

Research opportunities and lessons learned from the Nutrition BRU

Andy Ness

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



Bristol nutrition BRU vision:

“Translate causal associations in nutrition drawn from **population and clinical studies** into interventions for people with conditions related to (or compromised by) poor or sub-optimal nutrition”

Bristol Nutrition BRU

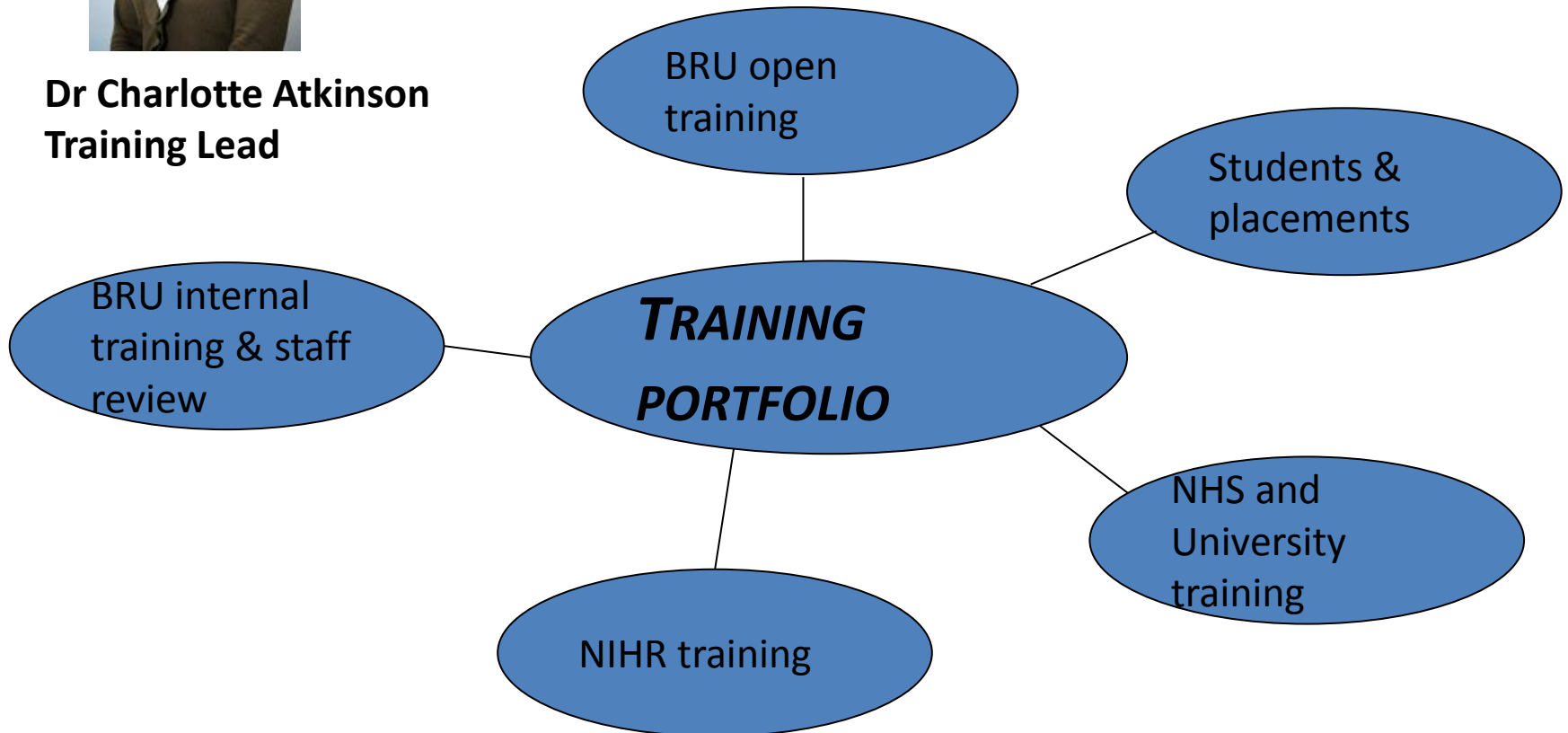
- Opened 1st April 2012
- 5 year award of £4.5 million
- Core theme
 - Methodology
 - Translation and transfer of ideas
- Four specific themes
 - Pre and post surgical feeding
 - Nutrition in men with prostate cancer
 - Optimising nutrition in children with chronic disease
 - Sedentary behaviour in people with diabetes



