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Vice Dean for Research and Innovation  
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Professor  
Institut for Medicin og Sundhedsteknologi  
Det Sundhedsvidenskabelige Fakultet  
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## Forskningsprofil

Forskningsinteresser:

Electrophysiological systems for pain assessment: stimulation techniques, EMG/EEG acquisition, computer models, signal processing, sophisticated statistical analysis

Modeling electrical stimulation of live tissue, Finite Element modeling, nerve excitability modeling (differential equation models), electrode design

The neurobiology of the human nociceptive withdrawal reflex: Neuroscience approach, motor control, interaction with central pattern generators

Rehabilitation engineering after stroke: gait rehabilitation, electrical stimulation, control engineering, tele-rehabilitation, sensor technology, machine learning, clinical evaluation.

Medlem af ATV

## Ansættelse

Professor

Professor  
Institut for Medicin og Sundhedsteknologi  
Det Sundhedsvidenskabelige Fakultet  
Gistrup, Danmark  
1 jul. 1996 → 31 dec. 4712

Professor

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Det Sundhedsvidenskabelige Fakultet  
Gistrup, Danmark  
1 jul. 1996 → 31 dec. 4712

## Center for Sanse-Motorisk Interaktion

Det Sundhedsvidenskabelige Fakultet  
Aalborg, Danmark  
1 jul. 1996 → present

Professor

Professor  
Translational Pain Neuroscience and Precision Health  
Det Sundhedsvidenskabelige Fakultet

Gistrup, Danmark  
1 jul. 1996 → 31 dec. 4712

**AI for the People**  
Det Tekniske Fakultet for IT og Design  
Aalborg, Danmark  
1 nov. 2019 → present

**Center for Neuroplasticity and Pain**  
Det Sundhedsvidenskabelige Fakultet  
Aalborg East, Danmark  
1 feb. 2015 → present

## Publikationer

**Spatiotemporal characterization of an experimental model of muscle pain in humans based on short-wave diathermy**  
Intelangelo, L., Mista, C. A., Barone, M., Imaz, F., Laugero, S. J., Adur, J., Andersen, O. K. & Biurrun Manresa, J. A., nov. 2024, I: European Journal of Pain. 28, 10, s. 1785-1798 14 s.

**Topical capsaicin modulates the two-point discrimination threshold-Modulation depends on stimulation modality and intensity**  
Frahm, K. S., Andersen, O. K., Arendt-Nielsen, L., Gervasio, S. & Mørch, C. D., nov. 2024, I: European Journal of Pain. 28, 10, s. 1855-1865 11 s.

**Investigation of directional discrimination in the nociceptive system using temperature-controlled laser stimuli**  
Ruojoie, A., Andersen, O. K. & Frahm, K. S., sep. 2024, I: European Journal of Pain. 28, 8, s. 1320-1329 10 s.

**Spatio-temporal modulation of cortical activity during motor deadaptation depends on the feedback of task-related error**  
Mista, C. A., Arguissain, F. G., Ranieri, A., Nielsen, J. F., Andersen, H., Manresa, J. A. B. & Andersen, O. K., 25 jun. 2024, I: Behavioural Brain Research. 468, 115024.

**Effects of Background Noise and Linguistic Violations on Frontal Theta Oscillations During Effortful Listening**  
Mohammadi, Y., Graversen, C., Manresa, J. B., Østergaard, J. & Andersen, O. K., 1 maj 2024, I: Ear and Hearing. 45, 3, s. 721-729 9 s.

**Validity and reliability of self-reported and neural measures of listening effort**  
Mohammadi, Y., Østergaard, J., Graversen, C., Andersen, O. K. & Biurrun Manresa, J., dec. 2023, I: European Journal of Neuroscience. 58, 11, s. 4357-4370 14 s.

**Phase-locking of Neural Activity to the Envelope of Speech in the Delta Frequency Band Reflects Differences between Word Lists and Sentences**  
Mohammadi, Y., Graversen, C., Østergaard, J., Andersen, O. K. & Reichenbach, T., aug. 2023, I: Journal of Cognitive Neuroscience. 35, 8, s. 1301-1311 11 s.

**Phase-locking of neural activity to the envelope of speech in the delta frequency band reflects differences between word lists and sentences**  
Mohammadi, Y., Graversen, C., Østergaard, J., Andersen, O. K. & Reichenbach, T., 1 jun. 2023, bioRxiv, 30 s.

**Validity and reliability of self-reported and neural measures of listening effort**  
Mohammadi, Y., Østergaard, J., Graversen, C., Andersen, O. & Manresa, J. B., 11 mar. 2023, Authorea, 13 s.

