

Health at work and risk factors related to ergonomics; some results from the Swiss sample of the 4th European working conditions survey

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Introduction

The European Foundation for the improvement of living and working conditions conducts a survey every 5 years since 1990. The foundation also offers the possibility to non-EU countries to be included in the survey: in 2005, Switzerland took part for the first time in the fourth edition of this survey. The Institute for Work and Health (IST) has been associated to the Swiss project conducted under the leadership of the SECO and the Fachhochschule Nordwestschweiz. The survey covers different aspects of work like job characteristics and employment conditions, health and safety, work organization, learning and development opportunities, and the balance between working and non-working life (Parent-Thirion, Fernandez Macias, Hurley, & Vermeylen, 2007). More particularly, one question assesses the worker's self-perception of the effects of work on health. We identified (for the Swiss sample) several factors affecting the risk to report health problems caused by work.

The Swiss sample includes 1040 respondents. Selection of participants was based on a random multi-stage sampling and was carried out by M.I.S Trend S.A. (Lausanne). Participation rate was 59%. The database was weighted by household size, gender, age, region of domicile, occupational group, and economic sector. Specially trained interviewers carried out the interviews at the respondents home. The survey was carried-out between the 19th of September 2005 and the 30th of November 2005.

As detailed in (Graf et al., 2007), 31% of the Swiss respondents identify work as the cause of health problems they experience. Most frequently reported health problems include back pain (18%), stress (17%), muscle pain (13%), and overall fatigue (11%). Ergonomic aspects associated with higher risk of reporting health problems caused by work include frequent awkward postures (odds ratio [OR] 4.7, 95% confidence interval [CI] 3.1 to 5.4), tasks involving lifting heavy loads (OR 2.7, 95% CI 2.0 to 3.6) or lifting people (OR 2.2, 95% CI 1.4 to 3.5), standing or walking (OR 1.4, 95% CI 1.1 to 1.9), as well as repetitive movements (OR 1.7, 95% CI 1.3 to 2.3).

These results highlight the need to continue and intensify the prevention of work related health problems in occupations characterized by risk factors related to ergonomics.

References

Graf, M., Pekruhl, U., Korn, K., Krieger, R., Mücke, A., & Zölch, M. (2007). *Quatrième enquête Européenne sur les conditions de travail en 2005; résultats choisis du point de vue de la Suisse* SECO Secrétariat d'Etat à l'économie.

Parent-Thirion, A., Fernandez Macias, E., Hurley, J., & Vermeylen, G. (2007). *Fourth European Working Conditions Survey* Luxembourg: Office for Official Publications of the European Communities.



Research Day

January 17, 2008
César Roux Auditorium

Regenerative Medecine

Unil

UNIL | Université de Lausanne

Faculté de biologie
et de médecine



CHUV RESEARCH DAY 2008
Thursday, January 17th, 2008
“Regenerative Medicine”

08:30 Presentation of the 2008 Research Day
Professor Ivan Stamenkovic, Vice Dean for Research

08:45 **Keynote
speaker 1**



Professor Philippe Menasché
Department of Cardio-Vascular Surgery
Hôpital Européen G. Pompidou, Paris
“Promises and pitfalls of skeletal myoblast therapy”

09:30 **Coffee & Posters**

10:30 6 short talks

12:00 **Keynote
speaker 2**



Professor Giulio Cossu
Stem Cell Research Institute, Milano
“Towards a cell therapy for muscular dystrophy”

12:45 **Lunch, Coffee & Posters**

14:00 **Keynote
speaker 3**



Professor Michele De Luca
Department of Biomedical Sciences, Modena
Epithelial Stem Cell Research Centre, Venice
“Epithelial stem cells and regenerative medicine”

14:45 6 short talks

16:15 **Coffee & Posters**

17:00 **Keynote
speaker 4**



Professor Lior Gepstein
Dept of Physiology & Biophysics, Technion – Haifa,
Israel
*“Myocardial Regeneration by Human Embryonic
Stem Cells”*

17:45 Poster Prizes Ceremony

18:00 **Apéritif & Buffet**

ATTENDANCE IS FREE - NO REGISTRATION IS NECESSARY

NOTE: Posters will be displayed from
Wednesday January 16st early morning to Friday January 18th early morning.

12 short talks

| Schedule | Names, departments | Titles |
|------------------|--|---|
| Morning | | |
| 10h30 - 10h45 | Boris Hinz Laboratoire de biophysique cellulaire - EPFL | <i>"The myofibroblast - friend and foe in tissue regeneration"</i> |
| 10h45 - 11h00 | Matthias Lutolf Laboratoire de cellules souches et bioengineering - EPFL | <i>"Bioengineering artificial stem cell niches".</i> |
| 11h00 - 11h15 | Corinne Kostic Unité de thérapie génique et biologie des cellules souches – Hôpital Ophtalmique | <i>"Gene therapy preclinical studies for Leber congenital amaurosis"</i> |
| 11h15 - 11h30 | Anne Zurn Chirurgie expérimentale - CHUV | <i>"Delayed peripheral nerve priming improves regeneration of sensory axons into the spinal cord following dorsal root injury."</i> |
| 11h30 - 11h45 | Meta Djojosebroto Unité de thérapie génique et biologie des cellules souches – Hôpital Ophtalmique | <i>"Increased chromosomal aberrations and transformation of adult mouse retinal stem cells"</i> |
| 11h45 - 12h00 | Paola Bonfanti Chirurgie expérimentale - CHUV & Laboratoire de dynamique des cellules souches - EPFL | <i>"Thymic epithelial cells have skin potency"</i> |
| Afternoon | | |
| 14h45 - 15h00 | Dominique Pioletti Laboratoire de biomécanique en orthopédie - EPFL | <i>"In Vivo evaluation of human fetal cells as allogenic cell source for tissue engineering"</i> |
| 15h00 - 15h15 | Mikaël Martino Laboratoire de médecine régénérative et de pharmacobiologie - EPFL | <i>"Controlling mesenchymal stem cells response to biomaterials with recombinant integrin- specific fibronectin fragments"</i> |
| 15h15 - 15h30 | Dela Golshayan Néphrologie et Centre de Transplantation d'organes - CHUV | <i>"Mechanisms of Allograft rejection and tolerance in transplantation"</i> |
| 15h30 - 15h45 | Jonathan Bloch Médecine Interne - CHUV | <i>"Spleen derived vascular progenitor cell transfer restores metabolic and vascular insulin sensitivity in high-fat diet insulin resistant mice"</i> |
| 15h45 - 16h00 | Marc-Etienne Roehrich Cardiologie – CHUV | <i>"Immunophenotypical analysis of putative cardiac progenitor cells isolated based on high ALDH activity from adult mouse and human hearts"</i> |
| 16h00 - 16h15 | Mohamed Nemir Dpt de Médecine - CHUV | <i>"Control of cardiac integrity via the Notch1 receptor pathway".</i> |