

# The Sport, Physical activity, and Health research group

## Publications in peer-reviewed journals 2013-2023

### Full-time and professor II positions

#### 2023

1. Weitz MS, Morseth B, Hopstock LA, Horsch LA: **Influence of Accelerometer Calibration on the Estimation of Objectively Measured Physical Activity: The Tromsø Study.** *Journal for the Measurement of Physical Behaviour (JMPB)* 2023.
2. Thorsteinsson H, Vigh-Larsen JF, Panduro J, Frstrup B, Kruse DZ, Gliemann L, Egeland M, Olesen JL, Aagaard P, Randers MB *et al*: **The recovery of muscle function and glycogen levels following game-play in young elite male ice hockey players.** *Scand J Med Sci Sports* 2023, **33**(12):2457-2469.
3. Teterina A, Niratisairak S, Morseth B, Bolstad N: **General and local predictors of mandibular cortical bone morphology in adult females and males: the seventh survey of the Tromsø Study.** *Clin Oral Invest* 2023, **27**(11):6577-6587.
4. Teterina A, Niratisairak S, Morseth B, Bolstad N: **Diagnostic efficacy of radiomorphometric indices for predicting osteoporosis in a Norwegian population in the Tromsø Study: Tromsø7.** *Oral Surg Oral Med Oral Pathol Oral Radiol* 2023, **135**(3):444-455.
5. Staff HC, Solli GS, Osborne JO, Sandbakk O: **Long-Term Development of Training Characteristics and Performance-Determining Factors in Elite/International and World-Class Endurance Athletes: A Scoping Review.** *Sports Med* 2023, **53**(8):1595-1607.
6. Sagelv EH, Hopstock LA, Morseth B, Hansen BH, Steene-Johannessen J, Johansson J, Nordstrom A, Saint-Maurice PF, Lovsletten O, Wilsgaard T *et al*: **Device-measured physical activity, sedentary time, and risk of all-cause mortality: an individual participant data analysis of four prospective cohort studies.** *Br J Sports Med* 2023, **57**(22):1457-1463.
7. Sagelv EH, Dalene KE, Eggen AE, Ekelund U, Fimland MS, Heitmann KA, Holtermann A, Johansen KR, Lochen ML, Morseth B, Wilsgaard T: **Occupational physical activity and risk of mortality in women and men: the Tromsø Study 1986-2021.** *Br J Sports Med* 2023.
8. Roso-Moliner A, Mainer-Pardos E, Carton-Llorente A, Nobari H, Pettersen SA, Lozano D: **Effects of a neuromuscular training program on physical performance and asymmetries in female soccer.** *Front Physiol* 2023, **14**:1171636.
9. Riegler MA, Thambawita V, Nguyen T, Hicks SA, Pettersen SA, Johansen D, Jain R, Halvorsen P: **ScopeSense: An 8.5-month sport, nutrition, and lifestyle lifelogging dataset.** In.; 2023.
10. Randers MB, Hagman M, Christensen JF, Povoas S, Nielsen JJ, Krstrup P: **Health and performance effects of 12 weeks of small-sided street football training compared to grass football training in habitually active young men.** *European journal of applied physiology* 2023:0.
11. Pedersen A, Randers MB, Luteberget LS, Moller M: **Validity of Session Rating of Perceived Exertion for Measuring Training Load in Youth Team Handball Players.** *J Strength Cond Res* 2023, **37**(1):174-180.
12. Paluch AE, Bajpai S, Ballin M, Bassett DR, Buford TW, Carnethon MR, Chernofsky A, Dooley EE, Ekelund U, Evenson KR *et al*: **Prospective Association of Daily Steps With Cardiovascular Disease: A Harmonized Meta-Analysis.** *Circulation* 2023, **147**(2):122-131.
13. Otsuka K, Cornelissen G, Weydahl A, Gubin D, Beaty LA, Murase M: **Rules of Heliogeomagnetics Diversely Coordinating Biological Rhythms and Promoting Human Health.** *Applied Sciences* 2023, **13**(2).
14. Osborne JO, Tallent J, Girard O, Marshall PW, Kidgell D, Buhmann R: **Neuromuscular electrical stimulation during maximal voluntary contraction: a Delphi survey with expert consensus.** *European journal of applied physiology* 2023, **123**(10):2203-2212.
15. Osborne JO, Solli GS, Engseth TP, Welde B, Morseth B, Noordhof DA, Sandbakk O, Andersson EP: **Annual Volume and Distribution of Physical Training in Norwegian Female Cross-Country Skiers and Biathletes: A Comparison Between Sports, Competition Levels, and Age Categories-The FENDURA Project.** *Int J Sports Physiol Perform* 2023:1-9.
16. Osborne JO, Minett GM, Stewart IB, Trost S, Drovandi C, Costello JT, Pavey TG, Borg DN: **Evidence that heat acclimation training may alter sleep and incidental activity.** *Eur J Sport Sci* 2023, **23**(8):1731-1740.

17. Nordstrom P, Ballin M, Nordstrom A: **Safety and effectiveness of monovalent COVID-19 mRNA vaccination and risk factors for hospitalisation caused by the omicron variant in 0.8 million adolescents: A nationwide cohort study in Sweden.** *PLoS Med* 2023, **20**(2):e1004127.
18. Myrstad M, Johansen KR, Sorensen E, Ranhoff AH: **Rationale and design of the Birkebeiner Ageing Study - a prospective cohort study of older endurance athletes.** *BMC Geriatr* 2023, **23**(1):365.
19. Moen F, Pettersen SA, Gjertsen K, Vatn M, Ravenhorst M, Kvalsvoll A, Liland KH, Mosleth EF: **The effect of bio-electro-magnetic-energy-regulation therapy on sleep duration and sleep quality among elite players in Norwegian women's football.** *Front Psychol* 2023, **14**:1230281.
20. Li Z, Krustup P, Randers MB, Xu B, Yang W, Huang Z, Mao L: **"11 for Health" in China - Effects on physical fitness in 9-11-year-old schoolchildren.** *Eur J Sport Sci* 2023, **23**(12):2291-2298.
21. Kanis JA, Johansson H, McCloskey EV, Liu E, Akesson KE, Anderson FA, Azagra R, Bager CL, Beaudart C, Bischoff-Ferrari HA *et al*: **Previous fracture and subsequent fracture risk: a meta-analysis to update FRAX.** *Osteoporos Int* 2023, **34**(12):2027-2045.
22. Johansson J, Emaus N, Geelhoed B, Sagelv E, Morseth B: **Vertebral Fractures Assessed by Dual-Energy X-Ray Absorptiometry and All-Cause Mortality: The Tromso Study, 2007-2020.** *Am J Epidemiol* 2023, **192**(1):62-69.
23. Johansen KR, Sørensen E, Ranhoff AH, Myrstad M: **Exercise and prevalence of cardiovascular disease in older female endurance athletes during 10 years follow-up.** In., vol. 30; 2023: 1.
24. Johansen KR, Ranhoff AH, Sorensen E, Nes BM, Bucher-Sandbakk S, Wilsgaard T, Lochen ML, Thelle DS, Morseth B, Myrstad M, Nexaf: **Ten-year mortality among older male recreational endurance athletes in the Birkebeiner Aging Study in comparison with older men from the Tromso Study.** *Scand J Med Sci Sports* 2023, **33**(8):1541-1551.
25. Irgens EL, Berglen G, Christoffersen T, Henninen AP, Hermansen R, Karlsen MRE, Kokkvoll AS, Liabo K, Mollersen S, Rugland G *et al*: **Our health, our research. Identifying public health research priorities among children and youth in a multiethnic population: protocol for a community-based participatory health research priority survey.** *BMJ Open* 2023, **13**(7):e072567.
26. Holvik K, Dahl C, Sjøgaard A-J, Solbakken SM, Tell GS, Hoff M, Kjeldgaard HK, Apalset EM, Morseth B, Grimnes G *et al*: **Educational gradient in hip fracture incidence in Norway. The Norwegian Epidemiologic Osteoporosis Studies (NOREPOS).** In., vol. 31: Norsk forening for epidemiologi; 2023: 22-22.
27. Haugnes P, Kocbach J, Noordhof D, Talsnes RK, Ettema G, Sandbakk O: **The influence of tactical positioning on performance in sprint cross-country skiing.** *PLoS One* 2023, **18**(6):e0287717.
28. Gentile A, Ficarra S, Thomas E, Bianco A, Nordstrom A: **Nature through virtual reality as a stress-reduction tool: A systematic review.** *International Journal of Stress Management* 2023, **30**(4):341-353.
29. Fjeld MK, Arnes AP, Engdahl B, Morseth B, Hopstock LA, Horsch A, Stubhaug A, Strand BH, Nielsen CS, Steingrimsdottir OA: **Consistent pattern between physical activity measures and chronic pain levels: the Tromso Study 2015 to 2016.** *Pain* 2023, **164**(4):838-847.
30. Ekberg S, Morseth B, Larsen KB, Wikstrom-Frisen L: **Does the Menstrual Cycle Influence Aerobic Capacity in Endurance-Trained Women?** *Res Q Exerc Sport* 2023:1-8.
31. De Martin Topranin V, Engseth TP, Hrozanova M, Taylor M, Sandbakk O, Noordhof DA: **The Influence of Menstrual-Cycle Phase on Measures of Recovery Status in Endurance Athletes: The Female Endurance Athlete Project.** *Int J Sports Physiol Perform* 2023, **18**(11):1296-1303.
32. Bloniecki V, Ulfvarson J, Javanshiri K, Hagman G, Freund-Levi Y, Nordstrom A: **The Geras Solutions Cognitive Test for Assessing Cognitive Impairment: Normative Data from a Population-Based Cohort.** *J Prev Alzheimers Dis* 2023, **10**(2):207-211.
33. Baptista I, Winther AK, Pedersen S, Johansen D, Pettersen SA: **The influence of age on the match-to-match variability of physical performance in women's elite football.** *Front Physiol* 2023, **14**:1193501.
34. Ballin M, Neovius M, Ortega FB, Henriksson P, Nordstrom A, Berglind D, Nordstrom P, Ahlqvist VH: **Genetic and Environmental Factors and Cardiovascular Disease Risk in Adolescents.** *JAMA Netw Open* 2023, **6**(11):e2343947.
35. Arnes AP, Nielsen CS, Stubhaug A, Fjeld MK, Johansen A, Morseth B, Strand BH, Wilsgaard T, Steingrimsdottir OA: **Longitudinal relationships between habitual physical activity and pain tolerance in the general population.** *PLoS One* 2023, **18**(5):e0285041.
36. Andersson EP, Logdal N, Byrne D, Jones TW: **Physiological responses and performance factors for double-poling and diagonal-stride treadmill roller-skiing time-trial exercise.** *European journal of applied physiology* 2023, **123**(11):2495-2509.

