

## Cardiology in Occupational Health

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**Chairman:** Peter L. Schnall M.D. From year: 2005  
 Email address: [pschnall@workhealth.org](mailto:pschnall@workhealth.org)

**Secretary:** Reiner Rugulies From year: 2005  
 Email address: [rer@ami.dk](mailto:rer@ami.dk)

**SC Website URL:** [www.workhealth.org](http://www.workhealth.org)

**Other SC Means of Communications: ICOH-Cardiology in OH Listserve**  
<http://www.icohweb.org/committees/cardiology.asp>

**Focus and aim of Scientific Committee:** The ICOH Scientific Committee on Cardiology in Occupational Health e-mail community serves a professional network of researchers, occupational health physicians and public health workers throughout the world concerned about the impact of work and work-related factors on cardiovascular health, in particular hypertension and ischemic heart disease (IHD). Linking economic globalization to the changing nature of work and its impact on the risk of CVD, and focusing on research, worksite interventions, and public health, we are organized as an official committee of the International Commission of Occupational Health. Our work focuses on identifying work-related risk factors for CVD, including both the physical and psychosocial work environment, the interplay of social class, work and health, interventions to reduce the burden of unhealthy jobs, and public policy concerns to foster change in working conditions.

### PART I – ACTIVITIES: Business meetings, Conferences, Seminars and Workshops Midterm Report: June 2006-September 30, 2007

**1) Business meeting:**

Venue: 28<sup>th</sup> ICOH  
 Date: June 13<sup>th</sup> 2006  
 Number of attendees: 8  
 Date report sent to VP Fingerhut – none submitted

**Conferences, Seminars, Workshops, Courses, etc:**

<b>(1) Name of the event:</b>	<b>Workshop on Occupational Health and Mental Health</b>			
<b>Type of event:</b>	<b>Conference</b>	<b>Seminar</b>	<b>Workshop</b>	<b>Course</b>
				XXXXX
<b>Date:</b>	September 24- 28 2007			
<b>Venue:</b>	<b>Beijing University</b>			

<b>Organizers:</b>	Peter Schnall (Chair, ICOH Scientific Comm. Card in OH) and Yueqin Huang, MD, MPH, PhD ( <b>Vice Chair</b> ) Professor of Psychiatric Epidemiology, Deputy Director, Institute of Mental Health, Peking University Director, The National Center for Mental Health,
<b>Co-organizers and Collaborators: Please describe roles.</b>	The workshop topics focused on the assessment of risk factors at work, work related health outcomes especially CVD , as well as worksite intervention strategies intended to reduce work stress. The workshops: provided an overview of the changing organization of work in developed countries and in China; discussed how stressful job characteristics and work organization affect worker health, particularly cardiovascular disease, psychological disorders and musculoskeletal disorders; discussed how to assess workplace stressors and stress-related health outcomes; explored intervention strategies to reduce workplace stressors and reduce the risk of work stress-related disease
<b>Number of participants:</b>	50
<b>Publication of proceedings:</b>	All presentations are available in English and Chinese at <a href="http://www.workhealth.org">www.workhealth.org</a>
<b>Book of abstracts:</b>	Yes
<b>Book of selected proceedings:</b>	In press
<b>Special issue of peer reviewed journals:</b>	Yes
<b>Assessment of success:</b>	Excellent

<b>(2) Name of the event:</b>	<b>Planning for 5<sup>th</sup> ICOH Sponsored “Work Environmentx and CVD 1<sup>st</sup> Announcement</b>				
<b>Type of event:</b>	<b>Conference</b>	<b>Seminar</b>	<b>Workshop</b>	<b>Course</b>	
	xxxx				
<b>Date:</b>	September 27-30 2009				
<b>Venue:</b>	Cracow, Poland Auditorium Maximum of the Jagellonian University				
<b>Organizers:</b>	<i>Prof. Konrad Rydzyński, MD, PhD Director General, NIOM</i>				

