

# **PREMUS2016**

## **TORONTO**

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March 16, 2016

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Allstream Conference Centre  
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# PREMUS2016 TORONTO

## Symposia

### **Biomechanics of the upper extremities during mobile IT work: (I) Smartphone use**

Biomechanics of the upper extremities during mobile information technology work: (i) smartphone use

*Dropkin, Jonathan*

Young children's movement whilst using mobile touch screen devices

*Straker, Leon*

Is motor variability influenced in a smart way by smartphones use?

*Madeleine, Pascal*

Is texting on mobile phones a risk factor for musculoskeletal disorders in neck and upper extremities?

*Gustafsson, Ewa*

Smartphone usage pattern and its biomechanical impact on the cervical spine and shoulder

*Shin, Gwanseob*

Mechanisms of motor control during smartphone texting contributing to neck pain

*Szeto, Grace*

Typing Biomechanical on the Touchscreen Virtual Keyboard on a Mobile Device

*Kim, Jeong Ho*

### **Biomechanics of the upper extremities during mobile IT work: (II) workstations and mobility**

Modified computer workstations to increase mobility: how do they affect trunk, neck and upper limb patterns?

*Côté, Julie*

A comparison of upper limb muscle recruitment strategies during a manual task in seated and standing work postures.

*Antle, David*

A low extra load during active pauses does not affect variability in muscle activation.

*St-Onge, Nancy*

Active pauses effect on muscle activation pattern and muscle oxygenation in women with and without trapezius myalgia doing repetitive task

*Januario, Leticia Bergamin*

Use of sit-stand stations during the first 2 months after their introduction

*Franca Barbieri, Dechristian*

Sit to Stand Workstations and Training: Examining the role of user control

*Robertson, Michelle*

### **Cohort studies using technical field measurements of sedentary work and/or occupational physical activity: protocols, experiences, results and prospects Part 1**

Objective measurements of physical activity in the Norwegian HUNT Study

*Mork, Paul Jarle*

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Design, methods and preliminary results from a study of objectively measured work exposure related to musculoskeletal health in physically demanding occupations

*Veiersted, Bo*

Design and experiences of objective measurements of physical activity during retirement transition in the Finnish Retirement and Aging Study (FIREA-FPS)

*Pulakka, Anna*

### **Cohort studies using technical field measurements of sedentary work and/or occupational physical activity: protocols, experiences, results and prospects Part 2**

The Danish Physical Activity Cohort with Objective measurements. Cohort Profile.

*Jorgensen, Marie Birk*

Thigh inclinometer measurements of 5000 persons in the Swedish CARDioPulmonary bioImage Study

*Palm, Peter*

Research protocol and profile of the “Danish observational study of eldercare work and musculoskeletal disorders” (DOSES)

*Karstad, Kristina*

Occupational differences in sedentary and moderate/vigorous activity exposure of young adults

*Straker, Leon*

### **Efficient assessment of physical workload**

Cost-efficient assessment of variation in arm posture during paper mill work

*Heiden, Marina*

Variance components of observed postural exposure: the effect of partly visible periods

*Trask, Catherine*

Improving Questionnaire-based Estimates of Occupational Physical Activity of Blue-Collar Workers by Individual and Work related Information

*Gupta, Nidhi*

Reliability of using observations when assessing different posture variables

*Garza, Jennifer*

Sample size and statistical performance in studies of sedentary behaviour – a novel approach based on compositional data analysis

*Mathiassen, Svend Erik*

Predicting physical exposures during computer use as a means to investigate the relation between physical exposures and symptoms in a large cohort of office workers

*Huysmans, Maaïke*

### **Evaluation of MSD biomechanical risk factors: the use of inertial sensors**

Using Inertial Sensors to monitor workers' trunk posture. The case of daycare workers.

*Dumas, Genevieve*

Orientation drift compensation of inertial sensors in magnetically distorted field applications

*Schiefer, Christoph*

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Effect of task complexity and duration when validating an inertial system with an optoelectronic system

*Robert-Lachaine, Xavier*

Hand position estimation using inertial sensors

*Bouvier, Brice*

Inertial measurement units for assessment of the pattern of forward bending among blue-collar workers from the dphacto cohort

*Madeleine, Pascal*

### **Implementing ergonomic change**

The implementation of ergonomics advice and the Stage of Change approach

*Rothmore, Paul*

Implementing a participatory change program in healthcare

*Van Eerd, Dwayne*

Processes, barriers and facilitators to implementation of a Participatory Ergonomics programme among nurses' aides

*Rasmussen, Charlotte*

Development and implementation of a guideline "Participatory Approach at the Workplace" in the Netherlands

*Huysmans, Maaike*

Participatory Ergonomics for Preventing Work-Related Musculoskeletal Disorders of Aircraft Cabin Cleaners in Hong Kong

*So, Billy*

### **Models of work-related musculoskeletal disorders- a round table discussion for new development**

Modelling personal and occupational factors in musculoskeletal disorders

*Shiri, Rahman*

Modelling recovery of work-related musculoskeletal disorder by intelligent work place exercise.

*Søgaard, Karen*

The "Pyramid of Disability" as a Conceptual Model for Work-Related musculoskeletal disorders (MSDs)

*Evanoff, Bradley*

Modelling work-related musculoskeletal disorders from a health economic perspective – the direct and indirect costs at different levels

*Hagberg, Mats*

### **Motor variability in working life' - determinants and effects on health and performance: Part 1**

Gender differences in muscle activity responses to a fatiguing short-cycle repetitive task

*Srinivasan, Divya*

Influence of posture variation in a repetitive manual task on maximal acceptable work pace and upper body kinematics

*Luger, Tessy*

Identification of individual working styles in a long-cycle assembly task using kinematic and EMG variables.

*Jackson, Jennie*

Variability in repetitive and fatigued shoulder work

*Keir, Peter*

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### **Motor variability in working life' - determinants and effects on health and performance: Part 2**

Effects of modified computer work posture on upper body muscle activity variability

*Côté, Julie*

Variability in pattern of muscular activity during a fatiguing repetitive task

*Samani, Afshin*

Variation in torso, head, neck, and shoulder postures during computer vs. non-computer interactions during office work.

*Garza, Jennifer*

Motor variability in relation to physical activity

*Madeleine, Pascal*

### **Musculoskeletal and venous disorders in standing work- risk factors and perspectives for future prevention**

Performance, muscle activity and discomfort while standing, sitting or using standing aids with different seat slopes

*Nicoletti, Corinne*

Discomfort and standing work in Europe

*Laeubli, Thomas*

Determining lower leg edema in standing work: Reliability of a modified water plethysmograph and effects of prolonged standing exposure

*Wall, Rudolf*

Body posture and movement among 19,000 employees in the industrial sector

*Klussmann, Andre*

Long-term leg muscle fatigue in standing work: effects of two ergonomic interventions

*Garcia, Maria-Gabriela*

Relationships between lower limb vascular and muscular outcomes in standing and sit-standing work postures

*Antle, David*

### **New methods for assessing risks for upper extremity MSDs : Part 1**

Effect modification of the association between biomechanical, work psychosocial exposure and carpal tunnel syndrome by personal and biomechanical factors.

*Harris Adamson, Carisa*

Threshold Limit Value for biomechanical risk factors (ACGIH-TLV®): a cohort study on carpal tunnel syndrome in manual workers

*Bonfiglioli, Roberta*

Job rotation – a failed ergonomics intervention approach?