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37. Zanaboni P, Manskow US, Sagelv EH, Morseth B, Edvardsen AE, Aamot IL, Nes BM, Hastings B, Gagnon MP, Antypas K: **Digital interventions to promote physical activity among inactive adults: A study protocol for a hybrid type I effectiveness-implementation randomized controlled trial.** *Front Public Health* 2022, **10**:925484.
38. Winther AK, Baptista I, Pedersen S, Randers MB, Johansen D, Krstrup P, Pettersen SA: **Position specific physical performance and running intensity fluctuations in elite women's football.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:105-114.
39. Weitz M, Syed S, Hopstock LA, Morseth B, Prasad DK, Horsch A: **Discrimination of sleep and wake periods from a hip-worn raw acceleration sensor using recurrent neural networks.** In.: Cold Spring Harbor Laboratory; 2022.
40. von Rosen P, Ekenros L, Solli GS, Sandbakk O, Holmberg HC, Hirschberg AL, Friden C: **Offered Support and Knowledge about the Menstrual Cycle in the Athletic Community: A Cross-Sectional Study of 1086 Female Athletes.** *Int J Environ Res Public Health* 2022, **19**(19):10.
41. von Hanno T, Hareide LL, Smabrekke L, Morseth B, Sneve M, Erke MG, Mathiesen EB, Bertelsen G: **Macular Layer Thickness and Effect of BMI, Body Fat, and Traditional Cardiovascular Risk Factors: The Tromso Study.** *Invest Ophthalmol Vis Sci* 2022, **63**(9):16.
42. Vikberg S, Bjork S, Nordstrom A, Nordstrom P, Hult A: **Feasibility of an Online Delivered, Home-Based Resistance Training Program for Older Adults - A Mixed Methods Approach.** *Front Psychol* 2022, **13**:869573.
43. Tjønnndal A, Røsten S, Skirbekk SB, Wågan FA, Rogstad ET, Vandenput L, Johansson H, McCloskey EV, Liu E, Åkesson KE *et al*: **Mostly successful collection how social media and digital communication technologies impact sports in various ways. Update of the fracture risk prediction tool FRAX: a systematic review of potential cohorts and analysis plan.** In., vol. 33; 2022: 2103-2136.
44. Staunton CA, Andersson EP, Skovereng K, Bjorklund G: **Heart Rate Does Not Accurately Predict Metabolic Intensity During Variable-Intensity Roller Skiing or Cycling.** *Int J Sports Physiol Perform* 2022, **17**(12):1664-1671.
45. Pedersen S, Welde B, Sagelv EH, Heitmann KA, M BR, Johansen D, Pettersen SA: **Associations between maximal strength, sprint, and jump height and match physical performance in high-level female football players.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:54-61.
46. Panduro J, Vigh-Larsen JF, Ermidis G, Povoas S, Schmidt JF, Sogaard K, Krstrup P, Mohr M, Randers MB: **Acute arm and leg muscle glycogen and metabolite responses to small-sided football games in healthy young men.** *European journal of applied physiology* 2022, **122**(8):1929-1937.
47. Panduro J, Ermidis G, Roddik L, Vigh-Larsen JF, Madsen EE, Larsen MN, Pettersen SA, Krstrup P, Randers MB: **Physical performance and loading for six playing positions in elite female football: full-game, end-game, and peak periods.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:115-126.
48. Paluch AE, Bajpai S, Bassett DR, Carnethon MR, Ekelund U, Evenson KR, Galuska DA, Jefferis BJ, Kraus WE, Lee IM *et al*: **Daily steps and all-cause mortality: a meta-analysis of 15 international cohorts.** *Lancet Public Health* 2022, **7**(3):e219-e228.
49. Nordstrom P, Bergman J, Ballin M, Nordstrom A: **Trends in Hip Fracture Incidence, Length of Hospital Stay, and 30-Day Mortality in Sweden from 1998-2017: A Nationwide Cohort Study.** *Calcif Tissue Int* 2022, **111**(1):21-28.
50. Nordstrom P, Ballin M, Nordstrom A: **Risk of SARS-CoV-2 reinfection and COVID-19 hospitalisation in individuals with natural and hybrid immunity: a retrospective, total population cohort study in Sweden.** *Lancet Infect Dis* 2022, **22**(6):781-790.
51. Nordstrom P, Ballin M, Nordstrom A: **Risk of infection, hospitalisation, and death up to 9 months after a second dose of COVID-19 vaccine: a retrospective, total population cohort study in Sweden.** *Lancet* 2022, **399**(10327):814-823.
52. Nordstrom P, Ballin M, Nordstrom A: **Effectiveness of a fourth dose of mRNA COVID-19 vaccine against all-cause mortality in long-term care facility residents and in the oldest old: A nationwide, retrospective cohort study in Sweden.** *Lancet Reg Health Eur* 2022, **21**:100466.
53. Noordhof D, de Jonge XAKJ, Hackney AC, de Koning JJ, Sandbakk Ø: **Sport-Science Research on Female Athletes: Dealing With the Paradox of Concurrent Increases in Quantity and Quality.** In., vol. 17; 2022: 993-994.

