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Forskningsprofil

Research field and research philosophy

The major goal is to identify and modulate key features of human pain neuroplasticity leading to prevention of maladaptive neuroplasticity and promote advantageous neuroplasticity, offering ways to manage chronic pain. A core research philosophy in TGN's work is that pain research by nature is multidisciplinary, hence interdisciplinary and intersectorial collaboration is a key concept, as is collaboration with excellent researchers and students.

Ansættelse

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Curtin University

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Adjunct Associate Professor

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Publikationer

Posterior-superior insula repetitive transcranial magnetic stimulation reduces experimental tonic pain and pain-related cortical inhibition in humans

Chowdhury, N., Millard, S. K., De Martino, E., Larsen, D. B., Seminowicz, D. A., Schabrun, S. M., de Andrade, D. C. & Graven-Nielsen, T., jun. 2025, I: Pain. 166, 6, s. 1314-1327 14 s., e03488.

Can quantitative sensory testing predict treatment outcomes in hip and knee osteoarthritis? A systematic review and meta-analysis of individual participant data

Murphy, M. C., Mosler, A. B., Rio, E. K., Coventry, M., Raj, I. S., Chivers, P. T., Arendt-Nielsen, L., Alfieri, F. M., Bjurström, M. F., Larsen, D. B., Chang, W.-J., Olesen, A. E., Hertel, E., Holm, P. M., Graven-Nielsen, T., de Paula Gomes, C. A. F., Henriksen, M., Klinedinst, N. J., Mathew, J. & Drewes, A. M. & 13 flere, Nunes, G. S., O'Leary, H., Østerås, H., Ozturk, O., Pozsgai, M., Rampazo, É. P., Rasmussen, S., Rice, D., Sánchez-Romero, E. A., Irani, A., Stausholm, M. B., Hince, D. & Petersen, K.K.-S., 29 apr. 2025, (E-pub ahead of print) I: Pain. e03627.

Brain Oscillations Evoked by Deep Transcranial Magnetic Stimulation: Targeting the Anterior Cingulate and Posterior Insular Cortices

Nascimento Couto, B. A., De Martino, E., Jakobsen, A., Bach, M. M., Ingemann-Molden, S., Casali, A. G., Graven-Nielsen, T. & de Andrade, D. C., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle*. s. 72-73

Dynamics of Electroencephalographic Peak Alpha Frequency in Capsaicin-Induced Pain and Resolution

Millard, S. K., Mazhari-Jensen, D. S., Alhajri, N. & Graven-Nielsen, T., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle*. s. 404

Effect of Transauricular Vagal Nerve Stimulation on pain and Cardioception in Healthy Individuals

De Herde, L. M. R., Frahm, K. S., Graff, C., Nielsen, T. G. N. D. S., Graven-Nielsen, T., Siebner, H. & de Andrade, D. C., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle*. s. 447

Extra Motor Cortical Excitability and Connectivity Metrics by Transcranial Magnetic Stimulation Coupled to Electroencephalography in Acute Pain

Bach, M. M., De Martino, E., Nascimento Couto, B. A., Jakobsen, A., Ingemann-Molden, S., Graven-Nielsen, T. & de Andrade, D. C., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle*. s. 358

Investigating Different Neural Responses During Experimental Acute Pain and Itch Using Transcranial Magnetic Stimulation Combined with Electroencephalography

Giannotta, A., Nascimento Couto, B. A., Lo Vecchio, S., Rossi, S., Arendt-Nielsen, L., de Andrade, D. C., Graven-Nielsen, T. & De Martino, E., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle*. s. 341

Pain Catastrophizing Attenuates Endogenous Pain Inhibition by Reward

Desch, S., Petrini, L., Graven-Nielsen, T. & Becker, S., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle.* s. 256

Reduced Natural Frequency in Fibromyalgia Patients - Assessed by Electroencephalographic Responses to Transcranial Magnetic Stimulation: Targeting the Anterior Cingulate and Posterior Insular Cortices

Jakobsen, A., De Martino, E., Nascimento Couto, B. A., Bach, M. M., Ingemann-Molden, S., Casali, A. G., Palsson, T., Graven-Nielsen, T. & de Andrade, D. C., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle.* s. 204

Resilience or Vulnerability to Pain in Climbers: A Survey Exploring the Relationships Between Psychological Flexibility, Psychological Inflexibility, and Pain Catastrophizing

Millard, S. K., Petrini, L. & Graven-Nielsen, T., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle.* s. 298

The Effect of High-Frequency Stimulation on C-Fiber Responses Elicited by Sustained Periodic Thermonociceptive Stimulation

M. Zolezzi, D., Leu, C., Graven-Nielsen, T. & Liberati, G., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle.* s. 155-156

Transcranial Magnetic Stimulation with EEG-Based Connectivity to Identify Responders to RTMS Treatments: A Feasibility Pilot Study

De Martino, E., Nascimento Couto, B. A., Jakobsen, A., Casali, A. G., Bonde-Henriksen, P. D., Graven-Nielsen, T. & de Andrade, D. C., apr. 2025, *Abstract Book 14th Congress of The European Pain Federation EFIC : Comorbidity of Chronic Pain and Mental Health Disorders: Breaking the Cycle.* s. 444-445

Pretreatment TMS-EEG connectivity assessment as a potential predictor of rTMS effectiveness in chronic pain: a feasibility pilot study

Martino, E. D., Nascimento Couto, B. A., Jakobsen, A., Casali, A. G., Bonde-HenrikSEN, P. D., Graven-Nielsen, T. & de Andrade, D. C., 10 mar. 2025, (E-pub ahead of print) I: Clinical Neurophysiology.

High-frequency electrical stimulation increases cortical excitability and mechanical sensitivity in a chronic large animal model

Meijs, S., Andreis, F. R., Janjua, T. A. M., Graven-Nielsen, T. & Jensen, W., feb. 2025, I: Pain. 166, 2, s. e18-e26

A pain research strategy for Europe: A European survey and position paper of the European Pain Federation EFIC

Pickering, G., O'Keeffe, M., Bannister, K., Becker, S., Cottom, S., Cox, F. J., Eisenberg, E., Finn, D. P., Forget, P., Graven-Nielsen, T., Kalso, E., Kocot-Kepska, M., Leite-Almeida, H., Lopez-Garcia, J. A., Meeus, M., Mouraux, A., Pereira, B., Puljak, L., Reneman, M. F. & Rohde, I. & 9 flere, Sotiropoulos, I., Skidmore, N., Tölle, T. R., Todorovic, S. T., Truini, A., Vowles, K. E., Pogatzki-Zahn, E., Garcia-Larrea, L. & Fullen, B. M., jan. 2025, I: European Journal of Pain. 29, 1, e4767.

Increase in beta frequency phase synchronization and power after a session of high frequency repetitive transcranial magnetic stimulation to the primary motor cortex

De Martino, E., Casali, A. G., Nascimento Couto, B. A., Graven-Nielsen, T. & Ciampi de Andrade, D., jan. 2025, I: Neurotherapeutics. 22, 1, e00497.

ENIGMA-Chronic Pain: a worldwide initiative to identify brain correlates of chronic pain

Quidé, Y., Jahanshad, N., Andoh, J., Antoniou, G., Apkarian, A. V., Ashar, Y. K., Badran, B. W., Baird, C. L., Baxter, L., Bell, T. R., Blanco-Hinojo, L., Borckardt, J., Cheung, C. L., Ciampi de Andrade, D., Couto, B. A., Cox, S. R., Cruz-Almeida, Y., Dannlowski, U., De Martino, E. & de Tommaso, M. & 64 flere, Deus, J., Domin, M., Egorova-Brumley, N., Elliott, J., Fanton, S., Fauchon, C., Flor, H., Franz, C. E., Gatt, J. M., Gerdhem, P., Gilman, J. M., Gollub, R. L., Govind, V., Graven-Nielsen, T., Häkansson, G., Hales, T., Haswell, C., Heukamp, N. J., Hu, L., Huang, L., Hussain, A., Jensen, K., Kircher, T., Kremen, W. S., Leehr, E. J., Lindquist, M., Loggia, M. L., Lotze, M., Martucci, K. T., Meeker, T. J., Meinert, S., Millard, S. K., Morey, R. A., Murillo, C., Nees, F., Nenadic, I., Park, H. R. P., Peng, X., Ploner, M., Pujol, J., Robayo, L. E., Salan, T., Seminowicz, D. A., Serian, A., Slater, R., Stein, F., Stevens, J., Strauss, S., Sun, D., Vachon-Presseau, E., Valdes-Hernandez, P. A., Vanneste, S., Vernon, M., Verriots, M., Wager, T. D., Widerstrom-Noga, E., Woodbury, A., Zeidan, F., Bhatt, R. R., Ching, C. R. K., Haddad, E., Thomopoulos, S. I., Thompson, P. M. & Gustin, S. M., 1 dec. 2024, I: Pain. 165,

12, s. 2662-2666 5 s.

Transcranial Direct Current Stimulation Reduces Pressure Pain Sensitivity in Patients With Noncancer Chronic Pain
Zolezzi, D. M., Kold, S., Brock, C., Jensen, A. B. H., Jensen, S. T., Larsen, I. M., Olesen, S. S., Mørch, C. D., Drewes, A. M. & Graven-Nielsen, T., nov. 2024, I: The Clinical Journal of Pain. 40, 11, s. 625-634 10 s.

Practical video demonstration of the technique to identify the posterior superior insula orthogonal scalp projection without neuronavigation: the Fast-PSI
da Cunha, P. H. M., Tanaka, H., Lapa, J. D. D. S., Dongyang, L., Fernandes, A. M., Júnior, A. A. B. S., Pereira, T. M. R., Soares, F. H. C., Kubota, G. T., Da Silva, V. A., Graven-Nielsen, T., Teixeira, M. J. & De Andrade, D. C., 3 sep. 2024, I: Brain Imaging and Stimulation. 3, e5640.

Impact of Chronic Pain on Use-Dependent Plasticity: Corticomotor Excitability and Motor Representation in Musicians With and Without Pain
Zamorano, A. M., De Martino, E., Insausti-Delgado, A., Vuust, P., Flor, H. & Graven-Nielsen, T., sep. 2024, I: Brain Topography. 37, 5, s. 874-880 7 s.

Facilitation of Early and Middle Latency SEP after tDCS of M1: No Evidence of Primary Somatosensory Homeostatic Plasticity
Zolezzi, D. M., Larsen, D. B., Zamorano, A. M. & Graven-Nielsen, T., 23 jul. 2024, I: Neuroscience. 551, s. 143-152 10 s.

Cross-sectional experimental assessment of pain modulation as part of multidimensional profiling of people with cervicogenic headache: protocol for a feasibility study
Mingels, S., Granitzer, M., Schmid, A., Graven-Nielsen, T. & Dankaerts, W., 18 jun. 2024, I: BMJ Open. 14, 6, s. e074743 e074743.

Peak alpha frequency is not significantly altered by five days of experimental pain and repetitive transcranial stimulation of the left dorsolateral prefrontal cortex
Millard, S. K., Chiang, A. K. I., Chowdhury, N., Chang, W.-J., Furman, A. J., Martino, E. D., Graven-Nielsen, T., Schabrun, S. M. & Seminowicz, D. A., 14 jun. 2024, bioRxiv.

Posterior-superior insula repetitive transcranial magnetic stimulation reduces experimental tonic pain and pain-related cortical inhibition in humans
Chowdhury, N., Millard, S. K., De Martino, E., Larsen, D. B., Seminowicz, D. A., Schabrun, S. M., de Andrade, D. C. & Graven-Nielsen, T., 15 maj 2024, bioRxiv, 31 s.

Evoked oscillatory cortical activity during acute pain: Probing brain in pain by transcranial magnetic stimulation combined with electroencephalogram
De Martino, E., Casali, A., Casarotto, S., Hassan, G., Nascimento Couto, B. A., Rosanova, M., Graven-Nielsen, T. & de Andrade, D. C., 15 apr. 2024, I: Human Brain Mapping. 45, 6, e26679.

Effects of pain on cortical homeostatic plasticity in humans: a systematic review
Zolezzi, D. M., Larsen, D. B., McPhee, M. & Graven-Nielsen, T., 4 apr. 2024, I: Pain Reports. 9, 2, s. E1141 e1141.

Evoked oscillatory cortical activity during acute pain: Probing brain in pain by transcranial magnetic stimulation combined with electroencephalogram
De Martino, E., Casali, A., Casarotto, S., Hassan, G., Nascimento Couto, B. A., Rosanova, M., Graven-Nielsen, T. & de Andrade, D. C., 23 jan. 2024, medRxiv, 31 s.

Pain history and experimental pressure pain responses in adolescents: Results from a population-based birth cohort
Brandão, M., Talih, M., Holden, S., Fernandes, F., Graven-Nielsen, T. & Lucas, R., jan. 2024, I: European Journal of Pain. 28, 1, s. 70-82 13 s.

Age and Sex Effects on Cuff Pressure Pain Sensitivity in a Large Cohort: The Tromsø Study (Tromsø7)
Graven-Nielsen, T., Christensen, M. E. M., Nielsen, C., Petersen, K.K.-S., Larsen, D. B., Arendt-Nielsen, L., Stubhaug, A. & Steingrimsdóttir, Ó., 2024.

The Understanding persistent Pain Where it ResiDes study of low back pain cohort profile

Jenkins, L. C., Chang, W.-J., Buscemi, V., Liston, M., Nicholas, M., Graven-Nielsen, T., Hodges, P. W., Wasinger, V. C., Stone, L. S., Dorsey, S. G., McAuley, J. H. & Schabrun, S. M., 28 nov. 2023, I: New Zealand Journal of Physiotherapy. 51 , 3, s. 199-216

Disrupted Cortical Homeostatic Plasticity Due to Prolonged Capsaicin-induced Pain

Geraldine Wittkopf, P., Boye Larsen, D., Gregoret, L. & Graven-Nielsen, T., 21 nov. 2023, I: Neuroscience. 533, s. 1-9 9 s.

Exploring the pain and disability continuum in adolescents with non-traumatic anterior knee pain: a mediation analysis using individual participant data of prospective studies

Holden, S., Lee, H., van Middelkoop, M., Rathleff, M. S., Adolescent knee health group, Roos, E. M. (Medlem af forfattergruppering), Olesen, J. L. (Medlem af forfattergruppering), Graven-Nielsen, T. (Medlem af forfattergruppering), Arendt-Nielsen, L. (Medlem af forfattergruppering), Hölmich, P. (Medlem af forfattergruppering), Thorborg, K. (Medlem af forfattergruppering), Rasmussen, S. (Medlem af forfattergruppering), Madeleine, P. (Medlem af forfattergruppering) & Selhorst, M. (Medlem af forfattergruppering), nov. 2023, I: British Journal of Sports Medicine. 57, 21, s. 1388-1394 7 s., 107177.

Pain in Parkinson disease: mechanistic substrates, main classification systems, and how to make sense out of them

de Andrade, D. C., Mylius, V., Perez Lloret, S., Cury, R. G., Bannister, K., Moisset, X., Kubota, G. T., Finnerup, N. B., Bouhassira, D., Chaudhuri, K. R., Graven-Nielsen, T. & Treede, R.-D., nov. 2023, I: Pain. 164, 11, s. 2425-2434 10 s.

Why Europe needs a pain research strategy

Pickering, G., O'Keeffe, M., Bannister, K., Becker, S., Cottom, S., Cox, F. J., Eisenberg, E., Finn, D. P., Graven-Nielsen, T., Meeus, M., Mouraux, A., Tölle, T., Garcia-Larrea, L. & Fullen, B. M., nov. 2023, I: European Journal of Pain. 27, 10, s. 1147-1149 3 s.

Effects of conditioned pain modulation on Capsaicin-induced spreading muscle hyperalgesia in humans

Schliessbach, J., Siegenthaler, A., Graven-Nielsen, T., Arendt-Nielsen, L. & Curatolo, M., 26 okt. 2023, I: Scandinavian Journal of Pain. 23, 4, s. 735-742

Acute pain drives different effects on local and global cortical excitability in motor and prefrontal areas: insights into interregional and interpersonal differences in pain processing

De Martino, E., Casali, A., Casarotto, S., Hassan, G., Rosanova, M., Graven-Nielsen, T. & Ciampi de Andrade, D., 15 sep. 2023, I: Cerebral Cortex. 33, 18, s. 9986-9996 11 s.

Decreased cortical excitability in the frontal cortical areas during experimental pain: a tms-eeg study

Martino, E., Casali, A., Casarotto, S., Hassan, G., Rosanova, M., Graven-Nielsen, T. & de Andrade, D. C., sep. 2023.

Decreased effective cortical connectivity during acute experimental pain: a transcranial magnetic stimulation combined with electroencephalography study

Martino, E., Casali, A., Casarotto, S., Hassan, G., Rosanova, M., Graven-Nielsen, T. & de Andrade, D. C., sep. 2023.

Electroencephalography during repetitive transcranial magnetic stimulation could be a key to personalized treatment: a methodological inspection in the frequency domain

Mahmoodi Omandani, M., Martino, E., Graven-Nielsen, T. & de Andrade, D. C., sep. 2023.

Facilitated Central Pain Mechanisms Across the Menstrual Cycle in Dysmenorrhea and Enlarged Pain Distribution in Women with Longer Pain History

Fortún-Rabadán, R., Boudreau, S. A., Bellostá-López, P., Herrero, P., Graven-Nielsen, T. & Doménech-García, V., sep. 2023, I: The Journal of Pain. 24, 9, s. 1541-1554 14 s.

Homeostatic plasticity of the nociceptive system after priming the motor cortex: a pilot study

M. Zolezzi, D., Larsen, D. B. & Graven-Nielsen, T., sep. 2023.

Influence of prolonged pain on corticomotor excitability and motor maps: insights from use-dependent plasticity
Zamorano, A. M., Martino, E., Insausti-Delgado, A., Kleber, B., Vuust, P., Flor, H. & Graven-Nielsen, T., sep. 2023.

Pain-free default mode network connectivity contributes to tonic experimental pain intensity beyond the role of negative mood and other pain-related factors

Alhajri, N., Boudreau, S. A., Mouraux, A. & Graven-Nielsen, T., sep. 2023, I: European Journal of Pain. 27, 8, s. 995-1005 11 s.

Level of pain catastrophising determines if patients with long-standing subacromial impingement benefit from more resistance exercise: predefined secondary analyses from a pragmatic randomised controlled trial (the SExSI Trial)

Clausen, M. B., Rathleff, M. S., Graven-Nielsen, T., Bandholm, T., Christensen, K. B., Hölmich, P. & Thorborg, K., jul. 2023, I: British Journal of Sports Medicine. 57, 13, s. 842-848 7 s., bjsports-2022-106383.

Pain-related cognitions and emotional distress are not associated with conditioned pain modulation: an explorative analysis of 1142 participants with acute, subacute, and chronic pain

Plinsinga, M. L., Vuvan, V., MacLachlan, L., Klyne, D., Graven-Nielsen, T., Vicenzino, B., Hodges, P. & Bjarke Vaegter, H., jul. 2023, I: Pain. 164, 7, s. 1593-1599 7 s.

Prolonged slumped sitting causes neck pain and increased axioscapular muscle activity during a computer task in healthy participants - A randomized crossover study

Christensen, S. W. M., Palsson, T. S., Krebs, H. J., Graven-Nielsen, T. & Hirata, R. P., jul. 2023, I: Applied Ergonomics. 110, 104020.

Burst Transspinal Magnetic Stimulation Alleviates Nociceptive Pain in Parkinson Disease-A Pilot Phase II Double-Blind, Randomized Study

Lapa, J. D. D. S., da Cunha, P. H. M., Teixeira, M. J., Brito Medeiros, V. M., Fernandes, A. M., Silva de Moraes, A. D., Graven-Nielsen, T., Cury, R. G. & Ciampi de Andrade, D., jun. 2023, I: Neuromodulation: Technology at the Neural Interface. 26, 4, s. 840-849 10 s.

Extensive Sensorimotor Training Predetermines Central Pain Changes During the Development of Prolonged Muscle Pain

Zamorano, A. M., Kleber, B., Arguissain, F., Boudreau, S., Vuust, P., Flor, H. & Graven-Nielsen, T., jun. 2023, I: The Journal of Pain. 24, 6, s. 1039-1055 17 s.

Decreased Default Mode Network Connectivity Following 24 Hours of Capsaicin-induced Pain Persists During Immediate Pain Relief and Facilitation

Alhajri, N., Boudreau, S. A. & Graven-Nielsen, T., maj 2023, I: The Journal of Pain. 24, 5, s. 796-811 16 s.

Kroniske smørter: Skal svaret findes i hjernen?

de Andrade, D. C. & Graven-Nielsen, T., 17 mar. 2023

A novel computational approach to pain perception modelling within a Bayesian framework using quantitative sensory testing

Drusko, A., Baumeister, D., McPhee Christensen, M., Kold, S., Fisher, V. L., Treede, R.-D., Powers, A., Graven-Nielsen, T. & Tesarz, J., 23 feb. 2023, I: Scientific Reports. 13, 1, 3196.

Extensive sensorimotor training enhances nociceptive cortical responses in healthy individuals

Zamorano, A. M., Kleber, B., Arguissain, F., Vuust, P., Flor, H. & Graven-Nielsen, T., feb. 2023, I: European Journal of Pain. 27, 2, s. 257-277 21 s.

Modulation of central pain mechanisms using high definition transcranial direct current stimulation: A double-blind, sham-controlled study

Kold, S. & Graven-Nielsen, T., feb. 2023, I: European Journal of Pain. 27, 2, s. 303-315 13 s.

Multifocal tDCS targeting the motor network modulates event-related cortical responses during prolonged pain
Gregoret, L., Zamorano, A. M. & Graven-Nielsen, T., feb. 2023, I: The Journal of Pain. 24, 2, s. 226-236 11 s.

Der findes ingen simple forklaringer på kroniske smertetilstande

Bruun, K. D., Hartvigsen, J., Blichfeldt-Eckhardt, M. R., Graven-Nielsen, T. & Vægter, H. B., 9 jan. 2023, I: Ugeskrift for Laeger. 185, 1, s. 83 1 s.

Cortical function and sensorimotor plasticity are prognostic factors associated with future low back pain after an acute episode: the Understanding persistent Pain Where it Resides prospective cohort study

Jenkins, L. C., Chang, W.-J., Buscemi, V., Liston, M., Homburg, P., Nicholas, M., Graven-Nielsen, T., Hodges, P. W., McAuley, J. H. & Schabrun, S. M., 1 jan. 2023, I: Pain. 164, 1, s. 14-26 13 s.

Effect of prolonged experimental neck pain on exercise-induced hypoalgesia

Christensen, S. W. M., Cancino, E. E., Simonsen, M. B., de Brito Silva, P., Sørensen, L. B., Graven-Nielsen, T. & Hirata, R. P., 1 dec. 2022, I: Pain. 163, 12, s. 2411-2420 10 s.

Mechanisms and manifestations in musculoskeletal pain: from experimental to clinical pain settings

Graven-Nielsen, T., 1 nov. 2022, I: Pain. 163, Suppl 1, s. S29-S45 17 s.

Chronic Postoperative Pain after Total Knee Arthroplasty: The Potential Contributions of Synovitis, Pain Sensitization, and Pain Catastrophizing – An Explorative Study

Kurien, T., Kerslake, R. W., Graven-Nielsen, T., Arendt-Nielsen, L., Auer, D. P., Edwards, K., Scammell, B. E. & Petersen, K.K.-S., okt. 2022, I: European Journal of Pain. 26, 9, s. 1979-1989 11 s.

Homeostatic plasticity in healthy participants: A systematic review and meta-analysis

Larsen, D. B., Wittkopf, P. G. & Graven-Nielsen, T., 23 sep. 2022.

Homeostatic plasticity in the somatosensory cortex after stimulating M1? - A pilot study

M. Zolezzi, D., Larsen, D. B. & Graven-Nielsen, T., 20 sep. 2022.

Features and methods to discriminate between mechanism-based categories of pain experienced in the musculoskeletal system: a Delphi expert consensus study

Shraim, M. A., Sluka, K. A., Sterling, M., Arendt-Nielsen, L., Argoff, C., Bagraith, K. S., Baron, R., Brisby, H., Carr, D. B., Chimenti, R. L., Courtney, C. A., Curatolo, M., Darnall, B. D., Ford, J. J., Graven-Nielsen, T., Kolski, M. C., Kosek, E., Liebano, R. E., Merkle, S. L. & Parker, R. & 9 flere, Reis, F. J. J., Smart, K., Smeets, R. J. E. M., Svensson, P., Thompson, B. L., Treede, R.-D., Ushida, T., Williamson, O. D. & Hodges, P. W., 1 sep. 2022, I: Pain. 163, 9, s. 1812-1828 17 s.

The fast-posterior superior insula (Fast-PSI): A neuronavigation-free targeting method for noninvasive neuromodulation

da Cunha, P. H. M., Tanaka, H., Lapa, J. D. D. S., Dongyang, L., Alves Boa Sorte Júnior, A., Pereira, T. M. R., Soares, F. H. C., Fernandes, A. M., Da Silva, V. A., Graven-Nielsen, T., Texeira, M. J. & de Andrade, D. C., 1 sep. 2022, I: Brain Stimulation. 15, 5, s. 1178-1180 3 s.

Difference in postural stability between STarT Back Tool subgroups of patients with low back pain under conditions of sensory deprivation and cognitive load

Ingemann-Molden, S., Pessoto Hirata, R., Bach Jensen, M., Graven-Nielsen, T. & Riis, A., jul. 2022, I: The Journal of International Medical Research. 50, 7, 11 s.

Modulation Of Experimental Prolonged Pain and Sensitization Using High-Definition Transcranial Direct Current Stimulation: a double-blind, sham-controlled study

Kold, S. & Graven-Nielsen, T., jul. 2022, I: The Journal of Pain. 23, 7, s. 1220-1233 14 s.

New updates on transcranial magnetic stimulation in chronic pain

Fernandes, A. M., Graven-Nielsen, T. & de Andrade, D. C., jun. 2022, I: Current Opinion in Supportive and Palliative Care. 16, 2, s. 65-70 6 s.

Positive affect and distraction enhance whereas negative affect impairs pain modulation in patients with recurrent low back pain and matched controls

McPhee, M. E. & Graven-Nielsen, T., maj 2022, I: Pain. 163, 5, s. 887-896 10 s.

Pain tolerance in chronic pain patients seems to be more associated with physical activity than with depression and anxiety

Skogberg, O., Karlsson, L., Börsbo, B., Arendt-Nielsen, L., Graven-Nielsen, T., Gerdle, B., Bäckryd, E. & Lemming, D., 29 apr. 2022, I: Journal of Rehabilitation Medicine. 54, 9 s., jrm00286.

Non-invasive insular stimulation for peripheral neuropathic pain: influence of target or symptom?

da Cunha, P. H. M., Dongyang, L., Fernandes, A. M., Tibes, R., Sato, J., Tanaka, H., Dale, C., Lapa, J. D. D. S., Morais, A. D. S. D., Soares, F. H. C., Da Silva, V. A., Graven-Nielsen, T., Teixeira, M. J. & de Andrade, D. C., apr. 2022, I: Neurophysiologie Clinique. 52, 2, s. 109-116 8 s.

Prolonged experimental neck pain impair efficacy of exercise-induced hypoalgesia in healthy participants

Christensen, S. W. M., Cancino, E. L. E., Simonsen, M. B., Silva, P., Sørensen, L. B., Graven-Nielsen, T. & Hirata, R. P., apr. 2022.

Role of population-based cohorts in understanding the emergence and progression of musculoskeletal pain

Waller, R., Smith, A. J., Graven-Nielsen, T., Arendt-Nielsen, L., Sterling, M., Karppinen, J. I., O'Sullivan, P. B., Straker, L. M. & Slater, H., 1 jan. 2022, I: Pain. 163, 1, s. 58-63 6 s.

Angular gyrus connectivity at alpha and beta oscillations is reduced during tonic pain - Differential effect of eye state

Alhajri, N., Boudreau, S. A. & Graven-Nielsen, T., jan. 2022, I: NeuroImage: Clinical. 33, 102907.

Slowing in peak-alpha frequency recorded after experimentally-induced muscle pain is not significantly different between high and low pain-sensitive subjects

De Martino, E., Gregoret, L., Zandalasini, M. & Graven-Nielsen, T., dec. 2021, I: The Journal of Pain. 22, 12, s. 1722-1732 11 s.

