

**BIOMEDICAL RESEARCH UNIT ANNUAL REPORT
2012/13 Financial Year**

Note: The accompanying *NIHR Biomedical Research Units – Guidance on Completion of Annual Reports for 2012/13 Financial Year* contains essential guidance on the information you need to provide when completing this proforma.

Please complete the form using a font size no smaller than 10 point (Arial). The completed form should be no longer than 10 pages in total.

1. UNIT DETAILS

Name of the NIHR Biomedical Research Unit:

The NIHR Biomedical Research Unit at the University of Bristol and the University Hospitals Bristol NHS Foundation Trust in Nutrition, Diet and Lifestyle

Name, job title, address, email and telephone number of an individual to whom any queries on this Annual Report will be referred, and to whom feedback on the annual report will be sent:

Richard Hocking, Manager, Bristol Nutrition BRU. Education and Research Centre, Upper Maudlin Street, Bristol BS2 8AE. Richard.Hocking@bristol.ac.uk. 0117 342 1750.

2. DECLARATIONS AND SIGNATURES

Name and address of the NHS Organisation administering the NIHR Biomedical Research Unit award:

University Hospitals Bristol NHS Foundation Trust

Name of the Chief Executive of the NHS organisation:

Robert Woolley

I hereby confirm, as Chief Executive of the NHS organisation administering the NIHR Biomedical Research Unit award, that this Annual Report and the Financial Report have been completed in accordance with the guidance issued by the Department of Health and provides an accurate representation of the activities of the NIHR Biomedical Research Unit:

Signature
(Chief Executive)

Date:

3. OVERVIEW OF ACTIVITIES

Please provide an overview of activities for your NIHR BRU for the 2012/13 financial year, addressing the following areas:

- progress against short, medium and long term objectives as detailed in your approved full application;
- progress with leadership, governance and management arrangements for your NIHR BRU;
- a list of the BRUs top three achievements during the 2012/13 financial year;
- any changes to the approved strategy for the BRU to translate findings from basic research into excellent patient-focused research and benefits for patients;
- any significant developments in implementing the strategy; and
- examples of the creation and development of intellectual assets (*i.e.* patents, *etc.*) through the work of the NIHR BRU.

Progress against objectives:

The Bristol Nutrition BRU has been in existence for twelve months. We have made significant progress with our short term objectives. We have also made some progress with our medium term objectives.

Progress with leadership, governance and management arrangements:

The management and reporting structure of the Bristol Nutrition BRU and the Executive Group Terms of Reference have been finalised. The Executive Group comprises the Director, the three other Theme Leads, and the Unit Manager and meets every two weeks. The Executive Group receives advice from our Scientific Advisory Board. This is now in place, with the first meeting scheduled for October 2013.

Research Themes provide formal reports to the Unit's Executive Group. These are then collated into a quarterly update report that is tabled at meetings of the NHS Trust's Research Group and at equivalent research groups in the two University Faculties across which the Unit operates.

Top three achievements:

1. **Space and Staff** - We have redesigned and refurbished offices for the Unit in a prime central location, with facilities including a meeting room, IT infrastructure and reception space. The new offices house all of our staff in one location, thereby further facilitating cross-theme collaboration. Our planned staff positions are all now filled.
2. **Structures and Procedures** – We have set up all our operational structures and procedures. These include remits and terms of reference for our key governance groups (Executive Group and Scientific Advisory Board), policies for training and PPI, and a clear process for project approval and reporting.
3. **Projects** - As we approach the start of our second year, we already have 25 approved projects, across all our five research themes, with further drafts in the pipeline. The details of these are listed on our new website, <http://www.bristolnutritionbru.org.uk>, which forms a key part of our strategy for making others aware of our research.

4. PROGRESS MADE IN EACH RESEARCH AREA

Please provide, in bulleted points, the progress made within each research area, addressing the following areas:

- details of progress against specific objectives detailed in your approved full application, highlighting any significant achievements and/or challenges faced during 2012/13;
- progress with leadership of the research area, including any changes or challenges faced;
- details of the progress of research area strategy, including any changes *e.g.* discontinuation of originally planned work or new areas of research; and
- examples of effective translation, or significant progress along the translational research pathway, as a result of NIHR BRU funding. Examples of progress along the translational pathway to include:
 - progress being made in taking development along the innovation pathway; and
 - measures of success in translation (*i.e.* development of new techniques, new biomarkers, *etc.*).

