

# MUR59



**Reporting statistics | Targeted reporting**  
**Remembering Jerry | African consultants**



**Marie Lindquist**  
 Director  
 the Uppsala Monitoring  
 Centre

*(from The People's Pharmacy)*  
 "Your column saved my life (or at least made it worth living again). I have been in lisinopril hell for over three months.

My insurance company switched me from Micardis, a blood pressure medicine that had no side effects, to lisinopril. They gave me six months free. If I had not agreed to switch, I would have had to pay \$100 a month for the Micardis.

Almost immediately, I became incapacitated with a violent cough. It made me choke, gag and vomit, and even lose my bladder control.

At first I thought I had caught the flu. A doctor then diagnosed a sinus infection. Antibiotics didn't help. I went back to my doctor, who dismissed my symptoms by sending me to an allergist.

The allergist had me fill out a lengthy history in which I mentioned the lisinopril, but he did not make the connection either. Instead he put me through a series of very expensive breathing tests and gave me breathing medicines (also expensive). Needless to say, none of this worked.

I was becoming depressed because the cough was interfering with my sleep, work and social life. Then my neighbor showed me your column about lisinopril cough. I stopped the drug and have completely recovered."

<http://www.peoplespharmacy.com/2012/06/03/troublesome-drugs-in-the-pharmacy-in-2011/>

*In the early days of Swedish autumn we have our annual kick-off meeting for all UMC staff. It is a good opportunity to reflect on the achievements of the year, and look forward to the many new projects and activities that will challenge and stimulate us in the year to come.*

*This year we have also had to face the shock and sorrow of losing two exceptional colleagues and friends, first Robert Lundbäck and then Jerry Labadie. Both died tragically, within less than three months; Robert, just turned 40, from a sudden illness, and Jerry, only 55, in a car accident.*

*Both of them, in their different ways, embodied the ideal that we, as professionals and human beings, should all aspire to – to work tirelessly for what we believe in, and support and encourage each other in every way. In their professional roles, Robert and Jerry represented two essential aspects of UMC's mission: to deliver high quality scientific tools; and to always work with patients' needs in focus. Robert was a dedicated and experienced IT consultant at the UMC who was an integral member of several key projects aimed at developing new, and better, tools to support data collection and analysis. Jerry, a paediatrician and vaccines specialist, was a fundamental and inspirational source of medical expertise and advice, not only for our internal pharmacovigilance team, but also for many people around the globe whom he made contact with through his work for the WHO medicines safety and vaccines networks. He had the rare ability to explain even the most complex medical issues in a way that makes sense!*

*We shall always remember, with profound gratitude, their contributions towards UMC's vision of safer patients. But above all, we shall remember Jerry and Robert as individuals and human beings, committed, enthusiastic and with guts and humour. Another thing they had in common was that they really cared about people, and had the ability of bringing out the best in others through their inherent leadership qualities, which has nothing to do with one's formal work role or position in life.*

*I, and my team, shall do our very best to honour their legacy, both in the work we do, and in the way we interact with colleagues, partners, and customers across the world. In the end, we should*

*be judged by the difference we make to people's lives. There is an obvious risk that the phrase 'putting patients first' becomes a meaningless slogan – unless that is exactly what we do! And the result should be judged by patients themselves, not us.*

~ ~ ~

*I recently read a story in a newspaper about a man who was travelling to destinations in Europe to test the accessibility and user friendliness of public transport, hotels and services for those who are wheelchair users. He arrived at a Swedish hotel, which promoted its accessibility programme, and found that the hotel and his room were accessible enough, but that there was one key thing – for him! – missing: he could not enjoy the view from his room because the window was positioned so that only a person standing up could see through it.*

*No matter how empathic we try to be, it is not until we find ourselves in the position of patients taking medicines that we really know what it's like to cope with harmful effects – whether caused by the medication or not – and that's why it is crucial to take every opportunity to actually listen to what patients say.*

*One of the several positive changes in the new European Union legislation, is to introduce direct patient reporting as a mandatory part of the regulatory pharmacovigilance work. It wasn't that long ago that patient reporting was seen as unnecessary, or even worse, detrimental in that it would 'dilute' the clinically evaluated data with 'a lot of noise'.*

*Providing web-based reporting tools for patients is a good start, but I would like to repeat my view that it is only a start! I am looking forward to the day when the national pharmacovigilance systems provide the most user-friendly and accessible fora for a learning that goes both ways; only then is there a chance that patients find it natural, and desirable, to tell us their stories – and we can become the life savers, as in the account in the left column.*

FEATURES

6-7

Six-monthly database report

10

Remembering Jerry Labadie

11

Targeted Spontaneous Reporting (TSR) in Uganda

12-13

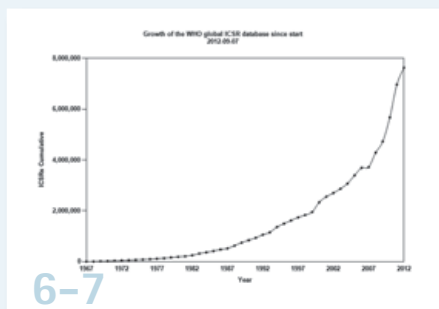
Publications news

17

The UMC Strategic Executive Team

18

African pharmacovigilance consultants



Latest reporting news

Our regular summary of global safety reporting trends

Spreading the message

Conference reports from around the world



REGULARS

2

Director's Message

4-5

WHO news – vaccines and medicines

8-9, 19-20

News from Around the World

14

Research news

15

Conference reports

16

IT updates

21

UMC staff news

22

Visitors to Bredgränd

23

Courses and conferences



Read all about it

A round-up of some recent publications related to pharmacovigilance

African network

Sustaining monitoring work across the continent





# Global Vaccine Safety Initiative takes off

Sten Olsson

In *Uppsala Reports 56* we briefly described the progress of the WHO Global Vaccine Safety Blueprint for the strengthening of capacity for vaccine pharmacovigilance in low- and middle-income countries. Once the Blueprint mission and strategic goals were endorsed by WHO's strategic advisory group of experts on immunization (SAGE), the Global Vaccine Safety Initiative (GVS) was proposed as its implementation mechanism. In May 2012 the 65<sup>th</sup> World Health Assembly approved the WHO Global Vaccine Action Plan which refers to GVS as the means for safety follow-up of new vaccines being introduced in low- and middle-income countries.

## WHO lead

WHO management support for GVS is provided by the Immunization, Vaccines and Biologicals (IVB) department under Patrick Zuber, with Ahmed Bella and WHO headquarters and regional focal points as the secretariat. A GVS Planning group has been formed to advise on strategy and priorities for the implementation. Alex Dodoo, WHO Collaborating Centre for Advocacy and Training in Pharmacovigilance, Accra, Ghana is chairing the Planning Group, and the UMC is represented by Sten Olsson.

## First Planning Group meeting

After a series of telephone conferences from March 2012 onwards, the planning group had its first face-to-face meeting on 30–31 August in Geneva. Present were Alex Dodoo, Jan Bonhoeffer (Brighton Collaboration), Sandra Deotti (Brazil), Ajit Pal Singh (International Vaccine Institute), Ananda Amarasinghe (Sri Lanka) and Sten Olsson (UMC); Dr Mira Choi, (KFDA, Republic of Korea) was unable to attend. The group listened to presentations from the GVS secretariat and then from all WHO regional offices about their priorities and challenges

in the area of vaccine safety. A report was also provided by Gunilla Sjölin-Forsberg, chief executive of CIOMS, regarding the possibility of establishing a CIOMS working

group as a platform for collaboration between stakeholders in the public and private sector in forwarding the goals and objectives of the GVS.

global technical support, expert advice, and interaction between stakeholders. The site will be regularly updated with news about activities aimed at achieving these objectives.



From left: Ananda Amarasinghe, Sandra Deotti, Sten Olsson, Phillipp Lambach (WHO), Christine Maure (WHO), Ajit Pal Singh, Alex Dodoo

group as a platform for collaboration between stakeholders in the public and private sector in forwarding the goals and objectives of the GVS.

Having listened to the very informative reports, the group engaged in a series of brainstorming sessions to develop short- and long-term action plans and a resource mobilization strategy. Deliberations also included planning for the annual meeting of GVS stakeholders, to take place in Egypt on 20 and 21 November.

## New GVS website

The web site of the Global Vaccine Safety Initiative (GVS) has gone live, announcing plans to ensure that effective vaccine pharmacovigilance systems are established in all countries.

The GVS web site describes the urgent need for global vaccine safety and explains what can be done to achieve it. The site outlines actions that will be taken to achieve the eight objectives of the Blueprint – on vaccine safety monitoring, evaluation of safety signals, communication, internationally harmonized tools, regulatory frameworks,

The site can be accessed through the following link: [www.who.int/vaccine\\_safety/en/](http://www.who.int/vaccine_safety/en/)

## Mapping activity – an appeal

GVS is reaching out to all stakeholders to join efforts developing a map of current and planned activities relating to vaccine safety. This mapping would allow all interested parties to gain an overview of the main projects currently on-going in global vaccine safety. At the first GVS annual meeting scheduled for 20 to 21 November 2012, this mapping will be reviewed with all interested stakeholders to explore synergies and opportunities for technical collaborations and possibly identify urgent gaps that could be addressed through innovative mechanisms.

Each contribution will be fully credited in the inventory and participation in this global effort is strongly welcomed.

Please provide input to [GVS@who.int](mailto:GVS@who.int)

## Jamaica joins WHO Programme

Sten Olsson

Following Niger in June 2012, we now have another new member country of the WHO Programme for International Drug Monitoring.

At the end of September Dr Lembit Rägo, Co-ordinator of Quality Assurance and Safety: Medicines at WHO Geneva, wrote to Dr Sheila Campbell Forrester, Chief Medical Officer at the National Centre for Adverse Drug Reaction Monitoring at the Ministry of Health in Kingston, Jamaica to inform her that Jamaica had fulfilled the necessary requirements to become the 109th member of the WHO Programme.

## MoU with US FDA

Ola Strandberg

The US Food and Drug Administration (FDA) have signed a Memorandum of Understanding (MoU) and Supplemental Agreement with the Uppsala Monitoring Centre enabling data sharing, research collaboration and use of the WHO Drug Dictionary Enhanced. The FDA was one of the founding members of the WHO Medicines Safety Programme in 1968 and is still the largest contributor to VigiBase. An initial result of the supplemental agreement being signed is that access to the WHO Drug Dictionary Browser has been made available agency wide. We hope to report further details about the MoU in the next *Uppsala Reports*.

We are also delighted that US FDA has made funds available to WHO to ensure a repeat of the module on the application of general pharmacovigilance strategies to a national vaccine safety programme carried out by CBER (FDA Center for Biologics Evaluation and Research) within the UMC's annual pharmacovigilance course.

## French agency

In May the French national medicines agency changed from the Agence française de sécurité sanitaire des produits de santé – AFSSAPS, to the Agence nationale de sécurité du médicament et des produits de santé – ANSM. ANSM took all the responsibilities and functions of the former body, although it also has some new powers. <http://ansm.sante.fr/Produits-de-sante/Medicaments>

## Serge Xueref

Sten Olsson

The UMC and QSM (Quality and Safety of Medicines) in Geneva are delighted that Serge Xueref will be working with us as senior adviser over the coming year. Serge is a public health professional with 16 years of experience in pharmaceutical sciences, epidemiology, monitoring and evaluation, research and microbiology in developing and industrialized countries.