Pain referral area is reduced by remote pain

Palsson, T. S., Doménech-García, V., Boudreau, S. S. & Graven-Nielsen, T., sep. 2021, I: European Journal of Pain. 25, 8 , s. 1804-1814 11 s.

Medial Prefrontal High-Definition Transcranial Direct Current Stimulation to Improve Pain Modulation in Chronic Low Back Pain: A Pilot Randomized Double-blinded Placebo-Controlled Crossover Trial

McPhee, M. E. & Graven-Nielsen, T., aug. 2021, I: Journal of Pain. 22, 8, s. 952-967 16 s.

Protocols for inducing homeostatic plasticity reflected in the corticospinal excitability in healthy human participants: a systematic review and meta-analysis

Wittkopf, P. G., Larsen, D. B. & Graven-Nielsen, T., aug. 2021, I: European Journal of Neuroscience. 54, 4, s. 5444-5461 18 s.

Introducing descending control of nociception: a measure of diffuse noxious inhibitory controls in conscious animals

Bannister, K., Kucharczyk, M. W., Graven-Nielsen, T. & Porreca, F., 1 jul. 2021, I: Pain. 162, 7, s. 1957-1959 3 s.

Effects of multifocal transcranial direct current stimulation targeting the motor network during prolonged experimental pain

Gregoret, L., Zamorano, A. M. & Graven-Nielsen, T., jul. 2021, I: European Journal of Pain. 25, 6, s. 1241-1253 13 s.

Experimental hand and knee pain cause differential effects on corticomotor excitability

Rice, D. A., Lewis, G. N., Graven-Nielsen, T., Luther, R. & McNair, P. J., jul. 2021, I: The Journal of Pain. 22, 7, s. 789-796 8 s.

Effect of anodal high-definition transcranial direct current stimulation on the pain sensitivity in a healthy population: a double-blind, sham-controlled study

Kold, S. & Graven-Nielsen, T., 1 jun. 2021, I: Pain. 162, 6, s. 1659-1668 10 s.

Prognostic factors for adolescent knee pain: an individual participant data meta-analysis of 1281 patients

Holden, S., Kasza, J., Winters, M., van Middelkoop, M., Rathleff, M. S., Adolescent knee health group, Roos, E. M. (Medlem af forfattergruppering), Olesen, J. L. (Medlem af forfattergruppering), Graven-Nielsen, T. (Medlem af forfattergruppering), Arendt-Nielsen, L. (Medlem af forfattergruppering), Hölmich, P. (Medlem af forfattergruppering), Thorborg, K. (Medlem af forfattergruppering), Rasmussen, S. (Medlem af forfattergruppering), Madeleine, P. M. (Medlem af forfattergruppering), Wedderkopp, N. (Medlem af forfattergruppering) & Selhorst, M. (Medlem af forfattergruppering), 1 jun. 2021, I: Pain. 162, 6, s. 1597-1607 11 s.

Cortical Connectivity of the Default Mode Network at Alpha Oscillations Was Reduced During Tonic Pain

Alhajri, N., Boudreau, S. & Graven-Nielsen, T., jun. 2021.

Dorsolateral prefrontal cortex continuous TBS as effective as 10Hz rTMS

Martino, E. D., Fernandes, A. M., Galhardoni, R., De Oliveira Souza, C., Andrade, D. C. A. D. & Graven-Nielsen, T., jun. 2021.

Enhanced nociceptive-evoked responses indicate metaplasticity in healthy musicians

Zamorano, A. M., Arguissain, F., Kleber, B., Vuust, P., Flor, H. & Graven-Nielsen, T., jun. 2021.

Experimental Pain mimics Sensory but not Affective Aspects of Low Back Pain

McPhee, M. & Graven-Nielsen, T., jun. 2021.

Modulation of the Somatosensory and Pain Systems using High Definition Transcranial Direct Current Stimulation

Sørensen, S. K. & Graven-Nielsen, T., jun. 2021.

Neurophysiological, psychological and symptom-related factors predict low back pain outcome

Jenkins, L. C., Chang, W.-J., Buscemi, V., Liston, M., Humburg, P., Nicholas, M., Graven-Nielsen, T., Hodges, P., McAuley, J. H. & Schabrun, S. M., jun. 2021.

Positive affect and distraction improve, while negative affect impairs pain modulatory mechanisms in recurrent low back pain patients and controls

McPhee, M. & Graven-Nielsen, T., jun. 2021.

Suppression of Corticomotor Excitability During the Transition Towards Persistent Muscle Hand Pain

Zamorano, A. M., Arguissain, F., Kleber, B., Vuust, P., Flor, H. & Graven-Nielsen, T., jun. 2021.

The Effect of Capsaicin-induced Pain on Homeostatic Plasticity

Wittkopf, P., Larsen, D. B., Gregoret, L. & Graven-Nielsen, T., jun. 2021.

Prognosis and transition of multi-site pain during the course of 5 years: Results of knee pain and function from a prospective cohort study among 756 adolescents

Holden, S., Roos, E. M., Straszek, C. L., Olesen, J. L., Jensen, M. B., Graven-Nielsen, T. & Rathleff, M. S., 21 maj 2021, I: PLOS ONE. 16, 5, e0250415.

Effects of Conditioned Pain Modulation on Spread of Hyperalgesia after Intramuscular Capsaicin in Humans

Curatolo, M., Siegenthaler, A., Graven-Nielsen, T., Arendt-Nielsen, L. & Schliessbach, J., maj 2021, I: The Journal of Pain. 22, 5, s. 582

Impaired Exercise-induced Hypoalgesia in Individuals Reporting an Increase in Low Back Pain During Acute Exercise

Vægter, H., Petersen, K. K., Sjodholm, L., Schou, P., Andersen, M. B. & Graven-Nielsen, T., maj 2021, I: European Journal of Pain. 25, 5, s. 1053-1063 11 s.

Pain and Disability in Low Back Pain can be Reduced Despite No Significant Improvements in Mechanistic Pain Biomarkers

Palsson, T. S., Christensen, S. W. M., De Martino, E. & Graven-Nielsen, T., maj 2021, I: The Clinical Journal of Pain. 37, 5 , s. 330-338 9 s.

Aberrant plasticity in musculoskeletal pain: a failure of homeostatic control?

Thapa, T., Graven-Nielsen, T. & Schabrun, S. M., apr. 2021, I: Experimental Brain Research. 239, 4, s. 1317-1326 10 s.

Challenges and opportunities in translational pain research - An opinion paper of the working group on translational pain research of the European pain federation (EFIC)

Mouraux, A., Bannister, K., Becker, S., Finn, D. P., Pickering, G., Pogatzki-Zahn, E. & Graven-Nielsen, T., apr. 2021, I: European Journal of Pain. 25, 4, s. 731-756 26 s.

Prolonged Corticomotor Homeostatic Plasticity - Effects Of Different Protocols And Their Reliability

Wittkopf, P. G., Larsen, D. B., Gregoret, L. & Graven-Nielsen, T., 1 mar. 2021, I: Brain Stimulation. 14, 2, s. 327-329 3 s.

Medial Prefrontal Transcranial Direct Current Stimulation Aimed to Improve Affective and Attentional Modulation of Pain in Chronic Low Back Pain Patients

McPhee, M. E. & Graven-Nielsen, T., 22 feb. 2021, I: Journal of Clinical Medicine . 10, 4, s. 1-17 17 s., 889.

Repeated injections of low-dose nerve growth factor (NGF) in healthy humans maintain muscle pain and facilitate ischemic-contraction evoked pain

Sørensen, L. B., Gazerani, P., Sluka, K. A. & Graven-Nielsen, T., dec. 2020, I: Pain Medicine. 21, 12, s. 3488-3498

Healthy Pain-Free Individuals with a History of Distal Radius Fracture Demonstrate an Expanded Distribution of Experimental Referred Pain Toward the Wrist

Doménech-García, V., Palsson, T. S., Boudreau, S. A., Bellota-López, P., Herrero, P. & Graven-Nielsen, T., nov. 2020, I: Pain Medicine. 21, 11, s. 2850-2862

Pain Catastrophizing, Self-Reported Disability and Temporal Summation of Pain Predict Self-reported Pain in Low Back Pain Patients 12 Weeks after General Practitioner Consultation: A Prospective Cohort Study

Petersen, K. K., Jensen, M. B., Graven-Nielsen, T., Hauerslev, L. V., Arendt-Nielsen, L. & Rathleff, M. S., 1 okt. 2020, I: The Clinical Journal of Pain. 36, 10, s. 757-763 7 s.

Multisensory sensitivity is related to deep-tissue but not cutaneous pain sensitivity in healthy individuals

Wang, D., Merkle, S. L., Lee, J. E., Sluka, K. A., Rakel, B., Graven-Nielsen, T. & Frey-Law, L. A., okt. 2020, I: Journal of Pain Research. 13, s. 2493-2508 16 s.

Activation of the descending pain modulatory system using cuff pressure algometry: Back translation from man to rat

Cummins, T., Kucharczyk, M., Graven-Nielsen, T. & Bannister, K., aug. 2020, I: European Journal of Pain. 24, 7, s. 1330-1338 9 s.

Individualized augmented reality training reduces phantom pain and cortical reorganization in amputees: A proof of concept study

Thøgersen, M., Andoh, J., Milde, C., Graven-Nielsen, T., Flor, H. & Petrini, L., 24 jun. 2020, I: Journal of Pain. 21, 11-12, s. 1257-1269 13 s.

Stimulus predictability moderates the withdrawal strategy in response to repetitive noxious stimulation in humans

Jure, F. A., Arguissain, F. G., Biurrun Manresa, J. A., Graven-Nielsen, T. & Kæseler Andersen, O., 1 jun. 2020, I: Journal of Neurophysiology. 123, 6, s. 2201-2208 8 s.

Brain perfusion patterns are altered in chronic knee pain: a spatial covariance analysis of arterial spin labelling MRI

Iwabuchi, S. J., Xing, Y., Cottam, W. J., Drabek, M. M., Tadjibaev, A., Fernandes, G. S., Petersen, K. K., Arendt-Nielsen, L., Graven-Nielsen, T., Valdes, A. M., Zhang, W., Doherty, M., Walsh, D. & Auer, D. P., jun. 2020, I: Pain. 161, 6, s. 1255-1263 9 s.

Testosterone replacement therapy of opioid-induced male hypogonadism improved body composition but not pain perception: a double-blind, randomized, and placebo-controlled trial

Glintborg, D., Vaegter, H. B., Christensen, L. L., Bendix, E., Graven-Nielsen, T., Andersen, P. G. & Andersen, M., jun. 2020, I: European Journal of Endocrinology. 182, 6, s. 539-548 10 s.

Mechanistic pain profiling in young adolescents with patellofemoral pain before and after treatment: a prospective cohort study

Holden, S., Rathleff, M., Thorborg, K., Holmich, P. & Graven-Nielsen, T., maj 2020, I: Pain. 161, 5, s. 1065-1071 7 s.

Activity Modification and Knee Strengthening for Osgood-Schlatter Disease: A Prospective Cohort Study

Rathleff, M. S., Winiarski, L., Krommes, K., Graven-Nielsen, T., Hölmich, P., Olesen, J. L., Holden, S. & Thorborg, K., apr. 2020, I: Orthopaedic Journal of Sports Medicine. 8, 4, 2325967120911106.

Temporal aspects of endogenous pain modulation during a noxious stimulus prolonged for 1 day

Bement, M. H., Petersen, K. K., Sørensen, L. B., Andersen, H. H. & Graven-Nielsen, T., apr. 2020, I: European Journal of Pain. 24, 4, s. 752-760 9 s.

Alterations in pro-nociceptive and anti-nociceptive mechanisms in patients with low back pain: a systematic review with meta-analysis

McPhee, M. E., Vaegter, H. B. & Graven-Nielsen, T., mar. 2020, I: Pain. 161, 3, s. 464-475 12 s.

Isometric exercise and pain in patellar tendinopathy: A randomized crossover trial

Holden, S., Lyng, K., Graven-Nielsen, T., Riel, H., Olesen, J. L., Larsen, L. H. & Rathleff, M. S., mar. 2020, I: Journal of Science and Medicine in Sport. 23, 3, s. 208-214 7 s.

Pain, Sports Participation, and Physical Function in Adolescents With Patellofemoral Pain and Osgood-Schlatter Disease: A Matched Cross-sectional Study

Rathleff, M. S., Winiarski, L., Krommes, K., Graven-Nielsen, T., Hölmich, P., Olesen, J. L., Holden, S. & Thorborg, K., mar. 2020, I: Journal of Orthopaedic and Sports Physical Therapy. 50, 3, s. 149-157 9 s.

The Effect of Stress on Repeated Painful Stimuli With And Without Painful Conditioning

Høgh, M. S., Nørgaard Poulsen, J., Petrini, L. & Graven-Nielsen, T., feb. 2020, I: Pain Medicine. 21, 2, s. 317-325 9 s.

Head repositioning accuracy is influenced by experimental neck pain in those most accurate but not when adding a cognitive task

Christensen, S. W., Peolsson, A., Agger, S. M., Gammelgaard, M. S., Graven-Nielsen, T. & Hirata, R. P., 2020, I: Scandinavian Journal of Pain. 20, 1, s. 191-203

Recurrent neck pain patients exhibit altered joint motion pattern during cervical flexion and extension movements

Qu, N., Graven-Nielsen, T., Lindstrøm, R., Bløgg Andersen, DC, V. & Hirata, R. P., 2020, I: Clinical Biomechanics. 71, s. 125-132 8 s.

Sensorimotor Changes After Prolonged Experimental Neck Pain in Healthy Participants

Cancino, E. L. E., Christensen, S. W. M., Martino, E. D., Simonsen, M. B., Silva, P. D. B., Sørensen, L. B., Hirata, R. P. & Graven-Nielsen, T., 2020, s. 96-97.

Recurrent low back pain patients demonstrate facilitated pronociceptive mechanisms when in pain, and impaired antinociceptive mechanisms with and without pain

McPhee, M. E. & Graven-Nielsen, T., 1 dec. 2019, I: Pain. 160, 12, s. 2866-2876 11 s.

Sessions of Prolonged Continuous Theta Burst Stimulation or High-frequency 10 Hz Stimulation to Left Dorsolateral Prefrontal Cortex for 3 Days Decreased Pain Sensitivity by Modulation of the Efficacy of Conditioned Pain Modulation

De Martino, E., Fernandes, A. M., Galhardoni, R., De Oliveira Souza, C., Ciampi De Andrade, D. & Graven-Nielsen, T., dec. 2019, I: Journal of Pain. 20, 12, s. 1459-1469 11 s.

Delayed effects of attention on pain sensitivity and Conditioned Pain Modulation

Hoegh, M., Seminowicz, D. A. & Graven-Nielsen, T., 1 nov. 2019, I: European Journal of Pain. 23, 10, s. 1850-1862 13 s.

Exercise-induced hypoalgesia in young adult females with long-standing patellofemoral pain – A randomized crossover study

Straszek, C. L., Rathleff, M. S., Graven-Nielsen, T., Petersen, K. K., Roos, E. M. & Holden, S., 1 nov. 2019, I: European Journal of Pain. 23, 10, s. 1780-1789 10 s.

Nerve growth factor-induced muscle hyperalgesia facilitates ischaemic contraction-evoked pain

Sørensen, L. B., Gazerani, P. & Graven-Nielsen, T., 1 nov. 2019, I: European Journal of Pain. 23, 10, s. 1814-1825 12 s.

Exercise induced hypoalgesia in pain-free and chronic pain populations: State of the art and future directions

Rice, D., Nijs, J., Kosek, E., Wideman, T., Hasenbring, M. I., Koltyn, K., Graven-Nielsen, T. & Polli, A., nov. 2019, I: Journal of Pain. 20, 11, s. 1249-1266 18 s.

Pain-Induced Reduction in Corticomotor Excitability is Counteracted by Combined Action-Observation and Motor Imagery

Larsen, D. B., Graven-Nielsen, T. & Boudreau, S., nov. 2019, I: Journal of Pain. 20, 11, s. 1307-1316 10 s.

Corticmotor excitability reduction induced by experimental pain remains unaffected by performing a working memory task as compared to staying at rest

Larsen, D. B., Graven-Nielsen, T., Hirata, R. P., Seminowicz, D., Schabrun, S. & Boudreau, S. A., sep. 2019, I: Experimental Brain Research. 237, 9, s. 2205-2215 11 s.

Experimental knee-related pain enhances attentional interference on postural control

Suda, E. Y., Hirata, R. P., Palsson, T., Vuillerme, N., Sacco, I. C. N. & Graven-Nielsen, T., sep. 2019, I: European Journal of Applied Physiology. 119, 9, s. 2053-2064 12 s.

Conditioning pain modulation reduces pain only during the first stimulation of the temporal summation of pain paradigm in healthy participants

Holden, S., Petersen, K. K., Arendt-Nielsen, L. & Graven-Nielsen, T., 1 aug. 2019, I: European Journal of Pain. 23, 7, s. 1390-1396 7 s.

Impaired microvascular reactivity after eccentric muscle contractions is not restored by acute ingestion of antioxidants or dietary nitrate

Larsen, R. G., Thomsen, J. M., Hirata, R. P., Steffensen, R., Poulsen, E. R., Frøkjær, J. B. & Graven-Nielsen, T., 10 jul. 2019, I: Physiological Reports. 7, 13, 15 s., e14162.

Assessment of conditioned pain modulation in healthy participants and patients with chronic pain: manifestations and implications for pain progression

Petersen, K. K., McPhee, M. E., Høgh, M. S. & Graven-Nielsen, T., 1 jun. 2019, I: Current Opinion in Supportive and Palliative Care. 13, 2, s. 99-106 8 s.

Activity Modification and Load Management of Adolescents With Patellofemoral Pain: A Prospective Intervention Study Including 151 Adolescents

Rathleff, M. S., Graven-Nielsen, T., Hölmich, P., Winiarski, L., Krommes, K., Holden, S. & Thorborg, K., jun. 2019, I: The American Journal of Sports Medicine. 47, 7, s. 1629-1637 9 s.

Chronic widespread pain patients show disrupted cortical connectivity in default mode and salience networks, modulated by pain sensitivity

Van Ettinger-Veenstra, H., Lundberg, P., Alfoldi, P., Södermark, M., Graven-Nielsen, T., Sjörs, A., Engström, M. & Gerdle, B., 29 maj 2019, I: Journal of Pain Research. 12, s. 1743—1755 13 s.

Do sensorimotor cortex activity, an individual's capacity for neuroplasticity, and psychological features during an episode of acute low back pain predict outcome at 6 months: a protocol for an Australian, multisite prospective, longitudinal cohort study

Jenkins, L. C., Chang, W.-J., Buscemi, V., Liston, M., Toson, B., Nicholas, M., Graven-Nielsen, T., Ridding, M., Hodges, P. W., McAuley, J. H. & Schabrun, S. M., 22 maj 2019, I: BMJ Open. 9, 5, 8 s., e029027.

Enlarged areas of pain and pressure hypersensitivity by spatially distributed intramuscular injections of low-dose nerve growth factor

Sørensen, L. B., Christensen, S., Gazerani, P. & Graven-Nielsen, T., 1 maj 2019, I: Journal of Pain. 20, 5, s. 566-576 11 s.

Experimental cervical interspinous ligament pain altered cervical joint motion during dynamic extension movement

Qu, N., Lindstrøm, R., Graven-Nielsen, T. & Hirata, R. P., 1 maj 2019, I: Clinical Biomechanics. 65, s. 65-72 8 s.

Effect of sustained experimental muscle pain on joint position sense

Summers, S. J., Schabrun, S. M., Hirata, R. P., Graven-Nielsen, T., Cavalieri, R. & Chipchase, L. S., maj 2019, I: Pain Reports. 4, 3, s. 2471-2531 8 s., e737.

Alterations in temporal summation of pain and conditioned pain modulation across an episode of experimental exercise-induced low back pain

McPhee, M. & Graven-Nielsen, T., mar. 2019, I: Journal of Pain. 20, 3, s. 264-276 13 s.

High frequency repetitive transcranial magnetic stimulation to the left dorsolateral prefrontal cortex modulates sensorimotor cortex function in the transition to sustained muscle pain

De Martino, E., Seminowicz, D. A., Schabrun, S. M., Petrini, L. & Graven-Nielsen, T., 1 feb. 2019, I: NeuroImage. 186, s. 93-102 10 s.

Hypoalgesia after bicycling at lactate threshold is reliable between sessions

Vaegter, H. B., Bjerregaard, L. K., Redin, M.-M., Rasmussen, S. H. & Graven-Nielsen, T., 30 jan. 2019, I: European Journal of Applied Physiology. 119, 1, s. 91-102 12 s.

Correlations between the active straight leg raise, sleep and somatosensory sensitivity during pregnancy with post-partum lumbopelvic pain: an initial exploration

Beales, D. J., Gaynor, O., Harris, J., Fary, R., O'Sullivan, P. B., Slater, H., Graven-Nielsen, T. & Palsson, T. S., 1 jan. 2019, I: Scandinavian Journal of Pain. 19, 1, s. 53-60 8 s.

Exercise-induced hypoalgesia after isometric wall squat exercise: A test-retest reliability study

Vaegter, H. B., Lyng, K. D., Yttereng, F. W., Christensen, M. H., Sørensen, M. B. & Graven-Nielsen, T., 1 jan. 2019, I: Pain Medicine. 20, 1, s. 129-137 9 s.

Increased postural stiffness during challenging postural tasks in patients with knee osteoarthritis with high pain sensitization

Hirata, R. P., Skou, S. T., Simonsen, O., Rasmussen, S., Laursen, M. B. & Graven-Nielsen, T., 1 jan. 2019, I: Clinical Biomechanics. 61, s. 129-135 7 s.

Origin of neck pain and direction of movement influence dynamic cervical joint motion and pressure pain sensitivity

Qu, N., Lindstrøm, R., Hirata, R. P. & Graven-Nielsen, T., jan. 2019, I: Clinical Biomechanics. 61, s. 120-128 9 s.

A novel approach to counterbalance pain-induced reduction in corticomotor excitability

Larsen, D. B., Graven-Nielsen, T. & Boudreau, S., 2019.

Effects of vitamin D supplementation on well-being, postural control, muscle strength, bone and calcitropic hormones: A randomized double blind placebo controlled trial

Eriksen, S. A., Starup-Linde, J., Hirata, R. P., Petersen, K. K., Graven-Nielsen, T. & Vestergaard, P., 2019, I: The journal of aging research & clinical practice. 8, s. 49-56

Enhanced pro-nociceptive mechanisms are present in recurrent low back pain patients, but only during a painful episode, in contrast to anti-nociceptive mechanisms

McPhee, M. E. & Graven-Nielsen, T., 2019.

Increased muscle pain evoked by ischemic contractions in a nerve growth factor (NGF)-sensitized muscle
Sørensen, L. B., Gazerani, P. & Graven-Nielsen, T., 2019.

Local hypoalgesia to pressure and enhanced sequential conditioned pain modulation following fatiguing trunk extensor exercise
McPhee, M. E. & Graven-Nielsen, T., 2019.

Motor adaptation varies between individuals in the transition to sustained pain
Summers, S. J., Chipchase, L. S., Hirata, R., Graven-Nielsen, T., Cavalieri, R. & Schabrun, S. M., 2019, I: Pain. 160, 9, s. 2115-2125 11 s.

Multifocal transcranial direct current stimulation modulates corticomotor excitability during prolonged pain
Gregoret, L., Zamorano, A. M. & Graven-Nielsen, T., 2019, *Book of Abstracts from EFIC Congress 2019*.

Pain and disability in Low Back Pain can be reduced despite no improvements in the pain sensory profile
Palsson, T., Christensen, S. W., Martino, E. D. & Graven-Nielsen, T., 2019.

Patterns of change in knee pain area and distribution in relation to improvements in function
Boudreau, S., Royo, A. C., Graven-Nielsen, T., Thorborg, K., Hölmich, P. & Rathleff, M. S., 2019.

Smerter i bevægeapparatet 1: Muskelsmerte

Bliddal, H. & Graven-Nielsen, T., 2019, *Smerter: Baggrund, Evidens og Behandling*. U. Werner, M., Finnerup, N. B. & Arendt-Nielsen, L. (red.). 4. udg. FADL's Forlag a/s, s. 378-390

Temporal summation and pain catastrophizing is associated with pain after 12 weeks: A prospective cohort study of patients with low back pain in general practice
Petersen, K. K., Jensen, M. B., Graven-Nielsen, T., Hauerslev, L. V., Arendt-Nielsen, L. & Rathleff, M. S., 2019.

The effects of use-dependent neuroplasticity and chronic pain on somatosensory peripheral and cortical excitability
Zamorano, A. M., Arguissain, F., Kleber, B., Vuust, P., Boudreau, S., Flor, H. & Graven-Nielsen, T., 2019.

Left dorsolateral prefrontal cortex repetitive transcranial magnetic stimulation reduces the development of long-term muscle pain
Seminowicz, D. A., de Martino, E., Schabrun, S. M. & Graven-Nielsen, T., 1 dec. 2018, I: Pain. 159, 12, s. 2486-2492 7 s.

Light touch contact improves pain-evoked postural instability during quiet standing

Hirata, R. P., Christensen, S. W., Agger, S., Svindt, M., Røssner, N., Abildgaard, J., Vuillerme, N. & Graven-Nielsen, T., 1 dec. 2018, I: Pain Medicine. 19, 12, s. 2487-2495 9 s.

Experimental muscle hyperalgesia modulates sensorimotor cortical excitability, which is partially altered by unaccustomed exercise
De Martino, E., Zandalasini, M., Schabrun, S., Petrini, L. & Graven-Nielsen, T., dec. 2018, I: Pain. 159, 12, s. 2493-2502 10 s.

Young females with long-standing patellofemoral pain display impaired conditioned pain modulation, increased temporal summation of pain, and widespread hyperalgesia
Holden, S., Straszek, C. L., Rathleff, M. S., Petersen, K. K., Roos, E. M. & Graven-Nielsen, T., dec. 2018, I: Pain. 159, 12, s. 2530-2537 8 s.

Distinct patterns of variation in the distribution of knee pain

Boudreau, S. A., Royo, A. C., Matthews, M., Graven-Nielsen, T., Kamavuako, E. N., Slabaugh, G., Thorborg, K., Vicenzino, B. & Rathleff, M. S., 8 nov. 2018, I: Scientific Reports. 8, 1, s. 1-12 12 s., 16522.

Preoperative neuropathic pain like symptoms and central pain mechanisms in knee osteoarthritis predicts poor outcome 6 months after total knee replacement surgery

Kurien, T., Arendt-Nielsen, L., Petersen, K. K., Graven-Nielsen, T. & Scammell, B. E., 1 nov. 2018, I: Journal of Pain. 19, 11, s. 1329-1341 13 s.

Test-retest reliability of exercise-induced hypoalgesia after aerobic exercise

Vægter, H. B., Dørge, D. B., Schmidt, K. S., Jensen, A. H. & Graven-Nielsen, T., 1 nov. 2018, I: Pain Medicine. 19, 11, s. 2212-2222 11 s.

Acute Procedural Pain in Children: Intervention with the Hospital Clown

Kristensen, H. N., Lundbye-Christensen, S., Haslund-Thomsen, H., Graven-Nielsen, T. & Elgaard Sørensen, E., nov. 2018 , I: The Clinical Journal of Pain. 34, 11, s. 1032-1038 7 s.

Cortical somatosensory excitability is modulated in response to several days of muscle soreness

Martino, E. D., Petrini, L., Schabrun, S. & Graven-Nielsen, T., nov. 2018, I: Journal of Pain. 19, 11, s. 1296-1307 12 s.

Pain, sports participation and physical function in 10-14 years olds with Patellofemoral Pain and Mb. Osgood Schlatter: A matched cross-sectional study of 252 adolescents

Rathleff, M. S., Winiarski, L. M., Krommes, K., Graven-Nielsen, T., Hölmich, P., Olesen, J. L., Holden, S. & Thorborg, K., 25 okt. 2018. 1 s.

Load management and progressive knee strengthening in young adolescents with Mb. Osgood Schlatter: a prospective single-cohort study including 51 adolescents

Rathleff, M. S., Winiarski, L. M., Krommes, K., Graven-Nielsen, T., Hölmich, P., Olesen, J. L., Holden, S. & Thorborg, K., 24 okt. 2018, s. 235. 1 s.

