

Curriculum Vitae

Personal data:

Name: Nina Skjæret Maroni
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Date of birth: 03.10.1986
Civil status: Married, 1 child
Academic degree: PhD
Current position: Postdoctoral Fellow, NTNU.



Academic degrees:

PhD in Health Science 2013 - 2016	Department of Neuroscience Faculty of Medicine Norwegian University of Science and Technology <i>Exergaming in older adults: Use, user experiences, and the relationship between game elements and movement characteristics.</i>
Doctoral thesis	
Master in Human Movement Science 2009 – 2011	Dept. of Human Movement Science, Faculty of Social Sciences and Technology Management Norwegian University of Science and Technology <i>Weight-bearing characteristics during standing in adults with Cerebral Palsy</i>
Master thesis	
Internship in physiotherapy 2008 – 2009	Tromsø Kommune Universitetssykehuset Nord-Norge (UNN)
Bachelor in physiotherapy 2005 – 2008	Department of Physiotherapy Faculty of Health and Social Science Høgskolen i Sør-Trøndelag <i>Motorisk utvikling i Norge og Uganda: Foresattes forventninger i to kulturer</i>
Bachelor thesis	

Work experience:

09. 2011 – 08.2016	Ilen Fysioterapi & Idrett Manager and physiotherapist, private practice
09.2012 – 02.2013	Norwegian University of Science and Technology (NTNU) University lecturer, 20 % (teacher on master- and bachelor education)
04.2012 – 12.2012	St.Olavs Hospital, Trondheim Physiotherapist, neurological ward, 30 %
09.2011 – 02.2013	Høgskolen i Sør-Trøndelag (Hist) Scientific assistant at Physiotherapy department
09.2009 – 10.2012	3T-Midtbym Personal trainer
09.2011 – 07.2012	Norwegian University of Science and Technology (NTNU) Scientific assistant at Dept. Human Movement Science, 50 %
01.2011 – 09.2011:	Brattøra Bedriftshelsetjeneste Physiotherapist, 100 %

08.2010 – 03.2011 Klinik 1
Physiotherapist, private practice, 40 %

Scientific work

Peer-reviewed publications:

1. Skjæret, N. & Sperstad, J.B. (2012). Motorisk utvikling og kulturelle påvirkninger: Foresattes forventninger til småbarn i Norge og Uganda. *Fysioterapeuten*, 1, 18-23.
2. Ihlen, E.A.F., Skjæret, N., & Vereijken, B. (2013). The influence of center-of-mass movements on the variation in the structure of human postural sway. *Journal of Biomechanics*, 46, 484-490.
3. Bourke A K, Barré A., Mariani B, Moufawad el Achkar C., Paraschiv-Ionescu A., Aminian K. Vereijken B, Skjæret N, Helbostad J L. (2014). Design and development of an inertial sensor based exergame for recovery-step training: VR exergame taxonomies and real-time step detection in all directions. 2014 IEEE International Conference on Body Sensor Networks, Zurich, Switzerland.
4. Nawaz, A., Helbostad, J.L., Skjæret, N., Vereijken, B., Bourke, A., Dahl, Y., & Mellone, S. (2014). Designing smart home technology for fall prevention in older people. *Communications in Computer and Information Science*, 435, 485-490.
5. Nawaz, A., Skjæret, N., Ystmark, K., Helbostad, J.L., Vereijken, B., & Svanæs, D. (2014). Assessing seniors' user experience (UX) of exergames for balance training. *ACM Digital Library*, 578-587.
6. Nawaz A, Waerstad M, Omholt K, Helbostad JL, Vereijken B, Skjæret N, Kristiansen, L. (2014). Designing simplified exergame for muscle and balance training in seniors: a concept of 'out in nature'. *Proceedings of the 8th International Conference on Pervasive Computing Technologies for Healthcare; ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering)*, 309-312.
7. Skjæret, N., Nawaz, A., Ystmark, K., Dahl, Y., Helbostad, J.L., Svanæs, D., & Vereijken, B. (2015). Designing for movement quality in exergames: Lessons learned from observing senior citizens playing stepping games. *Gerontology*, 61, 186-194.
8. Nawaz A, Skjæret N, Helbostad JL, Vereijken B, Boulton E, Svanaes D. (2015) Usability and acceptability of balance exergames in older adults: A scoping review. *Health informatics journal*, 1460458215598638.
9. Skjæret-Maroni, N., Nawaz, A., Morat, T., Schoene, D., Helbostad, J.L., Vereijken, B. (2016) Exercise and rehabilitation delivered through exergames in older adults: An integrative review of technologies, safety and efficacy. *Int J Med Inform.*, 85(1):1-16.
10. Skjæret-Maroni, N., Vonstad, E.K., Ihlen, E.A.F., Tan, X., Helbostad, J.L., & Vereijken, B. (2016) Exergaming in Older Adults: Movement Characteristics While Playing Stepping Games. *Front Psycho*, 7:964.
11. Anders, P. & Lehmann, T., Müller, H., Grønvik, K.B., Molde, I., Skjæret-Maroni, N., Baumeister, J., & Vereijken B. Exergames inherently contain cognitive elements as indicated by cortical processing. *Frontiers in Behavioral Neuroscience*.
- 12.

