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## Short presentation

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.

## Employment

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Department of Neuroscience  
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19 Jul 2021 → 18 Jul 2021

## Publications

**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, In: *Frontiers in Neurology*. 15, 9 p., 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, In: *Sensors*. 23, 22, 13 p., 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, In: *Cerebral Cortex*. 33, 2, p. 258–277 20 p.

**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, In: Journal of Neurophysiology. 127, 4, p. 1147-1158 12 p.

**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, In: European Journal of Applied Physiology. 122, 6, p. 1459-1471 13 p.

**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, In: Frontiers in Physiology. 13, 3 p., 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, In: Ultrasound in Medicine and Biology. 48, 4, p. 694-701 8 p.

**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, In: 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, In: Experimental Brain Research. 240, p. 159-171 13 p.

**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, In: PLoS ONE. 16, 1, 14 p., 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., Liphthay Behrend, P. & Nielsen, Jens Bo, 2021, In: 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, In: World Journal of Neuroscience. 11, p. 34-47 14 p.

**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, In: Cell and Tissue Research. 384, p. 513-526 14 p.

**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, In: Frontiers in Bioengineering and Biotechnology. 9, 12 p., 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, In: NeuroRehabilitation. 48, 3, p. 273-283 11 p.

**Neuroplasticity at Home: Improving Home-Based Motor Learning Through Technological Solutions. A Review**

Forman, C. R., Nielsen, Jens Bo & Lorentzen, Jakob, 2021, In: *Frontiers in Rehabilitation Sciences*. 2, 7 p., 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, In: *Archives of rehabilitation research and clinical translation*. 3, 1, 19 p., 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, In: *Frontiers in Psychiatry*. 12, 11 p., 736676.

**Philanthropic funding in cerebral palsy research: translating new knowledge into improved quality of life**

Nielsen, Jens Bo & Sinkjær, T., 2021, In: *Developmental Medicine and Child Neurology*. 63, 2, p. 125 1 p.

**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, In: *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, In: *Journal of Sleep Medicine*. 18, 2, p. 106-116 11 p.

**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, In: *Journal of Neurophysiology*. 124, 3, p. 973-984 12 p.

**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, Geertsens, S. S., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2020, In: *NeuroImage*. 218, 11 p., 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, In: *Human Movement Science*. 69, 12 p., 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, In: *Journal of Neurophysiology*. 124, 3, p. 985-993 9 p.

**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, In: *Scientific Reports*. 10, 15 p., 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, In: *Experimental Brain Research*. 238, p. 1627-1636 10 p.

**The benefits of strength training in cerebral palsy**

Lorentzen, Jakob & Nielsen, Jens Bo, 2020, In: *Developmental Medicine and Child Neurology*. 62, 11, p. 1232 1 p.

**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, In: Cerebral Cortex Communications. 1, 1, 11 p., tga047.

**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, In: Physiological Reports. 8, 16, 12 p., 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, In: Developmental Medicine and Child Neurology. 62, 6, p. 714-722 9 p.

**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, In: Cellular Signalling. 53, p. 224-233 10 p.

**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, In: American Journal of Medical Genetics. Part B: Neuropsychiatric Genetics. 180, 1, p. 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, In: Infant Behavior and Development. 54, p. 133-139 7 p.

**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, In: European Journal of Applied Physiology. 119, 5, p. 1127-1136 10 p.

**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, In: Experimental Brain Research. 237, 6, p. 1457-1467 11 p.

**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, In: Neurobiology of Aging. 78, p. 29-41 13 p.

**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, In: Neural Plasticity. 2019, 8 p., 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, In: Brain. 142, 3, p. 526-541 16 p.

**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, In: Experimental Brain Research. 237, 11, p. 2897-2909 13 p.

**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, In: *Nutrients*. 11, 3, 16 p., 620.

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

Forman, C. R., Svane, Christian, Kruise, Christina Rostrup, Gracies, J., Nielsen, Jens Bo & Lorentzen, Jakob, 2019, In: *Brain Communications*. 1, 1, 13 p., 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, In: *European Journal of Inflammation*. 17, p. 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, In: *NeuroImage*. 191, p. 350-360 11 p.

