



Newsletter, April 2016

No. 2

Welcome

Welcome to the 2016 edition of the Bournemouth University Clinical Research Unit (BUCRU) newsletter. Last year gave rise to some notable changes and achievements: BUCRU re-confirmed as a Bournemouth University research centre, Tamas Hickish appointed as Co-director in a clinical capacity, new member of the team Sharon Docherty joining us, 14 publications in peer reviewed journals, involvement in £1m of new successful bids to national competitive funders, and national awards for innovation. You can find out a bit more about some of these achievements within the following pages. We hope that we can build on these successes in 2016, for example by conducting further work in the areas of complex interventions and digital health.

In addition to my current role, I have recently been appointed as Head of Research for the Department of Nursing and Clinical Sciences in the Faculty of Health & Social Sciences. This will bring with it new opportunities for BUCRU to help grow and support nursing and clinical research within Bournemouth University. Please get in touch if you would like to find out more.

Professor Peter Thomas
Director (Methodology)



Back row: Tamas Hickish, Sharon Docherty, Peter Thomas, Audrey Dixon, Helen Allen
Front row: Louise Ward, Sarah Thomas, Lisa Gale-Andrews

News

Professor Roger Baker made Honorary Fellow of the British Association of Behavioural and Cognitive Psychotherapy



Congratulations to BUCRU's Professor Roger Baker who received an Honorary Fellowship from the British Association of Behavioural and Cognitive Psychotherapy at their Annual General Meeting at Warwick University in July 2015. The president read out a citation of Professor Baker's work as an outstanding contribution to psychological therapy services over the years. Professor Baker said, "I feel honoured

by this because the BABCP is a large and significant organization supporting Cognitive Behaviour Therapy."

Professor Tamas Hickish Winner of NHS Innovation Challenge Prize

BUCRU Co-Director Professor Tamas Hickish, and Dr Venky Dubey and Dr Neil Vaughan from the BU Faculty of Science and Technology are winners of an NHS Innovation Challenge Prize in the Acorn Open Innovation category. Their innovation is a new mobile device to detect neuropathy in patients undergoing cancer treatment. The team collected their £10,000 prize to develop their innovation further at an event at Anglia Ruskin University on 28 January. Congratulations to Professor Hickish and the rest of the team!



Recent successes: Congratulations to the following for recent successes with grant applications

Parkinson's Disease feasibility trial

The NIHR Research for Patient Benefit (RfPB) scheme is a good source of funding for small to medium sized projects such as feasibility work or simple trials. Dr Paul Taylor, a Consultant Biomedical Engineer at Salisbury District Hospital, together with a team drawing from BUCRU, University of Southampton, University of Bristol and the National Hospital of Neurology and Neurosurgery has recently been successful with this scheme. The funding of £244,000 is to conduct a two centre feasibility study looking at the use of Functional Electrical Stimulation (FES) to help improve mobility in people with Parkinson's Disease.

Slow movement and an associated risk of falling when walking is common for people with Parkinson's disease. FES is a small battery powered device that can be worn on the leg. By applying small electrical impulses, via a foot operated switch, to the appropriate nerve, it can produce movement in under active muscle that can assist with walking. This feasibility study, combining quantitative and qualitative methodologies and based on 68 people with Parkinson's Disease, will help in the planning of a larger full scale randomised trial to evaluate the effectiveness and cost effectiveness of the FES intervention.

The Research Design Service (Salisbury and Dorset/BUCRU offices) made a significant contribution to the development of the proposal, for example in the areas of study design, statistical methods, reviewing and feeding back on drafts, and patient and public involvement.

Dragons' Den a Roaring Success for BUCRU!

In July 2015 BUCRU hosted an event as part of the Bournemouth University (BU) Festival of Learning to demonstrate our commitment to service user involvement in the research process. Using the BBC's Dragons' Den format, four local colleagues (Mr Bob Sangar, Dr Venky Dubey and Dr Neil Vaughan and Dr Steve Perring) showcased their research ideas to a panel of five dragons including Professor Ann Hemingway (Faculty of Health and Social Sciences), Mark Mould (Chief Operating Officer, Poole Hospital NHS Foundation Trust), Peter Atkins (Carer and Service User Partnership, HSS), carer Eileen Hayward and service user Alan Lindsay. The event was expertly and humourously compered by Dave O'Loughlin from the BU Mental Health Nursing team.

