

1. Introduction

This UoA8 submission covers active areas of research within the University ranging from health Operational Research (OR) and informatics to the integration of Traditional Chinese Medicine within western health systems. This research fits into the wider mission of the University to address real world problems, as identified in the UK and international health agendas, in a sustainable and ethical manner. The strategic partnership with research groups located in Psychology and the Schools of Biosciences, Informatics and Integrated Health are managed through the University-wide **Health and Well-Being Institute** (H&WB). The Institute, launched with £260,000 funding for 2007/08, is a new strategic initiative to develop interdisciplinary research across Schools and provide a catalyst for research and knowledge transfer with external partners, both academic and professional. Scholarships for 10 H&WB interdisciplinary PhD students are also being funded.

2. Research Group Structure

In the 2001 RAE, the 'Food, Nutrition and Public Health' group were presented to 'Other Studies and Professions Allied to Medicine', and the 'Health & Social Care Modelling Group' to 'Statistics and Operational Research'. Since then, we have grown substantially to four main groups: Public Health Nutrition (PHN), Health Social Care Modelling (HSCMG), Patient Experiences (PEG) from 2006, and Complementary Therapies (CTG) from 2005. Each group is international in strength, output and partnerships, and connected through individual researcher links, and strategically through the University-wide H&WB Institute activities (e.g. regular University wide workshops, PhD scholarships). Group leaders ensure that scholarship is promoted through seminars, PhD support meetings, research courses, away days, regular conceptual debates, and research planning meetings.

A research subcommittee within the H&WB Institute which includes research directors, research readers and group leaders meet (e.g. to discuss strategy, grants, PhDs, progress and publications) and report to Management Teams in the Schools. Research group administration, research mentoring, internal grants and conference support are all funded within the Schools, and through the newly established Institute.

2.1 Health and Social Care Modelling Group (HSCMG; www2.wmin.ac.uk/hscmg)

Constituency of the group: Formed in 1997 by **Chaussalet** (OR modeller) and Millard (Clinician, Visiting Professor), the HSCMG was part of the first ever submission in Statistics and Operational Research by the University of Westminster in RAE2001. The group includes **Xie**, two other academic staff and seven PhD students.

Research focus: While most health OR research focused on secondary and tertiary care, the HSCMG became quickly recognised for its strength in modelling (patient flow, pathways, performance) in primary health and social

care systems, thus opening the way for new avenues of research. Additionally being data-driven, the HSCMG research crosses naturally the boundaries of health OR, informatics, and data mining.

Achievements and activities. Since 2001, the HSCMG research has led to over thirty publications in international journals in the field of health OR and informatics (see www2.wmin.ac.uk/hscmg), and attracted significant external funding from the Department of Trade and Industry and the Engineering and Physical Sciences Research Council (EPSRC).

In 2002, **Chaussalet** was awarded an EPSRC grant (GR/R86430/01 > £100,000) to “Develop a decision support tool for forecasting and planning resource use in long-term care for elderly people”, with Merton Housing and Social Services, and two care providers. The work received excellent reviews, and continues to stimulate related areas of research. These models have recently been recommended by the Care Services Efficiency and Delivery Programme (CSED; www.csed.csip.org.uk) established by the Department of Health with the specific target of improving the efficiency of adult care services by £684 million by 2007/08.

In 2004, the HSCMG was one of only a dozen UK Health OR groups invited to submit evidence of their research excellence to the International Review of OR (led by EPSRC). The review concluded that health OR was one of only two areas of OR where the UK was leading internationally.

Collaborative links. The HSCMG is frequently invited to join or lead national and international collaborative research initiatives and projects. **Chaussalet** has developed with Dr Jean-Michel Nguyen and Prof Pierre Lebeux (Rennes University, France) innovative methods for capacity planning and with Dr Nick Szirbik (Groningen University, Netherlands) a methodology to build health-related databases for research. In a project funded by the Wales Office of Research and Development for Health and Social Care (Grant SG00/339) in collaboration with Prof David Fone (Director, Health Sciences Research Centre, Cardiff University) **Xie** built decision analytic and simulation models, which were used to help inform public health policy decisions in Wales in relation to heart failure diagnosis.

Most HSCMG projects involve stakeholders including managers and clinicians. Two current projects are the development of models for capacity planning of neonatal networks with UCLH and the North Central London perinatal network, and for forecasting demand and cost of continuing care for older people with Richmond and Twickenham PCT.

Collaboration with the Clinical Operational Research Unit (CORU) at UCL has led to joint seminars and journal articles and the appointment of Vasilakis as principal research fellow at UCL.

