

The Research Unit
of
The Department of Physical and Occupational Therapy
Bispebjerg-Frederiksberg Hospital

2016 Annual Research Report

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2016 Staff

Professor Peter Magnusson, PT, DMSc

Professor Marius Henriksen, PT, PhD

Senior Researcher Susan Warming PT, PhD

Senior Researcher & associate professor Nina Beyer PT, PhD

Post-doctoral research fellow Christian Couppé PT, PhD

PhD student Emma Ghaziani, OT, MSc

PhD student Birgitte Hougs Kjær, PT, MSc

PhD student Cecilie Rødgaard Bartholdy, PT, MSc

PhD student Rikke Beyer, PT, MSc

Research assistant Martin Stausholm, PT, MSc

Research therapist Christian Have Dall, PT, PhD

Research therapist Helle Andersen, PT, MSc

Research therapist Mette Leth, OT, MSc

Research therapist Lise Walther Jørgensen, PT, MSc

Research therapist Theresa Bieler, PT, PhD

Highlights from 2016

The Research Unit of The Department of Physical and Occupational Therapy had an excellent year with regard to research in 2016. The department continued to grow with new staff and research facilities. Researchers were very productive publishing their work and submitting new grants applications to expand our current activities in upcoming years.

Highlights from the 2016 calendar year include

- Change of name of the unit
- 30 peer reviewed journal publications in journals with an average journal impact factor of 3.28 and a cumulated journal impact factor of 98.29
- 3 international and 1 national text book chapters
- Winner of EULAR Abstract Awards 2016 for Health Professionals
- 12 peer reviewed conference abstract presentations
- Over 1000 citations of works by senior staff members (post doc, senior researchers, and professors)
- 3 new members of the research staff
- Retirement of Senior Researcher and associate professor Nina Beyer, PT, PhD
- Commencement of 2 new RCTs and new observational clinical studies
- Successful symposium on muscle/tendon overuse injuries arranged in collaboration with the IOC and Danish Sports Physiotherapists

New name – broader horizons

We have decided to change the name of the unit from *Musculoskeletal Rehabilitation Research Unit* to *The Research Unit*. This decision was made to signal that our unit's focus includes other research areas than the musculoskeletal rehabilitation research. Our vision is to be a central part of the department of physical and occupational therapy that contributes with scientific advances in all areas of physical and occupational therapy.

New studies started

In 2016 we have started 2 new RCTs; one on early rehabilitation following rotator cuff rupture surgery (also the focus of a new PhD-study), and one focusing on physical activity and healthy lifestyle in individuals with liver cirrhosis. We are looking forward to the results, which can be expected within the next 2-3 years.

We have also started a longitudinal observational cohort study in which we evaluate physiotherapists' ability to predict the outcome of total knee replacement rehabilitation. This study is in collaboration with the physiotherapy department at Gentofte-Herlev Hospital, and a total of 1000 participants are planned. The data collection is expected to be ready by the end of 2018.

Furthermore, we have started sub-study protocols in a large investigator initiated trial on pharmacological weight loss, executed at The Parker Institute. Our sub-studies focus on assessments of physical activity associated with weight loss (a PhD-study) and with assessment of accumulation of advanced glycation end-products in the connective tissue following weight loss and weight loss treatments. The results are expected to be ready within the next 2 years.

Growth with new research staff

The research unit expanded with the appointment of new members of our team; Dr Ann Cools, and 2 new PhD students; Mrs Birgitte Hougs Kjær and Ms Cecilie Bartholdy.

Ann Cools, PT, M.Sc., PhD

Dr. Cools is affiliated with the research unit with a 10% position as Senior Researcher. Dr Cools will be responsible for facilitation of research within shoulder rehabilitation. When Dr. Cools is not here, she is affiliated with the University of Ghent in Belgium as an associate professor.

Birgitte Hougs Kjær, PT, M.Sc.