An audience were entertained and informed about studying the best treatment for fractured ankles (Bob Sangar), a method for providing anaesthetists with the opportunity to practice administering obstetric epidurals (Venky Dubey and Neil Vaughan), and how the effect of cancer treatment on the central nervous system can be explored (Steve Perring). Audience participation resulted in Steve Perring's project walking off with the dragons' money, and Bob Sangar and Venky Dubey vowing to return for another bite of the cherry.



National Institute for Health Research

NIHR Career Development Fellowship

NIHR personal awards are aimed at supporting researchers who conduct work that helps the NHS. There are a variety of awards ranging from Doctoral awards (to support those who want to do a PhD) to Professorships. Some awards are aimed at health professionals to do in combination with clinical work whilst others have a broader remit. There should be something for everyone.

Dr Samuel Nyman, a Principal Academic in Psychology at Bournemouth University, has recently been successful with an application for a NIHR Career Development Fellowship. This award of £655,000 will enable him to undertake a programme of training in clinical trials and leadership, and to conduct a research project that aims to improve patient care.

The project, in collaboration with BUCRU/Bournemouth University, Peninsula Clinical Trials Unit, University of Southampton, Elemental Tai Chi, and Southern Health and Dorset HealthCare University NHS Foundation Trusts, is a phase 2 randomised trial of 150 people with dementia looking at the effectiveness of Tai Chi in improving balance. People with dementia are at increased risk of falling and sustaining an injury. Achieving improvements in balance could translate into a reduced risk of falling, and this would be tested in a future phase 3 trial.



Mark Mould, Eileen Hayward, Alan Lindsay, Peter Atkins, Ann Hemingway

The Emotional Processing Scale

The Emotional Processing Scale (EPS) is a questionnaire measure of a person's emotional processing style, their typical way of processing stress or emotional situations. The EPS has been developed over 12 years by an experienced team including BUCRU's Professor Roger Baker, Professor Peter Thomas, and Dr Sarah Thomas. It was published by Hogrefe, a leading European Psychometric Test publisher in July 2015 and is available for use by clinicians working in mental health, psychological therapy and health psychology, as well as researchers interested in the emotional life of healthy individuals and other populations.

EPS

Emotional Processing Scale



The EPS can be used to:

- >> Identify and quantify healthy and unhealthy styles of emotional processing;
- >> Assess the contribution of poor emotional processing to physical, psychosomatic and psychological disorders;
- >> Provide a non-diagnostic framework to assess patients for research or therapy;
- >> Measure changes in emotions during therapy/counselling; and
- >> Assist therapists in incorporating an emotional component into their formulations of psychological therapy.

For more information on the EPS please see www.hogrefe.co.uk/eps.html and for more information on the concept of Emotional Processing please see www.emotionalprocessing.org/

HeART of Stroke Completion

The HeART of Stroke is a feasibility study of a randomised controlled trial of an Arts for Health group intervention to support self-confidence and psychological wellbeing following a stroke. The research, funded by the National Institute for Health Research (NIHR) RfPB Programme, is led by Dr Caroline Ellis-Hill (Faculty of Health and Social Sciences, Bournemouth University) in collaboration with the Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust and colleagues at the University of East Anglia and Cambridge Community NHS Trust. BUCRU researchers Professor Peter Thomas and Dr Sarah Thomas have supported the project from its inception in 2013, and Mary Grant, Research Assistant on the project has been based within BUCRU throughout its duration.

During the two years of the study, 56 people were recruited to the trial and 25 participants attended the art group. The study is now coming to a close and the data are being analysed.

The feasibility study preliminary findings are encouraging and there is hope to run a full trial in the future. The artworks produced by participants were showcased in a wonderful exhibition on BU's Talbot Campus at the end of January. For more information see the website: <https://research.bournemouth.ac.uk/2015/08/heart-of-stroke-study/>.



Engaging with Impact and the Power of a Poster

Helen Allen and Lisa Gale-Andrews from BUCRU secured a poster presentation at the National Co-ordinating Centre for Public Engagement (NCCPE) Engage 2015 conference on 2-3 December 2015. The conference was held in the Marriott Royal Hotel, Bristol, and focussed on the relationship between public engagement and impact in research.