54. Mohr M, Sjuretharson T, Leifsson EN, Randers MB, Knudsen NS, Thomasen MMD, Panduro J, Larsen MN, Andersen TB, Krstrup P: **The Faroe Islands COVID-19 Recreational Football Study: Player-to-Player Distance, Body-to-Body Contact, Body-to-Ball Contact and Exercise Intensity during Various Types of Football Training for Both Genders and Various Age Groups.** *Biomed Res Int* 2022, **2022**:6822385.
55. Mohr M, Fatouros IG, Jamurtas AZ, Draganidis D, Thomassen M, Orntoft C, Ermidis G, Loules G, Batsilas D, Poullos A *et al*: **Skeletal muscle phenotype and game performance in elite women football players.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:39-53.
56. Mohr M, Brito J, de Sousa M, Pettersen SA: **Executive summary: Elite women's football-Performance, recovery, diet, and health.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**(Suppl 1):3-6.
57. Mikkila S, Johansson J, Nordstrom A, Nordstrom P, Emaus N, Handegard BH, Morseth B, Welde B: **A 15-year follow-up study of hip bone mineral density and associations with leisure time physical activity. The Tromso Study 2001-2016.** *PLoS One* 2022, **17**(1):e0262228.
58. Medbo JJ, Welde B: **Effect of Computational Method on Accumulated O(2) Deficit.** *Front Sports Act Living* 2022, **4**:772049.
59. Majumder T, De Martin Topranin V, Sandbakk O, Noordhof DA: **Indian Endurance Athletes' Menstrual Cycle: Practices, Knowledge, Communication, Health, and Changes in Perceptions Across the Phases.** *Int J Sports Physiol Perform* 2022, **17**(12):1706-1715.
60. Løgdal N, Laaksonen MS, Andersson EP: **Individual fluctuations in blood lactate concentration during an ice hockey game; differences between player positions.** *International Journal of Exercise Science* 2022, **15**(6):985-993.
61. Linkas J, Ahmed LA, Csifcsak G, Emaus N, Furberg AS, Pettersen G, Rognmo K, Christoffersen T: **Two-year changes in sleep duration are associated with changes in psychological distress in adolescent girls and boys: the fit futures study.** *Health Psychol Behav Med* 2022, **10**(1):1159-1175.
62. Linkas J, Ahmed LA, Csifcsak G, Emaus N, Furberg AS, Grimnes G, Pettersen G, Rognmo K, Christoffersen T: **C-Reactive Protein and TGF-alpha Predict Psychological Distress at Two Years of Follow-Up in Healthy Adolescent Boys: The Fit Futures Study.** *Front Psychol* 2022, **13**:823420.
63. Linkas J, Ahmed LA, Csifcsak G, Emaus N, Furberg AS, Grimnes G, Pettersen G, Rognmo K, Christoffersen T: **Are pro-inflammatory markers associated with psychological distress in a cross-sectional study of healthy adolescents 15-17 years of age? The Fit Futures study.** *BMC Psychol* 2022, **10**(1):65.
64. Li Z, Mao L, Krstrup P, Randers MB: **Internal and external load during 8 v 8, 5 v 5 and 3 v 3 in Chinese elite youth male football players.** *Biol Sport* 2022, **39**(4):1065-1071.
65. Krstrup P, Mohr M, Nybo L, Draganidis D, Randers MB, Ermidis G, Orntoft C, Roddick L, Batsilas D, Poullos A *et al*: **Muscle metabolism and impaired sprint performance in an elite women's football game.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:27-38.
66. Johansen KR, Ranhoff AH, Sorensen E, Nes BM, Heitmann KA, Apelland T, Bucher Sandbakk S, Wilsgaard T, Lochen ML, Thelle DS *et al*: **Risk of atrial fibrillation and stroke among older men exposed to prolonged endurance sport practice: a 10-year follow-up. The Birkebeiner Ageing Study and the Tromso Study.** *Open Heart* 2022, **9**(2):e002154.
67. Hopstock LA, Morseth B, Cook S, Eggen AE, Grimsgaard S, Lundblad MW, Lochen ML, Mathiesen E, Nilsen A, Njolstad I: **Treatment target achievement after myocardial infarction and ischaemic stroke: cardiovascular risk factors, medication use, and lifestyle: the Tromso Study 2015-16.** *Eur J Prev Cardiol* 2022, **29**(2):362-370.
68. Heitmann KA, Welde B, Lochen ML, Styliadis M, Schirmer H, Morseth B: **Longitudinal Associations Between Cumulative Physical Activity and Change in Structure and Function of the Left Side of the Heart: The Tromso Study 2007-2016.** *Front Cardiovasc Med* 2022, **9**:882077.
69. Heitmann KA, Løchen M-L, Styliadis M, Hopstock LA, Schirmer H, Morseth B: **Associations between physical activity, left atrial size and incident atrial fibrillation: the Tromsø Study 1994–2016.** *Open Heart* 2022, **9**(1):e001823.
70. Haugen T, Sandbakk O, Seiler S, Tonnessen E: **The Training Characteristics of World-Class Distance Runners: An Integration of Scientific Literature and Results-Proven Practice.** *Sports Med Open* 2022, **8**(1):46.
71. Hammer TM, Pedersen S, Pettersen SA, Rognmo K, Sagelv EH: **Affective Valence and Enjoyment in High- and Moderate-High Intensity Interval Exercise. The Tromso Exercise Enjoyment Study.** *Front Psychol* 2022, **13**:825738.

72. Fjellstrom S, Hansen E, Holtta J, Zingmark M, Nordstrom A, Lund Ohlsson M: **Web-based training intervention to increase physical activity level and improve health for adults with intellectual disability.** *J Intellect Disabil Res* 2022, **66**(12):967-977.
73. Engseth TP, Andersson EP, Solli GS, Morseth B, Thomassen TO, Noordhof DA, Sandbakk O, Welde B: **Prevalence and Self-Perceived Experiences With the Use of Hormonal Contraceptives Among Competitive Female Cross-Country Skiers and Biathletes in Norway: The FENDURA Project.** *Front Sports Act Living* 2022, **4**:873222.
74. Ekenros L, von Rosen P, Solli GS, Sandbakk O, Holmberg HC, Hirschberg AL, Friden C: **Perceived impact of the menstrual cycle and hormonal contraceptives on physical exercise and performance in 1,086 athletes from 57 sports.** *Front Physiol* 2022, **13**:954760.
75. Dobler F, Bachl P, Stoggl T, Andersson EP: **Physiological Responses and Performance During a 3-Minute Cycle Time Trial: Standard Paced Versus All-Out Paced.** *Int J Sports Physiol Perform* 2022, **17**(11):1583-1589.
76. de Sousa MV, Lundsgaard AM, Christensen PM, Christensen L, Randers MB, Mohr M, Nybo L, Kiens B, Fritzen AM: **Nutritional optimization for female elite football players-topical review.** *Scand J Med Sci Sports* 2022, **32 Suppl 1**:81-104.
77. Bucher Sandbakk S, Tønnessen E, Haugen T, Sandbakk Ø: **Training and coaching of female vs. male endurance athletes on their road to gold. Perceptions among successful elite athlete coaches.** *Deutsche Zeitschrift für Sportmedizin/German Journal of Sports Medicine* 2022, **73**(7):251-258.
78. Borg DN, Osborne JO, Tweedy SM, Liljedahl JB, Nooijen CFJ: **Bicycling and Tricycling Road Race Performance in International Para-Cycling Events Between 2011 and 2019.** *Am J Phys Med Rehabil* 2022, **101**(4):384-388.
79. Beldo SK, Aars NA, Christoffersen T, Furberg AS, Halvorsen PA, Hansen BH, Horsch A, Sagelv EH, Syed S, Morseth B: **Criterion validity of the Saltin-Grimby Physical Activity Level Scale in adolescents. The Fit Futures Study.** *PLoS One* 2022, **17**(9):e0273480.
80. Baptista I, Winther AK, Johansen D, Randers MB, Pedersen S, Pettersen SA: **The variability of physical match demands in elite women's football.** *Sci Med Footb* 2022, **6**(5):559-565.
81. Ballin M, Ioannidis JP, Bergman J, Kivipelto M, Nordstrom A, Nordstrom P: **Time-varying risk of death after SARS-CoV-2 infection in Swedish long-term care facility residents: a matched cohort study.** *BMJ Open* 2022, **12**(11):e066258.
82. Andersson EP, Bachl P, Schmuttermair A, Staunton CA, Stoggl TL: **Anaerobic work capacity in cycling: the effect of computational method.** *European journal of applied physiology* 2022, **122**(12):2637-2650.
83. Almquist NW, Sandbakk O, Solli GS: **Performance-Related Physiological and Haematological Changes During Pregnancy and Postpartum in a Well-Trained Cyclist Performing Endurance Training.** *Front Physiol* 2022, **13**:762950.

## 2021

84. Tutt AS, Persson H, Andersson EP, Ainegren M, Stenfors N, Hanstock HG: **A heat and moisture-exchanging mask impairs self-paced maximal running performance in a sub-zero environment.** *European journal of applied physiology* 2021, **121**(7):1979-1992.
85. Tedesco S, Andrulli M, Larsson MA, Kelly D, Alamaki A, Timmons S, Barton J, Condell J, O'Flynn B, Nordstrom A: **Comparison of Machine Learning Techniques for Mortality Prediction in a Prospective Cohort of Older Adults.** *Int J Environ Res Public Health* 2021, **18**(23):0.
86. Taipale-Mikkonen RS, Raitanen A, Hackney AC, Solli GS, Valtonen M, Peltonen H, McGawley K, Kyrolainen H, Ihalainen JK: **Influence of Menstrual Cycle or Hormonal Contraceptive Phase on Physiological Variables Monitored During Treadmill Testing.** *Front Physiol* 2021, **12**:761760.
87. Syed S, Morseth B, Hopstock LA, Horsch A: **A novel algorithm to detect non-wear time from raw accelerometer data using deep convolutional neural networks.** *Sci Rep* 2021, **11**(1):8832.
88. Sorlen N, Hult A, Nordstrom P, Nordstrom A, Johansson J: **Short-term balance training and acute effects on postural sway in balance-deficient older adults: a randomized controlled trial.** *BMC Sports Sci Med Rehabil* 2021, **13**(1):23.
89. Skauge M, Rafoss K: **Gendered Exercise as an Expression of Gendered Meaning? Exercise Contexts and Motives Among Norwegian Youths 13–18 Years Old, 2010–2018 | A Summary.** In.: Idrottsvetenskap, Lärarutbildningen, Malmö högskola; 2021.

