

NIHR Bristol Nutrition BRU Newsletter



Welcome to our sixth newsletter. My summer did not get off to a good start as I had a heart attack in June. So summer for me this year was a chance to recover. I would like to thank everyone for their support while I was ill. It also helped to see the BRU continue to thrive in my absence. I would like to congratulate Clare on the award of her PhD and Osama both on the award of his PhD and on the birth of his daughter. I am sorry to see Cat, Katie and Rhona leave us but at the same time I am pleased that they are moving to exciting new roles. I am delighted to welcome Luke Robles and Kate Hawton to the BRU.

We are now well into our fourth year and it great to see the results coming out of our projects. We are starting to map out ideas for the anticipated next round of bids for BRUs next year and would welcome ideas. We are also still starting new projects so if you have a defined project that could be completed in the final year of our current funding please get in touch.



Aberdeen Folic Acid Supplementation Trial (AFAST)

By Charlotte Atkinson
Senior Research Fellow in Nutrition



We are collaborating with colleagues at the University of Aberdeen to investigate potential long term effects of exposure to high dose folic acid during pregnancy. In the mid 1960s, almost 3,000 pregnant women participated in a randomised trial of high (5mg/day) or low (0.2mg/day) dose folic acid compared to placebo. Records of participants have been linked to central registries, and in 2004 it was reported that there was a slightly elevated risk of breast cancer and all cancer deaths in later life among women randomised to high dose folic



acid compared with placebo; however, findings were based on small numbers of cases. We recently extended this analysis by including data from an additional 10 years of follow-up, but there was no evidence to support the previous observation of an elevated risk of mortality from breast cancer or all cancers in later life among women who had taken 5 mg folic acid/day during pregnancy. Furthermore, there were no associations with risk of mortality from all-causes, all cancers or cardiovascular disease.



We are also interested in looking at whether or not exposure to folic acid in utero results in biological effects that can be measured in offspring many years later. In a second study, we are examining the feasibility of tracing and contacting the 'exposed offspring' (the individual exposed to folic acid in utero) and piloting the collection of a saliva sample and basic demographic and other data via a short questionnaire. Almost 200 saliva samples and completed questionnaires have been received. DNA has been extracted from the saliva samples and will be used for epigenetic analyses by colleagues in the MRC Integrative Epidemiology Unit (IEU). The findings of this pilot study will allow us to examine whether exposure to high dose folic acid during pregnancy induces epigenetic changes that persist in the exposed offspring many years later.

STAFF CHANGES

By Katie Berryman, Trials Coordinator

Change is afoot at the BRU with new members of staff arriving and others sadly leaving but for exciting new opportunities. Luke Robles joined the unit on 14 September as a Cancer Research Assistant working on the PrEVENt Study. In addition, Byron Tibbets, who has already been working for the BRU one day a week, will be joining the unit on 1 December as a Diabetes Research Assistant working on a feasibility study of cycling to increase active travel in adults with newly diagnosed type 2 diabetes. Kate Hawton will be coming to the unit for 6 months as part of the Elizabeth Blackwell Institute Clinical Primer Scheme, working with Julian Hamilton-Shield and Elanor Hinton on a functional MRI and eating behaviour study at the Clinical Research Imaging Centre (CRIC). Also an NIHR Research Methods



Catherine Falconer

Fellow has just been appointed to start in October. Elsie Horne will be spending one year doing an MSc at the University of Leicester before coming to the Nutrition BRU for a year to do some mini projects. Lastly Tom Marshall has spent two months with the unit helping out

Lucy Hackshaw-McGeagh with the PrEVENt study and is now returning to school to start his A-levels. The BRU would like to thank Kerry Gault and Jodie Hooper from the University of Bristol HR department for their help with new recruits.

On the other side, Catherine Falconer has left to take up a post in Public Health. She will be doing a masters in London to train for her role. Rhona Beynon and Katie Berryman are moving on to begin PhDs at the School of Social and Community Medicine. Rhona's is a Wellcome Trust-Funded PhD in Molecular, Genetic and Lifecourse Epidemiology, the aim of her project being to identify prognostic markers in head and neck cancer. Katie's PhD is funded by the Medical Research Council, and revolves around the epigenetics of eczema. We wish them all good luck in their new roles!



Luke joins the team at Rhona and Katie's leaving do

NIHR Infrastructure Doctoral Research Training Camp

By Georgina Williams, Clinical PhD Student

In July I attended this sixth NIHR camp which this year was on developing "your post-doctoral career: the art of communicating your science". It was an intensive, enjoyable course which



taught me lots about the benefits and pitfalls of different communication methods and the media. Working as a team with other trainees we had to promote our (provided) research findings. As the elected spokeswoman for the team I was grilled by the mock television crew and quizzed by the funders following my presentation to the conference. We also had the experience of tackling our own Twitter feed, producing a press release and coping with the local radio presenter who was set on twisting our findings. I would recommend the training camp to any of the NIHR trainees. It is a great opportunity to meet other researchers and members of the NIHR Faculty.



PhD's Awarded!

Dr Osama Mahmoud
Research Assistant in Statistics

I completed my PhD titled "Improving Statistical Learning within Functional Genomic Experiments by means of Feature Selection"



at the University of Essex. The thesis develops a novel variable selection technique, called Proportional Overlapping Scores (POS), for improving classification performance of some widely used classifier models such as Random Forests, k-Nearest Neighbor and Support Vector Machines.