Birgitte Hougs Kjær has changed position from a research physiotherapist to a full-time PhD-student in our unit. Birgitte is enrolled at University of Southern Denmark. Mrs Kjær's studies focus on early physical rehabilitation of surgically repaired rotator cuff ruptures.

Cecilie Bartholdy, PT, MSc.

Cecilie Bartholdy is enrolled as a full-time PhD-student in our unit in collaboration with The Parker Institute. Cecilie is enrolled at Copenhagen University under supervision of Professor Marius Henriksen. Ms Bartholdy's studies focus on physical activity in people with knee osteoarthritis.

Retirement of a loyal colleague

Unfortunately the research unit had to say Goodbye to a loyal researcher, Dr Nina Beyer, at the end of 2016 owing to retirement. Dr Nina Beyer was among the first physiotherapists in Denmark who obtained a PhD degree (2003). Dr Nina Beyer has been a great source of inspiration to many physiotherapists, and the Research Unit will miss Nina's contributions in the future. We wish Nina all the best in retirement and her planned (and unplanned) journeys around the World.

Scientific Output

2016 was a successful year in terms of scientific production. A total of 30 articles published in international journals with peer review, of which the majority is with either first or last authorship indicating a high proportion of own research. In 2016 the average journal impact factor was 3.29.

Our staff also contributed with 3 international and 1 national text book chapters. Such contributions indicate the high international level of our researchers.

We were present at various international conferences in 2016 covering both general physical therapy and specialty conferences within rheumatology, neurology, and geriatrics. We participated with a total of 12 presentations, of which 4 were podium presentations. The proportion of podium presentations is an indication of high quality and relevance of our abstracts.

A list of published articles, book chapters, and conference presentations is appended this report.

EULAR Abstract Award

Of particular notice we wish to highlight that Mrs Theresa Bieler, PT, PhD won one of three abstract awards for health professionals at the 2016 EULAR congress held in London in June. Many congratulations to Theresa Bieler and her co-workers!

Other disseminations

In November we held our own symposium; this year with focus on muscle and tendon injuries in the athlete. The symposium was dedicated for sports physiotherapists in clinical practice. A

strong faculty including international experts gave excellent lectures on the subject, and we have received nothing but positive feedback from the attendees.

Our staff participated in local and national meetings for clinicians and dissemination in the monthly journal of the Association of Danish Physiotherapists, ensuring that our research and expertise is disseminated to clinicians within physical and occupational therapy and in relevant medical professions.

Finally, we have been active in pre- and postgraduate teaching at the University of Copenhagen and Aarhus University. We have taught courses at the school of medicine, health science, and under the auspices of various PhD programmes.

Plans and Goals for 2017

We are happy to announce that our loyal post doc Christian Couppé, PT, PhD, continues his work within the Research Unit. From January 1st 2017 he will fill the vacant position as a senior researcher, thereby succeeding Dr Nina Beyer. Dr. Couppé will focus on translational studies in musculoskeletal injuries with a special focus on tendon injuries, moving the research forward by integrating basic science and clinical epidemiology. We look forward to see Dr Couppé pursue his research plans in the coming years.

Also, we are happy to announce the affiliation of associate professor Tine Alkjær, PhD to the Research Unit. Dr Alkjær will continue her tenure track associate professorship at the Copenhagen University, but will have her office in our facilities and her research at the Research Unit. Dr Alkjær will be responsible for enhancing the neuro-bio-mechanical and motor control research with a clinical perspective. At first Dr Alkjær will engage in a tight collaboration with Dr Ann Cools in developing a upper limb biomechanics and rehabilitation research program. We welcome Dr Alkjær from January 1st 2017 and look forward to her contributions.

We also anticipate further expansion by 2-3 PhD-students, of which at least 1 will be fully affiliated with the Unit, and 2 will be more loosely affiliated and doing the main part of their theses at other departments and hospitals in Denmark.

We plan to repeat the successful scientific symposium. The topic of the symposium has not been decided, but will be announced in due time.