Childhood Disorders Research Theme

Progress against specific objectives detailed in the original application highlighting any significant achievements and/or challenges faced during 2012/13:

- *Short-term objectives – use reviews to identify nutrition interventions in chronic disorders*
Systematic review to commence June 2013; 'Identifying the minimum improvement in key measures of adiposity in children to improve metabolic health'.

- *Medium-term objectives – explore feasibility of interventions in small scale exploratory studies*
Exploratory studies currently in the set-up phase (see below for project summary):

- Feeding and Autoimmunity in Down's syndrome Evaluation Study (FADES)
- Using functional Magnetic Resonance Imaging to assess the impact of Mandolean training on the neural control of obesity in young people

Details of the progress of research area strategy, including any changes (eg, discontinuation of originally planned work, or new areas of research):

The studies detailed above are currently in the set-up phase e.g. study documentation prepared, PPI where appropriate, ethics submissions etc

Some amendments to the planned scheme of work within this research area as detailed in the original application.

Discontinuation of originally planned work:

- Examine the prevalence of Vitamin D deficiency at presentation of type 1 diabetes
- Examine the benefit of aggressive Vitamin D supplementation in a cross over trial on 'C' peptide response to 'Sustacal' mixed meal at baseline, 3 and 6 months.

New areas of research:

- MEND qualitative evaluation. Currently underway – telephone interviews with attendees (completers and non-completers) of MEND paediatric weight management programme. Planned completion - June 2013.
- FADES - Feeding and Autoimmunity in Down's Syndrome Evaluation Study. Aim to develop a family acceptable study protocol and establish the feasibility of creating a national cohort of infants with Down's Syndrome to study the association between early infant feeding, infections and the development of autoimmunity in Down's Syndrome.
- Project to examine daily energy intake in paediatric inpatients and comparison with energy requirements. Potential target patient groups: CF, oncology, cardiac surgery, renal. Collaboration with Paediatric Dietetic colleagues.
- Using functional Magnetic Resonance Imaging to assess the impact of Mandolean training on the neural control of obesity in young people. Collaboration with Clinical Research & Imaging Centre (CRIC).
- The Long term health outcomes of Children with Congenital Diaphragmatic Hernia: describing the nutritional and neurological status of surviving children born with a congenital diaphragmatic hernia in Bristol between 1998-2008

Examples of effective translation, or significant progress along the translational pathway, as a result of NIHR BRU funding:

At this stage projects are in the set-up phase and therefore there is limited progress with translation to date.

Core Theme

Although not a specific research theme, our Core Theme is successfully supporting the work of the Unit, as originally planned. It provides expertise in the areas of Qualitative Reviews, Systematic Reviews, Data Management, Statistical Analysis and administrative support.

Perioperative Nutrition Research Theme

Progress against specific objectives detailed in the original application

Objective 1: Systematically review the literature on pre-operative feeding and update existing reviews on early post-operative feeding and sham feeding.

- We are conducting a Cochrane review on gum chewing and postoperative recovery and updating the early post-operative feeding Cochrane review. We have reviewed the literature on preoperative feeding (a Cochrane review is being conducted by others). The principal reviewers for the gum chewing review have undergone Cochrane training, initial scoping of the literature has been carried out, protocols are being developed/revised, and search strategies are being developed/revised.
- It is anticipated that these reviews will be completed by December 2013.

Objectives 2 and 3: Assess current practice in Southwest centres on pre-operative feeding regimes in patients undergoing upper and lower GI surgery, and assess current practice in Southwest centres regarding post-operative feeding and develop interventions to encourage early post-operative feeding.

- We are working with the Surgical Research Team and methodologists in the BRU core to plan two qualitative interview studies. The first aims to explore the experiences of perioperative nutrition in people undergoing colorectal surgery. The second aims to gain an understanding of the experiences, practices and contexts of healthcare providers towards the enhanced recovery programme, with a focused enquiry on nutritional elements of the programme.
- Protocols and study materials for these studies are currently being developed, and the necessary forms to gain ethical approval are being completed.

