

NIHR Bristol Nutrition BRU Newsletter



I hope everybody had a good Christmas. I would like to welcome Clare England who has just joined us and to Amanda Chong, a third year student studying Animal and Veterinary Bioscience at the University of Sydney who is spending a couple of months with the BRU on a work placement with Elanor Hinton at CRIC.

I would like to congratulate Caroline on the award of her Wellcome Fellowship and Rhona on her Wellcome PhD award. And I would like to congratulate Chris on the birth of his son Joshua.

I always enjoy reading the newsletter as it reminds me of the

impressive range of interesting work that everyone in the unit is doing. We have been open for nearly three years now. Though it feels like only yesterday that I was standing on a windswept Cornish beach in August 2011 checking my voice messages and finding one from our Dean of Medicine congratulating me on the award. We have just started to think about our bid for the next round of units and we will be working on this over the coming months. We welcome any thoughts or ideas and will keep you updated as our plans take shape.



The BRU team get into the festive spirit with some cooking

Sedentary Time And Metabolic health in People with type 2 diabetes (STAMP-2)

By Catherine Falconer
Research Associate in Type 2
Diabetes



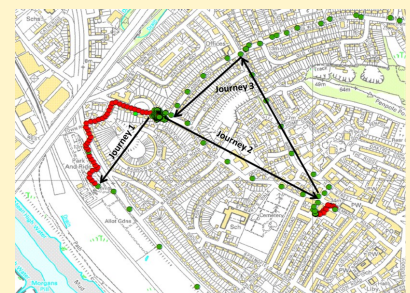
In the past year, over 100 adults with newly diagnosed type 2 diabetes have been recruited to take part in the STAMP-2 observational study. The aim of STAMP-2 is to understand more about the determinants of sedentary behaviour in this population. We are using a number of novel measurement techniques including Global Positioning System (GPS) monitors and inclinometers (a measure of posture) to tell us more about the physical activity and sedentary behaviour patterns of adults with type 2 diabetes. Furthermore we hope to use the results from the study to help develop targeted interventions to reduce prolonged sedentary time and improve metabolic health.

One potential intervention target is through the promotion of active modes of travel including walking and cycling. Promotion of active travel has potential for dual benefit; not only will it

increase physical activity but it may also displace time spent sedentary. In STAMP-2 we are able to use data from the GPS monitor (which tells us where the participants have been travelling) combined with data from the activity monitors (which tells us about the activity levels of the participant) to obtain a 'spatial narrative' of the participants physical activity and sedentary behaviour. These data can then be used to identify potential targets for intervention.

For example in the picture above we are able to identify three separate journeys.

Journey one is a 600m walk during which the participant achieves 7 minutes of moderate to vigorous physical activity (MVPA). Journeys 2 and 3 are also each 600m in length from



home to the shops and then back again. These journeys were taken in the car and therefore do not contribute to the recommended 30 minutes of daily MVPA. If we were able to convert journeys 2 and 3 from passive to active, the participant would be treble the amount of MVPA achieved to 21 minutes and would also reduce their sedentary time. This is just one example of how we may be able to use the plethora of data collected in STAMP-2 and we look forward to getting stuck into it.

"A Day In The Life of the Core Team..."

By Rachel, Eileen and Chris

The overall aim of the core theme is to provide expertise to support the work of the specific research themes.

Rachel: "As a systematic reviewer at the BRU, my main duties are to support other people to complete their own reviews. My day can be quite varied depending on what stage of the review we are at; I could spend a day coding titles and abstracts, extracting data or applying the Cochrane Risk of Bias tool to assess quality. Less frequently I will be running searches or writing up the results into tables. What I like about my role is the need to work with at least one other reviewer throughout the process; it is always good to meet up to discuss extracted data or compare risk of bias scores."

Eileen: "My current role involves providing qualitative research advice and support to the Unit's researchers and carrying out research across the different research themes. One of the best things about my job is that every day is different! I work on a number of studies, so one day I might be interviewing a surgeon

about their experiences of working on the Enhanced Recovery After Surgery Programme and another finding out a prostate cancer patient's views on diet and physical activity after their treatment. I am involved in analysing the data from these interviews – which are usually in the form of transcripts of audio recordings – with the help of dedicated software packages, writing up the findings in study reports or for publication in academic journals, and presenting my work at conferences."



