



## ORAHS Newsletter Spring 2011

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#### **1. The new-look ORAHS website – by Sally Brailsford**

If you are reading this, then by definition you must have found the new website! Please bookmark it. I am very grateful to Roberto for putting this together. I am sure you will all agree that he has done a brilliant job in producing a very professional-looking site with a nice clean interface and a lot more information (including an archive of all the old Newsletters, and also the conference reports from the very early meetings, which had somehow disappeared from the previous version).

We are going to do a “refresh” of the Link Members page. This had got very out of date, and so we are in the process of contacting all the current link members – if we can! – to check their contact information and asking whether they wish to continue. We’ll then review where there are gaps and in due course, will be asking for volunteers for any countries that are not covered. I think the Link Members fulfil a very useful function, and in fact we could probably make more of this role than we have in the past. I’d welcome suggestions from members on this topic.

We have decided **not** to maintain the list of “ordinary members” on the website. For one thing, it would be a massive updating job for Roberto as we now have over 200 people on the mailing list and new members joining every month. Secondly, the advent of networking sites like LinkedIn (and the less formal ORAHS Facebook group) has meant that anyone who wishes can join one of these and update their own contact details and personal information. We can’t compete with LinkedIn for functionality or user-friendliness!

#### **2. News about ORAHS 2011, Cardiff - by Paul Harper**

The people of Wales are immensely looking forward to this year’s annual meeting. It is the 600th anniversary since the last time that a meeting of our EURO working group took place in Wales – yes indeed – honest! The ORAHS 1411 meeting was chaired by Owain Glyndŵr (c. 1354- 1416), who was a Welsh ruler and the last native Welshman to hold the title Prince of Wales. He is most famous for his long-running revolt against English rule of Wales. Indeed in the year of the conference itself in 1411, Owain was not only busy planning for the workshop but in his spare time leading a national revolt. He had been joined by a French expeditionary force who marched towards the English borders capturing several important castles as they went. Unfortunately, for the Welsh at least,

Henry IV arrived to lead a successful campaign to regain English control. For ORAHS 2011, the Welsh would therefore especially like to welcome our French comrades to the conference!

Looking back at the programme from 1411, there were parallel sessions on topics such as cost - effectiveness of herbal remedies and potions, treatment strategies for Leprosy, and modelling the outbreak of the Bubonic Plague. The social programme comprised of jugglers, dancing, exhibiting monkeys and bears, alcohol and more alcohol (so some aspects of ORAHS never change at least!). Glyndŵr, who was never captured and whose final years remain a mystery, was subsequently portrayed in Shakespeare's play Henry IV, Part 1 (as Owen Glendower) and remains a notable figure in Welsh history.



Owain Glyndŵr



Owain fights off the marauding English

We fast forward 600 years and bring you news on plans for this year's conference. The abstract submission deadline (for both oral and poster presentations) is April 15<sup>th</sup> with early registration by 15<sup>th</sup> May. We also invite those with accepted abstracts to submit an extended abstract (conference proceedings paper) which will be published in a book (with ISBN) and a copy given to all delegates at the conference. The deadline for proceedings papers is May 27<sup>th</sup>. Monkeys and bears will not be on the social programme; however we can offer tours of the millennium stadium and Cardiff castle, a visit to the Brecon Beacons National Park, the Monday evening reception in the Welsh National Assembly Building (Senedd), and the conference banquet in the National Museum of Wales. Accompanying people will join us for the social programme, plus have escorted tours of the city and trips to St Fagan's National History Museum of Wales (a wonderful open-air museum) and the Mumbles coastline.

Fortunately the conference organising team (Paul, Janet, Israel and Vince), whilst being incredibly busy, are not having to lead a national revolt this year, and so are fully focussed on preparing for ORAHS 2011. We look forward to welcoming our friends and colleagues to Cardiff. See you in July!

Paul Harper, Cardiff University

## ORAHS 2011 – OR Informing National Health Policy

Cardiff, Wales, 24-29 July

[www.orahs2011.com](http://www.orahs2011.com)



ORAHS 2011 Organising Team – Paul, Janet, Israel and Vince

### 3. *Singing in tune with CHOIR –by Erwin Hans*

In 2012, the ORAHS conference will be hosted by Erwin Hans, Ingrid Vliegen and colleagues from the CHOIR research center, at the University of Twente in the Netherlands. In this newsletter, we introduce CHOIR (Center for Healthcare Operations Improvement & Research) - the largest research center in “OR/OM in healthcare” in the Netherlands.



The University of Twente represents "High tech, human touch" in research and teaching. Clearly, OR/OM in Healthcare fits perfectly within this scope. Founded in 2007, CHOIR's mission is to support healthcare organizations with improving their productivity, quality of care, and quality of labor. With 10 staff members and 7 PhD candidates, CHOIR has a unique intensive collaboration with the healthcare sector in the Netherlands, including more than 15 hospitals, and with ICT developers and consultants.