Objective 4: Extend these studies to other relevant patient groups e.g., head and neck cancer patients undergoing treatment and patients undergoing cystectomy.

- The second qualitative study (described above) aims to understand the experiences of healthcare professionals in three different surgery contexts: colorectal, head and neck, thoracic. This will provide an understanding of the culture and networks of these three differing settings and any shared values, expectations and norms.

Progress with leadership of the research area

- The research area is being led by Dr Charlotte Atkinson, under the guidance of Professor Andy Ness.

Details of the progress of research area strategy

- As a new area of research, we plan to use data from an NIHR RfPB funded trial on the effect of chewing gum on paralytic ileus to look at, for example, predictors of when a person begins eating again after colorectal surgery. A total of 405 patients were recruited to the trial and data entry is currently underway.

Examples of effective translation, or significant progress along the translational pathway, as a result of NIHR BRU funding.

At this stage, projects within the perioperative theme are primarily being set up; therefore, there is limited progress along the translational pathway at this time.

Prostate Cancer Research Theme

Details of progress against specific objectives detailed in the original application highlighting any significant achievements and/or challenges faced during 2012/13

In relation to our pre-specified objectives we have:

- Commenced a systematic review of the effect of physical activity and dietary interventions on the progression of prostate cancer.
- Commenced Mendelian randomization experiments of the effect of adiposity, height, selected nutrients (e.g. calcium, selenium, lipids) and the insulin-like growth factor (IGF) system on prostate cancer and its progression based on 25,000 cases and 25,000 controls from the PRACTICAL consortium. Our experiments to date indicate that the association of IGF-I with prostate cancer is causal, but the magnitude of the association is somewhat attenuated compared to estimates from meta-analyses of observational studies.
- Published a paper examining dietary changes in men before and after treatment for prostate cancer, showing that around 1/3 of men spontaneously adopted a healthier diet following a diagnosis of prostate cancer. Dietary choices differed by radical or monitoring treatments, indicating that men undergoing active surveillance may be more likely to pursue dietary changes as an adjunct therapy (KNL Avery et al. *Cancer*

Causes and Control 2013. DOI 10.1007/s10552-013-0189-x).

- Convened a steering committee for the prostate cancer theme.
- Designed a study to obtain biological samples to investigate the impact of dietary changes, micronutrients and increased physical activity on disease biomarkers.
- Obtained NHE Ethics approval to conduct qualitative research to explore the acceptability of dietary and physical activity interventions in men undergoing radical prostatectomy for prostate cancer, their partners and health care professionals.
- Agreed a study design with the steering committee for a 3x3 factorial RCT to assess the feasibility of selected physical activity and dietary interventions in men post radical prostatectomy.

Progress with leadership of the research area, including any changes or challenges faced

The research area is led by Professor Richard Martin and Dr Athene Lane from the School of Social and Community Medicine, University of Bristol, supported by Dr Lucy Hackshaw (Research Associate). A steering group of clinicians (urology, oncology), laboratory and population scientists, and qualitative researchers has been formed and meets on a quarterly basis. We have convened a prostate cancer Patient and Public Involvement group, involving six prostate cancer survivors.

Details of the progress of research area strategy, including any changes (eg, discontinuation of originally planned work, or new areas of research)

- A systematic review of the effect of physical activity and dietary interventions on prostate cancer progression is ongoing
- We have commenced Mendelian randomization experiments of the effect of adiposity, height, selected nutrients (e.g. calcium, selenium, lipids) and the insulin-like growth factor (IGF) system on prostate cancer and its progression based on 25,000 cases and 25,000 controls from the PRACTICAL consortium (<http://www.cogseu.org/index.php/consortia/prostate-cancer-association-group-to-investigate-cancer-associated-alterations-in-the-genome-practical>). Our results to date indicate that the association of IGF-I with prostate cancer is causal, but the magnitude of the association is somewhat attenuated compared to estimates from meta-analyses of observational studies.
- We have published a paper examining dietary changes in men before and after treatment for prostate cancer (KNL Avery et al. *Cancer Causes and Control* 2013. DOI 10.1007/s10552-013-0189-x).
- We have designed a study to obtain biological samples to investigate the impact of dietary changes, micronutrients and increased physical activity on disease biomarkers. This study will provide proof of efficacy and inform the size of the effect of dietary changes and increased physical activity levels on surrogates of cancer cell proliferation.
- We have agreed a study design with the steering committee for a 3x3 factorial RCT to assess the feasibility of selected physical activity and dietary interventions in men post radical prostatectomy. This study will assess acceptability; compliance; tolerability; delivery of the intervention; recruitment, randomisation and retention rates; and quality of life.
- We have obtained NHE Ethics approval to conduct qualitative research to explore the acceptability of dietary and physical activity interventions in men undergoing radical prostatectomy for prostate cancer, their partners and health care professionals.