He will be providing support to the WHO Programme, in particular to help us to strengthen our partnerships at a global level, and to facilitate dialogue between national authorities, the donor community and other development and co-operation partners on aid effectiveness and related policies, and in resource mobilization.

## Philippines head

Dr Kenneth Hartigan-Go has been appointed as the Director of the FDA in the Philippines. Dr Hartigan-Go has been active for many years in pharmacovigilance, both through WHO and the International Society of Pharmacovigilance.



## WHO Programme to meet

When this edition of *Uppsala Reports* is arriving with readers, representatives of national centres will be packing their bags for their annual get-together in Brazil. Already many countries have confirmed their attendance and we look forward to a productive and enjoyable meeting in South America.

## Continual vigilance

Sten Olsson

It's always useful to see new articles that reinforce the case in favour of pharmacovigilance and the need for continuous safety surveillance. A recent editorial in *Australian Prescriber* by Sidney M Wolfe, Director, Public Citizen's Health Research Group, is one such case. He offers the view that the approval process for drugs is weighted toward establishing evidence of benefit. Once approved, the new drug, used by large numbers of and more diverse groups of people, may reveal new adverse reactions and interactions with other drugs.

He cites a study which found that 25 years after approval, the probability of restrictive regulatory action e.g. black box warnings or withdrawal being taken was 20%. Half such changes occur within seven years of the drug's introduction. This article is well worth a read.

A graph from an article by Barton Cobert in the DIA Global Forum however, supports the need for continuous reporting throughout the life-cycle of a medicine: safety related labelling changes are occasionally introduced up to 60 years after a medicine made it to the market.

Wolfe SM. The seven-year rule for safer prescribing. *Australian Prescriber*. 2012;35:138-9 (October 2012). <http://www.australianprescriber.com/>

Cobert B. Megatrends in Clinical Safety and Pharmacovigilance. *Global Forum* 2012; 4(4): 27-29 (August 2012).

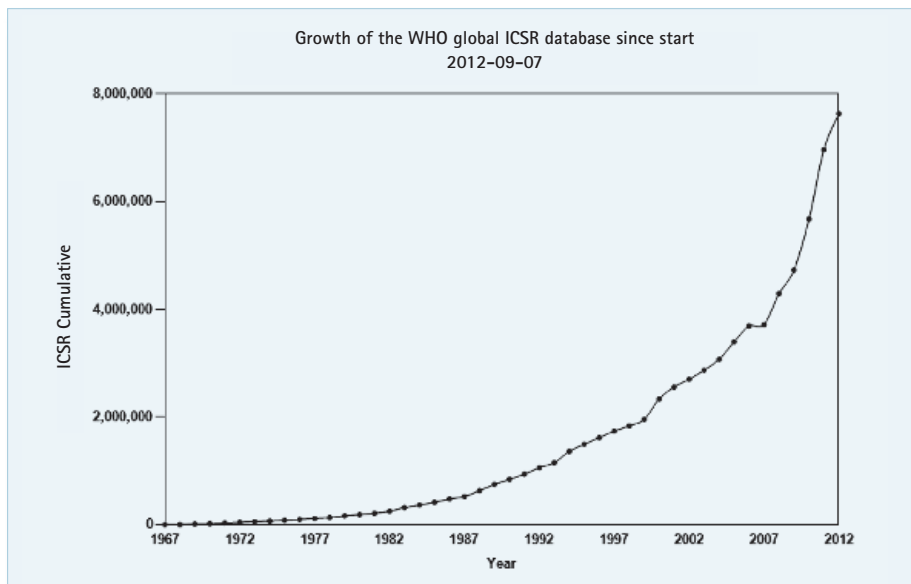
# VigiBase – reporting statistics update

Statistics on reporting to the WHO global ICSR database (VigiBase™) are represented twice a year in Uppsala Reports and four times a year on the UMC website.

## VigiBase growth

VigiBase is growing steadily, hitting 7 million reports in late 2011 (as reported in UR56) and presently containing over 7.5 million Individual Case Safety Reports (ICSRs). The 8 million reports milestone is likely to be passed in the first quarter of next year, given the current growth rate. Members of the WHO Programme for International Drug Monitoring make this happen by submitting an increasing number of reports for each year. They thereby contribute to the Programme by sharing information collected in their country, giving all members the opportunity to analyze data and identify early safety signals.

Figure 1. Cumulative number of active ICSRs in VigiBase



As of September 2012, the total number of active ICSRs in VigiBase is 7,625,451 (Figure 1). Country distribution stays approximately the same compared to 2011, with the US accounting for about half of the reports in VigiBase (Figure 2).

## Reporting rates

Figure 3 shows the top 20 countries in terms of reporting rate with population size taken into account (number of reports per million inhabitants and year). Singapore is still at the top, but the Republic of Korea has climbed from 13<sup>th</sup> to 5<sup>th</sup> place since the last time these statistics were presented (UR 55). This is due to the submission of a large backlog of ICSRs from 18 months back, which was recently received by the UMC.

## Submission frequency

Two other aspects of reporting are equally important as the quantity of ICSRs submitted: timely reporting and report quality. No sooner than reports are made searchable in VigiBase can they be part of the safety assessments and global signal detection work performed at the UMC as well as in many member countries. In the last 12 months, approximately 68% of all member countries fulfilled the minimum criterion of submitting ICSRs to the UMC at least every quarter (Figure 4). 28 of the 108 current member countries of the WHO Programme have not submitted any reports at all in the last 6 months which is approximately the same figure as in April when the last statistics were presented (UR57).

## Continued focus on quality

The quality of each report is crucial for the ability to make valid medical assessments and minimizing the risk of incorrect conclusions about a single patient or a potential drug problem.

The preferred format for ICSR reporting is the ICH E2B format, since it is the international standard and has the potential for the exchange of more complete information, thus improving data quality and output for signal analysis. 78 out of 108 member countries are presently reporting in the ICH E2B format. Of these, 46 are using VigiFlow as their ICSR management system.

## Measuring quality

During 2011 the UMC developed the 'documentation grading', which can be used to give feedback to the National Centres on the quality of their ICSRs. The system measures the amount and quality of the information provided on ICSRs as they appear in VigiBase (see also UR 53, page 5). National Centres are of course dependent on their reporters for the quality of reports received, but we have acknowledged that many National Centres still find it useful to know how report completeness has varied over time to be able to investigate possible reasons for this.

Using this new tool, a first communication of 'completeness scores' was provided to member countries in July 2011. Since then, suggestions for improvement have been collected and are considered for the continuous development of the tool. Current 'completeness scores' are planned to be sent once again to National Centres within a couple of months.

Figure 2. Country distribution in VigiBase as of September 2012

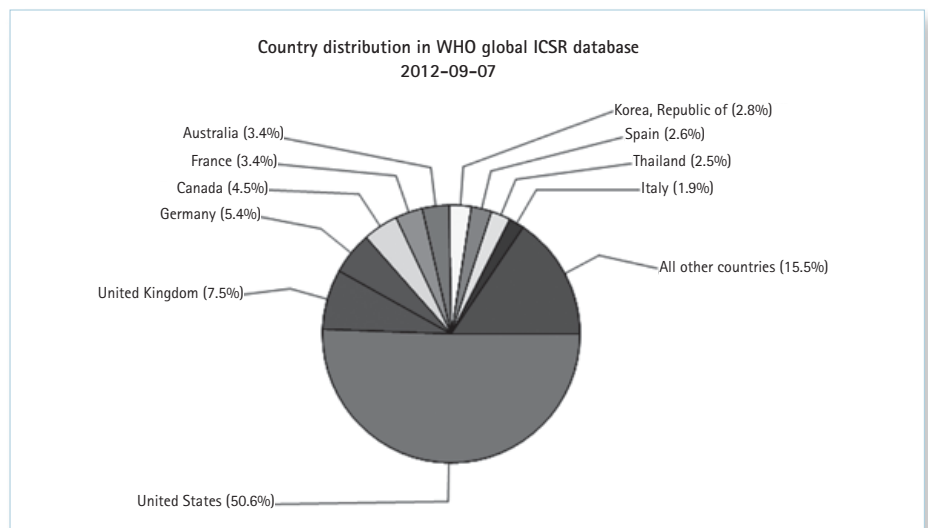
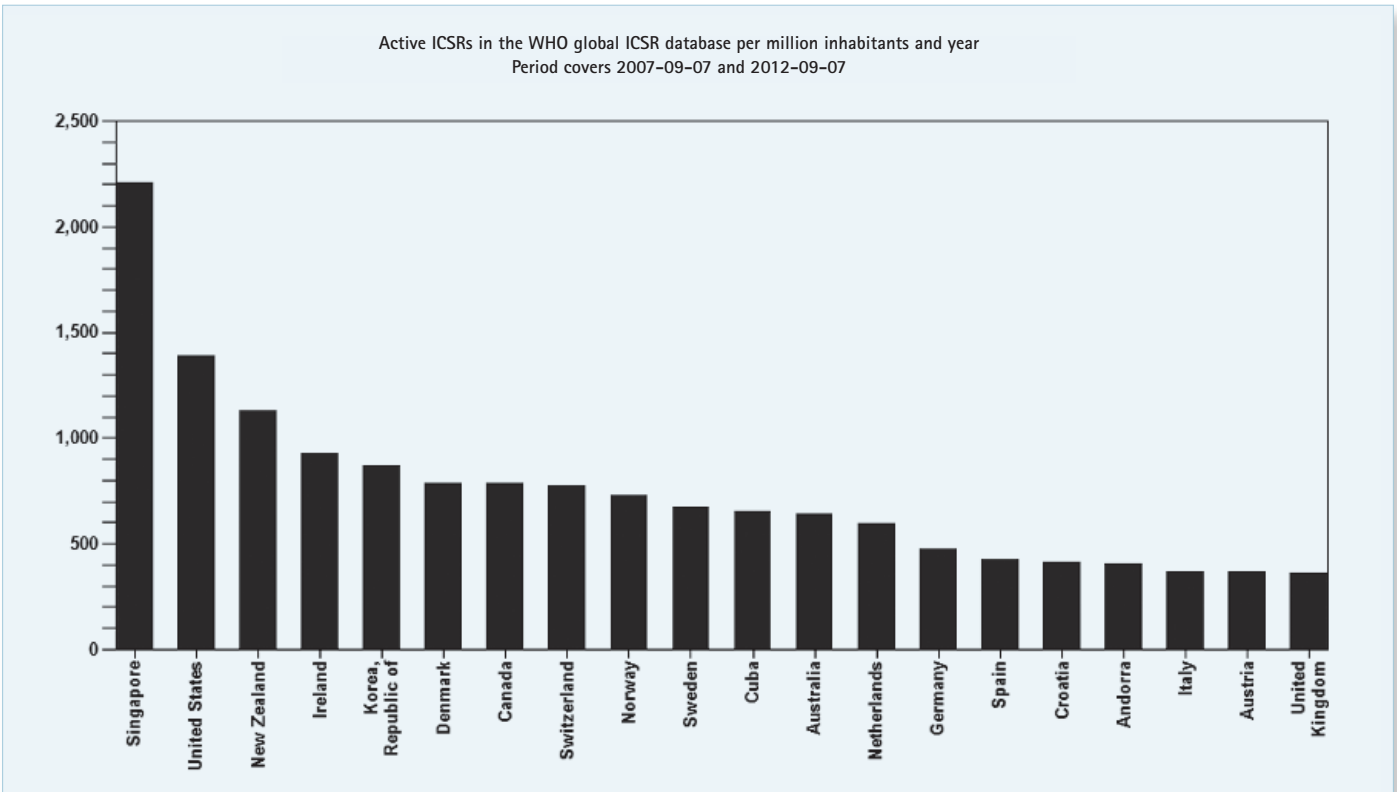


Figure 3. Country reporting rates over a 5-year period



An example of what a 'completeness score' graph may look like can be found in Figure 5. The country used in this example switched from INDtis to E2B format in January 2011, which clearly shows as a large improvement in average completeness in the first quarter of that year.

