

# Bulletin

April 2007

Number Six

In this issue:

**Invitación**

**Programme of 7<sup>th</sup> EASOM Summer School  
in Zaragoza, 6 – 8 September 2007**

**EASOM Board member successfully defends  
his PhD thesis**

**Progress of the epi module project**

**New EASOM members present themselves:**

**Vienna (by Jasminka Godnic-Cvar)**

**Forthcoming events**

**A request from the Board of EASOM**

More information about EASOM: <http://www.easom.org>

For comments and questions about this Bulletin and contributions and suggestions for the next Bulletin, please send an e-mail to EASOM's Secretary:

[andre.weel@mediforce.nl](mailto:andre.weel@mediforce.nl)

# **Invitación**

## ***¡Zaragoza, la capital de Aragón, te da la bienvenida!***

Te invitamos a visitar Zaragoza, la ciudad que te acoge y te proporciona momentos inolvidables. Un viaje a cuatro culturas que conviven en el tiempo, en el espíritu y en más de dos mil años de historia que jalona sus calles.

Prepárate a pasear por la Zaragoza romana, la cristiana, la mudéjar y la judía. Todas en una. Con cuatro culturas, cuatro religiones, cuatro arquitecturas que han evolucionado en el estilo de vida que, hoy, caracteriza la ciudad y sus gentes.

## ***Zaragoza, the capital of Aragon, welcomes you!***

We invite you to visit Zaragoza, the city that receives you and provides you with unforgettable moments. A trip into four cultures that share the time, the spirit and more than two thousand years of history that characterizes its streets.

Prepare for a walk through the Roman, the Christian, the Musulman and the Jewish Zaragoza. All in one. With four cultures, four religions, for architectures that have developed into the style of living that nowadays shapes the city and its people.

***University of Zaragoza, Faculty of Medicine***

***School of Occupational Medicine***

***Prof. Begoña Martínez Jarreta***

***European Association of Schools of Occupational Medicine***

# **Programme of 7<sup>th</sup> EASOM Summer School in Zaragoza, 6 – 8 September 2007**

## **TEACHING MANAGEMENT OF MENTAL HEALTH PROBLEMS**

### **Thursday, 6<sup>th</sup> of September: WHAT & WHY IN TEACHING**

**Morning Session.** Chair: Dr. Kristiina Mukala

08:30 Registration of participants

09:00 Opening Ceremony

09:30 Keynote Lecture: Individual approach of mental health problems at work  
*Prof. Jac van der Klink, University of Groningen, NL*

10:20 Keynote Lecture: Organisational approach of mental health problems at work  
*Dr. Victor Alcalde, General Motors, Zaragoza, Spain*

11:10 Coffee Break

11:40 Short presentations about mental health and teaching practice in different countries

- France: *Dr. María Gonzalez, Strasbourg*
- United Kingdom: *Prof. John Harrison, London*
- Finland: *Dr. Tina Saarelma, Helsinki*
- Romania: *Prof. Elena Pauncu, Timisoara*
- Belgium: *Prof. Raphael Masschelein, Leuven*
- Italy: *Prof. Maria Grazia Cassito, Milan*

14:00 Spanish Lunch

**Afternoon Session.** Chair: Dr. André Weel

17:30 What competencies a fully qualified occupational physician should have regarding management of mental health problems at work?  
*Prof. Begoña Martínez-Jarreta, University of Zaragoza*

General discussion and conclusions of the first day

19:00 End of programme

21:00 Spanish Dinner

Restaurante "La Bastilla"



# **Friday, 7<sup>th</sup> of September: HOW TO TEACH**

## **Morning Session. Chair: Prof. Alain Cantineau**

**09:00 Experiences with teaching methods from different countries:**

- **Teaching diagnosis**  
*Prof. Pedro Saz, University of Zaragoza, Spain*
- **Analysis of mental health problems in organisations**  
*Mag. Gerhard Elsigan, Linzer Academy of Occupational Medicine, Linz, Austria*
- **Teaching guidance and rehabilitation of workers with work-related mental health problems**  
*Dr. Javier Bascuas, General Motors and University of Zaragoza, Spain*
- **Preventive strategies for mental health problems**  
*Dr. Javier García-Campayo, University of Zaragoza, Spain*  
*Dr. Juan Carlos Fernández, Fremap, Zaragoza, Spain*