**A novel temperature-controlled laser system to uniformly activate cutaneous thermal receptors during movable thermal stimulation**  
Ruojoie, A., Andersen, O. K. & Frahm, K. S., 1 feb. 2023, I: Journal of Neural Engineering. 20, 1, 016040.

**An analytical method to separate modality-specific and nonspecific sensory components of event-related potentials**  
Young, E. L., Mista, C. A., Jure, F. A., Andersen, O. K. & Biurrun Manresa, J., okt. 2022, I: European Journal of Neuroscience. 56, 7, s. 5090-5105 16 s.

**Investigation of tempo-spatial mechanisms of nociceptive system using a temperature-controlled laser stimulator**  
Rucoie, A., Andersen, O. K. & Frahm, K. S., 23 sep. 2022.

**A novel temperature-controlled laser system to uniformly activate cutaneous nociceptors during moveable stimulation**  
Rucoie, A., Andersen, O. K. & Frahm, K. S., 22 sep. 2022.

**Perceptual learning reduces the 2-point discrimination threshold**  
Frahm, K. S., Mørch, C. D. & Andersen, O. K., 22 sep. 2022.

**Modulation of Spinal Nociceptive Excitability by Nociceptive-Visual Interaction**  
Filbrich, L., Andersen, O. K. & Frahm, K. S., 21 sep. 2022.

**Spinal Nociceptive Processing Facilitated by Distraction in Healthy Humans**  
Andersen, O. K., Henrich, M. & Frahm, K. S., 21 sep. 2022.

**An Analytic Method to Separate Nociceptive and Non-Nociceptive Specific Components of Event-Related Potentials: Preliminary Results**  
Young, E., Mista, C., Jure, F. A. & Andersen, O. K., sep. 2022.

**Spinal nociception is facilitated during cognitive distraction**  
Henrich, M. C., Steffen Frahm, K., Coghill, R. C. & Kæseler Andersen, O., 21 maj 2022, I: Neuroscience. 491, s. 134-145 12 s.

**Priming of central- and peripheral mechanisms with heat and cutaneous capsaicin facilitates secondary hyperalgesia to high frequency electrical stimulation**  
Hugosdottir, R., Kasting, M., Mørch, C. D., Kæseler Andersen, O. & Arendt-Nielsen, L., 1 mar. 2022, I: Journal of Neurophysiology. 127, 3, s. 651-659 9 s.

**Novel surface electrode design for preferential activation of cutaneous nociceptors**  
Poulsen, A. H., van den Berg, B., Arguissain, F. G., Tigerholm, J., Buitenhof, J. R., Andersen, O. K. & Mørch, C. D., feb. 2022, I: Journal of Neural Engineering. 19, 1, 016010.

**Tænk, hvis pandemien havde ramt os i 1996**  
Grønbæk, K., Alstrup, S., Riis, S., Andersen, O. K., Toft Frederiksen, P. & Brinckmann, R., 24 nov. 2021, I: Politiken. 2 s.

**Tempo-spatial integration of nociceptive stimuli assessed via the nociceptive withdrawal reflex in healthy humans**  
Henrich, M. C., Frahm, K. S. & Andersen, O. K., 1 aug. 2021, I: Journal of Neurophysiology. 126, 2, s. 373-382 10 s.

**Variability and effect sizes of intracranial current source density estimations during pain: Systematic review, experimental findings, and future perspectives**  
Völker, J. M., Arguissain, F. G., Andersen, O. K. & Biurrun Manresa, J., 1 jun. 2021, I: Human Brain Mapping. 42, 8, s. 2461-2476 16 s.

**A Novel Nociceptive Fiber Excitability Protocol to Identify Abnormal Voltage-gated Ion Channels: A Computational Study**  
Tigerholm, J., Poulsen, A. H., Andersen, O. K. & Mørch, C. D., jun. 2021.

**Cognitive modulation of spinal nociception assessed via the nociceptive withdrawal reflex**  
Henrich, M., Frahm, K. S. & Andersen, O. K., jun. 2021.

**Electrophysiological Changes in Motor Preparation During Muscle Pain Induced by Short Wave Diathermy: Preliminary Results**

Mista, C., Laugero, S., Adur, J., Andersen, O. K. & Biurrun Manresa, J., jun. 2021.

**Optimization of Electrode Design Parameters for Improved Preferential Activation of Small Cutaneous Nerve Fibers**

Poulsen, A. H., Tigerholm, J., Andersen, O. K. & Mørch, C. D., jun. 2021.

**Tempo-Spatial Inhibitory Mechanisms in the Human Spinal Cord – Insights from the Nociceptive Withdrawal Reflex**

Henrich, M., Frahm, K. S. & Andersen, O. K., jun. 2021.