We are planning to start a large RCT study on comparative effectiveness of focused hip vs. knee exercise programs in the management of patellofemoral pain. The study is approved by the health Research Ethics Committee and is scheduled to start during February 2017 and run until 2020, including 200 patients.

We also seek to engage in several fruitful collaborations in the coming years, of which 2017 will be used to consolidate the current and engage in new partnerships. Our closest current partners include The Parker Institute and the Institute of Sports Medicine, and we look forward to more joint projects in the future. We thank these two important partnerships for the past year and look forward to continue the close collaborations in 2017.

We hope to engage in more partnerships in 2017, local specialty research units at Bispebjerg-Frederiksberg Hospital, and various Departments and Research Groups at the University of Copenhagen and hospitals in Denmark and abroad.

We aim at 25 peer reviewed publications in 2017, in journals with an average impact factor of at least 3.00.

Further, we are aiming at a greater success rate in terms of attracting external funding to our activities. We will work hard on this, and we hope to get enough funding to consolidate our activities and perhaps expand with new studies and staff.

Concluding remarks

2016 was a successful year for the Research Unit. We have expanded our staff and increased our scientific output compared to previous years. We are in the process of internal consolidation, while at the same time increasing and strengthening our partnerships with local, national, and international research groups.

The staff of the Research Unit has worked hard and with a positive attitude, and we hope to see even more enthusiasm and happy spirits in 2017.

We are thankful to the department head, Morten Østergaard, and the hospital administration for providing us with necessary support to do our research. A special thank go to our clinical colleagues in the department for their support and contributions to the research.

Also, we wish to thank our partners for fruitful and inspiring collaborations in the past year. We look forward to continue our joint efforts in the years to come.

We wish our partners and friends a happy 2017!



Marius Henriksen
Professor



Peter Magnusson
Professor

Appendix: List of articles, book chapters and conference abstracts

Peer Reviewed Journal articles (alphabetical order)

1. **Bartholdy C**, Zangger G, Hansen L, Ginnerup-Nielsen E, Bliddal H, **Henriksen M**. *Local and systemic changes in pain sensitivity after 4 weeks of calf muscle-tendon stretching: A randomised trial*. Pain Pract. 2016 Jul;16(6):696-703
2. **Bartholdy C**, Klokke L, Bandak E, Bliddal H, **Henriksen M**. *A standardized "rescue" exercise program for symptomatic flare-up of knee osteoarthritis: Description and safety considerations*. J Orthop Sports Phys Ther 2016 Nov;46(11):942-946
3. Bechshøft RL, Reitelseder S, Højfeldt G, Castro-Mejía JL, Khakimov B, Ahmad HF, Kjær M, Engelsen SB, Johansen SM, Rasmussen MA, Lassen AJ, Jensen T, **Beyer N**, Serena A, Perez-Cueto FJ, Nielsen DS, Jespersen AP, Holm L. *Counteracting Age-related Loss of Skeletal Muscle Mass: a clinical and ethnological trial on the role of protein supplementation and training load (CALM Intervention Study): study protocol for a randomized controlled trial*. Trials. 2016 Aug 9;17(1):397.
4. Bodilsen AC, Klausen HH, Petersen J, **Beyer N**, Andersen O, Jørgensen LM, Juul-Larsen HG, Bandholm T. *Prediction of Mobility Limitations after Hospitalization in Older Medical Patients by Simple Measures of Physical Performance Obtained at Admission to the Emergency Department*. PLoS One. 2016 May 19;11(5):e0154350
5. **Couppé C**, Svensson RB, Kongsgaard M, Kovanen V, Grosset JF, Snorgaard O, Bencke J, Larsen JO, Bandholm T, Christensen TM, Boesen A, Helmark IC, Aagaard P, Kjær M, **Magnusson SP**. *Human Achilles tendon glycation and function in diabetes*. Journal of Applied Physiology, 15;120(2):130-7, 2016.
6. Dideriksen K, Boesen AP, Kristiansen JF, **Magnusson SP**, Schjerling P, Holm L, Kjaer M. *Non-steroidal anti-inflammatory medication influences skeletal muscle adaptation to immobilization and subsequent retraining in elderly men*. Experimental Gerontology 25;82:8-18, 2016.
7. Eliasson P, **Coupe C**, Lonsdale M, Svensson RB, Neergaard C, Kjaer M, Friberg L, **Magnusson SP**. *Ruptured human Achilles tendon has elevated metabolic activity up to 1 year after repair*. European Journal of Nuclear Medicine and Molecular Imaging 2016 Sep;43(10):1868-77.
8. Ellegaard K, Christensen R, Rosager S, **Bartholdy C**, Torp-Pedersen S, Bandholm T, Danneskiold-Samsøe, B, Bliddal H, **Henriksen M**. *Exercise therapy after ultrasound guided corticosteroid injection in patients with subacromial pain syndrome: A randomized sham-controlled trial*. Arthritis Res Ther. 2016 Jun 4;18(1):129
9. Eriksen CS, Garde E, Reisleve NL, Wimmelmann CL, **Bieler T**, Ziegler AK, Gylling AT, Dideriksen KJ, Siebner HR, Mortensen EL, Kjaer M. *Physical activity as intervention for age-related loss of muscle mass and function: protocol for a randomised controlled trial (the LISA study)*. BMJ Open. 2016 Dec 2;6(12)
10. Ginnerup-Nielsen E, Christensen R, Thorborg K, Tarp S, **Henriksen M**. *Physiotherapy for pain: A meta-epidemiological study of randomised trials*. Br J Sports Med. 2016;50:965–971.