90. Scott D, Johansson J, Gandham A, Ebeling PR, Nordstrom P, Nordstrom A: **Associations of accelerometer-determined physical activity and sedentary behavior with sarcopenia and incident falls over 12 months in community-dwelling Swedish older adults.** *J Sport Health Sci* 2021, **10**(5):577-584.
91. Sagelv EH, Ekelund U, Hopstock LA, Fimland MS, Lovsletten O, Wilsgaard T, Morseth B: **The bidirectional associations between leisure time physical activity change and body mass index gain. The Tromso Study 1974-2016.** *Int J Obes (Lond)* 2021, **45**(8):1830-1843.
92. Randers MB, Knudsen NS, Thomasen MMD, Panduro J, Larsen MN, Mohr M, Milanovic Z, Krustrup P, Andersen TB: **Danger zone assessment in small-sided recreational football: providing data for consideration in relation to COVID-19 transmission.** *BMJ Open Sport Exerc Med* 2021, **7**(1):e000911.
93. Pedersen S, Johansen D, Casolo A, Randers MB, Sagelv EH, Welde B, Winther AK, Pettersen SA: **Maximal Strength, Sprint, and Jump Performance in High-Level Female Football Players Are Maintained With a Customized Training Program During the COVID-19 Lockdown.** *Front Physiol* 2021, **12**:623885.
94. Osborne JO, Stewart IB, Borg DN, Beagley KW, Buhmann RL, Minett GM: **Short-term heat acclimation preserves knee extensor torque but does not improve 20 km self-paced cycling performance in the heat.** *European journal of applied physiology* 2021, **121**(10):2761-2772.
95. Nordstrom P, Ballin M, Nordstrom A: **Effectiveness of heterologous ChAdOx1 nCoV-19 and mRNA prime-boost vaccination against symptomatic Covid-19 infection in Sweden: A nationwide cohort study.** *Lancet Reg Health Eur* 2021, **11**:100249.
96. Nordstrom P, Ballin M, Nordstrom A: **Association Between Risk of COVID-19 Infection in Nonimmune Individuals and COVID-19 Immunity in Their Family Members.** *JAMA internal medicine* 2021, **181**(12):1589-1595.
97. Morseth B, Geelhoed B, Linneberg A, Johansson L, Kuulasmaa K, Salomaa V, Iacoviello L, Costanzo S, Soderberg S, Niiranen TJ et al: **Age-specific atrial fibrillation incidence, attributable risk factors and risk of stroke and mortality: results from the MORGAM Consortium.** *Open Heart* 2021, **8**(2).
98. Moore K, O'Shea E, Kenny L, Barton J, Tedesco S, Sica M, Crowe C, Alamaki A, Condell J, Nordstrom A, Timmons S: **Older Adults' Experiences With Using Wearable Devices: Qualitative Systematic Review and Meta-synthesis.** *JMIR Mhealth Uhealth* 2021, **9**(6):e23832.
99. Lidar J, Andersson EP, Sundstrom D: **Validity and Reliability of Hydraulic-Analogy Bioenergetic Models in Sprint Roller Skiing.** *Front Physiol* 2021, **12**:726414.
100. Johansson J, Morseth B, Scott D, Strand BH, Hopstock LA, Grimsgaard S: **Moderate-to-vigorous physical activity modifies the relationship between sedentary time and sarcopenia: the Tromso Study 2015-2016.** *J Cachexia Sarcopenia Muscle* 2021, **12**(4):955-963.
101. Hoog S, Andersson EP: **Sex and Age-Group Differences in Strength, Jump, Speed, Flexibility, and Endurance Performances of Swedish Elite Gymnasts Competing in TeamGym.** *Front Sports Act Living* 2021, **3**:653503.
102. Heitmann KA, Lochen ML, Hopstock LA, Styliadis M, Welde B, Schirmer H, Morseth B: **Cross-sectional associations between accelerometry-measured physical activity, left atrial size, and indices of left ventricular diastolic dysfunction: The Tromso Study.** *Prev Med Rep* 2021, **21**:101290.
103. Hauger AV, Holvik K, Bergland A, Stahle A, Emaus N, Morseth B, Strand BH: **Physical capability, physical activity, and their association with femoral bone mineral density in adults aged 40 years and older: The Tromso study 2015-2016.** *Osteoporos Int* 2021, **32**(10):2083-2094.
104. Gentile A, Bianco A, Nordström A, Nordström P: **Use of alcohol, drugs, inhalants, and smoking tobacco and the long-term risk of depression in men: A nationwide Swedish cohort study from 1969-2017.** *Drug Alcohol Depend* 2021, **221**:108553.
105. Gejl KD, Hvid LG, Andersson EP, Jensen R, Holmberg HC, Ortenblad N: **Contractile Properties of MHC I and II Fibers From Highly Trained Arm and Leg Muscles of Cross-Country Skiers.** *Front Physiol* 2021, **12**:682943.
106. Deraas TS, Hopstock L, Henriksen A, Morseth B, Sand AS, Njolstad I, Pedersen S, Sagelv E, Johansson J, Grimsgaard S: **Complex lifestyle intervention among inactive older adults with elevated cardiovascular disease risk and obesity: a mixed-method, single-arm feasibility study for RESTART-a randomized controlled trial.** *Pilot Feasibility Stud* 2021, **7**(1):190.
107. Danielsen KH, Varnes TK, Sagelv EH, Heitmann KA, Mathisen GE: **Seasonal variations in physical activity among Norwegian elementary school children in Arctic regions.** *International journal of circumpolar health* 2021, **80**(1):2004688.

108. Bergman J, Ballin M, Nordstrom A, Nordstrom P: **Risk factors for COVID-19 diagnosis, hospitalization, and subsequent all-cause mortality in Sweden: a nationwide study.** *Eur J Epidemiol* 2021, **36**(3):287-298.
109. Ballin M, Nordstrom P, Nordstrom A: **Associations of Light, Moderate to Vigorous, and Total Physical Activity With the Prevalence of Metabolic Syndrome in 4,652 Community-Dwelling 70-Year-Olds: A Population-Based Cross-Sectional Study.** *J Aging Phys Act* 2021, **29**(5):735-743.
110. Ballin M, Nordstrom P, Niklasson J, Nordstrom A: **Associations of Visceral Adipose Tissue and Skeletal Muscle Density With Incident Stroke, Myocardial Infarction, and All-Cause Mortality in Community-Dwelling 70-Year-Old Individuals: A Prospective Cohort Study.** *J Am Heart Assoc* 2021, **10**(9):e020065.
111. Ballin M, Nordstrom P, Niklasson J, Nordstrom A: **Associations of Objectively Measured Physical Activity and Sedentary Time with the Risk of Stroke, Myocardial Infarction or All-Cause Mortality in 70-Year-Old Men and Women: A Prospective Cohort Study.** *Sports Med* 2021, **51**(2):339-349.
112. Ballin M, Bergman J, Kivipelto M, Nordstrom A, Nordstrom P: **Excess Mortality After COVID-19 in Swedish Long-Term Care Facilities.** *J Am Med Dir Assoc* 2021, **22**(8):1574-1580 e1578.
113. Ballin M, Antonsson O, Rosenqvist V, Nordstrom P, Nordstrom A: **Association of dog ownership with accelerometer-measured physical activity and daily steps in 70-year-old individuals: a population-based cross-sectional study.** *BMC public health* 2021, **21**(1):2313.
114. Arnes AP, Nielsen CS, Stubhaug A, Fjeld MK, Hopstock LA, Horsch A, Johansen A, Morseth B, Wilsgaard T, Steingrimsdottir OA: **Physical activity and cold pain tolerance in the general population.** *Eur J Pain* 2021, **25**(3):637-650.
115. Andersson EP, Noordhof D, De Koning J, Stöggli TL, Björklund G: **Editorial: Anaerobic Energy/Work Supply in Endurance Activities—The Importance and Effect of Computational Method.** In.; 2021.
116. Andersson EP, Hamberg I, Do Nascimento Salvador PC, McGawley K: **Physiological responses and cycle characteristics during double-poling versus diagonal-stride roller-skiing in junior cross-country skiers.** *European journal of applied physiology* 2021, **121**(8):2229-2241.
117. Andersson EP, Björklund G, McGawley K: **Anaerobic Capacity in Running: The Effect of Computational Method.** *Front Physiol* 2021, **12**:708172.
118. Andersen TL, Moldenæs T, Ronglan LT: **When different logics meet: the crisis communication of a national head coach in elite football.** *Soccer & Society* 2021, **23**(2):159-172.