**Test-retest reliability of estimated cortical current density during experimental tonic muscle pain**

Völker, J. M., Arguissain, F., Biurrun Manresa, J. & Andersen, O. K., jun. 2021.

**Topical capsaicin modulates the 2-point discrimination threshold – modulation depends on stimulation modality and intensity**

Frahm, K. S., Gervasio, S., Arendt-Nielsen, L. & Andersen, O. K., jun. 2021.

**Does Threat Enlarge Nociceptive Reflex Receptive Fields?**

Lannon, E. W., Jure, F. A., Andersen, O. K. & Rhudy, J. L., maj 2021, I: The Journal of Pain. 22, 5, s. 487-497

**Characterization of Source-Localized EEG Activity During Sustained Deep-Tissue Pain**

Völker, J. M., Arguissain, F. G., Manresa, J. B. & Andersen, O. K., mar. 2021, I: Brain Topography. 34, 2, s. 192-206 15 s.

**Cold pain hypersensitivity predicts trajectories of pain and disability after low back surgery: a prospective cohort study**

Müller, M., Bütkofer, L., Andersen, O. K., Heini, P., Arendt-Nielsen, L., Jüni, P. & Curatolo, M., jan. 2021, I: Pain. 162, 1, s. 184-194 11 s.

**Evaluation of rest-activity cycles in patients with severe acquired brain injury: an observational study**

Kjeldsen, S., Nielsen, J. F., Andersen, O. K. & Brunner, I., 2021, I: Brain Injury. 35, 9, s. 1086-1094 9 s.

**Increased preferential activation of small cutaneous nerve fibers by optimization of electrode design parameters**

Poulsen, A. H., Tigerholm, J., Andersen, O. K. & Mørch, C. D., 2021, I: Journal of Neural Engineering. 18, 1, 016020.

**Development of an individualized asynchronous sensor-based telerehabilitation program for patients undergoing total knee replacement: Participatory design**

Naeemabadi, M., Søndergaard, J. H., Klastrup, A., Schlünsen, A. P., Lauritsen, R. E. K., Hansen, J., Madsen, N. K., Simonsen, O., Andersen, O. K., Kim, K. K. & Dinesen, B., dec. 2020, I: Health Informatics Journal. 26, 4, s. 2492-2511 20 s.

**Sæt Danmark i front med kunstig intelligens indenfor sundhedsområdet**

Andersen, O. K. & Arbejdsgruppe i Akademiet for de Tekniske Videnskaber, dec. 2020, 8 s..

**Spinal spatial integration of nociception and its functional role assessed via the nociceptive withdrawal reflex and psychophysical measures in healthy humans**

Henrich, M. C., Frahm, K. S. & Andersen, O. K., nov. 2020, I: Physiological Reports. 8, 22, 15 s., e14648.

**Comparison of existing electrode designs for preferential activation of cutaneous nociceptors**

Poulsen, A. H., Tigerholm, J., Meijis, S., Andersen, O. K. & Mørch, C. D., 12 jun. 2020, I: Journal of Neural Engineering. 17, 3, 17 s., 036026.

**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.

**Directional discrimination is better for noxious laser stimuli than for innocuous laser stimuli**

Frahm, K. S., Mørch, C. D. & Andersen, O. K., apr. 2020, I: European Journal of Pain. 24, 4, s. 742-751 10 s.

**Intense and sustained pain reduces cortical responses to auditory stimuli: implications for the interpretation of the effects of Heterotopic Noxious Conditioning Stimulation in humans**

Torta, D. M., Jure, F. A., Andersen, O. K. & Manresa, J. B., dec. 2019, I: European Journal of Neuroscience. 50, 12, s. 3934-3943 10 s.

**Psychophysical or spinal reflex measures when assessing conditioned pain modulation?**

Lie, M. U., Petriu, E., Matre, D., Hansson, P., Andersen, O. K., Zwart, J. & Nilsen, K. B., 1 nov. 2019, I: European Journal of Pain. 23, 10, s. 1879-1889 11 s.

**Investigating stimulation parameters for preferential small fiber activation using exponentially rising electrical currents**

Hugosdottir, R., Mørch, C. D., Andersen, O. K. & Arendt-Nielsen, L., 1 okt. 2019, I: Journal of Neurophysiology. 122, 4, s. 1745-1752 8 s.

**A new experimental model of muscle pain in humans based on short-wave diathermy**

Mista, C. A., Laugero, S., Adur, J., Andersen, O. K. & Biurrun Manresa, J. A., okt. 2019, I: European Journal of Pain. 23, 9, s. 1733-1742 10 s.

