



SUMMARY OF NFA'S RESEARCH PROGRAMMES

Ergonomic Work Environment and Musculoskeletal Health

NFA's research in the field of ergonomic work environment and musculoskeletal health contributes to the national goal set out in the 2020 tripartite agreement of "a safe and healthy ergonomic work environment in which fewer individuals are exposed to significant physical strain at work".



Overall Objectives

NFA has three overarching objectives for its research in ergonomic work environment and musculoskeletal health:

- 1 Develop and implement an applicable digital measurement system for ergonomic exposures by:**
 - Further developing the digital measurement system that NFA among others has designed to collect objective data on ergonomic exposures in the workplace.
 - Further refining the measurement system to ensure usability by occupational health and safety consultants.
 - Establishing a data management infrastructure that is flexible and compliant with GDPR.
- 2 Generate new knowledge about AI's impact on the ergonomic work environment and health, and how it can be used to strengthen these areas by:**
 - Mapping how AI is currently used, e.g. for work planning in selected industries.
 - Developing initiatives and conducting interventions on how AI can enhance workplace health and safety.
 - Expanding the opportunities to use of AI within occupational health and safety research.
- 3 Produce research-based knowledge on the development, implementation, cost-effectiveness, and dissemination of organisational workplace interventions by:**
 - Developing and managing partnerships, and carrying out pilot and intervention projects.
 - Developing, implementing, and evaluating, workplace interventions to promote musculoskeletal health.
 - Developing, implementing, and evaluating, workplace interventions aimed at improving senior workers' ability, possibilities, and motivation to remain longer in employment.

Priority Themes

NFA will prioritise the following themes in its research from 2025–2028:

Theme 1 **Phases of working life**

Work demands and employees' competences, capacity, resources, and need for flexibility often change over the course of a working life.

We aim to conduct research that generates knowledge about which factors impair, maintain, and enhance work ability, competences, and capacity to work across different age and occupational groups.

Theme 2 **Innovative technology**

We will develop, test, implement, and disseminate new technology-based solutions and methods that can improve ergonomic work environments and health.

We will also investigate how data-driven occupational health and safety efforts can generate high-quality solutions, and how AI can influence the work environment.



Theme 3 **Health promoting work environments**

We will develop, implement, and evaluate workplace interventions that promote employees' health by how work is organized, planned, and performed, called the Goldilocks work paradigm.

This will be done in close collaboration with international researchers, occupational workplace practitioners, and key occupational health and safety stakeholders.

Theme 4 **Musculoskeletal health at work**

We will conduct research aimed at enhancing workplace capabilities to enhance musculoskeletal health among their employees.

We will also develop the concept of "work-related musculoskeletal health" and continue the development and evaluation of the concept "workplace organisational health literacy".