It should be noted that the score is most meaningful when a country reports regularly (at least every quarter) to the UMC. The score is also difficult to interpret when only a small number of reports have been sent in a quarter, since a small number of reports will give each individual report a large impact on the score.

Figure 5. Average Completeness score, showing data from 5 years back. The dotted line shows the completeness score for all member countries combined, and the solid line shows the score of a single specific country.

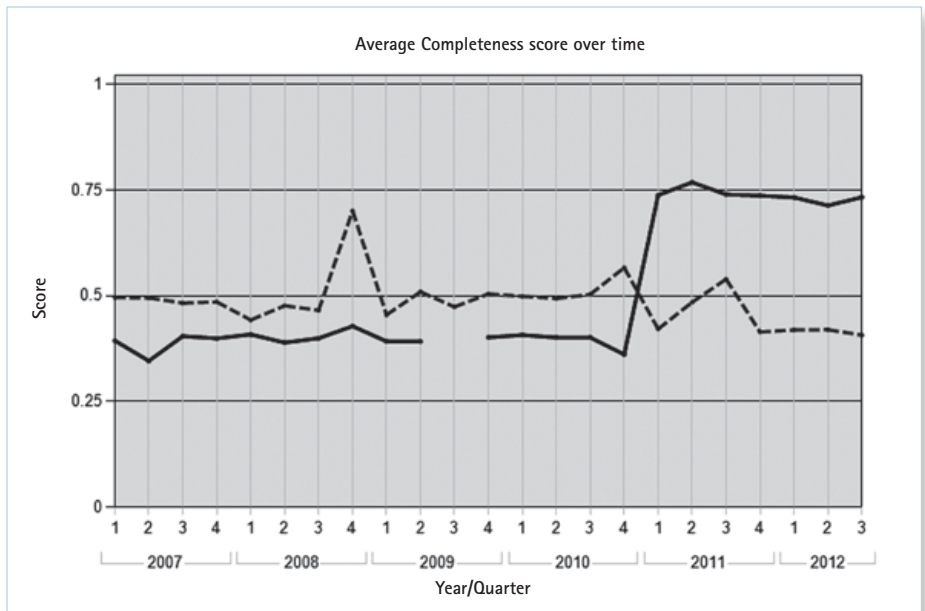
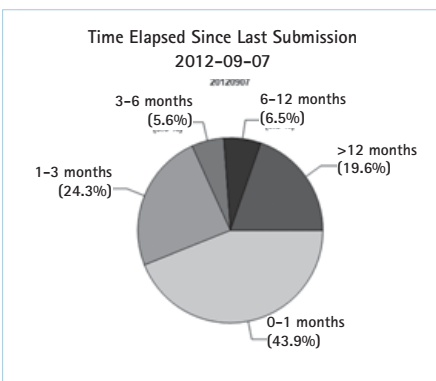


Figure 4. The time since countries last submitted reports to VigiBase





# Pharmacovigilance education in Montenegro

*Maja Stankovic, Veselinka Luburić, Marija Savović*

So as to provide health professionals with information and to encourage their active participation in drug safety, early 2012 saw the Agency for Medicines and Medical Devices in Montenegro (CALIMS) commence an information campaign in all health institutions across the country. We know that a proactive approach is proven to be the most effective way to develop pharmacovigilance. Raising awareness about the



*Around 50 health professionals attended the workshop at the General Hospital 'Blazo Orlandić' in Bar in March 2012*

importance of monitoring the efficacy of medicines means pointing out that active participation in the process is the moral, professional and legal obligation of health professionals. Under Montenegrin law they are obliged to report any suspected adverse reaction of a medicine to CALIMS.

## Professional workshops

So far there have been seven workshops. At each one, Director of CALIMS, Dr Milorad Drljević introduces participants to the responsibilities of CALIMS, underlining the role of this institution for the overall health system in Montenegro. Afterwards, representatives of the Pharmacovigilance Department present experiences from the European Union and other countries with effective pharmacovigilance, to emphasise the importance of reporting and early detection of possible problems related to use of medicines. The workshops are considered part of continuing professional education and rated by the Medical and Pharmaceutical Chamber of Montenegro. The Agency plans

to continue these workshops, with their presentations and intensive discussions with health professionals

## Reporting direct

From 21 May 2012 a new functionality in the information system of our primary health care gives doctors the opportunity to send reports direct to CALIMS from their workplace, which will significantly contribute to rapid and safe communication on adverse reactions of medicines.

## Networks

Since October 2009 Montenegro has been a full WHO Programme member, transmitting its ICSR reports to Uppsala. Through mutual projects, our Agency has received much help towards an effective system from Dr Viola Macolić Šarinić's expert team in Croatia (HALMED) and from valued colleagues at the Pharmacovigilance National Centre of the Agency for Medicines and Medical Devices of Serbia (ALIMS).

# Ghana training

*Sharon Ako-Adonuvu*

Uppsala Monitoring Centre-Africa (UMC-A) ran a two-day training course prior to ACP2012 (the 5<sup>th</sup> African Congress of Basic and Clinical Pharmacology) in Accra, on 9-10 July 2012. More than forty participants from twelve countries spent two days learning about and discussing communication skills and crisis management. The group included senior academics and pharmacists, health officials and a range of other specialists. The course was highly commended by almost all participants.

The course was led by UMC communications specialist Bruce Hugman. After Accra, he travelled to the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, to introduce a similar range of topics to the staff of the Faculty of Pharmacy. They are shortly to launch a PharmD programme under the guidance of Dean, Professor T.C. Fleischer.



*The impressive group of participants gathered for the UMC-A July course at La Palm Royal Beach Hotel, Accra, Ghana.*



## New EMA committee

*Geoffrey Bowring*

The Pharmacovigilance and Risk Assessment Committee (PRAC) has been created at the European Medicines Agency with responsibility for assessing and monitoring safety issues for human medicines.

Its recommendations will be considered by the Committee for Medicinal Products for Human Use (CHMP) when it adopts opinions for active substances or classes of medicines contained in centrally authorised products, and by the Co-ordination Group for Mutual Recognition and Decentralised Procedures – Human (CMDh) when it provides a recommendation on the use of national products. PRAC replaces the former Pharmacovigilance Working Party.

In addition to its role in the protection of public health, the PRAC will operate under unprecedented levels of transparency. There will be much more proactive publication of information on safety issues, the PRAC will have the possibility of holding public hearings, and agendas and minutes of its meetings will be published.

The PRAC consists of one member nominated by each of the 27 Member States, one member each from Iceland and Norway, six independent scientific experts nominated by the European Commission, one member to represent healthcare professionals and one to represent patients organisations. The members of the PRAC, chosen on the

strength of their qualifications and expertise with regard to pharmacovigilance matters, have been nominated by the EU Member States, in consultation with the Agency's Management Board.

June Raine from the United Kingdom is the first PRAC chair and Álmath Spooner from Ireland vice-chair, in what will be interesting times for pharmacovigilance, both in Europe and world-wide.

## Improving dialogue with pharmacists

*Sten Olsson*

In many countries the professional role of pharmacists has expanded, and this has brought additional responsibilities in respect of safety of patients and checking for adverse events and medication errors. Pharmacists also increasingly play a leading role in medicines agencies in the area of pharmacovigilance. Over recent years the UMC has tried to improve its profile on the international pharmacy scene, and was present at the centennial FIP (International Pharmaceutical Federation) conference in Amsterdam from 4-7 October.

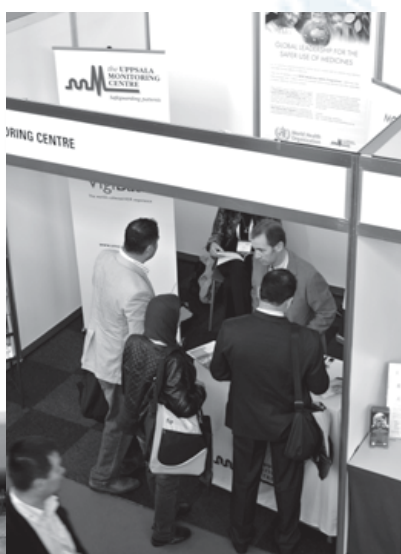
The FIP 2012 scientific programme covered every aspect of professional pharmacy issues, but touched on medicines safety in several of its themes: specifically in 'Safe

medicines, safe patients' but also within 'The healthcare team of the future' and 'Adherence - Helping patients take their medicines properly'.

UMC Director Marie Lindquist spoke on 'Optimizing resources for international safety data collection and analysis' in the session entitled 'Reporting of adverse events and errors'. Alex Dodoo chaired the session

'Pharmacists – creating a future of better Pharmacovigilance', where Sten Olsson spoke on 'Encouraging pharmacy involvement in pharmacovigilance, an international perspective'. Shanthi Pal, WHO-QSM, made a presentation in the same session with the title 'The role of the pharmacist in pharmacovigilance in resource limited settings'

In addition to these oral presentations the UMC had a small booth in the main exhibition hall in order to meet delegates during refreshment breaks. We had the pleasure of making many new contacts which are vital if we are all to work together towards our convergent goals of safer patients and medicines.



*Scenes at FIP in Amsterdam : a gusty Dutch welcome; contact in the exhibition hall; Marie Lindquist speaks.*

## We have lost our Jerry

Sten Olsson

As previously announced by e-mails to many of UMC's close partners and collaborators, we were affected by a tragic loss on 1 August 2012 when our friend, colleague and vaccine safety expert Jeremy (Jerry) Labadie died in a traffic accident just outside Uppsala, on his way to the office. The news of his sudden death sent shock waves through the entire organization. For us who knew him and worked with him, Jerry was not just any colleague; he was a gem of a person. Once the news of his demise spread through the international pharmacovigilance and vaccine safety community, condolences kept pouring in to the UMC office. It is very moving to read how they all refer not only to his expertise and professionalism but to his personality. In many messages he is described as a true gentleman. We, his close collaborators, all subscribe to that. He seems to have moved everyone that he met with his soft but still very firm manners and his smile that was always very close.

### WHO and UMC

Jerry joined the UMC in early 2009 to be the UMC vaccine safety expert and with the specific task of providing technical support to the WHO Global Network for Post Marketing Surveillance of Newly Pre-qualified Vaccines (PMS-network). He very soon established himself as a very knowledgeable professional in the international vaccine safety network with a deep understanding of vaccines, their

specific characteristics and of their pharmacovigilance. This is easy to understand if you know something about his background.

### Early professional years

Jerry graduated as a medical doctor from the Leiden University, the Netherlands, in 1986. For four years he was a junior scientist at the Laboratory for Immunology, Paediatric Bone marrow Transplant Department, Leiden University Medical Centre. He was then a junior resident in paediatrics for two years at the same university before he joined the Laboratory for Clinical Vaccine Research at the National Institute for Public Health and the Environment, Bilthoven, in 1994 as a senior scientist. In 2000 he joined Lareb, the Netherlands Pharmacovigilance Centre as a vaccines and paediatrics specialist. In that capacity he first came to Uppsala in 2001 as a student and lecturer at the UMC pharmacovigilance training course. During the course he made friends with many of us in the UMC staff, particularly with Inger, whom he later married.