**Preferential activation of small cutaneous fibers through small pin electrode also depends on the shape of a long duration electrical current**

Hugosdottir, R., Mørch, C. D., Andersen, O. K., Helgason, T. & Arendt-Nielsen, L., 14 sep. 2019, I: BMC Neuroscience. 20, 1, 11 s., 48.

**Can quantitative sensory tests predict failed back surgery? A prospective cohort study**

Müller, M., Limacher, A., Agten, C. A., Treichel, F., Heini, P., Seidel, U., Andersen, O. K., Arendt-Nielsen, L., Jüni, P. & Curatolo, M., sep. 2019, I: European Journal of Anaesthesiology. 36, 9, s. 695-704 10 s.

**From Perception Threshold to Ion Channels-A Computational Study**

Tigerholm, J., Poulsen, A. H., Andersen, O. K. & Mørch, C. D., 23 jul. 2019, I: Biophysical Journal. 117, 2, s. 281-295 15 s.

**Cutaneous nociceptive sensitization affects the directional discrimination – but not the 2-point discrimination**

Frahm, K. S., Mørch, C. D. & Andersen, O. K., jul. 2019, I: Scandinavian Journal of Pain. 19, 3, s. 605-613 9 s.

**Conditioned Pain Modulation affects the withdrawal reflex pattern to nociceptive stimulation in humans**

Jure, F. A., Arguissain, F., Biurrun Manresa, J. & Andersen, O. K., jun. 2019, I: Neuroscience. 408, s. 259-271 13 s.

**Electrical stimulation of small cutaneous nerve fibers for investigating human pain mechanisms**

Hugosdottir, R., Mørch, C. D., Andersen, O. K. & Arendt-Nielsen, L., jun. 2019.

**Spatial integration of electrical stimulation on the sole of the foot**

Henrich, M., Frahm, K. S. & Andersen, O. K., apr. 2019, I: Scandinavian Journal of Pain. 19, Suppl. 1, s. S4

**Developing a telerehabilitation programme for postoperative recovery from knee surgery: specifications and requirements**

Naeemabadi, M., Dinesen, B., Andersen, O. K., Madsen, N. K., Simonsen, O. & Hansen, J., feb. 2019, I: BMJ Health & Care Informatics. 26, 1, 7 s., e000022.

**Influence of a marker-based motion capture system on the performance of Microsoft Kinect v2 skeleton algorithm**

Naeemabadi, M., Dinesen, B., Andersen, O. K. & Hansen, J., 1 jan. 2019, I: IEEE Sensors Journal. 19, 1, s. 171-179 9 s., 8494823.

**A combined volume conduction and nerve fiber model for assessment of electrode design in relation to preferential activation of small cutaneous nerve fibers**

Poulsen, A. H., Andersen, O. K., Mørch, C. D. & Tigerholm, K. J. V., 2019.

**Comparison of electrodes designed for preferential activation of cutaneous nociceptors via experimental assessments and computational modeling**

Poulsen, A. H., Tigerholm, K. J. V., Andersen, O. K. & Mørch, C. D., 2019.

**Excitability differences between small and large sensory nerve fibers may be explained by different ion channel distribution**

Tigerholm, K. J. V., Poulsen, A. H., Andersen, O. K. & Mørch, C. D., 2019, *CNS 2019 Program Book*. P222

**Experimental ongoing musculoskeletal pain after nerve growth factor injection increases low and high frequency EEG activity during rest**

Volker, J. M., Arguissain, F., Biurrun Manresa, J. & Andersen, O. K., 2019.

**Functional spatial integration of multiple concurrent electrical stimulation assessed by means of the Nociceptive Withdrawal Reflex in humans**

Henrich, M., Andersen, O. K. & Frahm, K. S., 2019, *Book of Abstracts from EFIC Congress 2019*. P031

**Investigating the effect of priming with heat and capsaicin on the development of hyperalgesia to high frequency electrical stimulation**

Hugosdottir, R., Kasting, M., Mørch, C. D., Andersen, O. K. & Arendt-Nielsen, L., 2019.

**Investigating the impact of a motion capture system on Microsoft Kinect v2 recordings: A caution for using the technologies together**

Naeemabadi, M. R., Dinesen, B., Andersen, O. K. & Hansen, J., sep. 2018, I: PLoS ONE. 13, 9, 17 s., e0204052.

