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<tr>
<td>ADT</td>
<td>Androgen Deprivation Therapy</td>
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<tr>
<td>ABPI</td>
<td>Association of British Pharmaceutical Industry</td>
<td></td>
</tr>
<tr>
<td>ASP</td>
<td>Active Server Pages</td>
<td></td>
</tr>
<tr>
<td>BAC CGH</td>
<td>Bacterial Artificial Chromosome Comparative Generic Hybridisation</td>
<td></td>
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<tr>
<td>CanISC</td>
<td>Cancer Information Service Cymru</td>
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</tr>
<tr>
<td>CASE</td>
<td>Cancer support South East Wales</td>
<td></td>
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<tr>
<td>CCB</td>
<td>Confederation of Cancer Biobanks</td>
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<tr>
<td>CHC</td>
<td>Community Health Council</td>
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<tr>
<td>CIU</td>
<td>Clinical Information Unit</td>
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<tr>
<td>CRCCymru</td>
<td>Clinical Research Collaboration Cymru</td>
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<td>CRW</td>
<td>Cancer Research Wales</td>
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<tr>
<td>DNA</td>
<td>Deoxyribonucleic acid</td>
<td></td>
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<tr>
<td>ECMC</td>
<td>Experimental Cancer Medicine Centre</td>
<td></td>
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<tr>
<td>EDTA</td>
<td>Ethylenediamine Tetraacetic Acid</td>
<td></td>
</tr>
<tr>
<td>EGFR</td>
<td>Epidermal Growth Factor</td>
<td></td>
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<tr>
<td>FDA</td>
<td>Food and Drug Administration (USA)</td>
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<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
<td></td>
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<tr>
<td>HTA</td>
<td>Human Tissue Authority</td>
<td></td>
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<tr>
<td>ISBER</td>
<td>International Society for Biological and Environmental Repositories</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>LHB</td>
<td>Local Health Board</td>
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<td>LLEG</td>
<td>Lay Liaison and Ethics group</td>
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<tr>
<td>MRC</td>
<td>Medical Research Council</td>
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<tr>
<td>MREC</td>
<td>Multi-centre Research Ethics Committee</td>
<td></td>
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<tr>
<td>NCRI</td>
<td>National Cancer Research Institute</td>
<td></td>
</tr>
<tr>
<td>NCRN</td>
<td>National Cancer Research Network</td>
<td></td>
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<tr>
<td>NHS</td>
<td>National Health Service</td>
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<tr>
<td>QA</td>
<td>Quality Assurance</td>
<td></td>
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<tr>
<td>RCP</td>
<td>Royal College of Pathologists</td>
<td></td>
</tr>
<tr>
<td>RET PTC</td>
<td>Rearrangement of the RET oncogene found in Papillary Thyroid Cancer</td>
<td></td>
</tr>
<tr>
<td>RIN</td>
<td>RNA Integrity Number</td>
<td></td>
</tr>
<tr>
<td>RNA</td>
<td>Ribonucleic acid</td>
<td></td>
</tr>
<tr>
<td>RT-PCR</td>
<td>Reverse Transcriptase Polymerase Chain Reaction</td>
<td></td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
<td></td>
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<tr>
<td>SRP</td>
<td>Scientific Review Panel</td>
<td></td>
</tr>
<tr>
<td>WCB</td>
<td>Wales Cancer Bank</td>
<td></td>
</tr>
<tr>
<td>WCI</td>
<td>Wales Cancer Institute</td>
<td></td>
</tr>
<tr>
<td>WCTN</td>
<td>Wales Cancer Trials Network</td>
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</tr>
<tr>
<td>WCTU</td>
<td>Wales Cancer Trials Unit</td>
<td></td>
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<tr>
<td>WORD</td>
<td>Wales Office of Research and Development for Health and Social Care</td>
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<td>Gender of control donors</td>
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<td>Median yield DNA from individual blocks of tissue</td>
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To provide a population based resource of tissue and blood samples from all patients in Wales, who are undergoing an operation to remove tissue where cancer is a possible diagnosis, for future research into cancer.
The past year has seen the WCB pass a major milestone, with the 2000th patient recruited in January. This achievement is a testament to many factors.

First, and foremost, to our patients, whose support for this project has been unflagging – and, dare I say it, unprecedented, even by the standards of the incredible support that cancer patients in Wales and their families give to cancer research projects in general. However, this recruitment rate is also a testament to the commitment and enthusiasm of our staff, and I would like to take the opportunity of thanking them, and the NHS Trusts in which they work.

The Wales Cancer Bank now has three major sources of funding: the Welsh Assembly Government, whose core support is vital to the whole enterprise; Cancer Research Wales, who, uniquely as a Cancer Charity, have committed themselves to directly funding us; and Velindre NHS Trust, whose support in terms of IT infrastructure, as well as direct research funding to us, has been invaluable. I would like to thank all three organisations for their support, and we will continue to strive to repay the faith that they have shown in us and our project. Cancer Research Wales, in particular, have the distinction of keeping money raised in Wales to be spent on cancer research in Wales. They do not send it elsewhere in the UK or abroad, and we are proud that they feel that the WCB merits the investment that they have given us as an all-Wales project. Nonetheless, we do not wish to be insular, and the WCB is there as a research resource for the entire world. Indeed, as detailed in this report, most of the research projects for which we supply samples have been located outside Wales.

I believe that WCB is now taking its place on the international stage; we are in close contact with other tissue banks in Europe, and with the National Cancer Institute in the USA. We have also been able to achieve some modest expansion of the project into new hospitals in Wales, but this is the one area where progress has not been as fast as we would like it to be. However, as soon as we are able to secure the resources needed for expansion, we are ready to do so.
**TARGETS FOR 2007/08**

<table>
<thead>
<tr>
<th>TARGETS FOR 2007/08</th>
<th>ACHIEVED</th>
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<tr>
<td>Accrue 2000 patients in total</td>
<td>January 08</td>
</tr>
<tr>
<td>Supply three projects with biosamples</td>
<td>September 07</td>
</tr>
<tr>
<td>Reconstitute governance arrangements</td>
<td>January 08</td>
</tr>
<tr>
<td>Ensure Service Level Agreements in place with all NHS Trusts</td>
<td>November 07*</td>
</tr>
<tr>
<td>Develop IT infrastructure</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Collate clinical data for patients consented to end 2006</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Continue to raise awareness and promote WCB</td>
<td>Ongoing</td>
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</table>

* Swansea NHS Trust still under discussion

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**CENTRAL ADMINISTRATION**

The size and scope of the central administration has grown over the last twelve months to keep pace with the evolving project. Professor Gerry Thomas took up a part time position as Professor of Molecular Pathology in Imperial College, London in June 2007 and now splits her time between London and South Wales. Her continued involvement with the WCB ensures quality assurance standards are maintained and her wealth of knowledge gained from setting up the Chernobyl Tissue bank is invaluable.

Two new IT staff, a database manager and information assistant, joined WCB to strengthen the IT support available to staff and allow the IT manager to focus on developmental aspects of the database. Matthew Shaw, database manager, is based in Velindre hospital, Cardiff and Claire Alford, information assistant, is based in Singleton hospital, Swansea.

Sarah Phillips gained promotion to the new role of project officer and will be responsible for co-ordinating all the applications for samples received by WCB. She was replaced in the role of clerical officer by Debbie Way in March 2008.

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<tr>
<td>Director</td>
<td>Professor Malcolm Mason</td>
</tr>
<tr>
<td>Director of Scientific Services</td>
<td>Professor Gerry Thomas</td>
</tr>
<tr>
<td>Manager</td>
<td>Dr Alison Parry-Jones</td>
</tr>
<tr>
<td>IT Manager</td>
<td>Mr Daniel Naeh</td>
</tr>
<tr>
<td>Project Officer</td>
<td>Miss Sarah Phillips</td>
</tr>
<tr>
<td>Database Manager</td>
<td>Mr Matthew Shaw</td>
</tr>
<tr>
<td>Clerical Officer</td>
<td>Mrs Debbie Way</td>
</tr>
<tr>
<td>Information Assistant</td>
<td>Miss Claire Alford</td>
</tr>
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</table>
RECRUITMENT

868 patients were recruited between April 2007 and March 2008 across all collecting sites to take the total number of patients consented since the beginning of the project to 2125. The 2000th patient was consented at the end of January 2008, three years and three days after the first patient was consented in Swansea in 2005. Since the initial collection started the number of tumour types targeted has grown from seven to seventeen, although breast, colorectal, prostate and renal remain the highest proportion of samples collected. The majority of patients are consented pre-operatively, either at pre-assessment clinic or at admission immediately prior to surgery. A small percentage (13%) are consented after surgery, usually in oncology clinics a few weeks later but the overwhelming majority of patients approached by a WCB nurse agree to consent with only a 1.1% refusal rate. A partner, spouse or friend of the patient also has the opportunity to donate a blood sample as an environmental control and 20% of total donations have such an environmental EDTA blood control available. The low success rate of obtaining this sample is due to suitable non-blood relatives not being available especially when the patient is elderly.

Alison Davies

STAFF & LOCAL REPORTS

Seven hospitals around Wales are currently involved with recruiting for the Wales Cancer Bank.

- Ysbyty Gwynedd in Bangor, North Wales
- University Hospital of Wales (UHW) and Llandough hospitals in Cardiff
- Royal Gwent hospital in Newport
- Singleton and Morriston hospitals in Swansea
- Withybush hospital in Haverfordwest
Bangor

One hundred patients have been consented in the recruiting site in Bangor during this reporting period. This represents eight months consenting as the nursing post became vacant at the beginning of December. The nurse’s job description is currently being re-evaluated with Bangor. In June 2007 a roadshow event was held in Ysbyty Gwynedd and videoconferenced to Llandudno hospital. The audience heard from Professors Mason and Thomas about the WCB aims and current activity in North Wales and Professor Stuart, local WCB lead in Bangor, also spoke about the need for research using human tissue and blood samples. A variety of health professionals were present and the event helped raise the WCB profile in North Wales.

Cardiff

Throughout the year the collection for the Wales Cancer Bank has continued in the department of urology in the University Hospital of Wales (UHW) and in Llandough hospital resulting in 168 patients being consented across the two hospitals.