Experimental referred pain extends toward previously injured location: An explorative study

Palsson, T. S., Boudreau, S. A., Krebs, H. J. & Graven-Nielsen, T., 1 okt. 2018, I: Journal of Pain. 19, 10, s. 1189-1200 12 s.

Pressure-induced referred pain areas are more expansive in individuals with a recovered fracture

Doménech-García, V., Skuli Palsson, T., Boudreau, S. A., Herrero, P. & Graven-Nielsen, T., okt. 2018, I: Pain. 159, 10, s. 1972-1979 8 s.

The nociceptive capacity of muscle, skeletal, and connective tissue

Graven-Nielsen, T. & Arendt-Nielsen, L., 9 aug. 2018, *Pain after surgery*. Carr, D. B., Arendt-Nielsen, L. & Vissers, K. C. P. (red.). Wolters Kluwer, s. 15-32

Reorganized Force Control in Elbow Pain Patients During Isometric Wrist Extension

Mista, C. A., Monterde, S., Inglés, M., Salvat, I. & Graven-Nielsen, T., aug. 2018, I: The Clinical Journal of Pain. 34, 8, s. 732-738 7 s.

Disruption of cortical synaptic homeostasis in individuals with chronic low back pain

Thapa, T., Graven-Nielsen, T., Chipchase, L. S. & Schabrun, S. M., maj 2018, I: Clinical Neurophysiology. 129, 5, s. 1090-1096 7 s.

Pain patterns during adolescence can be grouped into four pain classes with distinct profiles: A study on a population based cohort of 2953 adolescents

Holden, S., Rathleff, M. S., Roos, E. M., Jensen, M. B., Pourbordbari, N. & Graven-Nielsen, T., apr. 2018, I: European Journal of Pain. 22, 4, s. 793-799 7 s.

The Strengthening Exercises in Shoulder Impingement trial (The SExSI-trial) investigating the effectiveness of a simple add-on shoulder strengthening exercise programme in patients with long-lasting subacromial impingement syndrome: Study protocol for a pragmatic, assessor blinded, parallel-group, randomised, controlled trial

Clausen, M. B., Bandholm, T., Rathleff, M. S., Christensen, K. B., Zebis, M. K., Graven-Nielsen, T., Hölmich, P. & Thorborg, K., 2 mar. 2018, I: *Trials*. 19, 1, s. 154 17 s., 154.

Acid-induced experimental knee pain and hyperalgesia in healthy humans

Asaki, T., Wang, K., Luo, Y., Arendt-Nielsen, T., Graven-Nielsen, T. & Arendt-Nielsen, L., feb. 2018, I: *Experimental Brain Research*. 236, 2, s. 587-598 12 s.

Repeatability of Cervical Joint Flexion and Extension Within and Between Days

Wang, X., Lindstroem, R., Plocharski, M., Østergaard, L. R. & Graven-Nielsen, T., jan. 2018, I: *Journal of Manipulative and Physiological Therapeutics*. 41, 1, s. 10-18 9 s.

Blood flow after contraction and cuff occlusion is reduced in subjects with muscle soreness after eccentric exercise

Souza-Silva, E., Wittrup Christensen, S., Hirata, R. P., Larsen, R. G. & Graven-Nielsen, T., 2018, I: *Scandinavian Journal of Medicine & Science in Sports*. 28, 1, s. 29-39 11 s.

Bradykinin-2 receptor antagonist, HOE 140, prevents the development of delayed onset muscle soreness in female and male rats

Poulsen, J. N., Graven-Nielsen, T. & Gazerani, P., 2018.

Cervical flexion and extension includes anti-directional cervical joint motion in healthy adults

Wang, X., Lindstroem, R., Plocharski, M., Østergaard, L. R. & Graven-Nielsen, T., 2018, I: *Spine Journal*. 18, 1, s. 147-154 8 s.

Chronic postoperative pain after total knee arthroplasty is associated with a functional MRI signature of facilitated temporal summation of pain

Kurien, T., Iwabuchi, S., Petersen, K. K., Reckziegel, D., Cottam, W., Kerslake, R., Edwards, K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2018.

Conditioning pain modulation reduces the initial part of temporal pain summation in healthy males

Holden, S., Petersen, K. K. & Graven-Nielsen, T., 2018.

Corticomotor excitability reduction in response to acute experimental muscle pain is not modulated by engagement in a two-back task

Larsen, D. B., Graven-Nielsen, T., Hirata, R. P., Schabrun, S., Seminowicz, D. & Boudreau, S., 2018.

Differential corticomotor excitability responses to hypertonic saline-induced muscle pain in forearm and hand muscles

Larsen, D. B., Graven-Nielsen, T., Hirata, R. P. & Boudreau, S. A., 2018, I: *Neural Plasticity*. 2018, 9 s., 7589601.

Effect of sustained experimental pain on joint position sense

Summers, S., Schabrun, S., Hirata, R. P., Graven-Nielsen, T., Cavalieri, R. & Chipchase, L., 2018.

Effects of repeated conditioning pain modulation in healthy volunteers

Høgh, M., Petersen, K. K. & Graven-Nielsen, T., 2018, I: *European Journal of Pain*. 22, 10, s. 1833-1843 11 s.

Exercise-induced muscle soreness in a pre-sensitized muscle: a novel model to provoke central and peripheral neuroplastic effects

De Martino, E., Zandalasini, M., Schabrun, S., Petrini, L. & Graven-Nielsen, T., 2018.

Experimental low back pain decreased trunk muscle activity in currently asymptomatic recurrent low back pain patients during step tasks

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2018, I: *Journal of Pain*. 19, 5, s. 542-551 10 s.

Hypoalgesia after bicycling at lactate threshold is reliable between sessions in pain-free subjects

Vægter, H., Redin, M., Rasmussen, S., Bjerregaard, L. K. & Graven-Nielsen, T., 2018.

Increased pain sensitivity in accident-related chronic pain patients with comorbid posttraumatic stress
Vaegter, H. B., Andersen, T. E., Harvold, M., Andersen, P. G. & Graven-Nielsen, T., 2018, I: *The Clinical Journal of Pain*. 34, 4, s. 313-321 9 s., 0543.

Kinesiophobia is associated with pain intensity but not pain sensitivity before and after exercise: an explorative analysis
Vaegter, H. B., Madsen, A. B., Handberg, G. & Graven-Nielsen, T., 2018, I: *Physiotherapy*. 104, 2, s. 187-193 7 s.

Left DLPFC rTMS counteracts the sensorimotor cortical excitability changes in the transition to sustained muscle pain
De Martino, E., Seminowicz, D., Schabrun, S., Petrini, L. & Graven-Nielsen, T., 2018.

Modulation of nociceptive-evoked cortical responses during the transition towards persistent muscle pain
Zamorano, A. M., Arguissain, F., Boudreau, S., Kleber, B., Vuust, P., Flor, H. & Graven-Nielsen, T., 2018.

Motor cortex reorganisation is associated with the magnitude of motor variability in the transition to sustained muscle pain
Summers, S., Chipchase, L., Hirata, R. P., Graven-Nielsen, T., Cavaleri, R. & Schabrun, S., 2018.

Movement does not promote recovery of motor output following acute experimental muscle pain
Schabrun, S. M., Palsson, T. S., Thapa, T. & Graven-Nielsen, T., 2018, I: *Pain Medicine*. 19, 3, s. 608–614 7 s.

Musculoskeletal referred pain to the craniofacial region

Graven-Nielsen, T., Fernández-de-las-Peñas, C., McPhee, M. & Arendt-Nielsen, L., 2018, *Temporomandibular Disorders: Manual Therapy, Exercise and Needling*. Fernández-de-las-Peñas, C. & Mesa-Jiménez, J. (red.). Handspring Publishing, s. 67-78

Prolonged slumped sitting posture causes neck pain and increased axioscapular muscle activity in healthy volunteers
Christensen, S. W., Palsson, T. S., Krebs, H. J., Graven-Nielsen, T. & Hirata, R. P., 2018.

Spatially distributed injections of low-dose nerve growth factor (NGF) induce enlarged areas of muscle pain and pronounced muscle hypersensitivity
Sørensen, L. B., Boudreau, S., Gazerani, P. & Graven-Nielsen, T., 2018.

Temporal aspects of conditioned pain modulation and temporal summation of pain during a prolonged noxious stimulus
Bement, M., Petersen, K. K., Sørensen, L. B., Andersen, H. H. & Graven-Nielsen, T., 2018.

Temporal summation of pain and conditioned pain modulation across an episode of experimental low back pain
McPhee, M. E. & Graven-Nielsen, T., 2018.

Test-retest reliability of motor and sensory evoked potentials as well as pain sensitivity assessment in healthy volunteers
Zandalasini, M., De Martino, E., Arendt-Nielsen, L. & Graven-Nielsen, T., 2018.

The effect of stress on conditioned and unconditioned pain in healthy volunteers
Høgh, M., Poulsen, J. N., Petrini, L. & Graven-Nielsen, T., 2018.

The influence of sustained nociception on homeostatic plasticity in humans
Thapa, T., Ridding, M., Graven-Nielsen, T. & Schabrun, S., 2018.

The pain experience in hospitalized children. The impact of hospital clowns on hospitalized children under-going painful procedures

Nygård Kristensen, H., Haslund-Thomsen, H. L., Lundbye-Christensen, S., Graven-Nielsen, T. & Sørensen, E. E., 2018, *Abstraktbog. Afslutningskonference: 'Patienten i Front - Forskning i Centrum': Et forskningsprogram med fokus på patient- og pårørendeinddragelse 2013-2018*. Aalborg: Aalborg Universitetshospital, 1 s.

The pain experience in hospitalized children. The impact of hospital clowns on hospitalized children undergoing painful procedures

Nygård Kristensen, H., Thomsen, H. H., Lundbye-Christensen, S., Graven-Nielsen, T. & Sørensen, E. E., 2018, s. 24. 1 s.

Young females with long standing patellofemoral pain display impaired conditioned pain modulation, increased temporal summation of pain, and widespread hyperalgesia

Holden, S., Straszek, C. L. N., Rathleff, M. S., Petersen, K. K., Roos, E. & Graven-Nielsen, T., 2018.

Cervical Regional Reposition Errors after Cervical Flexion and Extension

Wang, X., Lindstrøm, R. & Graven-Nielsen, T., 23 sep. 2017.

Cervical spine reposition errors after cervical flexion and extension

Wang, X., Lindstroem, R., Carstens, N. P. B. & Graven-Nielsen, T., 13 mar. 2017, I: BMC Musculoskeletal Disorders. 18, 7 s., 102.

Patient education, activity modification and progressive strengthening in young adolescents with patellofemoral pain

Rathleff, M. S., Graven-Nielsen, T., Hölmich, P., Winiarski, L. M., Krommes, K. & Thorborg, K., 2 feb. 2017. 1 s.

A Brain-Computer-Interface to combat musculoskeletal pain

Mrachacz-Kersting, N., Yao, N., Gervasio, S., Jiang, N., Palsson, T., Graven-Nielsen, T., Falla, D., Dremstrup, K. & Farina, D., 2017, *Brain-Computer-Interface Research – A state of the art summary*. Guger, C., Brendan, A. & Leuthardt, E. (red.). 5 udg. Springer, s. 123-130

Acid-induced experimental muscle pain and hyperalgesia with single and repeated infusion in human forearm

Wang, K., Luo, Y., Asaki, T., Graven-Nielsen, T., Cairns, B. E., Arendt-Nielsen, T. & Arendt-Nielsen, L., 2017, I: Scandinavian Journal of Pain. 17, s. 260-266

Acute muscle pain alters corticomotor output of the affected muscle stronger than a synergistic, ipsilateral muscle

Larsen, D. B., Graven-Nielsen, T., Hirata, R. P. & Boudreau, S., 2017, I: Scandinavian Journal of Pain. 16, s. 177

Acute muscle pain does not influence the corticomotor excitability of neighboring hand musculature representations to the same degree

Larsen, D. B., Graven-Nielsen, T., Hirata, R. P. & Boudreau, S. A., 2017.

Age interactions on pain sensitization in patients with severe knee osteoarthritis and controls

Petersen, K. K., Arendt-Nielsen, L., Finocchietti, S., Hirata, R. P., Simonsen, O., Laursen, M. B. & Graven-Nielsen, T., 2017, I: The Clinical Journal of Pain. 33, 12, s. 1081-1087

Altered pain sensitivity and axioscapular muscle activity in neck pain patients compared with healthy controls

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2017, I: European Journal of Pain. 21, 10, s. 1763–1771

Asymmetry in gait pattern following tibial shaft fractures: a prospective one-year follow-up study of 49 patients

Larsen, P., Læssøe, U., Rasmussen, S., Graven-Nielsen, T., Eriksen, C. B. & Elsøe, R., 2017, I: Gait & Posture. 51, s. 47-51 5 s.

Bilateral experimental neck pain reorganize axioscapular muscle coordination and pain sensitivity

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2017, I: European Journal of Pain. 21, 4, s. 681-691

Conditioned pain modulation and pressure pain sensitivity in the adult Danish general population: the DanFunD study

Skovbjerg, S., Jørgensen, T., Arendt-Nielsen, L., Ebstrup, J. F., Carstensen, T. & Graven-Nielsen, T., 2017, I: Journal of Pain. 18, 3, s. 274–284

Cortical somatosensory excitability and cortical motor excitability react differently in response to several days of muscle hyperalgesia

De Martino, E., Schabrun, S., Petrini, L. & Graven-Nielsen, T., 2017.

Cuff algometry for estimation of hyperalgesia and pain summation

Lindskou, T. A., Christensen, S. W. & Graven-Nielsen, T., 2017, I: Pain Medicine. 18, 3, s. 468-476

Cuff pressure pain detection is associated with both sex and physical activity level in nonathletic healthy subjects

Lemming, D., Börsbo, B., Sjörs, A., Lind, E.-B., Arendt-Nielsen, L., Graven-Nielsen, T. & Gerdle, B., 2017, I: Pain Medicine. 18, 8, s. 1573-1581

Deconstructing a model of muscular mechanical hyperalgesia provoked by lengthening contractions in rats

Poulsen, J. N., Graven-Nielsen, T. & Gazerani, P., 2017.

Delayed onset muscle soreness differentially modulates pressure-induced referred pain in individuals with a recovered shoulder fracture as compared to healthy controls

Doménech-Garcia, V., Palsson, T. S., Boudreau, S., Herrero, P. & Graven-Nielsen, T., 2017.

Eccentric exercise and microvascular function: Protective role of dietary nitrate and antioxidants?

Larsen, R. G., Thomsen, J. M., Hirata, R. P., Frøkjær, J. B. & Graven-Nielsen, T., 2017, I: Medicine and Science in Sports and Exercise. 49, 5S, s. 1003 3522.

Exercise increases pressure pain tolerance but not pressure and heat pain thresholds in healthy young men

Vaegter, H. B., Bement, M. H., Madsen, A. B., Fridriksson, J., Dasa, M. & Graven-Nielsen, T., 2017, I: European Journal of Pain. 21, 1, s. 73-81

Experimental knee pain enhances attentional interference on postural control

Suda, E. Y., Hirata, R. P., Palsson, T. S., Vuillerme, N., Sacco, I. C. N. & Graven-Nielsen, T., 2017, Abstract Book, XXVI Congress of the International Society of Biomechanics, ISB, 23-27 July 2017, Brisbane, Australia. s. 938 P313

Experimental neck muscle pain increase pressure pain threshold over cervical facet joints

Qu, N., Lindstrøm, R., Hirata, R. P. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 182-183

Experimental pain in the groin may refer into the lower abdomen: Implications to clinical assessments

Drew, M. K., Palsson, T. S., Hirata, R. P., Izumi, M., Lovell, G., Welvaert, M., Chiarelli, P., Osmotherly, P. G. & Graven-Nielsen, T., 2017, I: Journal of Science and Medicine in Sport. 20, 10, s. 904-909

Facilitated pronociceptive pain mechanisms in radiating back pain compared with localized back pain

Vaegter, H. B., Palsson, T. S. & Graven-Nielsen, T., 2017, I: Journal of Pain. 18, 8, s. 973-983

Facilitated temporal summation of pain correlates with clinical pain intensity after hip arthroplasty

Izumi, M., Petersen, K. K., Laursen, M. B., Arendt-Nielsen, L. & Graven-Nielsen, T., 2017, I: Pain. 158, 2, s. 323-332

Fixed or adapted conditioning intensity for repeated conditioned pain modulation

Høgh, M., Petersen, K. K. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 176

Increased postural stiffness in patients with knee osteoarthritis who are highly sensitized

Hirata, R. P., Skou, S. T., Simonsen, O., Rasmussen, S. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 173-174

Increased trunk muscle activity during gait after bilateral experimental pain induction in recurrent low back pain patients during a pain-free period

Larsen, L. H., Brogner, H., Østergaard, G. V., Sørensen, B. Ø. & Graven-Nielsen, T., 2017. 1 s.

Influences of conditioned pain modulation on the pain and pain referral patterns of the shoulder
Liu, Q., Palsson, T. S., Sørensen, L. B., Boudreau, S. & Graven-Nielsen, T., 2017.

NGF-induced muscle soreness and mechanical hyperalgesia: effects of muscle type and NGF-dose
Sørensen, L. B. & Graven-Nielsen, T., 2017.

Pain-evoked trunk muscle activity changes during fatigue and DOMS

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2017, I: European Journal of Pain. 21, 5, s. 907-917

Paradoxical differences in pain ratings of the same stimulus intensity

McPhee, M. E., Petersen, K. K., Hoegh, M. S. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 181

Preoperative hypoalgesia after cold pressor test and aerobic exercise is associated with pain relief six months after total knee replacement

Vægter, H. B., Handberg, G., Emmeluth, C. & Graven-Nielsen, T., 2017, I: The Clinical Journal of Pain. 33, 6, s. 475-484

Remote pain modulates the area of referred pain in healthy individuals

Palsson, T. S., Domenech-Garcia, V., Boudreau, S. & Graven-Nielsen, T., 2017.

Repeated measures of temporal summation of pain with cuff algometry

McPhee, M. E., Petersen, K. K., Høgh, M. & Graven-Nielsen, T., 2017.

Several days of muscle hyperalgesia facilitates cortical somatosensory excitability

De Martino, E., Petrini, L., Schabrun, S. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 169

Sitting posture and neck pain in healthy volunteers

Christensen, S. W., Palsson, T. S., Hirata, R. P., Krebs, H. J. & Graven-Nielsen, T., 2017.

Smerte

Graven-Nielsen, T., Høgh, M. & Vægter, H. B., 2017, *Basisbog i fysioterapi*. Bjørnlund, I. B., Sjöberg, N. E. & Lund, H. (red.). 2 udg. Munksgaard Forlag, s. 71-85 (Fysio/Munksgaard).

Temporal profile of four consecutive assessments of conditioning pain modulation

Høgh, M., Petersen, K. K. & Graven-Nielsen, T., 2017.

The effect of acute experimental neck pain on cervical kinesthetic sense with and without a distracting cognitive task

Christensen, S. W., Hirata, R. P., Peolsson, A., Agger, S. M., Svindt, M. & Graven-Nielsen, T., 2017.

The pain experience in hospitalized children: The impact of hospital clowns on hospitalized children undergoing painful procedures

Kristensen, H. N., Thomsen, H. H., Graven-Nielsen, T. & Sørensen, E. E., 2017.

The size of pain referral patterns from a tonic painful mechanical stimulus is increased in women

Liu, Q. G., Palsson, T. S., Sørensen, L. B. & Graven-Nielsen, T., 2017, I: Scandinavian Journal of Pain. 16, s. 179

Transition from acute to chronic pain in children: novel pieces of the puzzle

Rathleff, M. S. & Graven-Nielsen, T., 2017, I: Pain. 158, 5, s. 767-768

User-independent assessment of conditioning pain modulation by cuff pressure algometry

Graven-Nielsen, T., Izumi, M., Petersen, K. K. & Arendt-Nielsen, L., 2017, I: European Journal of Pain. 21, 3, s. 552-561

Acute bilateral experimental neck pain: Reorganise axioscapular and trunk muscle activity during slow resisted arm movements

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2016, I: Scandinavian Journal of Pain. 12, s. 125-126

Acute bilateral experimental neck pain reorganises axioscapular and trunk muscle activity during slow arm movements

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2016.

An MRI-based leg model used to simulate biomechanical phenomena during cuff algometry: a finite element study

Manafi-Khanian, B., Arendt-Nielsen, L. & Graven-Nielsen, T., 2016, I: Medical & Biological Engineering & Computing. 54, 2, s. 315-324

A reliability study of computer-controlled cuff pressure algometry to assess central pain mechanisms: a novel water-filled cuff

Uchida, Y., Petersen, K. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2016.

Assessment of musculoskeletal pain mechanisms in clinical and experimental settings: refresher course

Graven-Nielsen, T., 2016.

Assessment of musculoskeletal pain mechanisms in clinical and experimental settings

Graven-Nielsen, T. & Arendt-Nielsen, L., 2016, *Pain 2016 Refresher Courses: 16th World Congress on Pain*. Sommer, C. L., Wallace, M. S., Cohen, S. P. & Kress, M. (red.). Washington: IASP Press, s. 177-184

Attenuated corticomotor output due to experimental muscle pain does not return to normal following a motor learning task

Schabrun, S., Palsson, T. S. & Graven-Nielsen, T., 2016.

Decreased muscle strength is persistent and associated with worse quality of life one year after intramedullary nailing of a tibial shaft fracture

Larsen, P., Elsøe, R., Læssøe, U., Graven-Nielsen, T., Eriksen, C. B. & Rasmussen, S., 2016.

Decreased QOL and muscle strength are persistent 1 year after intramedullary nailing of a tibial shaft fracture: a prospective 1-year follow-up cohort study

Larsen, P., Elsøe, R., Laessoe, U., Graven-Nielsen, T., Eriksen, C. B. & Rasmussen, S., 2016, I: Archives of Orthopaedic and Trauma Surgery. 136, 10, s. 1395-1402 8 s.

Effects of prolonged and acute muscle pain on the force control strategy during isometric contractions

Mista, C. A., Bergin, M., Hirata, R. P., Christensen, S. W., Tucker, K., Hodges, P. & Graven-Nielsen, T., 2016, I: Journal of Pain. 17, 10, s. 1116-1125

Effects of unilateral and bilateral experimental low-back pain on trunk muscle activity during stair walking in healthy and recurrent low-back pain patients

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2016.

Hospitalized children's pain experience: Effect and impact of intervention with the hospital clown

Kristensen, H. N., Thomsen, H. H., Graven-Nielsen, T. & Sørensen, E. E., 2016.

Hospitalized children's pain experience: Effect and impact of intervention with the hospital clown in acute and repeated painful procedures in hospitalized children. A mixed methods study

Kristensen, H. N., Sørensen, E. E., Graven-Nielsen, T. & Thomsen, H. H., 2016, *Programme - Abstracts, Second Nordic Conference in Nursing Research, 15-17 June 2016, Stockholm, Sweden*. Svensk Sjuksköterske Förening, s. 49 29

Hospitalized children's pain experience: Effect and impact of intervention with the hospital clown in acute and repeated painful procedures in hospitalized children: A mixed methods study

Kristensen, H. N., Sørensen, E. E., Graven-Nielsen, T. & Thomsen, H. H., 2016, *Programme - Abstracts, Second Nordic Conference in Nursing Research, 15-17 June 2016, Stockholm, Sweden*. Svensk Sjuksköterske Förening, s. 49-50 29

Hypoalgesia after cold pressor test and aerobic exercise predict pain relief six months after total knee replacement
Vægter, H., Handberg, G., Emmeluth, C. & Graven-Nielsen, T., 2016.

Hypoalgesia after exercise and the cold pressor test is reduced in chronic musculoskeletal pain patients with high pain sensitivity
Vægter, H. B., Handberg, G. & Graven-Nielsen, T., 2016, I: *The Clinical Journal of Pain*. 32, 1, s. 58-69

Impaired conditioned pain modulation in young female adults with long-standing patellofemoral pain: a single blinded cross-sectional study
Rathleff, M. S., Petersen, K. K., Arendt-Nielsen, L., Thorborg, K. & Graven-Nielsen, T., 2016, I: *Pain Medicine*. 17, 5, s. 980-988

Inflatable cuff for pain modulation or pain assessment

Graven-Nielsen, T. (Opfinder), Arendt-Nielsen, L. (Opfinder) & Petersen, K. K. (Opfinder), 2016, IPC nr. A61B 5/00 (2006.01) , Patentnr. WO/2016/189093, 1 dec. 2016, Prioritetsdato 26 maj 2016, Prioritetsnr. PCT/EP2016/061924

Influences of liquid medium on interface pressure distribution in cuff stimulation methodology
Manafi-Khanian, B., Arendt-Nielsen, L. & Graven-Nielsen, T., 2016.

Injury to the musculoskeletal system causes a shift in location of experimentally-induced referred pain

Palsson, T. S., Krebs, H. J., Boudreau, S. & Graven-Nielsen, T., 2016, *Abstrakts og program, Forsknings- og Udviklingssymposium for Fysioterapeuter, Region Nordjylland, 8. november 2016, Aalborg, Danmark*. Fysio- og Ergoterapi, Aalborg Universitetshospital, s. 10

Interaction between ultraviolet B-induced cutaneous hyperalgesia and nerve growth factor-induced muscle hyperalgesia
Lo Vecchio, S., Petersen, L. J., Finocchietti, S., Gazerani, P., Christensen, S. W., Arendt-Nielsen, L. & Graven-Nielsen, T. , 2016, I: *European Journal of Pain*. 20, 7, s. 1058-1069

Interface pressure behavior during painful cuff algometry

Manafi Khanian, B., Arendt-Nielsen, L., Kjær Petersen, K., Samani, A. & Graven-Nielsen, T., 2016, I: *Pain Medicine*. 17, 5 , s. 915-923

Local and Widespread Hyperalgesia After Isolated Tibial Shaft Fractures Treated with Intramedullary Nailing

Larsen, P., Elsøe, R., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2016, I: *Pain Medicine*. 17, 6, s. 1174-1180 7 s.

Location of previous traumatic pain shift location of experimentally-induced referred pain

Palsson, T. S., Krebs, H. J., Boudreau, S. & Graven-Nielsen, T., 2016.

Motion segment contributions to cervical flexion and extension motion

Wang, X., Lindstrøm, R. & Graven-Nielsen, T., 2016.

Motor cortex reorganization and impaired function in the transition to sustained muscle pain

Schabrun, S. M., Christensen, S. W., Mrachacz-Kersting, N. & Graven-Nielsen, T., 2016, I: *Cerebral Cortex*. 26, 5, s. 1878-1890

Neural correlates of temporal summation in knee osteoarthritis pain: a preliminary fMRI study at 3T

Kurien, T., Reckziegel, D., Cottam, W. J., Petersen, K. K., Pearson, R. G., Arendt-Nielsen, L., Graven-Nielsen, T., Auer, D. P. & Scammell, B. E., 2016, I: *Osteoarthritis and Cartilage*. 24, Suppl. 1, s. S455 776.

Novel models for studying the effect of exercise and fatigue on the pain sensitivity in humans: part of topical workshop
Graven-Nielsen, T., 2016.

Ongoing neck pain causes alterations in axioscapular muscle activity when compared to healthy controls
Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2016.

Pain during adolescence can be grouped into four pain clusters with distinct profiles: results from a population based cohort of 2953 adolescents
Holden, S., Rathleff, M. S., Roos, E., Jensen, M. B., Pourbordbari, N. & Graven-Nielsen, T., 2016.

Pain during adolescence can be grouped into four pain clusters with distinct profiles: results from a population based cohort of 2953 adolescents

Holden, S., Rathleff, M. S., Roos, E., Jensen, M. B., Pourbordbari, N. & Graven-Nielsen, T., 2016, *Abstrakts og program, Forsknings- og Udviklingssymposium for Fysioterapeuter, Region Nordjylland, 8. november 2016, Aalborg, Danmark: "træning som behandling - hvorfor, hvordan og hvor lidt er nok?"*. Fysio- og Ergoterapi, Aalborg Universitetshospital, s. 9 25 s.