## 2020

119. Welde B, Morseth B, Handegard BH, Lagestad P: **Effect of Sex, Body Mass Index and Physical Activity Level on Peak Oxygen Uptake Among 14-19 Years Old Adolescents.** *Front Sports Act Living* 2020, **2**(78):78.
120. Vigh-Larsen JF, Ermidis G, Rago V, Thomsen MBR, Fransson D, Nielsen JL, Gliemann L, Piil JF, Morris NB, DE Paoli FV *et al*: **Muscle Metabolism and Fatigue during Simulated Ice Hockey Match-Play in Elite Players.** *Medicine & Science in Sports & Exercise* 2020, **52**(10):2162-2171.
121. Tervo T, Ermling J, Nordström AH, Toss F: **The 9+ screening test score does not predict injuries in elite floorball players.** *Scandinavian Journal of Medicine & Science in Sports* 2020:1-5.
122. Syed S, Morseth B, Hopstock LA, Horsch A: **Evaluating the performance of raw and epoch non-wear algorithms using multiple accelerometers and electrocardiogram recordings.** *Sci Rep* 2020, **10**(1):5866.
123. Stoggl TL, Hertlein M, Brunauer R, Welde B, Andersson EP, Swaren M: **Pacing, Exercise Intensity, and Technique by Performance Level in Long-Distance Cross-Country Skiing.** *Front Physiol* 2020, **11**:17.
124. Sharashova E, Wilsgaard T, Ball J, Morseth B, Gerds E, Hopstock LA, Mathiesen EB, Schirmer H, Lochen ML: **Long-term blood pressure trajectories and incident atrial fibrillation in women and men: the Tromsø Study.** *Eur Heart J* 2020, **41**(16):1554-1562.
125. Scott D, Johansson J, Ebeling PR, Nordstrom P, Nordstrom A: **Adiposity Without Obesity: Associations with Osteoporosis, Sarcopenia, and Falls in the Healthy Ageing Initiative Cohort Study.** *Obesity (Silver Spring)* 2020, **28**(11):2232-2241.
126. Sagelv EH, Pedersen S, Nilsen LPR, Casolo A, Welde B, Randers MB, Pettersen SA: **Flywheel squats versus free weight high load squats for improving high velocity movements in football. A randomized controlled trial.** *BMC Sports Sci Med Rehabil* 2020, **12**:61.

127. Sagelv EH, Hopstock LA, Johansson J, Hansen BH, Brage S, Horsch A, Ekelund U, Morseth B: **Criterion validity of two physical activity and one sedentary time questionnaire against accelerometry in a large cohort of adults and older adults.** *BMJ Open Sport Exerc Med* 2020, **6**(1):e000661.
128. Sagelv EH, Ekelund U, Hopstock LA, Aars NA, Finland MS, Jacobsen BK, Lovsletten O, Wilsgaard T, Morseth B: **Do declines in occupational physical activity contribute to population gains in body mass index? Tromso Study 1974-2016.** *Occupational and environmental medicine* 2020.
129. Rosenbaum S, Morell R, Abdel-Baki A, Ahmadpanah M, Anilkumar TV, Baie L, Bauman A, Bender S, Boyan Han J, Brand S *et al*: **Assessing physical activity in people with mental illness: 23-country reliability and validity of the simple physical activity questionnaire (SIMPAQ).** *BMC Psychiatry* 2020, **20**(1):108.
130. Rambaran TF, Bergman J, Nordström P, Nordström AH: **Effect of berry polyphenols on glucose metabolism: A systematic review and meta-analysis of randomized controlled trials.** *Current Developments in Nutrition (CDN)* 2020, **4**(7):0.
131. Pettersen SD, Aslaksen PM, Pettersen SA: **Pain Processing in Elite and High-Level Athletes Compared to Non-athletes.** *Front Psychol* 2020, **11**:1908.
132. Opdal IM, Morseth B, Handegard BH, Lillevoll KR, Nilsen W, Nielsen C, Furberg AS, Rosenbaum S, Rognmo K: **Is change in mental distress among adolescents predicted by sedentary behaviour or screen time? Results from the longitudinal population study The Tromso Study: Fit Futures.** *BMJ Open* 2020, **10**(2):e035549.
133. Nughes E, Rago V, Aquino R, Ermidis G, Randers MB, Ardigo LP: **Anthropometric and Functional Profile of Selected vs. Non-Selected 13-to-17-Year-Old Soccer Players.** *Sports (Basel)* 2020, **8**(8):1-10.
134. Nordstrom P, Bergman J, Ballin M, Bjork S, Nordstrom A: **Bone-Specific Drugs and Osteonecrosis of Sites Other Than the Jaw: A Nationwide Cohort Study.** *J Bone Miner Res* 2020, **35**(9):1703-1710.
135. Nordstrom A, Bergman J, Bjork S, Carlberg B, Johansson J, Hult A, Nordstrom P: **A multiple risk factor program is associated with decreased risk of cardiovascular disease in 70-year-olds: A cohort study from Sweden.** *PLoS Med* 2020, **17**(6):e1003135.
136. Nassis GP, Massey A, Jacobsen P, Brito J, Bredsgaard Randers Thomsen M, Castagna C, Mohr M, Krstrup P: **Elite football of 2030 will not be the same as that of 2020: Preparing players, coaches, and support staff for the evolution.** In., vol. 30; 2020: 962-964.
137. Morseth B, Hopstock LA: **Time trends in physical activity in the Tromso study: An update.** *PLoS One* 2020, **15**(4):e0231581.
138. Milanovic Z, Rada A, Erceg M, Trajkovic N, Stojanovic E, Lesnik B, Krstrup P, Randers MB: **Reproducibility of Internal and External Training Load During Recreational Small-Sided Football Games.** *Res Q Exerc Sport* 2020, **91**(4):676-681.
139. Johansson J, Strand BH, Morseth B, Hopstock LA, Grimsgaard S: **Differences in sarcopenia prevalence between upper-body and lower-body based EWGSOP2 muscle strength criteria: the Tromso study 2015-2016.** *BMC Geriatr* 2020, **20**(1):461.
140. Holmquist S, Nordstrom A, Nordstrom P: **The association of depression with subsequent dementia diagnosis: A Swedish nationwide cohort study from 1964 to 2016.** *PLoS Med* 2020, **17**(1):e1003016.
141. Hammer T: **Relative age effect in international ski jumping: analysis of FIS World Cup and FIS Junior World Ski Championships.** *Journal of Physical Education and Sport* 2020, **2020**(03):1455-1460.
142. GjOvaag T, Berge H, Olsrud M, Welde B: **Acute Post-Exercise Blood Pressure Responses in Middle-Aged Persons with Elevated Blood Pressure/Stage 1 Hypertension following Moderate and High-Intensity Isoenergetic Endurance Exercise.** *Int J Exerc Sci* 2020, **13**(3):1532-1548.
143. Feddermann-Demont N, Chiampas G, Cowie CM, Meyer T, Nordstrom A, Putukian M, Straumann D, Kramer E: **Recommendations for initial examination, differential diagnosis, and management of concussion and other head injuries in high-level football.** *Scand J Med Sci Sports* 2020, **30**(10):1846-1858.
144. Eriksson M, Naas S, Berginstrom N, Nordstrom P, Hansson P, Nordstrom A: **Sedentary behavior as a potential risk factor for depression among 70-year-olds.** *J Affect Disord* 2020, **263**(263):605-608.
145. Danielsen KH, Vårnes TK, Mathisen G, Heitmann KA, Morseth B: **Physical Activity, Physical Fitness And Body Mass Index Among Elementary School Children In The Arctic Area.** In., vol. 52: American College of Sports Medicine; 2020: 62-62.
146. Berginstrom N, Nordstrom P, Nyberg L, Nordstrom A: **White matter hyperintensities increases with traumatic brain injury severity: associations to neuropsychological performance and fatigue.** *Brain Inj* 2020, **34**(3):415-420.

147. Beldo SK, Morseth B, Christoffersen T, Halvorsen PA, Hansen BH, Furberg AS, Ekelund U, Horsch A: **Prevalence of accelerometer-measured physical activity in adolescents in Fit Futures - part of the Tromso Study.** *BMC public health* 2020, **20**(1):1127.
148. Ballin M, Nordstrom P, Niklasson J, Alamaki A, Condell J, Tedesco S, Nordstrom A: **Daily step count and incident diabetes in community-dwelling 70-year-olds: a prospective cohort study.** *BMC public health* 2020, **20**(1):1830.
149. Ballin M, Nordstrom A, Nordstrom P: **Cardiovascular Disease and All-Cause Mortality in Male Twins With Discordant Cardiorespiratory Fitness: A Nationwide Cohort Study.** *Am J Epidemiol* 2020, **189**(10):1114-1123.
150. Ballin M, Hult A, Bjork S, Lundberg E, Nordstrom P, Nordstrom A: **Web-based exercise versus supervised exercise for decreasing visceral adipose tissue in older adults with central obesity: a randomized controlled trial.** *BMC Geriatr* 2020, **20**(1):173.
151. Ballin M, Hult A, Bjork S, Dinsmore J, Nordstrom P, Nordstrom A: **Digital exercise interventions for improving measures of central obesity: a systematic review.** *Int J Public Health* 2020, **65**(5):593-605.
152. Ardigo LP, Stoggl TL, Thomassen TO, Winther AK, Sagelv EH, Pedersen S, Hammer TM, Heitmann KA, Olsen OE, Welde B: **Ski Skating Race Technique-Effect of Long Distance Cross-Country Ski Racing on Choice of Skating Technique in Moderate Uphill Terrain.** *Front Sports Act Living* 2020, **2**:89.
153. Aars NA, Beldo S, Jacobsen BK, Horsch A, Morseth B, Emaus N, Furberg AS, Grimsgaard S: **Association between objectively measured physical activity and longitudinal changes in body composition in adolescents: the Tromso study fit futures cohort.** *BMJ Open* 2020, **10**(10):e036991.