*Bao, Stephen*

Associations between psychosocial and biomechanical factors and shoulder pain: A Structural Equation Model

*Bodin, Julie*

A comparison of three techniques for quantifying HAL and their impact on the ACGIH TLV for HAL risk predictions

*Kapellusch, Jay*

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### **New methods for assessing risks for upper extremity MSDs: Part 2**

The influence of repeated and fluctuating stress on fatigue life of musculoskeletal tissues

*Gallagher, Sean*

Transformation between ACGIH “Hand Activity Level”, and “Normalized Peak Force” and measurements of wrist movements and muscular load

*Hansson, Gert*

Automated Computer Vision Exposure Analysis for Repetitive Motion Jobs

*Radwin, Robert*

A Time-Weighted Approximation of Total Demand to Determine Maximum Acceptable Efforts Across a Combination of Different Tasks

*Potvin, Jim*

Using the TLV for HAL and the Strain Index to Quantify Risk of CTS for Workers with Job Rotation

*Kapellusch, Jay*

### **Physical exposure and back disorders in the occupational life**

Background of epidemiological studies in Germany to analyse dose-response relations between biomechanical low-back load and lumbar-disease risk

*Jaeger, Matthias*

Dose-response relations between lifetime physical exposures to manual materials handling or trunk-inclined postures and lumbar-spine diseases

*Seidler, Andreas*

Multimodel methodology for estimating cumulative dose models to analyse physical exposure effects

*Morfeld, Peter*

Application of cumulative dose models to indicate occupational back exposure in praxis

*Schick, Ralf*

Simplified procedure for lumbar-disc compressive force estimation in cumulative spinal-dose calculations

*Ellegast, Rolf*

### **Physical load risk assessment methods for practitioners**

An OHS-practitioner tool for improving pushing and pulling operations

*Lind, Carl*

Facilitating improvement measures in manual handling using the RAMP-tool

*Lind, Carl*

Study protocol of the validation of new Key Indicator Methods

*Klussmann, Andre*

Pretesting of new Key Indicator Methods in Germany using techniques of qualitative research

*Brandstaedt, Felix*

Towards a better understanding of exposure limits for occupational postures

*Coenen, Pieter*

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A new risk assessment method for push and pull tasks for practitioners

*Douwes, Marjolein*

### **Sustainable prevention of WMSD: gender analysis and development of effective interventions: Part 1**

Sex/gender and motor control: what should you know before planning an intervention?

*Côté, Julie*

Development of Integrative Prevention to Improve Workers' Health: a Gender-Sensitive Approach

*Calvet, Benedicte*

Gender differences in duration of work absence for non-traumatic work-related musculoskeletal disorders

*Stock, Susan*

When management indicators make women's work invisible: the case of personal support workers in Ontario

*Chadoin, Martin*

### **Sustainable prevention of WMSD: gender analysis and development of effective interventions: Part 2**

How is gender taken into account in the action plans of participatory ergonomic interventions aimed at preventing WMSDs?

*Albert, Valerie*

Utilization-focused evaluation of the implementation of OHS learning tools employed by teachers in the Quebec work-oriented training path: Is gender considered?

*Laberge, Marie*

WMSD prevention and education: Why the supervisory tools used by teachers in charge of trainee placements in male-dominated training for semi-skilled trades should be gender-sensitive

*Tondoux, Aurelie*

### **Technical field measurements of sedentary work and occupational physical demands: A PEROSH-initiative**

Development of a CTS-risk assessment method for manual working processes based on technical measurements

*Hoehne-Hueckstaedt, Ulrike*

Validation and Calibration of Questionnaire-based Sitting Time: An Accelerometer-based Study among Blue Collar Workers

*Gupta, Nidhi*

How to objectively measure lifting burden in the field on many participants? Results and experience from use of pressure-measurement insoles in a field study

*Koch, Markus*

Classification of wearables for occupational physical activity measurements

*Weber, Britta*

Influence of task proportion errors on the effectiveness of task-based job exposure modeling

*Mathiassen, Svend Erik*

Practical objective measurements for sedentary time and body postures – utilizing Excel and iOS

*Forsman, Mikael*

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### **The design, development and use of digital tools for MSD prevention**

eOffice Ergo: Development of an eLearning course

*Van Eerd, Dwayne*

Can We Flip the Classroom in Occupational Health?: A Case Study Related to Workforce Aging

*Scott, Ken*

Evaluation of Oculus Rift as a tool for ergonomics assessments within Siemens Jack

*Sonne, Michael*

Designing Mobile Apps for the Workplace: Building Capacity and Big Data

*Vandergriendt, Curtis*

### **Using job-exposure matrixes to determine the impact of physical workload on workers musculoskeletal health: challenges and opportunities: Part 1**

Development and evaluation of a Job Exposure Matrix (JEM) for general population studies of musculoskeletal disorders

*Evanoff, Bradley*

Comparison between two Danish expert based JEMs and exposure estimates derived from ISCO linked US O\*NET job groups

*Andersen, Johan Hviid*

Job Exposure Matrices for estimating workplace physical exposures

*Evanoff, Bradley*

### **Using job-exposure matrixes to determine the impact of physical workload on workers musculoskeletal health: challenges and opportunities: Part 2**

Occupational mechanical exposures and risk of inguinal hernia, varicose veins, osteoarthritis of the hip and combined pain in the lower and upper body – experiences from using the Lower Body JEM in large scale epidemiologic studies

*Frost, Poul*

Incident CTS in a large pooled cohort study: Results obtained by JEM versus results obtained from observed exposures

*Dale, Ann Marie*

A general population job exposure matrix based on expert ratings and technical measurements: Upper arm elevation and repetitive shoulder movements

*Dalbøge, Annette*

### **When do scientific reviews have an impact on enterprise or public policy?**

Impact of OHS Systematic Reviews: a Canadian Perspective

*Irvin, Emma*

Knowledge Translation at the Liberty Mutual Research institute for Safety

*Noy, Ian*

The impact of a scientific review on return to work. The Danish experience.

*Mortensen, Ole*



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The impact of reviews summarizing the state-of-the-art regarding the relation between occupational hazards and musculoskeletal disorders on national policy in the Netherlands

*van der Beek, Allard*

Case Studies: Reports from the US National Academy of Sciences

*Rempel, David*

### **Workplace interventions for sedentary work**

Feasibility of implementing a high intensity interval training program with an office environment

*Fischer, Steven*

Are workplace interventions for reducing sitting at work effective?