### The trainer

Jerry came back to Uppsala as a lecturer on vaccine pharmacovigilance at all our subsequent international training courses. When we got the opportunity to recruit a vaccine safety expert for the PMS-network, Jerry was the obvious candidate. Only after we had negotiated special conditions for his attachment, working part-time from the

Netherlands and part-time from the UMC office, was he able to take up the new position.

### Pandemic initiatives

The UMC was lucky to have Jerry around as the world was affected by the A/H1N1 pandemic influenza in 2009. He took the lead in ensuring that UMC could offer pharmacovigilance support to countries using the pandemic influenza vaccine. For those using vaccines donated by WHO, the case management tool, PaniFlow, was offered, developed to Jerry's specifications.

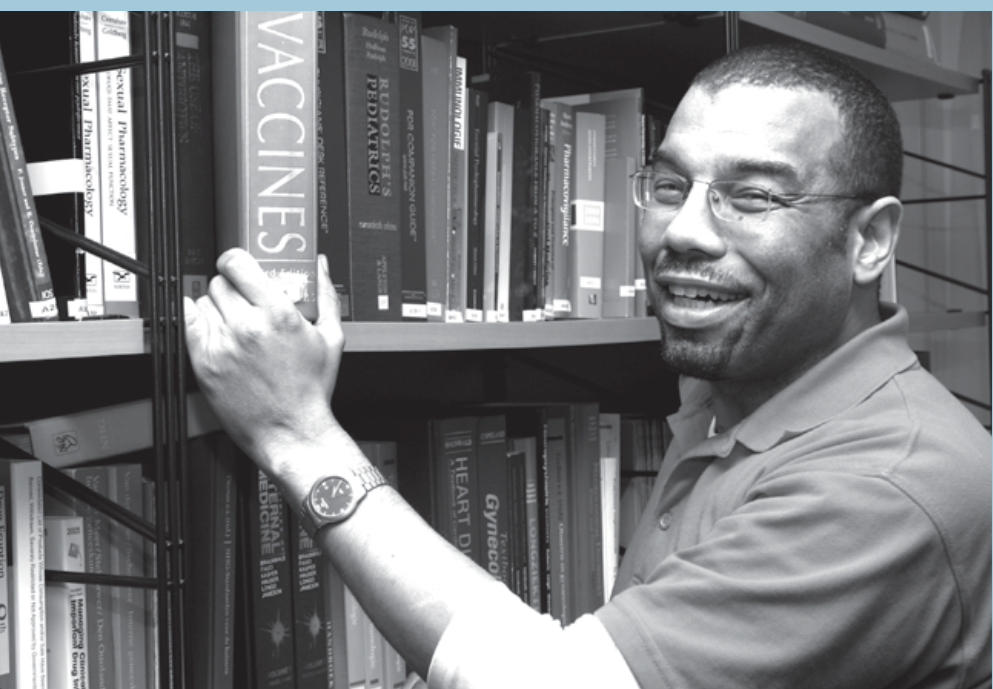
### Proactive in signals

UMC very soon learned that Jerry's expertise was not only confined to vaccine safety. He took an active role in the UMC process of signal analysis and lately also in the refinement of that process with new triages and algorithms. He was an excellent teacher and visited many national centres, supporting them in their use of UMC tools and services. He travelled widely also on behalf of WHO/IVB, for courses on causality assessment and also to review the vaccine pharmacovigilance capacity of the Chinese national drug authority.

### A loss for all

Without Jerry in the office, UMC is weakened. We will possibly, with time, be able to compensate for the competence we have lost but we will not be able to compensate for the loss of the person Jerry Labadie. We will always miss him truly and dearly.

Jerry was 55 years when he died. He leaves behind his wife Inger, four children aged 27, 25, 22 and 18 and one young grandchild.





# Targeting in ART

Helen Byomire & Victoria Nambasa

Uganda has rolled out treatment to HIV-infected people, and large amounts of anti-retrovirals (ARVs) with various concomitant medications have been widely distributed. By March 2011, close to 300,000 people were accessing Antiretroviral Therapy (ART) from 432 health facilities, while about 500,000 of the 1.2 million people living with HIV were accessing chronic HIV care services.

Prevention of mother-to-child transmission (PMTCT) services have been rolled out to over 1,300 sites in the country and provide ARV prophylaxis to 60% of the 25,000 HIV-infected women that get pregnant annually. By September 2012, pregnant women will be started on option B+ in which Tenofovir + Lamivudine + Efavirenz are the recommended antiretroviral drugs.

## Increased access and risk

This widespread access to HIV treatment and PMTCT services has thus greatly increased the number of people that are at risk of ADRs.

Targeted Spontaneous Reporting (TSR) in the HIV programme was introduced in 2011 after the training of a selected group of African countries in Mombasa conducted by the World Health Organization (WHO). TSR is an additional pharmacovigilance method to complement data from the spontaneous system widely used in Uganda. The National Pharmacovigilance Centre, in collaboration with the AIDS Control Program chose Tenofovir, one of the new drugs in the ART programme to be monitored for renal toxicities. Monitoring of suspected adverse events related to use of antiretroviral drugs in PMTCT and in Early Infant Diagnosis (EID) program were also included in the TSR project.

## Project goals

The goals of the TSR project are:

1. to improve care and safety of patients on antiretroviral therapy in Uganda
2. to provide data for future reference on the safety of Tenofovir and ADR reporting in PMTCT
3. to enhance pharmacovigilance in public health programmes and among health professionals in Uganda.

This pilot project runs for a period of one year until March 2013 and is funded by the Monitoring Medicines Project.

## Implementation

The pilot project was officially launched as an advocacy sensitization platform for pharmacovigilance in the country.

The project is being implemented in two regional pharmacovigilance centres located in regional referral hospitals and their catchment health facilities. Renal toxicity is monitored using urinalysis (urine protein, urine sugar), serum creatinine and clearance as per the national guidelines. Renal toxicity is monitored using urinalysis (urine protein, urine sugar), serum creatinine clearance as per the national guidelines. This monitoring will be done for about 8,500 patients on TDF-based (tenofovir (disoproxil fumarate)) ART regimens. Monitoring of PMTCT and EID will be done in eight health centres with a target of about 2,000 pregnant women.

Safety data collection started in April 2012, and six months on the following adverse drug reaction reports have been received:

- 7 ADR reports indicating renal toxicity (in a cohort of 8,543 patients) which required withdrawal of Tenofovir
- 8 case reports of out-of-range serum creatine (in a cohort of 1,250)
- identification of 6 case reports of Atazanavir related jaundice, and health workers have been sensitized on monitoring this drug when given to patients.

## Challenges

TSR has brought challenges, as with all good and important projects – particularly the laboratory facilities required for monitoring renal toxicities and the increased work load



TSR team and partners at the launch of the project

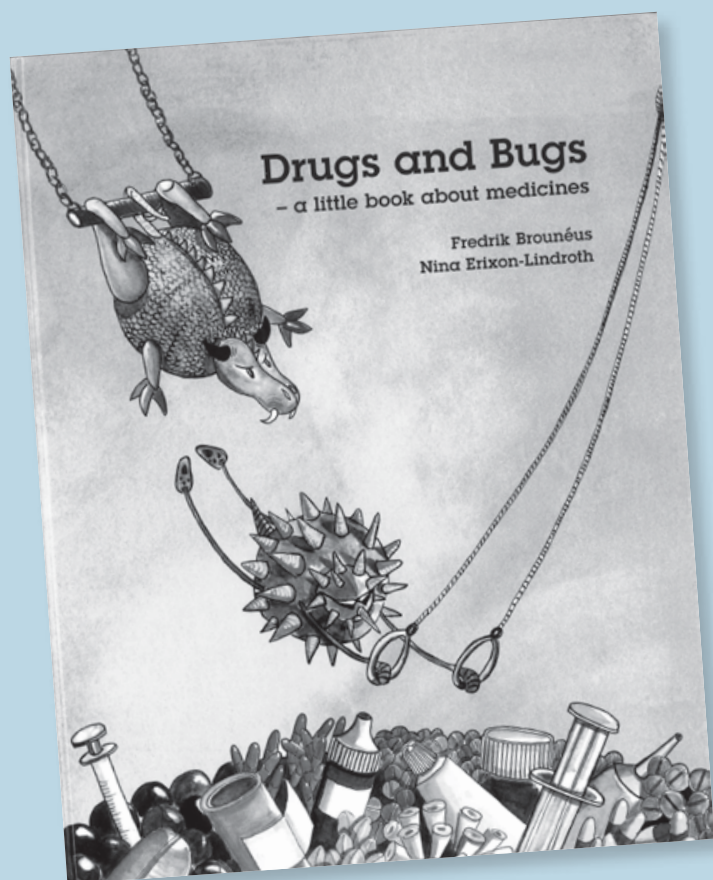
## Current status

The TSR project is on course: the ice has been broken between the National Pharmacovigilance Centre and the AIDS Control Program. The two have worked together in the implementation, shared information and pharmacovigilance has been included in the training curriculum for the roll out of option B+ in PMTCT.

involved in monitoring the patients. As implementers of the project however, we believe that with each of us doing our part coupled with close collaboration with all our partners, the patients in Uganda will benefit from the awareness about safety of all medicines apart from those the project is following.



## Books



### Drugs and Bugs

An English edition of the book for children, about medicines – *Drugs & Bugs* – has just been published. It is by Fredrik Brounéus, a pharmacist and writer, whose novels for children include *The Hunt for the Energy Gizmo*, 2006; *Yoga for Rockstars*, 2008; *The Prince of Soul and the Lighthouse*, 2012. Illustrations are by Nina Erixon-Lindroth, who is also a clinical neuroscientist. The Swedish edition was reviewed in UR45 p20.

In *Drugs and Bugs – a little book about medicines*, readers learn all about everything that is exciting about medicines. The book looks at vaccines, antibiotics, and how new medicines are invented. The different ways of drug administration and the path of a drug through the body, including mechanism of action, metabolism and excretion are covered. There's also viruses and bacteria, how parasites attack the body and how we defend ourselves, with and without medicines. The English EU edition was published by the Danish Medicines Agency, for the Danish EU presidency in 2012.

### Stephens' Detection and Evaluation of Adverse Drug Reactions: Principles and Practice (6<sup>th</sup> Edition)

John Talbot (Editor), Jeffrey K. Aronson (Editor)

ISBN: 978-0-470-98634-9

Hardcover, 750 pages

December 2011, Wiley-Blackwell

The sixth edition of *Stephen's Detection of Adverse Drug Reactions: Principle and Practice* is written with practitioners in mind. It covers the issues and problems involved in the detection of adverse drug reactions (ADRs) throughout the life cycle of a medicine, from animal studies through clinical trials, introduction to the market, to wide clinical use, and eventual decline in use or withdrawal.



## Recent Papers

### Clinical Diagnosis: A Topic Worth Revisiting for Pharmacovigilance

Edwards, I. Ralph

*Drug Safety*, Volume 35, Number 4, 1 April 2012, pp. 261–264(4)

### Embedding 'Speaking Up' into Systems for Safe Healthcare Product Development and Marketing Surveillance

Edwards, Brian; Hugman, Bruce; Tobin, Mary; Whalen, Matthew

*Drug Safety*, Volume 35, Number 4, 1 April 2012, pp. 265–271(7)

The authors argue that "robust, active cooperation, and effective, open communication" between stakeholders is essential to ensure regulatory compliance and the safe use of healthcare products.

