



# NetWoRM Group Newsletter August 2010

## Dear NetWoRM Partners,

It is a long time ago you received the last NeTWOoRM newsletter. As you all know the EU funding stopped in December 2009. Anyhow, we found our way with different kinds of business models to lead NeTWOoRM into a self sustainable project.

I am happy to welcome all of our old members that have become new members of the self sustainable NeTWOoRM group from 2010 on.



Lake Ammer, source: [www.bayregio-ammersee.de/](http://www.bayregio-ammersee.de/)

## The new EU NeTWoRM Group

While the NeTWoRM Program in Latin America is still supported by the DAAD, the EU funding for NeTWoRM in Europe expired in December 2009. Therefore, the EU NeTWoRM group was formed including all in the active EU NeTWoRM participants. We would like to welcome the following NeTWoRM members that have become NeTWoRM group member institutions in the year 2010:

- University Amsterdam, contact person Paul Smits: Member since April 1<sup>st</sup>
- University Strasbourg, contact person Maria Gonzalez: Member since May 1<sup>st</sup>
- University Birmingham, contact person Arun Dev Vellore: Member since May 1<sup>st</sup>
- University Zaragoza, contact person Begona Martinez-Jarreta: Member since July 1<sup>st</sup>
- University Badalona, contact person Eduard Monso: Member since July 1<sup>st</sup>
- University Timisoara, contact person Elena-Ana Pauncu: Member from October 1<sup>st</sup> on.

## NeTWoRM virtual patient usage in three steps

The dissemination of NeTWoRM virtual patients (VPs) is one of the major goals of the NeTWoRM EU group. The NeTWoRM VPs can be used in three different ways (Please note that this apply only the NeTWoRM usage in the EU. The usage of NeTWoRM VPs in Latin America is still free of costs!):

**1. NeTWoRM single user contract:** Single users who are interested to experience NeTWoRM virtual patients are given access to a course of 10 English or German NeTWoRM virtual patients for one month by the German coordinator. The costs of 30 Euro go to the NeTWoRM group.

**2. NeTWoRM user contract for groups:** Teachers who are interested in using NeTWoRM VPs with their students can choose a personalized course with selected VPs from the NeTWoRM homepage ([http://www.networm-online.net/index.php?article\\_id=22](http://www.networm-online.net/index.php?article_id=22) for European VPs, [http://www.networm-online.net/index.php?article\\_id=33](http://www.networm-online.net/index.php?article_id=33) for Latin American VPs). The costs for using a personalized NeTWoRM course for one semester are 500 Euros that go to the platform provides CASUS. Additionally a fee may be charged by the respective NeTWoRM group members that produced the VPs. Setting the amount of this fee and the support provided by the partners is in the responsibility of the NeTWoRM group partners.

**3. NeTWoRM group contract:** Institutions using NeTWoRM that would like to create or offer their own NeTWoRM VPs may become NeTWoRM group partners. An annual fee depending on the partners paying capacity will be paid to the NeTWoRM coordinator in Germany. Therefore the partner will get regular updates on relevant conferences, a regular newsletter, invitations to NeTWoRM meetings. Furthermore the partner's institution. will be mentioned on the NeTWoRM homepage and the partner will get access to the internal NeTWoRM wiki area.

**If you are interested in option 1, 2 or 3 please contact Laura (Laura.Wengenroth@med.uni-muenchen.de)**

## Upcoming Conferences / Meetings

### NeTWoRM Group Meeting, August 25<sup>th</sup> 2010, 12 a.m. - 5 p.m., Munich, DE

We would like to invite all NeTWoRM group partners to participate at this meeting, which will take place the afternoon before the EASOM summer school starts. It will be very important to use this opportunity to meet and discuss further steps of NeTWoRM and clarify problems that occurred.

Shortly we will provide the details for the meeting!

### EASOM Summer School NeTWoRM, August 26<sup>th</sup> -28<sup>th</sup> 2010, Herrsching, DE

This EASOM summer school aims on the possibilities of virtual patients in training for OM. Several models will be presented. Hands-on sessions will help in understanding the concept of virtual patients and support different implementation strategies.

From the NeTWoRM team Paul, Kristiina, Begona, Florina, Elena-Ana, Katja, Stefanie and Laura will take part at the summer school. Tobias Rheude is a student aid at the Institute in Munich. He will take part too and is running the organisation for the meeting.