Lisa and Helen showcased a patient and public involvement (PPI) activity they facilitated to inform a grant application to a National Institute for Health Research (NIHR) funding programme. The poster has since been highlighted as a "good learning tool for others" by the NIHR Director for Patient and Public Involvement.

If you have any patient and public involvement needs please contact Helen Allen in BUCRU.

Multiple Sclerosis Research Programme - Brief Update

Dissemination: 2015 was a busy year with poster presentations by members of the team at MS Frontiers, ECTRIMS, and the Complex Interventions Conference and invited speaker presentations (Dr Sarah Thomas) at MS Frontiers and the University College London Partners (UCLP) Neuro-rehabilitation Conference.

Grant awards: Last year Sarah and a team of researchers led by Professor Rona Moss-Morris (King's College, London) were awarded an MS Society grant to undertake a systematic review with process- and meta-analyses to find out 'Which treatments are effective for fatigue in people with MS?'. Work is currently ongoing - findings will be reported towards the end of 2016.

International collaboration: 2015 was rounded off by an inspiring 'iMSpire' (International Multiple Sclerosis Partnership in Research) meeting held in Paris in November to continue to develop our international collaborations.

News from our colleagues in CoPMRE

Centre of
Postgraduate Medical Research & Education
Pioneering progress in the field of medicine

Battcock (Educational Director) now head the Centre following Professor Paul Thompson's retirement in February 2015. Day-to-day activities are managed by Audrey Dixon, CoPMRE Manager. The Centre has over 60 members of the Visiting Faculty from various specialties, who meet bi-annually to disseminate research, education and innovation and to explore possible collaboration with Bournemouth University.

CoPMRE also runs two education programmes for NHS doctors at BU. The multi-disciplinary Professional Skills in Medicine for Foundation Year 2 (FY2) doctors, now in its tenth year, trains around 90 junior doctors in Dorset in issues that reflect increasing competence and craftsmanship in professional practice. This innovative programme was awarded the Notable Practice Educational Quality Awards by the Wessex Deanery and was presented at the AMEE Conference in Lyon. The second programme is the Professional Development for Senior Doctors programme, which provides an action learning set for new GPs and consultants to continue their education of management, educational issues, business and professionalism. It provides networking between new Consultants and their colleagues at the Trusts and new GPs to the area and helps to build bridges between primary and secondary care. We believe this to be the only place in the country bringing together GPs and new consultants to develop skills for the future. This project is run collaboratively with the GP centre and we will be working with Professor Keith Brown (HSS) to evaluate its longer term impact. Dr Tim Battcock will be presenting this project at the Ottawa World Conference later in the year.

The Centre also holds an annual conference in the autumn, now in its thirteenth year!

If you would like to know more about CoPMRE or its events please contact me.

Audrey Dixon
CoPMRE Manager

SAVE THE DATE

**CoPMRE Thirteenth Symposium:
Digital Healthcare...Shaping the
Future**

Wednesday 12 October 2016



Professor Jane Reid, Professor David Haslam CBE, Audrey Dixon and Dr Tim Battcock

Orthopaedics, Orthopaedic Research Institute. Dr. Will Verling, Consultant Paediatrician at Dorset County Hospital NHS Foundation Trust commented, "The quality was universally outstanding...These events inspire you to drive forward the ideas that you have about improving things and provides energy for that".

We were delighted to receive such great reviews from our delegates. A full report and video have been published and you can view them at <https://research.bournemouth.ac.uk/2015/11/human-factors-reducing-risk-in-healthcare>.

We look forward to welcoming everyone to our next conference in October, exploring the theme of Digital Healthcare in the autumn of 2016. We are confident it will be another sell out so once advertised ensure you book early!

CoPMRE Twelfth Annual Symposium

CoPMRE held its Twelfth Annual Symposium – Human Factors: reducing risk in healthcare on the 7 October 2015. The conference was a sell out and delegates included primary and secondary care doctors, nurses and other healthcare professionals, Trusts board members and academics.

The conference showcased how application of Human Factors can positively impact patient safety. The two keynote addresses were delivered by Professor David Haslam CBE, Chair of the National Institute for Health and Care Excellence (NICE) and Professor Ian Curran, Assistant Director of Education & Standards, General Medical Council.