*Shrestha, Nipun*

Promotion of movement@work for office workers with low back pain

*Daenen, Liesbeth*

Office work and ergonomic pitfalls

*Hermans, Veerle*

Postural and physiological effects of dynamic office workstations

*Ellegast, Rolf*

Effects of occupational standing on musculoskeletal outcomes – a systematic review

*Coenen, Pieter*

Workstation alternatives to reduce sitting time at work

*van der Beek, Allard*

Interventions to reduce sedentary behaviour and increase physical activity during productive work time - Effects on work performance and metabolic and physiological outcomes

*Huysmans, Maaike*

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### Field evaluations of MSD prevention policies, programs and practices

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How should job rotation be designed for manufacturing industrial workers? A systematic review

*Padula, Rosimeire*

The effectiveness of job rotation to prevent work-related musculoskeletal disorders: a cluster randomized clinical trial

*Padula, Rosimeire*

Physical Conditions of Work of the Portuguese Air Force Controllers and Air Traffic Incidents

*Corticeiro Neves, Miguel*

Evaluation of an ergonomic intervention in Swedish flight baggage handlers

*Bergsten, Eva*

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A gap analysis of MSD prevention activities in a comprehensive construction safety management program

*Dale, Ann Marie*

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*Dehdashti, Alireza*

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*Van Eerd, Dwayne*

Addressing essential skills gaps among participants in an OHS training program: a pilot study

*Saunders, Ron*

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Successes and challenges of implementing a comprehensive ergonomics and wellness total worker health intervention on commercial construction sites

*Grant, Michael*

Effects of an ergonomic intervention on posture and discomfort of office workers – a cluster randomized controlled trial

*Barros, Fernanda*

Analysis and Ergonomic Improvement Proposals for the Operations of Dry Food Distribution: The Nutresa Ergonomics Logistics Case

*Quintana, Leonardo*

Evaluation of Facilitators and Barriers to Implementing Ergonomic Solutions in Construction

*Welch, Laura*

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Evaluation of two guidance strategies on the use of ergonomic measures

*Van der Molen, Henk*

The effectiveness of an “ergonomic” keyboard for reducing musculoskeletal symptoms

*Baker, Nancy*

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Survey of Prevalence and Risk Factors Associated with Upper Extremity Musculoskeletal Disorders by Repetitive Job Activities Methods in Baker of Iran

*Ebrahemzadih, Mehrzad*

Encouraging Postural Breaks – findings from a two year behaviour change study

*Williams, Claire*

### Session 5

Safe Patient Handling: Does Literature Support Adoption

*Davis, Kermit*

Determinants of low back pain in nursing home workers after implementation of a safe resident handling program

*Gold, Judith*

Conditions for the prevention of musculoskeletal and psycho-social disorders: The case of the hospital sector

*Laneyrie, Elsa*

An integrated hospital-wide safe patient handling and mobilization program reduces lifting injuries

*Dennerlein, Jack*

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Whole Body Vibration Exposures and Truck Drivers' Health Status in the United States

*Kim, Jeong Ho*

A survey on occupational low back pain and its risk factors in steel industry workers in Iran

*Rafeemanesh, Ehsan*

Work-related musculoskeletal disorders in dockworkers: a study in Southern Brazil

*CEZAR-VAZ, MARTA REGINA*

Maximum acceptable weights for one-handed lifting and lowering tasks performed by males and females Chilean workers

*Gutiérrez, Manuel*

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Effects of physical exercise performed at the workplace on muscular capacity and symptoms in office workers

*Cabral, Anelise*

Rotator Cuff Tendinopathy in supermarket cashiers

*Serranheira, Florentino*

Implementation of a work-site adapted physical activity program targeting trunk muscle endurance and flexibility among vineyard-workers

*Balaguier, Romain*

Union Driven MSD Prevention Project

*Aversa, Terri*

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Influences of duty cycle and tool mass during overhead work

*Nogueira, Helen*

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A cohort study of a 10-week exercise intervention to improve work posture and neck/shoulder symptoms in dental health students

*Johnston, Venerina*

Prismatic glasses reduces neck pain in dental personnel

*Lindegard, Agneta*

Do active pauses change the pattern of electromyographic activity during repetitive manual task?

*Januario, Leticia Bergamin*

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Workplace Practices aimed at preventing prolonged work disability in workers compensated for work-related musculoskeletal disorders (WRMSD). A multiple case study.

*Nastasia, Iuliana*

Does the Organisation Make a Difference? - An Evaluation of Women's Work Environment Programme

*Niemi Birgersdotter, Lena*

Effectiveness of a Matching-Fund Program to Motivate Workplace Health and Safety Improvements

*Meyers, Alysha*

Convincing stakeholders to make changes in work situations through modification in their representations

*Albert, Valerie*

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A cost benefit analysis of peer-coaching for overhead lift use in the long-term care sector in Canada

*Tompa, Emile*

Determinants of Osteoarthritis Linked to Occupational Radiography – Epidemiologic Surveillance: Preliminary Results of the D.O.L.O.R.E.S. Pilot Study

*Huntley, Samuel*

The Necessity for Effective Prevention of WRMSDs by Improving the Present Statistics System for Occupational Diseases

*Nakata, Minori*

One year effects of a workplace integrated care intervention for workers with rheumatoid arthritis

*Boot, Cecile*

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### Economic burden of work-related MSDs

#### Session 1

Costs of Work-Related Musculoskeletal Disorders in Colombia 2009-2012

*Riaño Casallas, Martha Isabel*

Economic Burden of Occupational Musculoskeletal Disorders (MSDs) in the Wholesale and Retail Trade (WRT) Sectors and Subsectors

*Bhattacharya, Anasua*

The Burden of Work related Musculoskeletal disorders (MSDs) in Sweden is increasing

*Noor, Adnan*

Body mass index (BMI), musculoskeletal symptoms, and health-related job loss in older workers

*Linaker, Catherine*

The monetary value of productivity losses due to musculoskeletal disorders in office workers

*Pereira, Michelle*

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Evaluation of the cost-effectiveness of therapeutic ultrasound versus application of corticosteroids in the management of moderate carpal tunnel syndrome in Colombian working population

*Palencia, Francisco*

Costs of Work Related Low Back Disorders: A huge but unappreciated burden on Mexico's health systems

*Serratos-Perez, Nieves*

The place of the musculoskeletal disorders in the practice of Occupational Health Services

*Lyubomirova, Karolina*

Whole Body Vibration Exposures: Using Low Back and Neck Claims to Assess the Cost and Health Effects of Different Bus Driver Seats

*Gregersen, Kat*

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### Epidemiology of work-related MSDs

#### Session 1

Epidemiological differences between localised and non-localised low back pain

*Coggon, David*

Use of multiple data sources for surveillance of work-related chronic low-back pain and low-back spinal damages in a French region

*Fouquet, Natacha*

Are different mechanisms a potential reason for contrasting evidence on relationships between sedentary work and low back symptoms?

*Straker, Leon*

Multidimensional factors associated with low back pain in adolescence

*Straker, Leon*

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Is there an exposure-response relationship between the NIOSH lifting index and low back disorders?

*Lu, Ming-Lun*

Low back pain and potential work related factors among home care aides

*Sun, Chuan*

Association between neck pain and working postures among forklift operators

*Wåhlin, Charlotte*

Occupational risk factors for low back pain among Indonesian coal mining workers

*Widanarko, Baiduri*

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More sitting time at work is associated with favorable changes in neck-shoulder pain across one year in blue-collar workers

*Hallman, David*

Physical risk factors for the development of neck pain in office worker: A systematic review

*Jun, Deokhoon*

Is work a risk factor for lumbosacral radicular syndrome? A systematic review and meta-analysis of clinical studies

*Kuijer, Paul*

High number of EMG gaps and short periods of sustained low-level trapezius activity is associated to little neck pain

*Østensvik, Tove*

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Diagnosis of work related lumbar disc diseases: results from a caselist of a public occupational health clinic

*Carta, Angela*

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Prognosis after surgery for subacromial impingement syndrome: negative influence of high preoperative occupational shoulder exposures

*Svendsen, Susanne Wulff*

The content validity of the WORk-Related Questionnaire for UPper extremity disorders (WORQ-UP)