#### Topics

- Didactical Aspects of virtual patients in Medical Training
- Virtual patient Concepts
- The International NetWoRM Project
- Implementation strategies of virtual patients
- Use of virtual patients at the participants' universities
- "Helping students learn "heartsink" subjects – An interactive exercise in toxicology.
- Lecture and exercise
- Presentation about e-learning/ virtual patients of participants

For more information:

<http://www.klinikum.uni-muenchen.de/Arbeits-und-Umweltepidemiologie-Netteaching/de/summerschool/Summerschool2010Herrsching.html>

**The closing date for registration is over. For any questions please contact Tobias Rheude (Tobias.Rheude@med.uni-muenchen.de) and we will see what we can do!**

### AMEE (an international association for medical education), September 4<sup>th</sup> – 8<sup>th</sup> 2010, Glasgow, UK

Stefanie and Inga are going to attend the AMEE conference. Inga will present "Estimation of time efforts for repurposing Virtual Patients – empirical data from the electronic Virtual Patient Project (eViP)" and Stefanie will present the NeTWoRM project.

## Preceded Conferences / Summer schools

### 1<sup>st</sup> Summer school in Lima, Peru: Salud ocupacional cruzando fronteras, April 18<sup>th</sup> – 29<sup>th</sup> 2010

The general aims of the summer school are to contribute to the establishment of occupational health as an academic subject, reduce occupational accidents and diseases in Latin America focusing on the informal sector and small and medium enterprises.

**Specific objectives: Collaboration of occupational health professionals in Latin America including the following steps:**

- Form a network supporting international cooperation in the field of OM
- Identify occupational risks and prevent occupational accidents and diseases.
- Generate and publish research produced in cooperation
- Establish monitoring programs to detect and analyze occupational diseases and accidents



Figure 1: Summer school participants in Lima during a hands on session with NeTWoRM VPs

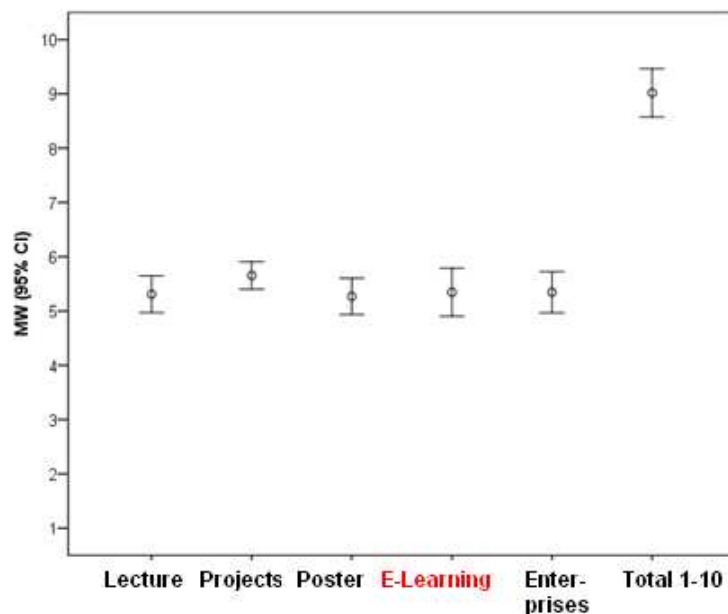


Figure 2: Mean (95% CI) evaluation results of the 1st course „Salud ocupacional cruzando fronteras“, Lima 2010: Satisfaction with the lectures, projects, poster sessions, e-learning, enterprise visits assessed on a scale from 1 (Totally disagree) to 6 (totally agree) and evaluation of the overall course quality assessed on a scale from 1 (poor) to 10 (excellent).

Figure 2 shows the evaluation results of the 1<sup>st</sup> summer school in Lima. Participants enjoyed the E-Learning part of the course including NeTWoRM VPs. Of the NetWoRM Group, Julietta Rodriguez Guzman, Denise Carvalho, Frank van Dijk and Katja were involved as teachers.