Urology has a new consultant, Mr Joshi, who is very interested in the work of the bank and is keen for his patients to be entered into the study. The pre admission format has altered and representatives of the Cancer Bank have been involved in the transition process and to facilitate WCB recruitment an allocated room and an allocated time for patients to discuss donation with WCB has been incorporated into the routine pre admission clinic.

Presentation at audit of all recruiting studies is performed on a monthly basis to ensure all new departmental staff are aware of the WCB.

In order to address the recognised poor uptake in partners/friends willing to donate control blood samples to the Cancer Bank, a designated clinic in urology will be provided in the future to increase participation.

In September 2007 the laboratory post in Cardiff was reviewed and became embedded as a post in the histology department of UHW. The post is now funded through the Cancer Research UK funded Experimental Cancer Medicine Centre (ECMC) in Cardiff and will help facilitate biosample based research in the ECMC by assisting with collection of fresh tissue for culture and analysis procedures.

A full time nurse was recruited in Cardiff in January 2008 and has begun to consent patients in the gynaecology clinics in Llandough hospital. Several other tumour types, including thyroid, lung and colorectal have been identified as potential collecting sites.
Royal Gwent

Ninety three patients were recruited from the pre-assessment unit and outpatient clinics of the urology department in the Royal Gwent hospital, Newport from April 2007 to March 2008. The urology theatre staff and histology laboratory staff fully support the collection and are extremely helpful with various requests for further information needed for data capture. The centre was audited in September 2007, and a mini audit performed in March 2008. In May 2007 Professor Thomas and Dr Parry-Jones gave a talk about WCB to the ‘Progress’ prostate support group based in the Royal Gwent. The patient group were extremely responsive and interested to discover how they could help raise awareness and funds for the bank. Also in May, a WCB roadshow event was held to inform the health professionals in urology of the work of WCB and the possible research avenues available using human tissue.

After spending several months in temporary accommodation, WCB now has a permanent office in the hospital and despite initial problems with relocating the bar-coding equipment, the transition has been smooth. The aim is to continue to increase recruitment in urology and hopefully, in the future, take on another speciality.

Swansea

Swansea consented 364 patients from the two hospital sites over the year and the 1000th patient is due to be consented early in April 2008. Discussions took place with neurology regarding initiating a brain tissue collection and retrospective consenting will start by approaching patients in oncology outpatient clinics, with the view to prospectively collect fresh tissue in the near future. The new information assistant joined the Swansea team in January 2008 and has been working through entering the existing follow-up and pathology data onto the database. The laboratory staff based in Swansea also facilitate the extraction of nucleic acids from tissue samples and are involved in quality assurance procedures and investigating novel fixative methods as comparisons against traditional methods.

RECRUITMENT FACTS AND FIGURES

![Figure 2 – Total patient recruitment](image)
Since April 2007 there has been a complete change of staff within the Wales Cancer Bank team in Withybush but despite this 144 patients have been consented. Two nurses, working part time, cover all the clinics and wards to consent patients. Pre-operative consenting has been prioritised through the year, therefore decreasing post-operative consents except for emergency patients. Both nurses have also been covering the laboratory work since January 2008 due to a delay in filling the vacant medical laboratory assistant post. They have managed to continue to collect frozen and paraffin tissue, blood samples and cover basic laboratory duties during this time and interviews for the laboratory post are scheduled for April.

Presentations have been given to theatre staff on the Wales Cancer Bank and its role, to explain how theatre plays a valuable and essential role in the collection of tissue. To reassure and enthuse theatre staff, the WCB nurses have been working with the staff in theatre to ensure the collection of tissue. A WCB roadshow event was held in Withybush in May and attracted a large range of staff from the hospital, including surgeons, pathologists and specialist nurses. The event gave the opportunity to be updated on the WCB progress as well as answer any questions related to tissue donation and collection in Withybush.

SAMPLES AND QUALITY ASSURANCE

Samples
Multiple samples are obtained from a single consent wherever possible to increase the potential research from individual donations. Frozen tissue samples (tumour and normal) are taken whenever pathology staff are available and resources allow and tissue samples are also embedded in paraffin blocks after fixing in neutral buffered formalin. Blood samples, EDTA and serum, are taken if the patient is consented pre-operatively and just EDTA samples if post-operative consent is obtained.

Statistics show that WCB has collected samples for an average of 93% of consents taken. This represents a snapshot in time and includes very recent consents for which surgery has not yet taken place. The type of samples collected depends upon the local resources and timing of consent, so the figures showing the percentage types of samples collected per consent are biased by retrospective consents not having access to fresh tissue or EDTA bloods. Overall, frozen samples are collected for an average of 57% of consents
(in centres where frozen samples are collected), paraffin blocks are collected for an average of 67% of consents and blood samples for an average of 60% of consents. The first bar chart shows detail by collecting centre and the second bar chart shows detail for the five most commonly consented tumour types across relevant WCB sites.

**Figure 8** - Percentage of sample types collected by centre

**Figure 9** - Percentage of sample types available for the five most commonly collected tumour types

**Quality Assurance**

The Wales Cancer Bank is committed to ensuring that the biospecimens it supplies to researchers are of the highest quality possible and suitable for use in downstream modern molecular biological techniques. It is important to ensure that the material stored in WCB is what is says on the pot, and that it is suitable for purpose. Cancer samples are composed of a mixture of different cell types and in many cases the genes that are being studied by researchers are present in only one cell type (the epithelial cell). The sensitivity of molecular biological techniques vary and it is therefore important that researchers know what proportion of the material from which nucleic acids have been extracted was present in the sample supplied to them. Also the presence of necrotic cells can have a deleterious effect on some assays. A frozen section from each tissue block is reviewed prior to extraction of nucleic acids and it has been found that the proportion of different cell types can vary considerably between blocks from the same operative specimen and different types of cancer. The graph (left) illustrates that for many cancers, the vast majority of the tissue blocks examined are composed mainly of...
epithelial cells. However, the situation is reversed for prostate cancer.

In order to maximise the use of material from the Wales Cancer Bank, the preference is to issue extracted nucleic acids from frozen tissue blocks rather than the frozen blocks themselves. This also enables WCB to provide researchers with material that is of the correct quality standard for their projects. Both types of nucleic acid are extracted, DNA, which researchers use to study mutations and rearrangements in the cancer genome, and RNA, which researchers use to identify which genes are expressed in tumours, from the same piece of tumour. This enables researchers to identify some of the causes of the alterations in expression of key genes in cancer. Each piece of tumour is first homogenised, then made into a solution (a lysate). The lysate is then split into two different portions in order to extract DNA and RNA. In general, techniques that utilise DNA require a lower quantity of nucleic acid than techniques that utilise RNA.

Different types of molecular biological techniques demand differing standards. For high throughput technologies that study the expression of a large number of genes simultaneously, higher molecular weight RNA or DNA is required (i.e. RNA or DNA that is present in its full length, not degraded into smaller fractions). Other technologies (e.g. those that look at the expression of a single or a small number of genes simultaneously) can use samples of a lower quality. In order to maximise use and minimise waste of valuable samples, the Wales Cancer Bank conducts quality assurance on nucleic acid extracted from frozen tissue. This includes an assessment of extract purity, using spectrophotometry to compare readings taken at different wavelengths (260/280 ratio), the amount of nucleic acid extracted (the yield), and microfluidics for RNA using an Agilent Bioanalyser to determine how intact the strands of RNA are (the RNA Integrity Number – or RIN). In the majority of cases the RNA and DNA extracted from frozen tissue is of a high quality (a 260/280 ratio of 2 is considered to be indicative of high quality RNA or DNA). The yield of both RNA and DNA (Figures 11 and 12) is variable among different tissue types and this is probably related to the amount of epithelial cells present in the individual frozen blocks. For example, blocks of normal breast tissue contain only a small number of ductal structures that are lined by epithelial cells, the rest of the block being composed of mainly fat cells, whereas blocks of breast cancer contain a high proportion of epithelial cells.
Figures 11 and 12 show the median yield (in microgrammes) of RNA (11) and DNA (12) from individual blocks of tissue. The yield varies among different tissues and between tumour and normal tissue from the same patient, due to the varying amounts of epithelial cells present in the individual tumour blocks and the size of the block of tissue provided by the pathologist.

The integrity of the RNA extracted also varies among tissue types (Figure 13). There are a number of reasons for this. Some may be related to the way in which the surgery is performed (e.g. restricting blood through an organ during surgery prevents the patient losing excessive amounts of blood during surgery, but may also starve the tissue being removed of oxygen, which may induce the death of some of the cells in that organ), the way in which the pathologist needs to document the operative specimen prior to removal of tissue for freezing and the skill of the technician carrying out the protocol for RNA and DNA extraction. It is important that in obtaining tissue for the Wales Cancer Bank there is no interference with the diagnosis and treatment of the patient. Carrying out quality assurance after the material has been obtained for the bank ensures that the requirements of the researcher can be satisfied without compromising the treatment and diagnosis of the patient who has agreed to donate to the bank.

Figure 13 shows the quality assurance for molecular biology – the integrity of RNA extracted from frozen tissue samples. Samples which give a reading of 7 or greater are considered by researchers to be of sufficient quality to use in high throughput technologies such as Affymetrix 3’ gene array platforms. Samples of a lower quality can be used to look at gene expression using RT-PCR or other similar techniques.

The quality of DNA extracted from frozen tissue is also important. As with RNA technologies, some techniques require DNA strands to be intact. One way of measuring this is to use gel electrophoresis.

Figure 14 shows an example of gel electrophoresis for DNA extracted from tissues from the Wales Cancer Bank. Smaller fragments of DNA migrate down the gel more quickly than larger fragments – ideally one clear band with no smearing should be seen. Smearing of DNA indicates that it is degraded, and a horseshoe shaped appearance indicates that there has been protein contamination of the DNA lysate. Both of these would restrict the use to which these samples could be put. The majority of samples from the Wales Cancer Bank yield very good quality DNA.
FIGURE 14 - Gel electrophoresis for DNA
APPLICATIONS AND SUPPLY OF BIOMATERIALS

Applications

With an ever increasing presence at National and International Cancer Conferences, the Wales Cancer Bank has seen a steady flow in applications for biomaterials. A new biosample search facility has been developed on the WCB website (www.walescancerbank.com) that allows researchers to ascertain the availability of specific tumour types and sample formats prior to application and the application form has been revised to simplify the application process and include a lay summary. WCB information is also incorporated in the search facility on the Confederation of UK Cancer Biobanks web portal.

