

# ProtecT Study

(Prostate testing for cancer and Treatment)

## Newsletter Issue 11, January 2014

Welcome to the annual ProtecT study newsletter.

As academic and media interest in ProtecT increases and 2016 moves ever closer when the results will be published, we are still keenly aware that there wouldn't be a study without you and the time you take to complete questionnaires and attend follow up appointments.

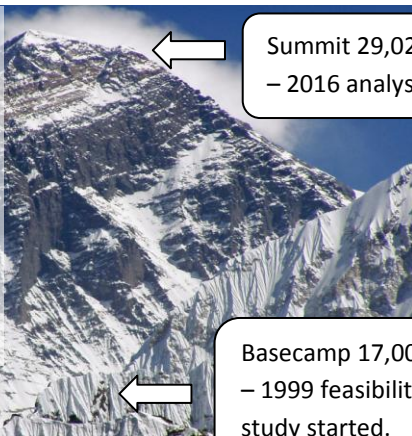
Given the difficult financial environment we all face, it is testament to the importance of ProtecT that the Department of Health has agreed to continue funding the study until its primary outcome in two years time.

The response rates from ProtecT participants is exemplary and will stand us in good stead of making a huge contribution to the debate on which treatments are best for prostate cancer and whether a nationwide screening programme would be desirable and viable.



Photograph courtesy of Anthony Devlin/PA Archive/Press Association Images

If you imagine the ProtecT study as climbing Mt Everest, we would have left the last camp at 26,000ft and be heading towards the summit.



Summit 29,029 ft – 2016 analysis.

Basecamp 17,000 ft – 1999 feasibility study started.

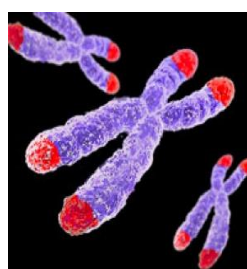
Professor Jenny Donovan, principal investigator for the ProtecT study, being awarded an OBE in recognition of her services to Social Medicine by Princess Anne. See Page 2.



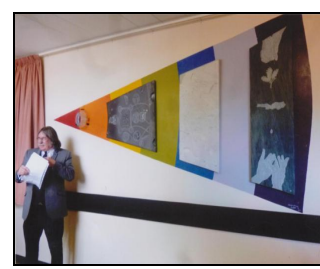
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## Q&A with Professor Jenny Donovan – principal investigator for the ProtecT study.

### How did you become involved in prostate cancer research?

I was working on a project developing questionnaires for various urinary difficulties, and I met Freddie Hamdy and David Neal (the other two study leads). In the course of our discussions, we became convinced that we should join together and design the study that was really needed for men with prostate cancer. We were turned down for funding by the Medical Research Council and European Union because they thought the study was too difficult and too big. But we kept going because we were convinced it was the right study to do, and eventually we were given the opportunity to do a small feasibility study by the HTA Programme. We did that in 1999 to 2001 - and it became the main ProtecT study, involving over 111,000 men in and around nine cities around the UK.

### What were your aims when the ProtecT study first started?

We have always had the same aims - to find out the best way to manage localised prostate cancer found following a PSA test and biopsy. That question needs answering just as much today as it did when we first started the study in 1999.

### What have been the highlights of the ProtecT study for you?

The most important highlight for me has been the way the men taking part have become so involved in the study. One of the most important things we did early on was to ask men what sort of study we should do. I interviewed quite a few of them in 1998-2000, and other researchers have done this all through the study. Those early discussions with the men made us really think carefully about which treatment options should be included in the study. In particular, they helped us to name and include active monitoring alongside surgery and radiotherapy. The men's commitment to the study, working with the excellent nursing team that we have, has been wonderful.



A recent research meeting of the ProtecT study with Jenny pictured on the top row 6<sup>th</sup> from the left.

### What was it like receiving your OBE from Princess Anne?

It was a tremendous surprise to be offered it - I had no idea! The day when it was presented at Windsor Castle was lovely, and I shared it with my son and his girlfriend. We were even allowed our own tour of the luxurious apartments!