11. Hammer NM, **Bieler T**, **Beyer N**, Midtgaard J. *The impact of self-efficacy on physical activity maintenance in patients with hip osteoarthritis - a mixed methods study*. Disabil Rehabil. 2016 Aug;38(17):1691-704
12. Henricsdotter C, Ellegaard K, Klokke K, **Bartholdy C**, Bandak E, Bartels EM, Bliddal H, **Henriksen M**. *Changes in ultrasound assessed markers of inflammation following intra-articular steroid injection combined with exercise in knee osteoarthritis: exploratory outcome from a randomised trial*. Osteoarthritis Cartilage 2016 May;24(5):814-21.
13. **Henriksen M**, Hansen JB, Klokke L, Bliddal H, Christensen R. *Comparable effects of exercise and analgesics for pain secondary to knee osteoarthritis: a meta-analysis of trials included in Cochrane systematic reviews*. J Comparative Effectiveness 2016 Jul;5(4):417-31.
14. Hoffmann K, **Sobol NA**, Frederiksen KS, **Beyer N**, Vogel A, Vestergaard K, Brændgaard H, Gottrup H, Lolk A, Wermuth L, Jacobsen S, Laugesen LP, Gergelyffy RG, Høgh P, Bjerregaard E, Andersen BB, Siersma V, Johannsen P, Cotman CW, Waldemar G, Hasselbalch SG. *Moderate-to-High Intensity Physical Exercise in Patients with Alzheimer's Disease: A Randomized Controlled Trial*. J Alzheimers Dis. 2016;50(2):443-53.
15. Jacobsen JS, Knudsen P, Fynbo C, Rovling N, **Warming S**. *Reproducibility and responsiveness of a Danish Pedi-IKDC subjective knee form for children with knee disorders*. Scand J Med Sci Sports. 2016 Dec;26(12):1408-1414
16. Johannsen F, Jensen S, Stallknecht S, Olsen LO, **Magnusson SP**. *Sonographic measurements of the Achilles tendon, plantar fascia and heel fat pad are reliable. A test-retest intra- and intertester study*. Journal of Clinical Ultrasound. 44(8):480-6, 2016.
17. Jørgensen TS, Hangaard S, Bliddal H, **Henriksen M**. *Test-retest reliability of cuff pressure pain algometry in patients with knee osteoarthritis*. Clin Exp Rheumatol. 2016 Jan-Feb;34(1):158
18. Klokke L, Christensen R, Wæhrens EE, Bandak E, Bartholdy C, Bliddal H, **Henriksen M**. *Dynamic Weight-Bearing Assessment of Pain in Knee Osteoarthritis: Construct Validity, Responsiveness, and Interpretability in a Research Setting*. Health Qual Life Outcomes 2016 Jun 16;14(1):91
19. Klokke L, Terwee CB, Wæhrens EE, **Henriksen M**, Nolte S, Liegl G, Kloppenburg M, Westhoven R, Wittoek R, Kjekken I, Haugen IK, Schalet B, Gershon R, Bliddal H, Christensen R. *Hand-related physical function in rheumatic hand conditions: Protocol for developing a patient-reported outcome measurement instrument*. BMJ Open 2016;6 (12):e011174.
20. Nytrøen K, Yardley M, Rolid K, Bjørkelund E, Karason K, Wigh JP, **Dall CH**, Arora S, Aakhus S, Lunde K, Solberg OG, Gustafsson F, Prescott EI, Gullestad L. *Design and rationale of the HITTS randomized controlled trial: Effect of High-intensity Interval Training in de novo Heart Transplant Recipients in Scandinavia*. Am Heart J. 2016 Feb;172:96-105
21. Pedersen MM, Petersen J, **Beyer N**, Damkjær L, Bandholm T. *Supervised progressive cross-continuum strength training compared with usual care in older medical patients: study protocol for a randomized controlled trial (the STAND-Cph trial)*. Trials. 2016 Apr 1;17:176.
22. Riis RG, Gudbergesen H, **Henriksen M**, Ballegaard C, Bandak E, Röttger D, Bliddal H, Hansen BB, Hangaard S, Boesen M. *Synovitis assessed on static and dynamic contrast-enhanced*

