CONFERENCE PROGRAMME

11th International Symposium on Human Factors in Organisational Design and Management (ODAM) &

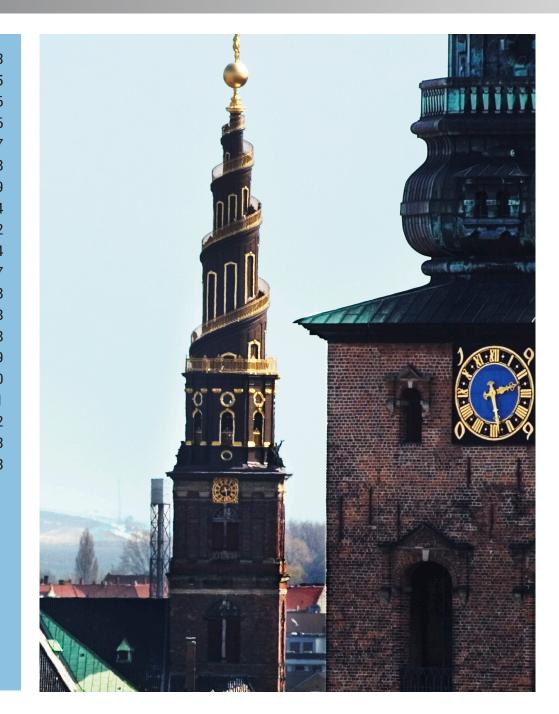
46th Annual Nordic Ergonomics Society Conference (NES)

17th-20th August 2014

Copenhagen, Denmark

TABLE OF CONTENT

\bigcirc	Welcome	;
	Organisation	4-
	Programme overview	(
	Programme details	(
	Scientific programme - Monday	-
	Scientific programme - Tuesday	8
	Scientific programme - Wednesday	9
	Detailed programme - Monday	10-14
	Detailed programme - Tuesday	15-22
	Detailed programme - Wednesday	23-24
	Keynotes	25-2
	Poster exhibition	28
	Information to presenters	28
$\widetilde{\mathbf{C}}$	Registration	28
	Social events	29
i	General information	30
	Transportation	3
	Thanks to our sponsors and exhibition partners	32
i	Exhibition information	3:
	Floor plan	33



WELCOME

Dear participants,

On behalf of the Organising Committee, I welcome you all to Copenhagen and to the joint ODAM and NES conference. The ODAM conference is organized on behalf of the IEA ODAM Technical Committee on Human Factors in Organizational Design and Management (ODAM), and the NES Conference on behalf of the Nordic Ergonomics and Human Factors Society (NES).

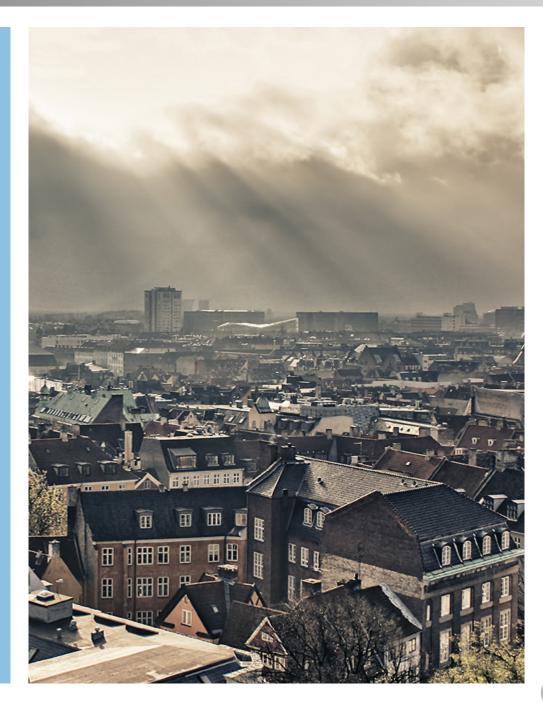
We are looking forward to three inspiring days in Copenhagen. The ODAM meetings gather researchers from all over the world. The NES meetings focus on creating a forum for exchange of experience between researchers and ergonomics practitioners. We hope that the meeting between the two conferences will inspire you all and spark some synergy. Also, the conference is a great opportunity to expand your global network of human factors and ergonomics researchers and practitioners. I do hope to see you Monday to the conference dinner and Tuesday at the Copenhagen City Hall reception.

Finally we do hope that you also will use the opportunity to experience Copenhagen and its surroundings. There are many fascinating things to see. You might get ideas and inspiration by talking to the Danish participants.

I wish you a good and rewarding conference.



Ole Broberg Conference Chair



ORGANISATION

The conference is organised in a collaboration between:









National Research Centre for the Working Environment

Technical University of Denmark, DTU Management Engineering

Aalborg University, Center for Industrial Production

Nordic Ergonomics & Human Factors Society (NES) IDA - Danish Occupational Safety and Health Professionals

National Research Centre for the Working Environment (NRCWE)



Endorsed by International Ergonomics Association

Conference Secretariat



Kirstine Lautrup Secretary, Technical University of Denmark



Tina Weller MSc, administrative officer, Technical University of Denmark



Marie Ekström Project manager, ICS

Local organising comittee



Ole Broberg (Conference Chair) MSc, PhD, Associate Professor, Technical University of Denmark



Per Langaa Jensen MSc, PhD, Professor, Technical University of Denmark





MSc, PhD, Professor, Industrial Production, Aalborg University, Copenhagen

Anders Kabel

MSc, Project Manager, The Construction Sector Safety and Health Preventive Service Bus, board member of IDA - Danish **Occupational Safety and Health Professionals**



Mette Elise Larsen

BSc, Chief Consultant, Alectia Consultancy, Chairwoman of IDA -Danish Occupational Safety and Health Professionals

Nils Fallentin



MSc, PhD, Research Director, National Research Centre for the Working Environment

International Scientific Advisory Board

Karen ALBERTSEN, Denmark Henning Boje ANDERSEN, Denmark Simone Nyholm ANDERSEN, Denmark Pedro AREZES, Portugal Sebastiano BAGNARA, Italy Pascal BÉGUIN. France Kirsten BENDIX OLSEN, New Zealand Lars BENGTSSON, Sweden Martina BERGLUND. Sweden Cecilia BERLIN, Sweden Verna BLEWETT, Australia Mette BØGEHUS, Denmark Ole BROBERG. Denmark Ralph BRUDER, Germany Claudio Marcelo BRUNORO, Brazil Peter BUCKLE, United Kingdom David CAPLE. Australia Pascale CARAYON, USA Hanne CHRISTENSEN, Denmark Jakob Ugelvig CHRISTIANSEN, Denmark Denis COELHO, Portugal Carolina CONCEIÇÃO, Denmark François DANIELLOU, France Lotta DELLVE. Sweden Jan DUL, Netherlands Kasper EDWARDS, Denmark Jörgen EKLUND, Sweden Mattias ELG, Sweden Jon ENGSTRÖM, Sweden Andrea ERIKSSON, Sweden Nils FALLENTIN, Denmark Kianoush FATOLLAHZADEH. Sweden Klaus FISCHER, Germany

Thomas FRANKE, Germany Ayse GURSES, USA Peter HASLE, Denmark Bjørg HEGDAL, Norway **Richard HOLDEN, USA** Peter HOONAKKER, USA Ann Schoofs HUNDT, USA Helge HVID, Denmark Andrew IMADA, USA Christine IPSEN. Denmark Kenji ITOH, Japan Per Langaa JENSEN, Denmark Anne Helbo JESPERSEN, Denmark Stig O. JOHNSEN, Norway Kirstin JØRGENSEN, Denmark Anders KABEL, Denmark Anette KARLTUN, Sweden Johan KARLTUN, Sweden Brian KLEINER, USA Henrik KOCK, Sweden Mathias KRISTIANSEN, Denmark Karen LANGE-MORALES, Colombia Mette Elise LARSEN. Denmark Stephen LEGG, New Zealand Dick LENOIR, Netherlands Hans Jørgen LIMBORG, Denmark Juha LINDFORS, Finland Preben LINDØ, Norway Peter LUNDQVIST, Sweden Pascal MADELEINE, Denmark Camilia A. MADSEN. Denmark Niels MØLLER, Denmark Enid MONTAGUE, USA

