



# VOLUNTEER *TIMES*

SUMMER 2013

## MRC Epidemiology Unit transfers to the University of Cambridge

**With effect from Wednesday 1<sup>st</sup> May 2013 the MRC Epidemiology Unit transferred to the University of Cambridge, creating a new University Unit within the School of Clinical Medicine.**

The Unit transfer is part of a wider strategic alliance between the MRC and the University which has been agreed so that we can build on and enhance our excellent research science, strengthen integration with University research activities, and open up exciting new scientific opportunities and funding.

As part of this transfer the responsibility for the safeguarding of research data and personal information will move from the MRC to the University.

However, apart from this, the location of where this data is held, who has access to the data and the conditions under which the data is held will **not** change.

Following the transfer the Unit name will remain the MRC Epidemiology Unit, as will the address.

Professor Nick Wareham, director of the MRC Epidemiology Unit said:

*"We are delighted by the successful completion of the transfer negotiation and look forward to realising the opportunities that will arise from our closer integration in the University."*



## Moving through space and time!



The Unit was once again at the Cambridge Science Festival, where we spoke to over 300 visitors on our 'Moving through space and time' stand in the Biology Zone. To mark the MRC Centenary we had a focus on both the past and the future, to show how physical activity research has changed in the last 100 years and how researchers use the latest science and technology to find out about how much we move and how this affects our health.

Visitors could try various activities and see how this affected their heart rate. This also lets us demonstrate some of the technology and the science behind our research. The results made a fantastic graph with over 500 stickers showing visitor's heart rates when resting and exercising.

Visitors also posted comments predicting the future of physical activity for the next 100 years... We had some amazing responses, including a young boy who suggested micro-chipping all babies at birth so we could measure their activity!

Not only is it great to meet such enthusiastic children, but it is always encouraging to see the level of knowledge and interest in health research.

# THE FENLAND *Study*

## SO FAR...

**The Fenland Study is a population-based study in Cambridgeshire that aims to find out how lifestyle factors (such as diet and physical activity) and genes may work together to influence the risk of conditions such as obesity and diabetes.**

The Fenland Study began testing volunteers in 2005, by November 2009 we celebrated the 5000th volunteer and we measured the 10,000th volunteer just three years later in November 2012! We couldn't have done this without the overwhelming support of all the volunteers and the general practices.

## THE RESULTS...

Extensive measurements have been taken from the volunteers including a treadmill fitness test, body composition and clinical measurements, such as blood pressure, electrocardiograph and blood samples, as well as a host of questionnaires.

Data collected from the 10,000 volunteers show nearly 45% of volunteers were categorised as having a normal body mass index between 18.5 - 24.9kg/m<sup>2</sup>.

Collectively volunteers have contributed the equivalent of 103 consecutive days on the treadmill and have worn monitors for 162 years of free-living physical activity, which is over 6.4 billion heart rate data points!

The analysis of this huge amount of data is on-going and results from the Fenland study have already contributed to some large international collaborative efforts investigating genes and health, including finding new genes associated with obesity and type 2 diabetes.

The same methods used in our Fenland study are now being implemented in other international studies in Alaska, Cameroon and Kuwait.

## LOOKING AHEAD...

We would like to invite you to attend one of our local Fenland Public Meetings. This is your chance to hear about the study so far and our future plans, as well as having the opportunity to ask questions.

These events will be held during the evenings and are free to attend, although you will need to register for tickets in advance as places are limited.

### **Cambridge Meeting, Churchill College**

*Tuesday 3<sup>rd</sup> September 2013*

### **Peterborough Meeting, Kings Gate Conference Centre**

*Monday 9<sup>th</sup> September 2013*

### **Ely Meeting, The Maltings**

*Friday 20<sup>th</sup> September 2013*

If you would like tickets please contact us via email stating your preferred date:

**[fenland-meetings@mrc-epid.cam.ac.uk](mailto:fenland-meetings@mrc-epid.cam.ac.uk)**

Alternatively you can call the MRC Epidemiology Unit reception on: **01223 330315**

*Light refreshments will be provided and all venues have disabled access and parking available.*

## Fenland Measurement Reactivity Study

When we measure things we change them, or as the famous physicist Heisenberg said 'What we observe is not nature itself, but nature exposed to our method of questioning'.

This theory applies to some of the measurements we commonly do here as part of our studies, including measurement of physical activity levels. We are interested in how people might alter their behaviour in response to having their physical activity measured.

When some participants were invited to take part in the Fenland study, they were assigned to one of two study groups, each of which received slightly different information about the ActiHeart they were asked to wear before their visit.

We have finished measuring all the participants and we are currently collating the data ready for analysis. We would like to thank all the Fenland participants who took part in this study and helped us try and answer this important research question.





