*. 134, s. 274-278 5 s.

Evidence for transcortical reflex pathways in the lower limb of man

Christensen, L. O. D., Petersen, N., Andersen, J. B., Sinkjær, T. & Nielsen, Jens Bo, 2000, I: *Progress in Neurobiology*. 62, s. 251-272

Hjemens styring af bevægelser hos mennesker

Nielsen, Jens Bo, 2000, I: *Ugeskrift for læger*. 162, 22, s. 3169-3175 7 s.

Major role for sensory feedback in soleus EMG activity in the stance phase of walking in man

Sinkjær, T., Andersen, J., Ladouceur, M., Christensen, L. & Nielsen, Jens Bo, 2000, I: *Journal of Physiology*. 523, 3, s. 817-827 11 s.

Presynaptic control of transmission along the pathway mediating disynaptic reciprocal inhibition in the cat

Enriquez-Denton, M., Nielsen, Jens Bo, Perreault, M., Morita, H., Petersen, Nicolas Caesar & Hultborn, Hans, 2000, I: *Journal of Physiology*. 526, 3, s. 623-637 15 s.

Reciprocal inhibition in hemiplegic patients - a longitudinal study

Crone, C., Johnsen, L. L. & Nielsen, Jens Bo, 2000, *Supplements to clinical Neurophysiology, Vol. 53*. Elsevier, s. 187-191

Synchronization of lower limb motor units in spastic patients

Hansen, N. L., Hansen, S., Crone, C., Christensen, L. O. D., Petersen, N., Nielsen, J. E., Biering-Sørensen, F. & Nielsen, Jens Bo, 2000, *Supplements to Clinical Neurophysiology, Vol. 53*. Elsevier, s. 178-185

The effect of baclofen on the transmission in spinal pathways in spastic multiple sclerosis patients

Ørsnes, G., Crone, C., Krarup, Christian, Petersen, Nicolas Caesar & Nielsen, Jens Bo, 2000, I: *Clinical Neurophysiology*. 111, 8, s. 1372-1379 8 s.

Cerebral activation during contraction of the lower extremities in man

Johannsen, P., Christensen, L. O. D., Sinkjær, T., Gjedde, Albert & Nielsen, Jens Bo, 1 dec. 1999, I: *NeuroImage*. 9, 6 PART II, s. S454

Evidence suggestion that a transcortical reflex pathway contributes to cutaneous reflexes in the tibialis anterior muscle during walking in man

Christensen, L., Morita, H., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 1999, I: *Experimental Brain Research*. 124, 1, s. 59-68 10 s.

Modulation of reciprocal inhibition between ankle extensors and flexors during walking in man

Petersen, Nicolas Caesar, Morita, H. & Nielsen, Jens Bo, 1999, I: *Journal of Physiology*. 520, 2, s. 605-619 15 s.

On the comparability of H-reflexes and MEPs

Nielsen, Jens Bo, Morita, H., Baumgarten, J., Petersen, Nicolas Caesar & Christensen, L., 1999, I: *Electroencephalography and Clinical Neurophys Suppl.* 51, s. 93-101 8 s.

Recruitment of extensor-carpi-radialis motor units by transcranial magnetic stimulation and radial-nerve stimulation in human subjects

Morita, H., Baumgarten, J., Petersen, Nicolas Caesar, Christiansen, L. & Nielsen, Jens Bo, 1999, I: *Experimental Brain Research.* 128, 4, s. 557-562 6 s.

Co-contraction of antagonistic muscles in man

Nielsen, Jens Bo, 1998, I: *Danish Medical Bulletin.* 45, 4, s. 423-435 13 s.

Corticospinal function during human walking

Christensen, L., Petersen, Nicolas Caesar, Morita, H. & Nielsen, Jens Bo, 1998, I: *New York Academy of Sciences.* 16, s. 546-549 4 s.

Does a C3-C4 propriospinal system transmit corticospinal excitation in the primate? An investigation in the macaque monkey

Maier, M., Illert, M., Kirkwood, P. A., Nielsen, Jens Bo & Lemon, R., 1998, I: *Journal of Physiology.* 511, 1, s. 191-212 22 s.

Evaluation of reciprocal inhibition of the soleus H-reflex during tonic plantar flexion in man

Petersen, Nicolas Caesar, Morita, H. & Nielsen, Jens Bo, 1998, I: *Journal of Neuroscience Methods.* 84, s. 1-8 8 s.

Evidence that a transcortical pathway contributes to stretch reflexes in the tibialis anterior muscle in man

Petersen, Nicolas Caesar, Christensen, L., Morita, H., Sinkjær, T. & Nielsen, Jens Bo, 1998, I: *Journal of Physiology.* 512, 1, s. 267-276 10 s.