Chaussalet and Millard were invited to join the MASHnet network (EPSRC funded) steering committee, which includes Prof Jeff Griffiths (Cardiff University) and Dame Gill Morgan (NHS Confederation). MASHnet brings

together researchers and practitioners in the field of health care simulation and modelling and to stimulate new research areas.

Future plans: To stimulate growth in current HSCMG research areas and to realise its vision of cross-fertilisation between health OR, informatics, and data mining, the group is developing into a cross-university interdisciplinary Centre for Health Operational and Informatics Research.

2.2 Patient Experiences Group (PEG)

Constituency of the group. The Patient Experiences Group brings together staff in the School of Integrated Health and other Schools at the University of Westminster. Established in late 2006 with the new appointment of **Ridge** (leader), the group also includes a new senior research fellow appointment (**Rugkasa**), two junior academic staff, and three PhD students, two of which are based in Australia.

Research focus. The objective of the group is to develop original perspectives on i) patient self-management approaches to health, ii) how being a patient is specifically meaningful and adds value to the understanding of illness and recovery, and iii) understand how best to promote patient health at the community level. Particular areas of expertise areas in PEG include mental health, masculinity, HIV, smoking and fuel poverty.

Achievements and activities. With 16 refereed journal publications since 2006 (westminsterresearch.wmin.ac.uk/view/subjects/UOW7.html), as well as making a clear academic impact, our depression research is commented on by Galdas, Vol 9, 2006, ebn.bmjournals.com and **Ridge** was invited to contribute to the new book 'The Story of Sexual Identity', Oxford University Press. The original perspectives of PEG are also being taken up by the public: The 'recovery from depression' research (**Ridge**) is read by over 1500 people every month on www.dipex.org (DIPEX Website Stats 2007), and used by many community-based organisations, e.g. the **Ridge & Ziebland** paper on depression is highlighted by many community recovery organisations including, www.workingtogetherforrecovery.co.uk/). **Ridge** is also a member of several academic advisory panels for patient-based research. Additionally, the group has obtained Department of Health (DoH) funding of £70,000 to examine the little understood experience of carers of black and minority ethnic (BME) patients with mental health problems (**Ridge** and **Rugkasa**). **Ridge** is co-investigator on a study looking at patient acceptability of the anti-HIV drug Fuzeon with Dr Jane Anderson, the director of the Centre for the Study of Sexual Health and HIV. He also supervises a PhD project investigating patient and practitioner theories of causality in Multiple Sclerosis.

Collaborative links. The strategy of the group is to work with the best patient experience researchers internationally to establish new perspectives that have the most utility for improving patient experience and professional approaches. **Ridge** collaborates extensively with Oxford University on patient experience research (Sue Ziebland, DIPEX), and **Rugkasa** has a base at Oxford University to facilitate cross-fertilisation. **Ridge** is listed as an external

collaborator with the MRC Social and Public Health Sciences Unit (www.sphsu.mrc.ac.uk/research_project.php?prjid=MH&bcrumbs=GH.ILL) for gender and health research (Kate Hunt). Other partners include Deakin University in Melbourne (Prof Marita McCabe); School of Education, University of the West Indies (Prof David Plummer); Royal Free & University College Medical School (Dr Ian Williams); and City University London (Prof Jonathan Elford). With these partners and others, the group is currently writing papers and developing new projects e.g. the investigation of male narratives of mental distress, self-management and support needs (with Oxford, Warwick and Leeds Metropolitan universities); and the role of patient experience in using the Internet for complementary therapies information on depression (with Warwick University)

Future plans. As a new group, the strategy for PEG is to focus on mentoring younger researchers in patient-centred research, continue to build collaborations and increase our income by 10% per year. Within five years PEG is expected to become an important and recognised International unit for original patient perspectives which collaborates widely with other key centres. Additionally, the Group will evaluate the impact of the Internet in revolutionising the patient experience, and address ways that sociology can better inform the field of complementary therapies.

2.3 Public Health Nutrition (PHN)

Constituency of the group. The PHN group brings together staff at the University of Westminster with interests in public health nutrition. The group includes **Draper**, **Hall** and **Robertson**, four other academic staff, two visiting professors and two PhD students, one of whom is based externally at the London School of Hygiene and Tropical Medicine.

Research focus. The principal focus of research is the epidemiology, design, delivery and evaluation of interventions to improve the nutritional status of communities internationally. The core areas of research are: nutrition and neglected parasitic diseases; the nutrition and health of school age children; nutritional surveillance and epidemiology; public understanding of food-related risk and its implications for risk communication; community participation and the potential of participatory approaches for nutrition interventions; evaluation of community nutrition programmes; and nutrition and cardiovascular health with particular reference to dietary assessment. These research themes are high on the public health agenda, and the PHN's strategy to meet this challenge is for joint projects enriched by partnerships with lead international agencies.