Manuscripts in Preparation/Planned:

Vogt, S., Skjæret-Maroni, N., Neuhaus, D., & Baumeister, J. Virtual Reality Interventions for Balance Prevention and Orthopaedic Rehabilitation after Lower Limb Impairments: A Comprehensive Review on Used Technology, Balance Outcome Measures and Observed Effects. Under review in *Int J Med Inform*

Subramanian, S., Skjæret-Maroni, N., Marx, C., Dahl, Y., Vereijken, B., & Svanæs, D. User Experience and Design Preferences of Exergames: Elderly Vs Young adults.

Pedersen, A., Stene, G.B. & Skjæret, N. Considering Handedness in Constraint Induced Movement Therapy.

Skjæret, N. & Vereijken, B. Postural control during quiet and relaxed standing in young adults with cerebral palsy.

Conference/Symposium Organization:

Skjæret, N. & Vereijken, B. Exergaming in the elderly for fall risk reduction and prevention: Challenges and future directions. Symposium organized at The International Society of Posture and Gait Research (ISPGR) World Congress, Vancouver, June 2014.

Skjæret-Maroni, N., Vereijken, B., Lamothe, C. & Barry, G. Active Ageing, Active Health: Setting the agenda for exergaming. Educational activities organized with sponsorship from The International Society of Posture and Gait Research (ISPGR) and NTNU Health, September 2016.

Presentations:

1. Skjæret, N. *Stående vektbærings karakteristikk hos voksne med CP*. Cerebral Palsy symposium, St.Olavs Hospital, October 2011.
2. Skjæret, N. *Stående vektbærings karakteristikk hos voksne med CP*. Oral presentation at Juleseminar for Norges Fysioterapi Forbund, November 2012.
3. Ihlen, E.A.F., Skjæret, N., Lund, S., & Vereijken, B. Posture during relaxed standing is controlled intermittently rather than continuously. Presentation at the first Joint World Congress of ISPGR and Gait & Mental Function, Trondheim, Norway, June 2012.
4. Skjæret, N., Ihlen, E.A.F., & Vereijken, B. Bipedal asymmetries during relaxed standing reveal postural control deficits in young adults with CP. Presentation at the first Joint World Congress of ISPGR and Gait & Mental Function, Trondheim, Norway, June 2012.
5. Vereijken, B., Tan, X., Skjæret, N., & Ihlen, E.A.F. A 3D-stabilogram as a new method to visualize and analyze postural sway during standing. Presentation at the second Joint World Congress of ISPGR and Gait & Mental Function, Akita, Japan, June 2013.
6. Skjæret, N., Svanæs, D., Helbostad, J.L., & Vereijken, B. Exergaming for fall prevention: Investigating usability and players' movement characteristics. Presentation at the Mobility and Exercise in the Elderly (MobEx) meeting, Köln, Germany, January 2014.
7. Skjæret, N. Bevegelsesvitenskap – forskning, utdanning, nettverk. Invited presentation at the turnusseminar for physiotherapists, HiST, Trondheim, May 2014.
8. Nawaz, A., Helbostad, J.L., Skjæret, N., Vereijken, B., Bourke, A., Dahl, Y., & Mellone, S. Designing smart home technology for fall prevention in older people. HCI International 2014, Crete, Greece, June 2014.
9. Skjæret, N. & Vereijken, B. Exergaming in the elderly for fall risk reduction and prevention: Challenges and future directions. Presentation at the World Congress of ISPGR, Vancouver, June 2014.
10. Skjæret, N., Helbostad, J.L., & Vereijken, B. Bruk av treningsspill blant eldre: egnethet og bevegelseskarakteristikk. Presentation at Fysioterapikongressen, Lillestrøm, Norway, March 2015.
11. Skjæret, N., Vonstad, E.K., Helbostad, J.L., & Vereijken, B. Investigating older adults stepping movement when playing exergames. Presentation at the Mobility and Exercise in the Elderly (MobEx) meeting, Bologna, Italy, January 2015.