Each of our PhD candidates works at one of the collaborating hospitals (shown in blue) for 3-4 days a week. This set-up is chosen to ensure researching problems that stem from practice, to involve clinicians, and to ensure implementation of the research outcomes. For the remaining time, the PhD candidate attends the university for supervision meetings and collaboration with the other PhD students. In addition to PhD students, annually some 30-35 BSc and MSc students do their graduation projects within the collaborating healthcare organizations. These are students from our Industrial Engineering,

Applied Mathematics, and Health Sciences programs.

CHOIR staff teach healthcare managers on the subject of operations management. Also, we are helping several hospitals to form a logistics department, which initiates, executes and supervises research and/or implementation projects.

A feature on our website ([www.utwente.nl/choir](http://www.utwente.nl/choir)) is the ORchestra Bibliography. This is a bibliography of the literature in the field of "Operations Research/Management Science in Health Care", categorized by medical and mathematical subjects, as well as publication type. We invite all ORAHS researchers to contribute to this bibliography. More info on ORchestra, as well as a mirror of the ORCHID EndNote library (previously maintained by Michael Carter), see: <http://www.utwente.nl/choir/en/orchestra/>

On May 27th, our PhD candidate Peter Vanberkel will defend his PhD thesis. We will soon announce the seminar that we organize on this day, with several international guest speakers.

Best regards,

Erwin Hans, [e.w.hans@utwente.nl](mailto:e.w.hans@utwente.nl)



Ingrid Vliegen, [i.h.m.vliegen@utwente.nl](mailto:i.h.m.vliegen@utwente.nl)



#### 4. PhD student perspective – by Marie Persson



As a master student in computer science at Blekinge Institute of Technology, I attended a licentiate seminar at Blekinge Institute of Technology in 2003. At the seminar I listened to Johanna Törnqvist-Krasemann defending her thesis, “Computer-based decision support for handling uncertainty in railway traffic and transportation”, and I thought that these types of methods should definitely be used and implemented in a healthcare setting. I had four years

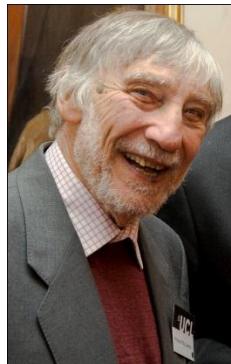
earlier left a career as an ICU nurse for studies in computer science and I was fully aware of all the problems related to the logistics in healthcare. After the seminar I contacted Dr Jan Persson, who later on became my supervisor, and we discussed the idea of operations research (OR) applied to healthcare and the possibility of PhD studies. In collaboration with the local hospital, Blekinge Institute of Technology set up a PhD position for the very first time in the area of OR in healthcare, and fortunately, I got the position.

In the beginning of my PhD studies, I attended my first ORAHS conference 2005 in Southampton and experienced a conference very friendly and stimulating. At that time, I didn't quite realize that many of the people I met at the conference were the very authors of papers that I was inspired by, and still am.

During my PhD studies, my research mainly focused on the problems related to operating room planning and waiting list management. I studied issues related to both elective surgeries and emergency surgeries, using a combination of simulation and optimization. In the end of my PhD studies I gradually altered my research focus towards problems related to waiting list management and how to increase the performance of the elective surgery process. In one of my latest projects, I studied the use of data mining techniques to find surgery indicators that could help estimate future patient demand. This project has turned out very promising and in a new, on-going project we investigate how surgery indicators can be used to predict patient surgery demand in an early stage and provide a good basis for developing a structured software-based patient referral system.

I look back on my PhD studies with great enthusiasm and looking forward to continuing my research in the research community, being able to attend many ORAHS meetings in future.

## **5. Professor Ray Jackson – by Martin Utley and Steve Gallivan**



**We are very sad to pass on the news that Professor Ray Jackson, an active member of ORAHS for many years, died shortly before Christmas.**

**Ray's career included successful periods working in industry, Government and academia, first at the University of Warwick and then at University College London as founding Director of the Clinical Operational Research Unit. Ray will be remembered as an outstanding and inspirational Operational Researcher dedicated to working in close collaboration with clinicians to tackle the problems important to them. He was also tremendous fun.**

## **6. Calls for Papers and conference announcements**

### **The 53<sup>rd</sup> Annual Conference of the UK Operational Research Society (OR53)**

**Nottingham, UK, September 6-8, 2011**

#### **Call for Papers for the Health Stream**

The healthcare stream will once again be hosting a wide variety of talks at the 53<sup>rd</sup> conference of the UK Operational Research Society. Talks will be welcomed on all topics related to any aspect of the application of OR modelling in the domain of healthcare. If you wish to present a paper in this stream, you may submit your abstract electronically at: [www.theorsociety.com/OR53](http://www.theorsociety.com/OR53). If you would like to submit an abstract but are not ready yet to do so, then please email either Sally Brailsford or Vince Knight (knightva@cf.ac.uk).