"The CoPMRE conference is a really important event in the calendar. We attracted world class international speakers for the event", Tom Wainwright, Associate Professor in

Retired CoPMRE Director, Professor Paul Thompson sails across the Atlantic



Many of you would be aware that Professor Paul Thompson who founded CoPMRE retired in February 2015.

He set sail in Pisces 615, a Contessa 32, in early May, sailing mostly single handed but was joined for various legs by friends and family. His life's ambition was to set sail across the Atlantic.

For the Atlantic crossing he was joined by his friend, Dr. David Everett, leaving Grand Canaria and after 23 days at sea they arrived in the Caribbean to a tumultuous welcome.

Well done Paul!

New paper published in American Journal of Medicine

A BU PhD student Ed Carlton supervised by members of CoPMRE Visiting Faculty, published a new paper in the American Journal of Medicine. Their research explores the value of 'chest pain typicality' and the effect of clinician experience when diagnosing acute coronary syndromes.

Carlton, E.W., Than, M., Cullen, L., Khattab, A., and Greaves, K. 'Chest Pain Typicality' in Suspected Acute Coronary Syndromes and the Impact of Clinical Experience. American Journal of Medicine.

National award for high-tech innovation in improving clinical outcomes – Congratulations to Professor Gary Smith, Visiting Professor, CoPMRE

Staff at Portsmouth NHS Trust including Professor Gary Smith, Visiting Professor at CoPMRE (far left) have scooped a prestigious award in recognition of their success in cutting avoidable mortality and enhancing patient safety. They were rewarded for their development of a system which a study showed had contributed to saving over 760 lives at two hospitals in a single year.



Judges at the Health Service Journal awards (HSJ) ceremony held on 18 November 2015 hailed what they described as an "excellent, proven and user-friendly solution". Portsmouth won the award for Improving Care with Technology. It seems that they beat the stiff opposition because they had not only developed and implemented the technology, but are now providing the research evidence of clinical impact in several areas of practice.

The award relates to several research publications which highlight the benefit of the VitalPAC system, which was developed and implemented in Portsmouth, and is now deployed in over 50 other UK hospitals including in Bournemouth, Poole and Dorchester.

Related publications:

Schmidt, P. E., Meredith, P., Prytherch, D. R., Watson, D., Watson, V., Killen, R., Greengross, P., Mohammed, M. A., Smith, G. B. 2015. Impact of introducing an electronic physiological surveillance system on hospital mortality. *BMJ Qual Saf*, 24:10-20.

Mitchell, C., Meredith, P., Richardson, M., Greengross, P., Smith, G. B. 2015. Reducing the number and impact of outbreaks of nosocomial viral gastroenteritis: time series analysis of a multidimensional quality improvement initiative. *BMJ Qual Saf*, doi:10.1136/bmjqs-2015-004134.

Smith, G. B., Prytherch, D. R., Meredith, P., Schmidt, P. E., Featherstone, P. I. 2013. The ability of the National Early Warning Score (NEWS) to discriminate patients at risk of early cardiac arrest, unanticipated intensive care unit admission, and death. *Resuscitation*, 84:465-470.

Events

BUCRU incorporates the Dorset office of the National Institute for Health Research (NIHR) Research Design Service South West (RDS SW). This means we can provide access to the following:

RDS SW Grant Applications Workshop

The grant applications workshop is directed at researchers who are considering applying to peer-reviewed funding competitions for applied health or social care research, and is intended to allow them to turn good applications into excellent ones. It is relevant to researchers applying to any of the major health research funders, but particularly the NIHR funding schemes. For more information please see <http://www.rds-sw.nihr.ac.uk/gaw.htm>.

RDS National Grant Writing Retreat

The Grant Writing Retreat provides an opportunity for research teams to develop high quality health related research proposals suitable for submission to national peer-reviewed funding schemes. The aim of the Retreat is to provide the environment and support to promote rapid progress in developing proposals over a relatively short time period. For more information see <http://www.rds.nihr.ac.uk/gwr/>.