*Aerts, Bas*

Long-Term Prolonged Standing: The Silent Risk Factor for Lower Extremity Health Outcomes

*Kotowski, Susan*

## Session 5

Physical work demands and risk of long-term sickness absence in the general working population and among blue-collar workers: Prospective cohort study

*Andersen, Lars*

Working with Multisite Chronic Pain: Findings from the (MUSCLE) MUsculoskeletal Study of Construction workers' Longitudinal Exposures

*Caban-Martinez, Alberto*

Work-Related Musculoskeletal Disorders in the U.S. Construction Industry, 1992-2013

*Dong, Xiuwen Sue*

Evaluation of Ergonomic risk factors in an interconnector manufacturing company

*Sharan, Deepak*

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Long term symptomatic, functional, and work outcomes of CTS among carpenters

*Franzblau, Alfred*

Musculoskeletal disorders and total occupational exposure in commercial lobstering

*Fulmer, Scott*

Neck- and upper extremity pain in sonographers – associations with occupational factors

*Gremark-Simonsen, Jenny*

Occupational Health, Work pattern and Psychological factors association with Accidents occurrence among the Non-Government (NG) city bus drivers of Kolkata

*Dev, Samrat*

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Musculoskeletal symptoms and physical exposures of dental hygiene students during transition into practice: a 2 year prospective cohort study

*Garza, Jennifer*

relationship mental workload with musculoskeletal disorders among Alzahra hospital nurses by NASA-TLX index and CMDQ

*Habibi, Ehsan*

Musculoskeletal disorders in physical and occupational therapists in long-term care work

*Kotejoshyer, Rajashree*

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Lower extremity symptom persistence and recovery of nursing home workers

*Kurowski, Alicia*

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Contribution of individual, physical, work-related, and psychosocial variables to work ability in office workers

*Johnston, Venerina*

The role of individual and organisational factors in completion of two workplace-based health promotion programs among office workers

*Welch, Alyssa*

The risk for work-related carpal tunnel syndrome by occupational type in the US controlling for related comorbidities

*Baker, Nancy*

Task-precision and time-dependent changes of motor variability during a sustained bimanual reaching task

*Longo, Alessia*

### Session 9

Analysis of ergonomic risk factors in a seafood manufacturing company

*Sharan, Deepak*

Ergonomic risk factors in an electrical equipment manufacturing company

*Sharan, Deepak*

Occupational Risk Assessment of Lower Back Pain for Metal Industry Workers

*Shirokov, Vasiliy*

The impact of gender on surgical decision-making following workplace musculoskeletal injury

*Jones, Andrea Marie*

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Predictors of work related musculoskeletal disorders among female public hospital nurses

*Amin, Nur Azma*

A follow-up study of the importance of occupational and personal factors for neck-shoulder pain among females

*Arvidsson, Inger*

Gender differences in upper limb symptoms – Are women more vulnerable to work exposures?

*Greiner, Birgit*

Disability pension due to musculoskeletal disorders in men and women after long-term exposure for heavy physical workload

*Kjellberg, Katarina*

### Session 11

Factor Analysis affecting the knee symptoms and diseases of farmers in South Korea.

*Shin, Donghee*

Assessment of MSDs of Women Farmers in Groundnut Cultivation

*Singh, Suman*



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Rural Agriculture as a Biopsychosocial Context for Low Back Health: Preliminary Results of the Saskatchewan Farmers Back Study  
*Trask, Catherine*

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Relationship between social support and upper limb pain in employed and self-employed healthcare therapists in Ireland  
*Hogan, Dervla*

Work-related musculoskeletal disorders (MSDs) among young workers in the brick industries of Nepal.  
*Joshi, Sunil Kumar*

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Prevalence and Associated Risks Factors of Playing Related Musculoskeletal disorders among String Instrumentalists in a Nigerian sample: a cross-sectional survey  
*Victor, Egwuonwu*

Musculoskeletal symptoms prevalence and their associated risk factors among Iranian workforce  
*Choobineh, Alireza*

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*Coenen, Pieter*

Multisite musculoskeletal pain among young technical school students entering working life  
*Hanvold, Therese Nordberg*

Occupational influences on Progression of Spondylolysis and Spondylolisthesis in young adults  
*Moshe, Shlomo*

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*Hansson, Gert*

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*Harris Adamson, Carisa*

Declining incidence of work-related musculoskeletal disorders in Ontario 2004-2011  
*Mustard, Cameron*

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### Session 15

Is coxarthrosis an occupational disease by law?

*Hartmann, Bernd*

Kneeling as occupational risk in the etiology of the knee osteoarthritis - secondary analysis of the Danish DWECS cohort study

*Liebers, Falk*

Non-traumatic upper extremity musculoskeletal pain, physical and psychosocial/organizational work exposures and psychological distress: a path analysis of mediated and moderated effects

*Nicolakakis, Nektaria*

Demographic, clinical and work-related factors associated with return-to-work trajectories for musculoskeletal disorders

*Reiff, Eline*

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### Biology of work-related MSDs

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Finger flexor tendon orientation as a function of forearm and wrist postural change

*Salas, Elizabeth A.*

Simultaneous activation of the trapezius and serratus anterior muscles in different positions for sEMG normalization

*Machado Cid, Marina*

Optimal Elbow Angle for Typing on a Tablet

*Yoon, Jangwhon*

The Effect of Full Finger Flexion on the Deformation of Median Nerve at Carpal Tunnel

*Loh, Ping Yeap*

#### Session 2

Biochemical biomarkers for MSDs: systematic review results

*Gold, Judith*

Sickness behaviors and serum and brain cytokines increase with performance of high demand tasks and increase further with aging in a rat model of overuse

*Barbe, Mary*

Sickness behaviors in a rat model of overuse are linked to systemic inflammatory cytokines and attenuated by anti-inflammatory drugs

*Barbe, Mary*

Development of a treatment protocol based on the biophysiology of computer related MSDs

*Damany, Suparna*

#### Session 3

Associations between biomarkers and changes in pain and functional ratings in subject with unspecific neck pain

*Hellström, Fredrik*

The Concavity Index: A Novel Approach for Quantifying Intervertebral Disc Degeneration

*Salar, Menekse*

Differentiating lumbar discovertebral changes associated to occupational biomechanical overload: integrated Magnetic Resonance imaging appraisal

*Bonfiglioli, Roberta*

Occupational load and spine, disc degeneration

*Kim, Youngki*

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### Session 4

Median nerve affection during seasonal repetitive work with moderate force

*Tabatabaeifar, Sorosh*

The prediction of health risks in heavy equipment vehicle operators based on average-continuous and cumulative-impulsive whole body vibration exposures

*Johnson, Peter*

Muscle strength at retirement age is not enhanced by heavy manual work

*Walker-Bone, Karen*

Assessment of an air-filled seat pad for reducing Whole Body Vibration Exposure in professional automobile drivers

*Jonsson, Per*

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## TORONTO

### Measuring exposures in a new world of work

#### Session 1

Whole Body Vibration Exposure Among Long Haul Drivers and the Potential For Knowledge Utilization

*Bigelow, Philip*

WBV: A free iOS application for measuring whole-body vibration exposures

*Burgess-Limerick, Robin*

A simplified head-neck dynamic model for evaluation of whole-body vibration on helicopters

*Huang, Ya*

An Exploration of the Effects of Cycle Time and Force Variations on Muscle Fatigue during Submaximal Intermittent Isometric Exertions

*Mattison, Miriam*

#### Session 2

Computer workers with neck pain spend more time in head extension than healthy controls

*Jun, Deokhoon*

Low back pain affects self-reported task durations: results of an experimental study

*Pulido, Jean*

Impact of rest-break interventions on neck and shoulder posture of symptomatic VDU operators during prolonged computer terminal work

*Chaikumarn, Montakarn*

Improving neck postures during tablet use

*Hermans, Veerle*

#### Session 3

Physical demands of paramedic work in real-life emergency conditions

*Corbeil, Philippe*

The effects of sex and obesity on three-dimensional trunk motion assessment of paramedics in real-life emergency conditions

*Corbeil, Philippe*

Use of MAPO to assess the risk for work-related MSDs among personal care workers working in nursing homes

*Cheung, Kin*

Is objectively measured sitting and standing at work associated with low back pain among Norwegian health care and construction workers?