Dave MOORE. New Zealand Patrick NEUMANN. Canada Anders Paarup NIELSEN, Denmark Klaus T. NIELSEN, Denmark Zoran PERUNOVIC, Denmark Gitte PETERSEN. Denmark Ruurd PIKAAR, Netherlands Bozena POKSINSKA, Sweden Signe POULSEN, Denmark Grane M. Gregaard RASMUSSEN, Denmark Carina RISLUND, Sweden Michelle ROBERTSON, USA Afshin SAMANI. Denmark Rikke SEIM, Denmark Karen SØGAARD, Denmark Ole Henning SØRENSEN, Denmark Divya SRINIVASAN, Sweden Nancy ST ONGE, Canada Laerte SZNELWAR, Brazil Andrew THATCHER. South Africa Geert VAN HOOTEGEM, Belgium Steffen VANGSGAARD, Denmark Morten VILLUMSEN. Denmark Peter VINK. Netherlands Nicolas VUILLERME, France Patrick WATERSON, United Kingdom Tina WELLER, Denmark Jörgen WINKEL, Denmark John WOOD, United Kingdom Paul YEOW, Malaysia Klaus J. ZINK, Germany Cecilia ÖSTERMAN. Sweden

PROGRAMME OVERVIEW

Sunday 17th

15:00Registration opens at venue DGI-Byen18:00Get-together at DGI-Byen

Monday 18th

Registration opens 8:00 Conference opening 10:00 Keynote: *Peter Hasle* 11:00 Keynote: Pierre Falzon 11:30 Lunch and exhibition 12:00 Scientific programme session 1 13:00 Scientific programme session 2 15:00 Scientific programme session 3 16:45 **Conference Dinner at Langelinie Pavilionen** 19:30

Tuesday 19th

- 8:45 Scientific programme session 4
- 10:30 Scientific programme session 5
- 12:15 Lunch and exhibition
- 13:15 Keynote: *Penelope Sanderson*
- 14:00 Scientific programme session 6
- 15:15 Interactive poster session
- 16:15 Scientific programme session 7
- 19:00 Reception at Copenhagen City Hall

Wednesday 20th

- 9:00 Keynote: Jody Hoffer Gittell
- 9:30 Awards
- 10:00 Scientific programme session 8
- 11:30 Keynote: Geert Van Hotegem
- 12:00 Conference Closing
- 12:30 Lunch-to-go

PROGRAMME DETAILS

How to read this programme

The programme is organised so that the following tree pages have an overview of sessions and speeches. Page 10 to 24 consist of detailed information of the sessions. If you want to know more about the keynotes you can look at page 25-27 and page 28-33 holds practical information.

The sessions are color coded and the symbols shown below show the type of session.







communication

symposium

technical session

worksh

vorkshop

^p comn

Conference opening

- Welcome, Ole Broberg
- Opening address 11th ODAM conference, Michelle Robertson
- Opening address 46th NES conference, Christina Jonsson
- Opening speech, *Karoline Klaksvig*, Director of Occupational Health and Safety Policy, The Confederation of Danish Employers
- Music by Morgan Grage & Co

Conference closing

- Introducing NES 2015, Knut Inge Fostervold
- Introducing ODAM 2017, Michelle Robertson
- Closing remarks, Ole Broberg
- Goodbye

- 8.00 Registration opens
- 10.00 Conference opening (se page 6 for additional info)
- 11.00 🕒 Keynote **Professor Peter Hasle** Development of sustainable work is there a future for a Nordic mode?
- 11.30 🕒 Keynote **Professor Pierre Falzon** Constructive ergonomics : enabling environments and enabling organizations
- 12.00 Lunch and exhibition

	Special sessions	Special sessions	Special sessions & technical sessions	Technical sessions & workshop	Organization & management	Tools & methods	Appplication areas
13.00	A1 Health care symposium part I: Patient centered care	B1 Physical work life balance	C1 Ergonomics and development in the new economy & er- gonomics in systems analysis and design	D1 Workshop: Designing work sys- tems for productivity and well-being	(No session)	F1 Risk management	G1 Health care
14.30	Coffee and exhibition						
15.00	A2 Human factors guidelines for CCTV- control centre design – part I	B2 Organizational applications of human factors and sustainable development	C2 Humans, technol- ogy and organization – part I	D2 Transforming working environment programmes into workplace practice – part I	E2 Communication & organizational culture	F2 Macroergonomics	G2 Information and communication technology & manufacturing industries
16.15	Break						
16.45 18.00	A3 Human factors guidelines for CCTV- control centre design – part II	B3 Performance measurement in ergonomics	C3 Humans, technol- ogy and organization – part II	D3 Transforming working environment programmes into workplace practice – part II	E3 Learning organizations	F3 Quality improvement	G3 Psycho- social aspects
19.30	.30 Conference Dinner at Langelinie Pavillionen (see page 29 for further information)						

SCIENTIFIC PROGRAMME - TUESDAY

	Special sessions	Special sessions	Special sessions & technical sessions	Technical sessions & workshops	Organization & management	Tools & methods	Appplication areas
8.45	A4 Health care symposium part II: "Health care coordination and health information technology"	B4 Relational coordination – in research and prac- tice – part I	C4 Work related musculoskeletal disorders in health care professionals – risk factors and preventive strategies	D4 Workshop: Lego serious play as a support tool for participatory ergo- nomics	E4 Organizational and technological change	F4 Intervention studies – part I	G4 Service industries & small and medium sized enterprises
10.00	Coffee break						
10.30	A5 Macroergonomic and sociotechnical methods: current and future directions	B5 Relational coordination – in research and practice – part II	C5 Lean in Sweden – the current situation	D5 Workshop: Prospects for effec- tive worker participa- tion in occupational health and safety management	E5 Participatory ergonomics	F5 Intervention studies – part II & sociotechnical systems analysis	G5 Workshop: Resilience against stress
12.15	Lunch and exhibition						
13.15 🕙 Keynote Professor Penelope Sanderson - Mobile technologies and patient care: A cognitive systems engineering view							
13.45 14.00	Break						
	A6 The way forward for human factors and sustainable development	B6 Simulations: The integration of human factors and ergonomics – part I	C6 What are the Scandinavian in- spection authorities preoccupied with at the moment?	D6 Workshop: Physiological stress of voluntary soldiers in military load carriage	E6 Work systems design & lean production systems	F6 Transforming working environment programmes into workplace practice – part III	G6 NES student award
15.15	Interactive poster session						
16.15	A7 NES general assembly	B7 Simulations: The integration of human factors and ergonomics – part II	C7 Workshop: CSR, social sustainability and ergonomics: drawing	D7 Workshop: Human factors and the bottom line.	E7 Work organization	F7 Work analysis – part I	G7 Visual ergonomics network meeting
17.45			the family tree				
19.00	0 Reception at Copenhagen City Hall						

- 9.00 Seynote: Professor Jody Hoffer Gittell Transforming relationships for organizational change
- 9.30 NES Student Awards, *Mette Elise Larsen*
 - Hal W. Hendricks and Ted Brown's young investigators award, Michelle Robertson
- 9.45 Break

	Special sessions	Special sessions	Special sessions & technical sessions	Technical sessions & workshops	Organization & management	Tools & methods	Appplication areas
10.00	A8 Health care symposium part III: A systems approach to health care	B8 Aspects of motor control in ergonom- ics	C8 Workshop: Light- ning, visual ergo- nomics and health implications	D8 Workshop: E-so- ciety health care practice	E8 Workshop: How to diagnose a work related musculoskel- etal disorder?	F8 Work analysis – part II	G8 Macroergonomics
11.30	0 🕒 Keynote Professor Geert Van Hotegem - Total workplace innovation - The paradigm that will change the organisation						
12.00	0 Conference closing (see page 6 for additional info)						

12.30 Lunch-to-go

MONDAY 13.00-14.30

Room: Plenum

A1 Health care symposium part I: Patient centered care



Chair: Peter Hoonakker

Challenges of doing research that involves patients, P. Hoonakker

Participatory ergonomics for healthcare process redesign: the example of family-centered rounds, *P. Carayon*

Conceptualizing the patient-engaged work system Part A: Macroergonomic models, *R. Valdez*

Conceptualizing the patient-engaged work system, Part B: macroergonomic challenges, R. Holden

An assessment tool for dialysis patients' satisfaction: exploring crucial satisfaction factors for Japanese patients, $X,\,Gu$

Room: Hovedbanen

B1 Physical work life balance



Chairs: Andreas Holtermann & Marie Birk Jørgensen

Physical work demands, health behaviors and sickness absence in the BELSTRESS Cohorts, *E. Clays*

Associations between physically demanding work and life-style: results from the Swedish WOLF study, *E. Fransson*

Are physical work demands during cleaning associated with sedentary leisure time?, *M. Korshøj*