Training



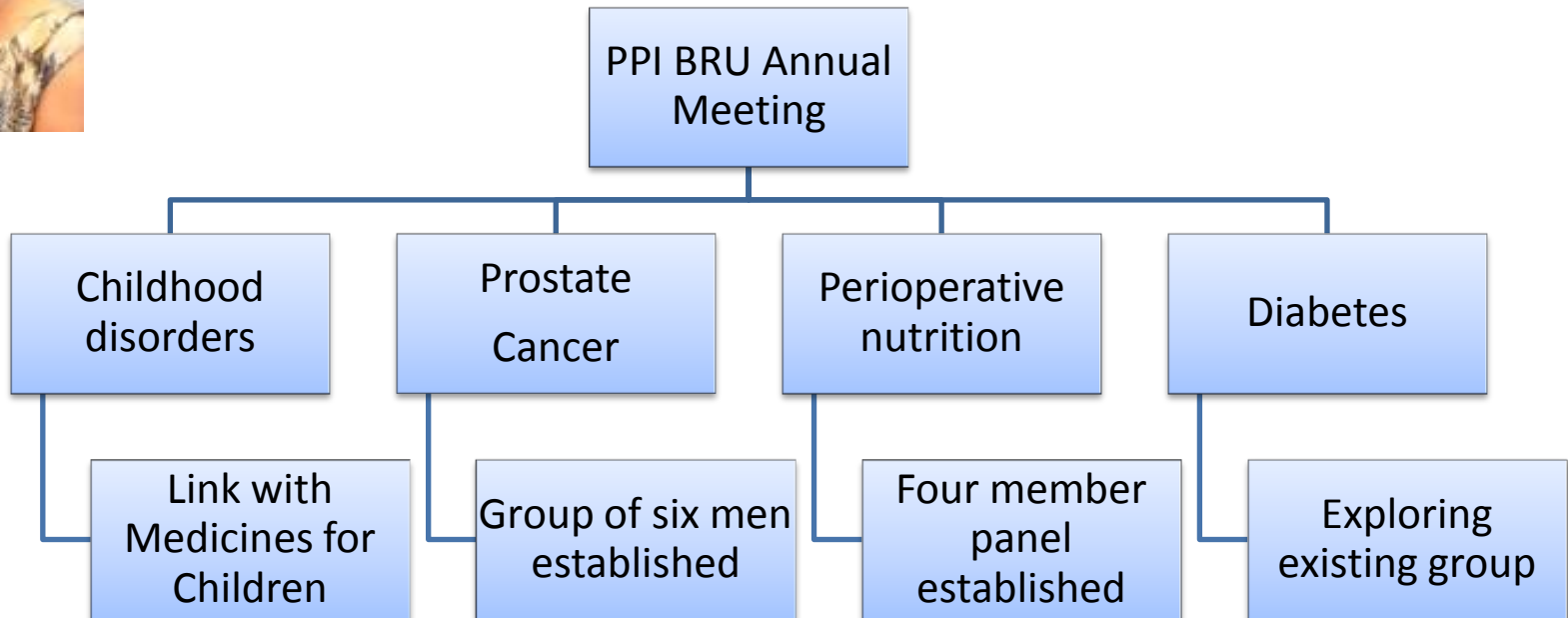
Dr Charlotte Atkinson
Training Lead



Patient and public involvement



Dr Eileen Sutton
PPI Lead



Public Engagement

*National Institute for
Health Research*



Ms Rachel Perry
Public engagement lead

- Engagement policy
- Supporting events
- School project on childhood asthma



Clinical trials day - May 2014

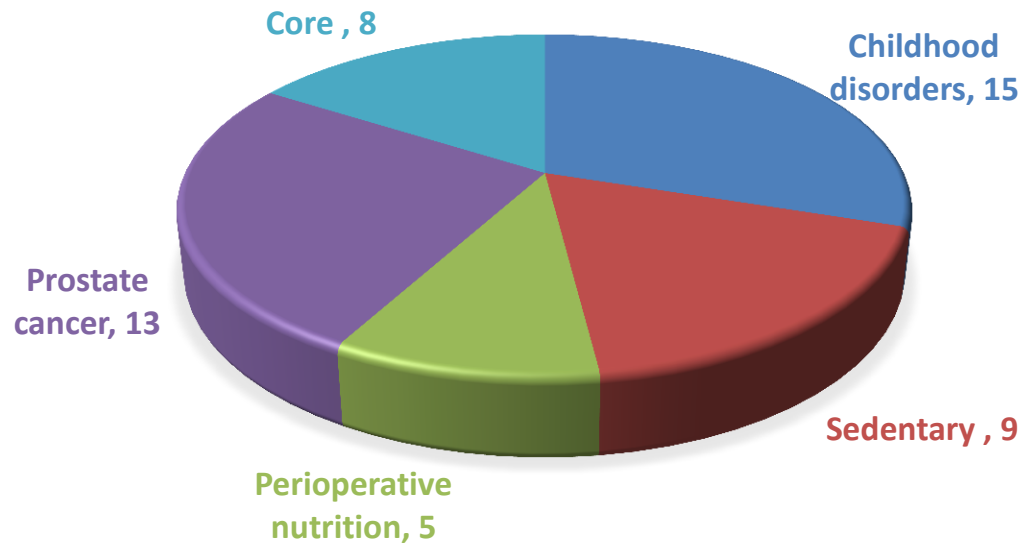