Pain modulatory phenotypes differentiate subgroups with different clinical and experimental pain sensitivity
Vægter, H. B. & Graven-Nielsen, T., 2016, I: Pain. 157, 7, s. 1480-1488

Pain modulatory phenotypes differentiate subgroups with different clinical and experimental pain sensitivity
Vægter, H. B. & Graven-Nielsen, T., 2016.

Preoperative pain mechanisms assessed by cuff algometry are associated with chronic postoperative pain relief after total knee replacement

Petersen, K. K., Graven-Nielsen, T., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2016, I: Pain. 157, 7, s. 1400-1406

Pressure-induced referred pain is expanded by persistent soreness

Doménech-García, V., Palsson, T. S., Herrero, P. & Graven-Nielsen, T., 2016, I: Pain. 157, 5, s. 1164-1172

Reorganized trunk muscle activity during multidirectional floor perturbations after experimental low back pain: a comparison of bilateral versus unilateral pain

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2016, I: Journal of Pain. 17, 2, s. 223-235

Resisted adduction in hip neutral is a superior provocation test to assess adductor longus pain: an experimental pain study

Drew, M. K., Palsson, T., Izumi, M., Hirata, R. P., Lovell, G., Chiarelli, P., Osmotherly, P. G. & Graven-Nielsen, T., 2016, I: Scandinavian Journal of Medicine & Science in Sports. 26, 8, s. 967-974

Sensitization and serological biomarkers in knee osteoarthritis patients with different degrees of synovitis

Petersen, K. K., Siebuhr, A. S., Graven-Nielsen, T., Simonsen, O., Boesen, M., Gudbergsen, H., Karsdal, M., Bay-Jensen, A. C. & Arendt-Nielsen, L., 2016, I: The Clinical Journal of Pain. 32, 10, s. 841-848

Stimulus predictability modulates the withdrawal strategy to nociceptive stimulation in humans
Jure, F. A., Arguissain, F., Manresa, J. B., Graven-Nielsen, T. & Andersen, O. K., 2016.

The pain experience in hospitalized children: The impact of hospital clowns on hospitalized children undergoing painful procedures

Kristensen, H. N., Thomsen, H. H., Graven-Nielsen, T. & Sørensen, E. E., 2016.

The relationship between pain threshold, muscle strength, and QOL in elderly people
Shiozawa, S. & Graven-Nielsen, T., 2016.

Tonic pressure as a novel model for conditioned pain modulation

Høgh, M., Andersen, H. H. & Graven-Nielsen, T., 2016.

Aerobic exercise and cold pressor test induce hypoalgesia in active and inactive men and women

Vægter, H. B., Handberg, G., Jørgensen, M. N., Kinly, A. & Graven-Nielsen, T., 2015, I: Pain Medicine. 16, 5, s. 923-933

A mechanism-based pain sensitivity index to characterize knee osteoarthritis patients with different disease stages and pain levels

Arendt-Nielsen, L., Egsgaard, L. L., Petersen, K. K., Eskelhave, T. N., Graven-Nielsen, T., Hoeck, H. C. & Simonsen, O., 2015, I: European Journal of Pain. 19, 10, s. 1406-1417

Approach to activity engagement in musculoskeletal pain: translation from research to clinical application

Graven-Nielsen, T., Kosek, E., Hasenbring, M. & Fehrmann, E., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. T5.5 No 5.5a; EFIC5-1109

Assessment of musculoskeletal pain mechanisms and the importance for management

Graven-Nielsen, T. & Arendt-Nielsen, L., 2015, *Refresher Courses, 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. 67-73

Assessment of musculoskeletal pain sensitivity and temporal summation by cuff pressure algometry: a reliability study

Graven-Nielsen, T., Vaegter, H. B., Finocchietti, S., Handberg, G. & Arendt-Nielsen, L., 2015, I: Pain. 156, 11, s. 2193-2202

Bilateral experimental neck pain reorganizes axioscapular and trunk muscle activity during fast arm movements

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2015, *Abstracts Fagkongres 2015: Danske Fysioterapeuter, 5-7 March 2015, Odense, Denmark.* Danske Fysioterapeuter, s. 97-98

Center of pressure displacement of standing posture during rapid movements is reorganised due to experimental lower extremity muscle pain

Shiozawa, S., Hirata, R. P. & Graven-Nielsen, T., 2015, I: PLoS ONE. 10, 12, e0144933.

Chronic musculoskeletal pain and its effects on brain activation

Ebbesen, B. D., Rasmussen, J., Gervasio, S., Graven-Nielsen, T. & Mrachacz-Kersting, N., 2015, *45th Annual Meeting of the Society for Neuroscience, Neuroscience 2015, 17-21 October 2015, Chicago, IL, USA.* Society for Neuroscience, s. No. 807.27/W1

Decreased muscle strength is associated with impaired long-term functional outcome after intramedullary nailing of femoral shaft fracture

Larsen, P., Elsøe, R., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2015, *Abstracts Fagkongres 2015: Danske Fysioterapeuter, 5-7 March 2015, Odense, Denmark.* Danske Fysioterapeuter, s. 100-101

Decreased muscle strength is associated with impaired long-term functional outcome after intramedullary nailing of femoral shaft fracture

Larsen, P., Elsøe, R., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2015, I: European Journal of Trauma and Emergency Surgery. 41, 6, s. 673-681 9 s.

Decreased muscle strength is persistent and associated with worse Quality of Life one year after intramedullary nailing of a tibial shaft fracture

Larsen, P., Elsøe, R., Læssøe, U., Graven-Nielsen, T., Eriksen, C. B. & Rasmussen, S., 2015.

Deformation and pressure propagation in deep somatic tissue during painful cuff algometry

Manafi-Khanian, B., Arendt-Nielsen, L., Frøkjær, J. B. & Graven-Nielsen, T., 2015, I: European Journal of Pain. 19, 10, s. 1456-1466

Distraction from pain improves postural stability during experimental pain

Hirata, R. P., Christensen, S., Agger, S. M., Svindt, M., Røssner, N., Abildgaard, J., Vuillerme, N. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.*

European Pain Federation EFIC, s. PO52 No. 146; EFIC5-0585

Dynamic mechanical assessment of muscle hyperalgesia in humans: the dynamic algometer

Finocchietti, S., Graven-Nielsen, T. & Arendt-Nielsen, L., 2015, I: *Pain Research & Management*. 20, 1, s. 29-34

Eccentric exercise slows in vivo microvascular reactivity during brief contractions in human skeletal muscle

Larsen, R. G., Hirata, R. P., Madzak, A., Frøkjær, J. B. & Graven-Nielsen, T., 2015, I: *Journal of Applied Physiology*. 119, 11, s. 1272-1281

Exercise-induced hypoalgesia and conditioned pain modulation are reduced in patients with knee osteoarthritis compared with patients with widespread pain and healthy controls

Vægter, H. B., Handberg, G., Emmeluth, C. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria*. European Pain Federation EFIC, s. PO07 No. 077; EFIC5-0122

Experimental human models and assessment of pain in non-pain conditions

Arendt-Nielsen, L., Graven-Nielsen, T. & Petrini, L., 2015, *Pain Comorbidities: Understanding and Treating the Complex Patient*. Giamberardino, M. A. & Jensen, T. S. (red.). Wolters Kluwer, s. 57-83

Experimental pelvic pain impairs the performance during the active straight leg raise test and causes excessive muscle stabilization

Palsson, T., Hirata, R. P. & Graven-Nielsen, T., 2015, I: *The Clinical Journal of Pain*. 31, 7, s. 642-651

Fysisk aktivitets indvirkning på tryksmertesensitivitet og smerteudbredelse hos personer med nakkesmerter sammenlignet med raske deltagere

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2015. 1 s.

Human surrogate models for musculoskeletal pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2015, *Pain Models: Translational Relevance and Applications*. Handwerker, H. O. & Arendt-Nielsen, L. (red.). Wolters Kluwer, s. 317-333

Hyperalgesia, temporal pain summation, and conditioned pain modulation in young female adults with and without patellofemoral pain: an assessor-blinded study

Rathleff, M. S., Petersen, K. K., Arendt-Nielsen, L., Thorborg, K. & Graven-Nielsen, T., 2015, *Sports Medicine Congress, 22-24 January 2015, Copenhagen, Denmark*. Danish Association of Sports Medicine and Danish Association of Sports Physiotherapy, s. 32

Impaired anticipatory postural adjustments due to experimental infrapatellar fat pad pain

Shiozawa, S., Hirata, R. P., Jeppesen, J. B. & Graven-Nielsen, T., 2015, I: *European Journal of Pain*. 19, 9, s. 1362-1371

Incidence and epidemiology of tibial shaft fractures

Larsen, P., Elsøe, R., Hansen, S. H., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2015, I: *Injury*. 46, 4, s. 746-750 5 s.

Inducing a blind spot: blinding data collectors in an investigation of experimental pain

Dannecker, E. A., Koltyn, K. F., Velazquez, C. R., Arendt-Nielsen, L. & Graven-Nielsen, T., 2015, I: *Pain Medicine*. 16, 6, s. 1145-1154

Isometric exercises reduce temporal summation of pressure pain in humans

Vægter, H. B., Handberg, G. & Graven-Nielsen, T., 2015, I: *European Journal of Pain*. 19, 7, s. 973-983

Mechanistic quantitative sensory testing: from animals to patients

Arendt-Nielsen, L., Graven-Nielsen, T. & Andersen, O. K., 2015, *Postoperative Pain: Science and Clinical Practice*. Wilder-Smith, O., Arendt-Nielsen, L., Yarnitsky, D. & Vissers, K. C. P. (red.). Wolters Kluwer, s. 95-107

Modulation of motor variability related to experimental muscle pain during elbow-flexion contractions

Mista, C. A., Christensen, S. W. & Graven-Nielsen, T., 2015, I: Human Movement Science. 39, s. 222-235

Movement evoked pain and mechanical hyperalgesia after intramuscular injection of nerve growth factor: a model of sustained elbow pain

Bergin, M. J. G., Hirata, R., Mista, C., Christensen, S. W., Tucker, K., Vicenzino, B., Hodges, P. & Graven-Nielsen, T., 2015, I: Pain Medicine. 16, 11, s. 2180-2191

Muscular pain comorbidities in joint diseases

Graven-Nielsen, T., Bliddal, H. & Arendt-Nielsen, L., 2015, *Pain Comorbidities: Understanding and Treating the Complex Patient*. Giamberardino, M. A. & Jensen, T. S. (red.). Wolters Kluwer, s. 349-372

Muskelømhed og unilateral og bilateral eksperimentel rygsmertes betydning for motorisk kontrol

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2015.

Osteoarthritis patients with increased temporal summation of pain and impaired conditioning pain modulation before surgery have more chronic pain after total knee replacement surgery

Petersen, K. K., Graven-Nielsen, T., Laursen, M. B., Simonsen, O. & Arendt-Nielsen, L., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria*. European Pain Federation EFIC , s. PO09 No. 103; EFIC5-0407

Patellofemoral pain in adolescence and adulthood: same same, but different?

Rathleff, M. S., Vicenzino, B., Middelkoop, M., Graven-Nielsen, T., van Linschoten, R., Hölmich, P. & Thorborg, K., 2015, I: Sports Medicine. 45, 11, s. 1489-1495

Pregnancy is characterized by widespread deep-tissue hypersensitivity independent of lumbopelvic pain intensity, a facilitated response to manual orthopedic tests, and poorer self-reported health

Palsson, T. S., Beales, D., Slater, H., O'Sullivan, P. & Graven-Nielsen, T., 2015, I: Journal of Pain. 16, 3, s. 270-282

Pressure algometry with a rotational fanning probe improves the detection of experimental muscle hyperalgesia

Adnadjevic, D. & Graven-Nielsen, T., 2015, I: Pain Medicine. 16, 3, s. 537-543

Reorganised motor control strategies of trunk muscles due to acute low back pain

Hirata, R. P., Salomoni, S. E., Christensen, S. W. & Graven-Nielsen, T., 2015, I: Human Movement Science. 41, s. 282-294

Sensitivity and specificity of diagnostic suprascapular nerve block assessed by a model of experimental muscle pain

Schliessbach, J., Siegenthaler, A., Treichel, F., Graven-Nielsen, T., Arendt-Nielsen, L. & Curatolo, M., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria*. European Pain Federation EFIC, s. PO23 No. 277; EFIC5-0066

Single-point but not tonic cuff pressure pain sensitivity is associated with level of physical fitness: a study of non-athletic healthy subjects

Lemming, D., Börsbo, B., Sjörs, A., Lind, E.-B., Arendt-Nielsen, L., Graven-Nielsen, T. & Gerdle, B., 2015, I: PLOS ONE. 10, 5, 11 s., e0125432.

Spread of musculoskeletal pain: common but misunderstood

Mense, S., Graven-Nielsen, T. & Giamberardino, M. A., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria*. European Pain Federation EFIC, s. T2.4 No. 2.4a; EFIC5-1092

System for evaluating pain modulation, spatial and/or temporal summation of pain or descending inhibition of pain in a human

Graven-Nielsen, T. (Opfinder) & Arendt-Nielsen, L. (Opfinder), 2015, IPC nr. A61B5/00, A61B5/021, A61B5/022, Patentnr. WO2015063221, 7 maj 2015, Prioritetsdato 30 okt. 2014

Temporal summation of muscle pain evoked by very fast pressure sequences and rotation
Adnadjevic, D. & Graven-Nielsen, T., 2015, I: Somatosensory and Motor Research. 32, 2, s. 99-105

The dynamics of the pain system is intact in patients with knee osteoarthritis: an exploratory experimental study
Jørgensen, T. S., Henriksen, M., Mortensen, S. R., Klokke, L., Ellegaard, K., Danneskiold-Samsøe, B., Bliddal, H. & Graven-Nielsen, T., 2015, I: Scandinavian Journal of Pain. 6, C, s. 43-49

The effect of aerobic and isometric exercises on pain sensitivity in healthy subjects and in patients with chronic musculoskeletal pain
Vægter, H. B., Handberg, G. & Graven-Nielsen, T., 2015, *Abstracts Fagkongres 2015: Danske Fysioterapeuter, 5-7 March 2015, Odense, Denmark.* Danske Fysioterapeuter, s. 89

The effect of a short mindfulness intervention on exercise induced hyperalgesia in fibromyalgia patients: a randomized controlled trial
Descheemaeker, F., Meeus, M., Danneels, L., Devulder, J., Prins, B., Rimbaut, S., Graven-Nielsen, T. & Van Damme, S., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. No. 282

The effect of combined skin and deep tissue inflammatory pain models
Lo Vecchio, S., Petersen, L. J., Finocchietti, S., Gazerani, P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2015, I: Pain Medicine. 16, 11, s. 2053-2064

The effect of experimental neck pain on pressure pain sensitivity and axioscapular motor control
Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2015, I: The Journal of Pain. 16, 4, s. 367-379

The effects of experimental knee pain on lower limb corticospinal and motor cortex excitability
Rice, D. A., Graven-Nielsen, T., Lewis, G. N., McNair, P. J. & Dalbeth, N., 2015, I: Arthritis Research & Therapy. 17, 8 s., 204.

The effects of repeated arm movements on pressure pain sensitivity in neck pain patients and healthy controls
Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. No. 126

The influence of experimental thigh and groin pain on the mechanical sensitivity, pain distribution and clinical tests of the adductor longus
Drew, M., Palsson, T. S., Hirata, R. P., Izumi, M., Lovell, G., Chiarelli, P., Osmotherly, P. G. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. PO08 No. 080; EFIC5-0765

The interaction of musculoskeletal pain and physical activity: human studies
Graven-Nielsen, T., Madsen, H. B. & Arendt-Nielsen, L., 2015, *Routledge Handbook of Physical Activity and Mental Health.* Ekkekakis, P. (red.). Routledge, s. 359-371 (Routledge Handbooks).

The long posterior sacroiliac ligament in lumbopelvic pain: comparison of clinical and experimental findings
Palsson, T. S. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. PO08 No. 086; EFIC5-0641

The long posterior sacroiliac ligament in lumbopelvic pain: comparison of clinical and experimental findings
Palsson, T. S. & Graven-Nielsen, T., 2015.

The nociceptive capacity of muscle, skeletal, and connective tissue
Graven-Nielsen, T. & Arendt-Nielsen, L., 2015, *Postoperative Pain: Science and Clinical Practice.* Wilder-Smith, O., Arendt-Nielsen, L., Yarnitsky, D. & Vissers, K. C. P. (red.). Wolters Kluwer, s. 17-33

The role of pain memory in lumbopelvic pain: a pilot study

Krebs, H. J., Palsson, T. S. & Graven-Nielsen, T., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. PO06 No. 065; EFIC5-0853

Within and between daily session reliability of computer-controlled pressure cuff algometry

Uchida, Y., Petersen, K. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2015, *Abstract book of the 9th Congress of the European Pain Federation, EFIC, 2-5 September 2015, Vienna, Austria.* European Pain Federation EFIC, s. PO28 No. 363; EFIC5-0373

Potential interaction of experimental knee pain and laterally wedged insoles for knee off-loading during walking

Mølgaard, C. M., Graven-Nielsen, T., Simonsen, O. & Kersting, U. G., 14 aug. 2014, I: *Clinical Biomechanics.* 29, 8, s. 848-854 7 s.

Acid-induced experimental muscle pain and hyperalgesia with single and repeated infusion in human forearm

Luo, Y., Wang, K., Asaki, T., Graven-Nielsen, T., Cairns, B. E. & Arendt-Nielsen, L., 2014.

Akutte eksperimentelle nakkesmerter påvirker motorisk kontrol af axioscapulære & trunkus muskler

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2014.

Altered control strategies during isometric trunk extension following experimental low back pain

Hirata, R. P., Salomoni, S. E., Christensen, S. W. & Graven-Nielsen, T., 2014, *Book of Proceedings, ISEK 2014, XX Congress of the International Society of Electrophysiology and Kinesiology, 15-18 July 2014, Rome, Italy.* ISEK

Assessment of musculoskeletal pain mechanisms and relevant human experimental models

Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, *Musculoskeletal Pain: Basic Mechanisms and Implications.* Graven-Nielsen, T. & Arendt-Nielsen, L. (red.). IASP Press, s. 369-391

Association between a composite score of pain sensitivity and clinical parameters in low-back pain

O'Neill, S., Manniche, C., Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, I: *The Clinical Journal of Pain.* 30, 10, s. 831-838

Association between experimental pain biomarkers and serologic markers in patients with different degrees of painful knee osteoarthritis

Arendt-Nielsen, L., Eskehave, T. N., Egsgaard, L. L., Petersen, K. K., Graven-Nielsen, T., Hoeck, H. C., Simonsen, O., Siebuhr, A. S., Karsdal, M. & Bay-Jensen, A. C., 2014, I: *Arthritis & Rheumatology.* 66, 12, s. 3317-3326

Association of exercise therapy and reduction of pain sensitivity in patients with knee osteoarthritis: A randomized controlled trial

Henriksen, M., Klokke, L., Graven-Nielsen, T., Bartholdy, C., Jørgensen, T. S., Bandak, E., Danneskiold-Samsøe, B., Christensen, R. & Bliddal, H., 2014, I: *Arthritis Care & Research.* 66, 12, s. 1836-1843

Axioscapular muscle activity during experimental neck pain and rapid arm movements is not affected

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina.* IASP Press, s. No. PH080

Basic mechanisms and assessment of musculoskeletal pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, *Pain 2014 Refresher Courses: 15th World Congress on Pain.* Raja, S. N. & Sommer, C. L. (red.). IASP Press, s. 153-161

Bone hyperalgesia after mechanical impact stimulation: A human experimental pain model

Finocchietti, S., Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, I: *Somatosensory and Motor Research.* 31, 4, s. 178-185

Cuff algometry to assess sensitization in elderly patients with severe knee osteoarthritis compared with controls

Finocchietti, S., Arendt-Nielsen, L., Petersen, K. K., Simonsen, O. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina.* IASP Press, s. No. PT232

Decreased muscle strength is associated with impaired longterm functional outcome after intramedullary nailing of femoral shaft fracture

Larsen, P., Elsøe, R., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2014.

Effects of eccentric exercise on microvascular function in human skeletal muscle

Larsen, R. G., Simonsen, C. W., Hirata, R. P., Frøkjær, J. B. & Graven-Nielsen, T., 2014, I: *Acta Physiologica*. 211, Suppl. 696, s. 37, No. 6:5

Effects of prolonged muscle soreness and pain on force variability during isometric force task

Mista, C. A., Bergin, M., Christensen, S. W., Hirata, R. P., Tucker, K. J., Hodges, P. W. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PH121

Facilitation of pain sensitization in knee osteoarthritis and persistent post-operative pain: A cross-sectional study

Skou, S. T., Graven-Nielsen, T., Rasmussen, S., Simonsen, O. H., Laursen, M. B. & Arendt-Nielsen, L., 2014, I: *European Journal of Pain*. 18, 7, s. 1024-1031 8 s.

Fast pressure stimulation sequences and rotation used to evoke temporal summation of muscle pain

Adnadjevic, D. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PT227

Heat-rekindling in UVB-irradiated skin above NGF-sensitized muscle: experimental models of prolonged mechanical hypersensitivity

Lo Vecchio, S., Finocchietti, S., Gazerani, P., Petersen, L. J., Arendt-Nielsen, L. & Graven-Nielsen, T., 2014, I: *International Journal of Physiology, Pathophysiology and Pharmacology*. 6, 3, s. 143-152

Hyperalgesia and allodynia to superficial and deep-tissue mechanical stimulation within and outside of the UVB irradiated area in human skin

Lo Vecchio, S., Petersen, L. J., Finocchietti, S., Gazerani, P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2014, I: *Scandinavian Journal of Pain*. 5, 4, s. 258–267

Hypoalgesia induced by exercise and cold pressor pain in patients with chronic pain

Vægter, H. B., Handberg, G. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PF059

Improving the outcome of patients with musculoskeletal and postsurgical pains: understanding pain mechanisms and controlling co-morbidities

Graven-Nielsen, T., 2014, *Annual Meeting of the Society for Neuroscience, Neuroscience 2014, 15-19 November 2014, Washington, DC, USA*. s. Presentation No. 766.07

Increased pain sensitivity occurs naturally during pregnancy and may be related with several physical and psychosocial factors

Pålsson, T., Slater, H., Beales, D., O'Sullivan, P. & Graven-Nielsen, T., 2014.

Intra-articular analgesia and steroid reduce pain sensitivity in knee OA patients: an interventional cohort study

Jørgensen, T. S., Graven-Nielsen, T., Ellegaard, K., Danneskiold-Samsøe, B., Bliddal, H. & Henriksen, M., 2014, I: *Pain Research and Treatment*. 2014, 6 s., 710490.

Knee osteoarthritis patients with different degrees of synovitis have different sensitization and serological biomarkers paradigms

Petersen, K. K., Siebuhr, A., Graven-Nielsen, T., Simonsen, O. & Arendt-Nielsen, L., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PT281

Latent myofascial trigger points are associated with an increased intramuscular electromyographic activity during synergistic muscle activation

Ge, H.-Y., Monterde, S., Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, I: *Journal of Pain*. 15, 2, s. 181-187

Mechanisms underlying extraterritorial and widespread sensitization: from animal to chronic pain

Arendt-Nielsen, L. & Graven-Nielsen, T., 2014, *Musculoskeletal Pain: Basic Mechanisms and Implications*. Graven-Nielsen, T. & Arendt-Nielsen, L. (red.). IASP Press, s. 417-435

Motor cortex adaptation in the transition from acute to maintained muscle pain

Schabrun, S. M., Christensen, S. W., Mrachacz-Kersting, N. & Graven-Nielsen, T., 2014, *Annual Meeting of the Society for Neuroscience, Neuroscience 2014, 15-19 November 2014, Washington, DC, USA*. s. Poster No. 338.04/HH2

Motor cortex reorganisation after several days with muscle hyperalgesia and movement evoked pain in humans

Schabrun, S. M., Christensen, S. W., Mrachacz-Kersting, N. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PW078

Musculoskeletal pain: basic mechanisms and implications

Graven-Nielsen, T. (Redaktør) & Arendt-Nielsen, L. (Redaktør), 2014, IASP Press.

Pain referral and regional deep tissue hyperalgesia in experimental human hip pain models

Izumi, M., Petersen, K. K., Arendt-Nielsen, L. & Graven-Nielsen, T., 2014, I: *Pain*. 155, 4, s. 792-800

Potential interaction of experimental knee pain and laterally wedged insoles for knee offloading during walking

Mølgaard, C., Graven-Nielsen, T., Simonsen, O. & Kersting, U. G., 2014, *Sports Medicine Congress, 30 January-1 February 2014, Kolding, Denmark: Treatment and Prevention of Sports Injuries*. Danish Association of Sports Medicine and Danish Association of Sports Physiotherapy, s. 24-25

Preface

Graven-Nielsen, T. & Arendt-Nielsen, L., 2014, *Musculoskeletal Pain: Basic Mechanisms and Implications*. Graven-Nielsen, T. & Arendt-Nielsen, L. (red.). IASP Press, s. ix-xi

Referred shoulder pain is facilitated by muscle soreness

Domenech, V., Skuli, T., Herrero, P. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PF369

Reliability and validity of a simple and clinically applicable pain stimulus: sustained mechanical pressure with a spring-clamp

O'Neill, S., Graven-Nielsen, T., Manniche, C. & Arendt-Nielsen, L., 2014, I: *Chiropractic & Manual Therapies*. 22, 1, 10 s., 30.

Restrictions in Quality of Life after Intramedullary Nailing of Tibial Shaft Fracture. A retrospective follow-up study of 223 cases

Larsen, P., Lund, H., Laessoe, U., Graven-Nielsen, T. & Rasmussen, S., 2014, I: *Journal of Orthopaedic Trauma*. 28, 9, s. 507-512 6 s.

Sensitivity to cuff algometry in 98 healthy non-athletic people: associations with sex and physical activity level?

Lemming, D., Börsbo, B., Sjörs, A., Lind, E., Arendt-Nielsen, L., Graven-Nielsen, T. & Gerdle, B., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PS133

Similarities between exercise-induced hypoalgesia and conditioned pain modulation in humans

Vægter, H. B., Handberg, G. & Graven-Nielsen, T., 2014, I: *Pain*. 155, 1, s. 158-167

Spatial reorganisation of muscle activity correlates with change in tangential force variability during isometric contractions

Mista, C. A., Salomoni, S. E. & Graven-Nielsen, T., 2014, I: *Journal of Electromyography & Kinesiology*. 24, 1, s. 37-45

Sustained mechanical hyperalgesia and pain during movement after intramuscular injection of nerve growth factor into a forearm muscle

Bergin, M. J., Hirata, R. P., Mista, C. A., Christensen, S. W., Tucker, K., Vicenzino, B., Hodges, P. W. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PW151

Vibration and rotation during biaxial pressure algometry is related with decreased and increased pain sensations

Adnadjevic, D. & Graven-Nielsen, T., 2014, I: *Pain Medicine*. 15, 12, s. 2095-2104

Widespread sensitization in patients with painful hip osteoarthritis

Izumi, M., Petersen, K. K., Laursen, M. B., Arendt-Nielsen, L. & Graven-Nielsen, T., 2014, *15th World Congress on Pain, 6-11 October 2014, Buenos Aires, Argentina*. IASP Press, s. No. PF367

Acid-induced experimental knee pain and hyperalgesia in humans

Asaki, T., Wang, K., Luo, Y., Nielsen, T. A., Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 819

Acute and short-term effects of intra-articular knee pain relief on pain sensitization in knee OA: a cohort study

Joergensen, T., Graven-Nielsen, T., Rosager, S., Klokke, L., Ellegaard, K., Danneskiold-Samsøe, B., Bliddal, H. & Henriksen, M., 2013, I: *Osteoarthritis and Cartilage*. 21, Suppl., s. S268, No. 520

Altered visual and feet proprioceptive feedbacks during quiet standing increase postural sway in patients with severe knee osteoarthritis

Hirata, R. P., Jørgensen, T. S., Rosager, S., Arendt-Nielsen, L., Bliddal, H., Henriksen, M. & Graven-Nielsen, T., 2013, I: *Pain*. 8, 8 s., e71253.