To date, from inception, the WCB has received and reviewed 26 applications. All research project applications submitted are reviewed by an international external Scientific Review Panel (SRP) to ensure the Wales Cancer Bank provides a robust and transparent approval system. The panel consists of pathology, surgical, oncology and tissue banking experts who have been invited to serve over a rolling period. All applications are reviewed via a scoring system with a defined minimum score for approval. Reviews from 66% of the members have to be completed prior to approval and the SRP membership will be increased during 2008 to ensure minimal review schedules. The Standard operating procedure, WCB SOP M05, available from the website (http://www.walescancerbank.com/sops/index.html), gives details of approval criteria. During the first two years of applications being reviewed, 10.5% of applications have been rejected, 31.5% have required further information or clarification before being approved and 58% have been approved outright.

Of the 13 applications received during this reporting year (April 2007-March 2008), two were to facilitate clinical trials and two were quality assurance exercises carried out in conjunction with WCB. The two clinical trial applications were not sent out for review as WCB has previously made a commitment to support sample collections within clinical trials. Eight applications have received samples and the remaining five applications stand as follows:

- 1 application is still under review
- 1 application is pending logistic problems
- 2 trials have not yet consented patients with blocks in WCB
- 1 application is waiting for sample extractions and is expected to be ready later this year.
All formats of samples collected and processed by WCB (frozen, DNA, serum etc) have been requested by researchers and currently there have been a greater number of applications for breast, colorectal and prostate tumour types.

During the last year, the WCB has supplied 9 projects, including two bespoke collections and one quality assurance project, with a total of 710 samples. Forty percent (284) of these samples were supplied to applications received from the 1st April 2007 to 31st March 2008 and the other sixty percent (426 samples) were supplied to two applications received in the previous reporting year (2006/2007). As the bar chart shows, six different tumour types have been supplied.

WCB has MREC approval to issue samples to researchers involved in cancer research. A condition of this approval is an annual report to MREC detailing all the projects supplied during the year. Basic information on the projects supplied is also detailed in Appendix A including a lay summary of the research.

![Number and type of samples supplied](image)

**FIGURE 16 - Number and type of samples supplied**

One of the recommendations received from the management review commissioned by the Welsh Assembly Government at the end of 2006 was to review governance arrangements and the reporting structure of the Wales Cancer Bank. It was important to balance the structure to ensure robust and appropriate management without over burdening a still evolving project of relatively small size with an over complex committee composition. The Executive group of the bank had previously discussed reviewing the membership of the Advisory Board and this was one area acted upon in 2007. The organogram shows committee reporting lines and structure.
Executive Group includes:

HTA Licence holder and Designated Individual

FUNDING BODIES

Welsh Assembly  Cancer Research  Velindre NHS

Cardiff University (sponsor under Research Governance Framework)

Human Tissue Authority

Advisory Board

Executive Group includes:

HTA Licence holder and Designated Individual

External Review Panel

HTA Persons Designated/Local management

Central office project officer

Local project/pathology meetings

External Research projects

Lay Liaison & Ethics group

Management committee

IT sub-committee

Sampling sub-committee

**FIGURE 17 - Governance organogram**

Advisory Board

It was recognised that a board made up of a wider spectrum of expertise, to include a majority of members external to Wales, would allow greater transparency and give a wider UK perspective. A number of stakeholder groups were identified and approached for representation, including the WCB funders, the NHS in Wales and the Cancer Services Co-ordinating group in Wales. The newly constituted group met for the first time in January 2008 in the Royal Society in London. Mr Calum Campbell, (then) acting Chief Executive of Swansea NHS Trust was voted as Chair with Mr Nick Ross, lay representative, voted as Deputy Chair. A number of key priorities were discussed and targets agreed for 2008/09. The risk register was updated to reflect the new responsibilities of the Advisory Board and a request was made to formalise the Disaster recovery plan, by expanding the current document from within an SOP to become a standalone document.

Full membership of the new Advisory Board and their affiliations are detailed on the next page and biographies can be found in Appendix B.
In order to formalise the reporting lines from the local sites, through the named Person Designated on the Human Tissue Authority licence, a local management committee was formed to meet every quarter with the HTA Licence Holder (Prof Malcolm Mason), the Designated Individual (Dr Alison Parry-Jones) and the bank’s Director of Scientific Services (Prof Gerry Thomas).

Service level agreements between Cardiff University and each collecting NHS Trust were drafted during the year to lay out the roles and responsibilities of both parties.

**Lay liaison and ethics group**

The WCB has always recognised the importance of involving patients, carers and support groups in the set up and running of the bank and shortly after funding was confirmed in April 2003 a Patient Liaison and
Ethics group was established to represent the Bank and provide a forum for patients to take an active role in the development of good and effective communication, a platform for the ‘patient voice’ and represent the patient’s view in establishing good practice. This group was set the task of looking at the ethical and consent issues in helping to access patients’ co-operation and procedures to procure samples. The group was instrumental in producing the Patient Information Sheet and the Patient Consent Form and was supported and facilitated by Prof Gerry Thomas.

In May 2007 the patient group met to discuss reorganising the membership and role of the group. Membership was sought from a wider range of stakeholder groups and the newly named ‘Lay Liaison and Ethics’ group (LLEG) met for the first time in September 2007. The original terms of reference were reviewed and redrafted and a code of conduct was established. The Chair of the group sits on the Executive group to give feedback and represent the lay committee. A full list of members and the role of the group can be found in Appendix D.

Four meetings were held to the end of March 2008 and the key target for the new group was to draft a communication strategy for the bank to give focus to raising awareness with the public, health care professionals, funders and the research community. The strategy also addresses fundraising, namely project funding looking at the long-term funding issues to facilitate research and local fundraising to give local hospitals/Trusts a feeling of ownership in becoming involved with fundraising events in helping to provide finance for equipment, nursing staff, laboratory support and any other local requirements.

**Work to Date - Raising Awareness**

The Group decided to concentrate on raising the profile of WCB and Susan Bailey (LLEG’s P.R. Specialist) produced a comprehensive document which enabled the Group to use it as a framework in producing the Communications Strategy. This is an exclusive internal document to be used by WCB employees and committees. The strategy identifies; the WCB aims, which groups should be targeted namely Cancer Bank staff and research partners, i.e. WAG, LHBs Health Commission Wales, NHS Trust G.Ps., Universities and voluntary/charitable organisations, opinion formers and general public i.e AMs, MPs councillors, community and voluntary groups, the media and of course the patients who are the key group.

The suggested methodology has been varied; newsletters have been sent (in December) to patients and patient groups, health professionals and the public. Awareness raising occurred at the Cancer Research Wales (CRW) Open Day in January, and a joint press release with CRW and WCB is planned to mark the WCB 2000th patient with patient case studies.

Forthcoming programmes have been planned for 2008/2009 which include exhibiting at the WCI Conference in April, presentations to Patient groups and CHCs, (July 08 funded by CASE) the National Eisteddfod (to be held in Cardiff in August 08) and presentations to Royal College of Pathologists and ISBER in the Spring/Summer 08. Briefings to AMs and politicians of all parties will be sent via the annual report and WORD (Wales Office of Research & Development for Health & Social Care).

The Strategy will be reviewed in May 08 when a further programme of events and projects will be identified and devised and the group will also begin to explore the fund-raising issues, both for project and local fundraising, and how they will be developed.
In the last twelve months IT development has concentrated on closing gaps in the WCB system functionality. The most substantial development was the completion of the Project and Order Management modules and also incorporating the sample reservation functionality.

The forms for recording the clinical dataset for treatment and outcome have been developed to allow the WCB to attach valuable patient follow-up and outcome data to the samples.

The WCB IT team also delivered an electronic laboratory logbook that allows users to trace samples within the laboratory when they have been quality assured or digitally scanned. New Royal College of Pathology (RCP) minimum datasets were implemented, including oesophagus and bladder (Cystectomy).

In addition to the development work the WCB has updated its system documentation so that it better reflects the current state of the evolving system.

The WCB has taken a leading role in the UK Confederation of Cancer Biobanks (CCB) initiative to develop
an e-portal for bio-banks that belong to the confederation. The CCB e-portal search functionality was developed by WCB staff using PHP and MySql. The CCB database is hosted and maintained by the WCB on the WCB webserver. The WCB was also involved in the database design for the portal and is working with the CCB partners to produce a national standard of recording tissue bank samples.

**System Re-write**

Current efforts are concerned with the system re-write in Microsoft visual studio ASP and C# technologies. The system re-write is important for the WCB as it keeps the project in line with the Informing Health Care strategy and development of the CANISC system in Wales. This effort is also crucial as the WCB database program size is no longer suitable for Microsoft Access project file and the Access development platform does not support a multi developer environment.

The new system will also break the dependency on citrix and facilitate potential future co-operation with other tissue banks. The re-write activity included the evaluation of products to speed up the re-write activity, such as Visual Webgui and ComponentArt. Subsequently a prototype system was developed as a proof of concept, mainly for GUI components and AJAX functionality.
Change Management & Maintenance

Last year recorded a reduction in system errors and an increase in change management requests. This trend was expected as the system became more stable and users became more familiar with system functionality. To manage the change request process a new change management module was designed and developed and will be operational in the beginning of 2008-2009. Examples of change requests implemented this year include the addition of recording patients’ involvement in clinical trials and an extension to the QA module to record the percentage of normal epithelium.

Training and System Demonstrations

In the last year nine new users were trained to use the WCB system and two training workshops were delivered. A new multimedia training film was added to guide the users through the process of shipment of EDTA samples to the Gene Park for processing.

This year a number of UK tissue banks came to the WCB to learn from and/or evaluate the WCB IT system. Demonstrations and discussions were conducted with a variety of researchers interested in setting up similar systems and a number of people expressed an interest in obtaining the WCB system to implement in their facility.

IT Governance

The IT section has increased its resilience following the management review report recommendation. In June 2007 a new member of staff was recruited, using the CRW grant, for three years as a designated database manager. A GO-Wales placement was also created and if successful will be translated into a one year contract.