## COMMUTING AND HEALTH in Cambridge

The way we travel can affect our health and the health of people around us. This study aims to find out more about how people travel and how this is related to their overall physical activity, health and well-being. It also aims to understand why people use different modes of transport and how this is related to where they live, where they work, and what travel options are available to them. For the last four years, we have been tracking changes in travel and physical activity patterns among adults who live within 20 miles of Cambridge and travel to work in the city using annual questionnaires. Many of our participants have also completed more detailed household travel diaries, taken part in interviews, or used activity monitors to record what they do and where they go. Over 3,000 people have taken part in the study in total. We are now winding up our final round of data collection, so we would like to take this opportunity to thank everyone who has taken part in the study and contributed to its success.

We have already published 11 scientific papers from the study, and more are in the pipeline. For the latest information on our results please visit the study website at [www.cambridgecommutingstudy.org.uk](http://www.cambridgecommutingstudy.org.uk)

*This study is organised by the MRC Epidemiology Unit in Cambridge in collaboration with the University of East Anglia and University College London and funded by the National Institute for Health Research*

## Introducing the Sedentary Time Validation Study

We recently started inviting a number of Fenland Study volunteers to participate in the **Sedentary Time Validation Study**. People who are invited and decide to take part in this study are asked to wear a sensor on their thigh for the 6 days following a Fenland Study visit.

This study helps us measure sitting time more accurately, as part of our research to investigate whether time spent sitting during the day has an independent influence on health.

In addition to the Fenland Study feedback that volunteers routinely receive following their visit, separate feedback on daily sitting patterns is also provided to those participating in this study. We are excited about this new study and we hope those invited will take up the opportunity to support this unique research.



## Vitamin D Trial

The MRC Epidemiology Unit in collaboration with Queen Mary University of London has now completed a clinical trial of the effects of vitamin D supplementation in people at risk of diabetes.

There has been increasing interest in the possible health benefits of higher vitamin D levels in the blood. But it is not known if the effects are due to vitamin D or other factors that are related with vitamin D levels.


In this clinical trial, we wanted to find out whether giving vitamin D supplements to people potentially at risk of developing diabetes could alter their glucose levels and future risk of diabetes.

We recruited 340 volunteers at increased risk of diabetes, who received one of three options – either supplementation with vitamin D2, or with vitamin D3, or with a “placebo” (an inactive substance which looked the same as the active vitamin supplements).

The trial has now been completed and we hope to report the findings in the near future. We would like to take this opportunity to thank those Fenland participants who took part in the trial.



# Baby Milk Study



## PROGRAMME for Healthy Growth and Nutrition

**The Baby Milk Study is being done to help us to learn more about baby feeding and how it affects growth and development in the first year of life. We want to improve the quality of support and guidance that is routinely offered to new parents who feed their babies some formula milk.**

We are recruiting families in the Cambridgeshire and Huntingdonshire areas who have a baby who is less than 3 months old and is receiving some bottle-feeds (which can be in combination with breastfeeding).

Parents are either given support to follow a new feeding programme, or given standard advice about bottle-feeding and weaning. Support is offered through leaflets and monthly contacts (phone or face-to-face) with children's nurses or other experienced professionals. Babies' length, weight and head circumference and other measurements are performed at the start of the study, at 6 months and 12 months by our specialist research staff.



We have recruited more than 250 families onto the study so far, with recruitment continuing into 2014/15.

We couldn't have got this far without the help of all of the families on the study, our GP Surgeries, Health Visitors, the Rosie Maternity Hospital at Addenbrooke's, Cambridge Community Services, the Primary Care Research Network and Hinchingsbrooke Community Midwives.

If you are interested in hearing more, or know someone who might then please give us a call for more information on freephone **0800 7560878** or by email [babymilkstudy@mrc-epid.cam.ac.uk](mailto:babymilkstudy@mrc-epid.cam.ac.uk).

## Get Moving study

**In collaboration with behavioural science colleagues at the University of Cambridge Primary Care Unit, and Imperative (AXA-ICAS), Get Moving is a 12-week study comparing three different physical activity self-monitoring systems, with a view to encouraging participants to be more physically active.** It is open to anyone working on the Addenbrooke's site in Cambridge. Participants benefit from a health check at the start and end of the study and get a comprehensive report from these visits.



The study started recruiting in February 2012, and we are on the home straight having recruited 310 of the 480 participants we need, but we still need more, so if you work on site and are interested in taking part please get in touch (contact details below).

Over half our participants have attended their follow-up visit and have received feedback. This includes printouts of the information recorded by the physical activity monitor and a comprehensive report of fitness. It is vital to the success of the study that as many participants as possible come back for their follow-up visit, irrespective of what has happened during the 12 week intervention period. We are also recruiting participants to the interview part of the study.

Thank you to you all for giving up your time and supporting the study – we appreciate it very much.

If you work on the Addenbrooke's site (regardless of who your employer is) and are interested in taking part, please take a look at our website or get in touch with the study team.

Contact : [getmoving@medschl.cam.ac.uk](mailto:getmoving@medschl.cam.ac.uk); **01223 763491**;

<http://www.medschl.cam.ac.uk/gppcru/getmoving>