

# Liverpool Cancer Therapy Centre

1995 2005

Ten Years of Achievement



*(top): The staff of Liverpool Cancer Therapy Centre in 2005. (inset): The staff of Macarthur Cancer Therapy Centre in 2005*



**In memory of Bernadette Donovan  
12 September 1945 – 20 June 2000**

Bernadette was one of the original Cancer Therapy Centre nurses. She tragically died as a result of cancer.

Bernadette epitomised everything that is good about the Cancer Therapy Centre. She had a good sense of humour, was hard-working, kind-hearted and cared a lot about her job. She was well-respected. We thought it appropriate to have this report dedicated to the memory of Bernadette.

# Foreword



**Dr Diana Horvath**  
*Chief Executive Officer*  
*Sydney South-West Area Health Service*

This decade of achievements by the Liverpool Cancer Therapy Centre is nothing short of outstanding. It shows what people can achieve by working together and an achievement far beyond that which will occur if individuals proceed in isolation.

The beneficiaries are the patients. The well documented Patterns of Care Studies in the USA and more recently documentation in other countries demonstrates the importance for good patient outcomes of grouping the speciality activities together. Aggregation of care permits the development of sub-speciality tumour programs; and ensures the level of professional activity that maintains skills and expertise at a high level.

The importance of training others – the next generation of professionals; and the need for research activities – the increase in the sum of human knowledge; are core activities of a tertiary health service that can only evolve satisfactorily once the professionals have come together in this way.

It is with great pride that I commend you this report, and ask you to enjoy the successes of our centre.

A handwritten signature in black ink that reads "Diana Horvath".

**Dr Diana Horvath AO**  
*Chief Executive*

# Introduction



**Associate Professor  
Martin Berry**  
*Director of Liverpool Hospital  
Cancer Therapy Centre*

Over the past ten years I have enjoyed many rewards and challenges as the Director of Liverpool Cancer Therapy Centre. The Centre was established as a greatly needed focal point for cancer patients and services in south western Sydney. It brought together a wide range of diagnostic, treatment and support professionals and volunteers in a modern building and specialised environment. This anniversary celebrates the aspirations and achievements of the numerous people who have played a part in these formative years.

Medical Oncology services were established at Liverpool in 1988, but it was not until 1995 that a comprehensive cancer centre accommodating medical and radiation oncology, allied health and palliative care was built and officially opened by the Honourable Ron Phillips. The Liverpool Cancer Therapy Centre was one of the first purpose-built multidisciplinary cancer centres in NSW. The new model of cancer care, based on the experience of established centres, provided a framework within which we could be innovative in designing a service to meet local needs. Many of the pioneering staff across different disciplines continue to work in the Centre. They have contributed to a work culture that recognises the importance of management, research, teaching and personal development in addition to patient service.

In 2000 the scope of the cancer service was formally broadened to include the whole south western region of Sydney with my appointment as Director of the SWS Cancer Service. An important organisational change was the setting up of site-specific Tumour Programs for the ten major cancer groupings. A Tumour Program consists of a multidisciplinary team (nursing, medical specialties, community, palliative care, and allied health) whose focus is on the treatment, support and care of patients with a particular type of tumour during their entire experience following a diagnosis of cancer.

This was necessary to better address the specific needs of patients with different cancers and to give them certainty that they would have access to the right clinicians when they needed them. A locally developed care coordination service is now operating in six Tumour Programs to support patients by providing them with a single point of contact.



Over the past two years the fight against cancer has received an unprecedented boost from the NSW government. The appointment of a special Minister for Cancer, Chief Cancer Officer and the foundation of the Cancer Institute NSW has given state-wide direction for coordinating and creating better cancer services, research, patient and professional support.

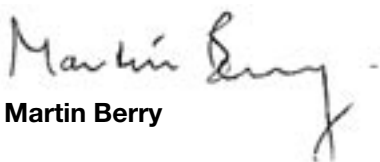


In January 2005 the Liverpool Cancer Therapy Centre became part of an amalgamated service with the former Central Sydney Area Health Service. This has opened up many opportunities to share experiences and benefit from an expanded resource base that will lead to better patient care. We are about to enter a new era of high growth driven by the rapidly expanding population in Sydney's south west and the political imperative to maintain services to match the population demand.



*Liverpool Cancer Therapy Centre in various stages through the building process.*

Despite many changes, after ten years the Centre can lay claim to its own traditions in service innovation, technical excellence, research and patient focussed care for which all those who have taken part in its development can share a sense of pride.

  
**Martin Berry**

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# Medical Oncology Report

**Dr Stephen Della-Fiorentina**

*A/Director Medical Oncology, SWSAHS*



*Nurses provide Chemotherapy in the day centre.*

I am pleased to present the report of 10 years of the medical oncology service within the Liverpool Cancer Therapy Centre. Medical Oncology services at Liverpool actually commenced with clinics and chemotherapy administration in 1988 provided by Dr Eugene Moylan, the current director of Medical Oncology at Liverpool Hospital. This was a significant improvement in the service delivery of patients requiring medical therapy for early and advanced cancers, reducing travelling time, cost and inconvenience to patients. Eugene had the vision and drive to argue for a comprehensive cancer centre on site at Liverpool as the hospital moved from District Hospital to Teaching Hospital status.

Dr David Goldstein was appointed Director of Medical Oncology in 1994 just prior to the commissioning of the Cancer Therapy Centre in 1995.

Dr Amanda Goldrick was also appointed as a Medical Oncologist and palliative care physician in 1994.

I joined the service in 1996 upon Dr Goldstein leaving for Prince of Wales Hospital. Dr Eva Segelov was appointed as a Senior Lecturer (1998-2003) and Dr Elizabeth Hovey was appointed in 2000. Dr Richard Eek commenced work in March 2005.

Recognising the enormous geographical area of South West Sydney and the need to provide services as close as possible to patients we commenced a consulting clinic at Campbelltown Hospital in 1996 and in Bowral in 2000. Extensive consultation and planning led to the commissioning of the comprehensive Macarthur Cancer Therapy Centre at Campbelltown Hospital in February 2003.

The strength of our unit lies in the people and the commitment they show to high quality patient care. This is achieved by implementing current best practices, participating in patient-centred multidisciplinary care and contributing to new cancer knowledge through an extensive clinical trials programme. We have a high quality clinical trials unit with Liverpool being a leading site for enrolment of patients into landmark studies of new treatments of breast, colorectal, lung and prostate cancers. We have been awarded grants for clinical trials staff from the NSW Cancer Council and the NSW Cancer Institute. Our ability to work as a team of doctors, nurses and pharmacists has seen us implement a safer method of chemotherapy prescribing using the Lantis® application, oral anti-nausea medications and improved hydration methods for chemotherapy administration.

These quality improvements in the delivery of chemotherapy have led to reductions in errors and costs as well as improved efficiencies.

We are proud of the registrars that we have trained and are privileged to see them commence their careers around the world. We have contributed to the teaching of the principles of medical oncology to radiation, palliative care and general medical registrars and the range of students through the University of NSW. Teaching nurses, pharmacists, allied health, patients and their carers has been a major achievement for the department.

The expanding role of chemotherapy, hormonal and targeted antibody treatments during this decade has created a challenge to provide medical oncology services to the rapidly growing south-western metropolitan region of Sydney. The opening of the second linear accelerator at Macarthur and the announcement of additional positions including a Professor of Medical Oncology will allow our workforce to grow and meet the needs of our population and continue to add to cancer research and education.

The commitment and dedication that all of our staff have shown over this period has prepared us for our future challenges of further population growth, new technologies and cancer education and prevention. Without their energy, innovation and dedication we would not be where we are now. We have come a long way since Dr Eugene Moylan first established the department in 1988.

### *The Medical Oncology Executive*



**Dr Eugene Moylan** MBBS, FRACP

*Chair of Medical Oncology Executive, Director of Medical Oncology Liverpool*

Dr Moylan is a senior staff specialist in Medical Oncology and has been the Director of the Medical Oncology service since 1997. He commenced at the Liverpool Hospital in 1988 after training and working at Concord and Prince Of Wales Hospitals. His main interests are breast, gastrointestinal (upper and lower) and genitourinary cancers as well as keeping an interest in the management of lymphomas and sarcomas.

He has been the chair of the Cancer Therapy Centre Education Committee and a member of many other planning and management committees. He has a conjoint appointment as Senior Lecturer with the University of NSW.

When not at work, Dr Moylan's main interests are his family of 8 children, cycling, gardening and crossword puzzles.



**Dr Stephen Della-Fiorentina** MBBS (Hons), FRACP

*Interim Area Director Medical Oncology, Director of Macarthur Cancer Therapy Centre*

Dr Stephen Della-Fiorentina is a senior medical oncologist and Director of the Macarthur Cancer Therapy Centre, which opened in 2003. In 2004, with the planned amalgamation of the Area Health Service he was appointed as Interim Area Director of Medical Oncology in South West Sydney. His clinical interests are lung and breast cancer.



**Dr Stephen Della-Fiorentina** *continued*

He is on the Medical Oncology Group of Australia Education Subcommittee and state committees for clinical research and chemotherapy protocol development. He chairs the Cancer Therapy Centre Research Committee and is the Project Leader for the Medical Oncology Lantis® module which has resulted in the Cancer Therapy Centre leading the country in the introduction of electronic prescribing.

Outside of work, Stephen is a representative lawn bowler, patron of the Bodyline Dance Academy, a sports watcher and a Dylan and Monty Python fan.



**Dr Richard Eek** MBChB (SA), MMed (Int), FCP (SA) – *Medical Oncologist*

Dr Richard Eek commenced work at the Cancer Therapy Centre in March 2005, relocating from South Africa. He completed pre-graduate training in 1988 (Cum Laude) in Pretoria, and received the medal for Internal Medicine and Ophthalmology. He qualified as Specialist Physician (Cum Laude) in 1995, and received the SA National Suzman medal during completion of physician training in South Africa.

He trained as a Medical Oncologist under Prof G Falkson, and is an active member of ECOG for 7 years. He has authored several publications, with a keen interest in breast cancer, colorectal cancer, plasma cell and lymphoproliferative disorders. Quality of life is an area of special interest in management of patients with cancer. In his spare time he enjoys playing his guitar, hiking, camping and jogging.



**Dr Amanda Goldrick** MBBS, FRACP – *Medical Oncologist*

Dr Amanda Goldrick, a specialist in Medical Oncology, joined the staff at Liverpool Cancer Therapy Centre in 1995. Her main clinical interests are the treatment of breast, gynaecological and head and neck malignancies. She has been an active participant in the Multidisciplinary Breast and Gynaecological teams and clinical trials in these tumour sites.

The 2005-year holds exciting prospects for Amanda, as she gains further expertise working for one of the world's largest and most prominent cancer research and treatment organizations, the British Columbia Cancer Agency in Canada.



**Dr Elizabeth Hovey** MBBS, FRACP, MSc – *Medical Oncologist*

Dr Elizabeth Hovey is a staff specialist in Medical Oncology at Liverpool Cancer Therapy Centre, commencing in July 2001. She trained at Royal Prince Alfred Hospital and then for 3 years at Columbia-Presbyterian Medical Centre/Columbia University, New York. During that time she also received a full scholarship to complete a Masters of Science (in Biostatistics in Patient-Oriented Research) at the Columbia University School of Public Health. Her clinical interests are genitourinary and neuro-oncology cancers. She is currently the secretary of NSW Neuro-Oncology Group and was instrumental in the development of a national Neuro-oncology Group for COSA.

**Dr Elizabeth Hovey** *continued*

Working in CCORE she has contributed a chemotherapy module for an international interactive CD-ROM designed for distance learning, as well as undertaken multicentre patterns of care studies and surveys reviewing the management of high grade gliomas and prostate cancer (presenting these findings at national meetings including COSA and MOG). She is a senior conjoint lecturer at UNSW, having developed a new syllabus for communication skills for medical students (including “Breaking Bad News”, “Informed Consent” and Masterclasses), in addition to being a tutor in Evidence-Based Medicine and Oncology.

She has participated in the development of the new UNSW Oncology Core Curriculum. She participates in post-graduate teaching including lecturing for the Basic Sciences of Oncology Course run by the NSW Cancer Institute. She is a reviewer for MJA (Medical Journal of Australia) reviewing oncology and epidemiology articles and has recently been invited to be on the neuro-oncology review panel for a new oncology journal: Asia Pacific Journal of Clinical Oncology. Her interests outside of work include directing for the theatre and travel.



**Mr Vu Nguyen** – *Research Manager of Clinical Trials Unit*

Vu Nguyen supervises the initiation, conduct and auditing of the clinical research program. He has a degree in Science (Bachelor of Biotechnology) and Graduate Certificate in Health Information Management (Clinical Data Management and Clinical Trials). The unit has achieved a high quality of work performed for international and national clinical trial groups.

Outside the workplace, Vu’s interests include tennis, soccer and reading.



**Ms Fariba Khosravan** – *Oncology Pharmacy*

Fariba Khosravan is the senior oncology pharmacist for the Cancer Services at Liverpool Hospital. She commenced at Liverpool in 2000. She has been a member of the project team for Lantis® electronic prescribing.

Outside the workplace, Fariba’s interests include attending the gym, watching nice movies and dining out.