### What would you say to someone who has just been diagnosed with prostate cancer?

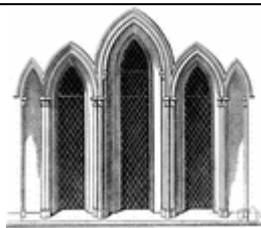
I wish I could still say "join the ProtecT study", but of course we finished recruiting in 2009. Men are still facing the same difficult decisions if they are diagnosed today as they did when we first started the study.

### Have you got a message for all the men on the study?

A huge "thank you"! I hope you have enjoyed seeing the many uses of the data you have provided so far. It is not long now until 2016 when we will be able to publish the main results of ProtecT. At that time, the NHS will decide how prostate cancer should be managed in future. Other countries across the world are also waiting to see the results. These decisions will be made because you joined ProtecT and have continued to see the nurses and fill in those questionnaires every year. Thank you.

# Protect Study Update

**The ProtecT study has been praised in the Lancet medical journal. Below is an extract by Professors James Raftery and John Powell from The Lancet, Vol 382, October 12<sup>th</sup>, 2013.**



Founded in 1823 by English surgeon Thomas Wakley, the Lancet is one of the world's oldest and most prestigious medical journals. It takes its name from the lancet surgical instrument – now more commonly called a scalpel – and also the 'lancet arch' to symbolise the letting in of light (shown left.)

The outstanding example of the 143 projects for screening and diagnostics funded by the **Health Technology Assessment Programme** is the ProtecT study of treatment of men with prostate cancer. This trial occurred after a failed attempt by the Medical Research Council to recruit patients to a randomised trial of various treatments, including watchful waiting, in the early 1990s. The success of ProtecT in recruitment owed much to design changes arising from its feasibility study.

In the late 1990s, two systematic reviews from the HTA programme helped to formulate government policy that routine screening for cancer with use of prostate-specific antigen could not be recommended because of uncertainty of effectiveness. In 1998, the HTA programme supported a feasibility study to explore whether it was possible to recruit men to a three-group study comparing surgery, radiotherapy, and an active monitoring protocol. Through embedding the trial in an innovative qualitative interview study, this project pioneered ways to involve patients in the communication of risks and benefits, helping with recruitment. As a result, the ProtecT trial was funded by the HTA programme. Researchers recruited more than 100,000 men for prostate-specific antigen testing. They detected more than 3000 men with prostate cancers, and randomly assigned 1500 patients with clinically localised disease to one of three interventions: radiotherapy, prostatectomy, or active monitoring (65% of those eligible.) Investigators are following up a further 1000 patients who chose their treatment. The 10 year results of the study (cumulative cost £34 million) will be reported in 2016.

ProtecT has affected clinical practice, even before announcement of its results, by allowing the UK to reaffirm its policy of no routine screening. Similar work funded by the HTA programme has led to improved recruitment of children to trials. ProtecT has also provided a platform for many other studies (trial methodology, psychosocial effect of prostate screening, and suitability of patients for focal treatment) and is a biorepository of human material for further study.

## ProtecT Baseline Paper Update

In the last newsletter we mentioned an important 'baseline paper' which was to be published in late 2012 / early 2013. Just to re-cap, this paper will account for all of the 200,000 plus men contacted by ProtecT and show at what point in the study those recruited have now reached. The baseline paper is such an important document in a study of this size that its publication had to be delayed to ensure that all the relevant data was properly included.

However, all the relevant data has now been verified, the baseline paper has been written and checked by all senior ProtecT academics and it will shortly be submitted for peer review in an academic medical journal. Unless unforeseen circumstances intervene, we are confident that the baseline paper will be published in the first half of 2014 and a full report will appear in the next ProtecT Newsletter.



**from Jeremy Horwood**

This side-study to ProtecT looked at the feasibility of asking men to take food supplements which have been linked to improved prostate health.

From the interviews I conducted with patients who took part in the Prodiet study, the results suggest that men at increased risk of prostate cancer had some understanding of the cause of cancer, but less understanding of prostate cancer. The men were interested in 'prostate friendly' dietary advice and were motivated to implement dietary changes. The men were generally unfamiliar with the potential prostate cancer preventative benefits of green tea and lycopene, they were willing to consider using these products (either as tomato rich diet, tea or capsules) as they valued their 'natural' qualities and considered them a simple dietary modification that could be easily adopted.

**This work has been submitted to an academic medical journal for publication and a full report will appear in a future newsletter.**

## ProtecT papers published in the last year.

Psychological impact of prostate biopsy: physical symptoms, anxiety and depression.