**Electrophysiologic techniques: Assessment of spinal nociceptive processing using the withdrawal reflex**

Andersen, O. K. & Manresa, J. A. B., 9 aug. 2018, *Pain after surgery*. Carr, D. B., Arendt-Nielsen, L. & Vissers, K. C. P. (red.). Wolters Kluwer, s. 121-131

**Deep Multimodal Pain Recognition: A Database and Comparison of Spatio-Temporal Visual Modalities**

Haque, M. A., Bautista, R., Noroozi, F., Kulkarni, K., Laursen, C. B., Irani, R., Bellantonio, M., Escalera, S., Anbarjafari, G., Nasrollahi, K., Andersen, O. K., Spaich, E. G. & Moeslund, T. B., 5 jun. 2018, *Proceedings - 13th IEEE International Conference on Automatic Face and Gesture Recognition, FG 2018*. IEEE (Institute of Electrical and Electronics Engineers), s. 250-257 8 s.

**A novel stimulation paradigm to limit the habituation of the nociceptive withdrawal reflex**

Gervasio, S., Laursen, C. B., Andersen, O. K., Hennings, K. & Spaich, E. G., maj 2018, I: *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 26, 5, s. 1100-1107 8 s.

**Tempo-spatial discrimination is lower for noxious stimuli than for innocuous stimuli**

Frahm, K. S., Mørch, C. D. & Andersen, O. K., feb. 2018, I: *Pain*. 159, 2, s. 393-401 9 s.

**A computational comparison of electrodes for preferential activation of thin cutaneous nerve fibers**

Poulsen, A. H., Tigerholm, J., Andersen, O. K. & Mørch, C. D., 2018.

**A new experimental model of muscle pain in humans based on short-wave diathermy: preliminary results**

Mista, C., Laugero, S., Adur, J., Andersen, O. K. & Biurrun Manresa, J., 2018.

**Cognitive processing for step precision increases beta and gamma band modulation during overground walking**

Oliveira, A. S., Arguissain, F. G. & Andersen, O. K., 2018, I: *Brain Topography*. 31, 4, s. 661-671 11 s.

**Does anxiety enlarge reflex receptive fields?**

Lannon, E., Jure, F. A., Andersen, O. K. & Rhudy, J., 2018.

**Evaluating accuracy and usability of Microsoft Kinect sensors and wearable sensor for tele knee rehabilitation after knee operation**

Naeemabadi, M. R., Dinesen, B. I., Andersen, O. K., Najafi, S. & Hansen, J., 2018, *Proceedings of the 11th International Joint Conference on Biomedical Engineering Systems and Technologies, Biostec 2018; Biodevices 2018, 19-21 January 2018, Funchal, Madeira, Portugal*. Bermudez i Badia, S., Cliquet, A., Cliquet, A., Gamboa, H. & Fred, A. (red.). SciTePress , Bind 1. s. 128-135 8 s.

**FES system for hand opening and grasping with automatic control based on the Microsoft Kinect sensor**

Spaich, E. G., Simonsen, D., Hansen, J. & Andersen, O. K., 2018, *Program Book, 22nd Annual Conference of the International Functional Electrical Society, IFESS, 28-31 August 2018, Nottwil, Switzerland*. s. 121-122 A-0041

**From perception threshold to ion channels: a computational study**

Tigerholm, J., Poulsen, A. H., Mørch, C. D. & Andersen, O. K., 2018.

**Gait rehabilitation by nociceptive withdrawal reflex-based functional electrical therapy**

Andersen, O. K. & Spaich, E. G., 2018, *Advanced Technologies for the Rehabilitation of Gait and Balance Disorders*. Sandrini, G., Homberg, V., Saltuari, L., Smania, N. & Pedrocchi, A. (red.). Springer, s. 325-333 9 s. (Biosystems and Biorobotics; Nr. 19).

**High frequency electrical stimulation induces a long-lasting enhancement of event-related potentials but does not change the perception elicited by intra-epidermal electrical stimuli delivered to the area of increased mechanical pinprick sensitivity**  
Biurrun Manresa, J., Kæseler Andersen, O., Mouraux, A. & van den Broeke, E. N., 2018, I: PLoS ONE. 13, 9, 18 s., e0203365.

**Neural correlates of sustained deep-tissue pain: an EEG study**

Völker, J. M., Arguissain, F., Biurrun Manresa, J. & Andersen, O. K., 2018.

**Patient's Body Motion Study using Multimodal RGBDT Videos**

Haque, M. A., Kjeldsen, S. S., Arguissain, F. G., Brunner, I., Nasrollahi, K., Andersen, O. K., Nielsen, J. F., Moeslund, T. B. & Jørgensen, A., 2018, *Advances in Visual Computing: 13th International Symposium, ISVC 2018, Las Vegas, NV, USA, November 19 – 21, 2018, Proceedings*. Springer, s. 552-564 12 s. (Lecture Notes in Computer Science, Bind 11241).

