

Amsterdam Movement Sciences



Dissertations 2024

In 2024 68 dissertations took place within AMS. These were defended either at Vrije Universiteit Amsterdam or University of Amsterdam, and the PhD candidates were supervised by researchers affiliated with Amsterdam Movement Sciences Research Institute. We are proud to present the list of dissertations on the following pages.

1. Berkeveld, E., Optimization of integrated care in trauma and COVID-19 patients: similar approaches. Bloemers, Frank W., Giannakopoulos, Georgios F., Zandbergen, Reinier R. February 1, 2024. (UvA)
2. Booij, M.J., Gait neuromechanics in knee osteoarthritis and total knee arthroplasty. Harlaar, Jaap, van den Noort, Josien C., van Royen, Barend J. March 11, 2024. (UvA)
3. Brouwer, N.P., Back to the Future: Towards versatile neuromechanical control of back-exoskeleton support. Kingma, I., van Dieen, J.H. December 13, 2024. (VU)
4. Bulstra, A.E.J., Scaphoid fractures: Increasing diagnostic efficiency and treatment functionality. Doornberg, Job N., Kerkhoffs, Gino M.M.J., Obdeijn, Miryam C. February 9, 2024. (UvA)
5. Chiozi Gotardi, G., Visually guided actions of urban traffic users: towards an affordance-based approach. van der Kamp, G.J. December 18, 2024. (VU)
6. Claeys, L.J.M., In vitro and in vivo approaches to modelling of Osteogenesis Imperfecta. Bravenboer, Nathalie, Heine, Vivi M., Micha, Dimitra, Verhage, Matthijs. April 24, 2024. (UvA)
7. de Andrade Muchacho, R.E., Handcycling Classification: A First Step Towards an Evidence-based System. de Groot, S., Janssen, T.W.J. June 17, 2024. (VU)
8. de Koning, L.E., Heritable connective tissue disorders in childhood: Impacts on health, physical fitness and physical activity. Bosman, Diederik K., Engelbert, Raoul H.H., Oosterlaan, Jaap. June 6, 2024. (UvA)
9. Deijle, I.A., Treating the invisible: moving towards more personalized stroke care. Kwakkel, Gerrit, van Wegen, Erwin E.H., Weinstein, Heinrich. June 11, 2024. (UvA)

10. Eggelbusch, M., Muscle at Risk: How Physical Inactivity and Systemic Inflammation Affect Skeletal Muscle Health. Jaspers, R.T., Wust, R.C.I. December 19, 2024. (VU)
11. Galli, R.A., Congenital myopathies: Puzzling it out. de Winter, Josine M., Ottenheijm, Coen A.C. October 31, 2024. (UvA)
12. Ganzevles, S.P.M., Tracking swim training. Beek, P.J., Daanen, H.A.M. November 11, 2024. (VU)
13. Ghiani, A., Looking step by step. Brenner, E.M., Mann, D.L., Smeets, J.B.J. November 27, 2024. (VU)
14. Hendrickx, L.A.M., Intramedullary nailing of tibial shaft fractures: Pearls & pitfalls. Doornberg, Job N., Kerkhoffs, Gino M.M.J. February 9, 2024. (UvA)
15. Innocenti, T., Meta-research in rehabilitation: Reporting guidelines, risk of bias, clinical trials outcomes and interpretability. Chiarotto, A., Ostelo, R.W.J.G. June 20, 2024. (VU)
16. Jin, F., Searching for cortical synergies by mapping multiple muscles using TMS. Bruijn, S.M., Daffertshofer, A. April 3, 2024. (VU)
17. Klarenberg, H., Towards comprehensive and fast real-time cardiac MR. Boekholdt, Matthijs M., Strijkers, Gustav J. October 10, 2024. (UvA)
18. Kwakman, R.C.H., Physical recovery after critical illness: Enhancements in physiotherapeutic care: From ICU to home. Engelbert, Raoul H.H., Nollet, Frans, van der Schaaf, Marike, Voorn, Eric L. May 7, 2024. (UvA)
19. Langbroek, G.B., Vascular malformations: From diverging visions to shared decisions. Horbach, Sophie E.R., Ubbink, Dirk T., van der Horst, Chantal M.A.M., Wolkerstorfer, Albert. December 20, 2024. (UvA)