# *Medical Physics Report*

**Mr Robin Hill, Dr Lois Holloway**

The original medical physics group of Wayne Beckham, Robin Hill and Mario Perez were involved prior to the opening of the CTC, through to the commissioning of radiotherapy equipment. The first machine was installed in late December 1994 when the long task of commissioning began. From the hard work that was put in, the radiotherapy treatment and planning equipment were able to be used in clinical service at the required time. Since the first day, the physics staff has been actively involved in commissioning of new radiotherapy equipment including new linear accelerators, brachytherapy service and new treatment planning systems.

The medical physics group has always had a younger profile, but this has led to the development of staff and allowing excellent growth in knowledge and skills. This had meant that the Physics group has provided high quality services in terms of commissioning work, quality assurance, treatment planning and dosimetry, education and research.

By taking a multidisciplinary approach, we have been able to develop the department into one which now has a highly regarded reputation within Australia. A benefit of this has been the reduction of staff shortages as compared to several years ago and increased skills mix.

Medical Physics research is of vital importance for improving the technology and techniques that we treat our patients with. At SWSCS this is an area which has developed significantly over the ten years of the department and further expansion is planned for the coming ten years. Through the support of the chief physicist and the radiation oncologists, the initial Research Fellow position was established in 1997. The initial work was to develop research interests of the physics group, establishing research support within the department, including joint projects and research meetings with the Radiation Therapists and Oncologists, and encouraging external students to the department. Since then research opportunities for the group in collaboration with the other professional groups in the department and the universities have continued to develop. It is anticipated that in the near future two postdoctoral research fellows will be employed who, together with the current physics group, will work on improving patient treatments.

Current projects include motion correction investigations in collaboration with Sydney University, adaptive radiotherapy and physiological IMRT. Further student projects are also encouraged in the department. Over the ten years of the department, three honours students, two masters student and two PhD students have completed their projects while involved in the department. Currently two masters and four PhD students are working in collaboration with the department towards completion of their projects. Together with research activities occurring throughout the cancer therapy centre it is anticipated that our goal of improving treatments for our patients will continue to be met.

The Medical Physics group is proud of their achievements and look forward into the next ten years with anticipation of new technologies in radiation therapy being implemented within the centre.

# Radiation Oncology Report

**Associate Professor Geoff Delaney**

*Director of Radiation Oncology, Liverpool and Campbelltown Hospitals*



*Radiation treatment on Linear Accelerator.*

What a 10 years it has been for radiation oncology! Rapid expansion during that period has seen the radiation oncology service grow from nothing to now being an integrated service across two sites with five linear accelerators and outreach services at Bankstown and Bowral. I am proud of the contribution made by all staff during this period as we have grown to the size that we are now. I am sure that you will agree when looking through this report that substantial excellent work has been achieved during this period. With further land releases planned for areas around Liverpool and Campbelltown, and with the newly-announced restructure of the area health services, the new radiation oncology service for the Sydney South Western Area Health Service will grow even further over the next 10 years. I hope that you enjoy reading about the achievements of this fabulous group of people.

As late as 1994, patients with cancer that required radiotherapy were referred to Prince of Wales Hospital. The radiation oncologists at Prince of Wales provided a consultative service at Liverpool and Campbelltown. However, anyone requiring treatment were required to travel into Randwick for their treatment. Those too sick to travel missed out on radiotherapy altogether or were transferred to Prince of Wales Hospital as an inpatient to undergo treatment thus being removed from their home environment for up to 7 weeks. For those patients considered fit to travel but without the means to provide their own transport, a bus service was provided which picked patients up at Campbelltown and Liverpool Hospitals. The patients on the bus would travel each day, back and forth. The round trip, including attendance for treatment, would frequently be 4-5 hours with patients from the Southern Highlands taking even longer for their treatment.

Some patients would have treatment courses that lasted 7 weeks. Therefore total travel distances would be nearly 5000 kilometres! In addition, the roads were not as good as they are today – there was no M5 freeway!

In 1995, the Liverpool Hospital radiation oncology service opened its doors to patients with the first patient receiving treatment on site on 1 May, 1995.

The department was the first in NSW to have a dedicated planning CT scanner within the department. Since then, Liverpool Hospital Radiation Oncology Department has three linear accelerators as well as a high dose rate brachytherapy service. It was planned that Liverpool would ultimately require four linear accelerators. However, in 1999, through the hard work of many members of staff we were able to advocate successfully for a radiation oncology service at Campbelltown Hospital and the Macarthur Cancer Therapy Centre was born. This department commenced treatment on 22 September 2003 and now has two linear accelerators.

In 1999, our department was selected as the pilot site to implement a new radiation oncology computerised information system and this has allowed an integrated electronic record across the area for radiation oncology. In addition, this information system is integrated with the medical oncology departments at Liverpool and Campbelltown.

Nowadays, we have integrated treatment facilities at both Liverpool and Campbelltown Hospitals along with outpatient consultative services at Bankstown and Bowral. Radiation oncologists participate in the wide-ranging multidisciplinary groups that have been established at Liverpool,



*Building the LCTC Radiotherapy Bunker.*

Campbelltown and Bankstown Hospitals, working side-by-side with their colleagues in surgery, medical oncology, respiratory medicine, gastro-enterology, haematology, gynaecological oncology, palliative care, social work, allied health and psychological medicine. We have established research groups in radiation therapy, medical physics and radiation oncology.

The Collaboration for Cancer Outcomes Research and Evaluation (CCORE) is a health services research group established by the early Liverpool Hospital radiation oncologists to further collaborative research into the clinical service delivery of radiotherapy. This group is headed by A/Prof Michael Barton who has done an excellent job in establishing this group and developing CCORE to the forefront of oncology health services research over the past 5 years. Our focus on research is recognized nationally and internationally.

The radiation oncology group also have an active education programme.

The undergraduate education programme includes regular medical student tutorials and clinic attachments and attendance at ward rounds and multi-disciplinary clinics.

Post-graduate teaching in medical physics, radiation therapy and radiation oncology have been established with strong records in each of these disciplines. All radiation oncology registrars who have trained at the centre have passed all of their examinations at their first attempt with several winning awards along the way and our department maintains a strong interest in registrar training.

I am proud of our achievements and reflect on what has occurred over the last 10 years and wonder how we have fitted all of this in such a short period of time. I wish to take this opportunity to thank all of the people who have worked with us and acknowledge the contribution that each and every one has made in establishing this service.

## *The Radiation Oncology Executive*



**A/Prof Geoff Delaney** MBBS, MD, FRANZCR

*Chair of Radiation Oncology Executive, Director of Radiation Oncology*

Associate Professor Delaney is a senior staff specialist in radiation oncology and the Director of the Radiation Oncology service. He commenced at the Liverpool Cancer Therapy Centre in 1996 after doing a research fellowship at Westmead Hospital. Since then he was appointed Director of Radiation Oncology in 2002. He has been involved in local, state, national and international committees relating to oncology and has published research in a wide variety of aspects of oncological care. His main interests are health services research, information technology, breast cancer and lung cancer. He has been the chair of the Cancer Therapy Centre and SWSAHS Cancer Information Management Committees and was previously chair of the Cancer Therapy Centre Clinical Trials committee. When not at work, Geoff's main interests are baseball, golf, tennis, cryptic crosswords and his family.



**A/Prof Michael Barton** MBBS, FRANZCR

*Deputy Director of Radiation Oncology, Director of CCORE*

Associate Professor Michael Barton is the Research Director of the Collaboration for Cancer Outcomes Research and Evaluation at Liverpool Hospital NSW where he is also deputy director of Radiation Oncology. He has a wide range of clinical and research interests with publications covering the gamut of clinical oncological interests from screening to palliation and cost-effectiveness. He has been involved in state, national and international strategic planning projects for cancer services. He chairs the Post Fellowship Education Committee of the Faculty of Radiation Oncology of the RANZCR. He started the Basic Science of Oncology course, which he ran from 1994 to 2001. He was the inaugural chair of The Cancer Council Australia's Oncology Education Committee and was the Chair of the recently introduced Cancer Block of the Sydney University Graduate Medical Program. He is the Australian representative to the radiotherapy section of the International Atomic Energy Agency for whom he is developing a distance-learning course in the Basic Sciences of Radiation Oncology. He was the recipient of the NSW Cancer Council Inaugural Award for Professional Excellence in professional education in 2000. Michael's main interests outside work are bird watching and playing the clarinet.



**Mrs Sandy Avery** *Business Manager*

After successfully completing a post graduate certificate in Business and Administration in 2001, with credits and distinctions in courses chosen to enhance the innovations being driven in research at the time, Sandra joined Cancer Services, bringing several years of experience within Liverpool Health Service. Prior to health, her background includes budget development and reporting for primary industry and several years working for quarantine focusing on processes, implementation of new technology and cost recovery.

**Mrs Sandy Avery** *continued*

Sandra has recently achieved a Diploma of Business (Frontline Management), using this as a catalyst to implement a pilot Business Administration course for administrative staff. This will include process reviews, structured training programmes, and workplace competency assessments developed and applied across Cancer Services. Area Human Resources Development will be working closely with us to ensure the best results and make our administrative team the best they can be. Sandra enjoys spending time with her family, entertaining, retail therapy and traveling. Happily, these can be combined to achieve her pursuit of efficient processes and best practice.



**A/Prof Martin Berry** MBBS, FRANZCR

*Director of Cancer Therapy Centre, Radiation Oncologist*

Martin was appointed as the first Director of the Liverpool Hospital Cancer Therapy Centre in 1994 and was Director of Radiation Oncology 1994-2002. He has facilitated the establishment of a comprehensive cancer service that includes multi-disciplinary practice, education and research programs. He has served on numerous State and National committees and major achievements have been the delivery of a sound policy framework for cancer in NSW and a state-wide radiotherapy information management system. In November 1999 Martin was appointed Area Director of the SWS Cancer Service. Through the Cancer Services Development Project he has implemented site specific Tumour Programs across the Area and the first Cancer Care Coordination Service in Australia.

In 2005 he was appointed Chief Censor for the Faculty of Radiation Oncology in the Royal Australian and New Zealand College of Radiologists. He holds a conjoint appointment with the UNSW SWS Clinical School as Associate Professor and his clinical interests are in paediatric and urological oncology. He was instrumental in establishing a number of pioneering efforts in education including a state wide multi-disciplinary group in urological cancer. He was a member of the Australian Cancer Network Group that devised National Best Practice Guidelines for prostate cancer. Interests outside work include being with his family, playing jazz and blues guitar, keeping fit and reading.



**Dr Allan Fowler** MBBS, FRANZCR – *Radiation Oncologist*

Dr Allan Fowler is a staff specialist in Radiation Oncology at Liverpool and Macarthur Cancer Therapy Centres, commencing in 1997. His main interests are the treatment of gynaecological, head and neck, and skin malignancies. He is chairperson on the Head and Neck Tumour site program and of the Cancer Therapy Centre Information Management and Technology committee. In 1998 Allan assisted in introducing a brachytherapy program to Liverpool and this was a significant improvement for selected patients, especially with gynaecological cancer.

Allan is on leave from Liverpool and Macarthur in 2005 while he gains further experience working for one of the world's largest and most prominent cancer research and treatment organisations, the British Columbia Cancer Agency, in Vancouver. His interests outside of work include travelling and gardening.



**Dr Andrew Kneebone** MBBS, FRANZCR – *Radiation Oncologist*

Dr Andrew Kneebone has been a staff specialist in Radiation Oncology at Liverpool Hospital since 1998 and also conducts a weekly radiation oncology clinic at Bankstown hospital. He is secretary of the South Western Sydney Colo-Rectal Tumour Group (CRTG) and is supervising the SWS CRTG database which now has information on more than 1800 colorectal cancer cases. He is also on the SWS executive overseeing upper gastrointestinal cancers. Andrew is secretary of the NSW Genitourinary oncology group and was instrumental in establishing 6-field conformal radiotherapy at Liverpool Hospital in 1999 (the first in Australia). He also arranged the purchase of the BAT ultrasound machine to localise the prostate prior to each treatment making the radiation treatment for prostate cancer among the best in Australia. He has a strong interest in clinical research and was the principal investigator in a major multi centre randomised trial aimed at preventing radiation induced rectal injury. Since then he has been involved in numerous other clinical trials and research groups.

Andrew's other special interest is in education. He was secretary of the NSW Education co-ordinating committee from 1999 to 2004 which has overseen dramatic changes in radiation oncology registrar training over recent years and was supervisor of registrar training at Liverpool hospital during that period.



**Dr Shalini Vinod** MBBS, MD, FRANZCR – *Radiation Oncologist*

Dr Shalini Vinod is a staff specialist in radiation oncology at Liverpool Hospital. She commenced at Liverpool Hospital in 1999 in a fellowship position at the Collaboration for Cancer Outcomes, Research and Evaluation (CCORE). She undertook a study into lung cancer patterns of care, which continued when she became a staff specialist in 2001. In 2004 her thesis on lung cancer was accepted for a Doctor of Medicine degree at UNSW. She has been the Junior Forum representative to the Education Board of RANZCR and the Radiation Oncology Expert Advisory Group of the National Breast Cancer Centre. Her clinical interests are lung cancer, breast cancer and gynaecological cancers. She is involved in health services and lung cancer research. She works part-time and spends her non-clinical days looking after her two active young children.