## HEALTH CARE MANAGEMENT SCIENCE

Editor-in-Chief Yasar A. Ozcan

### SPECIAL ISSUE ON GLOBAL HEALTH

Guest Editor: Geoff Royston (former Head of Strategic Analysis and Operational Research, Department of Health, England)

#### Invitation to submit papers



Improving global health is clearly one of the major human challenges for the 21<sup>st</sup> century.

Health care resources are limited, especially in low-income countries, and so there is a pressing need to make best use of what resources there are. This depends on informed action, which presents a global research challenge, not least for management science and operational research.



This special global health issue of the interdisciplinary journal Health Care Management Science, to be published in 2012, aims to help towards meeting this challenge by highlighting good case studies of management science and operational research work on key global health issues and advances in developing useful methodologies for such work.



Papers are invited from researchers, practitioners, programme managers and policy makers on health management science, systems thinking or operational research work on any of:

- global pandemics
- specific diseases or conditions e.g. spreading or emerging global health problems; diseases targeted in the UN millennium development goals (HIV/AIDS, tuberculosis and malaria); "neglected" diseases such as schistosomiasis
- supporting services and resources for global health e.g. pharmaceuticals, technology, workforce, finance
- problems within broad types of global health e.g. prevention, diagnosis, treatment or care
- wider systems impacts on global health e.g. climate change
- global health in disaster situations
- global health problems featuring typical analytic problem classes e.g. allocation, coordination or routing
- life cycle issues for global health programmes e.g. identification, design, resourcing, delivery, monitoring, or evaluation
- methodological developments e.g. lean analytics for global health
- developments in building capacity for operational research in global health through collaborative work between management scientists and global health professionals or between such workers in industrialised and low-income countries.



Priority will be given to papers on work demonstrating the highest actual or potential impact on policies or programmes addressing the greatest global disease burdens and health needs.

The deadline for submission of papers is **August 31 2011**. All manuscripts should be submitted electronically via the Editorial Manager for HCMS at [www.editorialmanager.com/hcms/](http://www.editorialmanager.com/hcms/). At the submission menu, please select article type "Special Issue Global Health." Enquiries can be directed to the Guest Editor, Dr Geoff Royston at [geoff.royston@gmail.com](mailto:geoff.royston@gmail.com)

# EURO Doctoral Dissertation Award

The EDDA (EURO Doctoral Dissertation Award) is a EURO instrument. It consists of a prize that is awarded at each EURO-K conference. The purpose of the prize is to distinguish an outstanding PhD thesis in Operational Research defended in the countries having an OR society that is member of EURO. It will be awarded for the sixth time at the closing session of the EURO-2012 conference (Vilnius, July 8 - 11, 2012).

## Eligibility of applications

The EDDA 2012 jury will only consider PhD theses in Operational Research defended between *15 January 2010* (i.e., the deadline for the preceding edition of the prize) and *15 January 2012* (the deadline for the present edition). The dissertation should have been defended in a University located in a member country of EURO. The author of the dissertation should be a member of a member society of EURO.

To be considered, *a dissertation should be nominated by the supervisor of the thesis* (one of them in case of multiple supervisors). The supervisor of the dissertation is asked to provide the jury with the following information:

1. the text of the dissertation,
2. an extended abstract (up to 5 pages) of the dissertation; this abstract should be written in English and should include *precise keywords*,
3. if the dissertation is not written in English, a paper in English authored (or co-authored) by the author of the dissertation and describing the core ideas of the thesis. This paper should preferably have been published in or submitted to an international journal.
4. nomination letters (or reports) from two referees selected by the dissertation supervisor, supporting the submission and stating their assessment of why the thesis should win the award.
5. an up-to-date CV of the candidate, including a list of publications.

*No nomination will be considered without these items.*

All information should be sent in electronic form to the chairman of the jury, Jacques Teghem ([jacques.teghem@umons.ac.be](mailto:jacques.teghem@umons.ac.be)), using a compressed format (e.g. zip) to save space and bandwidth. Since many PhD theses in OR are defended each year, the jury would like to remind supervisors that only outstanding pieces of work have a reasonable chance of winning the award.

## Selection process

The selection process consists in two phases.