- magnetic resonance imaging and its association with pain in knee osteoarthritis: A cross-sectional study.* Eur J Radiol. 2016 Jun;85(6):1099-108.
23. Anderson L, **Dall CH**, Nguyen TT, Burgess L, Taylor RS. Exercise-based cardiac rehabilitation in heart transplant recipients. Cochrane Database of Systematic Reviews. 2016(6)
 24. **Schaadt L**, Christensen R, Kristensen L, **Henriksen M**. *Increased mortality in patients with severe COPD associated with high-intensity exercise: A preliminary cohort study.* International Journal of COPD 2016;11 2329–2334
 25. **Sobol NA**, Hoffmann K, Vogel A, Lolk A, Gottrup H, Høgh P, Hasselbalch SG, **Beyer N**. *Associations between physical function, dual-task performance and cognition in patients with mild Alzheimer's disease.* Aging Ment Health. 2016 Nov;20(11):1139-1146.
 26. **Sobol NA**, Hoffmann K, Frederiksen KS, Vogel A, Vestergaard K, Brændgaard H, Gottrup H, Lolk A, Wermuth L, Jakobsen S, Laugesen L, Gergelyffy R, Høgh P, Bjerregaard E, Siersma V, Andersen BB, Johannsen P, Waldemar G, Hasselbalch SG, **Beyer N**. *Effect of aerobic exercise on physical performance in patients with Alzheimer's disease.* Alzheimers Dement. 2016 Dec;12(12):1207-1215
 27. Soriano-Maldonado A, Klokke L, **Bartholdy C**, Bandak E, Ellegaard K, Bliddal H, **Henriksen M**. *Intra-articular corticosteroids in addition to exercise for reducing pain sensitivity in knee osteoarthritis: Exploratory outcome from a randomized controlled trial.* PLoSOne 2016 Feb 12;11(2):e0149168
 28. Soriano-Maldonado A, Estévez-López F, Segura-Jiménez V, Aparicio VA, Álvarez-Gallardo IG, Herrador-Colmenero M, Ruiz JR, **Henriksen M**, Amris K, Delgado-Fernández M. *Association of physical fitness with depression in women with fibromyalgia.* Pain Med. 2016 Aug;17(8):1542-52
 29. Svensson RB, Heinemeier K, **Coupe C**, Kjaer M, **Magnusson SP**. *The effect of aging and exercise on the tendon.* Journal of Applied Physiology. 1;121(6):1353-1362, 2016.
 30. Thomsen T, Aadahl M, **Beyer N**, Hetland ML, Løppenthin K, Midtgaard J, Christensen R, Esbensen BA. *Motivational counselling and SMS-reminders for reduction of daily sitting time in patients with rheumatoid arthritis: a descriptive randomised controlled feasibility study.* BMC Musculoskelet Disord 2016;17:434.