**Dr George Papadatos** MBBS, FRANZCR – *Radiation Oncologist*

Dr George Papadatos is a staff specialist in radiation oncology at the Macarthur Cancer Therapy Centre (MCTC). He commenced his employment in the SWSAHS in 2002. He has previously worked as a consultant at Newcastle Mater, Peter Macallum Cancer Institute, The Alfred Hospital in Melbourne and St George Hospital. His main clinical interest is breast cancer, but enjoys a diverse practice which includes servicing the Southern Highlands. He is involved in both under-graduate and post-graduate teaching and is a member of the research committee. His interests outside work include spending time with family, fishing and home renovating.





**Dr Dion Forstner** MBBS, FRANZCR – *Radiation Oncologist*

Dion Forstner is a staff specialist in radiation oncology. He commenced at Liverpool and Macarthur Cancer Therapy Centres in 2003 after completing his training at Royal Adelaide Hospital. His main interests are in the management of head and neck, skin, lung and breast cancer. In 2005 he became the Supervisor of Training for radiation oncology registrars. He has previously been a member of a number of committees responsible for quality, an area in which he has a keen interest. He is eager to make the workplace a friendly environment for patients and staff and has been involved with arranging some interesting bonding activities for staff. His interests away from work include sailing, gardening and politics.



**Mr Anthony Arnold** BAppSc MRS (Radiation Therapy)

*Director of Radiation Therapy*

Anthony Arnold is the Director of Radiation Therapy for Liverpool and Macarthur Cancer Therapy Centres. Anthony joined the service in 2002 as the Deputy Chief Radiation Therapist for the new Macarthur site, where he was responsible for the commencement of the new radiation therapy service. In 2003 Anthony was promoted to the position of Radiation Therapy Director. Prior to joining the service, Anthony worked for 8 years with the Illawarra Cancer Care Centre, playing a pivotal role in the centre's development and implementation of 3D treatment planning, Intensity Modulated Radiation Therapy (IMRT), and later as a lead site project co-ordinator for the NSW Health, Radiotherapy Information Strategy. His main interests today are further developing cancer related IT, IMRT and personal management development. When not at work Anthony can be found relaxing either indulging in some social golf ball abuse or somewhere on the south coast with his surfboard.



**Mrs Lynette Cassapi** DCR(T)BSc (Hons)

*Assistant Director, Radiation Therapy - Liverpool*

Lynette trained in the UK as a Radiation Therapist, qualified in 1988 and worked in a very large regional Cancer Centre for the subsequent 15 years. During this time she developed an interest in all aspects of research and audit, at various times working in a Clinical Trials Team & introducing a Research and Development role to the department while maintaining routine clinical duties. She migrated to Australia in October 2003 and joined South Western Sydney Cancer Services as the Assistant Director of Radiation Therapy, primarily based at the Liverpool Centre.

Her main interests are the improvement & promotion of Quality and Standards in Radiation Therapy, the processes involved in Radiotherapy Planning and ongoing Research and Development. Away from Radiation Oncology, she enjoys spending time with family and friends, entertaining, motor sports, cross-stitch and reading.



**Ms Nicole Cusack** BAppSc MRT (Radiation Therapy)

*Assistant Director Radiation Therapy – Campbelltown*

Nicole Cusack completed a Diploma of Applied Science in Medical Radiation Technology in 1992 and later upgraded this to a Bachelor of Applied Science in Medical Radiation Technology, Radiation Therapy in 1994. She commenced work at Liverpool Cancer Therapy Centre in 1995 and is now Assistant Director of Radiation Therapy at Macarthur Cancer Therapy Centre. She has also worked in Newfoundland Canada and Nepean Cancer Care Centre which has broadened her knowledge of radiation therapy techniques and practices.

She has a special interest in complementary therapies in cancer care.

Nicole is currently studying a Master of Health Management. When not working or studying, Nicole enjoys spending time with her family and friends, walking her dog, entertaining and being entertained.



**Mr Gary Goozée** BSc (Hons), DipEd, MSc, MACPSEM

*Director of Medical Physics*

Gary Goozée is the Director of Medical Physics for South West Sydney Cancer Service. After commencing work in the field of Radiation Oncology Medical Physics in 1989, he has had appointments at Westmead, St George and Nepean Hospitals before moving to his current position in 2002. Since that time he has overseen the growth of the medical physics group to encompass two hospital sites and a significant increase in staff numbers. He has recently completed a two-year term as Council member and Chairman of the NSW/ACT Branch of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM), and continues to be involved in the profession's development through membership in the NSW Tripartite Committee, the ACPSEM Continuing Professional Development working party, and ongoing activities of the ACPSEM Branch Committee. His outside interests are family, reading, and web database development.



**Mr Satya Rajapakse** BSc(Hons), MAppSc

*Deputy Director of Medical Physics – Campbelltown*

Satya is the Principal Physicist at Macarthur Cancer Therapy Centre and the Deputy Director of Medical Physics at South Western Sydney Cancer Service. Satya has been working as a medical physicist for the past twenty-three years. Before commencing at Macarthur in 2002, he worked as the Chief Physicist at WP Holman Clinic, Launceston, Tasmania for three years and a Senior Physicist at North Queensland Oncology Service, Townsville, Queensland for five years bringing with him vast medical physics experience.

His main interests are in developmental work in quality assurance procedures of linear accelerators, IMRT radiation dosimetry and image-guided radiation therapy. Satya's main interests outside work are playing cricket, reading and spending time with his family.



**Mr Virendra Patel** MSc DipRP –

*Deputy Director of Medical Physics – Liverpool*

Virendra Patel joined the Liverpool Cancer Therapy Centre in September 2004 as a Deputy Director of Medical Physics. Having been involved in almost all areas of clinical radiotherapy physics, Virendra brings a wealth of skills and experience to the centre. Over the past 28 years he has worked at eight different centres and held positions ranging from physicist to Deputy Chief Physicist. He has been involved in commissioning and running new treatment units and modalities. Apart from medical physics his interests include movies, travel and family outings.

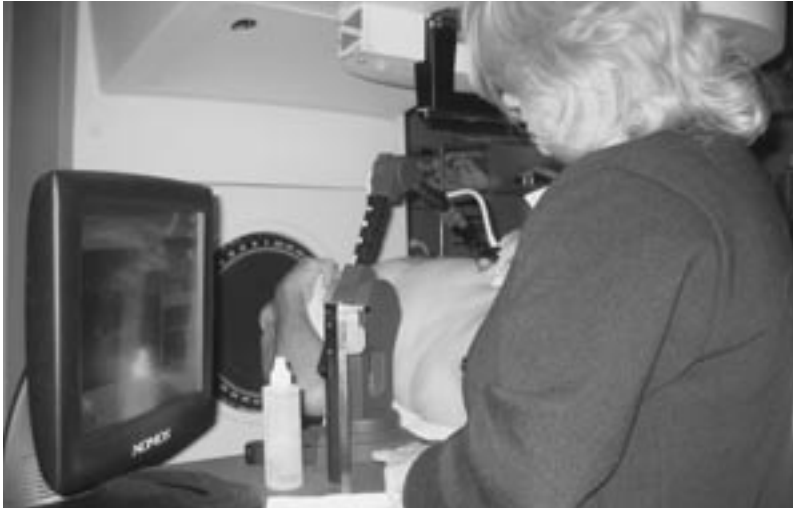


**Mrs Catherine Murray** RN, RM, BA, MClinN – *Senior Nurse Manager*

Catherine Murray is the Senior Nurse Manager for Cancer Services at Liverpool Hospital. She commenced at Liverpool in September 2002 and has extensive experience in oncology & palliative care nursing. Her main interests are risk management, professional development & support strategies for the health workforce. She is the Chair of the Quality Improvement Committee, Incident Review Committee and is the management representative on the Occupational Health and Safety Committee (LHS). Outside the workplace, Catherine's interests include music, reading and relaxing with her family.

# Radiation Therapy Report

**Mr Anthony Arnold**



*BAT ultrasound system in use.*

In its foundation year the radiation therapy team in 1995 totalled 18 radiation therapists, and was led by Ms Marcia Fleet as the Chief Radiation Therapist. Marcia was instrumental in the commencement of the new centre and was the driving force behind the development of the radiation therapy team over the next 8 years.

In 1995, of those patients in South Western Sydney requiring radiation therapy 73% were treated outside of the Area Health Service, in 2004 of those patients from SWS that received radiation therapy, 75% were treated within the area – a true reflection of the success of Liverpool.

Since 1995, the radiation therapy service has evolved to what it is today; a leading service of excellence, one held in highest regard throughout Australasia for the continual dedication to quality patient care and development of best practice techniques for both the planning and delivery of radiation therapy to our patient population.

While experiencing the pressures of staff shortages within the radiation therapy field and subsequent patient waiting lists, the radiation therapy team has experienced significant change over the last 10 years, much of this attributed to the rapid progression of technological advancement.

Major projects have included the inception of conformal 3D planning techniques for all tumour sites, the implementation of the first BAT Ultrasound system in Australia for prostate treatment, introduction of a new multi-slice CT scanner and the subsequent design and introduction of virtual simulation techniques for each tumour stream. The radiation therapy team have also been crucial to the successful implementation of the Radiotherapy Information Strategy Project, for which Liverpool was a lead site.

In more recent times radiation therapy has been successful in the creation and recruitment of two full time educators, completion of a comprehensive review of patient imaging and the design of a dedicated radiotherapy quality audit database.

To finish I would like to say that I am extremely proud to lead the radiation therapy team that we have today, having now grown to over 38 staff. The strength of this team stems from the work and dedication that has been the last 10 years. I can only hope that we can continue to achieve as well as has been done in the first 10 years of Liverpool.

# Multidisciplinary Care

The services within the Liverpool Cancer Therapy Centre have also been integral to the development of multidisciplinary care for most cancers presenting within the area. Prior to the opening of the Cancer Therapy Centre, multidisciplinary case conferences and care co-ordinators did not exist. This was considered sub-optimal. Therefore, most clinicians involved with the various tumour sites have developed multidisciplinary teams and treatment protocols to better standardise care and to allow forum for discussion and debate about the latest innovations in cancer care. Each multidisciplinary group has been successful in achieving most of their aims and present short summaries below of their major achievements to date. Plans are already in place to improve most services and integrate our multidisciplinary model with the plans of the NSW Cancer Institute.

## **(i) Genito-urinary Cancers**

The multidisciplinary genitourinary group meet twice-monthly to discuss patient care. The group consists of urologists, medical and radiation oncologists, registrars and nursing staff. Mr Nick Wilcox has been the care-co-ordinator of the genitourinary group since December 2002.

A patient support group has been established to assist patients with education and support needs.



*Some of the Multidisciplinary Breast Team.*

Liverpool Hospital has been innovative in its approach to treating prostate cancer.

The radiation oncology service has treated more than 350 patients with 6-field conformal radiotherapy and collects data on a prospective database. In 2003, Liverpool hospital (in conjunction with Westmead) published the largest Australian series of 460 prostate cancer patients with Dr Kneebone being the principal author. It is the only department in Australia to have a BAT ultrasound unit to enable accurate daily localisation of the prostate during treatment. Research into the BAT system is ongoing.

Outside the department, there is strong representation by various clinicians on state and national initiatives. A/Prof Martin Berry has been chair of the NSW Genito-Urinary Oncology Group and Dr Andrew Kneebone has been secretary for many years.

In collaboration with the Urological Society of Australia and the Faculty of Radiation Oncology Genito-urinary Group, A/Prof Martin Berry and Dr Andrew Kneebone have convened two very successful urologic master classes in 2001 and 2004 with excellent attendance from across Australia and New Zealand. They have also convened two international conferences in 1998 and 2000.

A/Prof Berry was the inaugural Chair of the Faculty of Radiation Oncology Genito-Urinary Group. A/Prof Berry was a contributing author to the NHMRC Evidence Based guidelines for the management of clinically localised prostate cancer and Dr Kneebone was on the Steering Committee for the writing of a guide for men and their families produced by the Australian Prostate Cancer Collaboration.

Both were instrumental in developing the National Consensus guidelines for the delivery of external beam radiotherapy, which have been published in the college journal.

### **(ii) Breast Cancer**

Breast cancer remains the most common cancer in women. Over the past 10 years our department has managed approximately 2500 new cases of breast cancer. Our centre provides consultative services at Liverpool, Campbelltown, Bankstown and Bowral. Our multidisciplinary team meet weekly at Liverpool and fortnightly at Macarthur campus, with video-links between both sites. The group comprises of surgeons, medical oncologists, radiation oncologists, registrars, medical students, nurses and various allied support staff. The unit has a full-time care coordinator, which has helped improve the cancer journey of our patients.

The format of the meeting involves case presentations, discussions and finally a consensus to the optimal management of each individual patient. They are supported by Anatomical Pathology with presentation of the histopathology at both sites. Meetings also serve as a place for education and updates as well as a forum for discussing research and encouraging recruitment of patients to various trials.

The centre is active in recruiting patients to clinical trials, both national and international, exploring the role of new drugs as well as different surgical and radiotherapy techniques. We are currently in the process of analysing the large database of patients treated in our centre. Our plan is to record this valuable information into an electronic format that will allow outcomes to be measured and foster

ongoing research within the centre. This initiative will also allow us to perform quality control audits, which in turn, will allow us to better document the high standard of care that our patients deserve.