Examples of effective translation, or significant progress along the translational pathway, as a result of NIHR BRU funding

The Bristol Biomedical Research Unit has only been in operation since October 2012, at this stage projects are still in the process of being set up, and therefore there is limited progress along the translational pathway at this time

Type 2 Diabetes Research Theme

Details of progress against specific objectives detailed in the original application highlighting any significant achievements and/or challenges faced during 2012/13

- A study is planned to characterise the sedentary behaviour of 500 adults with newly diagnosed type 2 diabetes using novel measures of sedentary behaviour and time spent outdoors. IRAS ethical approval has been applied for and the study will commence in July 2013.
- An online survey is being conducted with adults with type 2 diabetes to understand more about the travel patterns of people with diabetes and barriers and levers to change.
- Planning for a small, experimental study of the impact of differing sedentary behaviour and physical activity patterns on glucose handling in adults with newly diagnosed type 2 diabetes is underway.
- Results from these initial studies will be used to develop interventions to reduce sedentary time, which will

be trialled in adults with newly diagnosed type 2 diabetes.

Progress with leadership of the research area, including any changes or challenges faced

- The research is led by Professor Ashley Cooper. Professor Janice Thompson is no longer involved in the research due to taking up a new position at the University of Birmingham. Dr Angela Page will take a more extensive leadership role following the departure of Prof Thompson.

Details of the progress of research area strategy, including any changes (eg, discontinuation of originally planned work, or new areas of research)

- Changes to strategy: Since 2011, a number of systematic reviews have been published which investigate the association between sedentary time and health outcomes. Therefore no review is planned at this stage.
- Additional work: Active travel, for example walking or cycling, is associated with enhanced health and well-being in adults, however the feasibility of promoting active travel in people with diabetes is not yet known. Therefore, we are conducting a preliminary, online survey to understand more about the travel patterns of people with diabetes.

Examples of effective translation, or significant progress along the translational pathway, as a result of NIHR BRU funding

At this stage, research projects are in the planning and set up phases and therefore there is limited progress along the translational pathway.

5. GRANT AWARDS

Please provide details, at research area level, of major grant awards received as a consequence of NIHR BRU funding.

As a newly awarded unit, the first year has predominantly involved moving into new, dedicated office space for the unit, recruiting our staff, setting up management and governance structures, and formalising monitoring and reporting procedures. We are in the very early stages of setting up projects supported in part by external funding. These include:

A study in collaboration with North Somerset NHS Trust to produce a qualitative analysis of data from a Child Weight Management study. This is through our Childhood Disorders theme and supported in particular by qualitative analysis from staff in our Core theme. Funding amount £7900.

An industrial collaboration with Cambridge Temperature Concepts through our Childhood Disorders theme.

We have been awarded funding by the University of Bristol Institute for Advanced Studies (IAS) to support a series of workshops to develop engagement projects. The key elements of the proposed engagement project are:

- Stories of childhood and children's health
- Child led and interactive
- Multi-disciplinary
- Responsive to School priorities and linked to National curriculum

As part of an open competition within the University of Bristol, we were awarded funding for a PhD studentship. Vaneesha Short commenced her studies under this funding last October as part of the Perioperative Nutrition theme.

We are also actively writing and submitting grant applications to various funding sources, including:

NIHR HTA Programme.

Asthma UK – "Feasibility of diet and physical activity intervention in obese and overweight asthmatics".