Chris: "I try to commit some time each week to developing my own knowledge and skills. Occasionally this will involve attending courses outside the University, but often this is simply using new tools or analysis techniques in my day-to-day work. I have a small teaching workload, which is an enjoyable change from my regular work and prompts me to re-learn the topics in order to be prepared for students' questions. Managing a diverse and unpredictable workload can be challenging, but it's great to be involved in a range of really interesting studies."

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Academic Clinical Fellows (ACF's) join the BRU

By Gemma Davis, Simon Haworth and Ian Blewitt

We are three dental Academic Clinical Fellows (ACFs) and were kindly invited to spend two weeks with the Nutrition BRU in September 2014. These two weeks were part of a wider four-month period of visiting different research groups associated with the School of Oral and Dental Sciences.

Before we arrived we were each given a project title that would be our focus for the duration of our visit. These were literature reviews looking at 3 factors thought to affect the outcome of head and neck cancer. We were instantly made to feel welcome by all with a special mention to Shirley and Vanessa who showed us around the unit and introduced us to the team. We spent time with Prof Ness, Sam Leary and Rachel Perry who explained to us their roles and helped guide us with our projects. We were invited to and made to feel very welcome at the journal clubs and seminars hosted by the unit. On our last day we were asked to present our findings at one of these seminars where we were greatly supported by many members of the unit. We really enjoyed our time with the Nutrition BRU and thank you so much for having us!

BRU/BRC Training

By Charlotte Atkinson, Senior Research Fellow in Nutrition



Training and development has continued to evolve and remains a priority for all staff and students within the BRU. At the beginning of last year, all staff and students were asked to complete a questionnaire that included some questions specifically on training and development. Overall, the questionnaire responses were extremely positive and there was a sense that not a lot needed to be changed or improved. Nevertheless, we prepared a 'You said – we did' document in response to some of the points that were raised, and updated the Unit training policy accordingly. Both of these documents have recently been disseminated to staff and students within the BRU, and are available on our website. We are very pleased with the level of satisfaction among staff and students in regards to training and development, and hope that it will continue!

Media coverage in the BRU

By Vanessa Marshall, BRU Manager and Katie Berryman, Trials Coordinator

Over the past six months, work from Biomedical Research Unit researchers has on two occasions been in the media spotlight.

In August 2014, Vanessa Er spoke to the press about her PhD, which focuses on the effect of diet and physical activity in the prevention of prostate cancer. In particular it looks at the consumption of tomatoes, containing the key antioxidant lycopene, which can protect against DNA and cell damage. The team analysed the diet and lifestyle of nearly 20,000 British men aged between 50 and 69, and found that eating more than 10 portions of tomatoes each week made it 18% less likely that they would develop prostate cancer.

"Our findings suggest that tomatoes may be important in prostate cancer prevention," said Vanessa Er. "However,



further studies need to be conducted to confirm our findings, especially through human [clinical] trials. Men should still eat a wide variety of fruits and vegetables, maintain a healthy weight and stay active."

In June, Professor Ashley Cooper's paper published in the open access journal *International Journal of Behavioural Nutrition and Physical Activity* reached the headlines. The research suggests that by pushing the clocks forward by one hour all year round, we could increase the physical activity of children by 2 minutes in addition to the average of 33 minutes per day they currently spend doing moderate to vigorous physical activity. These 2 minutes would come from an average of 200 extra waking daylight hours which would be obtained if a change was made.



Professor Ashley Cooper said 'While the introduction of further daylight savings measures certainly wouldn't solve the problem of low physical activity, we believe they are a step in the right direction.'

In the wake of dealing closely with the press office, members of the BRU signed up to University of Bristol media training "Introduction to the media: Working with the University Press Office". First to attend were Vanessa Marshall and Shirley Jenkins, and more are to attend in 2015.



The Wellpoint Kiosk



Wellpoint Health Check Kiosk in the Education Centre

By Vanessa Marshall, BRU Manager

Bristol Nutrition BRU were approached by NOCRI (NIHR Office for Clinical Research Infrastructure) asking if we were interested in installing a Wellpoint Health Kiosk to evaluate.

Wellpoint are a company have developed a range of health kiosks which can be set up in the workplace or community to enable monitoring of wellbeing and health (there is actually one at one at the Department of Health).