### **(iii) Head and Neck Cancer**

The Head and Neck Tumour program has been led by Dr Allan Fowler. Multidisciplinary meetings and clinics are held fortnightly at Liverpool Hospital attended by a head and neck surgeon, radiation oncologists, a medical oncologist, pathologist, dentist, speech pathologist and social worker. The patients are well supported by dietetic, speech pathology and social work staff throughout the course of their illness.

In Radiation Oncology the aim in the near future is to develop image fusion (where the planning CT scans and diagnostic images including MRI and PET scans are fused together to allow even more accurate targeting of the cancer than we have had before) and implementation of Intensity Modulated Radiotherapy (IMRT). We are in the process of enhancing patient information resources and introducing evidence based protocols for oral care. We plan to explore ways to enhance our service within the recently amalgamated Sydney South West Area Health Service by discussing common protocols and databases with colleagues from other hospitals.

### **(iv) Lung Cancer**

The multidisciplinary lung cancer group meet weekly with video-conferencing between Liverpool and Campbelltown Hospitals. The group consists of respiratory physicians, cardiothoracic surgeons, medical and radiation oncologists, palliative care physicians, radiologists, nuclear medicine physicians, registrars and nurses.

They have had a full-time care coordinator since 2002 (Mrs Clare McCarthy). Services for lung cancer patients include PET and CT imaging, cardiothoracic surgery, respiratory medicine, radiation oncology (including endobronchial brachytherapy), chemotherapy and palliative care. There are future plans to have image co-registration of PET and CT images to better target tumours with radiotherapy which is an ongoing research endeavour between Cancer Therapy Centre staff and the nuclear medicine department.

The group are active in terms of lung cancer research and education. The medical oncologists and radiation oncologists have enrolled patients on a large number of clinical trials that test new drugs and test radiotherapy treatment. Dr Vinod and A/Prof Delaney have studied lung cancer patterns of care in SWS that provided a benchmark for improvements in practice in the area. Comparisons with practice in other area health services has also highlighted ways to improve the service. A/Prof Delaney and Dr Vinod are members of the International Association for the Study of Lung Cancer (IASLC), the Advisory Group for the NSW lung cancer patterns of care study, Lung Cancer Working Party of the NSW Cancer Council and the Australasian Lung Cancer Trials Group. Their research in lung cancer has been presented both nationally and internationally. A number of General Practitioner education seminars in lung cancer have been conducted over the past few years. Patient education and support sessions are run regularly for the benefit of patients and carers of patients with lung cancer.

**(v) Central Nervous System Tumours**

Brain and spinal tumours are managed by a multidisciplinary team comprising neurosurgeons, radiation and medical oncologists, social workers and a clinical nurse consultant. We organise the NSW Neuro-oncology group and helped found the Clinical Oncology Society of Australia Neuro-oncology group. This group will develop national guidelines for the management of gliomas in 2005-06.

**(vi) Haematological Malignancies**

The haematology group manages a large number of lymphomas and leukaemias at Liverpool Hospital. It contributes to several clinical trials. A/Professor Michael Barton has been involved in the writing of the National Lymphoma Guidelines and has been part of the organising committee of the national Lymphoma teaching course that is held every two years.

**(vii) Gastro-intestinal Cancer**

There are both upper and lower gastro-intestinal tumour groups, both with regular multi-disciplinary meetings to discuss patient care.

The Colorectal Tumour Group (CRTG) was established in 1995 and is a collaboration of more than 100 clinicians, nurses, stomal therapists and other paramedical staff involved in the management of colorectal cancer in the South Western Sydney area. With financial support from the SWS Bowel Cancer Foundation the CRTG has been able to achieve some of these aims.

The CRTG have developed a prospective database of all colo-rectal cancer cases since 1996.

By 2005 more than 2000 patients with colorectal cancer have been entered onto the database.

In 2004 a report was distributed titled "Colorectal Cancer in South western Sydney 1997-2001" which has been accepted for publication in the Australia and New Zealand Journal of Surgery. This demonstrates excellent outcomes in many areas of management for colorectal cancer patients for patients in SWS.

A colorectal laboratory and tumour bank was established in late 1999 with more than 300 specimens collected. Colorectal cancer specimens are stored and analysed for special features that might predict outcome or indicate a familial predisposition. The lab is also exploring mechanisms by which colorectal cancer becomes resistant to chemotherapy which is a major problem with advanced disease. In 2003 the lab moved across to St Vincent's Hospital in a collaborative arrangement with A/Prof Robyn Ward.

The Foundation has supported numerous professional and patient education initiatives in the area including 4 monthly weekend seminars, GP workshops, journal listings for specialists and regular pathology meetings.

In 2004, the Colorectal Surgical Unit was established under the Chairmanship of A/Prof Cyril Wong. It conducts regular multidisciplinary Tumour Boards and has a care co-ordinator (Sharon Cassar) further improving patient care. The unit now has some of the largest experience in Sydney with new surgical techniques including laparoscopic surgery and local excision of rectal tumours using the Trans Endoscopic Microsurgery (TEMS) machine.

**(viii) Gynaecological Cancers**

The multidisciplinary group consists of gynaecological oncologists, medical and radiation oncologists, pathologists, nurses and registrars. A clinical care co-ordinator is responsible for providing patient information and organising support groups for patients.

Whilst external beam treatment is available at both Liverpool and Campbelltown Hospitals, intracavitary and interstitial brachytherapy is only performed at Liverpool Hospital, as it is a highly specialised procedure requiring dedicated equipment. The SWS gynaecology oncology service has a weekly tumour board attended by a gynaecology oncologist, medical oncologist, radiation oncologists, pathologist and nursing staff.

Professional education sessions are conducted with the gynaecological oncology team from Royal Prince Alfred Hospital. A clinical care coordinator (Ms Luciana Ward) co-ordinates the care of gynaecological oncology patients and provides education and support groups for patients and carers of patients with gynaecological cancer.

**(ix) Skin Cancer**

The Cancer Therapy Centre provides a radiation therapy service for the treatment of skin malignancies, with both superficial and megavoltage treatments available. At this stage there is not a regular multidisciplinary clinic or meeting for those managing skin cancers, with multidisciplinary care being practiced in a more informal way. Our aim is to strengthen the links with our dermatology and plastic surgery colleagues in the future and to be part of a more formal skin cancer program.

# Allied Health Report



**Mr Gerald Au**  
*Clinical Psychologist,  
Allied Health Representative*

The Allied Health in CTC comprises Clinical Psychology, Dietetics, Occupational Therapy, Physiotherapy, Social Work, and Speech Pathology, providing a wide range of services in response to patients needs. Each discipline's line management lies with its relevant parent department, as do their professional affiliations. Since 1996, Allied Health has had a representative on the Executive Committee, serving as the bridge between management and staff.

In the early phase, over half of the Allied Health staff were posted to CTC on a rotational basis. Fortunately, this situation has improved over the years by the allocation of Allied Health staff on a more permanent basis.

Allied Health have consolidated the process of service delivery to meet the ever-increasing demands, serving the inpatient and outpatient cancer population. It has consolidated the referral process and procedures across the disciplines to facilitate communication and coordination of care.

Strong team cohesion has been achieved, and networks built with counterparts in other Area Health Services.

Over the years, a tradition of active collaboration among the disciplines has been built within the Allied Health team to provide comprehensive services to patients. In terms of clinical service, for instance, the Dietitians and Speech Pathologists have set up a joint clinic for patients with head and neck cancer, and the Occupational Therapist and Physiotherapist run a joint lymphoedema service.

Through effective collaboration, Allied Health runs many quality patient education and support programmes for patients and their families. The lymphoedema, laryngectomy, haematology, breast cancer, and brain tumour groups receive extremely favorable feedback from patients and families. The long-running "Dealing with Cancer Education Programme" won the 2002 Liverpool Health Service Quality Award.

The Allied Health team has also piloted several education and support programmes for the major ethnic communities within South Western Sydney.





*(l-r): Josephine Tamara (Physiotherapist), Meredith Porter (Speech Pathologist), Alison Pryor (Social Worker), Heather Aldis (Social Worker), Gerald Au (Clinical Psychologist), Teresa Simpson (Social Worker), Thomas Law (Speech Pathologist), Merran Findlay (Dietitian), Megan Jones (Occupational Therapist).*

Together with the NSW Cancer Council, it has conducted Vietnamese and Arabic education programmes, which have attracted residents from the local community and beyond. As a spin-off of the Vietnamese programme, a facilitator's manual has been produced as a resource for other health professionals interested in running similar programmes in their local areas. In addition, Mandarin and Cantonese education programmes have been conducted.

With the same enterprising spirit, the lymphoedema clinic has extended its service to cover patients treated for cancer in the Fairfield, Liverpool, and Macarthur areas, while post-mastectomy care has extended into Fairfield.

The Speech Pathologists have provided community-based training for family members and hostel staff to perform weekly voice prosthesis changes for laryngectomy patients unable to do this themselves. This eliminates the need for weekly appointments, reduces dependency on clinicians, and empowers patients and families in their cancer care.

The Allied Health team has successfully integrated with other disciplines within the CTC. Its members have been actively collaborating within tumour streams, care coordination, and attend Multidisciplinary Team meetings to facilitate comprehensive care for patients. The Allied Health team are active on many of the Centre's service committees. Its entire staff is now on the Lantis information system through which referrals, and communication can be carried out efficiently with the rest of the Centre. In-service for other staff within the CTC is a regular occurrence.

To Inform the Cancer Service on future directions and development of support services for patients, the Social Workers and Clinical Psychologist have developed a strategic plan on "Psycho-social care for the cancer population in SWS". As part of the strategic plan, a pilot project on routine psycho-social assessment of patients has been developed to facilitate the identification and triage of patients in need of support. This was completed with the Medical and Radiation Oncology departments, Care Coordination, and CCORE in 2004. The team is looking at further promoting this initiative to have this process incorporated into the clinic routine.

The Allied Health team has been one of the youthful, vibrant, adventurous segments of the CTC, and with this spirit, it looks forward to the challenges of the next decade.

# Palliative Care Report

**Dr Louise Elliott**



*(l-r): Laura Woodlands RN, Dr Louise Elliott and Colleen Carter CNC.*

The Liverpool Hospital Palliative Care Consultancy Service began in 1995 with the employment of Dr Amanda Goldrick (0.5 FTE) and Gail Scott as Clinical Nurse Consultant.

The role of the service was to provide expert Palliative Care advice for the patients, carers and staff of the hospital who had a life limiting illness.

Over the years the service has grown through its consultancy role to include close liaison with the Area Palliative Care Service, Community Health & GP education.

The service is now funded for 1.5 FTE Staff Specialists, 1 Clinical Nurse Consultant and 2 Clinical Nurse Specialists. In the year 2003/2004 the service received 290 medical referrals and 690 nursing referrals. The total number of individual visits exceeded 6000.

We now also conduct an outpatients clinic, are involved in medical student education, pre & post graduate nursing education, allied health education and Area policy development.

# Oncology Nursing Report

**Ms Catherine Murray**

When the Cancer Therapy Centre opened, nine nursing staff were recruited from Liverpool Hospital and areas beyond. Cassandra (Cassy) Hobbs Nurse Unit Manager oversaw the opening of the Centre. Unlike today, there were no PC's in the clinic rooms and no electronic booking system for appointments.

Achievements over the years have been many.

They include:

- The transfer of inpatient Cisplatin therapy to outpatient therapy.
- Development of a Chemotherapy Education Program which has developed into a 2-day chemotherapy workshop for all new nursing staff.

- Insertion of PICC vascular access lines by nurses. Liverpool CTC was one of the first centres where nurses were accredited to perform this procedure. This has been further developed by the creation of a vascular access nurse portfolio, vascular access database and assessment tool.

- One of the first CNC positions in Clinical Trials in NSW.
- Nursing staff teaching sessions for the Oncology Course at the NSW College of Nursing & University of NSW Nursing degree.
- Development of the chemotherapy team leader, clinic nurse and the ongoing development of the radiation oncology nurse role.
- Nurse membership of Protocol reference groups at the Cancer Institute.
- The growth of the palliative care team from 1 CNC to an additional 2 CNS positions.
- Presentations by nurses at a number of conferences.
- Premiers Award to the Cancer Services CNE for her participation in the 'Division of Medicine Length of Stay' project.

The individuals have changed and the organisation and nursing practice have moved forward and grown, but the ethos of providing a holistic, dynamic and caring service that strives to deliver best practice and treatment to patients and their families continues today.

# Academic Achievements

Publications that have had contributions from members of the Liverpool Cancer Therapy Centre (names in bold are people from CTC).

Ahern V, **Berry MP**

*Paediatric Radiotherapy in Australia and New Zealand: An anachronism in 2003?*  
Australasian Radiology 2003; 47: 343-48.

**Al-Bahrani BJ, Berry MP**, Singh Y, Taylor D

*Low pressure Cardiac Tamponade.*  
Medical Journal of Australia 2001; 174(2): 102.

**Al-Bahrani BJ, Delaney GP**, Henderson C

*Peripheral Metastasis from Primary Central Nervous System Lymphoma - A case report and review of the literature.*  
Journal of Neuro-Oncology 2000; 47(2): 141-4.

Back M, **Delaney GP**, Ahern V, Graham P, Steigler A, Wratten C  
*Absence of adverse quality of life outcomes of Radiation Therapy in Breast Conservation Therapy of early Breast Cancer.*  
Australasian Radiology 2005; 49(1): 39-43.