20. Leenen, A.J.R., Throwing shoulder in baseball pitchers. Hoozemans, M.J.M., Veeger, H.E.J. October 24, 2024. (VU)
21. Lin, Y., Objective analysis of anthropometric parameters of the auricle in health and disease. Breugem, Corstiaan C., Dobbe, Iwan G.G., Smit, Theo H., Streekstra, Geert J. December 5, 2024. (UvA)
22. Mennen, A., Pelvic fractures: A problem of all ages. Bloemers, Frank W., Hemke, Robert, Maas, Mario, van Embden, Daphne. December 11, 2024. (UvA)
23. Michielon, E., Modeling melanoma in reconstructed human skin. de Gruijl, Tanja D., Gibbs, Susan. September 11, 2024. (UvA)
24. Nepal, A.K., Mechanical Loading and Phosphate Homeostasis in Rat Bone. Bravenboer, Nathalie, Lips, Paul T.A.M. October 16, 2024. (UvA)
25. Nota, S.P.F.T., Immunotherapeutic strategies for the treatment of chondrosarcoma and the impact of resections around the shoulder. Bramer, Jos A.M., Kerkhoffs, Gino M.M.J. July 4, 2024. (UvA)
26. Noteboom, L., Injury prevention in fitness and strength training: Technology for musculoskeletal load optimization. Hoozemans, M.J.M., Verhagen, E.A.L.M. February 12, 2024. (VU)
27. Oberai, T.K., Delirium in patients with hip fractures. Doornberg, Job N., Kerkhoffs, Gino M.M.J. February 15, 2024. (UvA)
28. Ostelo, R.W.J.G., Meta-research in rehabilitation: Reporting guidelines, risk of bias, clinical trials outcomes and interpretability. Ostelo, Raymond W.J.G. June 20, 2024. (UvA)

29. Panhuyzen-Goedkoop, N.M., The athlete's heart: Towards tailored clinical decision-making on athlete screening. Jorstad, Harald T., Peters, Ronaldus J.G., Wilde, Arthur A.M. March 14, 2024. (UvA)
30. Pellekooren, S., Musculoskeletal complaints in primary care: Constraining healthcare costs, rethinking the deployment of healthcare professionals. Goudzwaard, A.L., Ostelo, R.W.J.G., van Tulder, M.W. January 24, 2024. (VU)
31. Ratter, J., Improving Trauma Rehabilitation and Upscaling the Transmural Trauma Care Model: Clinical Effects, Challenges, and Opportunities. Bloemers, Frank W., Ostelo, Raymond W.J.G., van Dongen, Hanneke M., Wiertsema, Suzanne H. May 23, 2024. (UvA)
32. Rauh, S.S., Advanced diffusion MRI for skeletal muscle applications. Gurney-Champion, Oliver J., Hooijmans, Melissa T., Nederveen, Aart J., Strijkers, Gustav J. December 6, 2024. (UvA)
33. Reuten, A.J.C., Sickness in Motion. Bos, J.E., Smeets, J.B.J. May 17, 2024. (VU)
34. Ritt, M.W.J., Patient-specific distal radioulnar joint arthroplasty: Towards a novel implant design using four-dimensional computed tomography. Dobbe, Iwan G.G., Ritt, Marco J.P.F., Streekstra, Geert J., Strijkers, Gustav J. March 8, 2024. (UvA)
35. Schijven, M., Serious gaming in trauma rehabilitation: Enhancing recovery after distal radius fractures. Goslings, Johan C., Graafland, Maurits, Obdeijn, Miryam C., Schijven, Marlies P. October 8, 2024. (UvA)
36. Schouten, H.J., Burn scar contracture, perspectives on prevalence, severity, and rehabilitation interventions. van Zuijlen, Paul P.M. January 8, 2024. (UvA)
37. Schutte-Blomjous, B.S., The impact of systemic lupus erythematosus on pregnancy and work participation. Bultink, Irene E.M., de Boer, Marjon A., de Vries, Hanneke I.P., Voskuijl, Alexandre E. July 1, 2024. (UvA)