Green Man festival - August 2014

Bristol Nutrition BRU

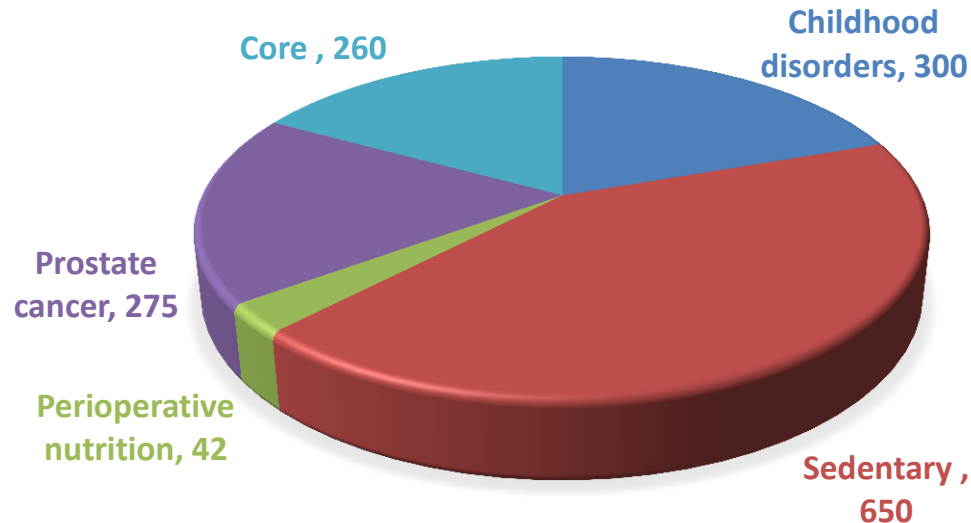
Projects by theme

50 Studies open (31 Studies completed)



Recruitment by theme

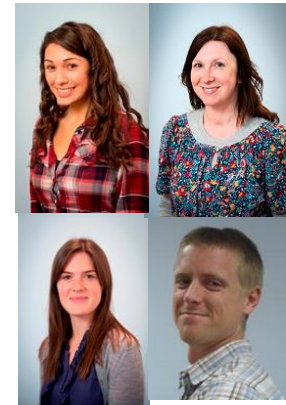
1527 Participants recruited



Systematic reviews

- Early enteral nutrition
 - No benefit in keeping people nil by mouth
 - Possible benefit on complications and length of hospital stay