Back M, **Delaney GP**, Denham J, Hamilton C, O'Brien P, Yuile P

*High dose chemotherapy in adjuvant breast cancer therapy: Concerns over design and toxicity.*  
ANZ J. Surg 1998; 68: 10-15.

Barbera L, Jackson LD, Schulze K, Groome PA, Foroudi F,

**Delaney GP**, et al

*Performance of different radiotherapy workload models.*  
Int J. Rad Biol Phys 2003; 55(4): 1143-49.

**Barton MB**

*Cancer Outcomes Research Tying the Loop.*  
J Aust Cancer Society 1999; 33(3): 160-61.

**Barton MB**

*Radiotherapy Utilisation in NSW from 1996 to 1998.*  
Australasian Radiology 2000; 44: 308-14.

**Barton MB**

*Mantle Planning: Report on the Australasian Radiation Oncology Lymphoma Group (AROLG) Film Survey and Consensus Guidelines.*  
Australasian Radiology 2000; 44: 433-8.

**Barton MB**

*Radiotherapy utilisation in NSW from 1996 to 1998.*  
Australasian Radiology 2000; 44: 308-14.

**Barton MB**

*The value of follow-up after cancer treatment.*  
Radiotherapy and Oncology 2001; 58(S1): 28.

**Barton MB**, Dawson R, **Jacob S**, Currow D, Stevens G, Morgan G

*Palliative Radiotherapy of Bone Metastases - An evaluation of Outcome Measures.*  
J Eval Clin Pract 2001; 7(1): 47-64.

**Barton MB**, Gabriel G, **Miles S**

*Colorectal Cancer patterns of care in the Western Sydney and Wentworth Area Health Services.*  
ANZ J Surg 2004; 74(6): 406-12.

**Barton MB, Gabriel G**, Sutherland D, Sundquist KJ, Girgis A

*Cancer knowledge and skills of general practice registrars in Australia in 2002.*  
J Cancer Education; In press.

**Barton MB**, GebSKI V, **Jacob S**

*A quality-adjusted analysis of the cost of Palliative Radiotherapy for Bone Metastases.*  
European Journal of Cancer 2000; 36(S3): 11.

**Barton MB, Jacob S**, GebSKI V

*Utility-adjusted analysis of the cost of Palliative Radiotherapy for Bone Metastasis.*  
Australasian Radiology 2003; 47(3): 274-8.

**Barton MB, Kneebone A**

*Adjuvant Therapy for Rectal Cancer can no longer be ignored (Editorial).*  
ANZ J Surg 1999; 69: 619-21.

**Barton MB**, Simons R

*A survey of cancer curricula in Australia and New Zealand medical schools in 1997.*  
Medical Journal of Australia 1999; 170: 225-27.

**Barton MB**, Tattersall MHN, Butow PN, Crossing S, Jamrozik K, Jalaludin B, et al

*Cancer knowledge and skills of interns in Australia and New Zealand in 2001: Comparison with 1990 and between course types.*  
Medical Journal of Australia 2003; 178: 285-9.

**Berry MP, Barton MB**

*Editorial: Health Outcomes and Radiation Therapy: A new era of competition.*

Australasian Radiology 1997; 4: 1-2.

**Berry MP, Barton MB, Kneebone A, Delaney GP, Fowler A, Jacob SA**

*Touchscreen computer survey to assess treatment toxicity and level of anxiety/depression of Radiation Oncology patients.*

Radiotherapy and Oncology 2001; 58(Suppl 1): S19.

Boyages J, **Delaney GP**, Taylor R

*Predictors of local recurrence after treatment of Ductal Carcinoma in situ: a Meta-analysis.*

Cancer 1999; 85: 616-28.

Carter J, MacLeod CA, **Fowler A**, Chan F, Darymple C, Wong F  
*Argument for the surgical staging of apparent early Endometrial Cancer.*

ANZ J Obstet Gynaecol 1999; 39(4): 438-42.

Chong CCW, **Kneebone A**, Sheridan A

*Managing Malignant Spinal Cord Compression.*

Australian Family Physician 2001; 30(9): 859-61.

Chong CCW, **Kneebone A**, Sheridan A

*Back pain and Metastatic Spinal Disease: Making the diagnosis.*

Australian Family Physician 2001; 30(9): 863-65.

Christie D, **Barton MB**, Bryant G, Cheuk R, GebSKI V, Hornsey D, et al

*Osteolympoma (Primary Bone Lymphoma): An Australian review of 70 cases.*

ANZ J Med 1999; 29: 215-19.

Dawson R, Currow D, Stevens G, Morgan G, **Barton MB**

*Radiotherapy for Bone Metastases: A critical appraisal of measures of outcome.*

Journal of Pain and Symptom Management 1999; 17 Mar: 208-18.

**Delaney GP**

*Cardiac mortality and Tangential Breast Radiotherapy.*

Breast News 1999; 5(3): 5.

**Delaney GP**

*Radiation Oncology: Rationale, Technique, Results (Book Review).*

Australasian Radiology 2004; 48(1): 105.

**Delaney GP**

*Principles and Practice of Radiation Therapy (2nd Edition) (Book Review).*

Cancer Forum 2004; 28(3): 158.

**Delaney GP**

*Adjuvant Radiation and/or Tamoxifen for DCIS treated by complete Local Excision.*

Clinical Update 2004; 15: 3-4.

**Delaney GP**

*Recent advances in the use of Radiotherapy to treat Breast Cancer.*

Current Opinion in Obstetrics and Gynaecology 2005; 17(1): 27-33.

**Delaney GP, Barton MB, Jacob S**

*Estimation of an Optimal Radiotherapy Utilization Rate for Breast Carcinoma.*

A review of the evidence. Cancer 2003; 98(9): 1977-86.

**Delaney GP**, Blakey D, Drummond R, Kenny L

*Breast Radiotherapy: A survey of current treatment techniques (On behalf of the NBCC Radiation Oncology Advisory Group).*

Australasian Radiology 2001; 45(2): 170-8.

**Delaney GP**, Christie D

*The RACR Radiation Oncology Part II Examination; Report from the 1995 training course and suggestions for preparation.*

RACR Newsletter 1995; 46: 19-22.

**Delaney GP**, Fisher R, Hook C, **Barton MB**

*Sucralfate Paste: An evaluation of its effect on skin exposed to Radiotherapy.*

Australasian Radiology 1997; 41: 270-75.

**Delaney GP**, French B

*Decision-making in Lung Cancer.*

Chapter In: K N S, C N, C R, eds. Tumours of the Chest: Biology, Diagnosis and Management Denmark: Springer-Verlag, 2005 (In press.)

**Delaney GP**, GebSKI V, Jalaludin B, Griffiths S

*Basic Treatment Equivalent (BTE) - A better measure of Linear Accelerator Workload.*

European Journal of Cancer 2001; 37(S6): S208.

**Delaney GP**, GebSKI V, Langlands AO

*To BTE or not to BTE - that is the question.*

Clinical Oncology 2001; 13(4): 311-12.

**Delaney GP**, GebSKI V, Lunn AD, Lunn M, Rus M, Manderson C, et al

*Basic treatment equivalent - A new measure of Radiotherapy Workload.*

Clinical Oncology 1997; 9: 234-39.

**Delaney GP**, GebSKI V, Lunn AD, Lunn M, Rus M, Manderson C, et al

*An assessment of the Basic Treatment Equivalent model as a measure of Radiotherapy Workload.*

Clinical Oncology 1997; 9: 240-44.

**Delaney GP**, GebSKI V, Rus M, Manderson C, Langlands AO

*The equivalent simple treatment visit model does not adequately measure Radiotherapy Productivity.*

Clinical Oncology 1997; 9: 245-47.

**Delaney GP**, Gerard K

*Breast Cancer patients' attitudes about rationing post-Lumpectomy Radiation Therapy: Applicability of trade-off methods to policy-making.*

Clinical Update 1999; 3: 4-5.

**Delaney GP, Hui A, Berry MP, Fowler A, Kneebone A, Barton MB**, et al

*Don't block the new kids.*

Australasian Radiology 1999; 43(4): 562.

**Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilization Rate for Melanoma: A review of the evidence.*  
Cancer 2004; 100(6): 1293-301.

**Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilisation Rate for Gynaecological Cancer Part I: Malignancies of the Cervix, Ovary, Vagina and Vulva.*  
A review of the evidence. Cancer 2004; 101: 671-81.

**Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilization Rate for Gynaecological Cancers Part II: Carcinoma of the Endometrium.*  
A review of the evidence. Cancer 2004; 101: 682-92.

**Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilization Rate for Gastro-intestinal cancers: A review of the evidence.*  
Cancer 2004; 101: 657-70.

**Delaney GP, Jacob S, Barton MB**

*Estimating the Optimal Utilisation Rates of Radiotherapy for Genito-urinary Cancers.*  
Cancer 2005; 103(2): 393-401.

**Delaney GP, Jacob S, Barton MB**

*Estimating the Optimal Utilization Rates of Radiotherapy for Head and Neck Cancers.*  
Cancer 2005; 103: 2216-2227.

**Delaney GP, Jacob S, Barton MB**

*Estimating the Optimal Radiotherapy Utilization for Cancers of the Central Nervous System, Thyroid and Cancers of unknown primary origin from evidence-based clinical guidelines.*  
Cancer 2005; submitted.

**Delaney GP, Jacob S, Barton MB**

*The role of Radiotherapy in the treatment of Cancer: Estimating the Optimal Utilization from a review of evidence-based clinical guidelines.*  
Cancer 2005; submitted.

**Delaney GP, Jacob S, Barton MB, Jalaludin B**

*A model for decision-making for the use Radiotherapy in Lung Cancer.*  
Lancet Oncology 2003; 4: 120-28.

**Delaney GP, Jacob S, Featherstone C, Barton MB**

*Radiotherapy in Cancer Care: Estimating Optimal Utilisation from a review of evidence-based clinical guidelines report.*  
Liverpool Hospital, Sydney: Collaboration for Cancer Outcomes Research and Evaluation 2003.

**Delaney GP, Jacob S, Iedema R, Winters M, Barton MB**

*A comparison of face-to-face and videoconferenced multidisciplinary clinical meetings.*  
Australasian Radiology 2004; 48(4): 487-92.

**Delaney GP, Jalaludin B, Gildea B, Moylan E, Barton MB**

*The development of a model of Outpatient Chemotherapy throughput - Chemotherapy basic treatment equivalent (CBTE).*  
European Journal of Cancer 2001; 37(S6): S231.

**Delaney GP, Jalaludin B, Moylan E, Barton MB**

*The development of a model of Outpatient Chemotherapy Treatment Delivery - Chemotherapy basic treatment equivalent.*  
Clinical Oncology 2002; 14(5): 406-12.

**Delaney GP, Langlands AO**

*Increased Libido as a complication of Tamoxifen in the management of Male Breast Cancer.*  
The Breast 1996; 5: 53-54.

**Delaney GP, Moylan E, Gildea B, Barton MB, Jalaludin B**

*Basic Treatment Equivalent (BTE) - A new model of assessing Radiotherapy and Chemotherapy treatment throughput.*  
Radiotherapy and Oncology 2001; 58(Suppl 1): S18.

**Delaney GP, Rus M, GebSKI V, Lunn AD, Lunn M**

*An Australasian assessment of the Basic Treatment Equivalent Model derived from New South Wales data.*  
Australasian Radiology 1999; 43: 500-06.

**Delaney GP, Rus M, GebSKI V, Lunn AD, Lunn M.**

*Refinement of the Basic Treatment Equivalent (BTE) model to reflect radiotherapy treatment throughput using Australasian data.*  
Australasian Radiology 1999; 43: 507-13.

**Delaney GP, Shafiq J, Jalaludin B, Barton MB**

*The development of a new Basic Treatment Equivalent model (BTE) to assess Linear Accelerator throughput.*  
Clinical Oncology; 2005; 17(5): 311-8.

**Delaney GP, Shafiq J, Jalaludin B, Barton MB**

*Technology enhancements and changes in Radiation Therapy Productivity in New South Wales.*  
Clinical Oncology 2005; 17(5): 305-10.

**Delaney GP, Sorenson R, Ralston A, Barton MB**

*Strategic Investment and new technology in Radiotherapy.*  
Cancer Forum 2002; 26(3): 180-82.

**Delaney GP, Ung O, Bilius M, Cahill S, Boyages J**

*Ductal Carcinoma in Situ of the Breast Part II - Treatment.*  
ANZ J Surg 1997; 67: 157-65.

**Delaney GP, Ung O, Bilius M, Cahill S, Greenberg M, Boyages J**

*Ductal Carcinoma in Situ of the Breast Part I: Definition and Diagnosis.*  
ANZ J Surg 1997; 67: 81-93.

**Delaney GP, Veness M, Beckham W, Ahern V, Back M, Boyages J, et al**

*Three-dimensional dose distribution of Tangential Breast Irradiation: Results of a Multicentre Phantom Dosimetry study.*  
Radiotherapy and Oncology 2000; 57(1): 61-68.

**Denham J, Steigler A, Kilmurray J, Wratten C, Burmeister BH, Lamb D, Delaney GP et al**

*Relapse patterns after Chemo-radiation for Carcinoma of the Oesophagus.*  
Clinical Oncology 2003; 15: 98-108.