**11:00 Coffee Break**

**11:30 Demonstrations of teaching methods**

- **Conflicts at work and mobbing**  
*Prof. Maria Grazia Cassito, University of Milan*
- **Role plays about stress at work**  
*Dr. Cristina Vispe, Fremap and University of Zaragoza, Spain*  
*Dr. Santiago Gascón, University of Zaragoza, Spain*  
*Dr. Ricardo Campos, Barcelona, Spain*

**13:30 Spanish Lunch**

## **Afternoon Session. Chair: Prof. Raphael Masschelein**

**16:30 Demonstrations of teaching methods (continued)**

**Mag. Gerhard Elsigan, Linzer Academy of Occupational Medicine, Linz, Austria**

**17:00 What instructional methods are appropriate for teaching management of mental health problems?**

***Prof. Raphael Masschelein, University of Leuven, Belgium***

**General discussion and conclusions of the second day**

**18:00 EASOM General Assembly**

**19:30 End of programme**

**21:00 Aragonese Dinner**

Restaurante "El Cachirulo"



# **Saturday, 8<sup>th</sup> of September: IMPROVING OUR TEACHING SKILLS**

## **Morning Session. Chair: Prof. John Harrison**

**09:00 Introduction of group working**

*Dr. André Weel, Mediforce, The Netherlands*

**09:15 Working in three subgroups dealing with the questions:**

- Which mental health problems at work have the highest priority to be included in the curriculum?  
*Prof. Begoña Martínez-Jarreta, University of Zaragoza, Spain*
- What do we need for teaching the management of mental health problems in our schools?  
*Dr. André Weel, Mediforce, The Netherlands*
- How to improve our skills as teachers in the management of mental health problems at work?  
*Prof. Raphael Masschelein, University of Leuven, Belgium*

**10:15 Plenary reports from the subgroups and discussion**

**11:15 Concluding session**

## ***General conclusions***

*Prof. Dr. John Harrison*

*Organizers of former Summer Schools are invited to participate in the concluding session:*

*Dr Giso Schmeisser, Dresden*

*Prof. Brigitta Danuser, Lausanne*

*Dr Peter Bulat, Belgrade*

*Dr. Kristiina Mukala, Helsinki*

*Prof. Giorgio Assennato, Bari*

**12:00 End**

**12:30 Guided Visit to the Historical Town and Monuments of Zaragoza**

**14:30 Spanish Lunch at the Zaragoza Roman Theatre**

Venue on 6th and 7th of September:

*Aula de la Logia,*

*Institución Fernando el Católico (IFC)*

*Diputación Provincial de Zaragoza*

*Plaza de España s/n*

*Zaragoza*

For more information and registration (starting 1<sup>st</sup> of May 2007), please visit our web site [www.easom.org](http://www.easom.org)

# **EASOM Board member successfully defends his PhD thesis**

On the 26<sup>th</sup> of March, 2007, our fellow EASOM Board member Jean-François Gehanno has completed his PhD research in defending his thesis at the University of Rouen, France. We congratulate him with this excellent performance. Because his research is so important for teaching occupational medicine, we present a summary of his thesis in this Bulletin.

## **Part one. Postgraduate training in occupational medicine in France**

Occupational medicine is changing and we wanted to assess if the training we provide to postgraduate students in France is adapted to these changes, to the needs for public accountability and to the underlying knowledge of students.

Three different studies were therefore performed.

The first one concerned the undergraduate training in occupational medicine. The purpose of this study was to assess the level and content of the teaching of occupational medicine in the French undergraduate medical curricula. A questionnaire survey of the teaching of occupational medicine to undergraduates sent in 2004 to all the French medical schools. The response rate was 95 %. All the schools had specific occupational medicine lectures but hours of lectures and seminars ranged from 2 to 18 hours with a mean of 9 hours. Lectures on the definitions of occupational diseases and workplace injuries were provided in all the medical schools, but the other topics varied widely between them. Due to a low level of attendance to the courses, nearly 30 % of students finish their undergraduate studies without having followed any lecture in occupational medicine. This study suggests a declining commitment to occupational medicine on the part of French medical schools. Furthermore, it shows that students who enter postgraduate training in occupational medicine have a very low level of knowledge in that field. This fact must be taken into consideration when trying to improve this postgraduate training.