**Psychophysical or neurophysiological measures when assessing conditioned pain modulation?**

Lie, M., Petriu, E., Matre, D., Hansson, P., Andersen, O. K., Zwart, J. & Nilsen, K., 2018.

**Quantification of the variability of detection thresholds to intra-epidermal electrical stimulation in humans**

Arguissain, F., Biurrun Manresa, J., Andersen, O. K. & Van Den Broeke, E., 2018.

**Strength-duration curve for slowly rising electrical pulse indicates accommodation of large but not small nerve fibers**

Hugosdottir, R., Mørch, C. D., Andersen, O. K. & Arendt-Nielsen, L., 2018.

**Tempo-spatial discrimination is higher for noxious than innocuous heat stimuli**

Frahm, K. S., Mørch, C. D. & Andersen, O. K., 2018.

**Measurement error of a simplified protocol for quantitative sensory tests in chronic pain patients**

Müller, M., Biurrun Manresa, J., Limacher, A., Streitberger, K., Jüni, P., Andersen, O. K. & Curatolo, M., 26 jul. 2017, I: *Regional Anesthesia and Pain Medicine*. 42, 5, s. 660-668

**Accommodation of non-nociceptive fibers during long duration electrical impulse of increasing exponential decay, indicates its ability to preferentially activate nociceptive fibers**

Hugosdottir, R., Mørch, C. D., Andersen, O. K., Helgason, T. & Arendt-Nielsen, L., 2017.

**Auditory evoked potentials (AEPs) are reduced during the cold pressor test**

Torta, D., Jure, F. A., Biurrun-Manresa, J. & Andersen, O. K., 2017.

**Cognitive processing for step precision increases beta and gamma modulation during overground walking**

Oliveira, A. S. C., Arguissain, F. & Andersen, O. K., 2017, *47th Annual Meeting of the Society for Neuroscience, Neuroscience*. Washington DC (USA), s. 153.05 1 s.

**Design and test of a closed-loop FES system for supporting function of the hemiparetic hand based on automatic detection using the Microsoft Kinect sensor**

Simonsen, D., Spaich, E. G., Hansen, J. & Andersen, O. K., 2017, I: *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 25, 8, s. 1249-1256

**Design and test of a Microsoft Kinect-based system for delivering adaptive visual feedback to stroke patients during training of upper limb movement**

Simonsen, D., Popovic, M. B., Spaich, E. G. & Andersen, O. K., 2017, I: *Medical & Biological Engineering & Computing*. 55, 11, s. 1927–1935

**Design and test of an automated version of the modified Jebsen test of hand function using Microsoft Kinect**

Simonsen, D., Nielsen, I. F., Spaich, E. G. & Andersen, O. K., 2017, I: *Journal of NeuroEngineering and Rehabilitation*. 14, 12 s., 38.

**Developing and testing an in-home tele-knee rehabilitation system for patient after knee surgery**

Naeemabadi, M. R., Dinesen, B. I., Andersen, O. K., Palsson, T. S., Simonsen, O. & Hansen, J., 2017.

**Effects of conditioned pain modulation on the withdrawal pattern to nociceptive stimulation in humans: Preliminary results**

Jure, F. A., Arguissain, F. G., Manresa, J. A. B. & Andersen, O. K., 2017, I: *Scandinavian Journal of Pain*. 16, s. 176-177

**Evaluating the ability of non-rectangular electrical pulse forms to preferentially activate nociceptive fibers by comparing perception thresholds**

Hugosdottir, R., Mørch, C. D., Andersen, O. K., Helgason, T. & Arendt-Nielsen, L., 2017, I: *Scandinavian Journal of Pain*. 16, s. 175

**Exploration of conditioned pain modulation effect on long-term potentiation-like pain amplification in humans**

Xia, W., Mørch, C. D., Matre, D. & Andersen, O. K., 2017, I: *European Journal of Pain*. 21, 4, s. 645-657

**Lateral inhibition during nociceptive processing**

Quevedo, A. S., Mørch, C. D., Andersen, O. K. & Coghill, R. C., 2017, I: *Pain*. 158, 6, s. 1046-1052

**Membrane properties in small cutaneous nerve fibers in humans**

Hennings, K., Frahm, K. S., Petrini, L., Andersen, O. K., Arendt-Nielsen, L. & Mørch, C. D., 2017, I: *Muscle & Nerve*. 55, 2, s. 195-201

**Microsoft Kinect-based system for automatic evaluation of the Modified Jebsen Test of Hand Function**

Simonsen, D., Spaich, E. G. & Andersen, O. K., 2017, *Converging Clinical and Engineering Research on Neurorehabilitation II: Proceedings of the 3rd International Conference on NeuroRehabilitation, ICNR2016, 18-21 October 2016, Segovia, Spain*. Springer, s. 1299-1303 (Biosystems and Biorobotics; Nr. 15).