Do V, GebSKI V, **Barton MB**

*The effect of waiting for Radiotherapy for Grade III/IV Gliomas.*  
Radiotherapy and Oncology 2000; 57(2): 131-6.

Drummond R, Power A, Evans A, Luxford K, Blakey D,  
**Delaney GP**, et al

*Changes in practice of Breast Cancer Radiotherapy 1998-2000: An Australasian survey.*  
Australasian Radiology 2005; 49(1): 44-52.

**Ellis P, Delaney GP, Della-Fiorentina S, Moylan E**

*Lessons to be learned from a retrospective review of the management of Small Cell Lung Cancer at the Cancer Therapy Centre, Liverpool Hospital.*

January 1996-July 2000. Australasian Radiology 2004; 48: 364-70.

Esmaili N, Clover K, **Vinod SK**, Hensley MJ

*Patterns of care for Lung Cancer in the Hunter (1996).*  
Australian Thoracic Society Meeting (Abstract) 2002.

**Featherstone C, Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilization rate for Haematological Malignancies (Part I): A review of the evidence.*  
Cancer 2005; 103(2): 383-392.

**Featherstone C, Delaney GP, Jacob S, Barton MB**

*Estimating Optimal Radiotherapy Utilisation for Haematological Malignancies from clinical guidelines.*  
Clinical Oncology 2003; 15(2): S25.

**Featherstone C, Delaney GP, Jacob S, Barton MB**

*Estimation of an Optimal Radiotherapy Utilization Rate for Haematological Malignancies (Part II): A review of the evidence.*  
Cancer 2005; 103(2): 393-401.

Gogna K, Spry N, Matthews J, **Berry MP**, Marneghan H, Duchesne G, et al

*Chemo-Radiation in the management of TCC of the Urinary Bladder.*

Trans-Tasman Radiation Oncology Group (TROG 97.01) Phase II Study of TUR Followed by Synchronous Chemo-Radiotherapy in the Definitive Management of Invasive TCC of the Urinary Bladder. Radiotherapy and Oncology 2001; 58(Suppl 1): S67.

Graham P, Capp A, Fox C, Nasser E, **Delaney GP**, Ahern V, et al

*Why a Breast Boost should remain a controversial aspect of routine Breast Conservation Management in Australia and New Zealand in 2002.*

Australasian Radiology 2003; 47(1): 44-49.

Griffiths S, **Delaney GP**, Jalaludin B

*An assessment of Basic Treatment Equivalent at Cookridge Hospital.*

Clinical Oncology 2002; 14: 394-98.

Harris RS, **Berry MP**

*Localised Prostate Cancer: Which way forward?*  
Medical Journal of Australia 1995; 162(3): 116-17.

Hruby G, **Barton MB**, Carroll S, Nasser L, Miles S, Stevens G  
*Sites of Local Recurrence following surgery, with or without Chemotherapy for Rectal Cancer – Implications for Radiotherapy Field Design.*

Int J Rad Biol Phys 2003; 55(1): 138-43.

Hruby G, Lehman M, **Barton MB**, Peduto T

*Malignant Retroperitoneal Paraganglioma: A case report and review of treatment options.*

Australasian Radiology 2000; 44(4): 478-82.

**Hui A**, Abi-Hanna D, Rae R, **Delaney GP**

*The use of Mucosal Clips to delineate Oesophageal Tumours for Radiotherapy Planning.*

Australasian Radiology 2002; 46(1): 111-14.

**Hui A, Berry MP, Delaney GP**

*Clinical audit of a new radiation Oncology Department in the first 20 months of establishment.*

Australasian Radiology 1999; 43: 82-86.

**Hui A, Vinod SK**, Jalaludin B, Yuile P, **Delaney GP**, **Barton MB**

*Socioeconomic status and patterns of care in Lung Cancer.*  
ANZ J Public Health 2005; submitted.

**Jacob S, Berry MP, Kneebone A, Delaney GP, Fowler A, Behan S**, et al

*Computerised screening for Anxiety, Depression and Radiation Toxicity in cancer patients.*

Cancer Forum 2004; 28(3): 143-46.

**Jacob S, Delaney GP**, Bonar T, **Barton MB**

*An assessment of Videoconferencing in Multidisciplinary Breast Meetings report.*

National Breast Cancer Centre, 2001.

**Keall P, Monti di Sopra F, Beckham W, Delaney GP**

*Comparison of Kilovoltage X-ray and Electron Beam Dose distributions for Radiotherapy of the Sternum.*

Medical Dosimetry 1999; 24(2): 141-44.

**Keall P, Monti di Sopra F, Beckham W, Delaney GP**

*Orthovoltage X-rays versus Electrons for Superficial Lesion Radiotherapy.*

Radiotherapy and Oncology 1998; 48: S150.

Kenny L, Peters L, Rodger A, **Barton MB**, Turner S

*Modern Radiotherapy for modern surgeons: An update on Radiation Oncology.*

ANZ J Surg 2002; 72(2): 131-6.

**Kneebone A**, Hogendorn N, Tramontana D, Gapes L, Turner S, GebSKI V

*Randomised trial of complete immobilization for Pelvic Irradiation.*  
Int J Rad Biol Phys 2003; 56(4): 1105-11.

**Kneebone A**, Marneghan H, **Berry MP**, Kearsley J, Turner S, Bolin T, et al

*A Phase III randomised trial to assess the effect of Oral Sucralfate on the Acute Proctitis associated with Prostate Radiotherapy.*

Int J Rad Biol Phys 2001; 51(3): 682-35.

- Kneebone A**, Mameghan H, Bolin T, **Berry MP**, Turner S, Kearsley J, et al  
*The effect of Oral Sucralfate on the Acute Proctitis associated with Prostate Radiotherapy: A double-blind randomised study.*  
Int J Rad Biol Phys 2001; 51(3): 628-35.
- Kneebone A**, Mameghan H, Bolin T, **Berry MP**, Turner S, Kearsley J, et al  
*Effect of Oral Sucralfate on late Rectal Injury associated with Radiotherapy for Prostate Cancer: A double-blind randomized trial.*  
Int J Rad Biol Phys 2004; 60(4): 1088-97.
- Kneebone A**, Turner S, **Berry MP**, Cakir G, Gebiski V  
*Prospective review of outcome following Radical Irradiation for clinically localised Prostate Cancer.*  
Australasian Radiology 2003; 47(4): 422-27.
- Latimer J, Beckham W, Delaney GP, West M, Holloway LC**  
*Utilizing an expandable Micro-shell to minimize skin dose and support large breasts during Tangential Irradiation.*  
Medical Dosimetry 2005; 30(1): 31-35.
- Lehman M, **Delaney GP, Papadatos G, Jacob S**, Jalaludin B, **Barton MB**  
*Waiting times for Radiotherapy – A survey of patient's attitudes.*  
Radiotherapy and Oncology 2004; 70: 283-89.
- Lim K, Vinod SK**, Bull CA, O'Brien P, Kenny L  
*The prioritisation of waiting lists for Radiotherapy in Australia and New Zealand.*  
Australasian Radiology 2004; In press
- Lin P, Chu J, **Kneebone A**, Pocock N, Kiat H, Rosenfeld D, et al  
*Direct comparison of 18F-Fluorodeoxyglucose Coincidence Gamma Camera Tomography with Gallium Scanning for the staging of Lymphoma.*  
IMJ 2005; In press.
- Lin P, **Delaney GP**, Chu J  
*Fluorine-19 FDG Dual-head Gamma Camera coincidence imaging of Radiation Pneumonitis.*  
Clinical Nuclear Medicine 2000; 25(11): 866-9.
- MacLeod CA, Cheuk R, Dally M, **Fowler A**, Gauden S, Leung S, et al  
*Australasian high dose rate Brachytherapy Protocols for Gynaecological Malignancy.*  
Australasian Radiology 2001; 45: 43-48.
- MacLeod CA, **Fowler A**  
*High dose rate Brachytherapy in the management of Cervical and Vaginal Intraepithelial Neoplasia (letter).*  
Int J Rad Biol Phys 1998; 40: 881-87.
- MacLeod CA, **Fowler A**, Dalrymple C, Atkinson K, Elliott P, Carter J  
*High dose rate Brachytherapy in the management of high grade Intraepithelial Neoplasia of the Vagina.*  
Gynaecol Oncol 1997; 65: 74-77.
- MacLeod CA, **Fowler A**, Darymple C, D'Costa I, Firth I, Atkinson K, et al  
*High dose rate Brachytherapy in the management of Carcinoma of the Cervix: An 8 year Australian experience.*  
ANZ J Obstet Gynaecol 1997; 37: 342-47.
- MacLeod CA, **Fowler A**, Duval P, et al  
*High dose rate Brachytherapy alone post Hysterectomy for Endometrial Cancer.*  
Int J Rad Biol Phys 1998; 42: 1033-39.
- MacLeod CA, **Fowler A**, Duval P, et al  
*Adjuvant high dose rate Brachytherapy with or without External Beam Radiotherapy post Hysterectomy for Endometrial Cancer.*  
Int J Rad Biol Phys 1999; 9(3): 247-55.
- MacLeod CA, **Fowler A**, O'Brien P  
*Selection of surgery or radiotherapy as the appropriate single modality of treatment for Stage IB and 2A Carcinoma of the Cervix (letter).*  
ANZ J Obstet Gynaecol 1998; 38:51.
- MacLeod CA, Stevens G, **Fowler A**  
*Best practice parameters for management of Rectal Cancer: Recommendations of the Colorectal Surgical Society of Australia (letter).*  
ANZ J Surg 1997; 67:215.
- MacLeod CA, **Vinod SK**  
*Early Cervical Cancer treated with Definitive or Adjuvant Radiotherapy: Improved survival with Adjuvant Radiotherapy attributable to patient selection.*  
Australasian Radiology 2003; 47: 279-83.
- Manderson C, **Berry MP**, Gebiski V  
*An Australasian survey of current practice regarding Radiation Treatment Records.*  
The Radiography 1996; 43(4): 157-62.
- Morgan G, Ward R, **Barton MB**  
*The contribution of Cytotoxic Chemotherapy to 5-year survival in adult malignancies.*  
Clinical Oncology 2004; 16: 549-60.
- Ngan SYK, Burmeister BH, Fisher R, Rischin D, J. SD, **Kneebone A**, et al  
*Early toxicity from Preoperative Radiotherapy with continuous infusion 5-Fluorouracil for Resectable Adenocarcinoma of Rectum. A phase II trial for the Trans-Tasman Radiation Oncology Group.*  
Int J Rad Biol Phys 2001; 50(4): 883-87.
- Ngan SYK, Burmeister BH, Fisher R, Rischin D, Schache DJ, **Kneebone A**, et al  
*A Phase II trial of preoperative Radiotherapy with Protracted Infusion 5-Fluorouracil for Resectable Adenocarcinoma of Rectum. A multi-centre trial for the Trans-Tasman Radiation Oncology Group.*  
Int J Rad Biol Phys 2000; 48(suppl): 119-20.
- Ngan SYK, Fisher R, Burmeister BH, Rischin D, Mackay JR, **Kneebone A**, et al  
*Delayed relapse following preoperative Chemoradiation and surgery for Rectal Cancer.*  
Int J Rad Biol Phys 2003; 57(2 Suppl): S220.