Achievements and activities. **Draper** and **Hall** were awarded \$97,000 by USAID to co-ordinate three international projects (Ghana, Nepal, Uganda) investigating the role of women health care providers in community contexts. **Draper** was commissioned with \$20,000 to undertake a systematic review by A2Z, a US-based health NGO, on the potential of community participation for the delivery of child survival packages in developing countries. **Hall** was awarded \$20,000 to undertake a meta-analysis of the impact of de-worming

on child growth and nutrition funded by the World Bank through the International Centre for Diarrhoeal Disease Research, Bangladesh. **Hall** designed a national survey of the health of schoolchildren in Ethiopia for Save the Children, USA funded through the UN Development Programme (UNDP). **Robertson** received funding from the Gates Foundation in collaboration with the Schistosomiasis Control Initiative at Imperial College London to tackle helminth infections in Africa. **Robertson's** work on post-marketing monitoring (PMM) for the FSA is now being used by Health Canada to inform their strategy on PMM. **Draper's** work on risk and public engagement fed into a WHO technical experts meeting convened to inform the development of WHO's risk communication policy.

Collaborative links. All members of the group already have extensive links with the leading agencies in international nutrition, such as WHO, UNICEF, FAO, USAID, SCF (USA and UK) and HKI, and are building on existing research partnerships with international colleagues. **Robertson** is also a member of the International Collaboration of Macronutrients and Blood Pressure (INTERMAP) and is a consultant to the Schistosomiasis Control Initiative (SCI) based at Imperial College. The PHN research group also hosts the British Sociological Association Food Study group that meets regularly and is a co-convenor of the Bloomsbury International Nutrition Seminars with the London School of Hygiene and Tropical Medicine and the Institute of Child Health, UCL.

Future plans. Over the next five years PHN will expand its profile and establish itself as a centre of expertise in key areas such as the implementation and evaluation of community-based interventions both in the UK and overseas, for which funding applications are with the DoH and Wellcome Trust. We are establishing a consultancy group to offer services in this area and Draper is already involved in the evaluation of the lottery-funded Well London community projects. North-South collaborations are planned for teaching and research.

2.4 Complementary Therapies (CTG)

Constituency of the group. The CTG was established in 2005, led by **Scheid** and **Pilkington**, and now incorporates two other academic staff members and one PhD student.

Research focus. The main objective of the group is to develop the Western world's foremost centre of multidisciplinary and scholarly research investigating East Asian Medicines. Use of East Asian medicine (EAM) (e.g. acupuncture, Chinese herbs) is diverse and needs to be investigated as 'living and evolving traditions' within varying cultural contexts, rather than just static traditional knowledges in order to ensure safe and effective practice. Secondly, the group investigates the evidence-base for complementary therapies using newly developed methods by **Pilkington** designed to better assess the effectiveness of complementary medicine.

Collaborative links. Partners and advisory board members for East Medicine research reflect the international excellence of the research taking place, and include Dame Marilyn Strathern (University of Cambridge), Dr Gerard Bodeker (Oxford University and Columbia University), Dr Margaret Lock (McGill University), Professor Paul Dieppe (Bristol University), and Dr Kenji Watanabe (Keio University, Tokyo). **Pilkington** is a founding member of the International Collaboration on Complementary Therapy Resources (ICCR) and a member of the Scientific Board for the proposed European Information Centre on Complementary and Alternative Medicine (EICCAM). Partners in her work include Dr Janet Richardson (now Prof of Health Service Research at the University of Plymouth), and the Research Council for Complementary Medicine (www.rccm.org.uk).

Achievements and activities. Recently the group ran the successful international conference at the University of Westminster: “Authenticity, Best Practice and the Evidence Mosaic: The Challenge of Integrating East Asian Medicine into Western Health Care.” (April 2007), including academics from Harvard University and Keio University Tokyo. The group won DoH funding for the research: *Translating Chinese Medical Treatment Strategies for Menopausal Syndrome into NHS Clinical Settings* (£270,000), a four year research programme aimed both at generating clinically effective treatment strategies, and providing a research model for guiding future research in the field of East Asian medicines. Funding was also provided for the project: *The Silent Body* (£203,000), a PhD project which examines the role of biomedicine in Chinese medical practice. In the area of complementary therapies and the evidence base, **Pilkington's** publications are frequently amongst the most downloaded articles in the international journals in which they appear.