Physical activity patterns in workers with neck pain assessed using accelerometry and GPS, *D. M. Hallman*

Does physical activity at work impact physical activity behavior in leisure time?, M. B. Jørgensen

Participatory ergonomics, cognitive behavioral training and physical training for prevention of low back pain, *C. Rasmussen*

Ergonomics in sports and at work, P. Madeleine

Room: Kastrup Lufthavn

C1 Ergonomics and development in the new economy & ergonomics in systems analysis and design



Chair: Denis Coelho & Patricia Rose Ferrara

Human factors specialists to the rescue for (other) systems developers, K. Schreibers

How is the new economy a challenge to old ergonomics?, F. Hubault

Community-x-ray: considering real life impact with community-driven tools, A. F. Couvinhas

Water and sewage treatment workers differences in psychosocial and ergonomics assessment, D. Coelho

Manufacturing analysis of the Serra da Estrela PDO cheese under the perspective of systemic design, *D. Coelho*

Redesign of the logo and design of a new ergonomic hand tool: enabled by systemic analysis of the Serra da Estrela PDO cheese universe, *D. Coelho*

Room: Kødbyen

D1 Workshop: Designing work systems for productivity and well-being



Organizers:

David Hansen; Signe Poulsen; Liv Gish; Christine Ipson, Technical University of Denmark

Aim of the workshop:

Can productivity and well-being co-exist in the 21st century? This workshop aims to collect and share the current knowledge on how to design work systems for productivity and well-being. Based on the presenters recent research and the participants experiences and research, the question of productivity and well-being will be discussed from different theoretical perspectives. The goal is to bring together researchers interested in further bridging the two research fields of productivity and well-being to share experiences and to initiate a shared research agenda going forward. We hope you will join us in setting this new direction towards better design, operation, and change of work systems to increase both productivity and well-being.

Format of the workshop:

The workshop will be facilitated with interactive discussions and co-creation in small groups. Participants should bring their own experiences, favorite theories, and be ready to engage in discussions. On your way to the workshop, ask yourself: "How would I design a work system for productivity and well-being?"their models to the group. Reflection and discussion of these models by the group will suggest opportunities for a shared model and hence a shared solution. The workshop will close with a question and answer session.

D MONDAY 13.00-14.30

Room: Vesterbro Torv F1 Risk management

Chair: Carl Lind

RAMP: risk management assessment tool for manual handling proactively, C.Lind

A method for risk assessment within visual ergonomics, H. Hemphälä

A Web-based model for teaching risk assessment methods, M. Forsman

Analyzing territorial governance to prevent occupational risks in the sector of waste management, *L. Boudra*

Room: Amager Strandpark **G1 Health care**

8

Chair: Jörgen Winkel

Ergonomic value stream mapping - can Lean and ergonomics go hand in hand?, *E. Edwards*

Factors facilitating and inhibiting value stream mapping processes at hospital units in three Nordic countries - a Nordic multicenter study, *J. Winkel*

The design of a quasi-experimental study on sustainable work ability in health care organisations, *E. Beune*

Defining the role of healthcare leadership for organizational safety challenges, *A. Goldberg*

DONDAY 15.00-16.15

Room: Kødbyen

A2 Human factors guidelines for CCTV- control centre design – part I



Chairs: Dick Lenior & Stig Johnsen

Human factors guidelines for CCTV control centre design - introduction to a symposium, *R. Pikaar*

CCTV supervision or surveillance - what's in a name?, K. Schreibers

Bodycamera use in Dutch surveillance practices, T. Timan

CCTV mediated observation versus non-mediated observation: investigating perceived image quality with different test systems, *A. Bennis*

CCTV - human factor challenges, J. Wood

Room: Kastrup Lufthavn

B2 Organizational applications of human factors and sustainable development



Chair: Andrew Thatcher

Sustainability and development of Lean implementations, J. Eklund

Holistic sustainable development: floor-laying workers' case, M. Lortie

Improving energy efficiency in the retail sector through job redesign: a sociotechnical systems approach, *P. Waterson*

Social-Life-Cycle Assessment (S-LCA): an instrument for macro-ergonomics in a globalized world?, K. J. Zink

Room: Plenum

C2 Humans, technology and organization - part I

Chair: Anette Karltun

The HTO-concept used as a tool when designing a new VTS center in Sweden, *P. Christofferson*

Improving safety in maintenance of the railway system by reducing latent errors – a way forward?, *H. Alm*

MONDAY 15.00-16.15

(C2 continued)

Visualizing improvements of care processes- supporting engagement and perceived systems performance in improvement work, A. Williamsson

Organisational challenges associated with design and implementation of technology in re-design projects in the nuclear domain, A. Osvalder

Room: Hovedbanen

D2 Transforming working environment programmes into work place practice – part I

Chair: Klaus T. Nielsen

Drivers for leaders to achieve sustainable benefits from ergonomics interventions, D. Caple

The impact of occupational health and safety policy interventions tailored to small enterprises in Denmark, L.V. Kvorning

The development of Danish OHS regulation - organizational understanding and program theory, R. Seim

New organisational and social provision in Sweden, T. Rosenblad

Room: Enghave Plads E2 Communication & Organizational Culture Chair: Lauren Murphy



The impact of safety climate beyond safety outcomes: job satisfaction, employee engagement and objective turnover rate, Y. Huang

The role of control and trust in a transition process to new ways of work, M. Hartner-Tiefenthaler

Conceptualizing safety climate in the U.S. construction industry, L. Murphy

The development of the Organisational Culture Work Health and Safety Survey (OCWHaS), L. Clarkson

Room: Vesterbro Torv F2 Macroergonomics Chair: Linda Rose

How could you implement 'Awakened Need of Change' for the applying ergonomics to work system in Industrially Developing Countries?, F. Helali

A Prospective Study of a Macroergonomics Process over Five Years Demonstrates Significant Prevention of Workers' Compensation Claims Resulting in Projected Savings. A. Heller-Ono

New ways of working (NWW) and quality of working life: results from three studies, O. Korunka

On the IEA strategy: mapping HFE performance knowledge, L. Rose

Room: Amager Strandpark



Chair: Michiel De Looze

Designing auditory alarms for an industrial control room, A. Sirkka

The potential benefits of an exoskeleton in industry settings, M. De Looze

Multifunctional cooperation with purpose to reduce ergonomic risks. A practical case, L. Nord Nilsson

Ergonomics for service technicians, L. Samuelsson

Optimizing production cost using ergonomic data, P. Neumann



MONDAY 16.45-18.00

Room: Kødbyen

A3 Human factors guidelines for CCTV- control centre design – part II



Chairs: Ruud Pikaar & John Wood

CCTV and other ICT support for supervisory tasks in healthcare, *A. Bennis*

CCTV - case study traffic management highway tunnel, *K. Schreibers*

How to sell a room without a view?, S. Reinstra

Use of CCTV in remote operations and remote support of oil and gas fields to improve safety and resilience, S. O. Johnsen

Room: Kastrup Lufthavn

B3 Performance measurement in ergonomics

Chairs: Jan Dul & Per Langaa Jensen

Performance and innovative behavior of employees. Development and application of a measurement tool for workplace research, J. Dul

A simple tool to calculate the business costs of OHS problems, P. T. Aldrich

Service quality as goal and outcome of ergonomics research: user and employee perspectives, O. H. Sørensen

KPI's, leadership and psychosocial work environment, K. Edwards

Using perceptions to include ergonomics in performance measurement, C. Rislund

Room: Plenum C3 Humans, technology and organization – part II



Chair: Martina Berglund

Measuring and visualizing resilience: a railway example, J. Lindvall Interactive research and HTO as an industry development model, J. Karltun A novel approach to understand nested layers in quality improvement, A. Karltun

Boundary crossing in product introductions considering humans, technology and organization, M. Berglund

HTO - a complementary ergonomics perspective, A. Karltun

Room: Hovedbanen

D3 Transforming working environment programmes into work place practice – part II



Chair: David Caple

Mandatory systematic work environment management is poorly integrated into Swedish employers' management control of their operations, K. Frick

New developments in occupational health and safety management in Danish companies, R. Seim

Working environment committees - stretched between strategy and par-ticipation, V K Scheller

OHS practitioners' role in implementation of national OHS programmes, K. B. Olsen

Room: Vesterbro Torv E3 Learning organizations

Chair: Sirpa Syvänen

Dialogic learning communities - key factors of sustainable working life and productivity?, S. Syvänen

The importance of common activity in SMEs for economic development and health, M Blomé