Dr Julia Wade summarises a recent paper published by herself and other ProtecT researchers in the Journal of Clinical Oncology.

This paper is based on findings from the Prostate Biopsy Effects (ProBE) study, a smaller sub-study undertaken with a sample of men already involved in the ProtecT study.

We looked at the relationship between symptoms men experienced following biopsy (e.g. pain, blood in the urine or ejaculate, infection) and how anxious they felt.

We asked 1,147 men in the ProtecT study to fill in questionnaires to describe the physical and psychological effects they experienced during and after biopsy (TRUS or transrectal ultrasound

biopsy). Men filled out these questionnaires at the time they had the biopsy, then again one week and five weeks after biopsy. Men were divided into four groups according to how they experienced symptoms after biopsy: a) those experiencing symptoms; b) those experiencing no symptoms; c) those experiencing symptoms as problematic; d) those experiencing symptoms as unproblematic. The levels of anxiety experienced by these different groups were then compared.<sup>5</sup>

We found that men, who said that their symptoms were 'problematic' a week after biopsy, also reported feeling more anxious as compared to men who had the same symptoms but found them to be 'not a problem' or a 'minor problem'. One month after biopsy there was no difference in anxiety between these two groups of men, although as you might expect, men who had been told they had cancer felt more anxious at that time.

We also interviewed 85 men taking part in either the ProBE/ProtecT studies about their experiences of biopsy. Most men reported that biopsy was tolerable, but about a quarter felt they could have been better prepared for biopsy. Men became anxious particularly if they did not feel prepared for what happened during or after biopsy. Men's experiences have been used to draft the content for a new improved patient information leaflet which will hopefully better prepare men for biopsy in future.

To read the full paper online visit: <http://jco.ascopubs.org/content/31/33/4235.full.pdf+html>



Dr Julia Wade

In the last year, ProtecT study data provided by yourselves has been used to produce many other interesting and informative papers which have appeared in a number of respected academic journals. Below is a small selection with internet addresses if you would like to read the paper in full:

**Psychological impact of PSA testing and biopsy using the impact of event scale. (Eur Urol Suppl 2013; 12; e135. Kok E.T. et al)**

<http://download.journals.elsevierhealth.com/pdfs/journals/1569-9056/PIIS1569905613606247.pdf>

**Alcohol consumption and PSA-detected prostate cancer risk – a case-control nested in the ProtecT study. (International Journal of Cancer 2013, 132: 2176-2185. Zuccolo L. et al)**

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3786564/>

**"Let's get the best quality research we can": public awareness and acceptance of consent to use existing data in health research: a systematic review and qualitative study. (BMC Medical Research Methodology 2013, 13. Hill E.M. et al)**

<http://www.biomedcentral.com/1471-2288/13/72>

# Results from other studies ...

## Telomeres and the ageing process.

A study of 35 men with a non-aggressive form of prostate cancer has indicated that certain lifestyle changes may reverse ageing of the body’s cells. 25 of the men were asked to make no changes to their routine, whilst the other 10 ...

1. Adopted a diet consisting mainly of unrefined and unprocessed foods,
2. Took moderate exercise, e.g. 30 minute walks six times a week,
3. Performed stress management techniques, e.g. yoga,
4. Attended a social support group.

After five years, the men who made the changes had chromosomes – which contain a person’s genetic information – similar to those of a younger person. The study scientists, based at the University of California, were particularly interested in the telomeres which sit at the end of chromosomes and protect the genetic information contained within them.



Telomeres (shown in red) at the end of chromosomes.

The shortening of these telomeres has been linked in earlier studies to a decrease in life expectancy and a greater risk of age-related diseases such as heart disease and vascular dementia. The 10 men who adopted the healthier lifestyles saw their telomeres increase by an average of 10 per cent with the men who stuck to the regime most faithfully seeing the biggest improvement. The telomeres of the 25 men who didn’t make the lifestyle changes reduced by an average 3 per cent.

Professor Dean Ornish, who led the study which was published in the *The Lancet Oncology* journal, said: “If validated by large-scale randomised controlled trials, these comprehensive lifestyle changes may significantly reduce the risk of a wide variety of diseases and premature mortality.”