**Neural correlates of visual feedback processing during motor learning: preliminary results**

Arguissain, F., Ranieri, A., Nielsen, J. F., Andersen, H. S. & Andersen, O. K., 2017.

**Nociceptive withdrawal reflex-based Functional Electrical Therapy: how much training is necessary?**

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## Priser

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Andersen, O. K. (Modtager), Spaich, E. G. (Modtager) & Emborg, J. (Modtager), dec. 2010

## **Presse/medie**

### **ATV's sundhedsgruppe har 5 anbefalinger om AI i sundhedssektoren**

Andersen, O. K.

15/12/2020

1 Mediebidrag

### **Baner vej til "mirakelbehandlinger"**

Andersen, O. K.

29/05/2017

2 elementer af Mediedækning

### **Dansk-israelsk samarbejde**

Arendt-Nielsen, L. & Andersen, O. K.

01/02/2008

1 element af Mediedækning

### **e-Health Tech : nyt center for individuel velfærdsteknologi**

Andersen, O. K.

01/01/2012

1 element af Mediedækning

### **Elektriske stød får lammede til at gå normalt**

Andersen, O. K., Spaich, E. G. & Emborg, J.

22/03/2010

1 element af Mediedækning

### **Elektriske stød får lamme til at gå**

Andersen, O. K.

22/03/2010

1 element af Mediedækning

### **Elektriske stød får lamme til at gå**

Andersen, O. K.

28/03/2010

1 element af Mediedækning

### **Elektriske stød hjælper blodpropspatienter**

Andersen, O. K.

24/03/2010

1 element af Mediedækning

### **EI-stimulation giver hurtigere genoptræning**

Andersen, O. K., Spaich, E. G. & Emborg, J.

15/05/2009

2 elementer af Mediedækning

### **Elsåler formes til nyt dansk eksporteventyr**

Hennings, K., Andersen, O. K. & Spaich, E. G.

24/07/2013

5 elementer af Mediedækning

### **Fire nye professorer styrker AAU's sundhedsområder**

Graven-Nielsen, T., Andersen, O. K., Farina, D. & Hejlesen, O.

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**Fondsmidler udhuler teknisk og administrativt personale på universiteterne**

Andersen, O. K.

23/01/2018

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**Forbedret gangtræning af apopleksipatienter**

Andersen, O. K. & Spaich, E. G.

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**Forskning for billigere sundhed**

Andersen, O. K.

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**Forskning på AAU danner grundlag for teknologi for ganggenoptræning**

Spaich, E. G. & Andersen, O. K.

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**Forskning: Små operationer giver flest kroniske smerter**

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**Fysisk interaktion med træningsteknologier**

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**Gigtforeningen støtter 24 nye forskningsprojekter**

Andersen, O. K.

26/06/2014

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**Guide til videnskaben på Folkemødet: Se fremtidens hjernehospital, fermentering og forskerspirer**

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**Her er Årets Danske Forskningsresultat**

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**Hjælp på vej til hjerneskadede**

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**Internationale eksperter i skadede nerver indtager Aalborg**

Andersen, O. K.

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**Jeg er forsker - ikke forretningsmand**

Andersen, O. K.

01/02/2014

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**Kommunerne vigtige medspillere**

Sinkjær, T., Andersen, O. K., Popovic, D. B., Spaich, E. G. &amp; Mazzaro, N.

02/03/2006

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**Kronisk smerte ved små indgreb**

Andersen, O. K.

10/05/2017

7 elementer af Mediedækning

**Kæmpagave: Danmark får nyt akademi for hjernehorskning**

Andersen, O. K.

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4 elementer af Mediedækning

**Livet efter en blodprop i hjernen**

Andersen, O. K.

29/03/2022 → 06/04/2022

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**Løsninger til pleje- og sundhedssektoren**

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14/11/2011

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**Målet er hele mennesker**

Sinkjær, T., Andersen, O. K., Popovic, D. B., Spaich, E. G. &amp; Mazzaro, N.

02/03/2006

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**Navne i noter**

Andersen, O. K., Farina, D. &amp; Hejlesen, O.

07/04/2008

1 element af Mediedækning

**Navneneyt**

Graven-Nielsen, T., Arendt-Nielsen, L., Andersen, O. K. &amp; Jensen, W.

21/10/2014

1 element af Mediedækning

**Nervestimulerende selskab kigger syd for grænsen**

Andersen, O. K.