Innovative working community development through self-evaluation and democratic dialogue, K. Loppela

Collaboration between HR and line management – enhancing learning in complex work. A. Kurki

MONDAY 16.45-18.00

Room: Enghave Plads **F3 Quality improvement** Chair: Kjerstin Vogel



Detecting and evaluating flicker from lighting systems during field assessments of lighting installations, S. Stoffer

Stay sharp, K. Vogel

The EQUID approach – improving ergonomics quality in product life cycle, *K. Lange-Morales*

Keeping rail on track: good practice work health and safety in the Australian rail industry, S. *Rainbird*

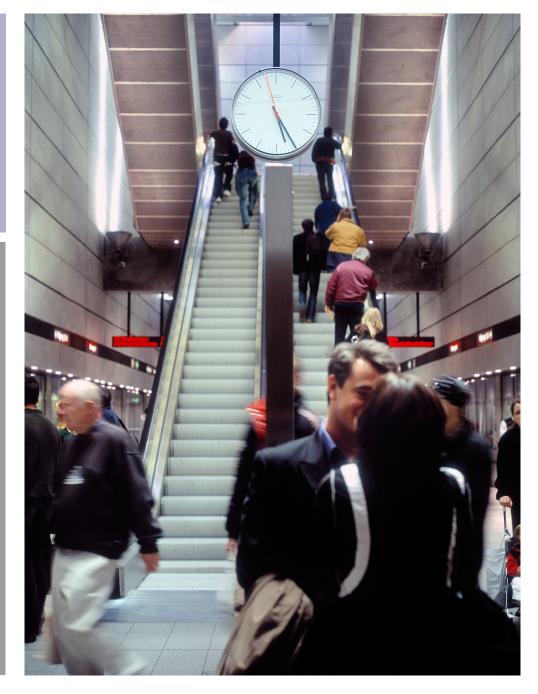
Room: Amager Strandpark G3 Psycho- social aspects Chair: Denis Coelho



Differences between psychosocial assessment of office and field workers in a utility company from a cross-sectional study, *D. Coelho*

Distribution of work tasks and associations to pain, fatigue and physical exertion among construction workers, ${\it J.Ajslev}$

Relationships between objective measures of sedentary time and health variables in office workers: a cross-sectional analysis in the DPhacto study, *R. Bødker*



TUESDAY 8.45-10.00

Room: Hovedbanen

A4 Health care symposium part II: Health care coordination and health information technology



Chair: Ann S. Hundt

Levels of strategies used by care managers to deal with health IT-related barriers, Y, Li

Community ergonomics applied to the implementation of a region-wide care coordination program, *A. S. Hundt*

Anticipated challenges for cross-organisational distributed collaboration in reactive telemedicine, *K. Reegaard*

Challenges in applying human factors approaches to health service design, G. T. Jun

Room: Plenum **B4 Relational Coordination** – in research and practice – part I



Chairs: Hans Jørgen Limborg & Karen Albertsen

Relational coordination is associated with productivity in general practice: a survey and register based study, S. L. Lundstrøm

Quality of everyday rehabilitation in the home care – a question of relational coordination?, *K. Albertsen*

Designing work organization based on "profession" collectives and "inter-profession" relations, S. Caroly

The effect on organizational change on relational coordination - a multi case study, *K. Edwards*

Developing capacity for change in Danish public sector organisations, C. Hornstrup

Room: Vesterbro Torv

C4 Work related musculoskeletal disorders in health care professionals – risk factors and preventive strategies

Chair: Deepak Sharan

Work related musculoskeletal disorders among radiologists and radiographers, *R. Ranganathan*

Work related musculoskeletal disorders in physiotherapists, J. A. Jose

Work related musculoskeletal disorders in surgeons, D. Sharan

Distal upper extremity disorders due to extensive usage of hand held mobile devices, *D. Sharan*

Work related musculoskeletal disorders among nurses, D. Sharan

Work related musculoskeletal disorders among dentists, D. Sharan

Room: Kødbyen

D4 Workshop: Serious Play Approaches in Participatory Ergonomics



Dr Martina Kelly, National University of Ireland Dr Ralph Riedel, Chemnitz TU, Germany

Aim of the workshop:

The aim of the workshop is to provide participants with the experience of using the Lego Serious Play (LSP) methodology in supporting the creation of group consensus in problem solving. At the same time the workshop is used to develop, to share and to discuss ideas on the concrete use of LSP in Participatory Ergonomics.

Format of the workshop:

The workshop will be conducted with a maximum of 10 participants under the guidance of two facilitators (namely the organisers listed above). The workshop will begin with a short introduction to the LSP methodology. Following a short practice session, the participants, under the guidance of the facilitators, will use Lego bricks to build a model which represents a defined Ergonomics problem. Participants will then explain their models to the group. Reflection and discussion of these models by the group will suggest opportunities for a shared model and hence a shared solution. The workshop will close with a question and answer session.

TUESDAY 8.45-10.00

Room: Enghave Plads

E4 Organizational and technological change



Chair: Michael Bartz

Case study on an accelerated approach to a new world of work transformation, $\it M. \ Bartz$

Development of future scenarios by prediction of mental workload in a traffic management control room, *M. Wilms*

Performance systems and social capital, G. G. Rasmussen

Making sense of the changing work by exploring the object of work, A. Ala-Laurinaho

Strategic foresight at work - approach to future thinking in ergonomics, *D. E. Puentes-Lagos*

Room: Kastrup Lufthavn F4 Intervention studies – part I



Chair: Michelle Robertson

Distance management - a challenge in participatory interventions in virtual organizations, *C. Ipsen*

Examining the effects of an office ergonomics intervention on computing behaviors, musculoskeletal health, culture and performance, *M*, *Robertson*

Implementation of participatory OL-OH intervention – focusing on the primary tasks, *E. Framke*

Displacements in organisations' responses to the inspections of their psychosocial working environment, *L. Starheim*

Room: Amager Strandpark

G4 Service industries & Small and medium sized enterprises



Chair: Stephen Legg

Aviation safety – could mild hypoxia impair complex flight decisions?, S. Legg

Different ways of defining and measuring company size when studying its effects on OHS: a literature study, <code>H. Nordlöf</code>

Furniture micro enterprises in a small city in Brazil: work conditions and health, *A. lguti*

Systemic appropriation: the case of humidification in granite mining sector in Brazil, *R. Mendes*

TUESDAY 10.30-12.15

Room: Hovedbanen

A5 Macroergonomic and sociotechnical methods: current and future directions



Chair: Michelle Robertson

Trade-offs between generality, validity and practical relevance in the development of human factors methods, *P. Waterson*

The intervention design and analysis scorecard: A planning tool for participatory design of integrated health and safety interventions in the workplace, *M. Robertson*

Macroergonomics in the wild: research challenges in community settings, R. Holden

The use of mixed methods in healthcare human factors research, P. Carayon

Applying tools and techniques from the study of complex, adaptive systems to work-place safety, *M. Robertson*

Room: Plenum

B5 Relational Coordination – in research and practice – part II



Chair: Hans Jørgen Limborg & Karen Albertsen

Relational and course coordination at the university - can the principles of relational coordination incorporated into the course coordinator role strengthen constructive alignment?, *J. Skakon*

A relational perspective on knowledge integration and organizational decision making, F. Van Berkel

Using relational coordination as a process tool in organizational development in a Danish nursing home, *B. Tørring*

Interventional uses of relational coordination: early evidence from four countries, J. H. Gittell

Organizational prototypes that fosters relational coordination, B. Vestergaard

Standardized work processes: the role of programmed and lateral mechanisms of coordination, *T. Prætorius*

Contribution to relational coordination and social capital through consultancy on communication in the context of the organisation, ${\it H.\ Graff}$

Insert Room

C5 Lean in Sweden – the current situation Chair: Jörgen Eklund

Three Swedish hospitals' lean strategies and their contribution to organizational development, A. Eriksson

Work environment in Swedish Lean implementations, J. Eklund

Work environment, Lean and agriculture, K. Andersson

Experiences from Lean inspired work in a hospital, K. Teär Fahnehjelm

The organization and work practice of change agents in health care organizations; effects on health care professionals' engagement and participation in improvement work, *A. Williamsson*

Lean implementation approaches at different levels in Swedish hospitals: the importance for working conditions, worker engagement, health and performance, *D. Dellve*

Room: Vesterbro Torv

D5 Workshop: Prospects for effective worker participation in occupational health and safety management



Organiser:

Kirsten Olsen, Centre for Ergonomics, Occupational Safety and Health, School of Public Health, Massey University.