However, a note of caution was expressed by Dr Lynne Cox, a biochemistry lecturer from the University of Oxford , who said it is: “perhaps too soon to judge whether this increase in telomere length will correlate with increased longevity or health-span.”

## Improved survival rates for prostate cancer in the last 20 years.

According to Cancer Research UK death rates from prostate cancer have fallen by 20% since the early 1990s. The current rate is around 24 per 100,000 men compared to approximately 30 per 100,000 in the 90s.

The downward trend has been credited to earlier diagnosis using PSA testing and more widespread use of surgery, radiotherapy and hormone therapy.

Professor Malcolm Mason, Clinical Oncologist for the ProtecT Study and Cancer Research UK’s prostate cancer expert, said:

“This new report shows we’ve come a long way in improving the treatment of prostate cancer in the last couple of decades. And improvements in how we treat prostate cancer have been key to reducing deaths from the disease. But a lot more work still needs to be done.”

## Aggressive prostate cancers finally identified

A big challenge for clinicians is distinguishing between those prostate cancers which are aggressive and require immediate treatment compared to those that are relatively harmless and shouldn’t be treated for fear of causing patients unnecessary side effects.

Cancer Research UK scientists have found that the protein, NAALADL2, is much more prevalent in prostate cancer tissue than healthy tissue and, more importantly, aggressive prostate cancers contain the highest concentration of this protein which could pave the way for a test to identify them.

Lead author of this research, Dr Hayley Whitaker, who has also worked on the ProtecT study, said: “This is early research, but if clinical trials confirm our results then it could help clinicians to tell which patients have a more aggressive tumour and need proportionally aggressive treatment, while sparing patients with low grade tumours unnecessary radiotherapy or surgery.”

## Nordic Walking ... How I Became A Volunteer Instructor by Bob Ray from our Cardiff Centre

Ten years ago was a wake up call for me to think about getting fit, my daughter required a kidney transplant. Although both my wife and I were compatible I opted to be the donor. Prior to the transplant taking place I embarked on trying to get fit by doing some walking in the beautiful hills we have here in Wales. The operation was a success and as part of my recovery process I continued my endeavours to walk various routes of the Brecon Beacons & Black Mountains.

However, right out of the blue in 2005 I was diagnosed with cancer of the prostate following a routine check-up via the ProtecT study. Having checked all the options I was able to go for radical surgery. Thankfully I had kept my fitness levels up, so felt good to go for the 'op'. The staff at UHW and the C.R.I. at Cardiff were fantastic and gave me all the support that was necessary both prior to surgery and post operative recovery. Yet again my walks on the hills were to support me in my goal for trying to stay on top of fitness.....both physically and mentally. I have to say that I value each day as it goes by, and never take anything for granted. When you're at one on the mountain trails it's so peaceful and tranquil, watching nature and how each of the seasons bring their own beauty to the surrounding areas.

In 2009 returning from one of my adventures with rucksack heavily laden, I met a lady in the car park of the building where I live. Following a chat about walking it turned out that she worked for Age Cymru and was involved in their Nordic Walking (NW) programme. That was it, before I knew it I had a taster session to find out what NW was all about. I immediately experienced the physical health benefits of this form of work-out and was hooked.



Bob Ray next to a 'trig point' on a Nordic trail.

Since that day I went on to become a volunteer NW Leader, taking groups of people out on local trails. I then progressed to become an Instructor which proved to be an added bonus regarding my voluntary activities with Age Cymru. Individuals are trained in the techniques of NW in accordance with their own health limitations.

There is nothing like seeing the joy and feeling of achievement on the faces of people who have gone the extra mile walking as a group enjoying the flora and fauna and listening to the birds or just to enjoy the expansive views that we are gifted with, whether it be coastal / park or hill walks....the terrain may be varied but is out there for all to experience.

Also, as a NW Instructor I not only take training sessions but give talks and Taster sessions to various groups out in the community. My reward for giving time is sharing the belief that it's all about making the effort. Strive to keep fit and enjoy life, we have all had hurdles to get over, but through NW and inspiring people through instructing I have seen people uplifted in their physical and mental well-being and looking forward to their weekly walks throughout the seasons.

## Sculptor Stephen Hines from our Leeds Centre

Internationally renowned sculptor, Stephen Hines, has been given many commissions over the years, but his latest two – for the Dewsbury and Pinderfields hospitals in Leeds – are in many ways his most remarkable.