## 2019

154. Vikberg S, Sorlen N, Branden L, Johansson J, Nordstrom A, Hult A, Nordstrom P: **Effects of Resistance Training on Functional Strength and Muscle Mass in 70-Year-Old Individuals With Pre-sarcopenia: A Randomized Controlled Trial.** *J Am Med Dir Assoc* 2019, **20**(1):28-34.
155. Torvik PO, Heimburg EDV, Sende T, Welde B: **The effect of pole length on physiological and perceptual responses during G3 roller ski skating on uphill terrain.** *PLoS One* 2019, **14**(2):e0211550.
156. Tervo T, Nyström H, Nordström AH: **Injuries in Swedish floorball players: A nationwide matched cohort study.** *Cogent Medicine* 2019, **6**.
157. Supej M, Nedergaard NJ, Nord J, Holmberg HC: **The impact of start strategy on start performance in alpine skiing exists on flat, but not on steep inclines.** *J Sports Sci* 2019, **37**(6):647-655.
158. Supej M, Holmberg HC: **Recent Kinematic and Kinetic Advances in Olympic Alpine Skiing: Pyeongchang and Beyond.** *Front Physiol* 2019, **10**:111.
159. Scott D, Johansson J, McMillan LB, Ebeling PR, Nordstrom P, Nordstrom A: **Associations of Sarcopenia and Its Components with Bone Structure and Incident Falls in Swedish Older Adults.** *Calcif Tissue Int* 2019, **105**(1):26-36.
160. Scott D, Johansson J, McMillan LB, Ebeling PR, Nordstrom A, Nordstrom P: **Mid-calf skeletal muscle density and its associations with physical activity, bone health and incident 12-month falls in older adults: The Healthy Ageing Initiative.** *Bone* 2019, **120**:446-451.
161. Sagelv EH, Selnaes I, Pedersen S, Pettersen SA, Randers MB, Welde B: **Effects of Linear Versus Changes of Direction Repeated Sprints on Intermittent High Intensity Running Performance in High-level Junior Football Players over an Entire Season: A Randomized Trial.** *Sports (Basel)* 2019, **7**(8):14.
162. Sagelv EH, Hammer T, Hamsund T, Rognmo K, Pettersen SA, Pedersen S: **High Intensity Long Interval Sets Provides Similar Enjoyment as Continuous Moderate Intensity Exercise. The Tromso Exercise Enjoyment Study.** *Front Psychol* 2019, **10**(JULY):1788.
163. Sagelv EH, Ekelund U, Pedersen S, Brage S, Hansen BH, Johansson J, Grimsgaard S, Nordstrom A, Horsch A, Hopstock LA, Morseth B: **Physical activity levels in adults and elderly from triaxial and uniaxial accelerometry. The Tromso Study.** *PLoS One* 2019, **14**(12):e0225670.
164. Pettersen SA, Brenn T: **Activity Profiles by Position in Youth Elite Soccer Players in Official Matches.** *Sports Med Int Open* 2019, **3**(1):E19-E24.
165. Pedersen S, Heitmann KA, Sagelv EH, Johansen D, Pettersen SA: **Improved maximal strength is not associated with improvements in sprint time or jump height in high-level female football players: a cluster-randomized controlled trial.** *BMC Sports Sci Med Rehabil* 2019, **11**(20):20.

166. Opdal IM, Morseth B, Handegard BH, Lillevoll K, Ask H, Nielsen CS, Horsch A, Furberg AS, Rosenbaum S, Rognmo K: **Change in physical activity is not associated with change in mental distress among adolescents: the Tromsø study: Fit Futures.** *BMC public health* 2019, **19**(1):916.
167. Nordstrom P, Nordstrom A: **Use of short-acting and long-acting hypnotics and the risk of fracture: a critical analysis of associations in a nationwide cohort.** *Osteoporos Int* 2019, **30**(10):1983-1993.
168. Nordström AH, Nordström P, Bergman J: **Overestimation of the Limitations of Randomized Controlled Trials.** In.; 2019.
169. Møller TK, Nielsen T-T, Lundager I, Andersen R, Krstrup P, Randers MB: **Team-sport training as a worthy alternative to fitness training for sedentary women with lifestyle diseases in a community health centre.** *German Journal of Exercise and Sport Research* 2019, **50**(1):136-145.
170. Mikkilä S, Calogiuri G, Emaus N, Morseth B: **A cross-sectional and 6-year follow-up study of associations between leisure time physical activity and vertebral fracture in adults.** *BMC musculoskeletal disorders* 2019, **20**(1):435.
171. Madsen M, Ermidis G, Rago V, Surrow K, Vigh-Larsen JF, Randers MB, Krstrup P, Larsen MN: **Activity Profile, Heart Rate, Technical Involvement, and Perceived Intensity and Fun in U13 Male and Female Team Handball Players: Effect of Game Format.** *Sports (Basel)* 2019, **7**(4):0.
172. Jonsson M, Welde B, Stoggl TL: **Biomechanical differences in double poling between sexes and level of performance during a classical cross-country skiing competition.** *J Sports Sci* 2019, **37**(14):1582-1590.
173. Hoaas H, Zanaboni P, Hjalmsen A, Morseth B, Dinesen B, Burge AT, Cox NS, Holland AE: **Seasonal variations in objectively assessed physical activity among people with COPD in two Nordic countries and Australia: a cross-sectional study.** *International journal of chronic obstructive pulmonary disease* 2019, **14**:1219-1228.
174. Hermansen R, Jacobsen BK, Lochen ML, Morseth B: **Leisure time and occupational physical activity, resting heart rate and mortality in the Arctic region of Norway: The Finnmark Study.** *Eur J Prev Cardiol* 2019, **26**(15):1636-1644.
175. Heitmann KA, Dalen H, Holmen Gundersen G, Ingvaldsen RP, Welde B: **Intra-arterial blood pressure traits during and after heavy resistance exercise in healthy males.** *Translational Sports Medicine* 2019, **2**(6):325-333.
176. Ermidis G, Randers MB, Krstrup P, Mohr M: **Technical demands across playing positions of the Asian Cup in male football.** *International Journal of Performance Analysis in Sport* 2019, **19**(4):530-542.
177. Casolo A, Sagelv EH, Bianco M, Casolo F, Galvani C: **Effects of a structured recess intervention on physical activity levels, cardiorespiratory fitness, and anthropometric characteristics in primary school children.** *Journal of Physical Education and Sport* 2019, **2019**(5):1796-1805.
178. Bergman J, Nordström AH, Nordström P: **Overestimation of the Limitations of Randomized Controlled Trials.** . In.; 2019.
179. Bergman J, Nordstrom A, Nordstrom P: **Epidemiology of osteonecrosis among older adults in Sweden.** *Osteoporos Int* 2019, **30**(5):965-973.
180. Bergman J, Nordstrom A, Hommel A, Kivipeltö M, Nordstrom P: **Bisphosphonates and mortality: confounding in observational studies?** *Osteoporos Int* 2019, **30**(10):1973-1982.
181. Berginstrom N, Nordstrom P, Ekman U, Eriksson J, Nyberg L, Nordstrom A: **Pharmaco-fMRI in Patients With Traumatic Brain Injury: A Randomized Controlled Trial With the Monoaminergic Stabilizer (-)-OSU6162.** *J Head Trauma Rehabil* 2019, **34**(3):189-198.
182. Baptista I, Johansen D, Figueiredo P, Rebelo A, Pettersen SA: **Positional Differences in Peak- and Accumulated- Training Load Relative to Match Load in Elite Football.** *Sports (Basel)* 2019, **8**(1).
183. Baptista I, Johansen D, Figueiredo P, Rebelo A, Pettersen SA: **A comparison of match-physical demands between different tactical systems: 1-4-5-1 vs 1-3-5-2.** *PLoS One* 2019, **14**(4):e0214952.
184. Ballin M, Lundberg E, Sorlen N, Nordstrom P, Hult A, Nordstrom A: **Effects of Interval Training on Visceral Adipose Tissue in Centrally Obese 70-Year-Old Individuals: A Randomized Controlled Trial.** *J Am Geriatr Soc* 2019, **67**(8):1625-1631.
185. Ballin M, Lundberg E, Sorlen N, Nordstrom P, Hult A, Nordstrom A: **Effects of interval training on quality of life and cardiometabolic risk markers in older adults: a randomized controlled trial.** *Clin Interv Aging* 2019, **14**:1589-1599.
186. Aars NA, Jacobsen BK, Morseth B, Emaus N, Grimsgaard S: **Longitudinal changes in body composition and waist circumference by self-reported levels of physical activity in leisure among adolescents: the Tromsø study, Fit Futures.** *BMC Sports Sci Med Rehabil* 2019, **11**:37.