Aim of workshop:

The aims are to present and discuss factors influencing worker participation in Occupational Health and Safety (OHS) management, effectiveness of different forms of worker participation and how to measure it and to identify research needs and ways to transfer knowledge to practitioners.

Format of the workshop:

The workshop starts with four presentations focusing on different aspects of worker participation in OHS management. The presentations will be followed by a discussion focussing on the prospect of employee participation under different contextual factors, how we can measure the effectiveness of worker participation, how to improve the effectiveness of worker participation and the future research needs on the topic.

Two of the presentations highlight findings from research on worker representation in special cases: coal mining in Australia and regional health and, safety representatives in Sweden. The third presentation discusses the change in the health and safety representatives' role in Denmark from negotiating employees OHS concerns to running part of

TUESDAY 10.30-12.15

(D5 continued)

the administrative procedures in OHS management. The fourth presentation discusses why Swedish workers do not fully take the opportunity to participate in OHS management when they have strong legal rights to do so.

Worker representation on health and safety in the coalmines of Queensland: a case of enhanced rights or an historical anomaly?, *D. Walters*

Worker participation in OHSM knowledge process at a paper mill, J. Sjöström

New roles for the OHS representatives - from employee representation to problem-solving, *P. Hasle*

Sweden's regional health and safety representatives - now also for salaried and professional employees in small firms, *K. Frick*

Room: Enghave Plads E5 Participatory ergonomics



Chair: Verna Blewett

Ergonomic systematic work environment management in mining industry - a participatory approach, *P. Ericsson*

(Why) Are Cognitive human factors missing from the blunt end in the oil and gas industry?, S. O. Johnsen

Workplace needs and experiences of university staff, V. Ruohomäki

Strategic engagement: including youth in the development of the Youth Work Health and Safety Strategy for South Australia, *V. Blewett*

Serious play approaches in participative ergonomics, M. Kelly

Participatory ergonomics in industrial engineering projects: The case of a new cheese packaging line work system, *C. Conceicao*

Room: Kastrup Lufthavn

F5 Intervention studies – part II & sociotechnical systems analysis



Chairs: Signe Poulsen & Liv Gish

The use of the Chronicle Workshop as a method for evaluating participatory interventions, S. Poulsen

(F5 continued)

A control center design revisited: learning from users' appropriation, C. Conceição

Design for fidelity - inscription of intended actions, participation and behavior in intervention frameworks, *L. Gish*

Longitudinal psychosocial assessment of office workers in a utility company, *D. Coelho*

How could you use the ergonomic checlpoints for job enrichment in an 'appreciative way' in industrially developing countries?, *F. Helali*

Room: Kødbyen G5 Workshop: Resilience against stress

Organisers:

Carolin Blum, Julius-Maximilians-Universität Würzburg, Germany Silja Hartmann, Ludwig-Maximilians-Universität München, Germany Prof. Dr. Jörn Hurtienne, Julius-Maximilians-Universität Würzburg, Germany Dr. Matthias Weiss, Ludwig-Maximilians-Universität München, Germany, Prof. Dr. Martin Hoegl, Ludwig-Maximilians-Universität München, Germany

Aim of the workshop

Discussing new perspectives on resilience at the workplace

Format of the workshop

Against the background of a constantly changing business environment, the concept of personal resilience, defined as the dynamic process encompassing individuals' positive adaptation after adversity, has gained considerable attention. However, considerable inconsistencies in definitions and conceptualizations still exist. Therefore, together with the workshop participants, we would like to work out the core elements of personal resilience in workplace contexts. Central questions include which conditions are important to support personal resilience, and whether negative side effects should be considered when dealing with personal resilience as a desirable attribute. Definitions, ideas and examples from the participants as well as our own experiences will build the basis of this conceptual work.

In a second step, we would like to explore interdependencies that exist because of the embeddedness of individual employees in teams and organizations. Those interdependencies are likely to affect the resilience of groups and individuals. Therefore we want to discuss how they are shaped and how they influence personal, team and organizational resilience. Creative and interactive methods (mind mapping; interactive plenary discussions) will be used to arrive at new perspectives about the resilience concept.

TUESDAY 14.00-15.15

Room: Plenum

A6 The way forward for human factors and sustainable development



Theoretical definitions and models of sustainable development that apply to human factors and ergonomics, A. Thatcher

Work in a sustainability perspective: corporates' perception and ergonomics, *C. M. Brunoro*

HF/E in shaky places, D. Moore

A survey of methods for product design and development with regards to ergoecological principles, M. H. Saravia

Synergies between ergoecology and green ergonomics:a contribution towards a sustainability agenda for HFE, K. Lange-Morales

Room: Amager Strandpark B6 Simulations: the integration of human factors and ergonomics – part I



Chair: Pascal Béguin

A framework for using simulation methodology in ergonomics interventions in design projects, *O. Broberg*

Organisational simulation: anticipating the ability of an organisation to cope with daily operations and incidents, *F. Daniellou*

Real time dynamic simulations and delayed time static simulation in human factors specialist's toolkit: two different ways for evaluate productivity and safety in process design, *J. Villena*

Simulation in full-scale mock-ups: an ergonomics evaluation method?, S. N. Andersen

Using 2D and 3D models as tools during a workplace design process - a question of how and when, $\it L. Bligard$

Room: Enghave Plads

C6 What are the Scandinavian inspection authorities preoccupied with at the moment?



Chair: Bitten Højmark Døjholt

What is the Norwegian Labour Inspection Authority preoccupied with at the moment?, *M. Brox*

A new approach to reduce musculoskeletal disorders, B. H. Døjholt

Unequal working conditions in female and male dominated operations in Swedish municipalities, *C. Jonsson*

Special prevention efforts for women's wellbeing at work focused on physical ergonomics in the health-care sector, *K. Lorén*

Women's work environment, health and ergonomics, M. Wersäll

Room: Vesterbro Torv

D6 Workshop: Physiological stress of voluntary soldiers in military load carriage



Organiser. Kianoush Fatollahzadeh

Workload of a collision avoidance system for remotely piloted aircraft, J. Alfredson Physiological stress of voluntary soldiers in military load carriage, K. Fatollahzadeh

Room: Kastrup Lufthavn

E6 Work systems design & lean production systems Chair: Matthew Stogsdill



Conceptual ship design, general arrangement & integration of the human element: a proposed framework for the engine department work environment, S. Mallam

Sharing is caring: a discussion for combining risk information, M. Stogsdill

Developing first-line managers within their shared operational challenges, *R. Trillingsgaard*

TUESDAY 14.00-15.15

Room: Hovedbanen

F6 Transforming working environment programmes into workplace practice – part III

Chair: Kaj Frick

Audit of psychosocial risk management system: between tacit knowledge and standardization, A. H. Jespersen

Hard work in soft regulation. A discussion of the social mechanisms in OHS management standards and possible dilemmas in the regulation of psychosocial work environment, *P. Hohnen*

The psychosocial work environment and certified occupational health and safety management systems in the public sector – experience from two Danish municipalities, *P. Hasle*

Room: Kødbyen G6 NES Student award session



0,

Chair: Mette Elise Larsen

NES has five members, - The national societies from each of the five Nordic countries. The national society is able to conduct a student price competition and award. The work of the participants must be at either bachelor or masters level. In this session the price winners from both Denmark and Sweden will present their work.

FINALISTS

Alter the wheelchair,

Christian Bremer and Erik Ohlsson, Chalmers University of Technology

A multi-wave follow-up study of sedentary work and ischemic heart disease, Simone Visbjerg Møller, University of Copenhagen.