Gating of somatosensory evoked potentials during voluntary movement of the lower limb in man

Morita, H., Petersen, Nicolas Caesar & Nielsen, Jens Bo, 1998, I: *Experimental Brain Research.* 120, 2, s. 143-152 10 s.

Pharmacologically evoked fictive motor patterns in the acutely spinalized Marmoset monkey (*Callithrix jacchus*)

Fedirchuk, B., Nielsen, Jens Bo, Petersen, Nicolas Caesar & Hultborn, Hans, 1998, I: *Experimental Brain Research.* 122, 3, s. 351-361 11 s.

Sensitivity of H-reflexes and stretch reflexes to presynaptic inhibition in humans

Morita, H., Petersen, Nicolas Caesar, Christensen, L., Sinkjær, T. & Nielsen, Jens Bo, 1998, I: *Journal of Neurophysiology.* 80, 2, s. 610-620 11 s.

The effect of transcranial magnetic stimulation on the soleus H-reflex during human walking

Petersen, Nicolas Caesar, Christensen, L. & Nielsen, Jens Bo, 1998, I: *Journal of Physiology.* 513, 2, s. 599-610 12 s.

Evidence suggesting a transcortical pathway from cutaneous foot afferents to tibialis anterior motoneurons in man

Nielsen, Jens Bo, Petersen, Nicolas Caesar & Fedirchuk, B., 1997, I: *Journal of Physiology.* 501, s. 473-484 12 s.

On the mechanism of the post-activation depression of the H-reflex in human subjects

Hultborn, Hans, Illert, M., Nielsen, Jens Bo, Ballegaard, Martin, Paul, A. & Wiese, H., 1997, I: *Experimental Brain Research.* 108, s. 450-462 13 s.

A second reply (Are H-reflexes and F-responses equally sensitive to changes in motoneuronal excitability?)

Hultborn, Hans & Nielsen, Jens Bo, 1996, I: *Muscle & Nerve.* 19, s. 1347-1348 2 s.

Evidence of facilitation of soleus-coupled Renshaw cells during voluntary co-contraction of antagonistic ankle muscles in man

Nielsen, Jens Bo & Pierrot-Deseilligny, E., 1996, I: Journal of Physiology. 493, s. 603-611 9 s.

Central control of reciprocal inhibition during fictive dorsiflexion in man

Nielsen, Jens Bo, Crone, C., Sinkjær, T., Toft, E. & Hultborn, Hans, 1995, I: Experimental Brain Research. 104, s. 99-106 8 s.

Changes in the effect of magnetic brain stimulation accompanying voluntary dynamic contraction in man

Nielsen, Jens Bo & Petersen, Nicolas Caesar, 1995, I: Journal of Physiology. 484, s. 777-789 13 s.

Changes in transmission across synapses of Ia afferents in spastic patients

Nielsen, Jens Bo, Petersen, Nicolas Caesar & Crone, C., 1995, I: Brain. 118, s. 995-1004 10 s.

Evidence favouring different descending pathways to soleus motoneurons activated by magnetic brain stimulation in man

Nielsen, Jens Bo & Petersen, Nicolas Caesar, 1995, I: Journal of Physiology. 486, s. 779-788 10 s.

H-reflexes and F-responses are not equally sensitive to changes in motoneuronal excitability

Hultborn, Hans & Nielsen, Jens Bo, 1995, I: Muscle & Nerve. 18, s. 1471-1474 4 s.

Ikkeinvasiv transkraniel hjernestimulation hos mennesker

Nielsen, Jens Bo, 1995, I: Ugeskrift for læger. 157, 18, s. 2559-2564 6 s.

Latency of effects evoked by electrical and magnetic brain stimulation in lower limb motoneurons in man

Nielsen, Jens Bo, Petersen, Nicolas Caesar & Ballegaard, Martin, 1995, I: Journal of Physiology. 484, 3, s. 791-802 12 s.

Mechanical and electromyographic analysis of reciprocal inhibition at the human ankle joint

Sinkjær, T., Nielsen, Jens Bo & Toft, E., 1995, I: Journal of Neurophysiology. 74, 2, s. 849-855 7 s.

Central control of disynaptic reciprocal inhibition in man

Crone, C. & Nielsen, Jens Bo, 1994, I: Acta Physiologica Scandinavica. 152, s. 351-363 13 s.

Discharge of muscle afferents during voluntary co-contraction of antagonistic ankle muscles in man

Nielsen, Jens Bo, Nagaoka, M., Kagamihara, Y., Kakuda, N. & Tanaka, R., 1994, I: Neuroscience Letters. 170, 2, s. 277-280 3 s.