A novel experimental model of bone hyperalgesia after mechanical impact periost stimulation

Finocchietti, S., Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 822

Assessment of pressure-pain thresholds and central sensitization of pain in lateral epicondylalgia

Jespersen, A., Amris, K., Graven-Nielsen, T., Arendt-Nielsen, L., Bartels, E. M., Torp-Pedersen, S., Bliddal, H. & Danneskiold-Samsøe, B., 2013, I: *Pain Medicine*. 14, 2, s. 297-304

Association between a composite score of pain sensitivity and clinical parameters in low-back pain

O'Neill, S., Manniche, C., Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 183

Blinding data collectors in investigations of experimental pain: let's get real

Dannecker, E., Koltyn, K., Velazquez, C., Arendt-Nielsen, L. & Graven-Nielsen, T., 2013, I: *Journal of Pain*. 14, 4, Suppl., s. S37

Complex muscular adaptation to perturbations after induction of experimental low back pain in healthy participants

Larsen, L. H., Hirata, R. P. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 827

Deformation and pressure propagation in deep tissue during mechanical painful pressure stimulation

Finocchietti, S., Takahashi, K., Okada, K., Watanabe, Y., Graven-Nielsen, T. & Mizumura, K., 2013, I: *Medical & Biological Engineering & Computing*. 51, 1-2, s. 113-122

Different patterns of pain referral and regional deep tissue hyperalgesia in experimental human hip pain models

Izumi, M., Petersen, K. K., Arendt-Nielsen, L. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 145

Effects of experimental muscle pain on force variability during task-related and three directional isometric force task
Mista, C. A. & Graven-Nielsen, T., 2013, *Abstracts, Poster Session I, Progress in Motor Control IX, 13-16 July 2013, Montréal, Canada.* The International Society of Motor Control, s. 66, No. 132 1 s.

Exercise-induced hypoalgesia and conditioned pain modulation is not correlated with status of physical activity
Madsen, H. B., Handberg, G., Jørgensen, M., Kinly, A. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy.* European Pain Federation EFIC, s. No. 127

Exercise therapy reduces pain sensitivity in patients with knee osteoarthritis: a randomized controlled trial
Henriksen, M., Klokke, L., Graven-Nielsen, T., Bartholdy, C., Joergensen, T. S., Bandak, E., Danneskiold-Samsøe, B., Christensen, R. & Bliddal, H., 2013, I: *Arthritis & Rheumatism.* 65, 10, Suppl., s. S775, No. 1816

Exogenous muscle pain

Graven-Nielsen, T., 2013, *Encyclopedia of Pain.* Gebhart, G. F. & Schmidt, R. F. (red.). 2 udg. Berlin: Springer Publishing Company, s. 1230-1233

Experimental knee pain evoke spreading hyperalgesia and facilitated temporal summation of pain

Jørgensen, T. S., Henriksen, M., Danneskiold-Samsøe, B., Bliddal, H. & Graven-Nielsen, T., 2013, I: *Pain Medicine.* 14, 6 , s. 874-883

Experimental knee pain rekindles spreading hyperalgesia and facilitated temporal summation of pain in patients with knee OA

Jørgensen, T. S., Henriksen, M., Rosager, S., Klokke, L., Ellegaard, K., Danneskiold-Samsøe, B., Bliddal, H. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy.* European Pain Federation EFIC, s. No. 146

Experimental neck muscle pain reorganises the axioscapular muscle activity during arm movements

Christensen, S. W., Hirata, R. P. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy.* European Pain Federation EFIC, s. No. 139

Human surrogate models for musculoskeletal pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Pain Models: Translational Relevance and Applications.* Handwerker, H. O. & Arendt-Nielsen, L. (red.). IASP Press, s. 317-333

Interaction between experimental cutaneous and muscle hyperalgesia: an experimental study in healthy volunteers

Lo Vecchio, S., Petersen, L. J., Finocchietti, S., Gazerani, P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy.* European Pain Federation EFIC, s. No. 829

MR-guided focused ultrasound for the novel and innovative management of osteoarthritic knee pain

Izumi, M., Ikeuchi, M., Kawasaki, M., Ushida, T., Morio, K., Namba, H., Graven-Nielsen, T., Ogawa, Y. & Tani, T., 2013, I: *B M C Musculoskeletal Disorders.* 14, 8 s., 267.

Muscular heat and mechanical pain sensitivity after lengthening contractions in humans and animals

Queme, F., Taguchi, T., Mizumura, K. & Graven-Nielsen, T., 2013, I: *Journal of Pain.* 14, 11, s. 1425-1436

Musculoskeletal pain and hyperalgesia in pregnancy facilitates the outcome of clinical diagnostic tests for lumbopelvic pain
Palsson, T., Slater, H., Beales, D., O'Sullivan, P. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy.* European Pain Federation EFIC, s. No. 153

Neurophysiological basis of muscle-referred pain to the head

Graven-Nielsen, T., Ge, H.-Y. & Arendt-Nielsen, L., 2013, *Multidisciplinary Management of Migraine: Pharmacological, Manual, and Other Therapies.* Fernández-de-las-Peñas, C., Chaitow, L. & Schoenen, J. (red.). Jones and Bartlett

Publishers, s. 57-66 (Contemporary Issues in Physical Therapy and Rehabilitation Medicine).

Pain intensity is correlated with postural strategies in patients with severe knee osteoarthritis under different sensory conditions

Hirata, R. P., Jørgensen, T. S., Mortensen, S. R., Arendt-Nielsen, L., Bliddal, H., Henriksen, M. & Graven-Nielsen, T., 2013, *Abstracts, ISPGR World Congress, 22-26 June 2013, Akita, Japan*. International Society for Posture & Gait Research, ISPGR, s. No. P4-E-118

Quantitative sensory testing in musculoskeletal pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Refresher Courses, Pain in Europe VIII : 8th Congress of the European Pain Federation EFIC, 9 October 2013, Florence, Italy*. European Pain Federation EFIC, s. 35-42

Referred muscle pain, assessment

Graven-Nielsen, T., 2013, *Encyclopedia of Pain*. Gebhart, G. F. & Schmidt, R. F. (red.). 2 udg. Berlin: Springer Publishing Company, s. 3372-3376

Relating clinical measures of pain with experimentally assessed pain mechanisms in patients with knee osteoarthritis

Skou, S. T., Graven-Nielsen, T., Lengsø, L., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2013, I: Scandinavian Journal of Pain. 4, 2, s. 111-117

Reliable vibration stimulation combined with pressure algometry

Adnadjevic, D. & Graven-Nielsen, T., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 1090

Reorganised anticipatory postural adjustments due to experimental lower extremity muscle pain

Shiozawa, S., Hirata, R. P. & Graven-Nielsen, T., 2013, I: Human Movement Science. 32, 6, s. 1239-1252

Repeated intramuscular injections of nerve growth factor induced progressive muscle hyperalgesia, facilitated temporal summation, and expanded pain areas

Hayashi, K., Shiozawa, S., Ozaki, N., Mizumura, K. & Graven-Nielsen, T., 2013, I: Pain. 154, 11, s. 2344-2352

Safety system for moving coil pressure algometer

Adnadjevic, D., Lorrain, T. & Graven-Nielsen, T., 2013, *35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, IEEE EMBS, 3-7 July 2013, Osaka, Japan*. IEEE Press, s. 5356-5359 (IEEE Engineering in Medicine and Biology Society. Conference Proceedings).

Sensitization in patients with pain after revision total knee arthroplasty

Skou, S. T., Graven-Nielsen, T., Rasmussen, S., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 179

Sensitization is more prominent in patients with pain after revision total knee arthroplasty than in painful knee osteoarthritis

Graven-Nielsen, T., Skou, S. T., Rasmussen, S., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 167

Status of physical activity is not related to level of exercise-induced hypoalgesia and conditioned pain modulation

Madsen, H. B., Handberg, G., Jørgensen, M., Kinly, A. & Graven-Nielsen, T., 2013, *Sports Medicine Congress, 31 January-2 February 2013, Kolding, Denmark: From Research to Clinical Practice*. Danish Association of Sports Medicine and Danish Association of Sports Physiotherapy, s. 25-26, No. 22

The associations between pain sensitivity and knee muscle strength in healthy volunteers: a cross-sectional study

Henriksen, M., Klokke, L., Bartholdy, C., Graven-Nielsen, T. & Bliddal, H., 2013, I: Pain Research and Treatment. 2013, 7 s., 787054.

The interaction of musculoskeletal pain and physical activity: human studies

Graven-Nielsen, T., Madsen, H. B. & Arendt-Nielsen, L., 2013, *Routledge Handbook of Physical Activity and Mental Health*. Ekkekakis, P. (red.). Routledge, s. 359-371

Translational studies on nerve growth factor, sensitisation and pain

Graven-Nielsen, T., Schmelz, M. & Mense, S., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 19

Trigger point dry needling in fibromyalgia: a partly blinded, randomized and controlled clinical trial

Ge, H.-Y., Graven-Nielsen, T. & Arendt-Nielsen, L., 2013, *Abstract Book of the 8th Congress of the European Federation of IASP Chapters (EFIC), 9-12 October 2013, Florence, Italy*. European Pain Federation EFIC, s. No. 217

Variability of three-dimensional forces increase during experimental knee pain

Salomoni, S. E., Ejaz, A., Laursen, A. C. & Graven-Nielsen, T., 2013, I: *European Journal of Applied Physiology*. 113, 3, s. 567-575

Widespread sensitization in patients with chronic pain after revision total knee arthroplasty

Skou, S. T., Graven-Nielsen, T., Rasmussen, S., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2013, I: *Pain*. 154, 9, s. 1588-1594

A simple test of muscle coactivation estimation using electromyography

Ervilha, U. F., Graven-Nielsen, T. & Duarte, M., 2012, I: *Brazilian Journal of Medical and Biological Research*. 45, 10, s. 977-981

Association between pain, biochemical markers of inflammation and cartilage degradation in patients with osteoarthritis

Eskehave, T. N., Arendt-Nielsen, L., Egsgaard, L. L., Graven-Nielsen, T., Hoeck, H. C., Bay-Jensen, A.-C. & Karsdal, M. A., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 067

Baseline pressure-pain tolerance threshold predicts the clinical outcome of a weight loss intervention in obese knee OA patients: a prospective cohort study

Jørgensen, T. S., Henriksen, M., Christensen, R., Graven-Nielsen, T., Bliddal, H. & Jespersen, A., 2012, I: *Osteoarthritis and Cartilage*. 20, Suppl. 1, s. S254-S255, No. 503

Comparing pressure pain thresholds determined by algometry and manual palpation

Degenhardt, B. F., Snider, E. J., Snider, K. T., Pamperin, K., Yang, Q., Johnson, J. C. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PT 023

Current pain and fear of pain contribute to reduced maximum voluntary contraction of neck muscles in patients with chronic neck pain

Lindstrøm, R., Graven-Nielsen, T. & Falla, D., 2012, I: *Archives of Physical Medicine and Rehabilitation*. 93, 11, s. 2042-2048

Descending pain modulation and its interaction with peripheral sensitization following sustained isometric muscle contraction in fibromyalgia

Ge, H.-Y., Nie, H., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Arendt-Nielsen, L., 2012, I: *European Journal of Pain*. 16, 2, s. 196-203

Different manifestations of exercise-induced hypoalgesia and conditioned pain modulation in humans

Madsen, H. B., Handberg, G. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 182

Effects of musculoskeletal pain on postural control and force variability

Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy.* IASP Press, s. No. TW 24

Effects of visual feedback size on multidirectional force variability during isometric contractions

Mista, C. A., Salomoni, S. E. & Graven-Nielsen, T., 2012, *Proceedings of the XIXth Congress of the International Society of Electrophysiology & Kinesiology, ISEK2012, 19-21 July 2012, Brisbane, Australia.* ISEK, s. 50, No. BIOM_O4.3

Exercise and conditioned pain modulation have different effects on cuff pressure pain tolerance in humans

Madsen, H. B., Handberg, G. & Graven-Nielsen, T., 2012, *Programme and Abstract Book, the 2012 Joint Annual Meeting of the Scandinavian Association for the Study of Pain (SASP) and the Danish Pain Society (DSF), 19-21 April 2012, Aarhus, Denmark.* SASP, s. 40, No. T15

Exercise and conditioned pain modulation have different effects on cuff pressure pain tolerance in humans

Madsen, H. B., Handberg, G. & Graven-Nielsen, T., 2012, I: *Scandinavian Journal of Pain.* 3, 3, s. 190, No. T15

Experimental human models and assessment of pain in non-pain conditions

Arendt-Nielsen, L., Graven-Nielsen, T. & Petrini, L., 2012, *Pain Comorbidities: Understanding and Treating the Complex Patient.* Giamberardino, M. A. & Jensen, T. S. (red.). IASP Press, s. 57-83

Experimental knee pain impairs postural stability during quiet stance but not after perturbations

Hirata, R. P., Arendt-Nielsen, L., Shiozawa, S. & Graven-Nielsen, T., 2012, I: *European Journal of Applied Physiology.* 112, 7, s. 2511-2521

Experimental knee pain impair the steadiness of the motor output in all three-dimensional force components

Salomoni, S. E., Ejaz, A., Laursen, A. & Graven-Nielsen, T., 2012, *Proceedings of the XIXth Congress of the International Society of Electrophysiology & Kinesiology, ISEK2012, 19-21 July 2012, Brisbane, Australia.* ISEK, s. 422, No. PAIN_P1.1

Experimental muscle pain increases normalized variability of multidirectional forces during isometric contractions

Salomoni, S. E. & Graven-Nielsen, T., 2012, I: *European Journal of Applied Physiology.* 112, 10, s. 3607-3617

Experimental pelvic pain facilitates pain provocation tests and causes regional hyperalgesia

Palsson, T. & Graven-Nielsen, T., 2012, I: *Pain.* 153, 11, s. 2233-2240

Extra articular pain of the sacroiliac joint complex causes widespread hyperalgesia and changes the outcome of sacroiliac joint provocation tests

Palsson, T. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy.* IASP Press, s. No. PT 050

Forreste knæsmørter og begrænsninger i aktivitet og deltagelse efter marvsømning af tibia fraktur

Larsen, P., Lund, H., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2012, *Abstracts Fagfestival 2012, Danske Fysioterapeuter, 22-24 March 2012, Odense, Denmark.* Danske Fysioterapeuter, s. 67-68

Heat rekindling of UV-B-irradiated skin: a human experimental model of peripheral and central sensitisation

Lo Vecchio, S., da Silva, L. B., Gazerani, P., Graven-Nielsen, T., Petersen, L. & Arendt-Nielsen, L., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy.* IASP Press, s. No. PT 298

Hyperalgesia in human skin and deep-tissues inside and outside of a UVB irradiated area

Lo Vecchio, S., Petersen, L. J., Graven-Nielsen, T., Finocchietti, S., Gazerani, P. & Arendt-Nielsen, L., 2012, *Programme and Abstract Book, the 2012 Joint Annual Meeting of the Scandinavian Association for the Study of Pain (SASP) and the Danish Pain Society (DSF), 19-21 April 2012, Aarhus, Denmark.* SASP, s. 40-41, No. T16

Hyperalgesia in human skin and deep-tissues inside and outside of a UVB irradiated area

Lo Vecchio, S., Petersen, L. J., Graven-Nielsen, T., Finocchietti, S., Gazerani, P. & Arendt-Nielsen, L., 2012, I: Scandinavian Journal of Pain. 3, 3, s. 190, No. T16

Impaired postural control in knee osteoarthritis patients: effects of visual and feet proprioceptive input and disease severity

Graven-Nielsen, T., Hirata, R. P., Jørgensen, T. S., Rosager, S., Arendt-Nielsen, L., Bliddal, H. & Henriksen, M., 2012, *Proceedings of the XIXth Congress of the International Society of Electrophysiology & Kinesiology, ISEK2012, 19-21 July 2012, Brisbane, Australia*. ISEK, s. 46, No. BIOM_O3.3

Low-dose sublingual ketamine does not modulate experimentally induced mechanical hyperalgesia in healthy subjects

Slater, H., Graven-Nielsen, T., Wright, A. & Schug, S. A., 2012, I: Pain Medicine. 13, 9, s. 1235-1246

Motor control of the back during frontal plane perturbations with and without pain

Larsen, L. H., Hirata, R. P., Falla, D. & Graven-Nielsen, T., 2012, *Proceedings of the XIXth Congress of the International Society of Electrophysiology & Kinesiology, ISEK2012, 19-21 July 2012, Brisbane, Australia*. ISEK, s. 267, No. SPIN_O3.2

Moving coil pressure algometer produces consistent force gradient and repeated stimulation

Adnadjevic, D. & Graven-Nielsen, T., 2012, *34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, IEEE EMBS, EMBC, 28 August-1 September 2012, San Diego, CA, USA*. IEEE Press, s. 6591-6594 (IEEE Engineering in Medicine and Biology Society. Conference Proceedings).

Muscle fatigue increases the amplitude of fluctuations of tangential forces during isometric contractions

Salomoni, S. E. & Graven-Nielsen, T., 2012, I: Human Movement Science. 31, 4, s. 758-771

Muscular pain comorbidities in joint diseases

Graven-Nielsen, T., Bliddal, H. & Arendt-Nielsen, L., 2012, *Pain Comorbidities: Understanding and Treating the Complex Patient*. Giamberardino, M. A. & Jensen, T. S. (red.). IASP Press, s. 349-372

Musculoskeletal pain mechanisms and quantitative assessment

Graven-Nielsen, T. & Arendt-Nielsen, L., 2012, *Pain 2012 Refresher Courses: 14th World Congress on Pain*. Tracey, I. (red.). Seattle, WA: IASP Press, s. 147-156

Musculoskeletal pain mechanisms and quantitative assessment

Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press

Muskuloskeletal smerte: fysiologi, manifestationer og mekanismer

Skou, S. T., Arendt-Nielsen, L. & Graven-Nielsen, T., 2012, I: Dansk Sportsmedicin. 16, 3, s. 14-18

Normalization of widespread hyperesthesia and facilitated spatial summation of deep-tissue pain in knee osteoarthritis patients after knee replacement

Graven-Nielsen, T., Wodehouse, T., Langford, R. M., Arendt-Nielsen, L. & Kidd, B. L., 2012, I: Arthritis & Rheumatism. 64, 9, s. 2907-2916

Pain evoked by pressure stimulation on the tibia bone: influence of probe diameter on tissue stress and strain

Finocchietti, S., Andresen, T., Arendt-Nielsen, L. & Graven-Nielsen, T., 2012, I: European Journal of Pain. 16, 4, s. 534-542

Predicting clinical pain in knee osteoarthritis using a multimodal pressure pain assessment procedure

Skou, S. T., Graven-Nielsen, T., Lengsø, L., Simonsen, O., Laursen, M. B. & Arendt-Nielsen, L., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PT 060

Raske forsøgsdeltageres motoriske kontrol af lænderyggen med træningsømhed og eksperimental rygsmerte
Larsen, L. H., Graven-Nielsen, T. & Falla, D., 2012, *Abstracts Fagfestival 2012, Danske Fysioterapeuter, 22-24 March 2012, Odense, Denmark*. Danske Fysioterapeuter, s. 83

Reorganized motor control pattern in experimental low back muscle pain

Larsen, L. H., Hirata, R. P., Falla, D. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PT 039

Repeated intramuscular injections of nerve growth factor induced muscle hyperalgesia, facilitated temporal summation, and expanded referred pain

Hayashi, K., Shiozawa, S., Ozaki, N., Mizumura, K. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 238

Reply: to comment on "Normalization of widespread hyperesthesia and facilitated spatial summation of deep-tissue pain in knee osteoarthritis patients after knee replacement"

Graven-Nielsen, T., Wodehouse, T., Langford, R. M., Arendt-Nielsen, L. & Kidd, B. L., 2012, *I: Arthritis & Rheumatism*. 64, 12, s. 4165-4166

Spreading hyperalgesia and facilitated temporal summation of pain evoked by experimental knee pain

Jørgensen, T. S., Henriksen, M., Danneskiold-Samsøe, B., Bliddal, H. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 242

Temporal summation of pain evoked by pressure stimulation in muscle: a finite element study of tissue stress/strain distribution

Graven-Nielsen, T., Finocchietti, S. & Arendt-Nielsen, L., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 233

The association between pressure-pain tolerance threshold and local and/or systemic inflammation in obese knee osteoarthritis patients: a cross-sectional study

Jørgensen, T. S., Jespersen, A., Christensen, R., Gudbergsen, H., Graven-Nielsen, T., Bliddal, H. & Henriksen, M., 2012, *I: Osteoarthritis and Cartilage*. 20, Suppl. 1, s. S258-S258, No. 510

The association between pressure-pain tolerance threshold and local and/or systemic inflammation in obese knee osteoarthritis patients: a cross-sectional study

Jespersen, A., Jørgensen, T. S., Christensen, R., Gudbergsen, H., Graven-Nielsen, T., Bliddal, H. & Henriksen, M., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PW 211

The cause-effect relations between physical function, physical ability, and quality of life in elderly people with knee pain after short-term non-invasive intervention

Shiozawa, S., Oida, Y., Morozumi, K., Nakamura, N., Sato, S., Kitabatake, Y., Yoshida, K. & Graven-Nielsen, T., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PF 116

Tissue characteristics during temporal summation of pressure-evoked pain

Finocchietti, S., Arendt-Nielsen, L. & Graven-Nielsen, T., 2012, *I: Experimental Brain Research*. 219, 2, s. 255-265

Tissue deformation and pressure propagation in human tissue during mechanical painful stimulation: comparison of tibialis anterior and gastrocnemius medialis

Finocchietti, S., Takahashi, K., Okada, K., Watanabe, Y., Graven-Nielsen, T. & Mizumura, K., 2012, *Abstracts of the 14th World Congress on Pain, International Association for the Study of Pain, IASP, 27-31 August 2012, Milan, Italy*. IASP Press, s. No. PT 026

Widespread pain hypersensitivity and facilitated temporal summation of deep tissue pain in whiplash associated disorder: an explorative study of women

Lemming, D., Graven-Nielsen, T., Sørensen, J., Arendt-Nielsen, L. & Gerdle, B., 2012, I: Journal of Rehabilitation Medicine. 44, 8, s. 648-657

Effects of adipose thickness and muscle hardness on pressure pain sensitivity

Finocchietti, S., Mørch, C. D., Arendt-Nielsen, L. & Graven-Nielsen, T., jun. 2011, I: The Clinical Journal of Pain. 27, 5, s. 414-424 11 s.

Basic aspects of musculoskeletal pain: from acute to chronic pain

Arendt-Nielsen, L., Fernandez-de-las-Penas, C. & Graven-Nielsen, T., 2011, I: Journal of Manual & Manipulative Therapy. 19, 4, s. 186-193

Effects of adipose thickness and muscle hardness on pressure pain sensitivity: Correction

Finocchietti, S., Mørch, C. D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: The Clinical Journal of Pain. 27, 8, s. 735-745

Experimental extra articular pain of the sacroiliac joint complex facilitates outcome of sacroiliac joint provocation tests

Palsson, T. & Graven-Nielsen, T., 2011, I: European Journal of Pain Supplements. 5, 1, s. 126, No. F204

Experimental extra articular pain of the sacroiliac joint complex facilitates outcome of sacroiliac joint provocation tests

Palsson, T. & Graven-Nielsen, T., 2011, *Fysioterapi & rehabilitering: en abstraktsamling fra det årlige forsknings- og udviklingssymposium i Nordjylland for fysioterapeuter 2011*, 22. november 2011, Aalborg, Danmark. Aalborg: University College Nordjylland, UCN, s. 21

Experimental knee-muscle pain inhibits the lower extremity muscle activation during anticipatory postural adjustments related to ankle movements

Shiozawa, S., Hirata, R. P. & Graven-Nielsen, T., 2011, *Annual Meeting of the Society for Neuroscience, Neuroscience 2011, 12-16 November 2011, Washington, DC, USA*. Washington, DC: Society for Neuroscience, s. No. 923.22/VV36

Experimental knee pain reduces muscle strength

Henriksen, M., Rosager, S., Aaboe, J., Graven-Nielsen, T. & Bliddal, H., 2011, I: Journal of Pain. 12, 4, s. 460-467

Experimental knee-related pain impairs postural stability during quiet stance

Hirata, R. P., Arendt-Nielsen, L., Shiozawa, S. & Graven-Nielsen, T., 2011, *Annual Meeting of the Society for Neuroscience, Neuroscience 2011, 12-16 November 2011, Washington, DC, USA*. Washington, DC: Society for Neuroscience, s. No. 580.01/FF22

Experimental muscle pain challenges the postural stability during quiet stance and unexpected posture perturbation

Hirata, R. P., Ervilha, U. F., Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: Journal of Pain. 12, 8, s. 911-919

Experimental muscle pain increases multidirectional force fluctuations during isometric contractions

Salomoni, S. E. & Graven-Nielsen, T., 2011, *Annual Meeting of the Society for Neuroscience, Neuroscience 2011, 12-16 November 2011, Washington, DC, USA*. Washington, DC: Society for Neuroscience, s. No. 703.07/SS6

Forreste knæsmærter og begrænsninger i aktivitet og deltagelse efter marvsømning af tibia fraktur

Larsen, P., Lund, H., Graven-Nielsen, T., Læssøe, U. & Rasmussen, S., 2011, *Fysioterapi & rehabilitering: en abstraktsamling fra det årlige forsknings- og udviklingssymposium i Nordjylland for fysioterapeuter 2011*, 22. november 2011, Aalborg, Danmark. Aalborg: University College Nordjylland, UCN, s. 57-58

Hyperalgesia to superficial and deep mechanical stimulation within and outside a UVB irradiated area

Lo Vecchio, S., Graven-Nielsen, T., Finocchietti, S., Gazerani, P. & Arendt-Nielsen, L., 2011, I: European Journal of Pain Supplements. 5, 1, s. 20, No. T119

Latent myofascial trigger points are associated with an increased antagonistic muscle activity during agonist muscle contraction

Ibarra, J. M., Ge, H.-Y., Wang, C., Vizcaino, V. M., Graven-Nielsen, T. & Arendt-Nielsen, L., 2011, I: Journal of Pain. 12, 12, s. 1282-1288

Local pain and spreading hyperalgesia induced by intramuscular injection of nerve growth factor are not reduced by local anesthesia of the muscle

Gerber, R. K. H., Nie, H., Arendt-Nielsen, L., Curatolo, M. & Graven-Nielsen, T., 2011, I: The Clinical Journal of Pain. 27, 3 , s. 240-247

Low pressure pain thresholds are associated with, but does not predispose for, low back pain

O'Neill, S., Kjær, P., Graven-Nielsen, T., Manniche, C. & Arendt-Nielsen, L., 2011, I: European Spine Journal. 20, 12, s. 2120-2125

Method and device for evoking temporal pain summation

Arendt-Nielsen, L. (Opfinder) & Graven-Nielsen, T. (Opfinder), 2011, IPC nr. A61B5/103, Patentnr. WO2011103880, 1 sep. 2011

Motorisk kontrol af lænderyggen hos raske: undersøgelse af overflade-EMG og kinematik ved standardiserede motoriske opgaver på bevægelig platform med træningsømhed og eksperimentel rygsmerde

Larsen, L. H., Falla, D. L. & Graven-Nielsen, T., 2011, *Fysioterapi & rehabilitering: en abstraktsamling fra det årlige forsknings- og udviklingssymposium i Nordjylland for fysioterapeuter 2011*, 22. november 2011, Aalborg, Danmark. Aalborg: University College Nordjylland, UCN, s. 32-33

Motor responses to experimental Achilles tendon pain

Henriksen, M., Aaboe, J., Graven-Nielsen, T., Bliddal, H. & Langberg, H., 2011, I: British Journal of Sports Medicine. 45, 5 , s. 393-398

Muscle strength as a predictor of the magnitude of multidirectional force fluctuations during steady contractions

Salomoni, S. E. & Graven-Nielsen, T., 2011, I: International Federation for Medical and Biological Engineering Proceedings. 34, s. 93-96

Pressure algometry and tissue characteristics: improved stimulation efficacy by a new probe design

Finocchietti, S., Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: International Federation for Medical and Biological Engineering Proceedings. 34, s. 49-52

Pressure-induced bone pain: an experimental and modeling study

Finocchietti, S., Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: European Journal of Pain Supplements. 5, 1, s. 162, No. F511

Pressure-induced muscle pain and tissue biomechanics: a computational and experimental study

Finocchietti, S., Nielsen, M., Mørch, C. D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: European Journal of Pain. 15 , 1, s. 36-44

Reproduction of overall spontaneous pain pattern by manual stimulation of active myofascial trigger points in fibromyalgia patients

Ge, H.-Y., Wang, Y., Fernandez-de-las-Penas, C., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Arendt-Nielsen, L., 2011, I: Arthritis Research & Therapy. 13, 2, s. Article No. R48

Sensory responses to mechanically and chemically induced tendon pain in healthy subjects

Slater, H., Gibson, W. & Graven-Nielsen, T., 2011, I: European Journal of Pain. 15, 2, s. 146-152

Short-term training effects on the relation between function, ability, and quality of life in elderly people with knee pain

Shiozawa, S., Oida, Y., Morozumi, K., Nakamura, N., Sato, S., Kitabatake, Y., Yoshida, K. & Graven-Nielsen, T., 2011, I: European Journal of Pain Supplements. 5, 1, s. 76, No. T508

Translational musculoskeletal pain research

Arendt-Nielsen, L. & Graven-Nielsen, T., 2011, I: Best Practice & Research: Clinical Rheumatology. 25, 2, s. 209-226

Translational studies on myofascial trigger points: models and clinical implication

Graven-Nielsen, T., Mense, S. & Giamberardino, M. A., 2011, I: European Journal of Pain Supplements. 5, 1, s. 11-12, No. 45

Vibration-induced afferent activity augments delayed onset muscle allodynia

Ayles, S., Graven-Nielsen, T. & Gibson, W., 2011, I: Journal of Pain. 12, 8, s. 884-891

Sensitization in patients with painful knee osteoarthritis

Arendt-Nielsen, L., Nie, H., Laursen, M. B., Laursen, B. S., Madeleine, P., Simonsen, O. H. & Graven-Nielsen, T., 1 jun. 2010, I: Pain. 149, 3, s. 573-581 9 s.