The IT team has also increased involvement with users groups by sending a representative to a monthly local pathology laboratory meeting in Swansea. It has also participated in the CANISC de-Coupling project team meetings to ensure the move of the WCB system to Health Solutions Wales will progress smoothly. Identifying that both CANISC and the WCB require the implementation of the RCP minimum data set has led to the secondment of the WCB database manager to assist in the prototype implementation of the CANISC RCP colorectal module.

CLINICAL TRIALS

The WCB is committed to supporting clinical trials and hopes to facilitate collection of samples for trials through the routine WCB collection. A policy has been formulated that outlines the procedure agreed by the WCB Executive group. Clinical trials consenting patients in hospitals with WCB activity and wishing to source paraffin embedded tissue and/or blood samples should complete a WCB application to register the trial with the bank. The trial consenting nurse should contact a WCB nurse to ascertain whether a particular patient has consented for WCB and, if samples are available, WCB will facilitate use of the samples.
Two trials, SUPREMO and OV07 both recruiting in Swansea, registered with WCB during the last twelve months. SUPREMO is a phase III randomised trial to assess the role of adjuvant chest role irradiation in intermediate risk breast cancer after mastectomy and OV07 is a phase III randomised study of erlotinib versus observation in patients with no evidence of disease progression after first line, platinum based chemotherapy for high risk Stage I and II-IV ovarian epithelial, primary peritoneal or fallopian tube cancer.

Translational research within clinical trials

An increasing number of clinical trialists are becoming more aware of the opportunities to collect prospective samples from the trial cohort for translational research. The Wales Cancer Trials Unit (WCTU) has set up a Translational Working Group to advise trial Chief Investigators and Trial Management Groups on potential translational research which could be linked to the proposed trial. Statistical support and/or statistical analysis advice is available and the translational group will also be able to offer operational quality assurance advice regarding sample handling, storage and processing, as well as ensuring consistency of data analysis. At the design stage of the trial, the group will provide advice on what data should be collected to support the potential translational research. Initially, the translational group will foster trials from the WCTU portfolio. However, this would not be exclusive and encouragement will be given to researchers from Cardiff, the rest of Wales and the UK. Expansion to other trials is expected in the future, and this could include phase I and II. Representatives from WCB sit on the WCTU Translational Working Group and the group is also working to involve scientific investigators in trial design with the long term goal of linking scientific disciplines with trials.

Hosting

The Wales Cancer Bank is continuing to host sample collections attached to clinical trials. Two new trial collections have commenced during the last twelve months and samples also continue to be collected for COIN and XERXES.

COIN

The MRC COIN trial collects paraffin blocks via pathology departments and blood samples. It aims to compare different treatment regimens in the management of inoperable or metastatic colorectal cancer. All patients in the trial receive a combination of oxaliplatin and a fluoropyrimidine, those in one arm are randomised to receive cetuximab, an epidermal growth factor receptor (EGFR) targeted monoclonal antibody. Over 2000 patients have now consented to COIN and 4040 blocks have been received from 1700 patients so far. The blood samples from the trial are being collated in the department of Medical Genetics in Cardiff University for DNA extraction.

XERXES

XERXES (EXamining the role of Early Neoadjuvant and Synchronous Erbitux in Preoperative Chemo-Radiotherapy using Xeloda followed by Excisional Surgery) is a Phase I/II feasibility study of intravenous cetuximab in combination with 5 day weekly oral Xeloda (capecitabine) and preoperative radiotherapy in rectal cancer. It is being run by University College London Clinical trials unit and it aims to evaluate the efficacy and safety of cetuximab in combination with capecitabine in patients with locally advanced rectal cancer. WCB is receiving frozen biopsy material for analysis.
SCOPE 1

SCOPE 1 (Study of Chemoradiotherapy in Oesophageal Cancer Plus or Minus Erbitux™) is a Wales Cancer Trials Unit run study in patients with cancer of the oesophagus for whom it has been decided the best form of treatment is chemo-radiation (treatment that involves giving radiotherapy together [or concurrently] with chemotherapy). It will attempt to answer the question of whether the addition of the monoclonal antibody cetuximab (Erbitux™) improves patient survival compared to standard chemo-radiation alone.

It is known that some cancers grow as a result of activation of a protein on the surface of the cancer cell called EGFR (Epidermal Growth Factor Receptor). It is thought that this is an important mechanism that leads to resistance of cancer cells to radiation. Cetuximab is a treatment that works by preventing activation of this (EGFR) protein. In this study all patients will receive 12 weeks of chemotherapy. Patients will also receive 5 weeks of radiotherapy during the second half of treatment.

Half of the patients will be allocated to also receive cetuximab every week for the 12 weeks of trial treatment. This allocation will depend on chance. The effects of the addition of cetuximab will be analysed to see if it is any more effective and any more toxic than chemo-radiation alone, together with the costs of the different treatment and the effects on quality of life.

ACTION

The Institute of Cancer Research Clinical Trials and Statistics unit is running the ACTION (Adjuvant Cytotoxic ChemoTherapy In Older WomeN) trial, recruiting 200 women over 70 for a pilot study around the UK. The trial is designed to question whether giving a combination of cyclophosphamide and adriamycin is an effective treatment for women aged over 70 diagnosed with early breast cancer. The trial will also investigate whether there are benefits to accelerating treatment (i.e. every two weeks instead of the usual three weeks). If it is found that chemotherapy is acceptable to British women in the 70+ age group and that they cope well with treatment, the information these 200 women contribute will automatically be included in the main ACTION trial. The trial will include 1000 women and will take several years to complete. It will be one of a group of research projects throughout Europe, all aimed at improving treatment for breast cancer patients in the 70+ age group.
ISBER (International Society for Biological and Environmental Repositories) was set up in 2000 to serve as an international forum to address technical, legal/ethical and managerial issues relevant to repositories of biological and environmental specimens. ISBER has published guidance for human banks entitled ‘Best practices for repositories’.

The 2007 ISBER international meeting took place at the end of May. This was only the second meeting of the society to take place outside the USA and the choice of venue — Singapore, proved to be very popular with delegates especially those from Australia and the Far East. This first meeting in the Asia Pacific area attracted 263 participants from 26 countries and gave a unique opportunity to network with both well established biobanks and new and emerging banks from around the world.

Professor Gerry Thomas and Dr Alison Parry-Jones represented the WCB at the meeting and gave three presentations. They each spoke in the legal and ethics session and Prof Thomas gave an oral presentation in the quality assurance session.

The 2008 annual ISBER meeting took place in Bethesda, Maryland on 18-21 May 2008.

The third annual NCRI conference took place between 30th September and 3rd October 2007 at the International Convention Centre in Birmingham. WCB once again exhibited at the conference and welcomed many delegates to the stand.

The bespoke WCB tracking and sampling management database was demonstrated on the exhibition stand for the first time this year which proved to be very popular and generated a lot of interest. Daniel Naeh, WCB IT Manager also gave a poster presentation, ‘Developing an information management system for a bio-bank’.
Professor Gerry Thomas organised and chaired the parallel session on ‘Biobanking’. The session involved speakers from Australia and France as well as the UK and introduced the industry perspective through a talk given by Dr Chris Womack from AstraZeneca.

Mr Neil Formstone, WCB patient representative gave an inspiring talk on the final day in the ‘Patients, Research and Involvement’ parallel session. The session highlighted the increasing ways that patients are becoming actively involved in research and the many attributes they bring to the process.

WCB will be exhibiting at the third annual conference in 2008 and will be at stand number 24, 5th - 8th October 2008.

Quality Matters

The Confederation of UK Cancer Biobanks organised a two day quality focussed workshop, under the auspices of the NCRI, in January 2008. Members of the confederation, along with invited speakers, gave a variety of presentations related to legal requirements and quality management systems on day one and sample quality and quality assurance processes on day two. The Wales Cancer Bank gave three presentations; Dr Parry-Jones spoke about human tissue resources working under the Human Tissue Act, Mr Naeh demonstrated the design principles and issues involved in creating a bespoke database for biorepositories and Professor Thomas gave a talk entitled ‘RNA QA – How low can you go?’ Professor Mason chaired the ‘Tissue Collection, Formalin and beyond’ and the ‘Quality Assurance in Pathology - What should we record?’ sessions on day two and introduced four very interesting talks, including Stephen Hewitt from the National Cancer Institute in the USA, talking about ‘Quality metrics of tissue beyond histology’.
LOOKING AHEAD

Patient recruitment

The graph below predicts a steady increase in patient recruitment over the coming twelve months. The target recruitment has been set at 3100 patients to allow for staff changeover periods which result in fewer patients consenting due to induction and training schedules.

Raising awareness

In line with the communication strategy, drafted by the Lay Liaison and Ethics group, the Wales Cancer Bank will continue to attend and exhibit at conferences and events. Three events are currently being targeted during 2008, as well as the WCB’s regular exhibition stand slot at the NCRI conference in October.

WCI conference

The Wales Cancer Institute in partnership with the Wales Cancer Alliance, who are a consortium of cancer charities, are organising a joint cancer conference in Cardiff at the end of April 2008. As a constituent member of the WCI, the WCB will be exhibiting at the conference and Professor Mason is due to give an update talk on the progress of the bank in the translational science session.

ISBER

The 2008 Annual ISBER conference is being held in Bethesda, Maryland in May 2008. Professor Gerry Thomas has been invited to contribute to a workshop session to highlight how to promote biobanking to institutions, the public and researchers. The conference gives unparalleled opportunities to network with other international biobanks, learn from their experiences and pass on valuable information to new and emerging banks around the world.
Eisteddfod

The National Eisteddfod of Wales is scheduled for 2nd – 9th August 2008 and is being held in Cardiff. The WCB will be exhibiting at the Eisteddfod alongside Cancer Research Wales. A stand at the Eisteddfod will give WCB access to a wide spectrum of the public and will greatly increase the profile of the bank.

Ongoing challenges

In order to move towards becoming a population based tumour bank the WCB needs to expand both the tumour types collected in the current recruitment sites and also increase the number of hospitals involved with the bank. Increased funding will be necessary and WCB has applied for further funding and is awaiting the peer reviewed decision.

Standard operating procedures are the backbone of a well organised, standardised biosample collection. The WCB SOPs are freely available on the website (www.walescancerbank.com) following a simple registration process. The annual review of SOPs will take place over the summer of 2008 to ensure all documents are up to date, accurate and applicable.