The 2<sup>nd</sup> Latin American summer school will take place in Viña del Mar, Chile from May 2<sup>nd</sup> – May 13<sup>th</sup> 2011. You will find more information about the upcoming summer school at <http://www.klinikum.uni-muenchen.de/Arbeits-und-Umweltepidemiologie-Netteaching/en/summerschools/SummerschoolChile.html>

### **3<sup>rd</sup> Summer school in Munich: Occupational Health crossing borders, June 7<sup>th</sup> – June 18<sup>th</sup> 2010**

This year, 36 participants (thereof 7 MSc Epidemiology students) attended our 3<sup>rd</sup> summer school. For two weeks they learned and discussed about occupational health around the world. Moreover, the participants visited a car producer in Munich, a bulb light factory in Augsburg and the ICE train railway control center in Munich. They also worked with NetWoRM virtual patients. Beside Katja, Janine and Prof van Dijk from the NeTWoRM group lectured during the course. A big thank you to all of you! The 4<sup>th</sup> summer school will take place in Munich in August 2011. Information will be available at: <http://www.klinikum.uni-muenchen.de/Arbeits-und-Umweltepidemiologie-Netteaching/en/summerschools/index.html>



Figure 3: Summer school poster session at the University Hospital Großhadern

### **Meeting of the German Society of Occupational and Environmental Medicine (DGAUM) in Dortmund, DE, June 16<sup>th</sup> – 19<sup>th</sup> 2010**

The NeTWoRM project was presented at the DGAUM. The abstract was handed in by Steffi and then presented by Laura in a session considering education in occupational medicine. Laura met Dr. Kujath from the BAUA (Federal Institute for Occupational Safety and Health) who is involved in the NeTWoRM project “Full breath” (virtual patient usage in secondary school students: <http://www.vollepuste.de/en/>). Recently an application was transferred to the BAUA applying for further funding of this project.

# NetWoRM Group Europe

## Funding

Stefanie handed in an application for further funding of NeTWoRM EU project at the federal ministry for work and social affairs. We are still waiting for their decision.

## New VPs for Epidemiology and Public Health

Currently, Oliver Menzel (medical PhD student) and Valeriya Blazhko (Epidemiology student) are working on new VPs for Epidemiology and Public Health. They are working on VPs considering the epidemiology of chronic heart diseases, occupational epidemiology, genetic epidemiology, nutrition, screening and global public health. The VPs will be in German and English language.



**Figure 4: Scene from the new case on occupational epidemiology by Valeriya Blazhko**



**Figure 5: Scene from the new case on the epidemiology of heart diseases by Oliver Menzel**

## NeTWoRM wiki area

The NeTWoRM wiki area was updated and is accessible for all NeTWoRM EU partners. Remember, the address was <http://cms.networm-online.eu/wiki/doku.php?do=login&id=start>.

Please make use of the wiki area and update your experiences considering NeTWoRM usage under “News posted by partners” or any material you would like to share. If you feel that a new subdirectory is needed, please feel free to do so.

**Considering the NeTWoRM EU meeting on August, 25<sup>th</sup> please indicate the topics you would like to discuss until Monday 16<sup>th</sup> 2010!**

# NetWoRM Group Publications in Process

## Students' attitude towards occupational medicine

Brazil, Germany and the Netherlands were involved in the evaluation of students' attitude towards occupational medicine. Therefore a study with medical students in the three countries was conducted. Paul Russ (MD Student from Munich) summed up the results in a manuscript which is going to be submitted soon. The following shows the draft of the abstract.

### ***Attitude, interest and knowledge of undergraduate medical students towards Occupational Medicine***

**Authors** Paul Russ<sup>1</sup>, Stephanie Strümpell<sup>1</sup>, Denise Carvalho<sup>2</sup>, Paul Smits<sup>3</sup>, Katja Radon<sup>1</sup>

<sup>1</sup> Unit for Occupational and Environmental Epidemiology & Net Teaching, Institute and Outpatient Clinic for Occupational-, Social- and Environmental Medicine, Hospital of the Ludwig-Maximilian-University, Munich, Germany

<sup>2</sup> Universidade Federal do Paraná, Curitiba, Brazil

<sup>3</sup> AMC Universiteit van Amsterdam

**Background:** Occupational accidents and diseases are preventable health threats across the globe. For this reason occupational medicine (OM) is important for all physicians. A positive attitude towards OM is basic to choose a career as an occupational physician, but also to consider different aspects of occupational diseases and health threats at work. Therefore, the attitude towards and the knowledge about occupational medicine (OM) were evaluated before the obligatory course in OM in Brazil and in Germany. Furthermore, change of attitude and knowledge over the course was assessed in Germany.

**Methods:** A previously validated questionnaire survey was performed at the beginning of the OM teaching term at the Federal University of Paraná in Curitiba / Brazil (n= 79) and at both medical schools in Munich / Germany (n= 266). The questionnaire contained 18 questions concerning the attitude towards and the knowledge of the undergraduate medical students about OM. The change of both qualities over the course was assessed and evaluated via a second questionnaire in Germany (n=490). For this reason, students were matched to obtain significant differences.

