Trine Moholdt, PhD
Research Scientist
Department of Circulation and Medical Imaging, Norwegian University of Science and Technology

• EDUCATION

2010 **PhD in Clinical Medicine.** Faculty of Medicine and Health Sciences, Dept. of Circulation and Medical Imaging (ISB), Norwegian University of Science and Technology (NTNU), Norway.
2001 **Cand. Scient. in Human Movement Science**, Program for Sports Sciences, NTNU
1997 **Physiotherapist**, Sør-Trøndelag University College, Norway

• CURRENT AND PREVIOUS POSITIONS

2025 – **Research Scientist** (50% position), Dept. Endocrinology, St. Olavs Hospital, Norway
2015 – **Research Scientist and Head of the Exercise, Cardiometabolic Health and Reproduction (EXCAR) Research Group**, ISB, NTNU, Norway
2020 – 2022 **Professor in Exercise in Medicine** (10%), ISB, NTNU, Norway
Jan-July 2017 **Visiting Academic**, Centre of Exercise and Nutrition, Mary MacKillop Institute for Health Research, Australian Catholic University, Australia
2013 – 2016 **Research Scientist** (50%), Women's Clinic, St. Olavs Hospital, Norway
2010 – 2016 **Post-Doctor Research Fellow** (50% in 2013-16), ISB, NTNU, Norway

• FELLOWSHIPS AND AWARDS

Since completing my PhD in 2010, I have secured ca. 90 MNOK (ca €7.7M) of funding (all as PI). Selection:

2024 **Project Funding**, NTNU Health & Life Science, (6.5 MNOK)
2024 **Researcher Position**, Joint research committee NTNU & St. Olavs Hospital (2.6 MNOK)
2023 **PhD Position**, The Liaison Committee HMN, Norway (3.9 MNOK)
2022 **ERC Starting Grant**, Exercised breastmilk: a kick-start for childhood obesity prevention, The European Research Council (19 MNOK).
2022 **Strategic funding,** NMR analyses of breastmilk, NTNU Health (170 000 NOK)
2022 – 2025 **PhD Position,** The Liaison Committee HMN, Norway (3.6 MNOK)
2022 – 2024 **Project Funding,** Joint research committee NTNU & St.Olavs Hospital (1.0 MNOK)
2021 – 2024 **PhD Position,** The Liaison Committee HMN, Norway (3.5 MNOK)
2021 – 2023 **Project Funding**, The Liaison Committee HMN, Norway (3.0 MNOK)
2020 – 2024 **Future Leader in Diabetes Award**, European Association for the Study of Diabetes/Novo Nordisk Foundation, Denmark (7.7 MNOK)
2019 **Research Award** for research in women, 1.6 millionerklubben, Norway (100 000 NOK)
2018 **Viviane Conraads Outstanding Achievement Award**, European Society of Cardiology
2018 – 2021 **Innovation PhD Position**, The Liaison Committee, Norway 3.2 MNOK)
2015 – 2020 **5-year funding** to establish my own research group within reproductive health and exercise, including a 3-year personal research scientist position and one PhD student (I.A. Kiel), The Liaison Committee, Norway (7.5 MNOK)

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS, all as main supervisor

Completed: 1 Postdoc (Garnæs 2021), 5 PhD students (Garnæs 2017, Lionett 2021, Berg 2021, Kiel 2022, Haganes 2025), 24 master's students
On-going: 5 Postdocs, 4 PhD students (as main supervisor + 2 as co-supervisor)

• INSTITUTIONAL RESPONSIBILITIES AND COMMISSIONS OF TRUST

2015 – **Head** of the EXCAR Research Group, NTNU, Norway
2018 – **Nucleus member** of various sections in the European Association for Preventive Cardiology. My responsibilities include promotion and facilitation of high-quality research and education related to exercise, basic and translational science in the field of cardiovascular prevention, bringing together scientists from a broad range of disciplines.
2020 – 2022 **Board member**, the European Association for Preventive Cardiology
2019 – 2021 **Co-Editor**, Special issue of Frontiers in Physiology, Exercise and Sports: Their Influences on Women's Health Across the Lifespan. Volume I and II
2018 – 2020 **Section Editor**, *Scand J Med Sci Sports*, Health & Physical Activity: 27 manuscripts.
2015 – **Associate Editor**, *BMJ Open Sports & Exercise Medicine*

- **PUBLICATIONS** Selected recent examples from > 90 publications:

Sujan MAJ, Skarstad HMS, Rosvold G, Fougner SL, Follestad T, Salvesen KÅ, **Moholdt T**. Time-restricted eating and exercise training before and during pregnancy for people with increased risk of gestational diabetes (BEFORE THE BEGINNING): single-centre randomised controlled trial. ***BMJ*** 2025;390:e083398