The WCB's administrative central office will be moving premises in the summer of 2008 due to the expiration of the lease on unit 18 in Cardiff Medicentre. The new location is currently under discussion but it is hoped that a suitable, permanent office space can be sourced to ensure a smooth transition.

Database rewrite

A major goal of the coming twelve months is to complete re-writing the WCB database onto a web accessible ASP .NET platform. A twelve month developer post is currently out to advert to assist the IT Manager with this substantial piece of work. The re-write will stabilise the database and allow password protected access over the internet. In time, this will also allow the digital images of the H&E slides to be displayed for researchers to view prior to sample selection.

Imaging

Due to software issues reducing the capability of the digital imaging systems a backlog of slides require imaging. One goal of the next reporting year is to utilise the now fully functioning system and ensure all H&E slides are imaged for integration onto the new database platform.

TARGETS FOR 2008/9

- Accrue 3100 patients in total
- Supply six projects with biosamples
- Develop a web accessible version of database
- Collate clinical data for patients consented to end 2007
- Continue to raise awareness and promote WCB
## Assembly Funding

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Application for tissue to support a programme of exploratory research projects that in turn, support and optimise the early stages of cancer drug discovery and development and also to gain information of relevance for design of clinical studies, e.g. “Proof of Mechanism, Proof of Principle and Proof of Concept”. Research studies will lead to a better understanding of the natural history of cancer and may generate hypotheses on the predictive value of specific molecular features for the natural history of specific cancer types. This will offer the potential of identifying patients with those tumour types considered most likely to benefit from “molecularly targeted therapies”. Some of the studies will be carried out at AstraZeneca and some in collaboration with scientists in Wales. The application is therefore not for a specific project with defined research outcomes, but for acquisition of tissues to enable assessment of utility and reliability of marker detection by a variety of methods in a variety of cancers and normal tissues. The technologies used will have been tried and tested using cell lines where appropriate or will use antibodies and probe sets defined by others and reported in the literature.

The primary objective of the initial studies outlined here is to investigate molecular targets from selected cell signalling pathways that drive tumour cell proliferation, survival, angiogenesis and invasion. A secondary objective will be to correlated selected molecular biomarkers with clinico-pathological parameters.

Epigenetics, the reversible heritable changes in gene function that occur without a change in DNA sequence, is an area of outstanding interest in oncology. It is now widely accepted that cancerous cells display a range of epigenetic abnormalities and that these alterations represent changes which have functional impacts on cellular behaviour. There have been successes in the targeting of drugs to epigenetic pathways in cancer. Decitabine is a DNA methylation inhibitor licensed by the FDA in the treatment of myelodysplastic syndromes, and the histone deacetylase inhibitor, vorinostat, has been licensed for use in patients with cutaneous T-cell lymphoma.

Although the results with the drugs mentioned above are very encouraging, and provide proof of principle in the application of epigenetic therapies, they are unlikely to be the most effective epigenetic modifiers that will be developed. To generate more effective drugs in this field, we require a much greater understanding of the complex networks of gene regulation and how these are disrupted in disease. CellCentric are working with a variety of scientists who are approaching epigenetics from a mechanistic rationale, identifying key regulatory genes and proteins in defined cellular epigenetic pathways. The information gained from these studies is extended to analyse the impact of these genes in abnormal epigenetic events in cancer, such as aberrant silencing to tumour suppressors. A number of candidate oncology epigenetic genes have been identified by this approach and we now wish to move into more advanced target validation and therapeutic product development.

To characterise local and systemic immunity in prostate cancer and the immunological implications of androgen deprivation therapy (ADT), leading to the rational design of novel immunotherapy of prostate cancer in conjunction with existing therapies.

To test whether differences in activation of the EGF, Notch and Wnt pathways could explain the differences in growth patterns observed in basal ca.

To identify genetic aberration patterns in human breast cancers with RET expression or RET/PTC rearrangement in comparison to tumours without RET expression. This will uncover molecular mechanisms related to RET expression during breast cancer development. Further studies could then relate the observed aberration patterns with clinical outcome and identify genetic markers which are of prognostic relevance in these tumours.

Paraffin-embedded tissue sections from 17 invasive ductal breast carcinomas with known RET expression status. DNA samples from matching samples had been received for array CGH analysis. The array CGH analysis is now completed and revealed two clusters of tumours which are characterized by specific aberration patterns. Paraffin sections needed to confirm these characteristic changes in each cluster by interphase FISH analysis with the appropriate BAC clones.
07/013  Dr Michaela Aubele - GSF-National Research Centre for Environment and Health, Germany

In this study we aim to perform protein profiling using 2D gel (DIGE) and mass spectra on primary breast carcinomas. Analysis will be performed comparing the protein expression pattern of triple-negative tumours (Her2- ER- PR-) versus tumours being positive for one of the parameters, respectively (Her2- ER+ PR-)/Her2- ER- PR+/Her2+ ER- PR-). The identified differentially expressed proteins will be characterised and analysed for their potential as a new therapy targets using data bases.

07/014  Dr Simak Ali – Imperial, London

Prostate-Specific Antigen (PSA) testing is widely used in the diagnosis of Prostate Cancer and in the monitoring of treatment for the disease. However, although the test is comparatively simple, PSA testing fails to identify a significant proportion of aggressive cancers, while only about a third of men with a ‘positive’ PSA test have tumour. Additionally, of men who are initially treated for prostate cancer, about a quarter require additional treatment, presumably due to recurrence of the disease. Together, these findings highlight the urgent need for new tests, which not only detect prostate cancer but can also help distinguish indolent from aggressive disease. In order to identify new, more specific diagnostic markers, we have been studying the changes that androgens, the hormones that drive prostate cancer growth, bring about to the types and amounts of proteins made by prostate cancer cells. One particular protein was made to very high levels upon treatment of prostate cancer cells with androgen. This protein is found in body fluids, including serum at low levels and is easy to detect. We now propose to evaluate this protein as the basis of a new diagnostic test for prostate cancer, by measuring levels in patient sera. We will also carry out experiments on prostate cancer cells grown in the laboratory to see if the protein might play a role in development of the disease itself. Collectively, the potential benefits of this research for men affected by prostate cancer will be an advance in our understanding of the mechanisms underlying prostate cancer development and the development of a new test for prostate cancer diagnosis.

07/015  Dr Duncan Baird – Cardiff University

Telomeres prevent the natural ends of chromosomes from fusing; chromosomal fusion can lead to genomic instability that may drive the earlier-stages of cancer. It is considered that many different types of cancer can be initiated by telomeric instability and fusion. We have developed technology, which allows us to detect telomere fusion events from single DNA molecules. Our data from cells grown in vitro provides a definition of the length at which telomeres lose their protective function, and provides insights into the mechanism that my cause fusion. Importantly, we have also shown that in normal human cells, telomeres can suffer sudden large-scale deletion events, which created severely shortened telomeres that can then fuse. Thus telomeric deletion and fusion may represent the earliest genetic lesions that can lead to cancer; we therefore wish to establish if our telomeric fusion assay could be useful as prognostic/diagnostic marker. Before we can consider doing this, we need to ascertain if telomere fusion is present in tumour samples. If we can detect telomere fusion in these samples it will inform us about the biology of this mutational event, but importantly will provide evidence that will allow us to start to look for these events in early-stage lesions.

07/015(A)  Dr Duncan Baird - Cardiff University

This application is for material to be used to define the basal level of telomere instability and fusion in normal colonic mucosa; this will allow the interpretation of significant changes in the frequencies or types of these events in material derived from colorectal carcinoma.
Chair - MR CALUM CAMPBELL

Calum Campbell is currently Assistant Chief Executive of the newly formed Abertawe Bro Morgannwg University NHS Trust, which is the largest Trust in Wales, serving a population of around 600,000 people and employing 16,000 staff.

Prior to moving to Wales as Director of Operations and subsequently Acting Chief Executive at Swansea NHS Trust, Calum undertook a variety of roles within the NHS in Scotland, including time spent as Director of Nursing at Dumfries and Galloway Primary Care Trust, Director of Strategy at Grampian, and Director of Governance and Delivery at Argyll and Clyde. In addition, Calum has also spent time as a professional footballer.

Vice Chair - MR NICK ROSS

Nick Ross is a broadcaster best known for documentaries and live events and for BBC1’s Crimewatch UK which he presented since its inception in 1984 until 2007. He has served on numerous government inquiries and committees including the Cloughie Committee into the ethics of gene therapy, and has been a member of the Nuffield Council on Bioethics and several other national ethics boards including those for the Royal College of Physicians and the Academy of Medical Sciences inquiry into the use of non-human primates in research. He has twice been chairman of the 2006 Royal Society Science Book Prize, is Guest Director of the 2008 Cheltenham Science Festival, and inspired the Jill Dando Institute of Crime Science at UCL where he is an honorary fellow and patron of around twenty charities.

PROFESSOR DAVID CAMERON

Professor David Cameron took up his post as the new Director of the National Cancer Research Network (NCRN) on 1st November 2006. The National Cancer Research Network was established in 2001 in response to the need to improve NHS capacity to facilitate cancer clinical research and to date has more than tripled the rate of patients being recruited into cancer clinical trials. It currently facilitates the delivery of a portfolio of over 250 clinical trials and other well-designed studies in cancer through 41 Local Research Networks which cover the whole of the UK.

Professor Cameron was formerly Consultant for Medical Oncology at Western General Hospital in Edinburgh, UK. He combined the role with that of medical lead for the South East Scotland Cancer Research Network. Prior to this, Professor Cameron was a Senior Lecturer in Medical Oncology at the University of Edinburgh. Professor Cameron received his medical degree in 1986 and an MD with distinction in 1997. Professor Cameron is a member of the American Society of Clinical Oncology, the European Society for Medical Oncology and the Breast Cancer Group of the European Organisation for Research and Treatment of Cancer (EORTC) Breast Cancer Group. Professor Cameron is active in a number of clinical trials and is a member of the steering group for three UK adjuvant breast cancer trials (TACT, TANGO and TEAM), the international HERA trial of Herceptin, and is Principal Investigator on the current UK adjuvant TACT2 breast trial.

DR SUSAN DENMAN

Susan started her career in pharmaceuticals research, specialising in particle size analysis for ICI Pharmaceuticals in Macclesfield. She then studied for a degree in Education and taught in the primary and secondary school sectors in Nottingham for ten years, teaching science subjects and coordinating health education. She was seconded in the late 1980s to Nottingham University to evaluate the National Drug Education Coordinators Initiative for Nottinghamshire County Council. This piece of work formed the basis of her MPhil thesis.