	<i>Assoc. Prof. Alicja Bortkiewicz, PhD</i>
<b>Co-organizers and Collaborators: Please describe roles.</b>	Dr. Peter Schnall, Chair ICOH Scientific Comm. Planning Comm.
<b>Number of participants:</b>	500
<b>Publication of proceedings:</b>	Planned
<b>Book of abstracts:</b>	Planned
<b>Book of selected proceedings:</b>	
<b>Special issue of peer reviewed journals:</b>	
<b>Assessment of success:</b>	

<b>(3) Name of the event:</b>	<b><u>Work, Stress, and Health 2008: Health and Safe Work Through Research, Practice, and Partnerships</u></b>				
<b>Type of event:</b>	<b>Conference</b>	<b>Seminar</b>	<b>Workshop</b>	<b>Course</b>	<b>Other</b>
	XXXXX				
<b>Date:</b>	March 6-8 <sup>th</sup> 2008				
<b>Venue:</b>	Omni Shoreham Washington D.C.				
<b>Organizers:</b>	APA, NIOSH				
<b>Co-organizers and Collaborators: Please describe roles.</b>	ICOH Members – Dr. Peter Schnall, Dr. Dean Baker – panel organizers and presenters – planning comm..				
<b>Number of</b>	800 expected				

<b>participants:</b>	
<b>Publication of proceedings:</b>	Yes
<b>Book of abstracts:</b>	Yes
<b>Book of selected proceedings:</b>	No
<b>Special issue of peer reviewed journals:</b>	No
<b>Assessment of success:</b>	Forthcoming

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**Conferences, Seminars, Workshops, Courses, etc:**

<b>(1) Name of the event:</b>	Job Stress, Chronic Disease and Heart Rate Variability: Measuring a New Pathway of Work-related Chronic Disease Risk, a Nordic Advanced Training Institute (NIVA) workshop at the National Institute of Occupational Health (AMI) in Copenhagen, Denmark,				
<b>Type of event:</b>	<b>Conference</b>	<b>Seminar</b>	<b>Workshop</b>	<b>Course</b>	
			XXXX		
<b>Date:</b>	June 6-7, 2006.				
<b>Venue:</b>	Palace Hotel Rådhuspladsen 57 DK-1550 Copenhagen V - Denmark				
<b>Organizers:</b>	NIOH (AMI)				
<b>Co-organizers and Collaborators: Please describe roles.</b>	NIVA (Nordic Institute for Advanced Training in Occupational Health)				
<b>Number of participants:</b>	30				
<b>Publication of proceedings:</b>					

<b>Book of abstracts:</b>	Yes
<b>Book of selected proceedings:</b>	No
<b>Special issue of peer reviewed journals:</b>	NO
<b>Assessment of success:</b>	Praised by participants

**Conferences, Seminars, Workshops, Courses, etc:**

<b>(1) Name of the event:</b>	<b>THIRD ICOH INTERNATIONAL CONFERENCE ON PSYCHOSOCIAL FACTORS AT WORK: FROM KNOWLEDGE TO ACTION</b>				
<b>Type of event:</b>	<b>Conferen ce</b>	<b>Semin ar</b>	<b>Worksho p</b>	<b>Cours e</b>	<b>Othe r</b>
	XXXXX				
<b>Date:</b>	<i>September 1-4, 2008</i>				
<b>Venue:</b>	Hotel LOEWS Le Concorde Quebec City, Quebec, Canada				
<b>Organizers:</b>	Organized by: Prof Renée Bourbonnais and Prof Michel Vézina from Laval University and the Québec Public Health Institute				
<b>Co-organizers and Collaborators: Please describe roles.</b>					
<b>Number of participants:</b>	500-800 planned				
<b>Publication of proceedings:</b>	?				
<b>Book of abstracts:</b>	Yes				
<b>Book of selected proceedings:</b>	?				
<b>Special issue of peer reviewed journals:</b>	?				