- Chewing gum and postoperative recovery
 - 81 trials, 9072 study participants
 - Some evidence for a benefit of chewing gum on time to first bowel movement and flatus



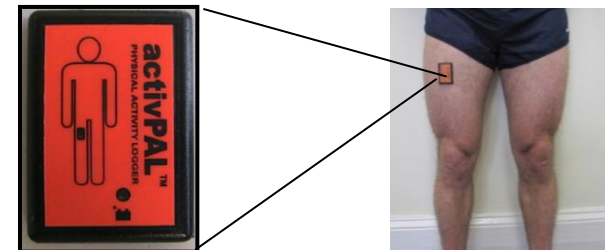
Qualitative studies

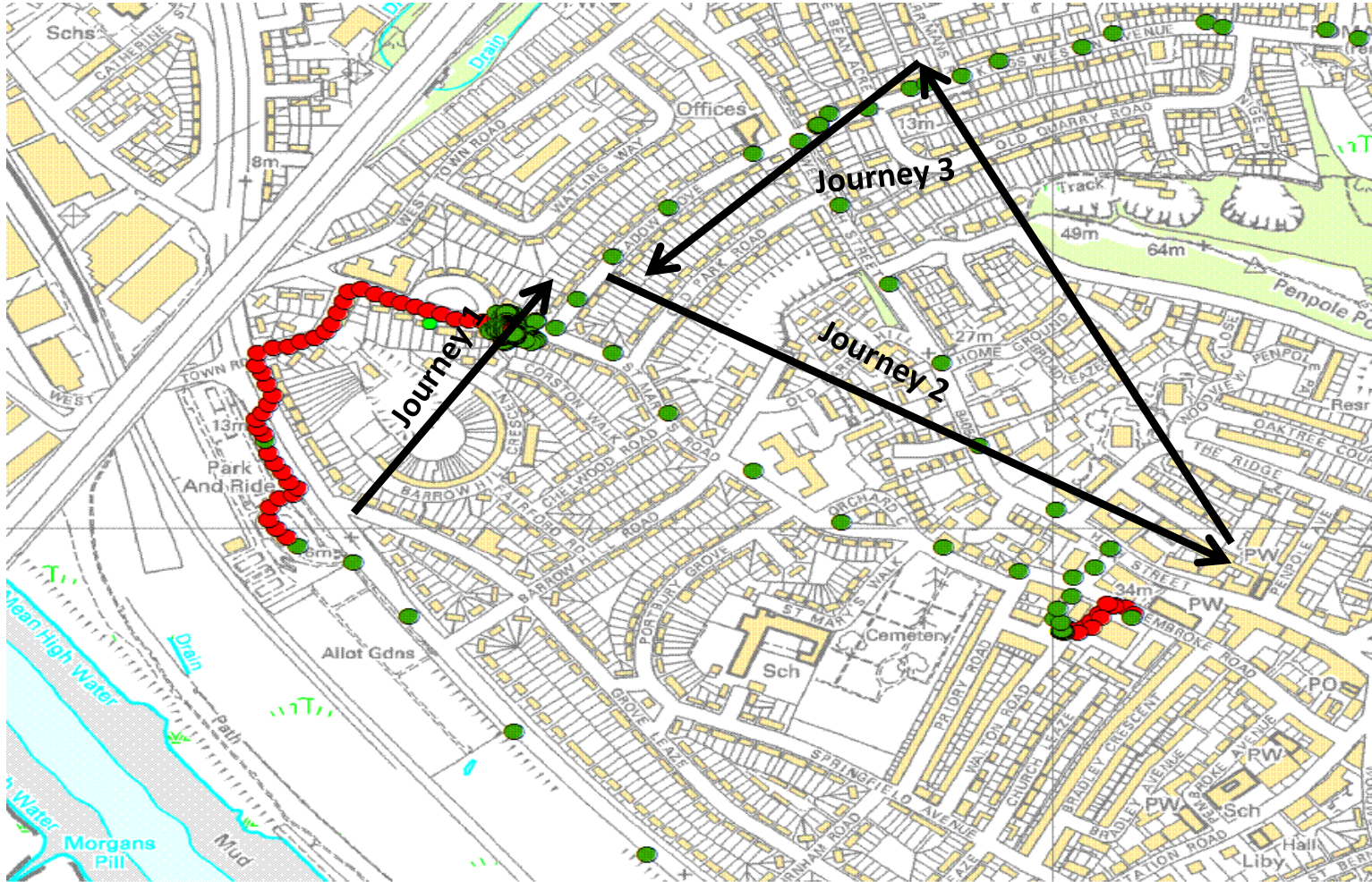
- **Perioperative nutrition experiences**
- **16 people post-colorectal surgery**
- **Semi-structured interviews**
- **Information provision is poor**
- **Range of food available**