**The neurophysiology of deforming spastic paresis: a revised taxonomy**

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

**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, In: *Journal of Motor Behavior*. 51, 6, p. 668-680 13 p.

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

Lorentzen, Jakob, Pradines, M., Gracies, J. & Nielsen, Jens Bo, Jan 2018, In: *Clinical Neurophysiology*. 129, 1, p. 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, In: *Journal of Biomechanics*. 73, p. 168-176 9 p.

**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, In: *Experimental Brain Research*. 236, 3, p. 745-753 9 p.

**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, In: *Journal of Biomechanics*. 72, p. 247-251 5 p.

**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, In: *Journal of Physiology*. 596, 11, p. 2159-2172 14 p.

**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, In: *Neural Plasticity*. 2018, 11 p., 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, In: *Developmental Medicine and Child Neurology*. 60, 7, p. 672-679 8 p.

**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, In: *Physiological Reports*. 6, 3, 11 p., 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, In: *Journal of Applied Physiology*. 125, 2, p. 536-544

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

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

**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, In: *Neural Plasticity*. 2018, 13 p., 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, In: *Brain Stimulation*. 11, 2, p. 346-357 12 p.

**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 Iadsatian, Nielsen, Jens Bo & Scott, S. H., 2018, In: *Experimental Brain Research*. 236, 3, p. 665-677 13 p.

**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, In: *Scientific Reports*. 7, 14746.

**Corticomuscular coherence in the acute and subacute phase after stroke**

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

**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, In: *B M C Neurology*. 17, 20 p., 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, In: *The Journal of Physiology*. 595, 8, p. 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, In: *P L o S One*. 12, 3, 13 p., e0173521.

**Acute exercise improves motor memory consolidation in preadolescent children**

Lundbye-Jensen, Jesper, Skriver, K. C., Nielsen, Jens Bo & Roig, M., 2017, In: *Frontiers in Human Neuroscience*. 11, 10 p., 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, In: *Journal of Neurophysiology*. 118, 6, p. 3165-3174 10 p.

**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, In: *Experimental Brain Research*. 235, 5, p. 1555-1564 10 p.

**Development and aging of human spinal cord circuitries**

Geertsen, S. S., Willerslev-Olsen, Maria, Lorentzen, J. & Nielsen, Jens Bo, 2017, In: *Journal of Neurophysiology*. 118, 2, p. 1133-1140 8 p.

**How plastic are human spinal cord motor circuitries?**

Christiansen, L., Lundbye-Jensen, Jesper, Perez, M. A. & Nielsen, Jens Bo, 2017, In: *Experimental Brain Research*. 235, 11, p. 3243-3249 7 p.

**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, In: *European Journal of Neuroscience*. 45, 12, p. 1490-1500 11 p.

**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, In: *European Journal of Neuroscience*. 45, 7, p. 964-974 11 p.

**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, In: *Journal of Neurophysiology*. 118, 4, p. 1962-1969 8 p.

**New perspectives on the development of muscle contractures following central motor lesions**

Pingel, Jessica, Bartels, E. M. & Nielsen, Jens Bo, 2017, In: *Journal of Physiology*. 595, 4, p. 1027-1038 12 p.

**Non-invasive assessment of changes in corticomotoneuronal transmission in humans**

Taube, W., Leukel, C., Nielsen, Jens Bo & Lundbye-Jensen, Jesper, 2017, In: *Journal of Visualized Experiments*. 123, 8 p., 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. (eds.). Cham, Switzerland: Springer, p. 1031-1036 6 p. (Biosystems and Biorobotics, Vol. 15).

**Supplementation of docosahexaenoic acid (DHA), vitamin D<sub>3</sub> 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, In: *BMC Nutrition*. 3, 12 p., 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, In: *Disability and Rehabilitation*. 39, 10, p. 987-993 7 p.

**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, In: *Research in Developmental Disabilities*. 53-54, p. 32-42 11 p.

### **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. (eds.). København: Hjerneforum, p. 198-209 12 p.

### **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. (eds.). København: Hjerneforum, p. 52-63 12 p.

### **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, In: *Journal of Neurophysiology*. 116, 6, p. 2615-2623 9 p.

### **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, In: *Physiological Reports*. 4, 2, 11 p., 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. (eds.). København, p. 177-183 7 p.

### **Det motoriske systems neuroanatomy**

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

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

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