Susan was then appointed to the post of Trainer and Adviser in Health Promotion, targeting young people, at Nottingham Community Health Trust. In 1992 she returned full time to research and was appointed Lecturer in Health Promotion in the Department of Public Health Medicine and Epidemiology, at Nottingham University’s Medical Faculty. She was a member of the team that planned and launched Nottingham University’s European Master of Public Health degree course which was a multi-disciplinary course for researchers, policy makers and practitioners across the sectors. Her research interests were in the area of research and evaluation related to children’s health and health promotion, which was also the topic of her PhD thesis and book.

In 2001 she moved to Wales to set up the Research, Monitoring and Evaluation Unit for the Welsh European Funding Office and in 2004 she was appointed as Deputy Director of the Wales Office of Research and Development in Health and Social Care (WORD). Her task was to build a team to develop and implement the strategy for R&D in Wales. Her title under the recent internal restructuring is Head of WORD.

PROFESSOR MITCHELL DOWSETT

Mitch is Professor of Biochemical Endocrinology (1994) and has been the Head of the Academic Department of Biochemistry at the Institute of Cancer Research and Royal Marsden Hospital since 1990, and Professor of Translational Research in the Breakthrough Breast Cancer Centre since 2006. He received his BSc. (Zoology) from Imperial College at London University and his Ph.D. from Chester Beatty Cancer Research Institute at London University.

Among his active membership of numerous
cancer committees he is a board member of the Breast International Group (BIG), and sits on the Executive/Steering Committees of several clinical trials. These include chairmanship of the Pathology Subcommittee of the ATAC trial, the largest trial of adjuvant therapy conducted in breast cancer and co-chair of the Translational Research Committee of the HERA Trial.

Professor Dowsett is the founding chairman of the NCRI Translational Clinical Study Group that aims to enhance the value of translational research in the UK’s national portfolio of phase III clinical trials in cancer. He has authored over 460 published papers related to breast cancer, and is the 2007 William L. McGuire Memorial Lecturer.

Professor Dowsett’s research group of c. 25 people focuses almost exclusively on breast cancer and predominantly on hormonal aspects of the disease and biomarkers of response. He has been closely involved with the development of aromatase inhibitors over a period of 25 years. These drugs have been shown to have superior efficacy to tamoxifen.

**DR RICHARD GREVILLE**

Richard started as Director ABPI Cymru Wales, in May 2003 after serving an apprenticeship of 15 years within the pharmaceutical industry. Since then he has enjoyed the challenges of raising the understanding and profile of the pharmaceutical industry with a variety of stakeholders, including professional bodies, Welsh Assembly Members and the NHS in Wales. In 2007, Richard added the role of Director of ABPI Northern Ireland to his responsibilities.

Richard has recently been re-elected as Vice Chair of the NHS-Industry Forum, working alongside colleagues from industry and the NHS in Wales. He is also a member of the Advisory Board of the Wales Office for Research and Development in Health and Social Care (WORD) and the Commercial Committee of the Clinical Research Collaborative (CRC) Cymru.

**DR JANE HANSON**

Dr Hanson has worked in NHS since 1977 spending the first 18 years in cancer research which involved working with leading cancer clinicians and scientists in Cardiff and Swansea, Cambridge and London and included research as part of a European Group. In 1996, following publication of Calman Hine Report on Cancer Services she left research and moved to policy/strategy as Programme Co-ordinator for the Cancer Services Expert Group working with cancer policy leads in the Welsh Office/Assembly Government. She has set up and supports all Wales multiprofessional advisory structure involving cancer experts and patients from across Wales to advise policy makers and support the 3 regional Cancer Networks. This includes setting standards for cancer services and benchmarking those services via national clinical audit. Wales has been at the forefront of cancer standards development, clinical trials, cancer genetics and cancer information to name just a few areas and it has been rewarding to be part of the various teams that have achieved this.

In 2001 she took on the additional role as Lead Advisor for Cancer and Cancer Services to ensure advice from the clinical advisory groups is communicated to Assembly colleagues in developing policy. In relation to the other home countries, she has established extensive links with clinical leads and policy colleagues in England and Scotland which has enabled good practice in all countries to be recognised and shared.

**PROFESSOR JOHN HARRIS**

Professor Harris is the Director of The Institute for Science, Ethics and Innovation and Lord Alliance Professor of Bioethics, School of Law at the University of Manchester. He is joint Editor-in-Chief of The Journal of Medical Ethics and has been a member of The United Kingdom Human Genetics Commission since its foundation in 1999 and is a Member of the Medical Ethics Committee of the British Medical Association.

**Recent Books Include:**


**PROFESSOR TONY HAZELL**

Tony began his career as a Probation Officer in Nottinghamshire in 1970. He also worked for a number of Local Authority Social Services Departments before beginning a career as an academic. He spent 18 years with the University Of Wales Institute Cardiff retiring in 2004 from the post of Assistant Principal. During this time he was actively involved in the University of Wales, holding membership of a number of Committees. He has also been a member of several committees of the Higher Education Funding Council for Wales and of the Quality Assurance Agency for Higher Education (QAA).

In 1998 he was appointed as a Non Executive Director of the Velindre NHS Trust and was subsequently appointed as Chairman in 2001. In the same year he was appointed as a Lay member of the Shadow Health Professions Council and was appointed to the new Council in 2002.

**DR DAVID MORREY**

Dave has been the Head of the Clinical Information Unit and the Director of Information Management & Technology in Velindre NHS Trust since 1991. Previous to that he was a Clinical scientist in Velindre (1975-1991), a Computer automation engineer in GEC Process Automation, Leicester (1974-1975) and a researcher in the Medical Research Unit of the Pneumoconiosis unit in Llandough hospital, Cardiff (1972-3).

**GRAEME POSTON**

Graeme Poston is Chairman of the Division of Surgery, Digestive Diseases, Critical Care and Anaesthesia at University Hospital Aintree (UHA) Liverpool UK, Chairman of the Liverpool, Mersey and North Cheshire
Radiotherapy Service, Velindre Hospital, Cardiff. During the period 1966–73 he obtained an MSc and PhD. From 1973–1983 he was Principal Scientific Officer and Head of the Immunology Department at Velindre Hospital where his research activities were focused on the development of immunodiagnostic techniques for the detection of malignant disease. During this period Dr Pritchard was the first scientist in the UK to be awarded a research contract from the National Cancer Institute, USA.

In 1984 Dr Pritchard was appointed Chief Scientific Adviser to the Welsh Office, Cardiff where his responsibilities covered all aspects of science within the NHS in Wales. He continued to maintain his interests in cancer services and was responsible for the development of standards for mammographic and cervical screening for the UK screening programmes – The Pritchard Reports. Dr Pritchard was appointed as Project Manager to implement the Calman Hine recommendations in Wales as set out in the Cameron Report on Cancer Services published in November 1996.

On retirement in 2002 Dr Pritchard joined the Board of Trustees of Cancer Research Wales. He is currently Chairman of the Scientific Committee and Vice-Chairman of the Management Board. His other interests include music, photography, amateur radio and tennis.

PROFESSOR GORDON STAMP

Professor Stamp has been Chairman of Histopathology at Hammersmith Hospital since 1997. Since his arrival at the pathology department he has been instrumental in the turnaround of the previously financially underachieving department and has coordinated a successful multidisciplinary research programme (peer reviewed grant income £2.5M 1997 – 2002) in cancer biology and inflammation/immunity, personally supervising 6 PhD students. He has developed the Human Biomaterial Resource Centre (HBRC), a UK/MRC model for Ethical and Clinical Governance issues in human cells and tissue in Research, Teaching and Diagnosis and has specialist pathology expertise in oncological diagnosis with lead roles in skin, gastrointestinal and other cancers.

He is a scientific advisor in Pathology to Cancer Research UK and is Chairman of Histopathology Examinations in the Royal College of Pathologists (implementing a radical change in the examination structure to facilitate training and academic development in Histopathology). He has developed internationally recognised specialist training courses in pathology and cancer biology and has written 100 expert reports for legal counsel in the assessment of professional competence in Histopathology. He is the Director of postgraduate training courses in pathology (Hammersmith short courses) and has worked closely with industry. He has a number of active collaborations and has acted as a consultant generating over £2.6M research income for the Department via these interactions, covering the fields of biosourcing, genomics / proteomics and molecular therapeutics/ diagnostics. Professor Stamp has authored 162 peer reviewed scientific publications.

Max Wilkinson has been a researcher in the biomedical domain for the past 18 years. Principally a molecular biologist he has applied cutting edge technology in the fields of cyanobacteria, mycology, vertebrate virology, transplantation, diabetes and presently is a member of the Informatics Coordination Unit at the National Cancer Research Institute. Dr Wilkinson took his PhD from University College London’s Medical School in applying bioinformatics to transcriptomic analyses in disease models. As a member of the NCRI Informatics Initiative Dr Wilkinson wrote a training review to compliment the strategy to build a fully integrated cancer informatics platform in the UK. Presently he is focussing on bridging the divide between individuals involved in building informatics technology solutions with those that ‘use’ such technology in the research and clinical environments. He regularly speaks at conferences and meetings to communicate developments in the Initiative and encourages participation from all areas of cancer research.
The annual audit schedule in 2007 took place between 13th August and 22nd November. The Cardiff, Withybush, Swansea, Bangor and Royal Gwent sites were visited by the WCB Director, Director of Scientific Services, Manager and IT Manager. A small random selection of donations was inspected at each site and a list of incomplete data generated to show donations with no samples, no diagnosis, questionable ischaemic times, no questionnaire or no pathology report after two months.

Four sites have been collecting for at least thirty months and the 2007 audit was the third such internal inspection during this time. Royal Gwent has been collecting samples for 11 months and this was the first internal audit at the site. The workflows and role responsibilities of staff at each site have local variation in order to fit in with routine clinical practice. Role responsibilities at each site are documented and included in the Service Level Agreements with each NHS Trust.

Each site is covered by a HTA licence to store tissue for research purposes. No major issues were highlighted that could potentially jeopardise the licence at any site. All sites are working within local and WCB guidelines on Health and Safety and adhere to WCB Standard Operating Procedures, although staff are reminded to ensure that they are fully conversant with all SOPs.