*Lunde, Lars-Kristian*

Physical workload and home condition among home care aides

*Sun, Chuan*

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### Session 4

Biomechanical evaluation of hotel luxury bed making while using a mattress lift tool and fitted sheets.

*Harris Adamson, Carisa*

Assessing workers' ability to recognize lifting risk factors for low back pain: Investigating the efficacy of a simple educational message.

*Ngo, Binh*

Lifting Demands of Daycare Workers: The Effect of the Caregiver to Child Ratio Regulations

*Diesbourg, Tara*

Associations between lower extremity musculoskeletal disorders and tibial acceleration measures

*Dutt, Mohini*

### Session 5

How Significant Are the Biomechanical Loads Experienced by Nurses as the Slings used with Mechanized Lifting Equipment are Placed Under Patients?

*Lavender, Steven*

An ergonomics evaluation and intervention of corpses handling

*Méndez, Cristian L*

Sensitivity analysis of surface electromyography during different lifting conditions

*Brandt, Mikkel*

The Revised NIOSH Lifting Equation for Job Rotation: The Cumulative Lifting Index

*Kapellusch, Jay*

### Session 6

Factors affecting the use of IMUs in forearm rotation assessment

*Lagree, Andrew*

Occupational mechanical exposures and risk of shoulder surgery: modelling cumulative exposures, duration and intensity

*Dalbøge, Annett*

Trapezius oxygenation and hemodynamics during work: a field study using EMG and Near Infrared Spectroscopy (NIRS)

*Gold, Judith*

Evaluation of two types of reference contraction on recordings of forearm extensor muscle activity

*Dahlqvist, Camilla*

Is there a best way to crank a lever? The scapula posture perspective

*Lin, Jia-Hua*

### Session 7

The DASH (Disabilities of the Arm, Shoulder and Hand) at work: A review of its use and measurement properties

*Kennedy, Carol*

Predicting Shoulder Fatigue using a Three-Compartment Model with Graded Motor Units

*McDonald, Alison*

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Quantitative measuring of workload to define exposure thresholds in Cumulative-Trauma Disorders applied in Rotator Cuff Injury: a cohort study.

*Alvarez Rincón, David*

The Work-Related Questionnaire for the Upper extremity (WORQ-UP): factor analysis and internal consistency.

*Aerts, Bas*

Implementing the RMQ Approach to Maximum Acceptable Effort: Assessing Cumulative Hand Activity Within Jobs and Across Job Rotations Based on Duty Cycle

*Vandergriendt, Curtis*

### Session 8

Assessing Energy Balance, Physiological Reactions, and Nutritional Practices in Ontario FireRangers During Fire Deployment

*Robertson, Ayden*

Quantifications of body posture of forklift truck operators

*Lu, Ming-Lun*

MUSCULOSKELETAL SYMPTOMS AND BACK POSTURAL EXPOSURE IN CAR MAINTENANCE WORKERS

*Carnaz, Letícia*

Evaluation of Ergonomic risk factors, musculoskeletal symptoms, exertion and workload among physiotherapists

*Rajkumar, Joshua Samuel*

### Session 9

Different autonomic responses to occupational and leisure time physical activity among blue-collar workers

*Sato, Tatiana*

Muscle Fatigue Assessment in Leather-cutting Tasks. Comparison between Manual and Machine-assisted Operations.

*Serratos Perez, J Nieves*

Physical workload of garbage collectors in two organization modes: one loader vs. two loaders

*Desbrosses, Kévin*

Sustained low physical exposure in a lean process plant

*Håkansson, Malin*

Utilization of Activity Monitors to Understand Falls

*Poole Wilson, Tiffany*

### Session 10

Effects of artifacts in a repetitive light assembly task on muscular activity according to age and work rate constraints

*Claudon, Laurent*

Effect of time constraint on performance speed of a repetitive assembly task according to age

*Gilles, Martine Annie*

Does increased automation influence the physical workload of the hands during repetitive manual work?

*Locks Neto, Francisco*

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Feasibility Study of Creating a Harmonized Approach for MSD Hazard Assessment and Engineering Tools

*Yazdani, Amin*

Relevance of Pathomechanisms in developing appropriate Exposure Assessment Models for work-related musculoskeletal disorders

*Forde, Martin*

### Session 11

Scientific background of practical methods to evaluate static postures at work

*Hartmann, Bernd*

Full-shift and task-specific ergonomic exposure assessment of posture and muscle activity among dairy parlor workers in US large herd operations

*Douphrate, David*

In vivo evaluation of a wearable trunk support for working in sustained stooped postures

*Baten, Chris*

Comparing Postural Responses to Push and Pull Task Demands using Optical Motion vs. Inertial Measurement

*Lim, Sol*

### Session 12

Metrics for quantifying variation in biomechanical exposure data – what does the literature show us?

*Locks Neto, Francisco*

Combining qualitative and quantitative data to target interventions effectively

*Major, Marie-Eve*

Comparing QEC with risk assessments without any specific method

*Nyman, Teresia*

Content and quality of questionnaires for assessment of physical functioning in MSDs – A systematic review of the literature

*Wiiitavaara, Birgitta*

### Session 13

A cross-sectional study of alternations between physical and mental tasks

*Jahncke, Helena*

Are Movement Quality, Physical Performance and Perceptual Responses affected during Concurrent Physical and Cognitive Task Execution?

*Mattison, Miriam*

Assessing Return-to-Work Status Questionnaires in an Occupational Rehabilitation Population

*Boyle, Eleanor*

Different EMG normalization methods and implications for field-based data acquisition of muscle activity

*Thamsuwan, Ornwipa*

Influence of different visual display unit configurations on physiology and performance

*Brütting, Mark*



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## Management of work-related MSDs and sustainable employment

### Session 1

Gender differences in associations between neck pain, neck range of motion and muscle function in office workers

*Chen, Xiaoqi*

Age as a factor affecting repetitive manual handling technique

*Boocock, Mark*

Lifting during Pregnancy Provisional Guidelines

*Hudock, Stephen*

Interventions to promote work participation in older workers with musculoskeletal disorders; results from a systematic review

*Steenstra, Ivan*

### Session 2

Does the addition of a vocational advice service to best current care improve work outcomes in patients with musculoskeletal pain? The SWAP trial ISRCTN 52269669

*Wynne-Jones, Gwenllian*

Korean Firefighters Hesitate to Report the Lower Back Pain

*Yoon, Jangwhon*

Female Human Service Organisation Workers on Long-term Sick Leave with Neck Pain; approaches used in the rehabilitation process for returning and handling the work

*Ahlstrom, Linda*

Prevalence of low back pain in Danish office workers and the effect of Intelligent Physical Exercise Training: A randomized controlled trial.