RDS SW Project Review Committee

The RDS SW Project Review Committee provides an excellent opportunity for researchers to obtain a critical review of a proposed grant application before it is sent to a funding body. The Committee brings the benefit of seeing the proposal with “fresh eyes”, replicating as far as possible the way the real funding committee will consider the application. Committee members include senior research consultants who have considerable experience of obtaining research funding, resulting in comprehensive comments and advice.

For more information or if you are interested in attending these events, please get in touch.

Spotlight – Sharon Docherty...I like a good spreadsheet!

I have joined the BUCRU team as a Research Fellow in Quantitative Methods. My background is in Biology with a particular interest in Physiology and I've been involved in clinical research for the past 12 years. I also have lots of experience working with large datasets (too many years to think about) and love trying to figure out the best way of presenting results.

My main area of research interest is looking at the effects of clinical conditions (neck pain, Parkinson's disease, diabetes) on people's perception of vertical. How we perceive upright is dependent on our brain's ability to integrate visual, vestibular (inner ear) and proprioceptive (positioning of joints) information. When the information from one of these systems is faulty, the brain has to overcome this by relying on signals from the other sources. This could lead to problems such as an increased risk of falling.

I have taught across various programmes within the Faculty of Health & Social Sciences at BU including Anatomy and Physiology, and Research Methodology. I'm also one of the co-founders and organisers of Bournemouth Café Scientifique, a public engagement forum for discussing scientific ideas.

So what will I be doing? As a member of the BUCRU team I am here to help you with any health related research you may be doing/thinking about doing. In particular, I can help with the design of quantitative studies as well as what to do with the collected data. I am also here to support you with developing grant proposals. For further information or support please get in touch.



BUCRU 2015 Publications

- Abbey, G., Thompson, S. B. N. & **Hickish, T.** 2015. PTSD aetiology, development and maintenance: a description, evaluation, and synthesis of respected theory. *Psycho-Oncology*.
- Abbey, G., Thompson, S. B. N., **Hickish, T.** & Heathcote, D. 2015. A meta-analysis of prevalence rates and moderating factors for cancer-related post-traumatic stress disorder. *John Wiley and Sons Ltd*, 371-381.
- Andre, T., **Hickish, T.** et al. 2015. Adjuvant Fluorouracil, Leucovorin, and Oxaliplatin in Stage II to III Colon Cancer: Updated 10-Year Survival and Outcomes According to BRAF Mutation and Mismatch Repair Status of the MOSAIC Study. *Journal of Clinical Oncology*, 10;33(35):4176-87. doi: 10.1200/JCO.2015.63.4238.
- Andrews, L. M., Allen, H.,** Sheppard, Z. A., Baylis, G. & Wainwright T. W. 2015. More than just ticking a box...how patient and public involvement improved the research design and funding application for a project to evaluate a cycling intervention for hip osteoarthritis. *Research Involvement and Engagement*, 1:13. doi: 10.1186/s40900-015-0013-8.
- Bagust, J., **Docherty, S.** & Razzak, R. A. 2015. Letter to the Editor Re: "High variability of the subjective visual vertical test of vertical perception, in some people with neck pain - Should this be a standard measure of cervical proprioception?" *Manual Therapy*, 20:e18.
- Earl, H. M., **Hickish, T.** et al. 2015. Efficacy of neoadjuvant bevacizumab added to docetaxel followed by fluorouracil, epirubicin, and cyclophosphamide, for women with HER2-negative early breast cancer (ARTemis): an open-label, randomised, phase 3 trial. *The Lancet Oncology*, 16 (6); 656-666.
- Ellis-Hill, C., Gracey, F., **Thomas, S.,** Lamont-Robinson, C., **Thomas, P. W.,** Marques, E., Grant, M., Nunn, S., Cant, R. P. I., Galvin, K., Reynolds, F. & Jenkinson, D. 2015. 'HeART of Stroke (HoS)', a community-based Arts for Health group intervention to support self-confidence and psychological well-being following a stroke: protocol for a randomised controlled feasibility study. *BMJ Open*, 5:e008888.
- Gillis, C., McLaughlin, P., Osselton, D., **Hickish, T.** & Mactier, H. 2015. Genetic and epigenetic variations and gene methylation in infants exposed to methadone in-utero. *Arch Dis Child*, 100:A50. doi:10.1136/archdischild-2015-308599.
- Mellor, F. E., **Thomas, P. W.,** Thompson, P. & Breen, A. C. 2014. Proportional lumbar spine inter-vertebral motion patterns: a comparison of patients with chronic, non-specific low back pain and healthy controls. *European Spine Journal*, 23; 2059-2067.
- Pan, J. J., Chang, J., Yang, X., Liang, H., Zhang, J. J., Qureshi, T., Howell, R. & **Hickish, T.** 2015. Virtual reality training and assessment in laparoscopic rectum surgery. *International Journal of Medical Robotics and Computer Assisted Surgery*, 11 (2); 194-209.
- Primrose, J. N., **Hickish, T.** et al. 2015. Cetuximab is contraindicated in the perioperative treatment of colorectal liver metastases. *Journal of Clinical Oncology*, 33 (21); 2405-2406.
- Purandare, L. and **Hickish, T.** 2015. Acceptability and safety of telemedicine to assess patients before chemotherapy. *Cancer Nursing Practice*, 14 (6); 20-24.
- Sclafani, F., **Hickish, T.** et al. 2015. Short- and long-term quality of life and bowel function in patients with MRI-defined, high-risk, locally advanced rectal cancer treated with an intensified neoadjuvant strategy in the randomized phase 2 EXPERT-C trial. *International Journal of Radiation Oncology Biology Physics*, 93 (2); 303-312.
- Thomas, S.,** Kersten, P., **Thomas, P. W.,** et al. 2015. Exploring strategies used following a group-based fatigue management programme for people with multiple sclerosis (FACETS) via the Fatigue Management Strategies Questionnaire (FMSQ). *BMJ Open*, 5: e008274. doi:10.1136/bmjopen-2015-00827.