### Good Pharmacovigilance Practice and the Curate's Egg

Edwards, I. Ralph

*Drug Safety*, Volume 35, Number 6, 1 June 2012, pp. 429–435(7)

The author scrutinizes the first seven Good Pharmacovigilance Practice (GVP) modules, from the EMA and considers their size and complexity of the documents and the need for serious examination.

### Considerations on causality in pharmacovigilance

Edwards, I. Ralph

*International Journal of Risk & Safety in Medicine* 24 (2012) 41–54

DOI 10.3233/JRS-2012-0552 IOS Press

Debated by philosophers, scientists, lawyers and for centuries, it is imperative to define causality in pharmacovigilance as precisely as possible.

### Artesunate- and Amodiaquine-Associated Extrapyramidal Reactions: A Series of 49 Cases in Vigibase™

McEwen, John

*Drug Safety*, Volume 35, Number 8, 1 August 2012, pp. 667–675(9)

Acute extrapyramidal reactions have been attributed to amodiaquine. They may be anticipated with the widely-used combination antimalarial artesunate with amodiaquine, but the association is very poorly documented. This study sought to identify individual case safety reports in Vigibase™ associating the use of the combination of artesunate and amodiaquine with extrapyramidal adverse reactions, and to characterize the clinical features in those reports.

### Global Pharmacovigilance for Antiretroviral Drugs: Overcoming Contrasting Priorities

Nyasha Bakare, Ivor Ralph Edwards, Andy Stergachis, Shanthi Pal, Charles B. Holmes, Marie Lindquist, Chris Duncombe, Alex Dodoo, Joel Novendstern, Jude Nwokike, Ricardo Kuchenbecker, Judith A. Aberg, Veronica Miller, Jur Strobos. *PLoS (Public Library of Science) ONE* | www.plosone.org 5 July 2011 | Volume 8 | Issue 7 | e1001054

The increasing numbers of people worldwide using antiretroviral drugs demand improved and sustained global drug safety monitoring or pharmacovigilance. The Forum for Collaborative HIV Research discusses the creation of a sustainable global pharmacovigilance system for ARVs. Barriers to progress noted were important but contrasting priorities and values among stakeholders, all of whom dedicated to establishing global pharmacovigilance.

The new edition is revised and updated with five new chapters on pharmacogenomics, ADRs with herbal medicines, safety of medical devices, safety issues with oncology drugs, and economic aspects of ADRs. Tables and web information needed in order to practice are included, offering a complete primer for the new practitioner and a reference for the more experienced.

Contributors include Joanne Barnes, Nicky Britten, E. G. Brown, Stephen J. W. Evans, Dorothea Nitsch, Munir Pirmohamed, Sudeep P. Pushpakom, June Raine and Lesley Wise.

### Safety of devices book

Dr Jitendra Kumar Sharma, who attended the UMC pharmacovigilance course in 2011, is author of a new book : *Medical Devices – Best Practices for Patient Safety*, which was launched in Bangalore at Health Ex on 7 September 2012 by the Chief Minister of Karnataka Sri Chettiar.



From left: Deepak Agarkhed (Editor), Dr Gayatri (Director of NABH, Quality Council of India), and Dr Jitendra Sharma at the launch of Medical Devices

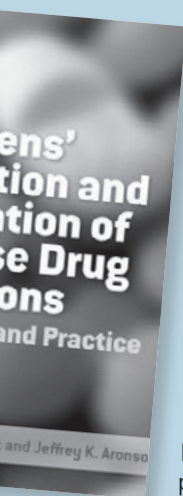
The book is the first in India to give a generic face to the most desirable and impactful practices that could form the stages in the life cycle of a medical device. The production phase is outlined under ten broad themes, whereas the stages of purchase process, training, quality management, maintenance and use have been brought under the theme of institutional management of medical devices. The emerging science of health technology assessment is elaborated. The book illustrates suggested best practice guidelines for medical devices of value to manufacturers, inspectors, regulators, and hospital and health care administrators.

Dr Jitendra Kumar Sharma has many interests related to patient safety and is a member of the Faculty of Health Sciences at University of Adelaide and Health Technology Innovation Centre of IIT, Madras, India.

The book is published by National Accreditation Board for Hospitals (NABH), Quality Council of India. For any query you may contact Mr Vikash Chaudhry at NABH secretariat at [Vikash@nabh.co](mailto:Vikash@nabh.co)

### Farmacovigilancia

This very useful introduction to pharmacovigilance in Spanish marks its 2nd edition completely revised and much expanded. Information on obtaining copies will be available shortly.



### Hearing Impairment Associated with Oral Terbinafine Use: A Case Series and Case/Non-Case Analysis in the Netherlands Pharmacovigilance Centre Lareb Database and VigiBase™

Scholl, Joep H.G.; van Puijenbroek, Eugene P. *Drug Safety*, Volume 35, Number 8, 1 August 2012, pp. 685–691(7)  
The Netherlands Pharmacovigilance Centre Lareb received reports of six cases of hearing impairment in association with oral terbinafine use. This paper describes these cases and provides support for this association from the Lareb database for spontaneous adverse drug reaction (ADR) reporting and from Vigibase (date of analysis August 2011).

### Decision Dilemmas: Worse in Emerging Economies

Edwards, I. Ralph *Drug Safety*, Volume 35, Number 8, 1 August 2012, pp. 611–614(4)

### Quantitative Benefit-Risk Assessment

Caster O, Norén GN, Ekenberg L, Edwards IR. Quantitative benefit-risk assessment using only qualitative information on utilities. *Medical Decision Making*, 2012. Published online before print August 30, 2012, doi: 10.1177/0272989X12451338.  
An article presenting novel methods for quantitative benefit-risk assessment is now published online ahead of print in *Medical Decision Making*.

### Percentage of Patients with Preventable Adverse Drug Reactions and Preventability of Adverse Drug Reactions – a Meta-Analysis

Hakkarainen, Katja M; Hedna, Khadija; Petzold, Max; Hägg, Staffan *PLoS (Public Library of Science) ONE* | [www.plosone.org](http://www.plosone.org) 1 March 2012 | Volume 7 | Issue 3 | e33236

Observational studies suggest that preventable adverse drug reactions are a significant burden in healthcare, but no meta-analysis using a standardised definition for adverse drug reactions exists. This study attempted to estimate the percentage of patients with preventable adverse drug reactions and the preventability of adverse drug reactions in adult outpatients and inpatients.

### Statin-Associated Polymyalgia Rheumatica. An Analysis Using WHO Global Individual Case Safety Database: A Case/Non-Case Approach

de Jong, Hilda JI; Saldi, Siti RF; Klungel, Olaf H; Vandebriel, Rob J; Souverein, Patrick C; Meyboom, Ronald HB; Passier, JLM (Anneke); van Loveren, Henk; Tervaert, Jan Willem Cohen. *PLoS (Public Library of Science) ONE* | [www.plosone.org](http://www.plosone.org) 1 July 2012 | Volume 7 | Issue 7 | e41289

A case/non-case study based on individual case safety reports (ICSR) in the WHO global ICSR database (VigiBase) was undertaken to assess whether there is an association between statin use and the occurrence of polymyalgia rheumatic (PMR).



# Linking the unlinkable

*Tomas Bergvall on behalf of the SALUS Consortium*

Pre-approval clinical trials cannot guarantee that drugs will not have serious side effects after they are marketed. Post-approval drug safety data studies aim to address this problem, however, their effectiveness is questioned especially after recent examples of drug withdrawals. A contributing reason is that current post market safety studies largely depend on the submission of spontaneous case reports where underreporting is a major problem. The need for a more proactive approach is apparent, where safety data from multiple sources are actively monitored, linked and analyzed. Effective integration and utilization of

electronic health records (EHR) can help to improve post-market safety activities on a proactive basis. SALUS (see UR57, p17 for introduction) aims to facilitate this through providing functional interoperability profiles and supporting open source toolsets enabling EHR systems and clinical research systems to communicate and exchange EHR data.

The SALUS Consortium believes that an effective integration and utilization of electronic health record (EHR) data can help to improve post-market safety activities and will result in:

- strengthening the spontaneous reporting process by automated ADE (adverse drug event) detection
- enabling ADE reporting by extracting the available information from EHRs into the individual case safety reports to avoid double data entry
- strengthening the current signal detection processes by enabling case reports to be traced to their corresponding patient records
- enabling real time screening of multiple, distributed, heterogeneous EHRs for early detection of ADE signals
- enabling sustainable and scalable EHR data re-use facilitating wide scale outcome and health effectiveness research.



*The consortium members between discussions*

SALUS Project (<http://www.salusproject.eu>), an R&D project co-financed by the European Commission's 7<sup>th</sup> Framework Programme (FP7), aims to create the necessary semantic and functional interoperability infrastructure to enable secondary use of EHR data in an efficient and effective way for reinforcing the post market safety studies.

For more information please read the whitepaper presented at the project website ([http://www.salusproject.eu/docs/SALUSwhite\\_paper-Final.pdf](http://www.salusproject.eu/docs/SALUSwhite_paper-Final.pdf)), or join us on twitter (SALUSProject\_EU) or Google+ (Salus Project).

## MIE impressions

*Kristina Juhlin*

The 34<sup>th</sup> conference of the European Federation for Medical Informatics (MIE) took place in the beautiful Italian town of Pisa, home of the famous leaning tower and renaissance scientist Galileo Galilei.

Over the years the field of biomedical informatics has grown as computers become an increasingly important part of the medical field. As the scope of the field has expanded the name has changed from medical computer science, via medical informatics, to health informatics, and later biomedical informatics. The overall topic of MIE 2012 was 'Quality of life through quality of information' and topics discussed included data-mining of health and patient records,

methods for decision support, knowledge representation and more.

The UMC was represented in the workshop on computational methods in pharmacovigilance held during the last day of the conference where I made a presentation entitled 'An attempt to expedite signal detection by grouping related adverse reaction terms'.

One of the most frequently addressed topics of the conference was text mining of medical information from EHRs and other sources. There were a number of interesting presentations on this topic, ranging from applications of machine learning in text

mining to extraction of semantic relationships.

Another prominent topic of the conference was the use of social media when collecting safety data and in disease surveillance. Sabine Koch of Karolinska Institutet, Stockholm gave a keynote talk on the development of a new smartphone app for managing one's 'health flow'. There was also an interesting presentation discussing the possibility to use twitter to monitor disease outbreaks (Mustafa Sofean, Leibniz University).



# São Paulo workshop

*Mariano Madurga*

The interest in EU regulations for medicines safety extends well beyond Europe. SINDUSFARMA (Sindicato da Indústria de Produtos Farmacêuticos no Estado de São Paulo) the body representing pharma industry, the Academia Nacional de Farmacia, and ANVISA (Agência Nacional de Vigilância Sanitária) the Brazilian Regulatory Agency responsible for pharmacovigilance, organized a joint event on 12-13 June to discuss the subject.

The workshop, 'European Regulation on Pharmacovigilance', in São Paulo, Brazil gathered over 100 health professionals, including physicians and pharmacists, from pharmaceutical companies from São Paulo State and the rest of Brazil, as well as a number of students in these professions.