*Dalager, Tina*

### Session 3

Benefit of early or immediate return-to-work on back pain and function persists after controlling for multiple confounds

*Shaw, William*

Low physical exposure at work is associated with excellent work ability in workers with neck pain

*Oliv, Stefan*

The risk for low back pain caused by driving professions in a young adult population

*Moshe, Shlomo*

Workplace based interventions neck pain in office workers: a systematic review and meta-analysis

*Chen, Xiaoqi*

### Session 4

The experiences of stakeholders of a primary care based vocational advice service: Qualitative interviews within the SWAP trial (ISRCTN 52269669)

*Wynne-Jones, Gwenllian*

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Do Prognostic Factors for Receiving Wage Replacement Benefits Differ Between Older and Younger Workers?

*Algarni, Fahad*

Determinants of work participation in older workers with musculoskeletal disorders; results from a systematic review of prognostic studies

*Steenstra, Ivan*

Systematic review of prognostic factors for return to work in workers with sub acute and chronic low back pain

*Steenstra, Ivan*

### Session 5

Effectiveness of two different modes of onsite Ergonomic intervention to prevent work related musculoskeletal disorders

*Sharan, Deepak*

Effectiveness of an ergonomic intervention program for reducing work-related musculoskeletal disorders for community nurses in Hong Kong

*So, Billy*

Effects of Ergomotor intervention on motor control in the neck and shoulder region during functional movements in people with work-related neck-shoulder disorders

*Szeto, Grace*

A systematic review on onsite fitness programs in the prevention of work related musculoskeletal disorders

*Sharan, Deepak*

### Session 6

Computer Vision-based Postural Ergonomic Evaluation

*Seo, Joonoh*

Ergonomics application in Health Care Unit at NMD, Reliance Industries Limited, India

*Gupta, Raghvendra*

A critical review of the literature on the effectiveness of ergonomic interventions in preventing Work-related Musculoskeletal Disorders

*Diabaté, Massiagbè*

Proposal for exercise resistance training for industrial workers

*Padula, Rosimeire*

### Session 7

What's new in return-to-work (RTW) for musculoskeletal, pain-related and mental health conditions?

*Cullen, Kim*

Organizing workplace health literacy to reduce musculoskeletal pain and consequences

*Larsen, Anne Konring*

Returning to work in spite of conflicts: an exploration of different types of decision-making in work rehabilitation after a chronic musculoskeletal disorder

*Gouin, Marie-Michelle*

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Injured Workers' Lived Experience of Perceptions of Organizational Justice during Return to Work: A Phenomenological Study

*Larmour-Trode, Sherrey*

Which patients do not return to work after total knee arthroplasty?

*Kuijer, Paul*

### Session 8

Effects of multimodal pain rehabilitation in combination with a web-based - behavior change program - an RCT-study within primary health care in Sweden

*Gard, Gunvor*

Participatory organizational intervention for improved use of assistive devices for patient handling: a single blinded cluster randomized controlled trial

*Jakobsen, Markus Due*

Musculoskeletal disorders among cleaning staff at the hospital and preventing arrangements

*Holbach, Michael*

Role of occupational health clinics in the prevention of work related musculoskeletal disorders in an information technology company

*Sharan, Deepak*

### Session 9

A method for the estimation of workers' risk of developing MSDs in early stages of process planning

*Rego-Monteil, Nadia*

Building on good ideas: developing MSD interventions with residential builders

*Tappin, David*

Analysis of worker strategies: a comprehensive understanding for a sustainable prevention of work-related Musculoskeletal Disorders

*Major, Marie-Eve*

Workplace barriers to reducing incidence of musculoskeletal disorders

*Oakman, Jodi*

### Session 10

Are organizational or psychosocial work interventions effective in preventing work-related musculoskeletal disorders? A systematic review of the literature

*Stock, Susan*

Exploring the diagnostic value of heart rate variability for sustained employability.

*Six Dijkstra, Marianne*

Does the difficulty of a memory task interspersed between bouts of repetitive work influence recovery?

*Mixter, Susanna*

A novel chamber lid removal tool reduces the spinal and shoulder loading

*Abdoli-Eramaki, Mohammad*

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## TORONTO

### Health disparities and globalization

#### **Session 1**

Towards understanding relations among social inequalities, gender and working conditions associated with WMSD  
*Stock, Susan*

Lifestyle and work-related factors are important for the health of Australian long distance commute and residential miners: evidence from a cross-sectional survey  
*Johnston, Venerina*

Work-Related Musculoskeletal Discomfort Among Latino Thoroughbred Workers  
*Swanberg, Jennifer*

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## TORONTO

### Emerging issues in the prevention and management of work-related MSDs

#### Session 1

Putting Evidence in Context – what works in Occupational Health and Safety (EC-OHS)

*Irvin, Emma*

Best Practices for Identifying Best Practices, and Teaching Workers to Use Them

*Taylor, Carrie*

Occupational health and safety knowledge user perspectives on research use

*Van Eerd, Dwayne*

Key Informant's Perspectives on MSD Prevention and Management Commitment, Training, and Workers' Participation

*Yazdani, Amin*

Ergonomics and Research to Practice (r2p) in the Construction Industry

*Welch, Laura*

#### Session 2

Short version of Western Ontario Rotator cuff Index (Short-WORC): A valid and responsive measure to evaluate health related quality of life in patients with rotator cuff disorders

*Dewan, Neha*

Reproducibility of short version of Western Ontario Rotator Cuff Index (Short-WORC) to assess health related quality of life among patients with rotator cuff pathology

*Dewan, Neha*

Effects of Driving and Whole-body Vibration on Reaction Times in Truck Drivers: Findings from a Pilot Study

*Du, Bronson*

A randomized controlled trial evaluating the ability of truck seats to reduce WBV exposures and self-reported adverse health outcomes

*Johnson, Peter*

The Effect of a Multi-Axial suspension on Whole Body Vibration Exposures and Muscle loading on the Neck and Low Back in an Agricultural Tractor Application

*Kim, Jeong Ho*

#### Session 3

Musculoskeletal Disorders as a Fatigue Failure Process: Implications and Research Needs

*Gallagher, Sean*

The influence of individual characteristics on fatigue life of musculoskeletal tissues: implications and recommendations

*Huangfu, Rong*

Human-Robot Collaborations as Job Interventions for Physical Stress

*Pearce, Margaret*

Factors at the transition: Understanding return to work (RTW) decisions

*Kennedy, Carol*

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### Session 4

Quick and Dirty Ergonomics: When is this approach appropriate?