Future Plans. The CTG has now established the East Medicine Centre (EMC), where research is directed by **Scheid**. Over the next five years, the EMC will assume a key international leadership role, with the strategy of researching EAMs and their effectiveness, and working with Western practitioners to ensure best practice. The EMC plans to be uniquely interdisciplinary, incorporating social science research, cultural studies, biomedicine, history, anthropology, Asian studies, and knowledge management as vitally important elements in the translation of EAM into Western health care.

3. Research context and policies

3.1 Development and support of research

Promoting and sustaining a vital research culture

The new Health and Well-Being Institute (H&WB) provides strategic mentoring through the new director, a PhD scholarship programme, a researcher to assist with funding applications, and administrative support. All Schools have in place policies and activities to promote and sustain an active research culture. These include regular research seminars and research meetings with other Schools e.g. the HSCMG holds health-related informatics

and computing research and three times a year hosts the meeting of the Operational Research Society Special Interest Group on Health and Social Services (chaired by **Chaussalet**). The groups also hold conferences, such as the recent “IMA Health 2007” (www.healthcareinformatics.org.uk/imahealth2007), which was a successful international health care modelling conference attended by academics and practitioners from the USA, Canada, Australia, India, and over ten different European countries. In April 2006, the CTG hosted with Elsevier an international four day conference on “Understanding Trauma & Adaptation”.

Developing collaborative links and inter-disciplinary research

The H&WB Institute also provides a bridge to enable and support collaborative links across departments and provide a focus for research activities. The first of five initiating workshops was held in May 2006. The Institute has already received a DoH grant to develop a mid-life health check instrument. Other members of the H&WB initiative, in UoAs 44, and 12, are involved in a large collaborative bid for £671,000 to the Wellcome Trust, with the University of East London, the MRC Social and Public Health Sciences Unit, and the Institute for Research in Child Development. The H&WB Institute is also making funds available for a number of “test-bed” projects.

3.2 Research Infrastructure

The Schools of Biosciences, Informatics and Integrated Health are all located in the same University building which has recently undergone extensive refurbishment. The research laboratories are now cutting edge and the facilities for all research students have been greatly improved in the new office complex. The School of Informatics maintains many dedicated secure databases and servers, where large datasets are stored (e.g. HES data) and several powerful computer clusters funded by SRIF, where complex analyses and modelling are run. The building also houses the Polyclinic for training student practitioners as well as a ‘living laboratory’ for research into the patient experience (e.g. Measure Yourself Medical Outcome Profile (MYMOP) research), the effectiveness and delivery of complementary therapies and the therapeutic relationship.

3.3 Policies for staff development and support

Staff support

The University’s staff development policy is complemented by School specific policies designed to support different categories of research staff and their needs. For established researchers there are mechanisms to provide teaching relief in order to provide more time for research. For those seeking to develop their research skills and become research active internal support, mentoring and training has been put in place and funds made available for external training and to support small research projects as a form of apprenticeship. Research objectives and staff requirements for skills development and other support are identified in the annual appraisals for staff.

Recruitment policies

The University is committed to the recruitment and retention of high quality research-active staff. Since 2001 particular emphasis has been placed on recruiting staff with an established track record in research to build research capacity. These include: **Draper** (appointed 2001) and **Hall** (appointed 2003) of the PHN group; **Ridge** of PEG (appointed 2006). **Robertson** is also a new staff member in Biosciences and a member of PHN (appointed 2006).

3.4 Research Governance

All research conducted within the University complies with the University Research Ethics Code of Practice and the Code of Good Research Practice as well those required by external funders. In addition the new Ethical Policy Framework draws together existing policies, guidance and codes of practice and behaviour to provide a clear framework for relationships with external partners and funders in our goal of developing research applicable to primary care. The Deans and School Research Directors are responsible for the implementation of these codes.

4. Research strategy

The University of Westminster's strategy identifies seven key areas of strategic importance to Society, and the first major area has been implemented through the Health & Well-Being Institute. The five year research strategy of the Institute is to create an environment within which world-class, ground breaking research is identified, facilitated, supported and disseminated through appropriate knowledge transfer mechanisms. Research will build upon existing strengths; feed into teaching programmes; address key global community health issues and encourage interdisciplinary activities. It will actively seek to determine the future trends of research that are of benefit to the community in which the University of Westminster is situated, the UK and the wider global community. This strategy will be facilitated by joint research appointments, PhD student supervisions and teaching programmes.