<b>Assessment of success:</b>	Forthcoming
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**PART II Midterm Report: SC Products and Collaborations June 2006 – September 30, 2007**

**Publications, Guidelines\*, Position Papers\*, etc**

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**Publications, Proceedings, Guidelines\*, Position Papers\*, etc.**

A systematic review of the job-stress intervention evaluation literature, 1990-2005. La Montagne et al, 2007

High job strain and ambulatory blood pressure in middle-aged men and women from the Belgian Job Stress Study. Clays et al, 2007

The impact of job strain and marital cohesion on Ambulatory blood pressure during one year: The Double Exposure Study. Tobe et al, 2007

Job strain in men, but not in women, predicts a significant rise in blood pressure after 6.5 years of follow-up. Ohlin et al, 2007

Work hours and self-reported hypertension among working people in California. Yang et al, 2006

Collins SM, Karasek R. Vagal Responses to Work and Rest Day Strain: Possible Cardiac Disease Risk Mechanisms. *European Journal of Cardiovascular Prevention and Rehabilitation*, 2006; 13(Supplement 1) S51.

Collins SM, Cahalin LP. Should we be considering Job Strain when evaluating our patients with cardiac disease? *Cardiopulmonary Physical Therapy Journal*, 2005; 16(4) 35.

Collins SM, Landsbergis P, Warren N, LaMontagne AD. Stopping Stress at its Origins: Working Conditions. *Hypertension* 2007 49:e33.

Giampaoli S, Palmieri L, Panico S, Vanuzzo D, Ferrario M, Chiodini P, Pilotto L, Donfrancesco C, Cesana GC, Sega R and Stamler J: Favourable cardiovascular risk profile (low risk) and 10-year stroke incidence in women and men: findings from 12 Italian population samples. *Am J Epidemiol* 2006; 163: 893-902

Palmieri L, Donfrancesco C, Giampaoli S, Troiani M, Panico S, Vanuzzo D, Pilotto L, Cesana GC, Ferrario M, Chiodini P, Sega R and Stamler J: Favorable cardiovascular risk profile and 10-year coronary heart disease incidence in women and men: results from the Progetto CUORE. *Eur J Cardiovasc Prev Rehab* 2006; 13:562-9

Antikainen R, Moltchanov V, Chukwuma C, Kuulasmaa K, Marques-Vidal P, Sans S, Wilhelmsen L, Tuomilehto J, for the WHO MONICA Project (among PIs, Cesana GC).

Trends in the prevalence, awareness, treatment and control of hypertension: the WHO MONICA Project. *Eur J Cardiovasc Prev Rehabil* 2006;13:13-29.

Cesana GC, Menni C: Cardiovascular risk as a paradigm of the negative consequences of stress at work: a large amount of data and huge problems. *Med Lav* 2006; 97:272-277

Barea M, Cesana GC: Social protection sustainability, prolongation of working life and greater participation of women in the labour market. *Med Lav* 2006; 97:149-155

Cesana GC, Costa G: Occupational stress: risk assessment and fitness for work. *Med Lav* 2006; 97:694-698

Kornitzer M, deSmet P, Sans S, Dramaix M, Boulenguez C, DeBacker G, Ferrario M, Houtman I, Isacson SO, Ostergren PO, Peres I, Pelfrene E, Romon M, Rosengren A, Cesana

GC and Wilhelmsen L: Job Stress and major coronary events: results from the Job Stress, Abseteeism and Coronary Heart Disease in Europe study. Eur J Cardiovasc Prev Rehab 2006; 13:695-704

Fornari C, Ferrario M, Menni C, Sega R, Facchetti R, Cesana GC: Biological consequences of stress: conflicting findings on the association between job strain and blood pressure. Ergonomics 2007; 50:1717-27

Fornari C, Cesana GC, Chambless LE, Corrao G, Borchini R, Madotto F, Ferrario M: Time trends of myocardial Infarction 28 day case fatality in the 1990s: is there a contribution from different changes in socio economic classes. J Epid Comm Health 2008; in press

Palmieri L, Barchielli A, Cesana G, de Campora E, Goldoni CA, Spaolone P, Ugucioni M, Vancheri F, Vanuzzo D, Cicaraelli P, Giampaoli S: The Italian Register of Cardiovascular Diseases: attack rates and case fatality for cerebrovascular events. Cerebrovasc Dis 2007; 24:530-539

Ngomo, S., Messing, K., Comtois, A., Laperrière, E. 2006. Working postures over an observed work day and orthostatic intolerance. Special session on Occupational Physical Activity, Work Posture, And The Risk Of Cardiovascular Diseases. 28th International Congress on Occupational Health. June 12 2006. Proceedings, p. 385.