38. Selles, M., Unmasking the invisible: Enhancing image quality through new metal artifact reduction techniques in CT. Maas, Mario, Wellenberg, Ruud H.H. March 22, 2024. (UvA)
39. Shi, A., Transforming Growth Factor- β Signalling in the Regulation of Skeletal Muscle Regeneration, Fibrosis and Function. Forouzanfar, T., Jaspers, R.T., Wu, G., Wust, R.C.I. January 16, 2024. (VU)
40. Sparenberg, S., Reconstructive surgery: Risk factors, outcomes and advanced indications. Lapid, Oren, Tanis, Pieter J., van der Horst, Chantal M.A.M. May 23, 2024. (UvA)
41. Spierings, J.F., The adoption of direct discharge in orthopaedic trauma surgery: A user-centred evaluation and towards user-centred design. Goslings, Johan C., Repping, Sjoerd. September 6, 2024. (UvA)
42. Stor, M.L.E., Moving towards a personalized approach in the management of vascular malformations. Horbach, Sophie E.R., Lokhorst, Max M., van der Horst, Chantal M.A.M. January 19, 2024. (UvA)
43. Suijker, J., Necrotizing Soft-Tissue Infections: Paths to Improving Outcomes. Bonjer, Jaap J., de Vries, Annebeth, Pijpe, Anouk, van Zuijlen, Paul P.M. March 21, 2024. (UvA)
44. Suskens, J.J.M., Preventive exercises as group therapy for the hamstring muscles: It takes three to tango. Kerkhoffs, Gino M.M.J., Reurink, Guus, Tol, Hans L. April 12, 2024. (UvA)
45. Tabasi, S.A., Advancing Back-Support Exoskeleton Control: A Biomechanical Approach. de Looze, M.P., Kingma, I., van Dieen, J.H., van Dijk, W. March 27, 2024. (VU)

46. ter Meulen, B.C., The acute lumbosacral radicular syndrome. Ostelo, R.W.J.G., van Dongen, J.M. June 19, 2024. (VU)
47. Vaillant, E., Development of spoken language comprehension and functional communication in children with cerebral palsy: Findings of the Cerebral Palsy – Communication and Language Learning (CP-CaLL) research project. Buizer, Annemieke I., Geytenbeek, Joke J.M., Oostrom, Kim J. April 10, 2024. (UvA)
48. van Biemen, T., Hey ref, do you need glasses?!: An on-field eye-tracking study into how gaze behaviour contributes to expertise in football refereeing. Mann, D.L., Savelbergh, G.J.P. September 12, 2024. (VU)
49. van Dam, C.S., Beyond the Frailty threshold: from Screening to Insight: Assessing Frailty and Adverse Health Outcomes in Older Adults at the Emergency Department. Muller, Majon H., Nanayakkara, Prabath D.P.W.B., Peters, Mike J.L., Trappenburg, Marijke C. November 20, 2024. (UvA)
50. van de Locht, M., Troponinology: Skeletal muscle troponin in congenital myopathies. de Winter, Josine M., Helmes, Michiel H.B., Ottenheijm, Coen A.C. March 25, 2024. (UvA)
51. van de Loo, R.A.H., Falls in older adults: Prediction, the role of medication and the use of decision support. Abu Hanna, Ameen, Medlock, Stephanie K., van der Velde, Nathalie. July 4, 2024. (UvA)
52. van de Riet, L., Transitional care for children with medical complexities: From concept to reality. Alsem, Mattijs W., van Karnebeek, Clara D., van Woensel, Job B.M. July 5, 2024. (UvA)
53. van Delft, E.A.K., On the cutting edge of nonoperative treatment of distal radius fractures. Bloemers, Frank W., Bonjer, Jaap J., Schep, Niels W.L. December 20, 2024. (UvA)