Assessment of mechanisms in localized and widespread musculoskeletal pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2010, I: Nature Clinical Practice Rheumatology. 6, 10, s. 599-606

Deep tissue biomechanics during pressure pain assessments on anterior tibialis muscle

Finocchietti, S. & Graven-Nielsen, T., 2010.

Effects of muscle hardness on pressure pain assessment

Finocchietti, S., Arendt-Nielsen, L., Mørch, C. D. & Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PM 264

Experimental calf muscle pain attenuates the postural stability during quiet stance and perturbation

Hirata, R. P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2010, I: Clinical Biomechanics. 25, 9, s. 931-937 7 s.

Experimental muscle pain and muscle hyperalgesia after intramuscular injection of heated saline or capsaicin

Quemé, L. F., Nie, H., Mizumura, K. & Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August-2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PM 249

Experimental thigh muscle pain impairs postural control during quiet standing posture

Hirata, R. P., Ervilha, U., Arendt-Nielsen, L. & Graven-Nielsen, T., 2010, *Abstracts of the XVIII Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2010, 16-19 June 2010, Aalborg, Denmark [CD-ROM]*. Falla, D. & Farina, D. (red.). Aalborg: Department of Health Science and Technology. Aalborg University

Experimental thigh muscle pain impairs postural recovery after perturbations during standing

Hirata, R. P., Ervilha, U., Arendt-Nielsen, L. & Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PH 076

From basic science to management of chronic musculoskeletal pain

Arendt-Nielsen, L., Graven-Nielsen, T., Kidd, B. L. & Fernandez-de-las-Penas, C., 2010, *Pain 2010 : an Updated Review: Refresher Course Syllabus*. Seattle: IASP Press, s. 73-83

Gait changes in patients with knee osteoarthritis are replicated by experimental knee pain

Henriksen, M., Graven-Nielsen, T., Aaboe, J., Andriacchi, T. P. & Bliddal, H., 2010, I: Arthritis Care and Research. 62, 4, s. 501-509

Human experimental models of tonic deep tissue pain and manifestations of widespread hyperalgesia

Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. TS 53

Increased trapezius pain sensitivity is not associated with increased tissue hardness

Andersen, H., Ge, H.-Y., Arendt-Nielsen, L., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2010, I: *Journal of Pain*. 11, 5, s. 491-499 9 s.

Injection of nerve growth factor causes prolonged hyperalgesia to phasic pressure stimulation but not allodynia to vibration stimulation

Graven-Nielsen, T., Nie, H., Mense, S. & Arendt-Nielsen, L., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PT 251

Low pressure pain threshold is associated with, but does not predispose for low back pain

O'Neill, S., Kjær, P., Graven-Nielsen, T., Manniche, C. & Arendt-Nielsen, L., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PT 081

Motor adaptation in musculoskeletal pain

Graven-Nielsen, T., 2010, *Abstracts of the XVIII Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2010, 16-19 June 2010, Aalborg, Denmark [CD-ROM]*. Falla, D. & Farina, D. (red.). Aalborg: Department of Health Science and Technology. Aalborg University

Motor responses to experimental achilles tendon pain

Henriksen, M., Aaboe, J., Graven-Nielsen, T., Bliddal, H. & Langberg, H., 2010, *Abstracts of the XVIII Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2010, 16-19 June 2010, Aalborg, Denmark [CD-ROM]*. Falla, D. & Farina, D. (red.). Aalborg: Department of Health Science and Technology. Aalborg University

Myofascial trigger points mapping and acupuncture for plantar foot pain in fibromyalgia

Ge, H.-Y., Xu, Y., Danneskiold-Samsøe, B., Graven-Nielsen, T. & Arendt-Nielsen, L., 2010, *Myopain 2010 Abstracts, 3-7 October 2010, Toledo, Spain*. s. 16, No. 19 1 s.

Referral of musculoskeletal pain

Graven-Nielsen, T. & Mense, S., 2010, *Muscle Pain: Understanding the Mechanisms*. Mense, S. & Gerwin, R. D. (red.). Berlin: Springer, s. 177-205

Reorganized motor control due to muscle pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2010, *Muscle Pain: Understanding the Mechanisms*. Mense, S. & Gerwin, R. D. (red.). Berlin: Springer, s. 251-268

Reproduction of overall spontaneous pain pattern by manual stimulation of active myofascial trigger points in fibromyalgia patients

Ge, H.-Y., Xu, Y., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Arendt-Nielsen, L., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PW 090

Sex differences in exercise-induced analgesia and diffuse noxious inhibitory control

Dannecker, E. A., Koltyn, K. F., Velazquez, C. R., Arendt-Nielsen, L. & Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PH 228

Smertemekanismer ved kroniske muskuloskeletale tilstænde

Graven-Nielsen, T., Arendt-Nielsen, L., Madeleine, P. & Svensson, P., 2010, I: *Ugeskrift for læger*. 172, 24, s. 1824-1827

Stress and strain distribution in muscle tissue during pressure stimulation: a 3D finite-element analysis

Finocchietti, S., Arendt-Nielsen, L. & Graven-Nielsen, T., 2010, *Myopain 2010 Abstracts, 3-7 October 2010, Toledo, Spain*. s. 43, No. 72

Temporal and spatial summation in widespread and localized chronic musculoskeletal pain

Jespersen, A., Amris, K., Bartels, E., Graven-Nielsen, T., Bliddal, H. & Danneskiold-Samsøe, B., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PH 087

The cause-effect relation between physical function, physical ability, and health-related quality of life in elderly people with knee pain

Shiozawa, S., Oida, Y., Morozumi, K., Nakamura, N., Sato, S., Kitabatake, Y., Miura, K. & Graven-Nielsen, T., 2010, *Abstracts of the 13th World Congress on Pain, International Association for the Study of Pain (IASP), 29 August - 2 September 2010, Montreal, Canada [CD-ROM]*. IASP Press, s. No. PH 042

The effects of muscle fatigue on three-dimensional force steadiness during isometric trunk extensions

Salomoni, S. E. & Graven-Nielsen, T., 2010, *Abstracts of the XVIII Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2010, 16-19 June 2010, Aalborg, Denmark [CD-ROM]*. Falla, D. & Farina, D. (red.). Aalborg: Department of Health Science and Technology. Aalborg University

The predetermined sites of examination for tender points in fibromyalgia syndrome are frequently associated with myofascial trigger points

Ge, H. Y., Wang, Y., Danneskiold-Samsøe, B., Graven-Nielsen, T. & Arendt-Nielsen, L., 2010, I: *Journal of Pain*. 11, 7, s. 644-651 8 s.

Contribution of the local and referred pain from active myofascial trigger points bilaterally in the upper trapezius in fibromyalgia syndrome

Ge, H. Y., Nie, H., Madeleine, P., Danneskiold-Samsøe, B., Graven-Nielsen, T. & Arendt-Nielsen, L., 2009, I: *European Journal of Pain*. 13, Suppl. 1, s. S149-S150, No. 505

Contribution of the local and referred pain from active myofascial trigger points in fibromyalgia syndrome

Ge, H. Y., Nie, H., Madeleine, P., Danneskiold-Samsøe, B., Graven-Nielsen, T. & Arendt-Nielsen, L., 2009, I: *Pain*. 147, 1-3, s. 233-240

Effect of cancellation on triggered averaging used to determine synchronization between motor unit discharge in separate muscles

Poulsen, P., Svendsen, J. H., Tucker, K., Graven-Nielsen, T. & Hodges, P. W., 2009, I: *Journal of Neuroscience Methods*. 182, 1, s. 1-5

Electromyographic mapping of the erector spinae muscle with varying load and during sustained contraction

Tucker, K., Falla, D. L., Graven-Nielsen, T. & Farina, D., 2009, I: *Journal of Electromyography & Kinesiology*. 19, 3, s. 373-379

Experimental calf muscle pain attenuates the postural stability

Hirata, R. P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2009, *39th Annual Meeting of the Society for Neuroscience, Neuroscience 2009, 17-21 October 2009, Chicago, USA*. s. No. 76.4/Y3

Glutamate and capsaicin-induced pain, hyperalgesia and modulatory interactions in human tendon tissue

Gibson, W., Arendt-Nielsen, L., Sessle, B. J. & Graven-Nielsen, T., 2009, I: *Experimental Brain Research*. 194, 2, s. 173-182

Increased H-reflex response induced by intramuscular electrical stimulation of latent myofascial trigger points

Ge, H. Y., Serrao, M., Andersen, O. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2009, I: *Acupuncture in Medicine*. 27, 4, s. 150-154

Increased pain from muscle fascia following eccentric exercise: animal and human findings

Gibson, W., Arendt-Nielsen, L., Taguchi, T., Mizumura, K. & Graven-Nielsen, T., 2009, I: *Experimental Brain Research*. 194, 2, s. 299-308

Motor unit recruitment strategies are altered during constant force contractions when pain is induced in muscle or other tissues

Hodges, P. W., Tucker, K., Butler, J., Graven-Nielsen, T. & Riek, S., 2009, *39th Annual Meeting of the Society for Neuroscience, Neuroscience 2009, 17-21 October 2009, Chicago, USA.* s. No. 179.18/CC1

Motor unit recruitment strategies are altered during deep-tissue pain

Tucker, K., Butler, J., Graven-Nielsen, T., Riek, S. & Hodges, P., 2009, I: *Journal of Neuroscience.* 29, 35, s. 10820-10826

Muscle pain, including fibromyalgia

Arendt-Nielsen, L. & Graven-Nielsen, T., 2009, *Encyclopedia of Neuroscience.* Binder, M. D., Hirokawa, N. & Windhorst, U. (red.). Springer, s. 2505-2508

Muskelsmerter

Bliddal, H. & Graven-Nielsen, T., 2009, *Smerter: baggrund, evidens og behandling.* Jensen, T. S., Dahl, J. B. & Arendt-Nielsen, L. (red.). 2 udg. København: FADL's Forlag a/s, s. 135-144

Reduction of experimental muscle pain by passive physiological movements

Nielsen, M. M., Mortensen, A., Sørensen, J. K., Simonsen, O. & Graven-Nielsen, T., 2009, I: *Musculoskeletal Science and Practice.* 14, 1, s. 101-109

Repeated injections of a high dose nerve growth factor (NGF) do not induce immediate muscle pain but prolonged hyperalgesia

Graven-Nielsen, T., Nie, H., Mense, S. & Arendt-Nielsen, L., 2009, I: *European Journal of Pain.* 13, Suppl. 1, s. S125, No. 415

Spatial and temporal summation of pain evoked by mechanical pressure stimulation

Nie, H., Graven-Nielsen, T. & Arendt-Nielsen, L., 2009, I: *European Journal of Pain.* 13, 6, s. 592-599

Temporal summation of pressure pain during muscle hyperalgesia evoked by nerve growth factor and eccentric contractions

Nie, H., Madeleine, P., Arendt-Nielsen, L. & Graven-Nielsen, T., 2009, I: *European Journal of Pain.* 13, 7, s. 704-710

The relation between mechanical properties of tissues and the sensation of muscle pain during pressure stimulation

Finocchietti, S., Nielsen, M. & Graven-Nielsen, T., 2009, I: *European Journal of Pain.* 13, Suppl. 1, s. S220, No. 762

Ultrasound guided, painful electrical stimulation of lumbar facet joint structures: an experimental model of acute low back pain

O'Neill, S., Graven-Nielsen, T., Manniche, C. & Arendt-Nielsen, L., 2009, I: *Pain.* 144, 1-2, s. 76-83

Acidic buffer induced muscle pain evokes referred pain and mechanical hyperalgesia in humans

Law, L. A. F., Sluka, K. A., McMullen, T., Lee, J., Arendt-Nielsen, L. & Graven-Nielsen, T., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM].* IASP Press, s. No. PW 114

Acidic buffer induced muscle pain evokes referred pain and mechanical hyperalgesia in humans

Law, L. A. F., Sluka, K. A., McMullen, T., Lee, J., Arendt-Nielsen, L. & Graven-Nielsen, T., 2008, I: *Pain.* 140, 2, s. 254-264

Changes in motor unit firing rate in synergist muscles cannot explain the maintenance of force during constant force painful contractions

Hodges, P. W., Ervilha, U. F. & Graven-Nielsen, T., 2008, I: *Journal of Pain.* 9, 12, s. 1169-1174

CR665: a selective peripherally acting kappa receptor agonist attenuates visceral pain in humans

Arendt-Nielsen, L., Olesen, A. E., Ståhl, C., Menzaghi, F., Kell, S., Graven-Nielsen, T. & Drewes, A. M., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM].* IASP Press, s. No. PM 178

Effect of innervation-zone distribution on estimates of average muscle-fiber conduction velocity
Nielsen, M., Graven-Nielsen, T. & Farina, D., 2008, I: Muscle & Nerve. 37, 1, s. 68-78

Facilitated temporal summation of pressure pain during muscle hyperalgesia evoked by nerve growth factor and eccentric contractions

Graven-Nielsen, T., Nie, H., Arendt-Nielsen, L. & Madeleine, P., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. PW 143

Finite element simulation of surface potential distributions at variable limb joint angle

Nielsen, M., Graven-Nielsen, T., Frøkjær, J. B. & Farina, D., 2008, *Proceedings, XVIth Congress of the International Society of Electrophysiology and Kinesiology (ISEK), 18-21 June 2008, Niagara Falls, Canada [CD-ROM]*. ISEK

Fundamentals of musculoskeletal pain

Graven-Nielsen, T. (Redaktør), Arendt-Nielsen, L. (Redaktør) & Mense, S. (Redaktør), 2008, Seattle: IASP Press. 496 s.

Glutamate facilitates capsaicin-induced pain in human tendon tissue

Gibson, W., Arendt-Nielsen, L., Sessle, B. & Graven-Nielsen, T., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. PT 132

Homotopic and heterotopic variation in skin blood flow and temperature following experimental muscle pain in humans

Lei, J., You, H.-J., Andersen, O. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2008, I: Brain Research. 1232, s. 85-93

Human models and clinical manifestations of musculoskeletal pain and pain-motor interactions

Graven-Nielsen, T. & Arendt-Nielsen, L., 2008, *Fundamentals of Musculoskeletal Pain*. Graven-Nielsen, T., Arendt-Nielsen, L. & Mense, S. (red.). Seattle: IASP Press, s. 155-187

Impact of clinical and experimental pain on muscle strength and activity

Graven-Nielsen, T. & Arendt-Nielsen, L., 2008, I: Current Rheumatology Reports. 10, 6, s. 475-481

Is it possible to identify muscles as primary source of pain by intramuscular injection of ropivacaine?

Gerber, R. H., Nie, H., Graven-Nielsen, T., Arendt-Nielsen, L. & Curatolo, M., 2008, I: Swiss Medical Weekly. 138, Suppl. 166, s. 11 S, No. P 8

Muscle pain: sensory implications and interaction with motor control

Arendt-Nielsen, L. & Graven-Nielsen, T., 2008, I: The Clinical Journal of Pain. 24, 4, s. 291-298

Musculoskeletal pain: basic mechanisms

Arendt-Nielsen, L. & Graven-Nielsen, T., 2008, *Pain 2008 : an Updated Review: Refresher Course Syllabus*. Castro-Lopes, J., Raja, S. & Schmelz, M. (red.). Seattle: IASP Press, s. 63-73

Osteoarthritis and its association with mechanical hyperalgesia: an experimental controlled study

Wodehouse, T., Cruwys, S., Kay, R., Graven-Nielsen, T., Arendt-Nielsen, L., Langford, R. & Kidd, B. L., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. PW 044

Pain-induced changes muscle fatigability in cervical muscle activation do not affect during sustained isometric contraction
Falla, D. L., Farina, D., Dahl, M. K. & Graven-Nielsen, T., 2008, I: Journal of Electromyography & Kinesiology. 18, 6, s. 938-946

Sensory and motor manifestations of muscle pain

Graven-Nielsen, T. & Arendt-Nielsen, L., 2008, I: Journal of Musculoskeletal Pain. 16, 1-2, s. 93-105

Spatial and temporal aspects of muscle hyperalgesia induced by nerve growth factor in humans

Andersen, H., Arendt-Nielsen, L., Svensson, P., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2008, I: Experimental Brain Research. 191, 3, s. 371-382

Spatial and temporal summation of pain evoked by mechanical pressure stimulation

Nie, H., Graven-Nielsen, T. & Arendt-Nielsen, L., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. PW 140

The efficacy of oral ketamine on experimentally induced mechanical hyperalgesia

Slater, H., Schug, S. A., Wright, T. & Graven-Nielsen, T., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. PW 116

The pain-induced decrease in low-threshold motor unit discharge rate is not associated with the amount of increase in spike-triggered average torque

Farina, D., Arendt-Nielsen, L., Roatta, S. & Graven-Nielsen, T., 2008, I: Clinical Neurophysiology. 119, 1, s. 43-51

The sensory-motor integration in experimental musculoskeletal pain

Graven-Nielsen, T., 2008, *Abstracts of the 12th World Congress on Pain, International Association for the Study of Pain (IASP), 17-22 August 2008, Glasgow, Scotland [CD-ROM]*. IASP Press, s. No. TW 37

Translational aspects of musculoskeletal pain: from animals to patients

Arendt-Nielsen, L. & Graven-Nielsen, T., 2008, *Fundamentals of Musculoskeletal Pain*. Graven-Nielsen, T., Arendt-Nielsen, L. & Mense, S. (red.). Seattle: IASP Press, s. 347-366

Acidic buffer induced referred pain associated with mechanical hyperalgesia

Law, L. A. F., Sluka, K. A., Hunstad, T., Lee, J. & Graven-Nielsen, T., 2007, *Fundamentals of Musculoskeletal Pain, IASP Research Symposium 2007, 7-9 May 2007, Aalborg, Denmark*. s. No. 24

Acute changes in muscle coordination induced by experimental pain do not affect cervical muscle fatigability during sustained isometric contraction

Falla, D. L., Farina, D., Dahl, M. K. & Graven-Nielsen, T., 2007, I: Physiotherapy. 93, S1, s. S117-S118, No. 1368

Computerized cuff pressure algometry: a new method to assess deep-tissue hypersensitivity in fibromyalgia

Jespersen, A., Dreyer, L., Kendall, S., Graven-Nielsen, T., Arendt-Nielsen, L., Bliddal, H. & Danneskiold-Samsøe, B., 2007, I: Pain. 131, 1-2, s. 57-62

Dynamic changes of temperature and blood flow in skin of primary and referred areas in intramuscular injection of hypertonic saline induced human experimental muscle pain

Lei, J., You, H.-J., Andersen, O. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2007, *Fundamentals of Musculoskeletal Pain, IASP Research Symposium 2007, 7-9 May 2007, Aalborg, Denmark*. s. No. 23

Exogenous muscle pain

Graven-Nielsen, T., 2007, *Encyclopedia of Pain*. Schmidt, R. F. & Willis, W. D. (red.). Berlin: Springer, Bind 1. s. 755-757

Experimental muscle pain results in reorganization of coordination among trapezius muscle subdivisions during repetitive shoulder flexion

Falla, D. L., Farina, D. & Graven-Nielsen, T., 2007, I: Experimental Brain Research. 178, 3, s. 385-393

Experimental quadriceps muscle pain impairs knee joint control during walking

Henriksen, M., Alkjær, T., Lund, H., Simonsen, E. B., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Bliddal, H., 2007, I: Journal of Applied Physiology. 103, 1, s. 132-139

Fascial and deep muscle tissue sensitivity to hypertonic saline under normal and eccentric-exercise-induced sensitised conditions

Gibson, W. I. & Graven-Nielsen, T., 2007, I: Journal of Musculoskeletal Pain. 15, Suppl. 13, s. 23, No. 36

Forskelle i smerteperception hos mænd og kvinder

Graven-Nielsen, T. & Arendt-Nielsen, L., 2007, I: Ugeskrift for læger. 169, 25, s. 2425-2427

Generalized deep-tissue hyperalgesia in patients with chronic low-back pain

O'Neill, S., Manniche, C., Graven-Nielsen, T. & Arendt-Nielsen, L., 2007, I: European Journal of Pain. 11, 4, s. 415-420

Increased H-reflex response induced by intramuscular electrical stimulation at trigger points

Ge, H. Y., Serrao, M., Andersen, O. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2007, I: Journal of Musculoskeletal Pain. 15, Suppl. 13, s. 22, No. 34

Increased muscle pain sensitivity in patients with tension-type headache

Schmidt-Hansen, P. T., Svensson, P., Bendtsen, L., Graven-Nielsen, T. & Bach, F. W., 2007, I: Pain. 129, 1-2, s. 113-121

Levels of cytokines, substance P, and excitatory amino acids in spinal fluid, saliva and plasma in patients with fibromyalgia

Ribel-Madsen, S., Jespersen, A., Diemer, T., Graven-Nielsen, T., Bliddal, H. & Danneskiold-Samsøe, B., 2007, I: Journal of Musculoskeletal Pain. 15, Suppl. 13, s. 57, No. 102

Localized muscle pain causes prolonged recovery after fatiguing isometric contractions

Ciubotariu, A., Arendt-Nielsen, L. & Graven-Nielsen, T., 2007, I: Experimental Brain Research. 181, 1, s. 147-158

Managing chronic whiplash associated pain with a combination of low-dose opioid (remifentanil) and NMDA-antagonist (ketamine)

Lemming, D., Sørensen, J., Graven-Nielsen, T., Lauber, R., Arendt-Nielsen, L. & Gerdle, B., 2007, I: European Journal of Pain. 11, 7, s. 719-732

Muscle pain induces task-dependent changes in cervical agonist/antagonist activity

Falla, D. L., Farina, D., Dahl, M. K. & Graven-Nielsen, T., 2007, I: Journal of Applied Physiology. 102, 2, s. 601-609

Muscle temperature has a different effect on force fluctuations in young and older women

Dewhurst, S., Graven-Nielsen, T., De Vito, G. & Farina, D., 2007, I: Clinical Neurophysiology. 118, 4, s. 762-769

Nociceptive withdrawal reflexes evoked by uniform-temperature laser heat stimulation of large skin areas in humans

Mørch, C. D., Andersen, O. K., Graven-Nielsen, T. & Arendt-Nielsen, L., 2007, I: Journal of Neuroscience Methods. 160, 1, s. 85-92

Reduced motor unit firing rate in synergist muscles during constant force painful contractions

Graven-Nielsen, T., Ervilha, U. F. & Hodges, P. W., 2007, 37th Annual Meeting of the Society for Neuroscience, Neuroscience 2007, 3-7 November 2007, San Diego, CA, USA. s. No. 510.1/PP27

Referred muscle pain, assessment

Graven-Nielsen, T., 2007, *Encyclopedia of Pain*. Schmidt, R. F. & Willis, W. D. (red.). Berlin: Springer, Bind 3. s. 2103-2106

Spatial and temporal muscle hyperalgesia induced by nerve growth factor in humans

Andersen, H., Arendt-Nielsen, L., Svensson, P., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2007, I: Journal of Musculoskeletal Pain. 15, Suppl. 13, s. 13, No. 16

Spatial and temporal muscle hyperalgesia induced by NGF in humans

Andersen, H., Arendt-Nielsen, L., Svensson, P., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2007, *Fundamentals of Musculoskeletal Pain, IASP Research Symposium 2007, 7-9 May 2007, Aalborg, Denmark.* s. No. 25

Spatial dependency of trapezius muscle activity during repetitive shoulder flexion

Falla, D. L., Farina, D. & Graven-Nielsen, T., 2007, I: *Journal of Electromyography & Kinesiology.* 17, 3, s. 299-306

Strategies for maintaining force during acute pain

Tucker, K., Hodges, P., Butler, J. & Graven-Nielsen, T., 2007, *Fundamentals of Musculoskeletal Pain, IASP Research Symposium 2007, 7-9 May 2007, Aalborg, Denmark.* s. No. 26

Substance P and levels of IL-1b, IL-6, IL-10, tumor necrosis factor alpha and GM-CSF in extracellular fluid from skin in fibromyalgia syndrome patients extracted by the suction blister

Jespersen, A., Ribel-Madsen, S., Diemer, T., Graven-Nielsen, T., Bliddal, H. & Danneskiold-Samsøe, B., 2007, I: *Journal of Musculoskeletal Pain.* 15, Suppl. 13, s. 50, No. 88

Substance P levels in saliva and spinal fluid in patients with fibromyalgia syndrome and healthy control

Jespersen, A., Ribel-Madsen, S., Diemer, T., Graven-Nielsen, T., Bliddal, H. & Danneskiold-Samsøe, B., 2007, I: *Journal of Musculoskeletal Pain.* 15, Suppl. 13, s. 51, No. 89

The interaction of musculoskeletal pain and motor control

Graven-Nielsen, T., 2007, I: *Journal of Musculoskeletal Pain.* 15, Suppl. 13, s. 10, No. 12

Two-dimensional spatial distribution of surface mechanomyographical response to single motor unit activity

Cescon, C., Madeleine, P., Graven-Nielsen, T., Merletti, R. & Farina, D., 2007, I: *Journal of Neuroscience Methods.* 159, 1, s. 19-25

A simple validation of co-contraction indices

Ervilha, U. F., Duarte, M., Arendt-Nielsen, L. & Graven-Nielsen, T., 2006, *From Research to Practice: Proceedings XVIth Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2006, 28 June-1 July 2006, Torino, Italy.* s. 83, No. T07.P17

Assessing musculoskeletal pain

Graven-Nielsen, T., 2006, *Refresher Courses, Pain in Europe V, 5th Congress of the European Federation of IASP Chapters (EFIC), 13 September 2006, Istanbul, Turkey.* s. 62-66

Central sensitization in musculoskeletal pain

Graven-Nielsen, T., 2006, *6th Physiatric Summer School: Fibromyalgia, 15-16 September 2005.* Lindgren, K.-A. (red.). Helsinki: Rehabilitation ORTON Invalid Foundation, s. 15-19 (Uden navn).