Book Chapters

1. **Magnusson SP**, Heinemeier K, Kjaer M. *Collagen homeostasis and metabolism.* In: Advances in Experimental Medicine and Biology. Springer, 920: 11-25, 2016.
2. Heinemeier K, Kjaer M, **Magnusson SP**. *Methods of Assessing Human Tendon Metabolism and Tissue Properties in Response to Changes in Mechanical Loading.* In: Advances in Experimental Medicine and Biology. Springer, 920: 97-106, 2016.
3. **Henriksen M**, Christensen R, Heitmann BL, Bliddal H. *Chapter 24: Weight loss.* In: Oxford text Book on Osteoarthritis and Crystal Arthropathy Edited by Michael Doherty, Hans Bijlsma, Nigel Arden, David Hunter, and Nicola Dalbeth. Oxford University press 2016.
4. **Beyer N**. *Fysisk træning.* In: Geriatri, Edited by Holm EA, Rønholt, F. Munksgaard 2016.

Invited lectures

1. **Magnusson SP.** *Tendon adaptation to loading in healthy and injured tendons.* 4th International Scientific Symposium. Cape Town, South Africa, October, 2016.
2. **Magnusson SP.** *Tendon Response to loading.* Universite de Technologie de Compiegne, France September, 2016.
3. **Magnusson SP.** *Eccentric exercise for tendon rehabilitation.* 17th International symposium, Biomechanics of human movement. Jyväskylä, Finland. September, 2016.
4. **Magnusson SP.** *Overbelastning af muskel – sene profylakse og rehabilitering for alle alder. Muskel - sene struktur og funktion i et overbelastnings perspektiv.* Forskningsenhedens Symposium for Fysioterapeuter i samarbejde med IOC, Frederiksberg, Copenhagen, November 2016.
5. **Couppe C.** *Hvad siger forskningen ved tendinopati?* Forskningsenhedens Symposium for Fysioterapeuter i samarbejde med IOC, Frederiksberg, Copenhagen, November 2016.
6. **Couppe C.** *Young Athlete – Tolerating the Tendon Challenge? Evaluation of screening methods in tendon injury. Are there any?* Finnish Prevention Sports congress, Helsinki Finland. March 2016.
7. **Couppe C.** *Forebyggelse og behandling af seneskade,* Musik konservatoriet, København. Juni 2016 (CC).
8. **Couppe C.** *The aging tendon.* German Sports Congress. Cologne, September 2016.
9. **Couppe C.** *Return to Sports: PFPS & Patellar Instability,* IOC Symposium on Patellofemoral Pain Problems in the Athlete. Copenhagen, Denmark, October 2016
10. **Henriksen M.** *Patellofemoral Pain - Non-surgical treatment possibilities.* IOC Symposium on Patellofemoral Pain Problems in the Athlete. Copenhagen, Denmark, October 2016
11. **Henriksen M.** *Smerter – hvordan håndteres de ved muskel - sene overbelastning?* Forskningsenhedens Symposium for Fysioterapeuter i samarbejde med IOC, Frederiksberg, Copenhagen, November 2016
12. **Henriksen M.** *Exercise and Osteoarthritis.* Translational Neurobiology of the Pain System XXI: Joint and Bone Pain. Aalborg, Denmark, November 2016