## 2018

187. Zoppirolli C, Bortolan L, Stella F, Boccia G, Holmberg H-C, Schena F, Pellegrini B: **Following a long-distance classical race the whole-body kinematics of double poling by elite cross-country skiers are altered.** *Frontiers in Physiology* 2018, **9**.
188. Vitale JA, Lombardi G, Weydahl A, Banfi G: **Biological rhythms, chronodisruption and chrono-enhancement: The role of physical activity as synchronizer in correcting steroids circadian rhythm in metabolic dysfunctions and cancer.** *Chronobiol Int* 2018, **35**(9):1185-1197.
189. Valstad SA, von Heimburg E, Welde B, van den Tillaar R: **Comparison of Long and Short High-Intensity Interval Exercise Bouts on Running Performance, Physiological and Perceptual Responses.** *Sports Med Int Open* 2018, **2**(1):E20-E27.
190. Torstveit MK: **Fysisk aktivitet og helse : fra begrepsforståelse til implementering av kunnskap.** Oslo: Cappelen Damm akademisk; 2018.
191. Supej M, Ogrin J, Holmberg HC: **Whole-Body Vibrations Associated With Alpine Skiing: A Risk Factor for Low Back Pain?** *Front Physiol* 2018, **9**:204.
192. Stoggl T, Welde B, Supej M, Zoppirolli C, Rolland CG, Holmberg HC, Pellegrini B: **Impact of Incline, Sex and Level of Performance on Kinematics During a Distance Race in Classical Cross-Country Skiing.** *J Sports Sci Med* 2018, **17**(1):124-133.
193. Stoggl T, Pellegrini B, Holmberg HC: **Pacing and predictors of performance during cross-country skiing races: A systematic review.** *J Sport Health Sci* 2018, **7**(4):381-393.
194. Sperlich B, Hahn LS, Edel A, Behr T, Helmpobst J, Leppich R, Wallmann-Sperlich B, Holmberg HC: **A 4-Week Intervention Involving Mobile-Based Daily 6-Minute Micro-Sessions of Functional High-Intensity Circuit Training Improves Strength and Quality of Life, but Not Cardio-Respiratory Fitness of Young Untrained Adults.** *Front Physiol* 2018, **9**:423.
195. Sperlich B, De Clerck I, Zinner C, Holmberg HC, Wallmann-Sperlich B: **Prolonged Sitting Interrupted by 6-Min of High-Intensity Exercise: Circulatory, Metabolic, Hormonal, Thermal, Cognitive, and Perceptual Responses.** *Front Physiol* 2018, **9**:1279.
196. Sharashova E, Wilsgaard T, Njølstad I, Mathiesen EB, Hopstock LA, Ball J, Gerdt E, Morseth B, Løchen M-L: **6168 Long-term systolic blood pressure trajectories predict risk of incident atrial fibrillation in a general population cohort study.** In: vol. 39; 2018: 1275-1276.
197. Sagelv EH, Engseth TP, Pedersen S, Pettersen SA, Mathisen G, Heitmann KA, Welde B, Thomassen TO, Stoggl TL: **Physiological Comparisons of Elite Male Visma Ski Classics and National Level Cross-Country Skiers During Uphill Treadmill Roller Skiing.** *Front Physiol* 2018, **9**(1523):1523.
198. Riiser A, Andersen V, Castagna C, Pettersen SA, Saeterbakken A, Froyd C, Ylvisaker E, Naess Kjosnes T, Fusch Moe V: **The Construct Validity of the CODA and Repeated Sprint Ability Tests in Football Referees.** *Int J Sports Med* 2018, **39**(8):619-624.
199. Renninger M, Lochen ML, Ekelund U, Hopstock LA, Jorgensen L, Mathiesen EB, Njølstad I, Schirmer H, Wilsgaard T, Morseth B: **The independent and joint associations of physical activity and body mass index with myocardial infarction: The Tromso Study.** *Prev Med* 2018, **116**:94-98.
200. Pettersen SA, Johansen HD, Baptista IAM, Halvorsen P, Johansen D: **Quantified Soccer Using Positional Data: A Case Study.** *Front Physiol* 2018, **9**:866.
201. Pellegrini B, Stoggl TL, Holmberg HC: **Developments in the Biomechanics and Equipment of Olympic Cross-Country Skiers.** *Front Physiol* 2018, **9**:976.
202. Ortenblad N, Nielsen J, Boushel R, Soderlund K, Saltin B, Holmberg HC: **The Muscle Fiber Profiles, Mitochondrial Content, and Enzyme Activities of the Exceptionally Well-Trained Arm and Leg Muscles of Elite Cross-Country Skiers.** *Front Physiol* 2018, **9**:1031.
203. Nordstrom A, Nordstrom P: **Traumatic brain injury and the risk of dementia diagnosis: A nationwide cohort study.** *PLoS Med* 2018, **15**(1):e1002496.
204. Morseth B, Lochen ML, Ariansen I, Myrstad M, Thelle DS: **The ambiguity of physical activity, exercise and atrial fibrillation.** *Eur J Prev Cardiol* 2018, **25**(6):624-636.
205. Morseth B, Andersen LB: **Fysisk aktivitet og hjerte- og karsykdom.** In: *Fysisk aktivitet og helse: Fra begrepsforståelse til implementering av kunnskap.* edn.: Cappelen Damm Akademisk; 2018: 453.
206. Marsland F, Anson J, Waddington G, Holmberg HC, Chapman DW: **Macro-Kinematic Differences Between Sprint and Distance Cross-Country Skiing Competitions Using the Classical Technique.** *Front Physiol* 2018, **9**(MAY):570.

207. Laaksonen MS, Jonsson M, Holmberg HC: **The Olympic Biathlon - Recent Advances and Perspectives After Pyeongchang.** *Front Physiol* 2018, **9**:796.
208. Laaksonen MS, Finkenzeller T, Holmberg HC, Sattler G: **The influence of physiobiomechanical parameters, technical aspects of shooting, and psychophysiological factors on biathlon performance: A review.** *J Sport Health Sci* 2018, **7**(4):394-404.
209. Krustup P, Williams CA, Mohr M, Hansen PR, Helge EW, Elbe A-M, De Sousa M, Dvorak J, Junge A, Hammami A *et al*: **The “Football is Medicine” platform – scientific evidence, large-scale implementation of evidence-based concepts and future perspectives.** In., vol. 28; 2018: 3-7.
210. Johansson J, Hult A, Morseth B, Nordstrom A, Nordstrom P: **Self-reported protein intake and properties of bone in community-dwelling older individuals.** *Arch Osteoporos* 2018, **13**(1):10.
211. Hermansen R, Broderstad AR, Jacobsen BK, Mahonen M, Wilsgaard T, Morseth B: **The impact of changes in leisure time physical activity on changes in cardiovascular risk factors: results from The Finnmark 3 Study and SAMINOR 1, 1987-2003.** *International journal of circumpolar health* 2018, **77**(1):1459145.
212. Gilgien M, Reid R, Raschner C, Supej M, Holmberg HC: **The Training of Olympic Alpine Ski Racers.** *Front Physiol* 2018, **9**:1772.
213. Düking P, Holmberg H-C, Sperlich B: **The Potential Usefulness of Virtual Reality Systems for Athletes: A Short SWOT Analysis.** In.; 2018.
214. Düking P, Fuss FK, Holmberg HC, Sperlich B: **Recommendations for Assessment of the Reliability, Sensitivity, and Validity of Data Provided by Wearable Sensors Designed for Monitoring Physical Activity.** *JMIR Mhealth Uhealth* 2018, **6**(4):e102.
215. Düking P, Achtzehn S, Holmberg HC, Sperlich B: **Integrated Framework of Load Monitoring by a Combination of Smartphone Applications, Wearables and Point-of-Care Testing Provides Feedback that Allows Individual Responsive Adjustments to Activities of Daily Living.** *Sensors (Basel)* 2018, **18**(5).
216. Dalen T, Overas O, van den Tillaar R, Welde B, von Heimburg ED: **Influence of different soccer-specific maximal actions on physiological, perceptual and accelerometer measurement loads.** *Open Access J Sports Med* 2018, **9**:107-114.
217. Bothun Ø, Zoglowski H: **Daily physical activity of Saami primary school in northern Norway.** *Revija za elementarno izobraževanje* 2018, **11**(4):341-356.
218. Baptista I, Johansen D, Seabra A, Pettersen SA: **Position specific player load during match-play in a professional football club.** *PLoS One* 2018, **13**(5):e0198115.
219. Ball J, Lochen ML, Wilsgaard T, Schirmer H, Hopstock LA, Morseth B, Mathiesen EB, Njolstad I, Tiwari S, Sharashova E: **Sex Differences in the Impact of Body Mass Index on the Risk of Future Atrial Fibrillation: Insights From the Longitudinal Population-Based Tromsø Study.** *J Am Heart Assoc* 2018, **7**(9):19.