6. NIHR BIORESOURCE (if applicable)

Please state the Unit's level of involvement with the NIHR BioResource during the reporting period. In addition, please highlight the local benefits and the impact of interaction for your Unit by being part of the NIHR BioResource.

N/A

7. PATIENT AND PUBLIC INVOLVEMENT AND ENGAGEMENT

Please summarise your progress to date in implementing the NIHR BRU's strategies for patient and public involvement and engagement.

The Bristol Nutrition BRU is committed to patient and public involvement (PPI) in its research and is developing an active PPI structure that enhances the work of the Unit. We have appointed a PPI lead within the Unit to oversee this, and to report back to the Executive Group. The PPI lead works with our Research Associates in each research theme to advise on PPI requirements and assist with establishing dedicated theme-based PPI groups. Once these groups are in place, we will form an additional PPI advisory group comprised of representatives from each of the theme-based PPI groups to advise the BRU Management and Scientific Advisory groups on BRU PPI policy. As of April 2013, we have a BRU PPI Policy document, a Remit and a template Role Description for our representatives. Our PPI representatives will have the opportunity to comment on these documents prior to them being finalised by the Executive Group.

As a unit, we are keen develop opportunities for public engagement. The University of Bristol has considerable expertise in children's health in paediatrics and in population research, in particular from the work done through its Avon Longitudinal Study of Parents and Children (also known as Children of the Nineties - <http://www.bristol.ac.uk/alspac>). The Unit is looking to partner with local schools to develop a programme which could be used in KS3 to introduce children to the story of their health through the ages. The BRU is ideally placed to lead on this development, both through our overall remit relating to nutrition, diet and lifestyle and also through our Childhood Disorders research theme. We are currently working with local schools to finalise a programme entitled "The Story of Children and Childhood Health". Based on the premise of Charles Dickens's *A Christmas Carol*, the project will explore in broad terms the stories of the health of children past, present and future. Through this we aim to engage children with the story of their health, and in so doing raise understanding about medical and social advances and ability to work with data. We have been awarded a grant by the IAS (see above) to support our workshops in this area.

Please provide specific examples of patient and public involvement in the activities, organisation and governance of the NIHR BRU (e.g. informing or developing strategy, management and governance, working with researchers in the research process itself), detailing the nature of their contribution and the impact this has made.

A prostate cancer Patient and Public Involvement group has been convened, involving six prostate cancer survivors who vary in age, stage of cancer, time since diagnosis and treatment type. The PPI group has, to date, met for an introductory session, where men were provided with information about the Bristol Nutritional Biomedical Research Unit, given a brief introduction to PPI, told a little about the prostate cancer research that is going to be taking place and had explained what was expected from PPI members and what the PPI members could expect from the Unit. The first official meeting of the prostate cancer PPI group is currently being arranged and will include training about key research terminology and methods and some initial discussion of the current prostate cancer research being undertaken in the unit. It is anticipated that the PPI group will assist in identifying and prioritising research ideas, commenting on study design, reading and providing feedback on study materials (e.g. PIS and consent forms) and commenting on research proposals.

Please also describe how you make patients and the public aware of the research being undertaken within your Unit, and signpost them towards appropriate information about participating in research as well as opportunities for public involvement and engagement.

Existing contacts/links in each of the four themes are exploited in recruiting PPI representatives. These may be with local patient groups, community contacts, charities or other voluntary sector organizations. Members may also be recruited via clinicians/patient contacts. The Trust also has a database of members who are interested in research that can be exploited for recruitment purposes. In addition, we have a dedicated section of our website that contains information on our PPI activities and describes the work of the Unit.

8. TRAINING

Please describe any highlights from the education/training provided for your NIHR BRU staff over the last year.

We have made training and development a priority for all staff and students. This is supported by a dedicated BRU training budget. Our Training Coordinator has been identified and a Training Policy is developed and agreed.