In the programme, Giselle Calado (ANVISA) outlined the Brazilian pharmacovigilance system, while Adalton Ribeiro (Centro de

Vigilância Sanitária do Estado de São Paulo) from the state pharmacovigilance centre set out the situation for pharmacovigilance in São Paulo State. Mariano Madurga (AEMPS, Spain) spoke about the Spanish pharmacovigilance system, development and application of PSURs (Periodic Safety Update Reports), risk management plans and risk minimization measures, benefit-risk assessment, pharmacovigilance of biotechnological products; and gave a presentation on new European Union legislation.

On the previous day Mariano Madurga gave a lecture at the National Academy of Pharmacy on 'Global Pharmacovigilance Scenario: the WHO International Programme of Drug Monitoring', explaining advances around the world in pharmacovigilance, a good way to optimise the rational use of medicines.



*The teaching team (from left):  
Rosana M Mastelaro (SINDUSFARMA),  
Mariano Madurga (AEMPS),  
Giselle Calado (ANVISA),  
Adalton Ribeiro (São Paulo PV Center)*

# UMC at ISPE

*Geoffrey Bowring*

The UMC was represented at this year's well-attended and successful ISPE meeting in August, in Barcelona.

Two oral presentations were given: in the session Identifying Risks in Special Populations, Kristina Star spoke on 'Temporal Pattern Discovery on Electronic Health Records – A source of reference in signal detection work', and Niklas Norén spoke on 'Uncovering Hidden Patterns in Pharmacovigilance through Robust Subgroup Surveillance'.

The presentation by Kristina Star covered results from a trial use of electronic health records as a reference source in routine signal detection work on spontaneous reports at the UMC. The researchers investigated to what extent highlighted signals of disproportionate reporting in VigiBase can find support in electronic health records from primary care.

Niklas Norén focused on uncovering hidden patterns in spontaneous report data using subgroup surveillance. The study concludes that the theoretical problem of multiple comparisons is a real and important issue to

deal with in multivariate exploratory analysis. It also presents techniques for finding patterns otherwise easy to overlook, such as where the disproportionality measure is dominated by a single subset or confounded.

## Posters

Three posters involved UMC staff or revolved around the WHO database, VigiBase:

- Grouping related medical terms may not expedite detection of disproportionate reporting patterns in pharmacovigilance (Richard Hill, Johan Hopstadius, Magnus Lerch, Niklas Norén)
- Disproportionality Analysis of Vaccine Reports – A comparison of VAERS and VigiBase (David Martin, Johan Hopstadius, Johanna Strandell, Robert Ball, Jerry Labadie)
- Characterisation of databases (DBs) used for signal detection (SD): Results of a survey of IMI PROTECT work package (WP) 3 participants. (Antoni FZ Wisniewski, Kristina Juhlin, Mona Vestergaard Laursen, Miguel M Macia, Katrin Manlik, Vlasta K Pinkston, Suzie Seabroke and Jim Slattery).

The UMC also had an exhibition stand where staff were able to chat with delegates about UMC products, services and publications.



*Mats and Geoffrey welcome visitors to the UMC stand at ISPE*

# Easier search services

Surendar Masuram

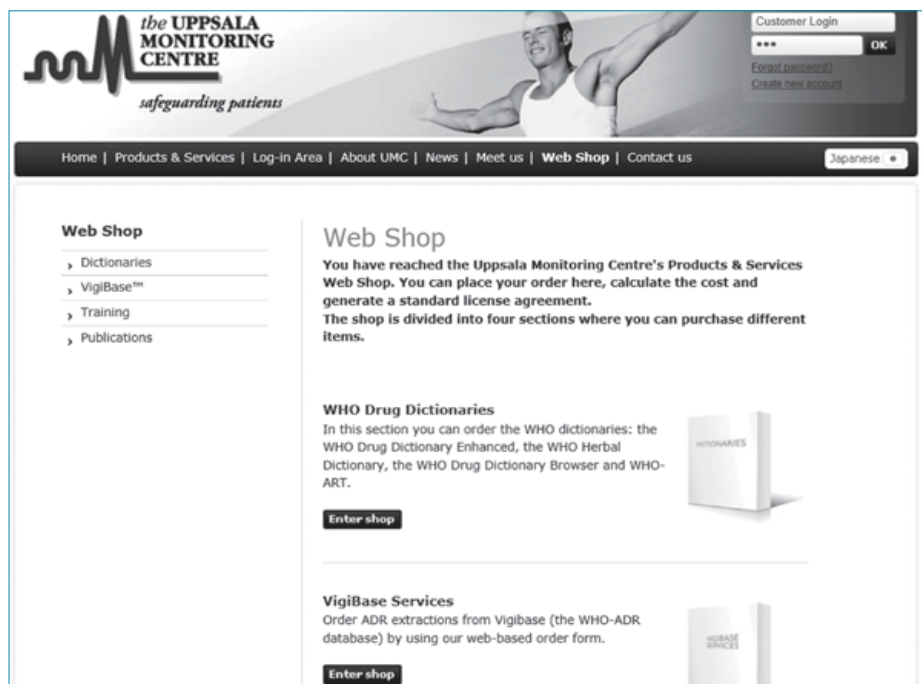
VigiBase™ Services are used by pharmaceutical companies, academia and national pharmacovigilance centres of member countries to get data with global coverage. Data extractions from VigiBase, the world's largest collection of drug safety information, are used for signal detection, updating PSURs (Product Safety Update Reports) and comparing products nationally and globally.

## Ordering ADR information

A newly-designed Custom Searches web-form is the simplest way to make a request, submitted via the web to UMC Products & Services. Orders via e-mail, regular mail or fax are also accepted. An order confirmation with specification of cost is sent electronically; searches for WHO Programme national centres are always free of charge. If no predefined type of report has been chosen, the confirmation will contain a proposal of search layout. After confirmation of cost and search layout, the search is carried out. Results are usually sent within 10 working days but can be expedited. The invoice is sent via regular mail to the address specified in the order form.

## VigiBase report formats

Overview Reports show the number of reported cases with a specified drug and reaction or all reactions listed for an individual drug or ATC group. This information can also be grouped by reporting country or by year. Reactions are listed by System Organ Class and preferred term. Detailed Reports show all details of each individual case report of interest. A case



report search should only be requested when the number of relevant cases in the database is limited since the output volume may otherwise be unmanageable. A number of alternative output formats are available.

Ad hoc searches are flexible both in terms of question formulation and result presentation. Ad hoc searches are used when none of the pre-defined reports answer the particular needs of a special enquiry, or where interest is focused on specific data elements.

## Extent of data

VigiBase consists of more than 7.6 million adverse reaction reports (ICSRs) gathered since 1968 from members of the WHO Programme for International Drug Monitoring.

The VigiBase database system includes linked databases containing medical and drug classifications: WHO-ART/MedDRA, WHO ICD, and WHO-DD. These classifications enable structured data entry, retrieval, and analysis at different levels of precision and aggregation.



## UMC web updates

You can now keep in touch with news and changes on the UMC website by subscribing to a RSS news feed. Look for the RSS (rich site summary) icon on the main UMC page: [www.who-umc.org](http://www.who-umc.org).

An improved search facility has also been added to our website, which we hope will help readers looking for information hidden within the many sections of the site.

# UMC strengthens its management

Sten Olsson

The WHO Medicines Safety Programme is growing – as is the Uppsala Monitoring Centre (UMC). With the expansion of pharmacovigilance as a science, new demands and expectations for support and services are directed towards the UMC from many stakeholders. Fortunately UMC has managed to expand its services in the commercial sector, allowing us to support the growth of the WHO Programme, and has successfully secured grants to support research and development. The Centre now employs approximately 100 people, all with the aim of improving patient safety.

## UMC set-up

The UMC (WHO Collaborating Centre for International Drug Monitoring) is a foundation created by the Swedish government with responsibility to manage all operational aspects of the WHO Programme, as set out in the agreement between Sweden and WHO. The UMC director, Marie Lindquist, reports to a Board consisting of six members, three appointed by WHO and three by the Swedish government.

## SET

To assist her in the management of the Centre, Marie has created a Strategic Executive Team (SET) consisting of senior staff with strategic and management responsibilities. During 2012 SET members have undertaken a development programme to ensure coherence and focus on UMC vision, mission and core values. Ultimately the SET is committed to looking out to the real world of drug and patient safety which we serve, and to use the skills and experience of all staff at the Centre to this end.

### Did you know??

#### Members of UMC's SET have –

run the Stockholm Marathon, completed the famous Vasaloppet (cross-country skiing race), or made a parachute jump from 4000m? Currently one is president of the Swedish section of Pharmacists without Borders, while others are an expert black and white photographer, a regular Kawasaki 2000 rider, a guitar builder and a leader of the Swedish wilderness education programme for children. And one of them was the youngest person in their town to pass the boat skipper's exam – at the age of 12!

## A collective contribution

The SET members bring a wide range of skills and experience to the strategic direction of the UMC towards global patient safety. Experience gained in the outside world and other employment settings all add up to a powerful collective effort. The range of skills covers approaches to innovation, critical review, as well as scientific and analytical expertise. There is the financial and administrative angle, as well as the huge area of IT: keeping abreast of industry standards, best practices and trends within life sciences and IT. Other inputs include insights into the world of commercial software suppliers, and a drive to foster a culture of personal responsibility for the success of the UMC.

Accumulated knowledge and skills in pharmacovigilance capacity-building and specific pharmacovigilance investigations are central to our key mission, while maintaining positive contact with commercial partners is essential for our survival.



*Johanna, Antonio, Sten, Marie, Niklas, Birgitta, Ola, Annika, Alex, Carin stepping out together*

## All set for action

The combination of these qualities allows the SET, we hope, to look outwards, and by innovative research and development, provide data, reference, consultative and training resources to medicines regulatory agencies, health professionals, researchers and the pharmaceutical industry all over the world, to meet UMC priorities – the safety of patients and the safe and effective use of medicines in every part of the world.

## Find out more

We thought that UMC clients might like to know a little more about the people who are directly responsible for management of the various UMC activities. The SET members are briefly introduced on this page. Updated information on the SET, the UMC Board and all staff working at the UMC may be found on the 'About UMC' pages of the UMC website: [www.who-umc.org](http://www.who-umc.org)

## The SET

### Marie Lindquist

Director, with overall responsibility for the Centre, its professional and scientific activities, and its management; matters relating to the WHO Programme; and external relationships.

### Antonio Mastroianni

Head of Pharmacovigilance Services (PVS), working closely with WHO headquarters to run the WHO Programme. The department delivers technical and scientific support to WHO Programme countries and other stakeholders.

### Niklas Norén

Chief Science Officer – provides scientific leadership, and assumes overall responsibility for the quantity, quality, and direction of research carried out.

### Birgitta Toreheim

Chief Financial Officer, responsible for Finance, Human Resources, IT support, EU project management and other administration.

### Johanna Eriksson

Chief Information Officer – technology vision and leadership in development and implementation of information technology (IT) programs as in product development. Also manages technical lifecycle issues and operations of UMC products.

### Carin Ström

Corporate Secretary: HR administration, support to management team in general, Director, and UMC Board.

### Ola Strandberg

Chief Product Officer, leading day-to-day work of Product Managers from different departments, co-ordinating product roadmaps and synchronizing the product portfolio.

### Sten Olsson

Chief WHO Programme Officer. Keeps close working relationships with WHO headquarters and WHO Programme, to ensure that UMC services are aligned with the needs of all Programme members.