Audit Schedule

<table>
<thead>
<tr>
<th>SITE</th>
<th>DATE OF AUDIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiff (UHW)</td>
<td>13th August 2007</td>
</tr>
<tr>
<td>Royal Gwent</td>
<td>14th September 2007</td>
</tr>
<tr>
<td>Bangor</td>
<td>28th September 2007</td>
</tr>
<tr>
<td>Swansea</td>
<td>15th October 2007</td>
</tr>
<tr>
<td>Withybush</td>
<td>22nd November 2007</td>
</tr>
</tbody>
</table>

A number of data queries were run to check integrity of data at each site:

1. Female prostate cancer
2. Incomplete records, i.e those records (donations) having an incomplete record marker recorded against them
3. Male breast cancer cases
4. Donations with missing diagnosis
5. No blood samples for donations over 15 days old
6. No pathology reports for donations over 15 days old
7. No tissue sample over 15 days old
8. Samples without a donation
9. Ischaemic time

Similar data queries will be generated every 3 or 4 months and sent to each site as interim data quality/completeness checks.

General

Family history questionnaire information only being recorded on database if a member of the immediate family recorded as having cancer. If questionnaire returned but no incidence of cancer then as nothing is recorded on database it shows as ‘no questionnaire’. Need to put tick box to show questionnaire returned but with no relevant information.

Family history questionnaires showing only the year of death of a relative should be recorded as 01/01/xxxx.

Consent form boxes ticked not initialled.

Several specialities not on database so pathology reports and diagnosis not able to be completed. Information is held on paper copies but transfer to database not possible. Therefore a number of the missing records highlighted on the audit paperwork are as a direct consequence of datasets not being available on database.

Still some doubt in centres regarding creating shipments for internal transfer of samples.
Actions

To be implemented centrally:

- Discuss whether appropriate to move ‘time harvested’ field to a page on the database used by laboratory staff
- Look at workflow in sites to ensure a full range of biosamples is collected in the majority of cases
- Implement 3 monthly local sample tracking exercise. Database manager to generate missing data information and identify five random numbers for local audit. Report to be submitted to central office
- Clarify prefixes being used for lymph node and polyp samples
- Discuss need for paper record of H&E preparation
- Ensure Royal Gwent storage layout is incorporated onto database
- Put tick box on database to show family history questionnaire returned to stop questionnaires with no relevant information being flagged as missing
- Change Royal Gwent address on HTA licence
- Training provided by IT staff for shipment of samples

To be implemented at sites:

- Ensure patient dates consent form themselves
- Ensure the boxes on the consent forms are initialled not ticked
- Ensure a copy of the consent form is placed in the patient’s notes
- All forms (paraffin, frozen etc) must have a WCB number
- All forms detailing sample handling, time information etc, must be signed by the member of staff carrying out the procedure
- Ensure training and SOP knowledge is up to date

Conclusions

All sites are generally operating well and the audit gave a good opportunity for the exchange of views and discussions about local practice and the project in general. The action points identified involve both central and local activity. It is hoped that all points can be actioned by the end of March 2008. Some sites have experienced a complete staff turnover during the audit year and this has impacted on the activity.

The audit highlighted a number of issues to be addressed to ensure completeness of data and which encourage regular reviews of missing information. The pilot scheme to back fill clinical data now needs to be rolled out to other sites to increase the annotation of the samples. A data entry post will be started early in 2008 to collate and input follow up data.

Sample tracking procedures should be reinforced to ensure the exact location of every sample is known and quarterly internal audits will be implemented in 2008.

The management team wishes to express its thanks to all staff, not only for their hospitality during the audit visits, but for their continued enthusiastic support for the project.

Notes by centres

Cardiff (UHW)

The data queries were run against the live WCB database on 10th August 2007 and the results are outlined below.

1. Female prostate cancer – none
2. Incomplete records – 20 instances from Cardiff were found
3. Male breast cancer – n/a, breast samples not collected in Cardiff
4. Donations with missing diagnosis – 9 instances were found at Cardiff
5. No blood samples over 15 days old – 33 instances were found at Cardiff
6. No pathology reports for donations over 15 days old – 16 instances were found at Cardiff
7. No tissue sample over 15 days old – 4 instances were found at Cardiff
8. Samples without a donation – none
9. The Ischaemic time query returns results for those donations that have either a negative ischaemic time or the ischaemic time is greater than 3 hours - none

A list of the missing data was left with the WCB technician to address. In addition, 4 WCB numbers from the last year were randomly chosen to check the data and sample tracking. Numbers generated were 99, 100, 212, and 220. An additional sample, 226 was subsequently checked.

Site file was present and up to date with SOPs etc

**Donation 99**
- All paperwork present – blood form shows EDTA samples taken from patient and control but not present on database report because they have been transferred to the Gene Park for extraction
- Query over coordinates of frozen normal samples. Three samples obtained and database coordinates show correctly as 47-49 but paperwork coordinates show as 46-49
- H & E slides present but not on database. (Noted – the project has no paperwork to record H&E slide preparation)

**Donation 100**
- All paperwork present although boxes on consent form ticked instead of initialled
- Query raised over annotation of prefix of lymph nodes and polyp samples. (Noted – need to check consistency of prefix across sites and between database and paper records)

**Donation 212**
- All paperwork present

**Donation 220**
- All paperwork present

**Donation 226**
- EDTA samples – query over numbering. Samples from two different donations from Llandough originally both given same number (223). Two samples subsequently renumbered (226). Agreed that correct numbering cannot be guaranteed, therefore central office to issue request for all blood related samples (EDTA and serum) from donations 223 and 226 to be destroyed

Workflow in UHW, especially for donations originating in Llandough, needs to be revised, too many individuals involved in process increases capacity for error. The laboratory post has moved (since the UHW audit) to an NHS post in October 2007 and a nurse post has been recruited with a December 2007 start date. These two measures should mitigate the problems encountered in the audit.

**Royal Gwent**

The data queries were run against the live WCB database on 11th September 2007 and the results are outlined below.

1. Female prostate cancer – none
2. Incomplete records – 8 instances were found
3. Male breast cancer – n/a, not collecting breast
4. Donations with missing diagnosis – 5 instances were found
5. No blood samples over 15 days old – none
6. No pathology reports for donations over 15 days old – none
7. No tissue sample over 15 days old – none
8. Samples without a donation – none
9. The Ischaemic time query returns results for those donations that has either a negative ischaemic time or the ischaemic time is greater than 3 hours - none
10. Family History missing– 11 instances were found

A list of the missing data was left with the nurses to address. (Noted – family history questionnaires were present for some of the donations listed as missing, point 10 above, but because they contained no relevant information nothing was entered on database, therefore query showed no questionnaire. Needs to be altered to record questionnaire present but no relevant data). In addition, 5 WCB numbers from the last year were randomly chosen to check the data and sample tracking. Numbers generated were 8, 37, 42, 86 and 90.

Site file was present and up to date with SOPs etc
Donation 008
- All paperwork present
- Noted – patients should date consent forms themselves
- One too many copies of consent form in file – check copy has been put in patient’s notes
- Only year of death detailed on family history questionnaire so needs to be entered on database as 01/01/xxxx
- Pathology report not on database because bladder dataset not yet completed on database

Donation 037
- All paperwork present
- Check copy of consent form is in patient’s notes

Donation 042
- All paperwork present
- Query over which copy of consent form was given to patient, need to check a copy in patient’s notes
- Family history questionnaire present but no relevant data

Donation 086
- All paperwork present
- Bladder sample so no pathology information on database

Donation 090
- All paperwork present
- Family history questionnaire given to patient but not yet returned

Storage coordinates for paraffin blocks and slides does not conform to layout on database due to smaller storage cabinets. Detailed layout to be sent to DN for inclusion on database. All blocks to be barcoded and scanned in once database updated with site specific storage layout.

Blood samples are being stored in the haematology department. Paraffin blocks and slides need to be co-located to ensure HTA licence conditions are met. Storage address needs to be altered on licence to reflect storage in haematology rather than pathology.

**Bangor**

The data queries were run against the live WCB database on 26th September 2007 and the results are outlined below.

1. Female prostate cancer – this query produces no results
2. Incomplete records – 21 instances were found
3. Male breast cancer – no instances were found
4. Donations with missing diagnosis – 1 instance found
5. No blood samples over 45 days old – 49 instances were found
6. No pathology reports for donations over 15 days old – 13 instances were found
7. No tissue sample over 45 days old – 8 instances were found
8. Samples without a donation – no instances were found
9. The Ischaemic time query returns results for those donations that has either a negative ischaemic time or the ischaemic time is greater than 3 hours. 2 results were found with negative times
10. Family History missing - 62 missing forms

A list of the missing data was left with the WCB lab staff to address. In addition, 5 WCB numbers from the last year were randomly chosen to check the data and sample tracking. Numbers generated were 137, 202, 224, 228 and 229.

Donation 137
- All paperwork present
- One more normal block on paperwork than database - issued

Donation 202
- All paperwork present
- One tumour block issued so paperwork showing more than database

Donation 224
- Paperwork present except pathology report

Donation 228
- Control consent form not signed by consenting nurse
- No surgeon form

Donation 229
- All paperwork present

Clinical information data capture form to be forwarded to Bangor to start collecting data.
Swansea

The data queries were run against the live WCB database on 11th October 2007 and the results are outlined below.

1. Female prostate cancer – none
2. Incomplete records – 168 instances were found
3. Male breast cancer – 3 instances were found
4. Donations with missing diagnosis – 55 instances were found
5. No pathology reports for donations over 15 days old – 120 instances found
6. No tissue sample over 15 days old – 1 instance found
7. Samples without a donation – none
8. The Ischaemic time query returns results for those donations that has either a negative ischaemic time or the ischaemic time is greater than 3 hours – none
9. Family History missing – 153 instances were found

A list of the missing data was left with the WCB staff to address. In addition, 8 WCB numbers from Singleton in the last year and 8 WCB numbers from Morriston in the last year were randomly chosen to check the data and sample tracking. Numbers generated for Singleton

Singleton

Donation 432
- Paperwork present except for theatre form (not routinely returned in Swansea)
- No tissue taken

Donation 454
- Paperwork present except for theatre form

Donation 501
- Paperwork present except for theatre form
- No signature on pathology frozen form to confirm who processed and stored tissue

Donation 556
- All paperwork present
- No tissue, tumour too small

Donation 578
- All paperwork present

Donation 586
- Paperwork present except for theatre form
- Boxes on consent form ticked not initialled
- Blood samples part of bespoke collection already shipped but not recorded on database

Donation 626
- Paperwork present except for theatre form
- Sentinel node surgery so no fresh tissue

Donation 730
- All paperwork present

The 3 male breast cancers were confirmed to be male donations. Query over donations where no samples are collected because of ‘open and shut’ surgery or indefinite delays to surgery, should they be left on the system? Agreed to keep on database for audit purposes and review in 12 months.