*Blake, Josie*

Ergonomic improvements go hand-in-hand with productivity in a logistic environment

*Delaruelle, Dirk*

Pushing Ergo Upstream: Selling Ergonomics to Engineers

*Hoodless, Karen*

Ergonomic benefits from a laparoscopic instrument with rotatable handle piece depend on the area of the operation field and working height

*Steinhilber, Benjamin*

### Session 5

Prescription Analgesic Patterns Before and After a Workers' Compensation Claim: A Historical Population-Based Cohort Study of Workers With Low Back Pain Disorders in British Columbia

*Carnide, Nancy*

Is there an association between temporal patterns of sitting and low back pain? - A cross-sectional study

*Korshøj, Mette*

Conceptualizing work disability prevention due to low back pain

*Mollayeva, Tatyana*

The effect of leisure-time physical activity on sciatica: A systematic review and meta-analysis

*Shiri, Rahman*

A randomized controlled pilot study of the effectiveness of wearing unstable shoes on reducing low back pain and disability in nurses

*Vieira, Edgar*

### Session 6

Interactions with clients and physiological responses related to musculoskeletal disorders and stress-related outcomes among call centre workers

*Berolo, Sophia*

Effects of a passive exoskeleton to support occupational activities

*Bosch, Tim*

Utilizing a digital video analysis approach to identify and model the firefighter trunk and knee postures during a lift task

*Lu, Ze*

Musculoskeletal disorders among teachers in Bulgaria, questions and areas for action

*Tzacheva, Nevena*

Postural analysis and factors of musculoskeletal risk of the paramedics inside the ambulance

*Villa, Martha*

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### Session 7

Experiences of work ability in young workers - an exploratory interview study

*Boström, Maria*

Work and Children: What do we not know – but need to know -- about musculoskeletal impacts?

*Gunn, Susan*

NIOSH's Musculoskeletal Health Research Program

*Hudock, Stephen*

Occupational Health and Safety of Students who Hold Jobs during the School Year

*Ledoux, Elise*

Frailty and pre-frailty are strongly associated with worklessness between aged 50-64 years

*Walker-Bone, Karen*

### Session 8

A Practical Program to Mitigate and Prevent Computer-related WMSDs in a fast-paced workplace

*Damany, Suparna*

A study of musculoskeletal disorders due to hand held devices

*Sharan, Deepak*

Effectiveness of an eye exercise program in the prevention of computer vision syndrome among computer workers

*Sharan, Deepak*

Office Ergonomics Assessment for Computer User: Case study in 3 Offices Tower in Jakarta, Indonesia

*Susilowati, Indri*

### Session 9

Activities of subcontractor first-line supervisors and MSD prevention: collective regulations with employees of the user company

*Cuny, Aude*

Physical Job demands are associated with smoking, pain, and work limitations in construction workers

*Dennerlein, Jack*

Measuring the usage of tethered tools while working at heights

*Wiener, Maria*

Musculoskeletal disorders prevention research: learning from research among bricklayers

*Van der Molen, Henk*

### Session 10

Movement variability highlighted during an assembly activity

*Gilles, Martine Annie*

An Econometric Analysis of Variability in Net Costs of a Safe Resident Handling Program in a Chain of Nursing Homes

*Lahiri, Supriya*

Mixed approach for MSD prevention: a meat cutting study

*Savescu, Adriana*

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An investigation of alternative work methods for emergency dispatch workers

*Sommerich, Carolyn*

### Session 11

How to prevent Work-Related MSDs during lean management implementation?

*Bruere, Sebastien*

Work Disability Prevention and Management: An analysis of Colombian Labour Risk System

*Cuervo, Diana*

Occupational Health & Safety Leading Indicators for Musculoskeletal Health, Safety & Disability Management

*Hogg-Johnson, Sheilah*

Managing safety and operations: The effect of joint management system practices on safety and operational outcomes

*Tompa, Emile*

### Session 12

Working experiences and psychosocial health impacts of work related musculoskeletal disorders

*Chung, Pei-Hua*

Integrated Risk Assessment - Psychosocial Risks associated with MSDS

*Corticeiro Neves, Miguel*

An evaluation of interventions to prevent & manage musculoskeletal discomfort in global corporate offices

*Madhwani, Kishore*

Taking the next step: operationalising a behaviour-based approach for musculoskeletal injury prevention interventions

*Rothmore, Paul*

### Session 13

Prevention of Work-Related Musculoskeletal Disorders and Disability Management using holistic Risk Assessment Data about Physical Exposures at Work

*Dolfen, Peter*

Identifying High Risk Workplaces for Work-Related Musculoskeletal Disorders in Washington State

*Howard, Ninica*

The Obliquity Strategy – A Key to Progress in MSD Prevention?

*Neuman, Patrick*

Comparison of lifting techniques among non-trained, trained and trainers

*Abdoli-Eramaki, Mohammad*

Habituation of Pain – A Challenge to Research

*Ajslev, Jeppe*



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### Session 14

Bracing Matters: Workers Use Their Environment to Make Their Tasks Easier

*Jones, Monica*

Differences in disability duration for musculoskeletal injuries by sex/gender – an emerging issue for management of work-related MSDs

*KoeHoorn, Mieke*

Biomechanical evaluation of optimal leg lifting

*Pardehshenas, Hamed*

Standing up, for workplace health

*Taylor, Carrie*

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## Poster Presentations

### **Biology of work-related MSDs**

Relative phase changes during lifting fatigue protocol within a middle-aged population

*Albert, Wayne*

Effect of repetitive work on intramuscular calcium release and uptake rates: implications from a rat model of work-related muscle disorders.

*Hadrevi, Jenny*

Biomechanical Demands of Bricklaying Concrete Masonry Blocks using One Handed Technique

*Albert, Wayne*

A case-control study of back muscle fatigue in younger and older adults with and without chronic low back pain

*Vieira, Edgar*

Chronic pain mechanisms in occupational musculoskeletal disorders

*Lagutina, Galina*

Seat pressure distribution characteristic during 1-hour sitting in office workers with and without chronic low back pain

*Janwantanakul, Prawit*

### **Emerging issues in the prevention and management of work-related MSDs**

Characteristics of pain syndrome in carpal tunnel syndrome

*Bakhtereva, Elena*

Protection of worker

*Carollo, Ayres*

Ergonomic interventions: invest in risk analysis or invest in solutions?

*Delaruelle, Dirk*

Self-adjustment of occupational activities – a principle for the prevention of musculoskeletal overload

*Luttmann, Alwin*

Interprofessional medical collaboration in the care of work-related MSDs

*Begue, Cyril*

### **Epidemiology of work-related MSDs**

Distal radius fracture: Epidemiology, risk factors and prognostic factors

*Dewan, Neha*

Burden of carpal tunnel syndrome (CTS) in active economic population in Colombia

*Palencia, Francisco*

Estimated and self-reported workloads and lower extremity symptoms for nurses and nursing aides

*Kurowski, Alicia*

The Italian network MAREL and musculoskeletal disorders

*Mattioli, Stefano*

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Perceived muscular tension in healthy subjects: a cross-sectional study

*Borg, Tina*

Ergonomics factors and low back pain among office workers in a private university of Colombia: a cross-sectional study

*Angarita Fonseca, Adriana*

Symptom Prevalence of Musculoskeletal Disorders and the Effects of Prior Acute Injury among Aging Male Steelworkers

*Choi, Won-Jun*

Work-related Musculoskeletal Disorders of Korean Firefighters

*Yoon, Jangwhon*

Musculoskeletal pain among the medical residents

*Malinauskaite, Ieva*

Upper extremity musculoskeletal pain among office employees in Costa Rica, Nicaragua and Spain

*Campos-Fumero, Adriana*

Work-related prevalence of musculoskeletal diseases among workers from Iron Foundry Industry

*Prakova, Gospodinka*

Decrease of work-related low-back pain prevalence in drivers in France

*Riviere, Stéphanie*

Dynamics of the outpatient prevalence and incidence from musculoskeletal diseases in the city of Sofia in the period 2009-2013

*Tabanska-Petkova, Dr. Milena*

Work-related MSDs in physical therapists

*Vieira, Edgar*

Work-related musculoskeletal disorders among nurses in a tertiary referral hospital

*Manmee, Charuwan*

Associations between self-reported CTS and the co-exposure to neurotoxic chemicals and physical constraints for male agriculture workers in France in 2010

*Pascal, Xavier*

Prevalence and associated factors of suspected carpal tunnel syndrome among personnel in a hospital

*Janpol, Kanya*

Capacity for work and occurrence of musculoskeletal symptoms in women

*Bertoncello, Dornival*

An exaggerated initial pain report bias in field studies?