### Annika Wallström

As Chief Marketing Officer is responsible for UMC's commercial operations, with clients in more than 80 countries. The WHO Drug Dictionary Enhanced is a de facto standard, used in clinical development, pharmacovigilance and drug safety to code medicinal products.

### Alex Dodoo

Head of UMC-Africa also participates in the strategic direction of the UMC.



# Zimbabwe welcomes African consultants

*Sten Olsson*

A fifth meeting of African pharmacovigilance consultants was held in Harare, Zimbabwe, from 21–24 August 2012. The objective of the meeting, just like previous ones, was to build competence and capacity in Africa to support advanced pharmacovigilance activities beyond the basic level. Previous meetings took place from 2007 to 2010, organized by the Quality and Safety: Medicines (QSM) department at WHO-HQ. This year it was organized thanks to financial contributions from WHO/UMC and United States Agency for International Development (USAID). The meeting was hosted by the Medicines Control Authority of Zimbabwe (MCAZ), and the WHO Collaborating Centre in Accra, Ghana, contributed with much logistic support.



*Keen discussions in Harare.*

Pharmacovigilance consultants attending represented Botswana, Cape Verde, Ghana, Kenya, Morocco, Mozambique, Nigeria, Sierra Leone, Tanzania, Uganda and Zimbabwe. Edinam Agbenu, Togo, sadly failed to join the group because of unclear visa instructions from authorities. She was forced on a four-day 'trip' to several countries before having to return home. Support persons from WHO-HQ, UMC, UMC-Africa and Management Sciences for Health (MSH) contributed to the sessions.

Gugu Mahlangu, Director General of MCAZ, chaired the opening session at which the WHO Representative to Zimbabwe expressed her satisfaction that a meeting on patient safety was being held in the country and wished for a successful outcome, and further progress.

## Africa in VigiBase

The contribution of African countries to VigiBase was discussed in the initial session. It was noted that Africa contributes only 0.3% of the ICSRs in the WHO database. Over the last year the number of reports has

increased considerably, and now amounts to about 50,000. The first safety signal based on only African data in VigiBase has just been published (extra-pyramidal reactions to artesunate/amodiaquine).

The need for direct patient reporting in Africa and support systems required was thoroughly discussed and the web-based reporting tool developed by UMC was demonstrated. Progress reports on the use of cohort event monitoring of anti-malaria medicines were given from Tanzania, Nigeria and Zimbabwe. Kenya has just started such a programme and showed some encouraging results. It became apparent that results from the different programmes should be coordinated and compared to identify both common findings and differences.

## New tools

Magnus Wallberg (UMC) provided an update on the development of the different management and analysis tools for adverse reaction data made available by UMC. He also explained the calculations behind the UMC documentation grading analysis and how the graphical presentations can be interpreted.

## Regulation

One session was devoted to a discussion on development of regulatory requirements for pharmacovigilance in Africa and the need for communication and regional harmonization. In another session the challenges associated with the introduction of new vaccines in Africa were considered and how safety monitoring systems have to be put in place to ensure that the integrity of the immunization programmes are maintained. A good model for collaboration between pharmacovigilance and the national immunization programme was presented from Zimbabwe. The WHO Global Vaccine Safety Initiative was briefly presented as an administrative structure with the mission to support capacity building for vaccine pharmacovigilance in low- and middle-income countries.

## Other systems

Hye Lynn Choi and Ndinda Kusu (MSH/ Systems for Improved Access to Pharmaceuticals and Services Program (SIAPS)), gave perspectives on active surveillance other than Cohort Event Monitoring. They also presented the MSH approach to health systems strengthening in pharmacovigilance and contributed to the session on pharmacovigilance indicators, initiated by Ambrose Isah, Nigeria.

Victoria Nambasa, Uganda, described experiences with targeted spontaneous reporting of HIV/AIDS patients, only introduced a few months earlier. Discussions were lively around the validity of early signs of nephrotoxicity associated with tenofovir treatment. Victoria also initiated a discussion about the need for safety monitoring of paediatric patients in Africa and challenges involved. Esperança Sevene, Mozambique, presented experience with pregnancy registers in Africa and challenges involved in studying drug effects in pregnant women.

The final session focused on medication errors and whether studies in an African setting are likely to record the true incidence of such problems. A limited number of studies do exist but it was concluded that more attention is needed and further research should be carried out.

## Looking forward

By the close of the meeting consultants agreed that much has been achieved since 2007. Instead of only discussing plans and ideas, a lot of the agenda is now devoted to assessment and interpretation of available safety information and the significance of development projects that have been carried out in Africa.

Participants enjoyed a guided tour at the MCAZ laboratories and offices before returning to their respective countries.



*Relaxation afterwards*

# The francophone pharmacovigilance rendezvous

*Loubna Alj*

The annual francophone pharmacovigilance training course was held as planned in September. Rabat - and more exactly the Moroccan pharmacovigilance Centre - were pleased to welcome the 25 participants from five French-speaking countries (Côte d'Ivoire, Guinea Conakry, Madagascar, Niger and Morocco). The training course was a great opportunity to share experiences regarding pharmacovigilance from different perspectives: national pharmacovigilance centres, drug regulatory authority, public health programmes and insurance company.

During the two weeks, the course programme covered all pharmacovigilance activities, missions and duties with a focus on HIV/AIDS and tuberculosis public health programmes, given that these diseases are a major issue in African countries. For those who want to be with us next year, save the following date 17-28 June 2013, as ever in Rabat.



*Participants in the Rabat rendezvous*

## Save the date!

### UMC PV Course 2013

In the last issue of Uppsala Reports we reported on the UMC Pharmacovigilance Course that was given in May this year. We are now in the midst of planning for the next course, which will be held in May 2013. The preliminary dates have been set as May 20<sup>th</sup> - May 29<sup>th</sup> for module 1 and May 30<sup>th</sup> - June 4<sup>th</sup> for module 2.

The course will have a slightly different structure from previous years, and more detailed information about the changes will be provided as soon as the curriculum has been set.

The course announcement and application form will be sent to all National Centres in October/November and will also be publicly available for everyone then on the UMC website.

If you have any questions about the course, please feel free to contact the course managers Johanna Stenlund and Elki Sollenbring:

[pvtraining@who-umc.org](mailto:pvtraining@who-umc.org)

Welcome to an unforgettable course in Uppsala 2013!

## Training for China SFDA delegation

*Zhurong Liu*

On 4-5 September 2012 the UMC ran an intensive training course for a delegation from the Information Centre, State Food and Drug Administration (SFDA) in China. The delegation of 22 was led by Hong Xiaoshun, Deputy Director of the Information Centre, and the participants came from regional centres and SFDA headquarters.

The training introduced the WHO Global ICSR database to the Chinese professionals. The database has more than 7.5 million cases and is used constantly by pharmacovigilance professionals. To use the database efficiently, software and tools are vital. During the course, UMC lecturers introduced VigiFlow, VigiSearch and VigiMine along with other tools used to analyze ADRs, while the Chinese Drug Dictionary and WHO-ART were also presented. During the discussions between UMC staff and SFDA professionals, the SFDA database of adverse drug reactions with its large number of cases was described, and this database will play an important role in China to generate signals in the future.



*SFDA and UMC staff on the UMC office steps*

# Pooling ideas on improved communication

Geoffrey Bowring

Priya Bahri (European Medicines Agency, London) and Mira Harrison-Woolrych (Intensive Medicines Monitoring Programme, New Zealand Pharmacovigilance Centre) have just published a comprehensive summary of the activities at and around the WHO Programme annual meetings over a two year period concerning social marketing and patient-tailored communications.\*

## On the agenda

The Annual Meetings of National Centres participating in the WHO Programme have increasingly included presentations and workshops on how to improve communication between the national pharmacovigilance centres, patients, health professionals, policy makers and the general public, in order to promote the safer use of medicinal products. The article offers a summary of these recent discussions and makes recommendations to investigate and pilot some approaches in small-scale projects at national centres.

## Model of engagement

In order to boost pharmacovigilance centre staff involvement at the start, in 2006 a survey asked for their views on advocacy of pharmacovigilance targeted at patients, health professionals, policy makers and the public. The replies led to a plenary session in 2007 on global awareness of pharmaco-

vigilance, where the social marketing approach was identified as a tool for advocacy. Major working group sessions at the 2010 and 2011 meetings attracted participants from all regions. At the 2010 Annual Meeting the working group looked at *'How to improve awareness of drug safety issues – through social marketing of pharmacovigilance?'*, while in 2011 the working group posed the question *'How to improve safety information to patients and their family and friends as carers?'*

## Recommendations

From the group feedback, recommendations have been made to WHO, including:

- gearing social marketing of pharmacovigilance towards behavioural changes in healthcare professionals and the general public to increase the safe medicines use and reporting of ADRs
- using many different means, such as the media and other public initiatives
- measuring the impact (analysing prescription data, media coverage, for instance)
- beginning medicines safety education in schools
- providing safety information by means of audio-visual media.

The authors propose further steps towards investigating and piloting the application of the social marketing approach and methods for patient-tailored communication.

\* Bahri, Priya and Harrison-Woolrych, Mira. How to Improve Communication for the Safe Use of Medicines? Discussions on Social Marketing and Patient-Tailored Approaches at the Annual Meetings of the WHO Programme for International Drug Monitoring. *Drug Safety*, 2012.

# PhD for Sylvia Kardaun

Ronald Meyboom

Since the first descriptions by Stevens, Johnson and Lyell, the group of serious cutaneous adverse drug reactions, now commonly called 'SCARs', has been of major concern. Difficult to detect, study and quantify, these mysterious – very serious as well as very rare – SCARs are a danger to patients and feared by doctors, companies and regulators alike. SCARs, together with agranulocytosis and aplastic anaemia, are a dominant cause of extreme regulatory measures such as the withdrawal from use of drugs.

A member of the UMC's signal review panel and of the Scientific Committee of the national pharmacovigilance centre in the Netherlands, dermatologist Dr Sylvia Kardaun is a renowned expert in the field of SCARs. On 25 June 2012 at Groningen

University, based on ground-breaking research also using the EuroSCAR, RegiSCAR and dZh (Freiburg) databases, Dr Kardaun defended a PhD thesis entitled 'Severe cutaneous adverse drug reactions. Challenges in diagnosis and treatment.'

This thesis provides an enlightening insight into the clinical, histopathological, pathogenetic and epidemiological nature of these disorders and their distinctions; of all that is known today, and that which remains to be explained. It is hoped that Dr Kardaun will embark also on further studying UMC's Vigibase. In addition to clinicians, this rich source of information on an often confusing group of serious diseases will also be a treasure trove for anyone working in pharmacovigilance.

[http://www.rug.nl/corporate/nieuws/archief/archief2012/promoties\\_oraties/25\\_Kardaun?lang=en](http://www.rug.nl/corporate/nieuws/archief/archief2012/promoties_oraties/25_Kardaun?lang=en)



# New faces at the UMC

## Jenny Adamsson

Jenny grew up in Norrköping, Östergötland and studied pharmacy in Linköping. After graduation she worked in Uppsala pharmacies for three years before ending up at the UMC as a consultant. "I found the UMC to be an inspiring and welcoming workplace and I am very happy to now be employed directly."

"I work in the WHO Drug Dictionaries Information Management section as a coding specialist, verifying entries in the WHO Drug Dictionaries. I am involved in the quality assurance work, responsible for co-ordinating weekly quality controls of newly-entered data. I also co-ordinate and advise on documentation regarding internal section activities such as SOPs."