Please describe progress and any highlights with the Unit's strategies, objectives and plans for experimental medicine research capacity development for both research staff and research support staff. Please specifically include progress with:

- **the clinical and non-clinical professions to be developed;**
- **the attributes of the research training environment; and**
- **the efforts to be made to ensure that research student/support staff receive a high quality development experience.**

Our training programme is divided into five core areas. These are as follows:

1. Students and placements

- Studentships: The BRU currently has three non-clinical PhD Studentships in place, with a clinical studentship and further non-clinical studentship due to commence in September 2013.
- Internships: The BRU will set up a series of internships that will run for between six and twelve months each. These will be aimed at post-graduates looking to obtain experience in the areas of scientific research administration or clinical trial management including organisational skills, R&D and ethics plus specific training in, for example, pilot testing, site file management and report writing. Interns will receive a salary of approximately £12,000 - £15,000 per annum pro rata depending on experience.
- Dietetic research training: The BRU has a designated Dietician Liaison who will coordinate training opportunities between the Unit and the UH Bristol dietitians.

2. NHS and University Training

- Generic / core training: All BRU staff and students will be encouraged to attend generic and core training courses offered by the Trust and University of Bristol, including IT and general management. These are often as a result of discussions held in staff reviews and line management meetings.
- Good Clinical Practice (GCP) and other mandatory training: All BRU staff and students will have access to mandatory training such as GCP training courses.
- Short Courses: The BRU has an agreement with the convenors of the Short Course Programme at the School of Social and Community Medicine for a 50% cost reduction for all courses attended by BRU staff and students. The courses cover a range of health services research and epidemiological methods, as well as generic research skills. Staff and students will be encouraged to attend relevant courses.

3. NIHR Training

- NIHR training opportunities: All BRU staff and students who are part or fully funded by the NIHR will have the opportunity to take advantage of the various courses and training meetings offered by the NIHR. All BRU PhD students will have the chance to attend an NIHR Summer School at some stage during their degree.

4. BRU Internal Training and Staff Review

- Reading Group: The BRU runs a reading club to which all staff and students within the Unit may attend. Key basic methodological texts are covered over several weeks and provide a platform for learning and discussion away from day to day tasks.
- Present and Discuss: All BRU research staff and students attend and contribute to regular Present and Discuss meetings. These provide an informal platform to talk about current work or previous work, lessons learned from prior work, or to practice a conference / other presentation.
- Research Methods course: All BRU staff and students will have access to training on research methods. Dr Sam Leary (Senior Lecturer in Statistics) has developed a series of e-lectures and three associated tutorials (2 hours each); the objective of the course is to understand and critically appraise research papers, and areas such as study design and basic statistics will be covered.
- Training Days: Training workshops will be run with support from additional University and Trust groups, including the Research Design Service, Research and Innovation and the Press Relations team.
- Team Building and Away Days: The BRU will from time to time run Team Building Events and Away Days to further encourage cross-Unit interactions and to allow a more strategic discussion of topics related to the Unit.
- Travel and Conferences: BRU staff and students will be encouraged to attend relevant national and international scientific meetings.
- Staff Review: All staff will be encouraged to meet regularly with their line manager / key colleague, and to undergo formal staff review once a year.

- Co peer review: Senior staff will be encouraged to co peer review manuscripts with junior staff.

5. BRU Open Training

- Seminar Programme: The BRU is running a formal CPD accreditable [seminar programme](#). Seminars are held every two weeks and include both internal and external speakers.

- Workshops: The BRU will develop and run workshops covering areas such as nutrition research methods. BRU staff and students, as well as external researchers, will be able to attend these workshops.

- Sabbaticals (through IAS) and visiting fellows: An agreement has been reached between the BRU and the [Institute for Advanced Studies](#) (IAS) at the University regarding support for BRU Sabbaticals. These will be run through the IAS, with one of a proposed two annual sabbaticals being funded by the IAS subject to them being competitive.

We will also host short term visits from visiting fellows with overlapping interests to those of the BRU.

9. CONTRIBUTION TO THE GROWTH AGENDA

Please outline your Unit's progress in engaging with industry describing any significant successes/ outputs and/or any challenges faced during 2012/13. Please describe progress with pharma, biotech and devices separately as appropriate.

We have so far been concentrating on building the Unit, and have developed a briefing for industry that sets out our strengths and expertise as a Unit, summarises what we can offer an industrial partner, and suggests ways in which we can work together. The briefing is available at <http://www.uhbristol.nhs.uk/research-innovation/bristol-nutrition-bru/industry/>

Please also outline any strategic plans for increasing engagement with industry.