Grants won in 2015

- >> February 2015 – Successful internal seed corn funding to conduct patient and public involvement, purchase equipment and prepare posters to inform a grant application for a future Mii-vitaliSe study - £3,000 (Lead applicant)
- >> July 2015 – Funding to conduct a systematic review of psychological and physiotherapy interventions for fatigue management in MS – MS Society, £80,000 (Co-applicant in collaboration with King's College London)
- >> September 2015 - TACIT trial – NIHR Career Development Fellowship, £655,000 (co-applicant with Bournemouth University, Peninsula Clinical Trials Unit, University of Southampton, Elemental Tai Chi, and Southern Health and Dorset HealthCare University NHS Foundation Trusts).
- >> September 2015 - STEPS trial - NIHR Research for Patient Benefit Programme, £244,000 (co-applicant in collaboration with Salisbury District Hospital University of Southampton, University of Bristol and the National Hospital of Neurology and Neurosurgery).

How can we help you

BUCRU is a model for supporting and conducting health related research in Dorset. We support researchers to improve the quality, quantity and efficiency of research across the University and local National Health Service (NHS) Trusts. We do this through:

- >> Helping researchers from the University and from the NHS with developing high quality applications for external research funding (including small grants) – free of charge
- >> Ongoing involvement in funded research projects
- >> A “pay-as-you-go” research consultation service for other projects
- >> Developing our own research programme

BUCRU supports Bournemouth University staff and researchers working locally in the NHS. There are no restrictions on topic area or professional background of the researcher. BUCRU is partly funded by the National Institute for Health Research (NIHR) and incorporates the Dorset office of the NIHR Research Design Service (RDS).

Free consultancy service

Yes – we are offering up to two hours of free research consultancy time to NHS colleagues or businesses in Dorset. We are keen to continue supporting the development of research and researchers in Dorset. For larger projects a grant application is often needed to secure funding, and BUCRU (via the NIHR Research Design Service) can help with that. Sometimes a grant application isn't the right approach; for example for new researchers, small projects, projects that have a primarily local focus, collection of feasibility or pilot data. In these situations we offer a “pay-as-you-go” consultancy service aimed at the NHS and the commercial sector in areas such as study design, quantitative methodology, statistics, patient and public involvement and general research know how. For a trial period we are now offering two hours of free consultancy. This is often enough time to provide sufficient advice to get a project started in the right direction or to get advice on data analysis. Please get in touch if you would like to take up this offer.

Contact details

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If you would like us to come to your event, we would be happy to provide more information on what we can offer your team.