Phase 1: Each application is studied by several members of the jury. The jury selects a shortlist of three finalists. The jury evaluates the applications taking the following points into account:

- Originality and novelty of the subject,
- Pertinence of the subject for OR;
- Depth and breadth of the results,
- Contributions of the dissertation to the theory and practice of OR,
- Applications and/or potential applicability of the results,
- Impact on related fields,
- Quality of the related publications.

Phase 2: These 3 finalists are invited to present their contribution in front of the jury and any other interested participant during a special EDDA session scheduled at the EURO 2012 conference. The jury selects the final laureate after the session.

## Award

The prize consists in an ad hoc certificate and reward of 1,000 €.

The three finalists will have to register for the EURO 2012 conference (they will only pay the early registration fees). EURO will contribute, if necessary, to their travel and journey expenses.

## Deadlines

The deadline for submitting applications is **15 January 2012**.

The nomination of the three finalists will be made public before **15 April 2012**.

## Contact

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## Journal of Enterprise Information Management

### Special Issue Call for Papers

### **Healthcare Operations Management through use of Simulation**

#### **Editors of the special issue**

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#### **About the Special Issue**

Decision support systems and modelling tools are Information Systems that support organisational decision making activities. Modelling tools have been widely used by governments to get advice on making the best possible use of public money. One such tool is simulation. There is a growing body of research on the application of simulation in the context of healthcare. With the recent financial crisis and its implications on governmental spending for public resources, this trend is likely to continue. On the one hand governments are faced with an increasingly upward pressure on the healthcare budgets for reasons as far fletching as ageing population, increase in life expectancy, rise in immigration, rising costs of providing medical care, among others; and on the other hand there is a necessity for decrease in governmental spending in citizen-centric services and for austerity measures due to widening budget deficits. Irrespective of this contradiction - "provide better service at a lesser cost" – which may last for years to come, it is imperative that the allocated healthcare budgets are utilised to provide for better patient experience at reasonable costs through optimum use of resources. Simulation is a decision support technique that can be used by researchers, policy makers, healthcare managers and practitioners, healthcare consultants and other stakeholders to realise this objective.

Simulation techniques such as Discrete-Event Simulation (DES), System Dynamics (SD), Monte Carlo Simulation (MCS) and Agent-Based Simulation (ABS) are used for planning of healthcare services, healthcare risk assessment, economic evaluation of healthcare interventions, public health policy evaluation, among others. This special issue is focussed on Simulation as applied to the management of healthcare operations.

## Coverage

Papers are invited from topics associated with the following (please note that the list is not exhaustive).

- Review of simulation literature pertaining to healthcare operation management
- Methodology papers pertaining to the use of simulation in healthcare
- Conceptual modelling in healthcare
- Application of simulation techniques (DES, SD, ABS, MCS, etc.) for healthcare operations management, for example,
  - Planning of healthcare services
  - Simulation of patient pathways
  - Simulation of emergency services (A&E, ambulance service)
  - Simulations that focus on hospital performance and restructuring of services
  - Contagious disease simulation
  - Geographical simulation for coping with changes in demographics
  - Use of simulation in healthcare policy making
  - Use of simulation for training healthcare stakeholders
- Use of advance technologies in healthcare simulation, e.g., RFID, Distributed Simulation, Cloud Computing, innovative visualisation.

## Manuscript Preparation

Submissions must constitute original work and should not have been previously published nor presently be under consideration for publication elsewhere. The submitted papers will first be reviewed by the guest editors to assess the suitability for inclusion in the special issue. Subsequent to this, the selected papers will be subjected to a double blind reviewing process. Submissions should be sent via e-mail to [n.mustafee@swansea.ac.uk](mailto:n.mustafee@swansea.ac.uk) AND [k.katsaliaki@ihu.edu.gr](mailto:k.katsaliaki@ihu.edu.gr). For information on preparing the manuscript please refer to the section on "manuscript requirements" available at [http://www.emeraldinsight.com/products/journals/author\\_guidelines.htm?id=jeim](http://www.emeraldinsight.com/products/journals/author_guidelines.htm?id=jeim)

## Timeline

Deadline for submission of papers: 31<sup>st</sup> October 2011

Authors to receive a first decision by: 28<sup>th</sup> February 2012

Final notification of acceptance by: 30<sup>th</sup> June 2012

Final paper submission by: 31<sup>st</sup> July 2012

Publication of the special issue: To be decided in conjunction with JEIM

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## About the journal:

- Journal of Enterprise Information Management (JEIM), previously published as Logistics Information Management
- Publisher: Emerald
- Current Volume: 24
- Listed in Academic Journal Quality Guide from the Association of Business Schools (ABS list) <http://www.the-abs.org.uk/?id=257>
- Indexed in Scopus and Emerald Management Reviews (see website <http://www.emeraldinsight.com/products/journals/journals.htm?id=jeim>