Disynaptic reciprocal inhibition of ankle extensors in spastic patients

Crone, C., Nielsen, Jens Bo, Petersen, Nicolas Caesar, Ballegaard, Martin & Hultborn, Hans, 1994, I: Brain. 117, s. 1161-1168 8 s.

Further evidence of increased motor cortex excitability during tonic plantar flexion in humans

Nielsen, Jens Bo, 1994, I: Acta Physiologica Scandinavica. 152, s. 341-343 3 s.

Is presynaptic inhibition distributed to corticospinal fibres in man?

Nielsen, Jens Bo & Petersen, Nicolas Caesar, 1994, I: The Journal of Physiology. 477, 1, s. 47-58 12 s.

Segmental reflexes and ankle joint stiffness during co-contraction of antagonistic muscles

Nielsen, Jens Bo, Sinkjær, T., Toft, E. & Kagamihara, Y., 1994, I: Experimental Brain Research. 102, s. 350-358 9 s.

Synchronization of human leg motor units during cocontraction in man

Nielsen, Jens Bo & Kagamihara, Y., 1994, I: Experimental Brain Research. 102, s. 84-94 11 s.

TASK-RELATED CHANGES IN THE EFFECT OF MAGNETIC BRAIN-STIMULATION ON SPINAL NEURONS IN MAN

Nielsen, Jens Bo, PETERSEN, N., DEUSCHL, G. & Ballegaard, Martin, nov. 1993, I: The Journal of Physiology. 471, s. 223-243 21 s.

Differential projection of the sural nerve to early and late recruited tibialis anterior motor units: Change of the recruitment gain

Nielsen, Jens Bo & Kagamihara, Y., 1993, I: Acta Physiologica Scandinavica. 147, s. 385-401 17 s.

H-reflexes are less depressed following muscle stretch in spastic spinal cord injured patients than in healthy subjects

Nielsen, Jens Bo, Petersen, Nicolas Caesar, Ballegaard, Martin, Biering-Sørensen, F. & Kiehn, O., 1993, I: Experimental Brain Research. 97, s. 173-176 4 s.

H-reflexes are smaller in dancers from the Royal Danish Ballet than in well-trained athletes

Nielsen, Jens Bo, Crone, C. & Hultborn, Hans, 1993, I: European Journal of Applied Physiology. 66, s. 116-121 6 s.

Task-related changes in the effect of magnetic brain stimulation on spinal neurones in man

Nielsen, Jens Bo, Petersen, Nicolas Caesar, Deuschl, G. & Ballegaard, M., 1993, I: Journal of Physiology. 471, s. 223-243 21 s.

The regulation of the presynaptic inhibition during co-contraction of antagonistic muscles in man

Nielsen, Jens Bo, 1993, I: Journal of Physiology. 464, s. 575-593 19 s.

Central facilitation of Ia inhibition during tonic dorsiflexion revealed after blockade of peripheral feedback

Nielsen, Jens Bo, Kagamihara, Y., Crone, C. & Hultborn, Hans, 1992, I: Experimental Brain Research. 88, s. 651-656 6 s.

Changes in motor cortex excitability preceding voluntary ramp-and-hold plantarflexion in man

Nielsen, Jens Bo & Petersen, Nicolas Caesar, 1992, I: Acta Physiologica Scandinavica. 146, s. 399-400 2 s.

The regulation of disynaptic reciprocal Ia inhibition during co-contraction of antagonistic muscles in man

Nielsen, Jens Bo & Kagamihara, Y., 1992, I: Journal of Physiology. 456, s. 373-391 19 s.

Pattern of cutaneous inhibition of the propriospinal-like excitation to human upper limb motoneurons

Nielsen, Jens Bo & Pierrot-Deseilligny, E., 1991, I: Journal of Physiology. 434, s. 35-45 11 s.

Sensitivity of monosynaptic test reflexes to facilitation and inhibition as a function of the test reflex size: a study in man and the cat

Crone, C., Hultborn, Hans, Mazieres, L., Morin, C., Nielsen, Jens Bo & Pierrot-Deseilligny, E., 1990, I: Experimental Brain Research. 81, s. 35-45 11 s.

Methodological implications of the post activation depression of the soleus H-reflex in man

Crone, C. & Nielsen, Jens Bo, 1989, I: Experimental Brain Research. 416, s. 28-32 5 s.

Spinal mechanisms in man contribution to reciprocal inhibition during voluntary dorsiflexion of the foot

Crone, C. & Nielsen, Jens Bo, 1989, I: Journal of Physiology. 416, s. 255-272 18 s.

Reciprocal Ia inhibition between ankle flexors and extensors in man

Crone, C., Hultborn, Hans, Jespersen, B. & Nielsen, Jens Bo, 1987, I: Journal of Physiology. 389, s. 163-185 18 s.