Conference abstracts and presentations

Podium presentations

1. Riis R, Gudbergson H, Simonsen O, **Henriksen M**, Al-Mashkur N, Eld M, Petersen K, Kubassova O, Arendt-Nielsen L, Boesen M. Predicting histological synovial inflammation using magnetic resonance imaging in end-stage knee osteoarthritis: A cross sectional study. OARSI Amsterdam, Holland
2. Svensson RB, Moyer PJ, Smith ST, **Magnusson SP.** Tensile response of tendon collagen fibrils in relation to cross-links. Matrix Biology Europe, Athens, Greece.
3. **Bieler T**, Siersma V, **Magnusson P**, Kjær M, **Beyer N.** *Even in the long run Nordic Walking is superior to strength training and home based exercise for improving physical function in older people with hip osteoarthritis - an RCT.* The Annual European Congress of Rheumatology, June 2016, London, UK

4. Eliasson P, **Couppé C**, Lonsdale M, Svensson RB, Neergaard C, Kjær M, Friberg L, **Magnusson SP**. *Ruptured human Achilles tendon has elevated metabolic activity up to 1 year after repair*. Danish Annual Sports Congress, Kolding, Denmark

Poster presentations

1. **Henriksen M**, Soriano-Maldonado A, Klokke L, **Bartholdy C**, Bandak E, Bliddal H. Intra-articular corticosteroids in addition to exercise for reducing pain sensitivity in knee osteoarthritis: Exploratory outcome from a randomised trial. OARSI Amsterdam, Holland
2. **Bartholdy CB**, Juhl C, Christensen R, Lund H, Zhang W, **Henriksen M**. Comparing clinical outcomes of exercise interventions according to the american college of sports medicine guidelines for strength training to other types of exercise in knee osteoarthritis: a systematic review and meta-analyses. OARSI Amsterdam, Holland
3. **Bartholdy C**, Gudbergesen H, Bliddal H, Kjærgaard M, Lykkegaard KL, **Henriksen M**. *Reliability and construct validity of the sens motion® activity measurement system*. Lassendag, 2016. København, Denmark
4. **Sobol NA**, Dall CH, Høgh P, Hoffmann K, Frederiksen KS, Vogel A, Siersma V, Waldemar G, Hasselbalch SG, **Beyer N**. *Improved fitness after aerobic exercise in patients with mild Alzheimer's disease*. 2nd Congress of the European Academy of Neurology, maj 2016, København, Denmark.
5. Frederiksen KS, Madsen K, Andersen BB, **Beyer N**, Garde E, Høgh P, Waldemar G, Hasselbalch SG, Law I. *Effect of moderate-high intensity aerobic exercise on beta-amyloid accumulation measured with 11C-PIB-PET in patients with mild to moderate Alzheimer's disease*. 2nd Congress of the European Academy of Neurology, May 2016, København, Danmark.
6. Thomsen T, Aadahl M, **Beyer N**, Hetland ML, Løppenthin K, Midtgaard J, Christensen R, Østergaard M, Jennum P, Esbensen BA. *The Efficacy of Motivational Counselling and SMS-reminders on Daily Sitting Time in Patients with Rheumatoid Arthritis: A Randomized Controlled Trial*. Annual meeting in The American College of Rheumatology, November 2016, Washington, USA.
7. Karlsen A, Loeb MR, Andersen KB, Jørgensen KJ, Scheel FU, Turtumoeygard IF, Perez A, Kjaer M, **Beyer N**. *Improved functional performance in geriatric patients during hospital stay*. The 12th Congress of the European Union Geriatric Medicine Society, October 2016, Lissabon, Portugal.
8. Melgaard D, Søndergaard K, **Jørgensen LW**, **Warming S**, *Inter-rater reliability of the Volume Viscosity Swallowing Test in acutely admitted older medical patients* The 6th ESSD Congress, October 2016 Milan, Italy