Morriston

Donation 444
- Paperwork present
- Only normal tissue taken as not enough tumour

Donation 491
- Paperwork present
- Insufficient tissue to take sample

Donation 524
- Paperwork present

Donation 528
- Paperwork present
Donation 560
- Paperwork present
- No tissue, tumour too small

Donation 603
- Paperwork present
- Frozen pathology form signed but not dated

Donation 652
- Paperwork present
- Box on consent form to ask partner not initialled but control consent obtained and samples donated

Donation 744
- Paperwork present

Time harvested field is completed by laboratory staff but is currently on a page on the database that lab staff do not normally need to go to. Query over whether this field should be moved onto a different page.

Withybush
The data queries were run against the live WCB database on 20th November 2007 and the results are outlined below.

1. Female prostate cancer – none
2. Incomplete records – 18 instances were found
3. Male breast cancer – none
4. Donations with missing diagnosis – 1 instance was found
5. No pathology reports for donations over 15 days old – 60 instances found
6. No tissue sample over 15 days old – 3 instances found
7. Samples without a donation – 3 instances found
8. The Ischaemic time query returns results for those donations that has either a negative ischaemic time or the ischaemic time is greater than 3 hours – 3 instances found
9. Family History missing – 40 instances were found

A list of the missing data was left with the WCB staff to address. In addition, 7 WCB numbers from Withybush in the last year were randomly chosen to check the data and sample tracking. Numbers generated were 215, 228, 229, 244, 251, 277 and 311.

Donation 215
- Paraffin and frozen forms did not have WCB number
- Sample FT2A missing from freezer (and no associated H&E slide on database)

Donation 228
- Different dates on consent form, nurse dated 18/12, patient dated 19/12
- Paraffin form originally recorded samples and storage coordinates but crossed out and ‘insufficient sample’ annotated on form but there are samples in previously mentioned coordinates

Donation 229
- Date of consent put in information sheet version number date space on consent form

Donation 244
- No date next to patient consent

Donation 251
- Paraffin form shows 7 paraffin blocks but database shows 8 and 8 present in cabinet

Donation 277
- All paperwork complete
- Surgeons forms not regularly completed

Donation 311
- Paperwork complete
- No frozen sample as came from theatre in formalin

Noted that very few donations had blood samples. None of the randomly audited numbers had blood samples and for donations 200 - 240 only 17 had associated bloods. Post operative serum generated for some samples, numbers to be advised and destruction forms issued.
## TRAINING COURSES, WORKSHOPS & EVENTS

### April 2007
- **25th**: WCB Roadshow  
  Location: Royal Gwent Hospital
- **26th – 27th**: Pfizer Oncology forum  
  Location: Windsor

### May 2007
- **3rd**: Good Clinical Practice  
  Location: WCTN, Bridgend
- **7th**: Communication skills in RCT Module  
  Location: WCTN
- **9th**: “Progress” Prostate Support Group Meeting  
  Location: Royal Gwent Hospital
- **9th**: Training for Research Ethics Committees  
  Location: Kings College London
- **10th**: Communication skills in randomised controlled trials  
  Location: WCTN, Swansea
- **15th and 17th**: Introduction to good clinical practice  
  Location: Cardiff
- **21st**: Designated Individual training – Human Tissue Authority  
  Location: Birmingham
- **22nd**: Communicating with Confidence  
  Location: Soloplus, Bridgend
- **22nd**: Dangerous goods /Transportation Biohazards  
  Location: WCB
- **28th – 2nd June**: ISBER Annual Meeting  
  Location: Singapore

### June 2007
- **5th**: Communication Skills in randomised controlled trials  
  Location: Cardiff
- **13th**: NCRI Consumer Liaison group  
  Location: London
- **21st**: Building Research in Partnership CRC Cymru Annual meeting  
  Location: CRC Cymru
- **26th**: Patient handling update course  
  Location: Cardiff and Vale NHS Trust

### July 2007
- **5th**: NCRI Late Phase Trials forum  
  Location: London
- **12th**: Anthony Nolan trust blood donation session  
  Location: Swansea

### September 2007
- **3rd**: Human Tissue in Research – AstraZeneca  
  Location: Alderley Park
- **14th – 15th**: Advanced practice for specialist nurses in ED  
  Location: Birmingham
- **20th – 21st**: Basic Anatomy & Physiology and Medical Terminology Workshop  
  Location: Brunel House (Cardiff)
- **28th**: End of life issues  
  Location: Warburton

### October 2007
- **1st – 3rd**: NCRI 2007 conference – poster presentation  
  Location: Birmingham
- **5th**: Cancer Services Co-ordinating group network meeting  
  Location: Cardiff
- **9th**: NCRI Board sub group  
  Location: London
- **11th**: Renal/Bladder Cancer study day  
  Location: UHW, Cardiff
- **17th**: Communicating with Confidence  
  Location: WCTN
- **25th – 27th**: European Organisation for Research and Treatment of Cancer Genito-Urinary Tract Group (EORTC GU group) Meeting  
  Location: Cardiff
November 2007
7th Basic Life Support
15th Association of British Pharmaceutical Industry conference
15th – 17th ENASCO workshop
29th WCTN Conference

December 2007
1st Royal College of the Physicians of Ireland
3rd WCB Annual Meeting
10th – 11th Irish Health Research Board Seminar and Workshop
20th Communication Skills in randomised trials (5-7)

January 2008
8th Introduction to Cancer Course, Part 1
15th-16th Quality Matters – NCRI Workshop
15th Mental Capacity Act
22nd Developing clinical trial SOPs and Quality Systems
23rd NCRI Board sub group
26th Cancer Research Wales open day

February 2008
12th Young Women and Breast Cancer Study Day
25th Communication Skills in Research
28th Venepuncture Study

March 2008
6th Manual Handling
12th Introduction to Cancer Course, Part 2
13th Cancer treatments
13th BAC Array CGH Profiles in Breast and Thyroid Cancer Seminar
13th – 14th Biospecimen Research Network Symposium

Throughout the year
Four nurses are working towards a BSc degree.

Congratulations to Suzanne Williams who achieved a BSc Degree (2:2) in Cancer Care in November 2007.
LAY LIAISON AND
ETHICS GROUP

Patient Representatives
Pam Parkhouse  Chair  (S.E.Wales)  Member of the WCB Executive group
Neil Formstone  Vice Chair  (North Wales)  Member of the WCB Executive group
Yvonne Young  (West Wales)
Ty Francis  (S.E.Wales)

Ethics Committee Lay Representative
Bob Hall  (S.E.Wales)

CHC Representative
Gordon Harrop  (Vale of Glamorgan)

NHS Representative
Susan Bailey  P.R. Specialist  (West Wales)

Charity Representative
Maggie Hughes  Fund Raising Specialist  (S.E.Wales)

Wales Cancer Bank Representatives
Dr. Alison Parry-Jones  Manager
Prof Gerry Thomas  Director of Scientific Services
Sarah Phillips  Project Officer

Role of the LLEG
- To monitor and advise on necessary amendments to the informed consent form and patient information sheet, ensuring that these documents are kept current and up to date with government legislation and changing ethics guidance
- To advise on the content of the WCB website with particular reference to patients and the general public
- To liaise with welsh patient groups to increase the profile of WCB and dissemination of information
- To consider a fund raising and communications strategy
- To attend patient focussed workshops and conferences and provide feedback
## WALES CANCER BANK
### PERSONNEL LIST (AS AT 31ST MARCH 2008)

#### Staff

<table>
<thead>
<tr>
<th>NAME</th>
<th>SITE</th>
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<tbody>
<tr>
<td>Professor Malcolm Mason</td>
<td>Central</td>
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<td>Mr Daniel Naeh</td>
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<td>IT Manager</td>
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<td>Miss Sarah Phillips</td>
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<td>Project Officer</td>
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<td>Mr Matthew Shaw</td>
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<td>Database Manager</td>
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<td>Mrs Debbie Way</td>
<td>Central</td>
<td>Clerical Officer</td>
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<tr>
<td>Miss Claire Alford</td>
<td>Central/Swansea</td>
<td>Information Assistant</td>
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<tr>
<td>Suzanne Williams</td>
<td>Swansea</td>
<td>Lead Nurse</td>
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<td>Janette Gwillim</td>
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<td>Nurse</td>
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<td>Catherine Lloyd-Bennett</td>
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<td>Colleen Lloyd</td>
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<td>Emma Squires</td>
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<td>Vicki Woods</td>
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<td>Catherine McPhee</td>
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<tr>
<td>Claire Smith</td>
<td>Bangor</td>
<td>Biomedical Scientist</td>
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#### HTA/Local Management Committee

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<thead>
<tr>
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<tbody>
<tr>
<td>Professor Malcolm Mason</td>
<td>Central</td>
<td>HTA Licence Holder</td>
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<tr>
<td>Professor Gerry Thomas</td>
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<td>Director of Scientific Services</td>
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<td>Dr Alison Parry-Jones</td>
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<td>Professor Nick Stuart</td>
<td>Bangor</td>
<td>HTA Person Designated/Local Lead</td>
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<tr>
<td>Professor Julian Sampson</td>
<td>Cardiff</td>
<td>Local Lead</td>
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<tr>
<td>Professor Bharat Jasani</td>
<td>Cardiff</td>
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<td>Dr Paul Griffiths</td>
<td>Swansea - Morriston</td>
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<td>Mrs Christine Davies</td>
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<td>Dr Sally Williams</td>
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<td>Mr Adam Carter</td>
<td>Royal Gwent</td>
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<tr>
<td>Dr Meleri Morgan</td>
<td>Llandough</td>
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