Central sensitization, referred pain, and deep tissue hyperalgesia in musculoskeletal pain

Graven-Nielsen, T., Curatolo, M. & Mense, S., 2006, *Proceedings of the 11th World Congress on Pain.* Flor, H., Kalso, E. & Dostrovsky, J. O. (red.). IASP Press, s. 217-230

Delayed onset muscle soreness at tendon-bone junction and muscle tissue is associated with facilitated referred pain

Gibson, W., Arendt-Nielsen, L. & Graven-Nielsen, T., 2006, I: *Experimental Brain Research.* 174, 2, s. 351-360

Effect of altered local temperature on force steadiness in young and older women

Dewhurst, S., Graven-Nielsen, T., De Vito, G. & Farina, D., 2006, *From Research to Practice: Proceedings XVIth Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2006, 28 June-1 July 2006, Torino, Italy.* s. 198

Effects of a manual therapy technique in experimental lateral epicondylalgia

Slater, H., Arendt-Nielsen, L., Wright, A. & Graven-Nielsen, T., 2006, I: *Musculoskeletal Science and Practice.* 11, 2, s. 107-117

Enhanced temporal summation of pressure pain in the trapezius muscle after delayed onset muscle soreness
Nie, H., Arendt-Nielsen, L., Madeleine, P. & Graven-Nielsen, T., 2006, I: Experimental Brain Research. 170, 2, s. 182-190

Experimental muscle but not tendon pain decreases motor unit discharge rate
Gibson, W., Farina, D. & Graven-Nielsen, T., 2006, I: European Journal of Pain. 10, Suppl. 1, s. S77, No. 287

Experimental skin pain and muscle pain induce distinct changes in human trigeminal motoneuronal excitability
Truini, A., Romaniello, A., Svensson, P., Galeotti, F., Graven-Nielsen, T., Wang, K., Cruccu, G. & Arendt-Nielsen, L., 2006 , I: Experimental Brain Research. 174, 4, s. 622-629

Fascial involvement in delayed onset muscle soreness
Graven-Nielsen, T., Gibson, W. & Arendt-Nielsen, L., 2006, I: European Journal of Pain. 10, Suppl. 1, s. S87, No. 326

Fundamentals of muscle pain, referred pain and deep tissue hyperalgesia
Graven-Nielsen, T., 2006, 43 s. (Scandinavian Journal of Rheumatology; Nr. vol.35(suppl.122)).

Impulse-forces during walking are not increased in patients with knee osteoarthritis
Henriksen, M., Simonsen, E. B., Graven-Nielsen, T., Lund, H., Danneskiold-Samsøe, B. & Bliddal, H., 2006, I: Acta Orthopaedica (Print Edition). 77, 4, s. 650-656

Increased joint loads during walking: a consequence of pain relief in knee osteoarthritis
Henriksen, M., Simonsen, E. B., Alkjær, T., Lund, H., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Bliddal, H., 2006, I: Knee. 13, 6, s. 445-450

Muscle pain
Graven-Nielsen, T. & Arendt-Nielsen, L., 2006, *Wiley Encyclopedia of Biomedical Engineering*. Akay, M. (red.). Hoboken, NJ: Wiley, Bind 4. s. 2417-2424

Muscle pain induces task-dependent changes in cervical agonist/antagonist coordination
Falla, D. L., Farina, D., Dahl, M. K. & Graven-Nielsen, T., 2006, *36th Annual Meeting of the Society for Neuroscience, 14-18 October 2006, Atlanta, GA, USA*. s. No. 347.10/U7

Patterns of experimentally induced pain in pericranial muscles
Schmidt-Hansen, P. T., Svensson, P., Jensen, T. S., Graven-Nielsen, T. & Bach, F. W., 2006, I: Cephalgia. 26, 5, s. 568-577 10 s.

Pivotal involvement of neurogenic mechanism in subcutaneous bee venom-induced inflammation and allodynia in unanesthetized conscious rats
Chen, H.-S., Lei, J., He, X., Wang, Y., Wen, W.-W., Wei, X.-Z., Graven-Nielsen, T., You, H.-J. & Arendt-Nielsen, L., 2006, I: Experimental Neurology. 200, 2, s. 386-391

Pressure pain sensitivity and hardness along human normal and sensitized muscle
Andersen, H., Arendt-Nielsen, L., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2006, I: Somatosensory and Motor Research. 23, 3/4, s. 97-109

Reduction of human experimental muscle pain by alfentanil and morphine
Schulte, H., Segerdahl, M., Graven-Nielsen, T. & Grass, S., 2006, I: European Journal of Pain. 10, 8, s. 733-741

Referred pain and hyperalgesia in human tendon and muscle belly tissue
Gibson, W. I., Arendt-Nielsen, L. & Graven-Nielsen, T., 2006, I: Pain. 120, 1-2, s. 113-123

Spatial and temporal changes of upper trapezius muscle fiber conduction velocity are not predicted by surface EMG spectral analysis during a dynamic upper limb task

Falla, D. L., Graven-Nielsen, T. & Farina, D., 2006, I: *Journal of Neuroscience Methods*. 156, 1-2, s. 236-241

Spatial summation of pain assessed by computerized cuff pressure algometry is not facilitated in patients with knee osteoarthritis

Jespersen, A., Lund, H., Graven-Nielsen, T., Arendt-Nielsen, L., Bliddal, H. & Danneskiold-Samsøe, B., 2006, I: *Osteoarthritis and Cartilage*. 14, Suppl. B, s. S191, No. P356

Two-dimensional spatial distribution of surface mechanomyography response to single motor unit activity

Cescon, C., Madeleine, P., Graven-Nielsen, T., Merletti, R. & Farina, D., 2006, *From Research to Practice: Proceedings XVIth Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2006, 28 June-1 July 2006, Torino, Italy*. s. 90

Upper trapezius muscle pain results in reorganization of coordination among trapezius muscle subdivisions during dynamic movement of the upper limb

Falla, D. L., Farina, D. & Graven-Nielsen, T., 2006, *From Research to Practice: Proceedings XVIth Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2006, 28 June-1 July 2006, Torino, Italy*. s. 66

Activity patterns of wrist extensor muscles during wrist extensions and deviations

Finsen, L., Søgaard, K., Graven-Nielsen, T. & Christensen, H., 2005, I: *Muscle & Nerve*. 31, 2, s. 242-251

Assessing muscle pain mechanisms in humans

Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, *Pain 2005: An Updated Review : Refresher Course Syllabus*. Justins, D. M. (red.). Seattle: IASP Press, s. 355-365

Central sensitization, referred pain and deep tissue hyperalgesia in musculoskeletal pain

Graven-Nielsen, T., Mense, S. & Staud, R., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia*. IASP Press

Effect of gabapentin on temporal summation and experimentally induced muscle pain

Arendt-Nielsen, L., Ståhl, C., Frokjaer, J., Huggins, J. P., Smart, T. S., Graven-Nielsen, T. & Drewes, A. M., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia*. IASP Press

Effect of temperature on spike-triggered average torque and electrophysiological properties of low-threshold motor units

Farina, D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: *Journal of Applied Physiology*. 99, 1, s. 197-203

Experimentally induced saline pain from human tendon and muscle: a comparison of pain characteristics and referred pain areas

Gibson, W. I., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia*. IASP Press

Experimental muscle pain changes motor control strategies in dynamic contractions

Ervilha, U. F., Farina, D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: *Experimental Brain Research*. 164, 2, s. 215-224

Experimental muscle pain decreases voluntary EMG activity but does not affect the muscle potential evoked by transcutaneous electrical stimulation

Farina, D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: *Clinical Neurophysiology*. 116, 7, s. 1558-1565

Experimental muscle pain reduces initial motor unit discharge rates during sustained submaximal contractions

Farina, D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: *Journal of Applied Physiology*. 98, 3, s. 999-1005

Gender differences in the association between dispositional anxiety and subjective pain response to experimental muscle pain

Jones, A., Frandsen, A. M. S., Graven-Nielsen, T., Arendt-Nielsen, L. & Zachariae, R., 2005, I: X X vs. X Y. 3, 1, s. 1-6

Muscle hardness and spatial pressure sensitivity in delayed onset muscle soreness

Andersen, H., Arendt-Nielsen, L., Danneskiold-Samsoe, B. & Graven-Nielsen, T., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia.* IASP Press

Saline-induced referred pain and mechanical hyperalgesia in clinical lateral epicondylalgia and in healthy controls with induced muscle soreness in wrist extensors

Slater, H., Arendt-Nielsen, L., Wright, T. & Graven-Nielsen, T., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia.* IASP Press

Sensations from skeletal muscle to mechanical stimulation

Graven-Nielsen, T., Mense, S. & Arendt-Nielsen, L., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia.* IASP Press

Sensory and motor effects of experimental muscle pain in patients with lateral epicondylalgia and controls with delayed onset muscle soreness

Slater, H., Arendt-Nielsen, L., Wright, A. & Graven-Nielsen, T., 2005, I: Pain. 114, 1-2, s. 118-130

Sex related differences in human experimental muscle pain

Grass, S., Carlsson, M., Sollevi, A., Graven-Nielsen, T. & Segerdahl, M., 2005, *Abstracts. 11th World Congress on Pain, 21-26 August 2005, Sydney, Australia.* IASP Press

Spatial summation of pain in fibromyalgia assessed by computerized cuff pressure algometry

Jespersen, A., Kendall, S., Dreyer, L., Bartels, E. M., Graven-Nielsen, T., Arendt-Nielsen, L., Bliddal, H. & Danneskiold-Samsoe, B., 2005, I: Annals of the Rheumatic Diseases. 64, Suppl. 3, s. 345, No. FRI0291

Spike-triggered average torque and muscle fiber conduction velocity of low-threshold motor units following submaximal endurance contractions

Farina, D., Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: Journal of Applied Physiology. 98, 4, s. 1495-1502

Spinal cord hypersensitivity in FM and other chronic musculoskeletal pain conditions

Arendt-Nielsen, L. & Graven-Nielsen, T., 2005, I: Les Entretiens du Carla. 8, s. 28-29

Temporal summation of pain evoked by mechanical stimulation in deep and superficial tissue

Nie, H., Arendt-Nielsen, L., Andersen, H. & Graven-Nielsen, T., 2005, I: Journal of Pain. 6, 6, s. 348-355

The responses to pharmacological challenges and experimental pain in patients with chronic whiplash-associated pain

Lemming, D., Sørensen, J., Graven-Nielsen, T., Arendt-Nielsen, L. & Gerdle, B., 2005, I: The Clinical Journal of Pain. 21, 5, s. 412-421

Whiplash associated disorder: a multivariate analysis of pharmacological response and experimental pain

Lemming, D., Sørensen, J., Graven-Nielsen, T., Arendt-Nielsen, L. & Gerdle, B., 2005, *Program & Abstracts. 28th Annual Meeting of the Scandinavian Association for the Study of Pain, SASP 2005, 20-22 May 2005, Oslo, Norway.* s. 59

A comparison of sensori-motor interactions in patients with 'tennis elbow' and an in-vivo experimental model of 'tennis elbow' in healthy subjects

Slater, H., Arendt-Nielsen, L., Wright, T. & Graven-Nielsen, T., 2004, *25th Annual Scientific Meeting of the Australian Pain Society, 7-10 March 2004, Canberra, Australia.* s. 89, No. 4

Central sensitisation in fibromyalgia

Arendt-Nielsen, L., Mense, S. & Graven-Nielsen, T., 2004, I: La Lettre de l'Observatoire du Mouvement. 12, s. 8-9

Central sensitisation in fibromyalgia

Arendt-Nielsen, L. & Graven-Nielsen, T., 2004, I: Les Entretiens du Carla. 7, s. 26-27

Comparative EEG activation to skin pain and muscle pain induced by capsaicin injection

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Chen, A. C. N., 2004, I: International Journal of Psychophysiology. 51, 2, s. 117-126

Computerized cuff pressure algometry: a new method to assess deep-tissue sensitivity in fibromyalgia

Jespersen, A., Kendall, S. A., Dreyer, L., Danneskiold-Samsøe, B., Bliddal, H. & Graven-Nielsen, T., 2004, I: Journal of Musculoskeletal Pain. 12, Suppl. 9, s. 54, No. 108

Computerized cuff pressure algometry: a new semi-objective method to assess pain in patients with fibromyalgia

Jespersen, A., Kendall, S. A., Dreyer, L., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Bliddal, H., 2004, I: Annals of the Rheumatic Diseases. 63, Suppl. 1, s. 66-67, No. OP0031

Computerized cuff pressure algometry: a new semi-objective method to assess pain in patients with fibromyalgia

Jespersen, A., Kendall, S., Dreyer, L., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Bliddal, H., 2004, I: Arthritis & Rheumatism. 50, 9, Suppl., s. S308

Disturbances of pain perception in myofascial pain syndrome and other musculoskeletal pains

Arendt-Nielsen, L., Graven-Nielsen, T. & Svensson, P., 2004, *Pathophysiology of Pain Perception*. Lautenbacher, S. & Fillingim, R. B. (red.). New York: Plenum Publishing Corporation, s. 93-106 (Plenum Series in Rehabilitation and Health).

Effect of experimental muscle pain on motor unit firing rate and conduction velocity

Farina, D., Arendt-Nielsen, L., Merletti, R. & Graven-Nielsen, T., 2004, I: Journal of Neurophysiology. 91, 3, s. 1250-1259

Effect of load level and muscle pain intensity on the motor control of elbow-flexion movements

Ervilha, U. F., Arendt-Nielsen, L., Duarte, M. & Graven-Nielsen, T., 2004, I: European Journal of Applied Physiology. 92, 1-2, s. 168-175

Effects of experimental muscle pain on mechanical properties of single motor units in human masseter

Sohn, M. K., Graven-Nielsen, T., Arendt-Nielsen, L. & Svensson, P., 2004, I: Clinical Neurophysiology. 115, 1, s. 76-84

Eksperimentel kortlægning af muskelsmerter

Graven-Nielsen, T. & Andersen, H., 2004, I: Fysioterapeuten. 22, s. 6-17

Experimental muscle pain increases trapezius muscle activity during sustained isometric contractions of arm muscles

Schulte, E., Ciubotariu, A., Arendt-Nielsen, L., Disselhorst-Klug, C., Rau, G. & Graven-Nielsen, T., 2004, I: Clinical Neurophysiology. 115, 8, s. 1767-1778

Interaction between muscle pain and motor control

Arendt-Nielsen, L., Madeleine, P. & Graven-Nielsen, T., 2004, I: Pain and Movement : Newsletter of the IASP Special Interest Group on Pain and Movement. 5, s. 2-4

Low-threshold motor unit twitch force and conduction velocity following sub-maximal fatiguing contractions

Farina, D., Arendt-Nielsen, L., Merletti, R. & Graven-Nielsen, T., 2004, *Proceedings XVth Congress of the International Society of Electrophysiology and Kinesiology, ISEK 2004, 18-21 June 2004, Boston, MA, USA*. s. 162, No. 419

Muscle pain and muscle fatigue: experimental and clinical findings

Arendt-Nielsen, L., Graven-Nielsen, T. & Ervilha, U. F., 2004, I: Annals of the Rheumatic Diseases. 63, Suppl. 1, s. 43, No. SP0133

Non-painful and painful pressure sensation from skeletal muscle

Graven-Nielsen, T., Mense, S. & Arendt-Nielsen, L., 2004, I: Journal of Musculoskeletal Pain. 12, Suppl. 9, s. 24, No. 48

Painful and non-painful pressure sensations from human skeletal muscle

Graven-Nielsen, T., Mense, S. & Arendt-Nielsen, L., 2004, I: Experimental Brain Research. 159, 3, s. 273-283

Peripheral and central sensitisation in musculoskeletal pain

Graven-Nielsen, T., 2004, 25th Annual Scientific Meeting of the Australian Pain Society, 7-10 March 2004, Canberra, Australia. s. 64, No. P4.1

Quantitative sensory testing in chronic widespread pain

Graven-Nielsen, T., 2004, 25th Annual Scientific Meeting of the Australian Pain Society, 7-10 March 2004, Canberra, Australia. s. 63, No. 3D.3

Relationship between computerized cuff pressure algometry and disease assessment measures in fibromyalgia

Jespersen, A., Kendall, S. A., Dreyer, L., Graven-Nielsen, T., Danneskiold-Samsøe, B. & Bliddal, H., 2004, I: Journal of Musculoskeletal Pain. 12, Suppl. 9, s. 55, No. 109

Sensory-motor interaction in muscle pain

Graven-Nielsen, T., 2004, 25th Annual Scientific Meeting of the Australian Pain Society, 7-10 March 2004, Canberra, Australia. s. 79, No. 4B.1

Spatial pressure sensitivity in healthy muscle

Andersen, H., Arendt-Nielsen, L., Danneskiold-Samsøe, B. & Graven-Nielsen, T., 2004, I: Journal of Musculoskeletal Pain. 12, Suppl. 9, s. 12, No. 24

Surface EMG crosstalk evaluated from experimental recordings and simulated signals: reflections on crosstalk interpretation, quantification and reduction

Farina, D., Merletti, R., Indino, B. & Graven-Nielsen, T., 2004, I: Methods of Information in Medicine. 43, 1, s. 30-35

The effect of muscle pain on elbow flexion and coactivation tasks

Ervilha, U. F., Arendt-Nielsen, L., Duarte, M. & Graven-Nielsen, T., 2004, I: Experimental Brain Research. 156, 2, s. 174-182

The influence of muscle pain and fatigue on the activity of synergistic muscles of the leg

Ciubotariu, A., Arendt-Nielsen, L. & Graven-Nielsen, T., 2004, I: European Journal of Applied Physiology. 91, 5-6, s. 604-614

Activation of peripheral NMDA receptors contributes to human pain and rat afferent discharges evoked by injection of glutamate into the masseter muscle

Cairns, B. E., Svensson, P., Wang, K., Hupfeld, S., Graven-Nielsen, T., Sessle, B. J., Berde, C. B. & Arendt-Nielsen, L., 2003, I: Journal of Neurophysiology. 90, 4, s. 2098-2105

Central sensitization in fibromyalgia and other musculoskeletal disorders

Arendt-Nielsen, L. & Graven-Nielsen, T., 2003, I: Current Pain and Headache Reports. 7, 5, s. 355-361 6 s.

Effect of peripheral NMDA receptor antagonists on masseter muscle pain

Svensson, P., Cairns, B. E., Wang, K., Hupfeld, S., Graven-Nielsen, T., Sessle, B. J., Berde, C. B. & Arendt-Nielsen, L., 2003, I: Journal of Dental Research. 82, Special Issue B, s. 316, No. 2443

Experimental deep tissue pain in wrist extensors: a model of lateral epicondylalgia

Slater, H., Arendt-Nielsen, L., Wright, A. & Graven-Nielsen, T., 2003, I: European Journal of Pain. 7, 3, s. 277-288 11 s.

Experimental pain by ischaemic contractions compared with pain by intramuscular infusions of adenosine and hypertonic saline

Graven-Nielsen, T., Jansson, Y., Segerdahl, M., Kristensen, J. D., Mense, S., Arendt-Nielsen, L. & Sollevi, A., 2003, I: European Journal of Pain. 7, 1, s. 93-102 9 s.

Glutamate-evoked pain and mechanical allodynia in the human masseter muscle

Svensson, P., Cairns, B. E., Wang, K., Hu, J. W., Graven-Nielsen, T., Arendt-Nielsen, L. & Sessle, B. J., 2003, I: Pain. 101, 3, s. 221-227 6 s.

Human withdrawal reflex receptive fields to foot sole stimulation in symmetrical standing position

Andersen, O. K., Matjacic, Z., Graven-Nielsen, T. & Arendt-Nielsen, L., 2003, Society for Neuroscience 33rd Annual Meeting, 8-12 November 2003, New Orleans, LA, USA [CD-ROM]. s. No. 914.9

Induction and assessment of muscle pain, referred pain, and muscular hyperalgesia

Graven-Nielsen, T. & Arendt-Nielsen, L., 2003, I: Current Pain and Headache Reports. 7, s. 443-451 8 s.

Interaction between muscle pain and motor control

Graven-Nielsen, T., Svensson, P. & Arendt-Nielsen, L., 2003, *Chronic Work-Related Myalgia: Neuromuscular Mechanisms behind Work-Related Chronic Muscle Pain Syndromes*. Johansson, H., Windhorst, U., Djupsjöbacka, M. & Passatore, M. (red.). Gävle University Press, s. 141-154

Lumbar epidural fentanyl: segmental spread and effect on temporal summation and muscle pain

Eichenberger, U., Giani, C., Petersen-Felix, S., Graven-Nielsen, T., Arendt-Nielsen, L. & Curatolo, M., 2003, I: British Journal of Anaesthesia. 90, 4, s. 467-473 6 s.

Messung von Muskelschmerz und Hyperalgesie: experimentelle und klinische Befunde

Arendt-Nielsen, L., Mense, S. & Graven-Nielsen, T., 2003, I: Schmerz. 17, 6, s. 445-449 4 s.

Muskelsmerter

Bliddal, H. & Graven-Nielsen, T., 2003, *Smerter : en lærebog*. Jensen, T. S., Dahl, J. B. & Arendt-Nielsen, L. (red.). København: FADL's Forlag a/s, s. 141-151

Patterns of experimentally induced pain in pericranial muscles in patients with tension-type headache and matched controls

Schmidt-Hansen, P. T., Svensson, P., Jensen, T. S., Graven-Nielsen, T. & Bach, F. W., 2003, I: Cephalgia. 23, 7, s. 629, No. P2G1

Pharmacological modulation of experimental phasic and tonic muscle pain by morphine, alfentanil and ketamine in healthy volunteers

Schulte, H., Graven-Nielsen, T., Sollevi, A., Jansson, Y., Arendt-Nielsen, L. & Segerdahl, M., 2003, I: Acta Anaesthesiologica Scandinavica. 47, 8, s. 1020-1030 10 s.

Psychophysical and EEG responses to repeated experimental muscle pain in humans: pain intensity encodes EEG activity

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T. & Chen, A. C. N., 2003, I: Brain Research Bulletin. 59, 6, s. 533-543

Selectivity of spatial filters for surface EMG detection from the tibialis anterior muscle

Farina, D., Arendt-Nielsen, L., Merletti, R., Indino, B. & Graven-Nielsen, T., 2003, I: IEEE Transactions on Biomedical Engineering. 50, 3, s. 354-364 10 s.

Alfentanil reduces muscle pain by hypertonic saline infusion and electric stimulation

Segerdahl, M., Graven-Nielsen, T., Jansson, Y., Draiby, J., Kristensen, J., Arendt-Nielsen, L. & Sollevi, A., 2002, 10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book. IASP Press, s. 500, No. 1498-P46

Assessment of single motor unit conduction velocity during sustained contractions of the tibialis anterior muscle with advanced spike triggered averaging

Farina, D., Arendt-Nielsen, L., Merletti, R. & Graven-Nielsen, T., 2002, I: Journal of Neuroscience Methods. 115, 1, s. 1-12

Brain processing of cool and warm perceptions: EEG spectral topography and coherence analyses

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T. & Chen, A. C. N., 2002, *8th International Conference on Functional Mapping of the Human Brain, HBM 2002, 2-6 June 2002, Sendai, Japan.*

Cerebral response to repeated tonic muscle pain: psychophysics and EEG spectral topography

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T. & Chen, A. C. N., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 148, No. 436-P70

Deep tissue hyperalgesia

Arendt-Nielsen, L. & Graven-Nielsen, T., 2002, I: *Journal of Musculoskeletal Pain*. 10, 1/2, s. 97-119

Deep tissue hyperalgesia

Arendt-Nielsen, L. & Graven-Nielsen, T., 2002, *The Clinical Neurobiology of Fibromyalgia and Myofascial Pain: Therapeutic Implications*. Bennett, R. M. (red.). New York: Haworth Press, s. 97-119

Differential cerebral responses to auditory aversive arousal and muscle pain: EEG topography and power spectra

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T. & Chen, A. C. N., 2002, *8th International Conference on Functional Mapping of the Human Brain, HBM 2002, 2-6 June 2002, Sendai, Japan.*

Does a transcortical pathway contribute to the human quadriceps stretch reflex during sitting?

Mrachacz-Kersting, N., Grey, M. J., Voigt, M., Graven-Nielsen, T. & Sinkjær, T., 2002, *Society for Neuroscience 32nd Annual Meeting, 2-7 November 2002, Orlando, FL, USA [CD-ROM]*. s. No. 15.13

Epidural fentanyl: effect on segmental spread, temporal summation and muscle pain

Giani, C., Petersen-Felix, S., Graven-Nielsen, T., Arendt-Nielsen, L. & Curatolo, M., 2002, *Abstract Book of the Scandinavian Association for the Study of Pain, 25th Annual SASP Meeting, Aalborg, Denmark, 4-7 April*. s. 46, No. 24

Experimental pain by intramuscular infusions of adenosine or hypertonic saline compared to pain by ischaemic contractions

Graven-Nielsen, T., Jansson, Y., Segerdahl, M., Kristensen, J. D., Mense, S., Arendt-Nielsen, L. & Sollevi, A., 2002, *Abstract Book of the Scandinavian Association for the Study of Pain, 25th Annual SASP Meeting, Aalborg, Denmark, 4-7 April*. s. 33, No. 1

Induction and assessment of muscle pain and the clinical applications

Graven-Nielsen, T., 2002, *Abstract Book of the Scandinavian Association for the Study of Pain, 25th Annual SASP Meeting, 4-7 April 2002, Aalborg, Denmark*. s. 29

Inhibition of maximal voluntary contraction force by experimental muscle pain: a centrally mediated mechanism

Graven-Nielsen, T., Lund, H., Arendt-Nielsen, L., Danneskiold-Samsøe, B. & Bliddal, H., 2002, I: *Muscle & Nerve*. 26, 5, s. 708-712

Is there a relation between intramuscular hypoperfusion and chronic muscle pain?

Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, I: *Journal of Pain*. 3, 4, s. 261-263

Modality-specific facilitation and adaptation to painful tonic stimulation in humans

Polianskis, R., Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, I: *European Journal of Pain*. 6, s. 475-484

Modulation of human experimental muscle pain by an NMDA-receptor antagonist and by opioids

Schulte, H., Graven-Nielsen, T., Sollevi, A., Jansson, Y., Kristensen, J., Arendt-Nielsen, L. & Segerdahl, M., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 500, No. 1495-P43

Muscle pain induced by high intensity thermal stimulation

Graven-Nielsen, T., Arendt-Nielsen, L. & Mense, S., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 20, No. 60-P56

Opioid-insensitive hypoalgesia to mechanical stimuli at sites ipsilateral and contralateral to experimental muscle pain in human volunteers

Graven-Nielsen, T., Gibson, S. J., Laursen, R. J., Svensson, P. & Arendt-Nielsen, L., 2002, I: *Experimental Brain Research*. 146, s. 213-222

Peripheral and central sensitization in musculoskeletal pain disorders: an experimental approach

Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, I: *Current Rheumatology Reports*. 4, 4, s. 313-321

Pressure-pain function in desensitized and hypersensitized muscle and skin assessed by cuff algometry

Polianskis, R., Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, I: *Journal of Pain*. 3, 1, s. 28-37

Spatial and temporal aspects of deep tissue pain assessed by cuff algometry

Polianskis, R., Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, I: *Pain*. 100, s. 19-26

Spatial and temporal aspects of deep tissue pain, assessed by cuff algometry

Polianskis, R., Graven-Nielsen, T. & Arendt-Nielsen, L., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 498, No. 1488-P36

Standardising surface electromyogram recordings for assessment of activity and fatigue in the human upper trapezius muscle

Farina, D., Madeleine, P., Graven-Nielsen, T., Merletti, R. & Arendt-Nielsen, L., 2002, I: *European Journal of Applied Physiology*. 86, s. 469-478

Temporal summation of pain from skin, muscle and joint following nociceptive ultrasonic stimulation in humans

Wright, A., Graven-Nielsen, T., Davies, I. I. & Arendt-Nielsen, L., 2002, I: *Experimental Brain Research*. 144, 4, s. 475-482

The analgesic effect of morphine, lidocaine and ketamine in whiplash associated disorder patients with different pain duration

Lemming, D., Sørensen, J., Graven-Nielsen, T., Arendt-Nielsen, L. & Gerdle, B., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 173, No. 519-P153

The effect of experimental muscle pain and fatigue on synergistic muscle activity

Ciubotariu, A., Arendt-Nielsen, L. & Graven-Nielsen, T., 2002, *Abstract Book of the Scandinavian Association for the Study of Pain, 25th Annual SASP Meeting, Aalborg, Denmark, 4-7 April*. s. 60, No. 48

The effect of experimental muscle pain on homonymous synergistic muscle activity during sustained contractions

Ciubotariu, A., Arendt-Nielsen, L. & Graven-Nielsen, T., 2002, *10th World Congress on Pain, 17-22 August 2002, San Diego, CA, USA: IASP Abstract Book*. IASP Press, s. 19, No. 56-P52

Thermosensitivity of muscle: high intensity thermal stimulation of muscle tissue induces pain in humans

Graven-Nielsen, T., Arendt-Nielsen, L. & Mense, S., 2002, I: *Journal of Physiology*. 540, 2, s. 647-656

An investigation of how acute muscle pain modulates performance during computer work with digitizer and puck

Birch, L., Arendt-Nielsen, L., Graven-Nielsen, T. & Christensen, H., 2001, I: *Applied Ergonomics*. 32, 3, s. 281-286

A spike triggered averaging technique for high resolution assessment of single motor unit conduction velocity changes during fatiguing voluntary contractions

Farina, D., Arendt-Nielsen, L., Merletti, R. & Graven-Nielsen, T., 2001, *23rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2001, 25-28 October 2001, Istanbul, Turkey*. Bind 2. s. 1097-1100

Attenuation of maximal force during experimental muscle pain is centrally mediated

Graven-Nielsen, T., Lund, H., Arendt-Nielsen, L., Danneskiold-Samsøe, B. & Bliddal, H., 2001, I: Journal of Musculoskeletal Pain. 9, Suppl. 5, s. 16

Computer-controlled pneumatic pressure algometry: a new technique for quantitative sensory testing

Polianskis, R., Graven-Nielsen, T. & Arendt-Nielsen, L., 2001, I: European Journal of Pain. 5, 3, s. 267-277

Conditioning of heteronymous H-reflex in human temporalis muscle by stimulation of perioral afferents

Macaluso, G. M., Svensson, P. & Graven-Nielsen, T., 2001, I: Experimental Brain Research. 136, 1, s. 114-119

Craniofacial muscle pain: review of mechanisms and clinical manifestations

Svensson, P. & Graven-Nielsen, T., 2001, I: Journal of Orofacial Pain. 15, 2, s. 117-145

Deep tissue pain in wrist extensors: a model of lateral epicondylalgia

Slater, H., Arendt-Nielsen, L., Wright, A. & Graven-Nielsen, T., 2001, I: Journal of Musculoskeletal Pain. 9, Suppl. 5, s. 95

Different EEG topographic effects of painful and non-painful intramuscular stimulation in man

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Chen, A. C. N., 2001, I: Experimental Brain Research. 141, s. 195-203

Inhibition of motor system excitability at cortical and spinal level by tonic muscle pain

Le Pera, D., Graven-Nielsen, T., Valeriani, M., Oliviero, A., Lazzaro, V. D., Tonali, P. A. & Arendt-Nielsen, L., 2001, I: Clinical Neurophysiology. 112, s. 1633-1641

Methods for induction and assessment of pain in humans with clinical and pharmacological examples

Graven-Nielsen, T., Sergerdahl, M., Svensson, P. & Arendt-Nielsen, L., 2001, *Methods in Pain Research*. Kruger, L. (red.). Boca Raton: CRC Press, s. 263-304 (Methods & New Frontiers in Neuroscience).