TUESDAY 15.15-16.15

Room: Foyer

Interactive poster session



The study of fatigue compared between touch screen and keypad mobile phone for use social network, S. Buensanteai

Level analysis of fatigue among workers of a line press in an industry of Minas Gerais, *C. A. Gonçalves Sirqueira*

A successful private company in industrial developing country. Managers' perspective, *H. Shahnavaz*

Effectiveness of onsite fitness programme among information technology professionals in prevention of work related musculoskeletal disorders, *D. Sharan*

Modeling and management knowledge in health surveillance, J. Castillo

Musculoskeletal disorder among physiotherapists - a survey report, D. Sharan

The product development as determinant factor of the operational model in the production line in an automobile industry assembly line, *F. Porfiro*

A inclusion model based on activity: fitting work tasks to people with disabilities, A. Simonelli

Biomechanical risk factors among the assembly line workers of a cosmetics manufacturing factory in India, *D. Sharan*

Identification of ergonomic risk factors among the workers of a paint manufacturing company, *D. Sharan*

A prospective study of the importance of leadership support for health-related sustainability and participatory approaches towards employees, L. Dellve

A 2014 update on special glasses for use at work in Norway, M. Helland

Fast and effective learning of assembly tasks. Implications for work instructions, *M. De Looze*

Work style risk and its correlation with other ergonomic risk factors in musculoskeletal disorders - a retrospective report analysis among Indian computer users, D. Sharan

Children's attitudes towards comfort and safety of an extra seatbelt during car travelling, A. Osvalder

Evaluation of computer workers' usage of posture adjustments of an ergonomic office chair, *A. Osvalder*

Work life balance and gender: a literature review, I. Monteiro

Realistic evaluation of interventions in the psycho social working environment, $\it L. Starheim$

TUESDAY 16.15-17.45

Room: Plenum **A7 NES General assembly**

The annual NES general assembly



Room: Amager Strandpark B7 Simulations: the integration of human factors and ergonomics – part II



Chair: François Daniellou

Learning during design through simulation, B. Béguin

Simulations in operational integration projects: from space to organizational conception, C. V. Cordeiro

Simulation with a Lego scale model and other intermediary objects, *F. J. de Castro Moura Duarte*

Organizational simulation : issues for ergonomics and for teaching of ergonomics' action, *F. Barcellini*

Planning an organizational simulation to support an integrated operation initiative in the oil and gas industry, *L. Garotti*

Comparison of two human factors approaches in an integrated evaluation/validation of a future emergency operating organization, *C. Garza*

Room: Vesterbro Torv

C7 Workshop: CSR, social sustainability and ergonomics: drawing the family tree



Cecilia Österman, Kalmar Maritime Academy, Linnaeus University, Sweden Cecilia Berlin, Product and Production Development, Chalmers University of Technology, Sweden.

Aim of workshop:

This workshop aims to discuss and explore the relationships between three central concepts for the workplaces of the future: Ergonomics, Social Sustainability, and CSR (Corporate Social Responsibility). What meanings do these concepts convey to the participants? In which professional environments are they most frequently used? Are they relevant for all ergonomics practitioners? And how do they interrelate?

Format of the workshop:

The workshop is initiated with a brief introductory presentation of the topic at hand and the concepts to discuss. It is followed by a very hands-on, creative workshop process interlaced with discussion sessions leading to the conceptual and physical drawing of a 'family tree' of how these concepts interrelate today. Further, to determine whether there are gaps to be filled in the future so that Ergonomics does not become a separate realm from Social Sustainability. Are the concepts perhaps in a hierarchy? Do they overlap? Are they all forces moving towards the same overall goal? Or are they, at present, separate entities? Welcome to draw, discuss and shape this visualization of Ergonomics in the long-term!

Room: Enghave Plads **D7 Workshop: Human factors and the bottom line**



Organisers

L. Rose, KTH, The Royal Institute of Technology, Sweden W. P. Neumann, Ryerson University, Canada

Aim of the workshop

The workshop gives opportunities to learn about how to banish the phantom of unexpected costs and poor operating performance that comes from ergonomics / Human Factors problems in the workplace. The objectives are to foster a broad discussion on the economics of ergonomics including aspects such as 1) How Human Factors can affect company's bottom line, 2) Why companies underestimate Ergonomics/Human Factors costs and benefits, 3) What economic assessment tools and approaches can be used to help companies realise the financial benefits of good working environments.



TUESDAY 16.15-17.45

(D7 continued)

Format of the workshop

Participants are invited to join this interactive workshop on quantifying the financial costs and benefits of workplace improvements. The workshop will take an interactive approach. First the hosts will share their experiences, and will be examining a range of economic assessment techniques and discuss case studies in from both Swedish and Canadian industry, of how attending the human factors and ergonomics can improve a company's productivity and quality performance. Thereafter an open plenary discussion will follow.

Work environment effects are often difficult to assess, especially since many of them are hidden. Moreover, the economic impact of these hidden effects is often many times larger than that from visible effects, such as costs from absenteeism. Hidden effects often play a larger role on business parameters than visible ones do. Without adequate measurement or assessment tools, hidden effects remain obscured. As a result, they may be overlooked, which can have significant business consequences, particularly when making investment decisions related to work environment issues. Ergonomics/ Human Factors gains from quality and productivity are usually much greater than for reduced compensation costs. Companies that underestimate the financial impact of human aspects of their systems can find their anticipated profits vanish – so called 'phantom profits'.

Room: Hovedbanen **E7 Work organization**

Chair: Lander Vermeerbergen

A macroergonomic approach to work-family conflict and employee safety, L. Murphy

Decision making in commercial construction, A. Goldberg

A new avenue in organisational research: blurring organisational boundaries and ethnic segregation of job quality, *L. Vermeerbergen*

Effect of time related parameters on predisposition of musculoskeletal pain among Indian Information technology professionals, *M. Mohandoss*

Room: Kastrup Lufthavn **F7 Work analysis – part I** Chair: Peter Palm

The social construction of design processes in complex organizations, F. Duarte

Designing frameworks to do and get done. An analysis of team management in the horticole sector, C. Gotteland

Body worn video cameras with simultaneous technical measurements for ergonomic assessment of full work days, *P. Palm*

Room: Kødbyen G7 Visual ergonomics network meeting

Organizers: The Visual Ergonomics Network, Nordic Ergonomics Society (NES)

Chair. Hanne-Mari Schiøtz Thorud, Department of Optometry and Visual Science, Buskerud and Vestfold University College, Norway

Description and preliminary agenda of the meeting

Good visual ergonomics is essential to maintain efficiency and well-being and prevent sick leave in workers. Good visual ergonomics include optimal vision and lighting conditions at the workplace.

Preliminary agenda:

- (1) Introduction to the Visual Ergonomics Network in NES.
- (2) A summary of visual ergonomics presentations at the ODAM-NES 2014.
- (3) Needs for future research and developments within visual ergonomics.
- (4) Discussions on the possibility of cross-country projects within visual ergonomics.

The meeting is open to every participant at the ODAM-NES 2014.

🚺 WEDNESDAY 10.00-11.30

Room: Plenum

A8 Health care symposium part III: A systems approach to health care



Chair: Patrick Waterson

Build it and they will come? Assessment of use, usability and usefulness of the keystone health information exchange, *P. Hoonakker*

The sociotechnical challenge of integrating telehealth into health and social care for the elderly, *P. Waterson*

Unravelling the relationship between patient handling performance and safety climate: a mesoergonomic analysis, *P. Waterson*

Health care manager's views on and approaches to implementing models for care processes, *J. Andreasson*

Control modes in care delivery organisations, R. Wears

Human factors based risk analysis – a way to inform systems design, user satisfaction and organizational success in healthcare innovation?, *B. Rangstrup*

Room: Hovedbanen **B8 Aspects of motor control in ergonomics**



Chair: Pascal Madelaine

Self-reported pain and trunk posture during pruning activity among vineyard workers at the Château Larose-Trintaudon, *N. Vuillerme*

Motor strategies during meat cutting tasks in simulated and real environment, *P. Madeleine*

Based on current knowledge on physical demands in professional cleaning can we introduce enough variation to create a healthy workday for cleaners?, K. Søgaard

Inducing exposure variability during computer work in the shoulder girdle with and without experimental pain, *A. Samani*

Motor variability traits among individuals performing repetitive precision work, D. Srinivasan

Room: Vesterbro Torv

C8 Workshop: Lightning, visual ergonomics and health implications



Organisers:

Camilla Zetterberg, University of Gävle, Sweden Hillevi Hemphälä, Lund University, Sweden Per Nylén, Swedish Work Environment Authority, Sweden

Aim of the workshop:

Deficient visual ergonomics is a problem across many occupations. Poor viewing and lighting conditions is associated with both visual and neck/shoulder discomfort, and can also impact productivity. According to the provision from the Swedish Work Environment Authority on prevention of musculoskeletal disorders (AFS 2012:02), risk assessment of the visual conditions are mandatory. The aim of this workshop is to increase knowledge about visual ergonomics among practitioners working with risk assessment, and to allow participants hands-on practice in assessing the visual environment.

Format of the workshop:

The first part of the workshop will involve a brief presentation of the subject visual ergonomics and its implications on health and performance. The impact of progressive glasses, too small or blurred font letters, or blurred vision on posture at e.g. computer work will be demonstrated together with advice how to proceed to improve the conditions. The second part of the workshop will allow participants some hands-on practice in for example; how to measure light (luminance and illuminance); how different light conditions impact pupil size and visual comfort; how to measure and quantify amount of flicker, light modulation and colour rendering in different light sources. Several useful mobile phone applications concerning light and vision will be demonstrated.