Describing sedentary behaviour

- Observational study of people with newly diagnosed type 2 diabetes
 - Sedentary time and metabolic outcomes
 - Dietary behaviours and sedentary time
 - Contribution of time outdoors and active travel to activity





Interrupting sedentary behaviour

- Intervention in middle aged adults
- Randomised three-treatment crossover trial
 - **Sitting**
 - **Walking**
 - **Standing**
- Outcome: interstitial glucose concentration



Grant funding



*National Institute for
Health Research*

- CRUK/BUPA Foundation - Cancer prevention in hard to reach groups - £15,000
- NIHR Clinical Academic Training Internship- £10,000
- NIHR RCF - NIHR grant application for Cystic Fibrosis-Related Diabetes- £20,000
- NIHR Rare Diseases - TRC Fellowship PhD Grant of £228,362
- NIHR Rare Disease - Type 2 diabetes in children. 2013-2015 £195,000 + £199,885
- **NIHR EME (CARDIOMAN) £440,000**
- NIHR RCF - Dietary intake & PA in men on ADT- £12,000
- Elizabeth Blackwell Institute – Prehabilitation in Cancer- £8,207
- NIHR Programme Development Grant with University of Sheffield- £24,554
- Elizabeth Blackwell Institute "Crowd-sourcing of dietary data for nutritional assessment" - £42, 883
- Elizabeth Blackwell Clinical Primer - Effects of change in rate of eating on neural food responses and memory for food. £56,595
- **CRUK Population - Programme Award - £4,154,270.00**
- **NIHR Public Health – Employer-led walk to work intervention - £1,272,395.**
- **NIHR Public Health - Active design and walking and cycling - £618,065**



Prof Julian Hamilton-Shield
Deputy Director and industry Lead

Industry

- **Systematic Reviews** - on artificial sweeteners and obesity - in press.
- **Training opportunities** - internship programme with **Nutricia**.
- **Research seminars** - lectures as part of seminar series.
- **Evaluation** - product developed by **Genotek** and the **Wellpoint** health kiosks.
- **Testing new medical devices** - with **Cambridge Temperature Concepts**.
- **Feasibility**
 - Maltron** Paediatric body composition and fluid status
 - AmBeR**- breath ammonia to manage urea cycle defects.

Lessons learned

- Vision, plans, policies and reporting
- Principles – fair, sustainable
- Location, space and resources
- Multi-disciplinary methodology
- Range of projects

Summary

- Open for 3+ years
- Location, staff, reporting and policies
- 81 Projects (31 completed, 50 open)
- 1527 Participants recruited
- 43 Publications
- Welcome new project proposals in the final year

Any questions?