Sujan MAJ, Skarstad HMS, Rosvold G, Fougner SL, Follestad T, Nyrnes SA, Salvesen KÅ, **Moholdt T**. Neonatal outcomes following a preconception lifestyle intervention in people at risk of gestational diabetes: secondary findings from the before the beginning randomized controlled trial. ***Nutrients*** 2025;17:3492

Lemoine MCC, Klau LJ, Holmen M, Ashby ER, Aachmann FL, Andreassen T, Giskeødegård GF, **Moholdt T.** Unaltered 3'-sialyllactose and 6'-sialyllactose concentrations in human milk acutely after endurance exercise: a randomized crossover trial. ***Front Nutr*** 2025;12:1638430

Haganes KL, Hawley JA, Lydersen S, **Moholdt T**. Time-restricted eating and high-intensity interval training in women with overweight/obesity: A 2-year follow-up. ***Sci Rep*** 2025;15(1):14520

Moholdt T, Aye C, Bahls M, Crispi F, Ghossein-Doha C, Goossens E, Hanssen H, Kulkarni A, Lewandowski1 AJ, Mannaerts D, Nyrnes SA, Tiberi M, Van Craenenbroeck E. A call to action on pregnancy-related lifestyle interventions to reduce cardiovascular risk in the offspring. A Scientific Statement of the European Association of Preventive Cardiology of the ESC. ***Eur J Preven Cardiol*** 2025 [Online ahead of print]

Bishop DJ, Biddle SJH, Denay KL, Ferri A, Gibala MJ, Headley S, Jones AM, Jung M, Lee MJC, **Moholdt T**, Newton RU, Nimphius S, Pescatello LS, Saner N, Springfield S, Tzar C. Physical activity and exercise intensity terminology: a joint expert statement from the Exercise and Sport Science Australia (ESSA) and the American College of Sports Medicine (ACSM). ***Med Sci Sports Exerc*** 2025;57(11):2599-2613

Haganes KL, Devlin BL, Orr RK, **Moholdt T**. Impact of time-restricted eating and high-intensity exercise on nutrient intake in women with overweight/obesity: Secondary analysis of a randomized controlled trial. ***Nutrients*** 2025 Jan 8;17(2):218

Holm RL, Holmen M, Sujan MAJ, Giskeødegård GF, **Moholdt T**. Acute effect of aerobic exercise on human milk insulin concentrations: A randomised cross-over study. ***Front Nutr*** 2025;11:1507156

Skarstad HS, Haganes KL, Sujan MAJ, Gellein TM, Johansen MK, Salvesen KÅ, Hawley JA. **Moholdt T**. A randomized feasibility trial of time-restricted eating during pregnancy in people with increased risk of gestational diabetes. ***Sci Rep*** 2024;14(1):22476

Moholdt T, Sujan MAJ, Ashby ER, Beetham K. Interval training and cardiometabolic health in reproductive-aged females. ***Appl Physiol Nutr Metab*** 2024;49:993-1001

Moholdt T & Stanford KI. Exercised breastmilk: a kick-start to prevent childhood obesity. ***Trends Endocrinol Metab*** 2024;35:23-30

Holmen M, Giskeødegård GF, **Moholdt T**. High-intensity exercise increases breast milk adiponectin concentrations: a randomised cross-over study. ***Front Nutr*** 2023;10:1275508

Moholdt T, Ashby ER, Tømmerdal KH, Lemoine MCC, Holm RL, Sætrom P, Iversen AC, Ravi A, Simpson MR, Giskeødegård GF. A randomised controlled trial of exercise training during lactation on breast milk composition in breastfeeding people with overweight/obesity: Study protocol for the MILKSHAKE trial. ***BMJ Open Sport & Exerc Med*** 2023;9:e001751

Moholdt T, Parr EB, Devlin BL, Giskeødegård GF, Hawley JA. Effect of high-fat diet and morning or evening exercise on lipoprotein subfraction profiles: secondary analysis of a randomised trial. ***Sci Rep*** 2023;13:4008.

Haganes KL, Silva CP, Eyjólfsdóttir SK, Steen S, Grindberg M, Lydersen S, Hawley JA, **Moholdt T**. Time-restricted eating and exercise training improve HbA1c and body composition in women with overweight/obesity: A randomized controlled trial. ***Cell Metab*** 2022;34(10):1457-1471

Speakman J, Johnstone A, **Moholdt T**, Panda S, Klein S, Parker BL, Goodyear L. Focus on diet and exercise. ***Cell Metab*** 2022;34(10):1416-1419

Moholdt T, Parr EB, Devlin BL, Debik J, Giskeødegård G, Hawley JH. The effect of morning vs evening exercise training on glycaemic control and serum metabolites in overweight/obese men: a randomised trial. ***Diabetologia*** 2021;64:2061-76