Room: Enghave Plads

D8 Workshop: E-society health care practice



Organisers:

Gudbjörg Erlingsdottír (Chair), Gerd Johansson, Johanna Persson, Christofer Rydenfält, Jonas Borell, Lena Petersson, Department of Design Sciences, Lund University

Aim of the workshop:

Welcome to a workshop that gives researchers, experts, and practitioners the opportunity to discuss and share experiences about how the e-society affects health care practice. E-society has entered health care and is transforming the roles of patients and practitioners. This raises some questions:

🚺 WEDNESDAY 10.00-11.30

(D8 continued)

- How will the relations between different professions and between practitioners and patient be affected?
- How does this affect power relations?
- Will e-Health affect the care processes?
- Where will care be carried out in the future?
- How will these changes affect the work environment and quality of health care?

At the Department of Design Sciences, Lund University, we approach these questions in an interdisciplinary way in close collaboration with health care practice. Thus our main aim is to identify possibilities and challenges in this area and build a network of researchers, experts, and practitioners for further cooperation and development of this field.

Format of the workshop

The workshop will consist of a number of short presentations (no papers/abstracts are submitted especially for this workshop) and group discussions based on the above questions. We hope you are interested in participating! If so please send an email to the corresponding organizer. Let us know if you would consider making a short presentation (max 10 min) at the workshop.

Room: Tivoli

E8 Workshop: How to diagnose a work related musculoskeletal disorder?



Organiser

Deepak Sharan, Consultant in Orthopaedics, Rehabilitation and Ergonomics, RECOUP Neuromusculoskeletal Rehabilitation Centre, India

Aim of the workshop

Diagnosis of Work related musculoskeletal disorder (WRMSD) can be controversial and challenging, especially since soft tissue evaluation requires specialised manual skills not usually provided in medical training. Symptoms or WRMSD are often poorly localised, nonspecific, and episodic. Accurate diagnosis helps determine the most appropriate treatment and protects the worker from treatments that are ineffective, unwarranted, or unnecessarily invasive. In this interactive workshop we will present the latest criteria for diagnosis and for classification of WRMSD. The workshop will cover practical demonstrations of diagnostic tests for different regions of the body and will be relatively low on theory. The diagnosis of WRMSD of each region of the body will include history taking, physical examination, special tests, investigations, differential diagnosis and time rule. Establishing work relatedness of MSDs has significant organisational, financial and medico-legal implications, besides helping the clinician to make considered

(E8 continued)

decisions about a worker's possible condition and management. Classification criteria, by contrast, aim to identify homogenous subgroups to help ensure that future studies are comparable and that data can be combined across industries, even countries. This workshop is aimed at medical occupational health personnel and primary care physicians, occupational physiotherapists, researchers and ergonomists.

Format of the workshop

- 1. WRMSD of Head, Neck, Upper Limb, M. Mohandoss
- 2. WRMSD of Spine, Thorax, Pelvis and Lower Limbs, J. A. Jose

3. Overview of classification and diagnosis of WRMSD, including criteria to determine work-relatedness of a MSD. Non-specific or diffuse WRMSD, *D. Sharan*

4. Discussion

Room: Kastrup Lufthavn

F8 Work analysis - part II

Chair: Jenny Gremark Simonsen

A study of biomechanical risk factors in an elevator manufacturing company, *D. Sharan*

Associations between glare, eyestrain and neck and shoulder pain during reading on a computer screen, $\it R.\,Mork$

Inter-ergonomist reliability in rating risk level - without any specific method - in ten video recorded work tasks, *M. Forsman*

Whole body vibration training - good vibrations? Measurements of acceleration levels, *K. Wilander*

Measuring wrist and forearm physical workload at an assembly line, J. G. Simonsen Relationship between eye-lens accomodative response and trapezius muscle activity during manual tracking of a visual target, D. Domkin

Room: Kødbyen

G8 Macroergonomics

Chairs: Michelle Robertsen & Patrick Neumann

Documenting and sharing macroergonomic success stories: nearly two decades of good ergonomics

Panel: R. Holden, M. Robertson, P. Neumann, K. Zink, P. Carayon

HEYNOTES



DEVELOPMENT OF SUSTAINABLE WORK – IS THERE A FUTURE FOR A NORDIC MODE ?

Professor Peter Hasle

Centre for Industrial Production, Aalborg University Copenhagen

Peter Hasle is a professor at the Centre for Industrial Production, Department of Business and Management, Aalborg University. His former positions include a professorship at the National Research Centre for the Working Environment and positions at the Technical University of Denmark, at CASA (independent research centre), the International Labour Organization and the Occupational Health Service.

Peter Hasle has extensive publications in international journals, books and book chapters. He has also been a keynote speaker at several international conferences. Peter Hasle's research interests lie in integration of the work environment in management and operation, organisational social capital, sustainable work, lean, and organisation of work environment programmes.



CONSTRUCTIVE ERGONOMICS: ENABLING ENVIRONMENTS & ENABLING ORGANIZATIONS

Professor Pierre Falzon

Conservatoire national des arts et métiers (Cnam), Paris, France.

Pierre Falzon is Professor of Ergonomics and neurosciences of work at the Conservatoire national des arts et métiers (Cnam), an academic institution located in Paris, France.

Pierre Falzon is the head of the Centre de Recherche sur le Travail et le Développement (CRTD; Center for research on work and development) and of the Ergonomics Lab, part of the CRTD. His present research interests concern on one hand constructive ergonomics, competence development and enabling environments, on the other hand human and organizational reliability (especially in aeronautics and medicine). On a more general level, he is interested in epistemological issues related to the practice of ergonomics and to ergonomics as a discipline.

Between 2000 and 2006, he has been successively Secretary General, then President of the International Ergonomics Association, world federation of national ergonomics societies.

HEYNOTES



COGNITIVE SYSTEMS ENGINEERING: SHAPING UNDERSTANDING WITH CONSTRAINTS

Professor Penelope Sanderson

Schools of ITEE, Psychology and Medicine, The University of Queensland, Australia

Penelope Sanderson is Professor of Cognitive Engineering and Human Factors at The University of Queensland, where she has appointments in the Schools of Psychology, of Information Technology and Electrical Engineering, and of Medicine. After receiving her PhD from University of Toronto she worked for many years at University of Illinois at Urbana-Champaign before returning to her native Australia.

The general area of Penelope's research is cognitive systems engineering, where she has been influenced by and has contributed to applications of cognitive work analysis. Together with her students, she has focused particularly on developing principles for the design of visual and auditory displays to be used in safety-critical systems, such as power plant control rooms and medical electrical equipment. In recent work she has applied cognitive work analysis to safety audits and organisational design. Further recent work brings systems and distributed cognition perspectives to the issue of interruptions and distractions in the workplace.

Penelope is a Fellow of the Academy of the Social Sciences in Australia, and also of the Human Factors and Ergonomics Society (HFES). She has received the HFES Distinguished International Colleague Award, the HFES Paul Fitts Educator Award, and has twice won the HFES Jerome Ely Award for the best paper in the journal Human Factors. She has also received the American Psychological Association Division 21 Franklin Taylor Award for Distinguished Contributions to Applied Experimental and Engineering Psychology.



TRANSFORMING RELATIONSHIPS FOR ORGANIZATIONAL CHANGE

Professor Jody Hoffer Gittell

Brandeis University, United States

Jody Hoffer Gittell is a professor of management at Brandeis University's Heller School for Social Policy and Management. She received her PhD from the MIT Sloan School of Management and taught at the Harvard Business School before joining the faculty of Brandeis University.

Gittell's research explores how coordination by front-line workers contributes to quality and efficiency outcomes in service settings. She has developed a theory of relational coordination, proposing that work is most effectively coordinated through relationships of shared goals, shared knowledge and mutual respect. Through the design of work systems it is demonstrated how organizations can support relational coordination. Gittell leads the Relational Coordination Research Collaborative, an international network of practitioners and researchers seeking to transform relationships for high performance using the framework and tools of relational coordination, and serves as co-founder and Chief Scientific Officer for Relational Coordination Analytics.

KEYNOTES



TOTAL WORKPLACE INNOVATION - THE PARADIGM THAT WILL CHANGE THE ORGANISATION

Professor Geert Van Hootegem

Faculty of Social Sciences, KU Leuven, Belgium

Geert Van Hootegem is a professor at the Faculty of Social Sciences at KU Leuven, where he teaches the following courses: sociology of labour, sociology of organisations, critical management studies and change management. He has a PhD in Sociology and conducts research at the Centre for Sociological Research (CeSO). His research unit Labour Organisation and Organisational Change is currently involved in research projects related to labour organisation, globalisation, quality of labour, stress and teamwork.