5. Research students and research studentships

Entered staff within this UoA currently supervise thirteen PhD students (8.55 FTE) and have supervised a further three students to completion. One is now a member of staff at Westminster; another has started a post-doctoral research fellow position at Southampton University (EPSRC funded project: RIGHT) and one is working at the Food Standards Agency. Supervision arrangements follow the University's Code of Practice for Research Degree programmes, which includes a new training programme. This includes a new PGCert of special Study for Supporting Learning for students involved in teaching and assessment. Students can also bid for School-based funds for training and conference support and have free access to any relevant MSc modules on research methods. They have the same access to facilities, space and seminar as research fellows. A new professional doctorate

programme is being developed initially for mid-career professionals within the NHS and independent health care organizations to study at doctoral level whilst providing innovation and leadership within their field of health care.

6. Evidence of esteem

Thierry CHAUSSALET

Invited Member of the EPSRC Peer Review College 2006-2009.

Invited Member of the Peer Review Panel of the Health Technology Assessment Programme of the National Institute for Health Research (NIHR) since 2007.

Invited Member of EPSRC Healthcare prioritising panels in September 2002 and 2003.

Elected Chair and Secretary of the Operational Research Society (ORS) Health and Social Services special interest group since 2003, and Elected Member of the ORS Council since September 2006.

Invited Member of the editorial board of *Health Care Management Science* since January 2006.

Alizon DRAPER

Elected to the UK Nutrition Society Council summer 2006.

Acted as an external appraiser to Food Standards Agency on their Food Acceptability and Choice Research programme No.9 Summer 2006.

Member of ObaapaVitA Trial Steering Committee as USAID representative from 2005, one of the world's largest randomised controlled trials.

Autumn 2006 elected to the signpost labelling evaluation project management panel convened by the UK government to commission research on front of pack nutritional labelling schemes.

Appointed as qualitative research expert giving peer-review advice to GAIN (Global Alliance for Improved Nutrition) Spring 2006.

Andrew HALL

Advisor on School Health and Nutrition to Save the Children, USA since 1999.

Advisor to the Office of Health and Nutrition of the United States Agency for International Development (2004, 2005).

Member of the editorial boards of *Tropical Medicine & International Health* and *The Journal of Health Population and Nutrition*.

Technical Advisor to a World Health Organization Expert Committee on intestinal parasites and schistosomiasis (October 2001).

Karen PILKINGTON

Member of the Scientific Board for the proposed European Information Centre on Complementary and Alternative Medicine (EICCAM).

Member of the Editorial Board for the *Journal of Acupuncture & Meridian Studies, Korea*

Invited address, "The long and winding road: tracking down the evidence on CAM in cancer." Presentation at NCRI Cancer Conference, Birmingham, October 2005.

Recently obtained PhD by publications, September 2007

Damien RIDGE

Member, Academic Advisory Panels: e.g. 2006: Mental health needs of black African people living with HIV/AIDS, *UK Coalition of People Living with HIV & AIDS*, 2003: Consumer Perspectives on New Anti-depressant medications – Service User Research Enterprise, *Institute of Psychiatry*, King's College, University of London.

Invited International conference presentations: Key patient issues in recovery from depression, Melbourne University, Australia, December 2007; & Recovery from Depression, The Work of Morning Conference, Wesleyan University, Middletown, CT, USA, April 2005.

Claire ROBERTSON

Member of expert group on post-market surveillance run by the International Life Sciences Institute (ILSI Europe).

Invited speaker on standardization and quality control procedures of dietary data at 15th International Congress of Dietetics, 8th-11th September 2008, Tokyo, Japan.

Invited speaker at Rank Prize Funds Mini Symposium on Regional and Social Conditions and Diet Related Diseases in the UK, 3rd - 6th December 2001.

Jorun RUGKÅSA

Editorial Board Member of *Health Education Research* (OUP) since 2005.

Academic Visitor, Division of Public Health and Primary Health Care, University of Oxford, 2007-2008.

Member of the Editorial Group of the National Black Carers' and Black Carers' Network since August 2007.

Invited speaker at: The 5th Warwick Healthy Housing Conference, 17th-19th March 2008; and The Eastern Investing for Health Annual Conference, Belfast. Presentation: Policy into Practice: The Healthy Living Centre Programme in Northern Ireland, 2006.

Volker SCHEID

President, International Association for the Study of East Asian Medicines (IASTAM), from May 2006.

Visiting Professor, Zhejiang University of Chinese Medicine, Hangzhou (China), from May 2006.

Editorial Board Member of *Australian Journal of Acupuncture & Chinese Medicine*, and *Asian Medicine - Tradition and Modernity*.

Invited Keynote Presentation on "Menopausal Syndrome: History, Culture, Practice", World Federation of Acupuncture Societies 6th World Conference on Acupuncture. Gold Coast (Australia), 30th October 2004.