The focus of our unit is to identify nutrition and lifestyle interventions that may be beneficial in clinical populations. We are attempting to determine the optimum nutrition for defined groups and the best way to modify nutrition or lifestyle in these groups. The remit of the Nutrition BRU does not immediately suggest avenues to collaborate with industry on phase 1 or phase 2 clinical drug trials. We instead envisage our strengths to be:

- Clinical aspects of obesity management in childhood and adolescence
- Measurement of physical activity and sedentary behaviours in both young people and adults
- Systematic reviews, qualitative and health economic studies and statistical analysis
- Running feasibility studies and randomised controlled trials (RCTs) of nutritional and physical activity interventions in clinical populations
- Recruiting to clinical research studies, including observational studies and trials

As such, we are actively forming links with industry through contacts within both the University's Research Enterprise and Development team and through the Trust's Research and Innovation department, and also through our network of theme leads and affiliates. We are therefore targeting collaborations which include:

- Measurement of diet, nutrition and lifestyle compliance
- Identification of nutritional phenotypes and endpoints
- Analysis of nutritional data
- Implementation and conduct of studies
- Development of interventions

Please include the number of specific industry collaborations, broken down into the following categories:

- **Pharma:**
- **BioTech:**
- **MedTech/ Devices:**
- **Diagnostics:**
- **Other (please specify):**

Please also include the number of collaboration agreements and Non-Disclosure Agreements (NDAs) signed with industry, and provide brief details:

We do not at this time have any collaboration agreements or NDAs. We are at the initial discussion stages with two potential industrial collaborators in the MedTech / Devices category as described above.

10. LINKS WITH OTHER NIHR INFRASTRUCTURE

Please specify the type and the number of other NIHR infrastructure collaborations (e.g. with other BRUs and BRCs, Clinical Research Facilities (CRFs), Health Technology Centres (HTCs), Collaboration for Leadership in Applied Health Research Centres (CLAHRCs), Translational Research Partnerships (TRPs), NIHR BioResource facilities, Experimental Cancer Medicine Centres (EMCs) and the Clinical Research Networks (CRNs).

As a new BRU we have prioritised establishing a working collaboration with the other units and centres focussing on nutrition. We have regular meetings both at management level and at research level. We are hosting a collaboration workshop in August with the Leicester – Loughborough BRU and the Southampton BRC to discuss management processes, capacity building and standard setting

Please also outline any strategic plans for increasing engagement with these NIHR Infrastructure schemes.

The second stage of our strategic plans to increase engagement with NIHR infrastructure will be to establish areas of common research interests for collaboration with other non-Nutrition BRUs and BRCs. This may be from an administrative angle, for example in sharing common working practices and staff expertise with the other Bristol based BRU and BRC, or from a research perspective, for example in joint workshops with the Gastrointestinal BRUs and BRCs.

11. FORWARD LOOK

Please identify any significant developments not already highlighted above, e.g. major research findings, planned initiatives etc anticipated in 2013/14, particularly those that are likely to either generate media interest or impact on the BRU in a major way.

We have the following publication where the support of the Unit is acknowledged:

Avery KNL, Gilbert R, Davis M, Emmett P, Down L, Oliver S, Neal DE, Hamdy FC, Donovan JL, Lane JA. *Men with prostate cancer make positive dietary changes following treatment in a randomized trial*. Cancer Causes & Control 2013; DOI 10.1007/s10552-013-0189-x

We will be holding our first major conference in October 2013 to highlight research and administrative progress within the BRU, demonstrate some of the academic and commercial collaborations we have set up and to set out further ways in which we will interact with other groups.

12. OTHER COMMENTS

Please use this space to provide us with any other information you would like to highlight, or comments you would like to make.

This form, together with the BRU Financial & Activity Report and an Added Value pro forma (using the structured template provided) must be submitted, by email, no later than **1pm on Monday 20 May 2013** to Sonja Tesanovic (sonja.tesanovic@nihr-ccf.org.uk).

A signed copy of this report should be sent no later than **Monday 27 May 2013** to:

Dr Sonja Tesanovic
NIHR Central Commissioning Facility, Grange House, 15 Church Street, Twickenham TW1 3NL