The second study concerned the students who were recently graduated in occupational medicine. The purpose of this study was to obtain the opinions of former trainees as regards their specific training programme experience. A questionnaire was sent to 338 specialists who had completed their internship in France in 2002, 2003 or 2004. Overall, 253 replies were obtained (75% return rate). Most of the physicians were satisfied with their career. However, 9% of physicians had left their practice since the end of internship and 8 % anticipated a moderate-to-definite likelihood to do so within a few years. Respectively 76% and 62% of physicians estimated that their practical and theoretical training had adequately prepared them for their current professional activities. The rate of physicians who leaved occupational medicine in the years after their internship, or who anticipate to do so is similar to other specialities, but it reflects the fact that some physicians are not prepared enough to tackle the changes in the practice of occupational medicine. Furthermore, it emphasises the need for improvement of the post graduate training.

The last study concerned the training needs of future occupational physicians. We first elaborated a list of competencies required of specialists in occupational medicine, based on the works of WHO-Europe and the University of Glasgow. The competencies were

classified into 6 basic competencies, and further divided into three areas—namely, knowledge, experience, and competence. We then submitted this list to 6 focus groups, involving the stakeholders of occupational medicine, *i.e.* occupational physicians, post-graduate trainees, employers, employees and occupational health services directors. The contributions of focus groups were used to modify and improve readability of the list of competencies, which finally included 219 items. This new curriculum will be implemented in France in next September.

## **Part two. Information retrieval methods in occupational medicine**

The methods of evidence-based medicine have been adopted on a wide scale in many areas of health care, including occupational health, during the last ten years. As pointed out by Smith, medicine, in modern jargon, is a knowledge based business and the rate of change in medical knowledge has accelerated: the doubling time of the biomedical knowledge base is currently about 19 years. These trends emphasize the need for the occupational physician to be able to actualise his knowledge, and to retrieve relevant information when needed.

Those two different scopes involve different tools.

Occupational health covers many basic and clinical research fields. The articles dealing with related topics are therefore published in a wide range of journals, and not only in occupational health journals. Specialists in occupational health, as well as specialized librarians, thus confront a problem when trying to follow-up occupational health literature. On the basis of MEDLINE and the Impact Factor, we quantified this diversity and we proposed a cost-effective method for selecting the most pertinent periodicals in the practice of occupational health. We performed a MEDLINE search to identify all the articles published in 1998 with occupational diseases or occupational exposures as the main topic. These articles were classified based on the periodicals in which they appeared. The periodicals were then compared according to their subject area, the number of articles that were published in the fields studied, and their Impact Factor. Overall, the search retrieved 2247 articles, published in 577 different periodicals in 1998. Each periodical published between 1 and 105 articles during this period (mean 3.89). However, only 1.4% of the periodicals accounted for more than 25% of the total articles published. More than one half of the articles were published in journals dealing with general practice or medical specialities other than occupational health. Only 66% of retrieved periodicals had an Impact Factor, and more than 80% of the articles were published in periodicals with an Impact Factor lower than 2. Therefore, following-up only occupational health journals is not sufficient to meet the requirements of the occupational health professional. Moreover, the use of the Impact Factor cannot be considered as a reliable research tool for follow-up assessment purposes. Two lists of 8 and 38 periodicals were thus set up. They permit literature coverage of 27% and 52% respectively in the specific fields studied, and this appears to be the optimal compromise between time consumption and literature coverage. Furthermore, the method we used can be applied to different topics to define a cost-effective method to follow-up literature.

The second scope is to find evidence-based answers to the questions that arise during day to day practice. A two step strategy can be used: first identify the articles using bibliographic databases, and second use the reference lists of recovered articles to identify additional relevant articles. Nevertheless, both strategies need to be evaluated.