**Results:** Before their course in OM, German medical students showed low interest in and motivation towards OM. Brazilian students were significantly more interested and rated the importance of OM for medical students ( $3.6 \pm 1.2$ ) higher than German medical students ( $4.1 \pm 1.1$ ). They also seemed to have more knowledge in the field of OM before the lectures. However, attitude towards and knowledge about OM improved significantly over the course in OM in Germany.

**Conclusions:** OM seems to have more potential and importance in Brazil. The higher amount of occupational accidents in low and middle income countries might lead to the fact that Brazilian medical students showed more interest in the subject of OM than German medical students. In Germany, OM teaching was successful in changing the attitude towards and the knowledge of undergraduate medical students about OM.

### **New paper and abstracts for NeTWoRM Latin America submitted**

A paper considering the implementation of VPs in the context of the NetWoRM Latin America project was submitted and is now in the 2<sup>nd</sup> review round.

Moreover the following abstract about NeTWoRM Latin America has been submitted for the Public Health Congress in Santiago, November 19<sup>th</sup> - 22<sup>nd</sup> 2010 ([http://www.dohad2009.com/dohad\\_society.php](http://www.dohad2009.com/dohad_society.php)):

#### ***Implementation of virtual patients into the training of occupational health in Latin America***

***Authors:*** Stephanie Strümpell<sup>1</sup>, Denise Carvalho<sup>2</sup>, Maria Julia Calvo<sup>3</sup>, Veronica Herrera<sup>4</sup>, Laura Wengenroth<sup>1</sup>, Gudrun Kausel<sup>3</sup>, Nella Marchetti<sup>4</sup>, Daniel Segura Rojas<sup>3</sup>, Paul Russ<sup>1</sup>, Inga Hege<sup>5</sup>, Katja Radon<sup>1</sup>

***Background:*** Health professionals trained on occupational aspects are essential to reduce the burden of occupational accidents and diseases. However, training resources are limited globally. We aimed to promote occupational health and safety (OHS) using virtual patients (VPs) in Brazil, Chile and Germany.

***Methods:*** VPs were created in three Latin-American health centers. So called “partner VPs” comparing the distinct health care systems were designed. Translation, adaptation to different medical and legal systems, expert review, implementation into under- and postgraduate teaching and user evaluation were performed.

***Results:*** Twelve VPs covering traditional and modern topics of OHS are available in Spanish, Portuguese, and English. Overall, N=2371 students used the VPs. Latin America users evaluated VP content and their relevance for the professional career statistically significantly higher than German students.

***Conclusions:*** VPs are a feasible learning method for OHS in middle income countries. Partner VPs seem to be useful for teaching global aspects.

Denise Carvalho also will hand in an abstract on the experiences with NeTWoRM in at the Universidade Federal do Paraná in Curitiba, Brazil. Since 2006 the faculty of medicine in Curitiba is involved in the NeTWoRM project in Latin America.

# NetWoRM Latin America

## New partner VP for Brazil, Chile and Germany

Paul Russ finished his VP about stress at work and low back pain. The VP was evaluated by the participants of the summer school in Munich as well as medical students from Munich. Currently the case is being translated to Spanish and Portuguese.



Figure 6: Scene from the new case on low back pain by Paul Russ

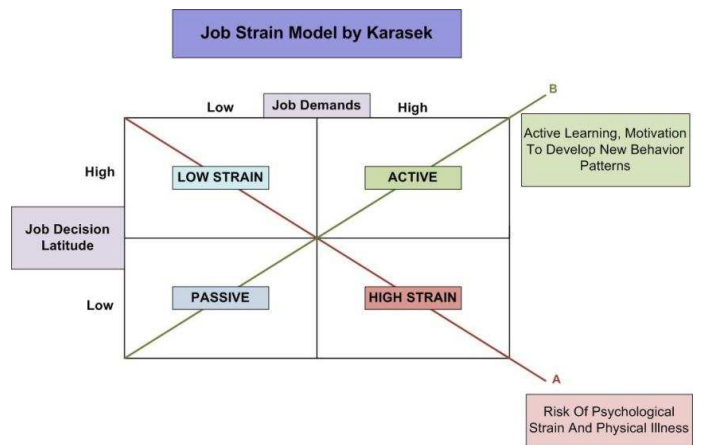


Figure 7: Scene from the new case on low back pain by Paul Russ explaining the Job Strain Model, adapted from: Karasek Adm Sci Q (1979)

## Visit at the Universidad El Bosque

In May 2010, Katja took the chance of her visit to Bogotá to finally get to know the partner Universidad El Bosque and to meet with Julietta Rodriguez and Maria Teresa Espinosa. There she received a very warm welcome!