Jenny, Hanna, Jason

"I am a vegan who enjoys Ashtanga Vinyasa yoga, a dynamic form of yoga I recently started practicing. I also love watching movies."

## Hanna Secher Lindroos

Although she has also lived at various times in Karlskoga, Torquay, York and Tokyo for study and work, Hanna was born in Stockholm and spent most of her life there.

"I'm covering for Ennita Nilsson (while on maternity leave) as project manager for the EC-funded Monitoring Medicines project. I have worked on the World Health Assembly event, and edited a lot of project reporting material." Hanna already worked as manager for a similar EU-funded project at Karolinska Institute in Stockholm, and before that did a PhD in cell and molecular biology, also at KI, and an MSc in biology.

"Anything crafty is my thing really. I'm a member of a 'pyssel-junta' (craft-group) that meet twice a month to chat and do crafty things (knit, embroider, beadwork, sewing)."

## Jason Johansson

Born in Uppsala, Jason has lived in the city most of his life. Before UMC he worked at a company called Visma Sirius in Stockholm. "One of the last projects I was involved in there was creating new software for the deregulated pharmacy market in Sweden." Jason is involved in the VigiLyze project as a senior developer (the project is mentioned in UR56).

"My hobbies would probably include my car, an Alfa Romeo which I tend to spend a bit



Johanna

thereafter undertook her Master thesis at the UMC.

"After graduation I worked in the pharma industry as a product specialist for five years and also gave birth to our daughter Ingrid. In April 2011 I joined the UMC as a consultant and worked with various country support-related tasks. Today I work as an Education and Training specialist, being one of the managers for the annual UMC pharmacovigilance course and involved in training and consulting. Since August I am a permanent staff member and glad to combine my interest in global pharmacy with teaching and to contribute to our work for safer patients."

too much time and money on. Other interests include playing golf and Formula 1 (fan of the red cars with the prancing horse logo)."

## Johanna Stenlund

"I grew up in the very heart of Sweden, Sundborn in Dalarna. The region is presented to all tourists as genuinely Swedish with all its handicraft, such as the Dala horse, national costumes and folk dance. As for crafts, I enjoy crocheting and wear my national costume from Sundborn with pride."

Johanna studied pharmacy at Uppsala University, where she also met her husband. Among the elective courses, a Global Pharmacy course being offered in Sri Lanka particularly caught her eye. In addition, she took extra classes in toxicology and

# Visitors

## Lao PDR focus for PhD project

For a couple of days in mid-August we had the pleasure of welcoming to the UMC the French PhD student Céline Caillat, who works in the Pharmacoepidemiology team of



*Helena Wilmar, Céline, Elki Sollenbring, Therese Lundin*

Dr Lapeyre-Mestre in Université Paul Sabatier, Toulouse. Céline has started a PhD with the general topic of Pharmacovigilance in Lao PDR with the support of the Health Ministry and School of Pharmacy in Vientiane, the capital of Lao PDR. The project is divided into two parts, where the first part aims to assess the knowledge of health professionals and of the population in Lao PDR about risks related to drugs. The second part seeks to estimate the frequency of hospitalizations related to ADRs in a hospital emergency ward in Vientiane, and to describe the characteristics of ADRs in hospitalizations in several wards of the three main hospitals of Vientiane during a six-month period.

During the visit Céline was presented with UMC's pharmacovigilance work and specifically our collaboration with countries in ASEAN (Association of South-East Asian Nations) and Lao PDR in particular.

## Eight weeks in Research



*Zarif Jabbar-Lopez*

Dr. Zarif Jabbar-Lopez spent two months this summer with the research team at the UMC. Zarif completed his medical education in Cambridge and London before undertaking a master's in public health in 2012 at the Harvard School of Public Health, including training in advanced pharmaco-epidemiology.

His interest in drug safety drew him to the UMC where he completed a short project alongside Niklas Norén, Tomas Bergvall and Kristina Star. The aim of the project was to evaluate the information component temporal pattern discovery method for exploratory analysis of adverse drug reactions in electronic health records. This pilot project evaluated ten commonly used dermatological drugs, and was accepted for an oral presentation at the 7<sup>th</sup> Asian Conference on Pharmacoepidemiology in Bengaluru, India. Zarif is currently resuming his clinical training back in the UK and will continue to collaborate with the research team on the next phase of the project, which involves a larger scale evaluation of the method.

## Bangalore professor

On 2 August, 2012, Professor Shoba Rani, Department of Pharmacy Practice, Al-Ameen College of Pharmacy, Bangalore, India paid a short visit to the UMC. She attended a



*Surendar Masuram, Ramjan Shaik and Shoba Rani*

pharmacovigilance training seminar in Mumbai, India in 2005 with contributions from the UMC. In connection with travels in Europe this year she was interested in visiting the UMC to learn more about the methodology for signal analysis used. She was received by Surendar Masuram and Sten Olsson.

## Training collaborators

In June we welcomed representatives from Kaohsiung Medical University in Taiwan. The university is collaborating with Uppsala University in an annual Global Pharmacy course that takes place partly in Uppsala and partly in Taiwan.



*Professor Chang, Johanna Stenlund, Dean Li, Sarah Watson and Anders Backlund*

Dean Li is the leader of the College of Pharmacy and Professor Chang is responsible for the research education focusing on herbal products. During their visit they were accompanied by Professor Anders Backlund from the Division of Pharmacognosy, Uppsala University.

The visitors were shown around the UMC and a presentation was given about the WHO Programme and the main tasks that are being done by UMC staff. As a token of appreciation, two LED lanterns called 'the Bright of Morakot' were given to UMC staff; they symbolize the vision of reconstruction in Taiwanese regions that were affected by the Morakot typhoon of 2009.

DATES	TITLE	PLACE	ORGANISER/CONTACT
26-28 October 2012	7 <sup>th</sup> Asian Conference on Pharmacoepidemiology	Bangalore, India	ISPE www.acpe-india.org/
30 October - 2 November 2012	12 <sup>th</sup> ISoP Annual Meeting	Cancún, Mexico	International Society of Pharmacovigilance www.isop2012.org
14-15 November 2012	Pharmacovigilance in Products Subject to Licensing Agreements	London, UK	Drug Safety Research Unit Tel: +44 (0)23 8040 8621 www.dsru.org/trainingcourses E-mail: jan.phillips@dsru.org
14-15 November 2012	Introduction to Signal Detection and Data Mining in Pharmacovigilance	Prague, Czech Republic	DIA Europe Tel: +41 61 225 51 51 www.diahome.org Fax +41 61 225 51 52 E-mail: diaeurope@diaeurope.org
23-25 November 2012	12 <sup>th</sup> Annual conference of SOPI	Ghaziabad, India	Society of Pharmacovigilance India
28-29 November 2012	Pharmacovigilance Planning and Risk Management	Fareham, UK	Drug Safety Research Unit Tel: +44 (0)23 8040 8621 www.dsru.org/trainingcourses E-mail: jan.phillips@dsru.org
10-12 December 2012	Pharmacovigilance - A Basic Training for those working on Drug Safety - Monitoring in the EU, USA and Japan	London, UK	Management Forum Ltd Tel: +44 (0)1483 730008 www.management-forum.co.uk E-mail: registrations@management-forum.co.uk
13-14 December 2012	6 <sup>ème</sup> congrès scientifique national de la Société Marocaine de Pharmacovigilance (SMPV)	Rabat, Morocco	Société Marocaine de Pharmacovigilance Tel: 05 37 77 71 67; Fax: 05 37 77 71 79; www.smpv.ma ; E-mail: atebaa@yahoo.fr
14-16 January 2013	Pharmacovigilance and Risk Management Strategies 2013	Washington DC, USA	DIA Tel: +1 215 442 6135 E-mail: Marilyn.Ginsberg@diahome.org
23-25 January 2013	Medical Aspects of Adverse Drug Reactions	Southampton, UK	Drug Safety Research Unit Tel: +44 (0)23 8040 8621 www.dsru.org/trainingcourses E-mail: jan.phillips@dsru.org
11-15 February 2013	International Meyler Course in Pharmacovigilance 2013	Groningen, the Netherlands	University of Groningen If interested or for information, send an e-mail to Prof A.C. van Grootheest (ac.vangrootheest@lareb.nl) with your CV and a motivation why you should be invited.
18-22 February 2013	EMA Excellence in Pharmacovigilance: Clinical Trials and Post-marketing	London, UK	DIA Europe Tel: +41 61 225 51 51 www.diahome.org Fax +41 61 225 51 52 E-mail: diaeurope@diaeurope.org
11-13 April 2013	ISPE Mid-Year Meeting	Munich, Germany	ISPE www.pharmacoepi.org/meetings/ E-mail: ISPE@paimgmt.com
20 May - 4 June 2013	Pharmacovigilance - the Study of Adverse Drug Reactions and Related Problems; followed by a two-day training seminar <i>Application of Pharmacovigilance to U.S. FDA Regulatory Decisions for Vaccines</i> .	Uppsala, Sweden	UMC E-mail: pvtraining@who-umc.org www.who-umc.org > Pharmacovigilance > Education & Training
9-10 June 2013	XII Jornadas de Farmacovigilancia	Tenerife Island, Spain	Spanish Medicines Agency & Regional PhV Centre of Canary Islands, www.aemps.gob.es





The Uppsala Monitoring Centre (UMC) is a not-for-profit foundation and an independent centre of scientific excellence in the area of pharmacovigilance and patient safety. We provide essential research, reference, data resources and know-how for national pharmacovigilance centres, regulatory agencies, health professionals, researchers and the pharmaceutical industry round the world.

Many of our services and products have been developed as a result of our responsibility - as a World Health Organization Collaborating Centre - for managing the WHO pharmacovigilance network of over 100 countries and the WHO global individual case safety report database, VigiBase™. A core function is the screening and analysis of data with the aim of detecting potential issues of public health importance in relation to the use and safety of medicines. Other services include technical and scientific support to WHO and its member countries, and provision of tools, such as VigiSearch™ and VigiFlow™, for data entry, management, retrieval and analysis.

Our main commercially available products are the family of international WHO Drug Dictionaries, used by most major pharmaceutical companies and CROs.

## Communications information

### Visiting address

Uppsala Monitoring Centre  
Bredgränd 7  
SE-753 20 Uppsala  
Sweden

### Mail Address

Box 1051  
SE-751 40 Uppsala  
Sweden

Telephone: +46 18 65 60 60

Fax: +46 18 65 60 88

### E-mail:

General enquiries: [info@who-umc.org](mailto:info@who-umc.org)

Personal e-mail messages may be sent to any member of the team by putting their name (e.g. [sten.olsson](mailto:sten.olsson@who-umc.org)) in place of info

Sales & marketing enquiries: [info@umc-products.com](mailto:info@umc-products.com)

A list of UMC staff may be found via -  
About UMC > UMC staff - on our website.

Internet: [www.who-umc.org](http://www.who-umc.org)

Uppsala Reports © the Uppsala Monitoring Centre 2012

Editors: Sten Olsson and Geoffrey Bowring

Uppsala Reports ISSN 1651-9779



## Want a personal copy?

If you do not receive a copy of *Uppsala Reports* directly, but would like your own personal copy, please send your name, position, organisation, full postal address and e-mail/phone to the UMC address above.

## Prefer to get the digital version?

If you would like to receive the pdf version of *Uppsala Reports* every quarter, please let us know your details and the e-mail to which we should send it.

Current and past issues of *Uppsala Reports* may also be downloaded from the Publications section of the UMC website.