Motor potentials evoked by transcranial magnetic stimulation during isometric and dynamic masseter muscle contraction in humans

McMillan, A. S., Graven-Nielsen, T., Romaniello, A. & Svensson, P., 2001, I: Archives of Oral Biology. 46, 4, s. 381-386

Non-painful and painful surface and intramuscular electrical stimulation at the thenar and hypothenar sites: differential cerebral dynamics of early to late latency SEPs

Niddam, D. M., Graven-Nielsen, T., Arendt-Nielsen, L. & Chen, A. C. N., 2001, I: Brain Topography. 13, 4, s. 283-292

Osteoarthritis and its association with muscle hyperalgesia: an experimental controlled study

Bajaj, P., Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2001, I: Pain. 93, 2, s. 107-114

Post-exercise muscle soreness after eccentric exercise: psychophysical effects and implications on mean arterial pressure

Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2001, I: Scandinavian Journal of Medicine & Science in Sports. 11, 5, s. 266-273

Standardisation of surface EMG recording for reliable assessment of the upper trapezius muscle activity and fatigue in occupational studies

Farina, D., Madeleine, P., Graven-Nielsen, T., Merletti, R. & Arendt-Nielsen, L., 2001, *ESMAC-SIAMOC Pre-Congress Course on Movement Analysis (European Society for Movement Analysis in Adults and Children, Societa' Italiana di Analisi del Movimento in Clinica), 9-11 October 2001, Milan, Italy.*

The effects of cutaneous nociception on EEG topography

Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Chen, A. C. N., 2001, I: NeuroImage. 13, 6, Suppl. 1, s. S871

The peripheral apparatus of muscle pain: evidence from animal and human studies
Graven-Nielsen, T. & Mense, S., 2001, I: *The Clinical Journal of Pain*. 17, s. 2-10

Topographic effects of tonic cutaneous nociceptive stimulation on human electroencephalograph
Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Chen, A. C. N., 2001, I: *Neuroscience Letters*. 305, 1, s. 49-52 4 s.

Trigger points in patients with lower limb osteoarthritis
Bajaj, P., Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2001, I: *Journal of Musculoskeletal Pain*. 9, 3, s. 17-33

Whiplash and symptom amplification: reply to R. Ferrari
Graven-Nielsen, T., Johansen, M. K., Olesen, A. S. & Arendt-Nielsen, L., 2001, I: *Pain*. 89, 2-3, s. 294-295

Alfentanil, morphine and ketamine increase thresholds and reduce local and referred muscle pain during hypertonic saline infusion and electric stimulation
Schulte, H., Graven-Nielsen, T., Jansson, Y., Kristensen, J., Sollevi, A., Arendt-Nielsen, L. & Segerdahl, M., 2000, *Pain in Europe : Third Congress of the European Federation of IASP Chapters, EFIC, September 26-30, 2000, Nice, France*. s. 213, No. PS1-065

A psychophysical study of muscle fatigue and post-exercise muscle soreness of first dorsal interosseous muscle of hand
Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2000, *IFESS 2000. NP 2000, Proceedings, 5th Annual Conference of the International Functional Electrical Stimulation Society, 6th Triennial Conference "Neural Prostheses: Motor Systems", June 18-24, 2000, Aalborg University, Denmark*. Sinkjær, T., Popovic, D. & Struijk, J. J. (red.). Center for Sensory-Motor Interaction (SMI), Department of Health Science and Technology, Aalborg University, s. 186-189

Duration and distribution of experimental muscle hyperalgesia in humans following combined infusions of serotonin and bradykinin
Babenko, V., Svensson, P., Graven-Nielsen, T., Drewes, A. M., Jensen, T. S. & Arendt-Nielsen, L., 2000, I: *Brain Research*. 853, 2, s. 275-281

EEG and human pain: topographic mapping of tonic pain by intradermal vs. intramuscular injection of capsaicin
Chang, P., Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Chen, A. C. N., 2000, *Pain in Europe: Third Congress of the European Federation of IASP Chapters, EFIC, September 26-30, 2000, Nice, France*. s. 187, No. PS1-014

Effect of muscle pain on motor control: a human experimental approach
Graven-Nielsen, T., Svensson, P. & Arendt-Nielsen, L., 2000, I: *Advances in Physiotherapy*. 2, s. 26-38

Effects of post-exercise muscle soreness on pinch force
Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2000, *Pain in Europe : Third Congress of the European Federation of IASP Chapters, EFIC, September 26-30, 2000, Nice, France*. s. 204, No. PS1-047

Eksperimental smerteforskning: et nyt forskningsområde
Graven-Nielsen, T. & Arendt-Nielsen, L., 2000, I: *Naturens Verden*. 83, 11-12, s. 44-53

Experimental muscle pain modulates muscle activity and work performance differently during high and low precision use of a computer mouse
Birch, L., Graven-Nielsen, T., Christensen, H. & Arendt-Nielsen, L., 2000, I: *European Journal of Applied Physiology*. 83, s. 492-498

Inhibition of motor unit firing during experimental muscle pain in humans
Sohn, M. K., Graven-Nielsen, T., Arendt-Nielsen, L. & Svensson, P., 2000, I: *Muscle & Nerve*. 23, 8, s. 1219-1226

Interaction between cutaneous and muscle afferent activity in polysynaptic reflex pathways: a human experimental study
Andersen, O. K., Graven-Nielsen, T., Matre, D. A., Arendt-Nielsen, L. & Schomburg, E. D., 2000, I: Pain. 84, s. 29-36

Ketamine reduces muscle pain, temporal summation, and referred pain in fibromyalgia patients

Graven-Nielsen, T., Kendall, S. A., Henriksson, K. G., Bengtsson, M., Sørensen, J., Johnson, A., Gerdle, B. & Arendt-Nielsen, L., 2000, I: Pain. 85, s. 483-491

Modulation of stretch-evoked reflexes in single motor units in human masseter muscle by experimental pain

Svensson, P., Miles, T. S., Graven-Nielsen, T. & Arendt-Nielsen, L., 2000, I: Experimental Brain Research. 132, s. 65-71

Muscle hyperalgesia in postexercise muscle soreness assessed by single and repetitive ultrasound stimuli

Bajaj, P., Graven-Nielsen, T., Wright, A., Davies, I. I. & Arendt-Nielsen, L., 2000, I: Journal of Pain. 1, 2, s. 111-121

Post-exercise muscle soreness evaluated by McGill pain questionnaire (MPQ)

Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 2000, *The Pain Society, British and Irish Chapter of the International Association for the Study of Pain, Annual Scientific Meeting, 3-5 April 2000, Warwick, UK.* s. 85, Poster No. 78

Quantitative analysis of reflex inhibition in single motor units in human masseter muscle: effects of stimulus intensity

Graven-Nielsen, T., Svensson, P., McMillan, A. S. & Arendt-Nielsen, L., 2000, I: Muscle & Nerve. 23, s. 259-266

Sensitivity to pressure stimuli in capsaicin-induced referred pain areas

Graven-Nielsen, T., Gibson, S., Svensson, P. & Arendt-Nielsen, L., 2000, *Pain in Europe : Third Congress of the European Federation of IASP Chapters, EFIC, September 26-30, 2000, Nice, France.* s. 213, No. PS1-066

The influence of experimental muscle pain on motor unit activity during low level contraction

Birch, L., Christensen, H., Arendt-Nielsen, L., Graven-Nielsen, T. & Søgaard, K., 2000, I: European Journal of Applied Physiology. 83, s. 200-206

Assessment of muscle pain in humans: clinical and experimental aspects

Arendt-Nielsen, L., Graven-Nielsen, T. & Svensson, P., 1999, *Muscle Pain, Myofascial Pain, and Fibromyalgia: Recent Advances.* Vecchiet, L. & Giamberardino, M. A. (red.). New York: Haworth Press, s. 25-41

Central hyperexcitability in fibromyalgia

Graven-Nielsen, T., Sørensen, J., Henriksson, K. G., Bengtsson, M. & Arendt-Nielsen, L., 1999, *Muscle Pain, Myofascial Pain, and Fibromyalgia: Recent Advances.* Vecchiet, L. & Giamberardino, M. A. (red.). New York: Haworth Press, s. 261-271

Effect of clenching levels on heteronymous H-reflex in human temporalis muscle

Svensson, P., De Laat, A., Graven-Nielsen, T., Arendt-Nielsen, L. & Macaluso, G. M., 1999, I: Experimental Brain Research. 126, s. 467-472

Epidural fentanyl: effect on intramuscular and cutaneous experimental pain

Petersen-Felix, S., Curatolo, M., Giani, C., Graven-Nielsen, T., Zbinden, A. M. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria.* IASP Press, s. 401, No. 82

Experimental human muscle pain and muscular hyperalgesia induced by combinations of serotonin and bradykinin

Babenko, V., Graven-Nielsen, T., Svensson, P., Drewes, A. M., Jensen, T. S. & Arendt-Nielsen, L., 1999, I: Pain. 82, s. 1-8

Experimental human muscle pain induced by intramuscular injections of bradykinin, serotonin, and substance P

Babenko, V., Graven-Nielsen, T., Svensson, P., Drewes, A. M., Jensen, T. S. & Arendt-Nielsen, L., 1999, I: European Journal of Pain. 3, s. 93-102

Experimental muscular hyperalgesia in humans induced by combinations of serotonin and bradykinin: the duration and spatial distribution

Babenko, V., Svensson, P., Drewes, A. M., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 514, No. 31

Generalised muscular hyperalgesia in chronic whiplash syndrome

Johansen, M. K., Graven-Nielsen, T., Olesen, A. S. & Arendt-Nielsen, L., 1999, I: *Pain*. 83, s. 229-234

Inhibitory effects of tonic jaw-muscle pain on stretch reflexes in single motor unit recordings

Svensson, P., Miles, T. S., Graven-Nielsen, T. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 538, No. 112

Ketamine attenuates experimental referred muscle pain and temporal summation in fibromyalgia patients

Graven-Nielsen, T., Aspegren-Kendall, S., Henriksson, K. G., Bengtsson, M., Sörensen, J., Johnson, A., Gerdle, B. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 516, No. 39

Modulation of an inhibitory reflex in single motor units in human masseter by tonic painful stimulation

Svensson, P., McMillan, A. S., Graven-Nielsen, T., Wang, K. & Arendt-Nielsen, L., 1999, I: *Pain*. 83, s. 441-446

Motor unit firing rate during experimental muscle pain

Birch, L., Christensen, H., Graven-Nielsen, T., Arendt-Nielsen, L. & Sjøgaard, K., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 516, No. 36

Muscular hyperalgesia and referred pain in chronic whiplash syndrome

Johansen, M., Graven-Nielsen, T., Schou-Olesen, A. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, 22-27 August 1999, Vienna, Austria*. IASP Press, s. 48, No. 151

Post exercise muscle soreness (PEMS): an experimental muscle pain

Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 1999, I: *Journal of Anaesthesiology - Clinical Pharmacology*. 15, 4, s. 407

Psychophysical study of muscle hyperalgesia: an experimental post exercise muscle pain model

Bajaj, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 1999, *The Pain Society, British and Irish Chapter of the International Association for the Study of Pain, Annual Scientific Meeting, 14-16 April 1999, Edinburgh, United Kingdom*. s. 71-72

Referred pain in pericranial muscles following hypertonic saline injection

Schmidt-Hansen, P. T., Svensson, P., Jensen, T. S., Graven-Nielsen, T., Arendt-Nielsen, L. & Bach, F. W., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 423, No. 157

SEMG in experimental and clinical muscle pain research

Graven-Nielsen, T., 1999, *Future Applications of Surface ElectroMyoGraphy : Proceedings of the fourth general SENIAM workshop, September 1999, 's Hertogenbosch, the Netherlands*. Hermens, H. J. & Freriks, B. (red.). Roessingh Research and Development, s. 85-90

Temporal summation following noviiveptive ultrasonic stimulation

Wright, A., Graven-Nielsen, T., Arendt-Nielsen, L. & Davies, I. I., 1999, *9th World Congress on Pain, 22-27 August 1999, Vienna, Austria*. IASP Press, s. 515, No. 35

The effect of compression and regional anaesthetic block on referred pain intensity in humans

Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1999, I: *Pain*. 80, 1-2, s. 257-263

The effect of differential and complete nerve block on electrical induced muscle pain: a psychophysical study

Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, 22-27 August 1999, Vienna, Austria*. IASP Press, s. 516, No. 37

The effect of differential and complete nerve block on experimental muscle pain in humans

Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1999, I: Muscle & Nerve. 22, s. 1564-1570

The influence of experimental muscle pain on motor unit threshold and behaviour during low level ramp contraction

Birch, L., Graven-Nielsen, T., Arendt-Nielsen, L., Sjøgaard, K. & Christensen, H., 1999, *PROCID Symposium. Muscular Disorders in Computer Users: Mechanisms and Models, 25-27 November 1999, Copenhagen, Denmark*. Christensen, H. : Sjøgaard, G. (eds.) (red.). National Institute of Occupational Health, s. 162-165

Ultrasonic stimulation for assessment of muscle hyperalgesia and temporal summation of muscle pain

Bajaj, P., Graven-Nielsen, T., Wright, A., Davies, I. I. & Arendt-Nielsen, L., 1999, *9th World Congress on Pain, August 22-27, 1999, Vienna, Austria*. IASP Press, s. 515, No. 34

Assessment of muscle pain in humans: clinical and experimental aspects

Arendt-Nielsen, L., Laursen, R. J., Graven-Nielsen, T., Babenko, V., Drewes, A. M. & Svensson, P., 1998, I: Journal of Musculoskeletal Pain. 6, Suppl. 2, s. 57

Central hyperexcitability in fibromyalgia

Graven-Nielsen, T., Sörensen, J., Henriksson, K. G., Bengtsson, M. & Arendt-Nielsen, L., 1998, I: Journal of Musculoskeletal Pain. 6, Suppl. 2, s. 83

Effect of bite force on heteronymous H-reflexes in human temporalis muscle

Graven-Nielsen, T., Svensson, P., Laat, A. D. & Arendt-Nielsen, L., 1998, I: Journal of Dental Research. 77, Special issue B, s. 1005, No. 2992

Experimental jaw-muscle pain does not change heteronymous H-reflexes in the human temporalis muscle

Svensson, P., De Laat, A., Graven-Nielsen, T. & Arendt-Nielsen, L., 1998, I: Experimental Brain Research. 121, 3, s. 311-318

Experimentally induced muscle pain induces hypoalgesia in heterotopic deep tissues, but not in homotopic deep tissues

Graven-Nielsen, T., Babenko, V., Svensson, P. & Arendt-Nielsen, L., 1998, I: Brain Research. 787, 2, s. 203-210

Experimental muscle pain does not cause long-lasting increases in resting EMG activity

Svensson, P., Graven-Nielsen, T., Matre, D. A. & Arendt-Nielsen, L., 1998, I: Muscle & Nerve. 21, s. 1382-1389

Hyperexcitability in fibromyalgia

Sörensen, J., Graven-Nielsen, T., Henriksson, K. G., Bengtsson, M. & Arendt-Nielsen, L., 1998, I: Journal of Rheumatology. 25, 1, s. 152-155

Interaction of cutaneous and muscle afferent activity in withdrawal reflex pathways in man

Andersen, O. K., Graven-Nielsen, T., Matre, D. A. & Arendt-Nielsen, L., 1998, *Society for Neuroscience 28th Annual Meeting, 7-12 November 1998, Los Angeles, CA, USA: Abstract Book, Vol. 24(2)*, s. 2085, No. 831.8

Intramuscular injections of bradykinin, serotonin and substance P in humans in relation to pain and hyperalgesia to mechanical stimuli

Babenko, V., Graven-Nielsen, T., Svensson, P., Drewes, A. M., Arendt-Nielsen, L. & Jensen, T. S., 1998, I: European Journal of Neuroscience. Supplement. 10, s. 82, No. 30.33

Involvement of algogenic substances in muscle pain and muscular hyperalgesia in humans

Babenko, V., Graven-Nielsen, T., Svensson, P., Drewes, A. M., Jensen, T. S. & Arendt-Nielsen, L., 1998, *Second Annual Pain, 7-8 December 1998, Washington, DC, USA*.

Mechanical hyperesthesia of human facial skin induced by tonic painful stimulation of jaw-muscles

Svensson, P., Graven-Nielsen, T. & Arendt-Nielsen, L., 1998, I: Pain. 74, 1, s. 93-100

Muscle pain and muscular hyperalgesia after intramuscular injections of bradykinin, serotonin and substance P in humans
Babenko, V., Graven-Nielsen, T., Svensson, P., Drewes, A. M., Arendt-Nielsen, L. & Jensen, T. S., 1998, I: Journal of Musculoskeletal Pain. 6, Suppl. 2, s. No. 4

Muscular sensibility assessed by electrical stimulation and mechanical pressure

Fenger-Grøn, L. S., Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P., Stengaard-Pedersen, K. & Jensen, T. S., 1998, I: Journal of Musculoskeletal Pain. 6, 4, s. 33-44

Muskelsmerte: eksperimentel muskelsmertes indflydelse på muskelfunktion

Graven-Nielsen, T., 1998, I: Dansk Sportsmedicin. 3, s. 6-9

Painful conditioning of motor-unit reflex behavior in human masseter muscle

Svensson, P., McMillan, A. S., Graven-Nielsen, T., Wang, K. & Arendt-Nielsen, L., 1998, I: Journal of Dental Research. 77, Special issue B, s. 1007, No. 3007

Quantification of deep and superficial sensibility in saline-induced muscle pain: a psychophysical study

Graven-Nielsen, T., Fenger-Grøn, L. S., Svensson, P., Steengaard-Pedersen, K., Arendt-Nielsen, L. & Jensen, T. S., 1998, I: Somatosensory and Motor Research. 15, 1, s. 46-53

Referred pain and hyperalgesia related to muscle and visceral pain

Arendt-Nielsen, L., Graven-Nielsen, T. & Drewes, A. M., 1998, I: IASP Newsletter. January/February, s. 3-6

The effect of differential and complete nerve block on referred pain: a psychophysical study

Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1998, I: Journal of Musculoskeletal Pain. 6, Suppl. 2, s. 12

Effects of experimental muscle pain on muscle activity and co-ordination during static and dynamic motor function

Graven-Nielsen, T., Svensson, P. & Arendt-Nielsen, L., 1997, I: Electroencephalography and Clinical Neurophysiology. 105, s. 156-164

Experimental muscle pain: a quantitative study of local and referred pain in humans following injection of hypertonic saline

Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1997, I: Journal of Musculoskeletal Pain. 5, 1, s. 49-69

How to assess muscle pain experimentally and clinically

Arendt-Nielsen, L., Svensson, P. & Graven-Nielsen, T., 1997, I: European Journal of Pain. 1, s. 64-65

Investigation of muscle pain in man

Arendt-Nielsen, L., Graven-Nielsen, T. & Svensson, P., 1997, Book of Abstracts, *Pain in Europe : 2nd Congress of the European Federation of IASP Chapters, 24-27 September 1997, Barcelona, Spain.* s. 210-214

Investigation of summation between cutaneous and muscle afferent input in man: an experimental pain study

Andersen, O. K., Graven-Nielsen, T., Matre, D. A., Arendt-Nielsen, L. & Schomburg, E. D., 1997, Book of abstracts: *Pain in Europe: 2nd Congress of the European Federation of IASP Chapters, September 24-27, 1997, Barcelona, Spain.* s. 356

In vivo model of muscle pain: quantification of intramuscular chemical, electrical and pressure changes associated with saline-induced muscle pain in humans

Graven-Nielsen, T., McArdle, A., Phoenix, J., Arendt-Nielsen, L., Jensen, T. S., Jackson, M. J. & Edwards, R. H. T., 1997, I: Pain. 69, s. 137-143

Modulation of static and dynamic muscle activity by experimental muscle pain in legs

Graven-Nielsen, T., Svensson, P. & Arendt-Nielsen, L., 1997, Society for Neuroscience 27th Annual Meeting, 25-30 October 1997, New Orleans, LA, USA: Abstract Book, Vol. 23(2). s. 2354, No. 916.11

MRI and microdialysis for assessment of intramuscular biochemical following saline-induced muscle pain in humans
Graven-Nielsen, T., McArdle, A., Phoenix, J., Arendt-Nielsen, L., Jensen, T. S., Jackson, M. J. & Edwards, R. H. T., 1997, *20th Annual Meeting of the Scandinavian Association for the Study of Pain, SASP, April 17-20, 1997, Århus, Denmark.* s. 25

Muscle pain assessed by electrical stimulation and mechanical pressure in the anterior tibial muscle
Fenger-Grøn, L. S., Graven-Nielsen, T., Svensson, P., Arendt-Nielsen, L., Stengaard-Petersen, K. & Jensen, T. S., 1997, *SASP 1997 : 20th Annual Meeting of the Scandinavian Association for the Study og Pain, April 17-20, 1997, Århus, Denmark.* s. No. 24

Ongoing muscle pain do not cause muscular hyperactivity
Graven-Nielsen, T., Svensson, P., Matre, D. A. & Arendt-Nielsen, L., 1997, *Pain in Europe: 2nd Congress of the European Federation of IASP Chapters, September 24-27, 1997, Barcelona, Spain.* s. 354

Quantification of local and referred muscle pain in humans after sequential i.m. injections of hypertonic saline
Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1997, I: *Pain.* 69, s. 111-117

Quantification of local and referred pain in humans induced by intramuscular electrical stimulation
Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1997, I: *European Journal of Pain.* 1, s. 105-113

Quantification of local and referred pain in humans induced by intramuscular electrical stimulation
Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1997, *SASP 1997 : 20th Annual Meeting of the Scandinavian Association for the Study og Pain, April 17-20, 1997, Århus, Denmark.* s. 23

Referred pain dependent on sensory input from the periphery: a human experimental study
Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1997, *PGA'51 : 51st Postgraduate Assembly, 13-17 December 1997, New York, NY, USA: The World of Anesthesia.* s. 117

Referred pain is dependent on sensory input from the periphery: a psychophysical study
Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1997, I: *European Journal of Pain.* 1, 4, s. 261-269

Sensory manifestations and sensory-motor interactions during experimental muscle pain in man
Graven-Nielsen, T., 1997, Aalborg: Center for Sensory-Motor Interaction (SMI), Department of Health Science and Technology, Aalborg University.

Stimulus-response functions in areas with experimentally induced referred muscle pain: a psychophysical study
Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1997, I: *Brain Research.* 744, s. 121-128

Temporal summation in muscles and referred pain areas: an experimental human study
Arendt-Nielsen, L., Graven-Nielsen, T., Svensson, P. & Jensen, T. S., 1997, I: *Muscle & Nerve.* 20, s. 1311-1313

The effect of prolonged muscle pain on deep pressure-pain sensibility
Babenko, V., Graven-Nielsen, T., Svensson, P. & Arendt-Nielsen, L., 1997, *Pain in Europe: 2nd Congress of the European Federation of IASP Chapters, September 24-27, 1997, Barcelona, Spain.* s. 354

The effect of skin anaesthetising the area of muscular induced referred pain
Laursen, R. J., Graven-Nielsen, T., Jensen, T. S. & Arendt-Nielsen, L., 1997, *Pain in Europe: 2nd Congress of the European Federation of IASP Chapters, September 24-27, 1997, Barcelona, Spain.* s. 286-287

Pain thresholds in cutaneous, subcutaneous and muscle tissue after saline induced muscle pain
Slot, L., Graven-Nielsen, T., Stengaard-Pedersen, K., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1996, *Abstracts 8th World Congress on Pain, 17-22 August 1996, Vancouver, Canada.* IASP Press, s. 232-233, No. 51

Psychophysical assessment of thermal and mechanical stimuli applied to areas with referred muscle pain in humans
Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1996, *Abstracts 8th World Congress on Pain, 17-22 August 1996, Vancouver, Canada*. IASP Press, s. 233, No. 52

The influence of low back pain on muscle activity and coordination during gait: a clinical and experimental study
Arendt-Nielsen, L., Graven-Nielsen, T., Svarrer, H. & Svensson, P., 1996, I: *Pain*. 64, 2, s. 231-240

Experimental muscle pain: motor and sensory aspects

Graven-Nielsen, T., 1995, *Symposium om patogenetiska mekanismer vid kronisk muskelsmärta, June 1995, Linköping, Sweden.*

Experimental referred muscle pain

Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1995, I: *Journal of Musculoskeletal Pain*. 3, Suppl. 1, s. 7

Sensory aspects of experimental muscle pain

Graven-Nielsen, T., Arendt-Nielsen, L., Svensson, P. & Jensen, T. S., 1995, *Pain in Europe, Verona, Italy, May*, s. 71

The effect of clinical and experimental low back pain on human gait

Arendt-Nielsen, L., Graven-Nielsen, T., Svarrer, H. & Svensson, P., 1995, I: *Journal of Musculoskeletal Pain*. 3, Suppl. 1, s. 135

The influence of low back pain on muscle activity and coordination during gait: a clinical and experimental study

Arendt-Nielsen, L., Graven-Nielsen, T., Svarrer, H. & Svensson, P., 1994, *International Conference on Pain, October 1994, London, UK*.

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19/01/2017

1 element af Mediedækning

Aalborg-forskere er verdensberørte for at påføre folk smerte

Graven-Nielsen, T. & Boudreau, S.

30/10/2017 → 30/10/2017

3 elementer af Mediedækning

AAU arrangerer forskertræf

Arendt-Nielsen, L. & Graven-Nielsen, T.

24/07/2006

1 element af Mediedækning

AAU styrker det sundhedsvidenskabelige område

Graven-Nielsen, T., Farina, D., Hejlesen, O. & Andersen, O. K.

05/04/2008

1 element af Mediedækning