Geerts research expertise covers: quantitative and qualitative research; workshops and consultancy concerning: labour market tendencies, new production concepts, work organisation, team based work, work load; qualification profiles; redesign of work organisation; flexibility; wellbeing at work and information society.



POSTER EXHIBITION

The poster exhibition will take place from Monday 18 August 10.00 until Wednesday 20 August 12.00 with an interactive poster session on Tuesday 19 August 15.15-16.15. The mounting time is Monday 18 August 08.00-10.00. Posters must be dismounted on Wednesday 20 August before 13.00. The remaining posters will be destroyed afterwards.



INFORMATION TO PRESENTERS

Technical Equipment for Oral Presentations

The facilities at the congress venue include pc with Microsoft Power Point software and data projectors. Presenters are kindly requested to hand in their presentation to the technician in each room at least 15 minutes prior to the session.





Registration & information desk

Opening hours:	
Sunday 17 August	15.00-18.00
Monday 18 August	8.00-18.00
Tuesday 19 August	. 8.00-18.00
Wednesday 20 August	. 8.30-12.00

On-site registration fees

Participants€ 975	
Members of IEA affiliated associations€ 950	
IEA council members, students, developing countries€ 800)
Accompanying persons€150	

Entitlements

Delegates' registration includes:

- Participation in the scientific programme
- Final programme
- Proceedings on USB stick
- Coffee breaks & lunches
- Welcome reception
- City Hall reception

Registration cancellation & refund policy

Refunds are not made for unattended events, late arrivals or early departure. All refunds will be processed after the congress.

SOCIAL EVENTS



Congress Venue 18.00 - 19.30

Please come join your colleagues for a relaxing get-together including wine & snacks. The get-together will be held in the exhibition area. Included in the registration fee, but enrolment is required.



Restaurant Langelinie Pavillonen 19.30-24.00

A memorable highlight of the congress will be the Congress Dinner that provides an ideal opportunity to mingle and meet other colleagues. The restaurant is located with panoramic views of the entire Copenhagen waterfront adjacent to the Little Mermaid, The Citadel, and The Gefion Fountain – and not far from Amalienborg (Royal Palace) and Nyhavn. The restaurant is fitted and furnished with the very finest in Danish modern design.

Music by The Wingmen (rock'n'roll retro-band) Transportation by bus is organised from the venue at 19.00 hrs. Shuttle busses will go back to the congress center from 22.00

Price: € 25 which includes bus transfer and a three-course dinner with wine and coffee. Tickets must be purchased in advance.

A cash bar (DKK and €) will be open the rest of the evening (cash only)



Copenhagen City Hall 19.00 - 20.30

The City of Copenhagen is pleased to invite all delegates to a reception at the beautiful and historic City Hall. The famous "City Hall Pancakes" and beverages will be served. As the reception is not a dinner, we suggest you make your own arrangements in the city centre after the event.

Included in the registration fee, but enrolment is required.

GENERAL INFORMATION

Copenhagen

Copenhagen is at the cross-roads between Continental Europe and Scandinavia and the Baltic area. The sea and waterfront dominate the city that has kept an old-world charm. The city's old streets and architecture blends in with modern design symbolising its rapid growth. The newly inaugurated Royal Opera offers a magnificent contemporary perspective of Denmark.

The modest size of the city is a great advantage for visitors. The best sights are within the city centre which has a bustling pedestrian shopping area called Strøget. Most roads have a bike lane, and compared with other European cities there is little traffic. Visitors may enjoy a leisurely stroll in a relaxed and safe environment – or a bicycle ride.

Congress venue

The venue for the congress is DGI-Byen's conference center from 2009: CPH Conference. The center is located an approx. 5 minute walk from the Central Station.

The address of the venue is: Tietgensgade 65 (entrance from Kvægtorvsgade) 1704 København V, Denmark Phone: +45 3329 8000 www.dgi-byen.dk

Congress language

The congress language is English. No simultaneous interpretation will be provided.

Name badges

Entrance to the congress area and to the various social events will be limited to badge holders only. If the badge is lost, please contact the registration desk. A fee of DKK 50 will be charged for each new badge.

Certificate of attendance

Certificate of attendance can be obtained upon request at the registration desk from Tuesday.

Insurance

You are requested to arrange your own health and travel insurance. The congress organiser is not responsible for any injuries or damages occurring during the congress.

Weather

Denmark has a maritime climate, which means that the weather is temperate, no extreme heat or cold. In the August the weather is usually dry and pleasant with daytime temperatures around 15 - 20 C. However, rain may occur, so it is advisable to bring a light raincoat or umbrella.

Voltage

Electricity in Denmark is 220-volt AC. Plugs are European standard with two round pins.

Currency & credit cards

The currency in Denmark is the DKK (Danish kroner). Major credit cards are accepted in hotels, taxis, restaurants and shops.

Tipping

Service charges are always included.

TRANSPORTATION AND MAP

Public Transportation

Copenhagen has an extensive and very reliable network of public transportation including buses, trains, S-trains and metro.

Airport - City – Congress venue

Trains run every 20 minutes between the airport and the Copenhagen Central Station (Hovedbanegården). The train fare is approximately DKK 36.

The congress venue, DGI-Byen/CPH Conference is located an approx. 5 minute walk from the Central Station.

A typical taxi fare between the airport and the City Centre/Congress Venue is approximately DKK 200.

City Centre – Congress Venue The official congress hotels are located within walking distance from the Congress Venue (5-10 minutes).





The conference center is places in the center of Copenhagen a few minutes walk from the central station and less than 10 minutes from the city hall and the city square (Rådhuspladsen)

Parking at the venue

The parking can be accessed from Ingerslevgade.

Prices (for each hour commenced) 6.00-22.00 – 19 DKK/hour 22.00-6.00 – 6 DKK/hour For 24 hours – DKK 170

THANKS TO OUR SPONSORS AND EXHIBITION PARTNERS

Exhibition partners Sponsors RollerMouse® by contour 🖪 COWIfonden **P**Sal SIT HAPPY OTTO MØNSTEDS FOND **SID DIG STÆRK** dynamostol[®] d

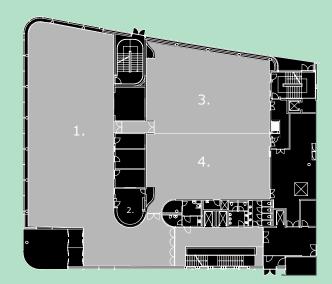
Exhibition Opening Hours

Sunday 17 August Monday 18 August Tuesday 19 August Wednesday 20 August 18.00 - 20.00 8.00 - 18.00 8.00 - 18.00 8.00 - 12.00

More information about the exhibitors

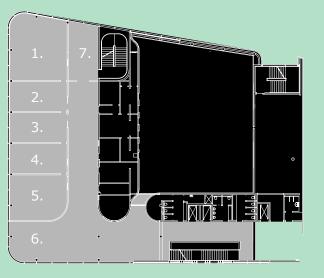
www.salli.com www.contour-design.com / www.rollermouse.com www.dynamostol.dk

FLOOR PLAN



GROUND FLOOR

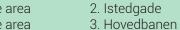
- 1. Foyer
- 2. Reception
- 3. Sankt Hans Torv
- 4. Nørrebros Runddel



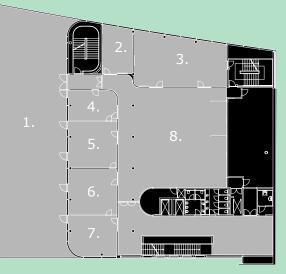
1st FLOOR

- 1. Kastrup Lufthavn
- 2. Christianshavn
- 3. Islands Brygge
- 4. Christiania

5. Amager Strandpark 6. Break / lounge area 7. Break / lounge area



4. Tivoli



2ND FLOOR

- 1. Roof terrace
 - 6. Enghave Plads
 - 7. Kødbyen
 - 8. Break / lounge area

5. Vesterbro Torv





SEE YOU AT NES 2015 & ODAM 2017

Professional congress organiser



ICS A/S Strandvejen 169-171 P.O. Box 41 DK-2900 Hellerup Denmark

Tel: +45 3946 0500 Fax: +45 3946 0515 E-mail: reservations@ics.dk www.ics.dk