*Waersted, Morten*

PSW Safety in the Community: A prospective cohort study

*King, Emily*

Work-related risk factors for incidence of neck pain in a large working population

*Petit, Audrey*

Example of using Job-exposure matrix: Carpal tunnel syndrome and computer exposure at work in two large complementary cohorts

*Descatha, Alexis*

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Prevalence and risk factors associated with thumb pain from smartphone use in secondary school students at Klong-Luang, Pathumthani  
*Khruakhorn, Santhanee*

Prevalence and risk factors associated with neck pain from smartphone use in secondary school students at Khlong-Luang, Pathumthani  
*Kanchanomai, Siriluck*

The Factor Related to Upper Limb Musculoskeletal Pain among Office Worker  
*Baek, Kiook*

Work related lower limb disorders: lessons learned from a caselist of a public occupational health clinic  
*Carta, Angela*

Work-related musculoskeletal disorders among Thai accountants  
*Nakphet, Nuttika*

Physical activity levels and prevalence of low back pain in call-center operators.  
*Chaikumarn, Montakarn*

Risk factors for the hip osteoarthritis (coxarthrosis). Results from a systematic review and meta-analysis  
*Hartmann, Bernd*

Assessment of work related musculoskeletal disorders (WMSDs) and psychosocial health problems among the brick field workers of West Bengal, India  
*Das, Banibrata*

## **Field evaluations of MSD prevention policies, programs and practices**

Step by step to job rotation implementation in textile manufacturing industry  
*Padula, Rosimeire*

Ergonomic improvements go hand-in-hand with productivity in a logistic environment.  
*Delaruelle, Dirk*

Functional profile of preparation program workers for a Brazilian university retirement  
*Bertoncello, Dernal*

Proposal of a prospective multisite evaluation approach to understand the mechanisms of action underlying complex ergonomic interventions  
*Albert, Valerie*

Multifaceted workplace intervention: managing musculoskeletal disorders in workers of a medium-sized company  
*Harari, Denise*

Evaluation of effectiveness of DINO methods in estimation musculoskeletal disorders risk Related to Patient Transfer Operation  
*Habibi, Ehsan*

Obesity and musculoskeletal distress  
*Barros Júnior, José Cerqueira*

Investigating the high incidence of lower back pain in underground employees at a Platinum mining company in Zimbabwe  
*Garamumhango, Blessing*

# PREMUS2016 TORONTO

## Health disparities and globalization

Sociodemographics and Health Determinants among Older Adults Workers: A Population-Based Study

*Padula, Rosimeire*

RISK CHARACTERIZATION IN THE INFORMAL LABOR MARKET IN BOGOTA, COLOMBIA. A CASE STUDY

*Piñeros, Victor Hugo*

## Management of work-related MSDs and sustainable employment

Ageing among building and construction workers. Effects of deteriorating respiratory and neuromuscular functions.

*Jeppesen, Gitte Kær*

Prevention of musculoskeletal disorders among computer workers

*Reinhold, Karin*

Does dental staffing matter for perceived health and work demands?

*Rolander, Bo*

Age Differences in Prediction of Occupational Disability Three Months After Functional Restoration.

*Algarni, Fahad*

Drilling, Counter-sinking, and Riveting: the Risks of MSD in Aviation Assembly Work

*Gonella, Maud*

Using a job exposure matrix on physical exposure as a decision tool for helping in social compensation and retirement benefits. A preliminary study in France

*Descatha, Alexis*

Design and Evaluation of a Novel Exoskeleton to Reduce Shoulder Loads During Manufacturing

*Van Engelhoven, Logan*

The Effect of Three Ergonomics Interventions on Body Posture and Musculoskeletal Disorders among Staff of Isfahan Province Gas Company

*Habibi, Ehsan*

## Measuring exposures in a new world of work

Validation of an ambulatory approach to estimate lumbar back loadings

*Delisle, Alain*

Occupational Health Care as a Measure to Prevent Work Related Musculoskeletal Disorders – Trigger-Criteria for Health Care and Estimation of Employees concerned

*Serafin, Patrick*

Manual handling of loads: Types, amount and frequencies of typical load handling in a large-scale industrial company

*Serafin, Patrick*

CHALLENGES IN MEASURING FATIGUE: TASK PARAMETERS INFLUENCE THE MEASURES DIFFERENTIALLY

*Yung, Marcus*

Fatigue in a light precision micropipetting task – responsiveness of a test battery of measures over an 8-hour period

*Yung, Marcus*

Assessment of physical exposure of the housekeepers of the hotel chain

*Padula, Rosimeire*

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Measuring exposure: The Scoring Method for Assessment of Repetitive Tasks

*Bubaš, Marija*

Vibration exposures of operators of pallet trucks during internal transport of goods

*Rokosch, Frank*

Correlation of daily walking steps among three measurement tools: smartphone application, wearable device, and pedometer

*Sitthipornvorakul, Ekalak*

A Pilot Study of the SLUMP Questionnaire for Assessing Musculoskeletal Pain and Laptop Use in Students

*D'Silva, Chelsea*

### Other

Short term zhan zhuang, bauduanjin and segmental stabilization exercises or stabilization exercises to improve capacity in adults with low back pain (LBP)? A pilot study.

*Silva, Sheila*

Depression and work limitation trajectories in injured workers with musculoskeletal disorders: 2-year follow-up study

*Ibrahim, Selahadin*

Associations between neck/shoulder pain and job strain in relation to physical activity among family physicians

*Malinauskaite, Ieva*

Quantitative assessment of shoulders postures: preliminary application of a real-time monitoring system in a grocery store setting

*Graziosi, Francesca*

Fragility Fractures in the Workplace: Analysis of Patient Survey Data from Ontario, Canada

*Adihetty, Chamila*

Work on display screen (around 70 case)

*EL FADIL, Hayat*

Linking of the AAOS DRF Clinical Practice Guidelines to ICF, and ICF Core sets for Hand conditions.

*Esakki, Saravanan*

Assessment of physical workload: muscular activity vs. resultant external force

*Gaudez, Clarisse*

Effects of dual monitor workstation on visual and neck-shoulder muscular and proprioceptive outcomes associated with a 90-minute computer task in men and women

*Farias, Amanda*

Pain intensity and pain thresholds after a dynamic physical load, in persons with chronic neck pain.

*Grimby-Ekman, Anna*

Repeatability of electromyography of the neck and shoulder muscles in VDU operators with neck and shoulder symptoms

*Nakphet, Nuttika*

Knee Biomechanics in Obese Female during Walking

*Nutalaya, Chitchanok*

The impact of office ergonomics intervention: a case study in 18 companies across Singapore

*Rusli, Noer Triyanto*