

**Department of Clinical Neuroscience (CNS)**

Division of Insurance Medicine

**Pain, common mental disorders, and work incapacity: the importance of genetics, environment, and comorbidity on the progression from disorder to sick leave and disability pension**

Musculoskeletal disorders (MSDs) and common mental disorders (CMDs) make up much of the global burden of disease among the working-age population and are the most frequent causes of work incapacity in terms of sickness absence (SA) and disability pension (DP). This research project aims to bridge insurance medicine and twin research to respond to the growing need of scientific knowledge regarding the mechanisms involved in the progression from (chronic) pain conditions and CMDs to work incapacity in terms of SA and DP across the working lifespan. This will be done using a large, nationwide, and unique prospective population-based twin cohort. Various aspects of the associations between pain conditions, CMDs and SA/DP are studied with special emphasis on the importance of comorbidity/multimorbidity, genetics and environmental factors on the development from disorder to work incapacity. National register data as well as survey data are used applying epidemiological methods. Results will provide new knowledge on selection mechanisms involved on the development from disorders to work incapacity, and regarding protective factors. Better knowledge of risk and protective factors would help to target preventive efforts.

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**Publications:**

Ropponen A, Wang M, Farrants K, Narusyte J, Svedberg P. Psychosocial working conditions and subsequent sickness absence – effects of pain and common mental disorders in a population-based Swedish twin sample. *Journal of Occupational and Environmental Medicine*. 2022 Jun 1;64(6):451-457. doi: 10.1097/JOM.0000000000002501.

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#### **Conference presentations (peer-reviewed abstracts):**

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Ropponen A, Mather L, Wang M, Narusyte J, Kärkkäinen S, Blom V, Bergström G, Svedberg P. Do diagnosis group play a role in associations between sickness absence and inpatient- and specialized outpatient care. EUMASS (European Union of Medicine in Assurance and Social Security), September 2021, Basel/digital online conference.

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Narusyte J, Ropponen A, Mittendorfer-Rutz E, Svedberg P. Chronic pain, depression/anxiety, and disability pension: a common liability behind? The European Union for Medicine in Assurance and Social Security Congress (EUMASS), Maastricht, the Netherlands, October 4-6, 2018.