We therefore performed a study to determine the efficiency of the major bibliographic databases by assessing the percentage of references among the total literature available that can be retrieved from each database. We also evaluated the best database combinations to carry out an exhaustive search. BIOSIS, EMBASE, MEDLINE, NIOSH-TIC, and TOXLINE were searched on two topics: allergy to latex and asbestos. This search was performed for the years 1994 and 1995. All the records were classified by journal and author's name and were verified for each record whether or not it was indexed in each database. Overall, 777 articles in 510 issues were found. The efficiency of each database (percentage of articles recovered) and of combinations varied between 11% and 63% for one database and between 42% and 86% for a combination of two databases. Therefore, it is not advisable to assert that a bibliography is complete when only one database is searched. Furthermore, the efficiency of the databases may be quite different. Finally, it is suggested that the best way to be as exhaustive as possible is to search two or more databases. This seems to be the best compromise solution between time consumed for searching and efficiency.

We performed another study to know if bibliographic citations can be used to access new data in occupational medicine. We therefore evaluated the accuracy of references citing Occupational and Environmental Medicine (OEM) articles. The ISI Science Citation Index Expanded was searched for all the papers citing one of the articles published in OEM in 1994 or 1998. The accuracy of all the citations were checked, using the printed version of OEM as the gold standard. A total amount of 3347 citations from a 1994 or 1998 OEM publication were retrieved from the SCIE. One hundred and twelve (3.35%) citations included at least one major error. These citation errors will not only delay retrieval of the article but may also result in failure to locate the article. Furthermore this can lead to an underestimation of single paper citation factor of up to 25%.

Information retrieval methods in occupational medicine are therefore complex and their limits and drawbacks must be known by occupational physicians.

**Jean-François Gehanno**

## **Progress of the epi module project**

The aim of the project is to ensure the formation of a working group who will design a practical teaching module for Occupational Epidemiology that links to the ATOM Project.

Outlines for this epi module have been set at the Summer School in Torre Canne / Bari, summer 2006.

The project is managed by Cathy Harrison and Kristiina Mukala.

There have been two reports to the Board of EASOM about the progress of the project: In December and in March. In March the original idea with four strand leaders was abandoned and a more realistic plan, based on the work of Guido Moens (Leuven) was proposed to the Board. In September the General Assembly will be presented the results.

# New EASOM members present themselves

## ACTIVITIES OF THE DIVISION OF OCCUPATIONAL MEDICINE AT THE MEDICAL UNIVERSITY OF VIENNA, AUSTRIA

by Jasminka Godnic-Cvar

The tradition of Occupational Medicine at the University of Vienna has got a 70 year long tradition. Up to now, it remained the only Institution in charge of undergraduate, postgraduate and specialist training in the subject of Occupational Medicine in Austria.

### ORGANISATIONAL UNITS

It consists of an outpatient's office of occupational medicine (with an environmental diseases office), an occupational functional laboratory and an occupational toxicology with cytogenetic laboratory. It is as well the only research institution in occupational medicine in Austria.

The **outpatient's office** is dealing with:

- preventive obligatory check-ups for workers under increased risk of an occupational disease,
- diagnosis and treatment of patients in which a work related or associated disease is suspected – in which case a laboratory analysis of biochemical, toxicological, functional, psychological parameters are being tested
- vocational guidance in subjects with already developed occupational health disturbances
- preventive check-ups in persons with non-occupational chemical or physical burdens
- assessment of patients with vertigo by means of a head up tilt testing
- occupational expert's opinion for the third party

The patients are referred from the enterprise doctors, centres for occupational medicine, GPs, other Clinics of the University Hospital of Vienna or other hospitals. On average the outpatient's clinic has got 700 cases per year.

The **functional laboratory** is equipped for the cardio-respiratory diagnostic procedures, allergologic, visual and hearing work-related assessment (ECG, 24h-ECG, 24h-blood pressure, stress test on a bicycle, spirometry, plethysmography, blood gas analysis, non-specific and specific nasal and bronchial provocation test, allergy skin test, PEF-monitoring, nasal lavage, sputum induction, sight and hearing test).