Tuchsen F, Stock S, Krause N, Feveille H, Messing K. 2006. The impact of prolonged standing at work on hospitalisation for varicose veins of the lower extremities in Québec compared to Denmark. Special session on Occupational Physical Activity, Work Posture, And The Risk Of Cardiovascular Diseases. 28th International Congress on Occupational Health. June 12 2006. Proceedings, p. 384.

Messing, K, Tissot, F., Stock, S. 2006. Lower limb pain, standing, sitting and walking: the importance of freedom to adjust one's posture. Presented at the International Ergonomics Association. July 2006.

#### **Cooperation with other Scientific Committees:**

None

#### **Participation and support to WHO – ILO meetings and or publications:**

Article Published in Special WHO GHONET Newsletter July 2007 titled Psychosocial factors and work stress research in Mexico: A new Latin-American Network – Arturo Juarez Garcia and Peter L.. Schnall

#### **Cooperation with non-ICOH organizations:**

These are too numerous to list in their entirety. Some examples follow:

**Tage Kristensen** - professor in Taiwan (1 week).

Invited key-note lecturer at the 2007 International Conference of Industrial Hygiene and Occupational Medicine in Kaohsiung: "Psychosocial factors at work, stress, and the health of the employees – the European perspective".

**Conference on "Factores Psicosociales y Salud". IV Foro ISTAS de Salud Laboral.**

**Invited keynote speaker : "Psychosocial risk factors and health". Barcelona, Spain.**

#### **Any other points of relevance:**

none

**Planned business meetings, conferences, seminars:**

There will be a business meeting of committee members attending the 3<sup>rd</sup> **THIRD ICOH INTERNATIONAL CONFERENCE ON PSYCHOSOCIAL FACTORS AT WORK in Quebec to be held September 1-4 2008**

**Planned collaborative Activities with other ICOH Scientific Committees:**

Many Scientific committee members of the Cardiology in Occupational Health are involved in the planning of both the **Work, Stress, and Health 2008 conference as well as the 3rd ICOH sponsored WOPS meeting in Quebec.**

**Planned collaborative Activities with other (Non-ICOH) Organizations:**

Committee members in the U.S. are involved in two networks 1) involving Latin American researchers interested in work organization and psychosocial factors and 2) with colleagues in China conducting research on impact of occupation on health and CVD.

**Planned Publications, Position papers, etc.:**

Book titled “Unhealthy Work: Causes, Consequences and Cures” Edited by Peter L. Schnall, Marnie Dobson, Ellen Rosskam, Dean Baker, Paul Landsbergis. 20 authors. Publisher – Baywood Press. 2008 In Press 500 pages.

**Planned Scientific Contributions to ICOH 2009:**

Still in planning stages.

**In preparation**

A new research project in France *Psychosocial and organizational work factors and hypertension in medical care staff in hospitals – Analysis of the ORSOSA study. Headed up by a member of the ICOH Scientific Committee on Cardiology in Occupational Health (Dr. Regis de Gaudemaris)*

**Any other points of relevance:**

none

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**PART IV – Assessment of Success of SC and Impact on Global Occupational Health**

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**Midterm Report:**

Significant advances have occurred in establishing the relationship between the work environment and CVD particularly hypertension. Attention in the past 3 years has shifted to clinical issues such as 1) the existence of occult hypertension (working people with elevated bp at work and normal bp in the doctor’s office) which may be as much as 20% of the adult working population and 2) RTW after an acute MI as to the degree this is influenced by work stressors. Efforts are being made to increase awareness among occupational health doctors as they can lead in prevention efforts. In addition, both in Europe and the U.S. further research on interventions/prevention is being conducted. We gathered an impression during our recent China workshop that occupational health and safety issues are a serious concern with 40,000 reportable occupational health and safety accidents and injures every day and 104,000 deaths per year. On the other hand, CVD is not on the radar screen in China despite dramatic increases in prevalence of both hypertension and CAD.

Work in this field remains most active in Japan, Europe and Canada with only a small # of researchers in North America. Reasons for these differences are discussed in our forthcoming book titled “Unhealthy Work: Causes, Consequences and Cures” to be published in Fall 2008 by Baywood.