The kiosk was situated on the 2nd floor of the Education Centre and was installed on 15th October. It was available for staff to use anonymously and voluntarily for 3 months and in that time over 304 people used it (some more than once).

A 5 minute test screened for essential health metrics which you could then you print, email or text the results to yourself.

The Nutrition BRU are interested in behavioural change and asked a few additional questions at the end of the test, about users intended health changes. We will use to evaluate the service provided by the kiosk during its installation.

Prostate Cancer Theme attend the World Cancer Conference

December 2014

By Lucy Hackshaw-McGeagh,
Research Associate in Prostate Cancer



In early December Professor Richard Martin, Dr Athene Lane, Dr Lucy Hackshaw-McGeagh and Vanessa Er attended the World Cancer Conference in Melbourne, Australia. The World Cancer Conference is the leading international conference for cancer control experts, practitioners, and advocates, sharing the latest information in cancer implementation science. Richard Martin was invited by the organisers to present 'New methods for reviewing mechanistic evidence' as part of the World Cancer Research Fund International Continuous Update Project; Vanessa Er presented a recently published paper which explored adherence to dietary and lifestyle recommendations and prostate cancer risk; Athene Lane took part in an exciting rapid-fire presentation session, where she described findings from

ProDiet, a study of lycopene and green tea interventions in those at high risk of prostate cancer; and Lucy Hackshaw-McGeagh gave two e-poster presentations about recent qualitative interviews and a systematic review, both examining diet and physical activity in prostate cancer patients.

Other incredibly interesting sessions attended included 'Policy action on diet, physical activity and alcohol', 'Connecting risk factors to the burden of cancer', 'Addressing inequalities in cancer care', 'The role of physical activity and exercise for cancer survivors' and 'Developments in prevention and early detection'. The Global Village within the conference centre was a fantastic hub of activity, with a huge variety of exhibitors, providing ample networking opportunities, of which the team made great use. There was even an appearance by some local Australian animals; a koala, a wombat and a snake.

As Vanessa had previously lived in Melbourne, we were very lucky to have her local knowledge. Our free time was spent exploring the different culinary delights of Melbourne's Italian Quarter, authentic Greek cuisine, China Town and the famous laneways and arcades filled with cafes and boutiques. We were also able to sample the roof top bars, delicious coffee and ice-cream.



Dr Caroline Taylor awarded a Wellcome Trust Career Re-entry Fellowship



Dr Caroline Taylor, currently a Research Assistant working with Dr Charlotte Atkinson under the Perioperative Theme at the BRU, has been awarded a Wellcome

Trust Career Re-entry Fellowship. The 4-year Fellowship will extend the project on in utero exposure to heavy metals and effects on child development that she completed as a returner to science during a Daphne Jackson Fellowship in the School of Social and Community Medicine. The Wellcome Trust Fellowship will involve further analysis of data from the Avon Longitudinal Study of Parents and Children, and from another cohort, including the effects of maternal lead, cadmium and mercury levels on pregnancy outcomes and child outcomes such as growth, hearing and IQ.

Christmas outing to the Square Food Foundation

By Caroline Taylor, Research Assistant in Nutrition

Wednesday 17th December, 10am, the Square Food Foundation Bristol

We gathered dressed in motley assortment of Christmas jumpers/hats/elf outfits at the Square Food Foundation in Knowle West just before Christmas for an Italian-themed lunch – sadly Andy's Santa onesie from last year's Christmas event was



unavailable – the catch being that we had to cook it ourselves! Chef Barny talked us through the menu that he had devised for us and set us off peeling pears and then kneading

and rolling pasta dough. The starter salad of seasonal leaves, artfully arranged mozzarella, freshly shelled walnuts and pomegranate was soon assembled and we moved on to bashing out rose veal (carnivores) or stuffing pasta shapes (vegetarians). We were soon tucking into our completed dishes at festive tables and



raising a toast to something – I can't quite remember what to but thanks to Andy for providing the Prosecco – and then the luscious poached pears were served forth with crunchy biscotti to finish off. Tre urrà* to Barny and his assistants for a most enjoyable and delicious day, and molte grazie† to Catherine Falconer for organising it all perfectly.

*Three cheers;
†many thanks.

Congratulations to Chris and his wife Sian on the birth of Joshua Thomas, born on Tuesday 14th October