- Ngan SYK, Fisher R, Rischin D, Joseph D, Burmeister BH, Schache DJ, **Kneebone A**, et al  
*Comparison of two regimens of Protracted Infusion 5-Fluorouracil as part of preoperative Chemoradiation treatment of Resectable Adenocarcinoma of Rectum.*  
Radiotherapy and Oncology 2001; 58(Suppl 1): 36.
- O'Brien P, Roos D, Pratt G, Liew K, **Barton MB**, Poulsen M, et al  
*A Phase 2 multi-centre study of brief single Methotrexate followed by Irradiation in Primary CNS Lymphoma.*  
Journal of Clinical Oncology 2000; 18(3): 519-26.
- Penman A, **Barton MB**  
*Access to Radiotherapy: The gap between policy and practice.*  
Cancer Forum 2002; 26(3): 173-76.
- Perez MD, Hill RF, Whitaker MK, Greig L, West MP, Williams MJ**, et al  
*Dosimetry of Small Electron Fields shaped by lead.*  
Australasian Physical and Engineering Sciences in Medicine 2003; 26(3).
- Singh V, **Al-Bahrani BJ, Berry MP**, Taylor D  
*Cardiac Tamponade missed clinically but diagnosed by CT Scan.*  
ANZ J Med 2000.
- Skala M, Berry MP**, Duchesne G, Gogna K, Tai KH, Turner S, et al  
*Australian and New Zealand 3D Conformal Radiation Therapy (3DCRT) consensus guidelines for Prostate Cancer.*  
Australasian Radiology 2004; 48(4): 493-501.
- Skala M, Delaney GP**, Vladica N  
*The use of Radiotherapy in the management of Rhinophyma – A case report.*  
Australasian Dermatology 2005; 46: 89-90.
- Starmer D, Jamrozik K, **Barton MB, Miles S**  
*Evaluating curriculum changes in Undergraduate Cancer Education.*  
J Cancer Education 2004; 19: 156-60.
- Stevens G, **Berry MP**, Firth I  
*Faculty of Radiation Oncology – A survey of Work Practices.*  
Australasian Radiology 1999; 43(2): 233-42.
- Tai KH, Duchesne G, Turner S, **Kneebone A**, See A, Gogna K, et al  
*Three-dimensional Conformal Radiotherapy in the treatment of Prostate Cancer in Australia and New Zealand: Report on a survey of Radiotherapy Centres and the proceedings of a Consensus Workshop.*  
Australasian Radiology 2004; 48(4): 493-501.
- Turner S, Adams K, Bull CA, **Berry MP**  
*Sexual dysfunction after radical radiation therapy for Prostate Cancer: A prospective evaluation.*  
Urology 1999; 54(1): 124-29.
- Tynan K, Barton MB, Krickler W**  
*Cancer care: From cottage industry to strategic care.*  
NSW Public Health Bulletin 2001; 12(10): 266-69.
- Veness M, Delaney GP**  
*Variations in Breast Tangent Radiotherapy – A survey of practice in New South Wales and the Australian Capital Territory.*  
Australasian Radiology 1999; 43: 334-38.
- Veness M, Delaney GP, Berry MP**  
*Lung Cancer in patients aged 50 years and younger: Clinical characteristics, treatment details and outcome.*  
Australasian Radiology 1999; 43(3): 328-33.
- Vincent D, Beckham W, Delaney GP**  
*An assessment of the number of CT Slices necessary for Breast Radiotherapy.*  
Radiotherapy and Oncology 1999; 52: 179 -83.
- Vinod SK**  
*Adjuvant Radiotherapy in early stage Cervical Cancer.*  
Salud Ciencia (Spanish) 2000; 10: 8-12.
- Vinod SK, Delaney GP, Baumann A, Barton MB**  
*A Lung Cancer Patterns of care study in South Western Sydney Area Health Service, New South Wales, Australia.*  
Thorax 2002; 58(8): 690-94.
- Vinod SK, Hui A**, Esmaili E, Hensley MJ, **Barton MB**  
*A comparison of patterns of care in Lung Cancer in three area health services in NSW.*  
Int Med J 2004; 34: 677-83.
- Vinod SK**, Jalaludin B, Rodger A, Turner S, Kelly L, Thornton D, et al  
*Part-time consultants in Radiation Oncology.*  
Australasian Radiology 2002; 46: 396-401.
- Vinod SK**, MacLeod CA, Barnes DJ, Fletcher J  
*Malignant Fibrous Histiocytoma of the Trachea.*  
Respirol 1999; 4: 271-74.
- Vinod SK**, MacLeod CA, Dalrymple C, Elliott P, Atkinson K, Carter J, et al  
*Surgery and post-operative Radiotherapy for early stage Cervical Cancer.*  
Aust NSW J Obstet Gynaecol 2000; 40: 66-69.
- Vinod SK**, MacLeod CA, **Fowler A, Delaney GP, Barton MB**, Jalaludin B  
*A basic treatment equivalent for Gynaecological Brachytherapy: A pilot study.*  
Radiotherapy and Oncology 2001; 58(Suppl 1): S63.
- Vinod SK**, MacLeod CA, **Fowler A, Delaney GP, Barton MB**, Jalaludin B  
*A basic treatment equivalent for high-dose rate Gynaecological Brachytherapy: A pilot study.*  
Clinical Oncology 2002; 14(5):394-98.
- Vinod SK**, Pendlebury S  
*Carcinoma of the male breast: A review of Adjuvant Therapy.*  
Australasian Radiology 1999; 43: 69-72.
- Vinod SK**, Pendlebury S  
*Review of Internal Mammary Chain Irradiation in Breast Cancer.*  
The Breast 1999; 8: 245-50.

# Post Graduate Degrees<sup>1</sup> and Awards<sup>2</sup>

**<sup>1</sup>Oona Collins**

BSc (Hons).  
UTS. 2002.

**<sup>1</sup>Geoff Delaney**

MD awarded UNSW 2003.  
Thesis title: "The development of a new measure of Linear Accelerator Throughput in Radiation Oncology Treatment Delivery – The basic treatment equivalent".

**<sup>1</sup>Kylie Dundas**

Master of Applied Science.  
The University of Sydney. 2004.  
"The Effects of Dose Compensation, Set-Up Error and Breast Size on Radiation Therapy of the Intact Breast".

**<sup>1</sup>Marcia Fleet**

Masters in Public Health.  
University of Western Sydney. 1997.

**<sup>1</sup>Gabriel Gabriel**

Fellowship of the Australasian Faculty of Public Health Medicine.  
December 2002.

**<sup>1</sup>Anne-Marie Griffin**

Masters in Public Health.  
University of Western Sydney. 1999.  
Diploma of Somatic Psychotherapy.  
College of Contemporary Somatic Psychotherapy. 2004.

**<sup>1</sup>Robin Hill**

Accreditation in Radiotherapy Commissioning and Quality Assurance.  
Australasian College of Physical Scientists and Engineers in Medicine. 1999.

**<sup>1</sup>Lois Holloway**

Accreditation in Radiotherapy Commissioning and Quality Assurance.  
Australasian College of Physical Scientists and Engineers in Medicine. 2005.  
PhD 1999. UNSW.  
Thesis entitled: "Radiotherapy Optimisation: Biological and Physical Concepts".

**<sup>1</sup>Andrew Hui**

Awarded Master of Medicine (Clin Epi).  
Sydney University. 2002.

**<sup>1</sup>Dr S Jacob**

Masters in Health Administration.  
UNSW. 2004.

**Ming Kong**

BSc (Hons).  
UNSW. 2004.

**<sup>1</sup>Teresa Simpson**

Masters of Councelling.  
University of Western Sydney. 2002.

**<sup>1</sup>Phan Sayaloune**

Masters in Public Health.  
UNSW. 2002.

**<sup>1</sup>Kate Tynan**

Masters in Public Health.  
UNSW. 2003.

**Thu Tran**

BSc (Hons).  
UNSW. 1999.

**Michael Veness**

Awarded 2002 MMed (Clin Epi).  
University of Sydney.  
Treatise: "Evidence Based Medicine and Radiation Oncology in Australia and New Zealand in 2000".

**<sup>1</sup>Matthew Williams**

PhD  
UNSW. 2004.  
Thesis entitled: "Investigations into Static Multileaf Collimator based intensity modulated Radiotherapy".

**<sup>1</sup>Nick Wilcox**

Masters in Public Health.  
UNSW. 2005.

**<sup>1</sup>Debra Vincent**

Batchelor of Applied Science (MRS) Radiation Therapy.  
University of Sydney. 1996.

**<sup>1</sup>Shalini Vinod**

MD awarded UNSW 2004.  
Thesis title: "A Lung Cancer patterns of care study in the South Western Sydney Area Health Service".

**<sup>2</sup>Ray Asghari**

Trainee/Student Prize, Clinical Oncological Society of Australia AGM – Canberra 2004.  
*“Estimation of an Optimal Chemotherapy Utilization Rate in newly-diagnosed Colon Cancer”.*  
R Asghari, E Hovey, E Moylan, S Jacob, G Delaney, M Barton.

**<sup>2</sup>Mike Bailey**

*ACPSEM Accreditation in Radiotherapy.*  
Equipment commissioning and quality assurance.  
June 2005.

**<sup>2</sup>Michael Barton**

*Professional Excellence Award.*  
NSW Cancer Council. 2000.

**<sup>2</sup>Geoff Delaney, Michael Barton, Susannah Jacob**

*Philips prize in Radiation Oncology for the best research paper presented by a fellow of the college at the RANZCR College meeting.*  
Adelaide, 2002.

**<sup>2</sup>Geoff Delaney, Michael Barton**

*People’s Choice poster prize.*  
Leura International Breast Cancer meeting. 2000.



*The Hon John Fahey addressing the LCTC Annual General Meeting 2002.*

**<sup>2</sup>Lois Holloway**

Australasian College of Physical Sciences and Engineering in Medicine’s *Boyce Worthley Young Achiever Award.* 2003.  
*Finalist in the Cancer Cure Foundation’s Young Researcher of the Year Award.* 2003.  
*Varian Prize* for the best Radiotherapy Oral Presentation at the Australasian Engineering and Physical Sciences in Medicine and Health meeting. 2001.

**<sup>2</sup>Lois Jones**

*Young Investigator Award* at the 4th International Stereotactic Radiosurgery Congress. 1999  
*Marie Curie Prize* for the best postgraduate research and presentation from the NSW Branch of the Australasian College of Physical Scientists and Engineers in Medicine. 1999.

**<sup>2</sup>Fabrice Monti di Sopra**

*MSc 1998.*  
Swiss Federal Institute of Technology, Zurich.

**<sup>2</sup>Stephen Thompson**

*“Optimal Brachytherapy Utilization”.*  
Awarded the Certificate of Merit for Oral Presentation – CVS and Cancer.  
UNSW Faculty of Medicine.  
Merck Sharp and Dohme poster competition.  
23 September 2004.

**<sup>2</sup>Matthew Williams**

*Marie Curie Prize* for the best postgraduate research and presentation from the NSW Branch of the Australasian College of Physical Scientists and Engineers in Medicine. 2002.

# Activity 1995-2004

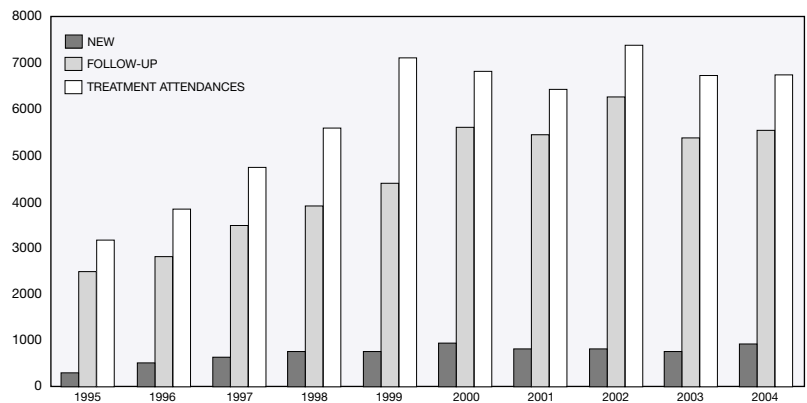
The following graphs show the changes in activity throughout the CTC's history. They have shown steady increases in the demands for services. It is likely that we have not yet reached the peak activity as further enhancements to Cancer Services are planned over the next 5 years.

In the last 12 months, the radiation oncology department saw 1300 new patients, 3370 follow-up patients and provided 1300 new courses of treatment.

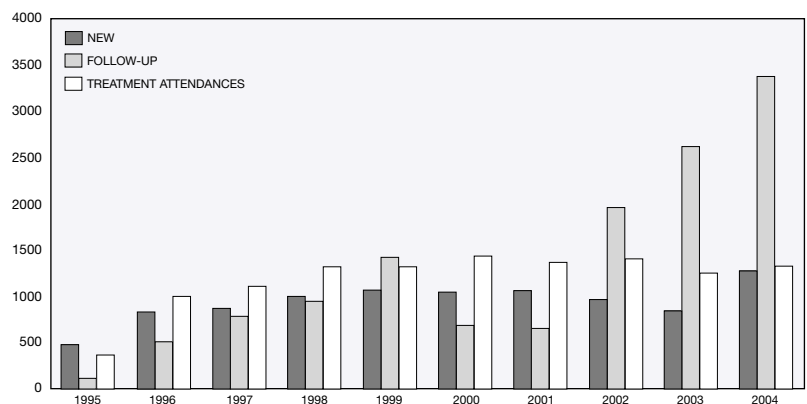
In medical oncology, there were nearly 1000 new patients, over 5,500 follow up appointments and over 6,000 treatments. There has been a plateau in consultations and treatments due to staff and facilities reaching full capacity in 1997/98.

The following graphs highlight the main activities in radiation oncology and medical oncology across the area.

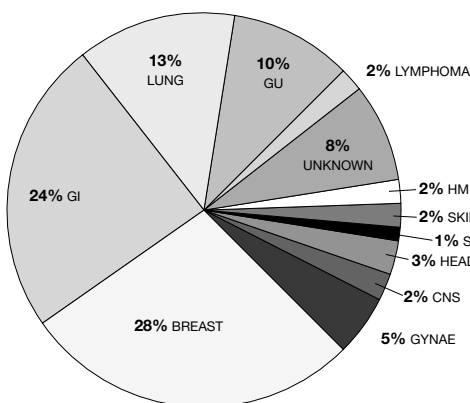
**Medical Oncology: No of New, Follow-up and Treatment Attendances of Patients 1995-2004**



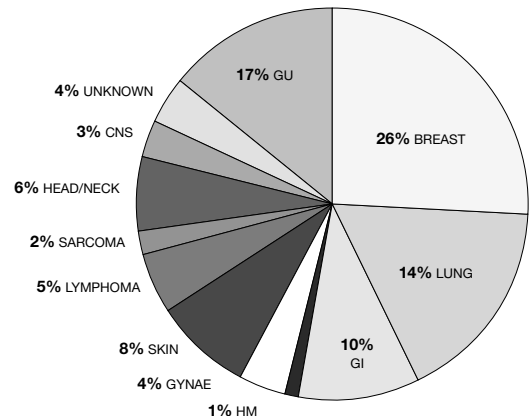
**Radiation Oncology: No of New, Follow-up and Treatment Attendances of Patients 1995-2004**



**Medical Oncology: Total New Patients by Tumour Site**



**Radiation Oncology: Total New Patients by Tumour Site**



# Quality Initiatives

Since Cancer Therapy Centre's inception, a strong focus has been on the quality of care provided. This has resulted in ongoing development of initiatives to improve quality. In the second half of the decade, there has been formalisation of quality programs and processes. This has seen a significant amount of cooperative work from all groups within radiation oncology; medical physics, radiation therapy, medical oncology, palliative care, nursing, allied health and administrative support staff. We are now in a strong position with formal processes in place to detect and analyse any incidents and deficiencies, and then take appropriate action.