12. Skjæret, N. Using exergames for the elderly: suitability and movement characteristics. Presentation at AGATHE meets CERG, NTNU, Trondheim, May, 2015.
13. Skjæret-Maroni, N. Tv-spill og spillteknologi også for de eldre? Presentation at Sør-Trøndersk Demensforum, Trondheim, May, 2016.

Poster presentations:

1. Skjæret, N., Nawaz A., Ystmark, K., Helbostad J.H.L. & Vereijken, B. Exergaming for fall risk reduction: Investigating older players' movement characteristics. Poster presentation at The International Society of Posture and Gait Research (ISPGR) World Congress, Vancouver, Canada, June 2014.
2. Nawaz, A., Helbostad, J.L., Skjæret, N., Vereijken, B., Bourke, A., Dahl, Y., Mellone, S. Designing smart home technology for fall prevention in older people. Poster presentation at HCI International 2014, Crete, Greece, June 2014.
3. Skjæret, N., Ihlen, E.A.F., Helbostad, J.L., & Vereijken, B. Exergaming in older adults: the effect of the games on movement characteristics during gameplay. Poster presentation at The International Society of Posture and Gait Research (ISPGR) World Congress, Seville, Spain, June 2015.

Popular Scientific Activities:

Eldre og dataspill? Blogg innlegg på #NTNUmedicine, 29.august 2016.

<https://blog.medisin.ntnu.no/eldre-og-dataspill/>

Exergames for eldre. Intervju, Gemini.no, 29.august, 2016.

<http://gemini.no/2016/08/exergames-for-eldre/>

Forsker: - For lett å jukse med treningsspill for eldre. Intervju, Forskning.no, 10.september 2016.

Et dataspill fikk Nikolas (13) til å elske trening. Intervju Adresseavisen, 28.mai 2017. (Gjengitt i Aftenposten og ITroms).

Journal Reviewer:

International Journal of Medical Informatics, Sports Medicine, IEEE Journal of Biomedical and Health Informatics, Games for Health, Journal of computer assisted learning, Gerontology, Nordisk Tidsskrift for Helseforskning, Supportive Care in Cancer

Supervision Experience

Co-supervisor for PhD-fellow Phillipp Anders. Department of Neuromedicine and Movement Science (INB), NTNU, PhD program in Medical Technology

Master student Elise K. Vonstad in Human Movement Science, NTNU, 2014. Title: Exergaming for elderly: Subjective experiences and objective movement characteristics

Master student Karoline B. Grønvik in Human Movement Science, NTNU, 2017. Title: The effect of cognitive challenge on brain activity and weight-shifting characteristics during exergaming. An experimental study on healthy young adults.

Master student Ingunn Molde in Human Movement Science, NTNU, 2017. Title: Effect of order of difficulty level on body movements and brain activity during balance-based exergaming. An experimental study with healthy young adults.

Master student Helen Müller, exchange student from University in Paderborn, Germany, 2017. Title: Brain activity while playing a balance-based exergame – an EEG study with young healthy adults
Master student Claudia Marx. Exchange student from Sport Science, Magdeburg University, Germany, 2017. Title: Designing a kinect-based balance exergames for older adults.

Bachelor student Lars Veenendaal. Exchange student from Technical Informatics, University College Utrecht, Nederland, 2016. Title: Exergaming
Supervision of 9 bachelor students in Human Movement Science at NTNU and 3 bachelor students in Physiotherapy at Hist.

Teaching Experience

Various courses in Human Movement Science at Bachelor- and Master level (*Exercise Physiology; Neurophysiology; Motor Behavior; Training and Performance; Fitness and Performance Assessment; Bachelor Thesis in HMS; Theory in HMS; Signal Analysis and Measurement in the Laboratory; Movement Control and Movement Problems; Motor Behavior and Biomechanics; Rehabilitation and Welfare Technology for People with Movement Related Diseases; Specialization; Thesis in Movement Science*), NTNU, Trondheim

Participation in international and national research projects

Member and co-applicant in Exergaming for active healthy ageing and rehabilitation (EXACT) financed by NTNUs strategic research area NTNU Health.

Part of applicant team for EU financed project PreventIT i PHC-20 in Horizon 2020.

Member of the EU financed project *Repository for the design of smart and self-adaptive environments prolonging independent living* (FARSEEING) under EU's FW7.