Though diagnosed with prostate cancer in 2007, it is the two strokes he suffered in 2005 and 2009 which took the greatest toll on Stephen's life and work. The second stroke robbed him of the ability to speak, write and sculpt – not to mention the effect it had on his memory which was encyclopaedic allowing him to remember whole Shakespeare plays. At one stage things were so bad that he could only pronounce one word. I won't say which word he could speak here for fear of offending some readers (let's just say it sounds like a group of young male cows.)

For a while Stephen had to carry a card which explained to people – including pub landlords who might have thought he was already intoxicated – why he couldn't speak. However, through hard work, perseverance and the help of his wife, Margaret – who has a background in education – Stephen's speech slowly returned. He still couldn't pronounce certain words, however, like caterpillar; much to the amusement of his grandson, Samuel, who would make him say "capatilla" over and over again.

Though most of his faculties returned Stephen's creative spark remained dulled and he felt no inclination to pick up the hammer and chisel.



Stephen Hines next to his sculpture at Dewsbury Hospital

However, two years ago, Stephen started to feel the winds of change and was persuaded to attend a meeting organised by the art-based charity Move Ahead. Against expectations, his ability to produce art gradually returned to the point where Mr Andy Chung, Consultant Ophthalmologist at the Pinderfields Hospital in Leeds, commissioned Stephen to produce two sculptures to help promote organ donation. Stephen would accept no payment for the artwork in appreciation of the care he and his wife received from the Mid Yorkshire Hospitals NHS Trust.

The first wall-mounted sculpture – triangular in shape and formed by fusing pieces of glass, marble, slate and granite – was unveiled in the main corridor of Dewsbury Hospital on the 8<sup>th</sup> July 2013. Stephen is currently working on the second sandstone and limestone sculpture which will be placed in the grounds of Pinderfield's Hospital. One unusual feature of this sculpture is a prostate which was a strange experience for Stephen to sculpt. He compares the care and concern he gives to the stone as he shapes it with that he received from the ProtecT team.

Stephen credits a good sense of humour as being essential to coping with adversity and also cites an old Hunslet expression which sums up the Yorkshire spirit: "deal with it."



Stephen working on the Dewsbury sculpture.

## Donald and Dorothy Shepherd from Leeds Celebrate 50 years together.



Congratulations to Donald and Dorothy Shepherd who have celebrated their golden wedding anniversary since the last newsletter. Married on the 8<sup>th</sup> September 1962 – they very generously asked friends and relatives to make donations to prostate and renal cancer charities instead of buying them presents.

That didn't stop them having a 80 strong knees-up at the Recreation Hall in Crossgates, Leeds. When asked what the secret to a long and happy marriage was, Donald replied: "give and take." And who can argue with that?

### If you have moved ... or just need to contact us, you can by:

- Contacting your lead nurse using the number of the your local centre
- Emailing us at: [info-protect@bristol.ac.uk](mailto:info-protect@bristol.ac.uk)
- Dialing Freephone 0800 7833167
- Writing to us at: The ProtecT Study, University of Bristol, Canynge Hall, 39 Whatley Road, Bristol, BS8 2PS.

### A list of **lead research nurses** by centre:

Birmingham: Pauline Thompson (0121 6272992)  
 Bristol: Lynne Bradshaw (0117 3235080)  
 Cambridge: Phillipa Herbert (01223 596225)  
 Cardiff: Sarah Tidball (02920 746501)  
 Edinburgh: Norma Lyons (0131 5372433)  
 Leeds: Debbie Cooper (0113 2063509)  
 Leicester: Sue Bonnington (0116 2588316)  
 Newcastle: Teresa Lennon (0191 2231461)  
 Sheffield: Joanne Howson (0114 2712791)

### A note from the Editor: Nick Christoforou

If you would like to contribute to the next newsletter - whether by suggesting ways it could be improved or writing about your own experiences – you can phone me on 0117 9287298 or email me at: [n.christoforou@bristol.ac.uk](mailto:n.christoforou@bristol.ac.uk)

And finally ... congratulations to David Neal, principal investigator for the ProtecT study, who has been awarded a CBE in the New Years Honours List. We will bring you more news on his achievement in the next newsletter.