Figure 8: Visit at the Universidad el Bosque, Bogotá, Colombia

## **New application for funding of the NeTWoRM Latin America project**

A new application was prepared for the German Academic Exchange Service (DAAD). This new program will include the planned three year master study program in International Occupational safety and Health in Research and Practice (IntMOSH) for Latin America. NeTWoRM VPs will play a role in the IntMOSH program, since many parts will be realized through e-learning. After completion of the Master course students will be capable:

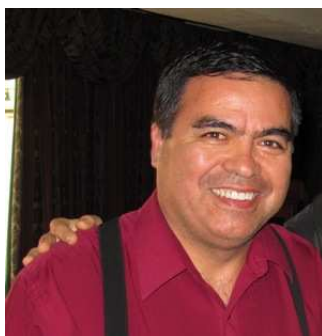
- to evaluate the work environment and its hazards
- to propose actions of prevention and control
- to conduct independent research in the field of OHS
- to work in an interdisciplinary team and at an international level
- to evaluate and compare different OHS legal systems and practices
- to read, discuss and publish work in OHS in English and Spanish
- to teach local teams in Basic Occupational Safety and Health (BOSH) using state of the art teaching methods

Part of the IntMOSH will be the Summer school in Germany. The Summer school will be obligatory for the participants of the IntMOSH, but additional places will be available for interested health professionals from developing countries.

Furthermore the application includes clinical electives and internships in South America that will be offered for medical students from South American countries that did their medical studies in Germany. This will strengthen the link of the medical students to their home country. Through their application at the Institute for Occupational, Social and Environmental Medicine at the LMU Munich, this will also put medical students early on into positive contact with occupational medicine.

However, not everything will change: parts of the funding will be used for new VPs and the technical support of the VP implementation at our Latin American centres.

**In this context, we would like to welcome our new NeTWoRM partners from Latin America:**



**Figure 9: Prof. Dr. Daniel Moraga  
UCN, Coquimbo, Chile**



**Figure 10: Prof. Leonardo Briceño  
U del Rosario, Bogotá, Colombia**

## **New PhD program International Health**

The CIH<sup>LMU</sup>-PhD-Program International Health combines health related research in the widest sense, and development cooperation. Special focus lies in educating young researchers to become in their turn educators within developing countries of the next generation of health professionals. Not only acquisition of knowledge for their personal interest, but to import knowledge to areas in need and multiply it there should be one leading work ethic while being a PhD-Student at CIH<sup>LMU</sup>. This motive is complying with global development strategies that have recognized the human resource crisis as a key factor in the deterioration of health systems in developing countries.

The PhD-Program is open to anyone sharing the interest in health-related issues in the field of development cooperation. Therefore all professionals of any nationality are encouraged to become part of the CIH<sup>LMU</sup>-PhD-Program, people working in the field of health or in health related areas who are willing to improve local research and health situations both through manpower and knowledge.

For further information please visit: [http://www.international-health.uni-muenchen.de/module\\_2/phd\\_program\\_info/index.html](http://www.international-health.uni-muenchen.de/module_2/phd_program_info/index.html)

## **Meeting of the NeTWoRM Latin America members in November 2010**

In November 2010 a meeting of the NeTWoRM Latin America members will take place in order to plan NeTWoRM's future in Latin America. Sergio Cifuentes is the contact person for this meeting. Sergio started working in Katjas group this year. He is Chilean citizen and is organizing the meetings and summer schools in Latin America. Moreover, Sergio is involved in the creation of IntMOSH program.

Also involved in the Latin American activities is Verónica Encina, a occupational health nurse from Chile who currently lives in Lima. She was the “mother” of the Lima course and luckily will continue to work with us in order to organize the short-term module 2011 in Chile.

Armando Basagoitia from Sucre, Bolivia, will start doing his PhD at LMU in the context of these projects and will be involved in the future short-term modules.



**Figure 11: Sergio Cifuentes, new member of the Munich team during the short-term module in Lima**



**Figure 12: Verónica Encina, Local coordinator in Lima, with Armando Basagoitia, PhD student from Sucre**