17/02/2016

1 element af Mediedækning

**Nye ansættelser på AAU**

Graven-Nielsen, T., Andersen, O. K., Farina, D. &amp; Hejlesen, O.

02/05/2008

1 element af Mediedækning

**Ny forskning: Sætter strøm til robotbenene**

Andersen, O. K., Spaich, E. G. &amp; Laursen, C. B.

26/09/2016

1 element af Mediedækning

**Ny teknik kan hjælpe folk på benene igen efter et slagtilfælde**

Andersen, O. K.

24/03/2010

1 element af Mediedækning

**Nyt forskningscenter i Aalborg**

Andersen, O. K.

09/07/2014

1 element af Mediedækning

**Ole K. Andersen forsvarer doktorafhandling**

Andersen, O. K.

01/06/2007

3 elementer af Mediedækning

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Andersen, O. K., Christensen, M. G., Kolmos, A., Kørnøv, L., Mathiesen, B. V., Nielsen, I. E., Popovski, P., Rees, S. E. &amp; Johansen, P. M.

27/04/2017

2 elementer af Mediedækning

**Patienter i stødet**

Andersen, O. K., Spaich, E. G., Sinkjær, T., Popovic, D. B. &amp; Emborg, J.

29/02/2008

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**Penge fra Gigtforeningen til forskning**

Andersen, O. K.

14/07/2014

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**Pris for at lære lammede at gå**

Andersen, O. K.

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2 elementer af Mediedækning

**Professorer i fint selskab**

Andersen, O. K., Christensen, M. G., Kolmos, A., Kørnøv, L., Mathiesen, B. V., Nielsen, I. E., Popovski, P., Rees, S. E. &amp; Johansen, P. M.

05/05/2017

1 element af Mediedækning

**Små stød kan få liv i lammede ben**

Sinkjær, T., Andersen, O. K., Popovic, D. B., Spaich, E. G. & Mazzaro, N.

02/03/2006

1 element af Mediedækning

**Stor bevilling skal mindske antallet af invalide efter slagtilfælde**

Andersen, O. K. & Jensen, W.

24/06/2014

10 elementer af Mediedækning

**Storming the gates of knowledge**

Andersen, O. K.

01/08/2011

1 element af Mediedækning

**Stød lærer lammede at gå igen**

Emborg, J. & Andersen, O. K.

01/12/2010

1 element af Mediedækning

**Teknologi til de nye sygehuse**

Andersen, O. K.

16/11/2011

4 elementer af Mediedækning

**To nye chefer på plads på AAU**

Andersen, O. K. & Graven-Nielsen, T.

20/02/2016

4 elementer af Mediedækning

**Utrølig forskning: Stød får lammede til at gå**

Andersen, O. K., Spaich, E. G. & Emborg, J.

03/12/2010

2 elementer af Mediedækning

**Aalborg danmarksmester i forskning**

Andersen, O. K.

02/12/2010

1 element af Mediedækning

**AAU har udnævnt en ny prodekan**

Andersen, O. K.

10/01/2017

1 element af Mediedækning

**AAU-professorer i forskningsråd**

Larsen, C. A., Andersen, O. K., Skouby, K. E., Rasmussen, P., Dahl, M. S., Giese, H. & Jensen, S. H.

02/12/2014

4 elementer af Mediedækning

**AAU styrker det sundhedsvidenskabelige område**

Graven-Nielsen, T., Farina, D., Hejlesen, O. & Andersen, O. K.

05/04/2008

1 element af Mediedækning

## **Projekter**

### **Assesment of central sensitisation**

Andersen, O. K. (PI (principal investigator))

### **Bevica Center for NeuroEngineering Solutions in Stroke Rehabilitation**

Andersen, O. K. (PI (principal investigator)), Jensen, W. (PI (principal investigator)), Jørgensen, H. R. M. (Projektdeltager), Moeslund, T. B. (Projektdeltager), Mrachacz-Kersting, N. (Projektdeltager), Nielsen, J. F. (Projektdeltager), Petrini, L. (Projektdeltager), Spaich, E. G. (Projektdeltager), Modrau, B. (Projektdeltager), Svaneborg, N. (Projektdeltager), Larsen, B. (Projektdeltager) & Knudsen, G. H. (Projektdeltager)

01/09/2014 → 31/08/2019

### **Effortless Listening using Brain Feedback**

Østergaard, J. (PI (principal investigator)), Andersen, O. K. (PI (principal investigator)), Arquissain, F. (PI (principal investigator)), Baboukani, P. S. (PI (principal investigator)) & Mohammadi, Y. (PI (principal investigator))

01/09/2019 → ...