- 54.** van den Heuvel, S.C.M., The use of fibula flaps for complex reconstructions. Ritt, Marco J.P.F., Schulten, Engelbert A.J.M., Winters, Henri A.H. February 2, 2024. (UvA)
- 55.** van Duijnhoven, E., Specialized lower limb orthotic care in neuromuscular disorders. Brehm, Merel A., Koopman, Sophia, Nollet, Frans. October 31, 2024. (UvA)
- 56.** van Hattum, J.C., Exploring the frontiers in sports cardiology: From core concepts to extreme phenotypes. Jorstad, Harald T., Pinto, Yigal, Wilde, Arthur A.M. March 1, 2024. (UvA)
- 57.** van Schelt, A., Advancements in abdominal MR elastography. Nederveen, Aart J., Runge, Jurgen H., Stoker, Jaap. September 11, 2024. (UvA)
- 58.** van Trier, T.J., Cardiovascular risk and prevention: Predicting the future to optimise the present. Jorstad, Harald T., Peters, Ronaldus J.G., Scholte op Reimer, Wilma J.M., Snaterse-Zuidam, Marjolein. September 30, 2024. (UvA)
- 59.** van Vliet, A., On the TRAIL of a killer: mechanisms of action of an allogeneic NK cell therapy: Mechanism of action of an allogeneic NK cell therapy. de Gruyl, Tanja D., Gibbs, Susan. July 1, 2024. (UvA)
- 60.** Verdonk, S.J.E., More than bones: Expanding the understanding of rare monogenic variants causing early-onset osteoporosis with emphasis on osteogenesis imperfecta. Eekhoff, Elisabeth M.W., Micha, Dimitra, van den Aardweg, Joost G., Zhytnik, Lidiia. January 25, 2025. (UvA)
- 61.** Vermeijden, H.D., Acute anterior cruciate ligament injury: Is primary repair a treatment option?. Kerkhoffs, Gino M.M.J., Rademakers, Maarten V., van der List, Jelle P.J. November 15, 2024. (UvA)
- 62.** Verstraeten, L.M.G., Barriers and opportunities to combat sarcopenia in geriatric rehabilitation. Maier, A.B. November 12, 2024. (VU)

63. Verweij, L.P.E., Traumatic anterior shoulder dislocation: What is required to define optimal treatment strategies?. Blankevoort, Leendert, Kerkhoffs, Gino M.M.J., van den Bekerom, Michel P.J. May 30, 2024. (UvA)
64. Wijers, O., Fractures of the talus: Diagnostics, management and outcome. Halm, Jens A., Posthuma, Jelle J., Schepers, Tim. April 26, 2024. (UvA)
65. Wildenbeest, M.H., Effect of low back pain and pain-related fear on human movement. Kiers, H., van Dieen, J.H. December 9, 2024. (VU)
66. Yap, C., Unravelling the threads of Marfan Syndrome and mitochondrial metabolism. de Vries, Carlie J.M., de Waard, Vivian, Micha, Dimitra, Mieremet, Arnout. December 12, 2024. (UvA)
67. You, Y., The relationship between conscious movement investment and motor inhibition. Savelbergh, G.J.P., van der Kamp, G.J. July 2, 2024. (VU)
68. Zheng, R., Affordance-based control in the soccer penalty kick. Savelbergh, G.J.P., van der Kamp, G.J. April 16, 2024. (VU)