Dr Clare England
Research Associate

I undertook my PhD, Development of a brief, evidence-based dietary assessment tool to promote healthy dietary change for people with Type 2 diabetes, at the University of Bristol, funded by an NIHR Clinical Doctoral Research Fellowship. The aim of my PhD was to develop the UK Diabetes and Diet Questionnaire (UKDDQ), a new brief dietary questionnaire for use by people with, or at high risk of, Type 2 diabetes.



“A Week In Your Life”

By Lucy Hackshaw-McGeagh, Research Associate



In 2014 I was awarded £15,000 by the Cancer Research UK/BUPA Foundation to run an innovative, high risk study exploring cancer prevention in hard to reach groups. ‘A Week In Your Life’ aimed to identify barriers and facilitators to cancer preventing / causing behaviours in young mothers, from their own perspectives. We recruited 29 women (21 years old or under) who were mothers in Belfast, Bristol or Middlesbrough. The women took photographs of things that matter to them, in ‘their world’, over a week. Focus groups followed; where the photographs were used to elicit discussion around their lives generally and barriers or facilitators to cancer preventing or causing behaviour specifically. With input from the young women, and their community support workers, we then designed preliminary interventions to help enhance or adapt these behaviours for young mothers in general. Although the young women understood traditional definitions of health, they did not see themselves as healthy and demonstrated little interest in their own health, particularly their diet. Cancer knowledge was lacking and relationships with health care professionals were worryingly poor. Of paramount importance to the young women was the health, wellbeing and happiness of their children, which was put ahead of everything else.



University Networking and PPI

University Networking (by Vanessa Marshall, BRU Manager)

Vanessa Marshall and Shirley Jenkins attended the Inaugural Professional Services Away Day for the new Faculty of Health Sciences at Wills Hall on 10th September. The purpose was to help us understand what each Professional Services team does and to consider how we might communicate more effectively with each other going forward.



Vanessa and Shirley attending the Professional Services Away Day
The Nutrition BRU was also represented at the first Industry Day in the Wills Memorial Building on 15th September. The aim was to highlight Bristol’s pharmaceutical and biotech expertise by showcasing its world-leading biomedical, healthcare and veterinary research expertise and facilities.



The Nutrition BRU and Nutrition Behaviour Unit stall at the Industry Day

PPI (by Eileen Sutton, PPI Lead)

The Bristol Nutrition BRU values the advice provided by the members of our Patient & Public Involvement (PPI) groups and we are keen to increase PPI in our



research. We currently have two established groups, a Prostate Cancer PPI Group and a Perioperative Health PPI Group who have helped us with developing the patient-facing materials for our studies, advising on recruitment, and providing us with ideas for new research. We have recently welcomed four new members to our existing groups - two for each of these groups.

Eileen Sutton has also been working with Clare England to set up a new Diabetes PPI Group to advise on our research in this theme. Four people have agreed to join the group and the first meeting will be held in early September. Two of our established group members have also agreed to join our BRU Strategy Group and will attend the annual strategy meeting at the end of September to ensure that we have PPI input on the way our research moves forward into the future.

We are excited about how our PPI work is progressing and we are looking forward to working with our group members in the future and thank them all for their invaluable support.

Laura Birch volunteers at Diabetes Camp

By Laura Birch, Research Dietician

Diabetes UK young people's support events – Osmington Bay, Weymouth, August 2015.



Currently 3.9 million people in the UK are living with diabetes. Diabetes UK is the UK's leading diabetes charity, providing information, advice and support to help people with diabetes manage their condition well.



Adjusting to a diagnosis of diabetes takes time and it is often helpful to meet other people who have been through a similar situation as they can offer understanding and support. For over 65 years Diabetes UK has been providing people living with diabetes unique opportunities to share and learn from each other in a relaxed and safe environment on their Care Events. Care

Events run throughout the year, all across the UK and are aimed at children, young people, adults and families living with diabetes. For many young people, it is their first experience of being away from home and is first step to managing their own diabetes.

As a Paediatric Dietitian I have been volunteering on Diabetes UK Young People's Care Events for the last seven years as a



Healthcare Professional. Doctors, Nurses and Dietitians, all with an interest in diabetes, make up the Healthcare Professional teams on these events and are supported by other volunteers, many of whom have diabetes and who attended the Care Events themselves as children.



A key aspect of my role as a Dietitian on these events is to help the young people develop skills in carbohydrate counting. All carbohydrates affect blood glucose levels and carb counting is a way of matching the amount of insulin needed for the amount of carbohydrate eaten to help to improve blood glucose control. This year's event was held at the PGL centre in beautiful Osmington Bay, Weymouth. The young people (and volunteers!) took part in a wide range of exciting and challenging activities from abseiling and mountain biking to kayaking and raft-building. The week provided the ideal setting for the young people to meet others in a similar situation, to learn how different activities and eating patterns affect their blood glucose levels and, importantly, how to deal with this. Developing a positive attitude and establishing self-confidence in diabetes management is a key objective of these Care Events and I think it is safe to say that everyone who attended the week in Weymouth learnt a lot whilst also having a lot of fun!



Breakfast Club!



By Vanessa Marshall, BRU Manager

Following the BRU Away Day in January, an idea was floated that there might be an appetite for a monthly BRU Breakfast Club for BRU

staff. Chris Penfold willingly took up the mantle of co-ordinator and the inaugural meeting was on 19th February which was very well received. The breakfasts have continued monthly (including a brief foray at lunchtime instead of breakfast in May, to allow those not able to normally make breakfast, to partake) and have been well attended. The venue, the Workhouse Cafe on the corner of Upper Maudlin Street and St Michael's hill come highly recommended by the team!

Congratulations to Osama and his family on the birth of their third child, daughter Salma!