The **occupational toxicological and cytogenetic laboratory** is performing the biomonitoring of different agents based on 75 different analytical procedures including 22 metals and trace elements. Light- and fluorescence microscopic analysis of defined genome damage types due to occupational exposures are being assessed in the cytogenetic laboratory. In both laboratories 750 tests are being performed monthly.

## **STUFF**

Apart from the head of the department, Univ. Prof. Dr. Hugo Rüdiger, there are 5 senior specialists in occupational and internal medicine, 2 physicians in training for the specialist in occupational medicine, 2 chemical engineers, one biochemist, one physicist, and 6 technicians.

## **RESEARCH**

Although the Division of Occupational Medicine is a relatively small unit, we are permanently staying in the upper third of the units of the Medical School in Vienna concerning research output.

At present we have got projects dealing with following topics:

- skin protection
- interventional program for older work staff
- reversibility of cognitive impairment due to occupational lead exposure
- orthostatic intolerance at the workplace – clinic and frequency of a specific noradrenalin transporter mutation (Ala457Pro)
- effect of physical stamina training on the orthostatic intolerance
- insertion variation of the endothelin-1-genes and orthostatic intolerance
- coronary heart disease in sulphur carbonate exposure
- phototoxic maculopathy in welders and efficiency of protection measures
- medical support of the unemployed
- mobile phones and other sources of electromagnetic fields – the invisible threat
- evaluation of reference values for occupational-toxicological parameters
- health effects of ultra fine particles at the workplace
- e-learning for education in occupational medicine
- influence of inert dusts on the pathology of chronic obstructive lung disease
- selenium and asthma research integration project (EU-Network)
- secure work in subjects on pharmacotherapy
- localization of iron, copper and zinc in slices of liver tissues from patients with Wilson's disease and hemochromatosis by  $\mu$ -SRXRF
- 2D distribution of gadolinium (Gd) in slices of kidney tissue from patients following exposure to Gd due to magnetic resonance imaging
- Early detection of solvent induced encephalopathy
- Micronucleus test in workers in the microchip industry
- Distribution of lead in the bone

## **TEACHING**

Undergraduate - Occupational Medicine has been included in the new medial curriculum of the Viennese Medical University, and is being taught in 3 blocks

The staff of the Occupational Medicine Department are participating in other seminars and courses as well (ECG, problem oriented learning, e-learning is being developed).

Continuous medical education:

- evening lectures and research evenings are organized once a month
- Journal Club - weekly
- clinical case reports - weekly
- visits of enterprises with the occupational physician and the security technician on site
- Viennese Forum of Occupational Medicine – meeting once a year

## **JOURNAL**

Our Division of Occupational Medicine is publishing the only occupational medicine journal in Austria: "Austrian Forum Occupational Medicine" in a circulation of 1000 peaces - three times a year.

## **SCIENTIFIC AND ORGANISATIONAL ACTIVITIES**

Members of our team are regularly publishing their scientific publications and are regularly presenting their work at national and international congresses and meetings.

The members of our Division of Occupational Medicine are members of different national and international occupational medicine societies, editorial boards of international Journals. National and international multicentric research collaboration is taking place.

Medical University of Vienna  
Clinical Division of Occupational Medicine  
University and General Hospital Vienna  
**Prof Jasminka Godnic-Cvar**  
Head of Functional Laboratory and Environmental Office of  
the Division of Occupational Medicine  
Währinger Gürtel 18-20  
1090 Vienna, AUSTRIA  
Tel: +43 1 40400 4701  
Fax: +43 1 4088011  
E-mail: [jasminka.godnic-cvar@meduniwien.ac.at](mailto:jasminka.godnic-cvar@meduniwien.ac.at)

## **Forthcoming events**

**Zagreb, 12 May 2007: UEMS meeting**

**Zaragoza, 6 – 8 September 2007: Seventh EASOM Summer School  
“Teaching management of mental health problems”**

**Ghent, 3 December 2007: EASOM Board meeting**

**Amsterdam, 28 – 30 August 2008: Eighth EASOM Summer School  
“Teaching evidence-based occupational medicine”**

## **A request from the Board of EASOM**

Members schools are requested to provide us with information about their education and training programmes. We intend to put this information on the EASOM website. Please send this information and your www-links to the secretary.