## 2017

220. Calogiuri G, Rossi A, Formenti D, Weydahl A: **Sleep recovery in participants after racing in the Finnmarkslop - Europe's longest dog-sled race.** *J Sport Med Phys Fit* 2017, **57**(1-2):103-110.
221. Calogiuri G, Weydahl A: **Health challenges in long-distance dog sled racing: A systematic review of literature.** *International journal of circumpolar health* 2017, **76**(1).
222. Pal L, Boye W, Vebjørn R, Hege M: **Absentee rates in physical education in high schools: The importance of gender and study programmes.** *International Journal of Educational Administration and Policy Studies* 2017, **9**(11):152-161.
223. Riiser A, Pettersen SA, Andersen V, Saeterbakken AH, Froyd C, Ylvisåker E, Moe VF: **Accelerations and high intensity running in field and assistant football referees during match play.** *Science and Medicine in Football* 2017, **1**(3):280-287.
224. Vandbakk K, Welde B, Kruken AH, Baumgart J, Ettema G, Karlsen T, Sandbakk O: **Effects of upper-body sprint-interval training on strength and endurance capacities in female cross-country skiers.** *PLoS One* 2017, **12**(2):e0172706.
225. Vitale JA, Bjørkesett E, Campana A, Panizza G, Weydahl A: **Chronotype and response to training during the polar night: a pilot study.** *International journal of circumpolar health* 2017, **76**(1).

226. Vitale JA, Weydahl A: **Chronotype, Physical Activity, and Sport Performance: A Systematic Review.** *Sports Medicine* 2017;1-10.
227. Welde B, Stoggl TL, Mathisen GE, Supej M, Zoppirolli C, Winther AK, Pellegrini B, Holmberg HC: **The pacing strategy and technique of male cross-country skiers with different levels of performance during a 15-km classical race.** *PLoS One* 2017, **12**(11):e0187111.

## 2016

228. Andersen TB, Krusturup P, Bendiksen M, Orntoft CO, Randers MB, Pettersen SA: **Kicking Velocity and Effect on Match Performance When using a Smaller, Lighter Ball in Women's Football.** *Int J Sports Med* 2016, **37**(12):966-972.
229. Calogiuri G, Evensen KH, Weydahl A, Andersson K, Patil GG, Ihlebæk C, Raanaas RK: **Green exercise as a workplace intervention to reduce job stress. Results from a pilot study.** *Work : A journal of Prevention, Assessment and rehabilitation* 2016, **53**(1):99-111.
230. Hoaas H, Morseth B, Holland AE, Zanaboni P: **Are Physical activity and Benefits Maintained After Long-Term Telerehabilitation in COPD?** *Int J Telerehabil* 2016, **8**(2):39-48.
231. Mathisen G, Jensen RM, Pettersen SA: **Aerobic Games and Playful Exercises in 9-Year-Old Boys: Intensity and Fitness Effects.** *Revija za Elementarno Izobraževanje* 2016, **9**(1-2):57-64.
232. Morseth B, Graff-Iversen S, Jacobsen BK, Jorgensen L, Nytnes A, Thelle DS, Vestergaard P, Lochen ML: **Physical activity, resting heart rate, and atrial fibrillation: the Tromso Study.** *Eur Heart J* 2016, **37**(29):2307-2313.
233. Morseth B, Jacobsen BK, Emaus N, Wilsgaard T, Jorgensen L: **Secular trends and correlates of physical activity: The Tromso Study 1979-2008.** *BMC public health* 2016, **16**(1):1215.
234. van Hees VT, Thaler-Kall K, Wolf KH, Brond JC, Bonomi A, Schulze M, Vigl M, Morseth B, Hopstock LA, Gorzelniak L et al: **Challenges and Opportunities for Harmonizing Research Methodology: Raw Accelerometry.** *Methods Inf Med* 2016, **55**(6):525-532.

## 2015

235. Calogiuri G, Nordtug H, Weydahl A: **The potential of using exercise in nature as an intervention to enhance exercise behavior: results from a pilot study.** *Perceptual and Motor Skills* 2015, **121**(2):350-370.
236. Formenti D, Rossi A, Calogiuri G, Thomassen TO, Scurati R, Weydahl A: **Exercise Intensity and Pacing Strategy of Cross-country Skiers during a 10 km Skating Simulated Race.** *Research in Sports Medicine: An International Journal* 2015, **23**(2):126-139.
237. Mathisen G, Pettersen SA: **Anthropometric factors related to sprint and agility performance in young male soccer players.** *Open Access J Sports Med* 2015, **6**:337-342.
238. Mathisen G, Pettersen SA: **Effect of high-intensity training on speed and agility performance in 10-year-old soccer players.** *J Sports Med Phys Fitness* 2015, **55**(1-2):25-29.
239. Mathisen G, Pettersen SA: **The effect of speed training on sprint and agility performance in female youth soccer players.** *Journal of Physical Education and Sport* 2015, **2015**(03):395-399.
240. Mathisen GE, Pettersen SA: **The Effect of Speed Training on Sprint and Agility Performance in 15-Year-Old Female Soccer Players.** *LASE Journal of Sport Science* 2015, **6**(1):61-70.
241. Rossi A, Formenti D, Vitale JA, Calogiuri G, Weydahl A: **The effect of chronotype on psychophysiological responses during aerobic self-paced exercises.** *Perceptual and Motor Skills* 2015, **121**(3):840-855.
242. Vitale JA, Roveda E, Montaruli A, Letizia G, Weydahl A, Caumo A, Carandente F: **Chronotype influences activity circadian rhythm and sleep: Difference in sleep quality between weekdays and weekend.** *Chronobiology International* 2015, **32**(3):405-415.

## 2014

- 243. Morseth B, Løchen M: **Fysisk aktivitet og effekt på hjertesykdom og død.** *Hjerteforum* 2014, **27**(1):26-32.
- 244. Stokke A, Weydahl A, Calogiuri G: **Barn og fysisk aktivitet i barnehagen: Hvordan kan aktivitetsnivået dokumenteres?** *Nordisk Barnehageforskning* 2014, **8**(3):1-18.
- 245. Weydahl A, Calogiuri G: **Hydration in female drivers in a 1044 km dog sled race in Finnmark.** In., vol. 25; 2014: 82-88.

## 2013

- 246. Calogiuri G, Mikkilä SP, Weydahl A: **Can promotion of outdoor activities impact people's vitamin D levels? Promising finding from a pilot study.** *Proceedings in Electronic International Interdisciplinary Conference* 2013, **2**:276-280.
- 247. Calogiuri G, Weydahl A: **Effects of Sleep Loss on the Rest-Activity Circadian Rhythm of Helpers Participating in Continuous Dogsled Races.** *Biological Research for Nursing* 2013, **16**(2):123-133.
- 248. Calogiuri G, Weydahl A, Carandente F: **Methodological Issues for Studying the Rest-Activity Cycle and Sleep Disturbances: A Chronobiological Approach Using Actigraphy Data.** *Biological Research for Nursing* 2013, **15**(1):5-12.
- 249. Morseth B, Melbye H, Waterloo S, Thomassen MR, Risberg MJ, Emaus N: **Cross-sectional associations between prevalent vertebral fracture and pulmonary function in the sixth Tromso study.** *BMC Geriatr* 2013, **13**:116.
- 250. Rossi A, Calogiuri G, Formenti D, Vitale JA, Weydahl A: **The chronotype can influence the perceived exertion during self-paced exercise performed at different times of day.** In.; 2013: 55-56.
- 251. Vitale JA, Calogiuri G, Weydahl A: **Influence of chronotype on responses to a standardized, self-paced walking task in the morning vs afternoon: A pilot study.** *Perceptual and Motor Skills* 2013, **116**(3):1020-1028.
- 252. Waterloo S, Sogaard AJ, Ahmed LA, Damsgard E, Morseth B, Emaus N: **Vertebral fractures and self-perceived health in elderly women and men in a population-based cross-sectional study: the Tromso Study 2007-08.** *BMC Geriatr* 2013, **13**:102.