Specific incident reporting tools relevant to radiation oncology and review of incident processes have been developed. The Radiotherapy Quality Improvement Committee formally began in 2000. Its role is to review all processes related to the delivery of radiation therapy to patients and to oversee the development of new techniques and installation of new technology. The Radiation Therapy Incident Review Committee was formed in 2004. This was a significant initiative in fostering an environment and culture of reporting all incidents, including events that were "near miss" incidents.

The committee reviews incidents reported then assesses the department's response to the incident and the adequacy and evaluation of implemented changes. There is a weekly audit of patient treatment. This provides peer review and a discussion forum for radiation therapists and medical physicists to highlight planning and treatment delivery issues. This audit is currently undergoing review and change to comply with the new (currently in draft) Royal Australian and New Zealand College of Radiologists audit requirements.

The Cancer Therapy Centre Quality Improvement Committee is a multi-disciplinary group that ensures cooperation and coordination within the relevant departments of the Cancer Therapy Centre. It is charged with the facilitation and reporting of quality assurance projects, systems and procedures, and evaluation of audit results and reporting to the hospital executive.

The Cancer Therapy Centre also participates in the broader quality and occupational health and safety programs of Liverpool and Campbelltown Hospitals and New South Wales Health, including EQU IP and Numerical Profile accreditation.

# Education Initiatives



*Some of the graduated Registrars (top to bottom):  
Dr Upendra Parvathaneni,  
Dr Rowena Martin, Dr Minjae Lah  
and Dr Marketa Skala.*

Education is a particular strong point of the Cancer Therapy Centre, with many staff interested in fostering good education programmes.

The Cancer Therapy Centre has a highly regarded Radiation Oncology Training Programme with an excellent record in getting registrars through the exam at the first attempt. This is largely due to the interest in education and training by its radiation oncologists. A/Prof Martin Berry has been an examiner from 1997-2003 and is a previous chair of the NSW Education co-ordinating committee. In 2005 he was appointed as Chief Censor for the Faculty of Radiation Oncology. Dr Andrew Kneebone has been the Supervisor of training at Liverpool from 1997 to 2004 and also has been the secretary of the NSW Education Committee for the last 5 years. A/Prof Michael Barton has been awarded the professional education award from the NSW Cancer Council, established the highly successful Basic Sciences of Oncology Course (and has expanded this to develop a distance Basic Sciences of oncology course for the International Atomic Energy Agency), has formulated the Ideal Cancer Curriculum for Australian Medical Students and has been involved in numerous other education initiatives.

A/Prof Geoff Delaney has been a member of the NSW Education committee for many years and was pivotal in organising the highly successful state-wide training programme as well as the pre-examination workshops. Dr Shalini Vinod has been a previous registrar representative on the faculty education board and is now an active member of the NSW education Committee. In 2005, Dr Dion Forstner has taken over as supervisor of registrar training. Already his enthusiastic attitude has made an impact on the training programme.

This interest in Education has produced outstanding results. Since opening in 1995, SWS has had 9 radiation oncology registrars complete their training. These registrars were Andrew Hui, James McKean, Gil Campbell, Thomas Shakespeare, Lyn Austen, Minjae Lah, Upendra Parvathaneni, Marketa Skala and Rowena Martin. All 9 passed their final barrier exams on their first attempt, which is a record the department is very proud of. Currently we have 6 registrars working at Campbelltown and Liverpool.

The Cancer Therapy Centre continues to be a consistent and strong supporter of training for Radiation Therapists in South Western Sydney. All programs that are run for Radiation Therapists are recognised by the professional body, the Australian Institute of Radiography. Radiation Therapy Student Education has evolved to a fully co-ordinated program including buddy training, student debriefing, and thorough student orientation to the department and radiation therapy. Students from Sydney and Newcastle Universities are welcomed in the department 39 weeks of the year, and always report a positive and enriching learning experience. Students from Sydney University first year class also visit the department for an introduction to the profession they are training for.

In the last 3 years, the Cancer Therapy Centre has attracted and retained 17 new graduates in radiation therapy. Training for these new graduates, has extended from a program that caters for basic needs, to a program that inducts the PDY's into every aspect of a multi-disciplinary dual site department, with full assessment of their progress throughout the year.

Continuing education for staff is vital to staff retention and assisting in the development of competence and safe delivery of treatment. In recent years, the cancer therapy in-service program has developed to include education that assists Radiation Therapists, Registrars, Oncologists and Physicists.

The program was developed collaboratively between the three groups to provide an education program that appeals to all. Topics include basic oncology science, general workplace education, radiation therapy specific talks and presentations from members of the physics team. Cancer Services' Education Committee's charter is to co-ordinate and advocate for improved education for staff and patients of Cancer Services. They facilitate the documentation of all education programmes for the centre, and aim to standardise the information that is disseminated. The scope includes staff education, orientation and assessment, as well as patient information, education programmes and support groups.

The clinic support staff has undertaken a pilot programme to upskill the whole team in customer service. They will broaden their knowledge to help with problem solving at the base level and achieve a certificate in Business Administration. The committed staff are enjoying the programme, and we hope that it will achieve an improvement in the service our patients receive at the front door.

Since the inception of the Cancer Therapy Centre, education and training has been a high priority within the Medical Physics group. In the first few years, the experience level of the junior staff was low and from this, a number of education initiatives were undertaken. An in-house tutorial program was run for about four years covering the basic competencies in radiotherapy physics.

These were of a practical nature and ensured that all staff had sufficient clinical training to take part in the various clinical tasks. Several junior physics staff attended the Basic Sciences of Oncology course as run by the NSW Cancer Council. The training program was refined in the following years, particularly in regards to treatment planning. In 2003, NSW Health announced funding for medical physics registrar positions. This required the implementation of a formal training program in accordance with the Australian College of Physical Scientists and Engineers in Medicine (ACPSEM) training program called TEAP. The ACPSEM has specified the competencies required within TEAP but did not design any training program. The training program was put together and consisted of a tutorial program (with questions and recommended readings), competency assessment sheets and an assessment process. This required significant work by the senior physics staff in combining various resources together to set this program in place.

The medical physics staff have been actively involved in education outside of the group throughout the 10 years. This involvement has included providing lectures in the Basic Science of Oncology courses, tutorial session for radiation oncology registrars, lectures and tutorials at the various university departments for both medical physics and radiation therapy courses.

# *Information Technology Report*

There have been a large number of information technology initiatives that have been conducted in the Liverpool CTC. The CTC have an information technology meeting monthly to discuss project progress. A number of members of the CTC have provided significant input into state and national information technology initiatives. The Liverpool CTC were the instigator of the NSW Health Radiotherapy Information Strategy which has resulted in every public radiation oncology facility having an electronic radiotherapy patient record. Liverpool and Campbelltown have extended this electronic record to incorporate medical oncology and have worked on the system to use it in a way that results in less error, greater efficiency and greater treatment quality. In addition, the information technology group have been responsible for establishing the CTC website <http://www.swsahs.nsw.gov.au/cancer/default.asp>, the development of a touchscreen computer programme that assists clinicians establish whether patients have symptoms of depression or anxiety, the development of video-conferencing of multiple multi-disciplinary meetings, the development of a prospective database for all cancer patients and electronic linkages with the hospital information system.

One major initiative that will require significant work is the development of an area-wide hospital-based cancer registry which will allow clinicians and administrators access to real-time data on patterns of care, incidence and treatment quality across Sydney South-West. To date, significant groundwork has been done in developing a system that will facilitate development of this registry. Dr Val Poxon has just been appointed as project leader and she brings with her a wealth of experience in developing similar audit tools in the Division of Surgery.



# Clinical Trials Unit



*The 2005 Clinical Trials Team (l to r):  
Seini Taufa, Vu Nguyen and Masrura Kabir.*

From the outset the Cancer Therapy Centre set up a unit to promote clinical trial participation. Initially chaired by Dr David Goldstein the committee set about involving itself with establishing a range of clinical trials with international collaborations in all cancer sites. Denise Burns, the clinical trials Nurse Consultant established a service based on good clinical practice, high quality data collection and built up a team of nurses, research officers and data managers. When Dr Goldstein left in 1996, A/Prof Delaney took over the chair until he handed over to Dr Della-Fiorentina in 1998.

We quickly obtained a reputation for levels of enrolment into clinical trials at levels above the National Health and Medical Research Foundation targets. We were the leading recruiting site in adjuvant studies for colorectal and breast cancer within the first 4 years of operation.

This recognition led to oncologists from the Cancer Therapy Centre leading national studies in prostate, lung, breast and lymphoma studies.

We have developed innovative research within the centre around multicultural needs of cancer patients and a touch-screen technology for patient's anxiety assessment and needs. A/Prof Barton was a member of the Liverpool Ethics committee; Dr Kneebone is on the steering committee for the Cancer Council NSW Clinical Trials group. Dr Della-Fiorentina is a reviewer for the NSW Health Shared Scientific Assessment Committee.

The Cancer Service has been successful in obtaining grants for two research officers from the NSW Cancer Council and one from the NSW Cancer Institute.

This is in recognition for the quality of our work; the needs of the population of South West Sydney, the high level of enrolment to clinical trials and the fostering of a research environment amongst the staff of the Cancer Therapy Centre.

The following list of our clinical trial involvement shows the breadth and commitment to finding newer and better treatments to our current and future patients.

*The following clinical trials have been conducted within the Liverpool Hospital Cancer Therapy Centre.*

## **Radiation Oncology**

### **TROG 99.04 - Chemotherapy and Radiotherapy for Osteolymphoma**

A prospective non-randomised study of Chemotherapy and Radiotherapy for Osteolymphoma.

*Principal Investigator: A/Prof Michael Barton.*

### **PET scan f-18 FDG**

Phase III clinical trial of 18-FDG Co-PET Scanning in patients with Inoperable Cancer.

*Principal Investigator: Dr Martin Berry.*

### **Anxiety Study**

Patient anxiety associated with Cancer Follow-up clinic attendance.

*Principal Investigator: Dr Minjae Lah.*

### **Merkel Cell**

A Phase II study of Synchronous Carboplatin/Etoposide and Radiation in Merkel Cell Carcinoma of the skin.

*Principal Investigator: Dr Geoff Delaney.*

### **Prostate PPS**

Phase III Double Blind Study of Pentosan Polysulphate Sodium (PPS) in the treatment of late (Chronic) Radiation Proctitis.

*Principal Investigator: Dr Martin Berry.*

### **Clinical Ultrasound**

Pilot Study to Evaluate the Feasibility of Utilising F-Fluorodeoxyglucose and Co-incidence Detection Gamma Detection Camera Imaging in Inoperable Lung Cancer.

*Principal Investigator: Dr Michael Veness.*

### **Anal Canal TROG 99.02**

A prospective single arm non-randomised study of concurrent Radiation and Chemotherapy for the Organ Conserving Treatment of early Anal Canal Cancer.

*Principal Investigator: Dr Andrew Kneebone.*

### **Superdex**

A pilot randomised controlled trial of Dexamethasone 96mgs versus 16mgs for Malignant Spinal Cord Compression treated by Radiotherapy.

*Principal Investigator: Dr Geoff Delaney.*

### **Pre-op Oesophagus**

A randomised Phase III clinical trial comparing surgery alone with Concurrent Pre-operative Chemotherapy and Radiation followed by surgery for localised Resectable Carcinoma of the Oesophagus.

*Principal Investigator: Dr Geoff Delaney.*

### **Anal Guidelines**

TROG guidelines for the treatment of Anal Canal Carcinoma.

*Principal Investigator: Dr Andrew Kneebone.*

### **Strontium 89**

Strontium-89 (Metastron) for painful Bone Metastases in Prostate Cancer.

*Principal Investigator: Dr Martin Berry.*

### **Sucralfate**

Effect of Oral Sucralfate on the Rectum for patients receiving Radiotherapy for Localised Carcinoma of the Prostate.

*Principal Investigator: Dr Martin Berry.*

### **Neuropathic Bone Pain**

A prospective randomised trial of Single Fraction versus Fractionated Radiotherapy for Neuropathic Pain due to Bone Metastases.

*Principal Investigator: Dr Geoff Delaney.*

### **PCNSL**

A Phase II study of Intravenous Methotrexate and Cranial Irradiation in the treatment of Primary Central Nervous System Lymphoma (PCNSL).

*Principal Investigator: Dr Geoff Delaney.*

### **Standard Oesophagus**

Standard Radio-Chemotherapy for Oesophageal Cancer Patients (Not identified as having favourable Prognostic Features).

*Principal Investigator: Dr Geoff Delaney.*

### **TCC of Bladder TROG 99.06**

Phase II study of Trans-urethral Resection followed by Synchronous Chemo-radiation in the definitive management of Localised Invasive TCC of the Urinary Bladder.

*Principal Investigator: Dr Martin Berry.*

### **TOAD**

A collaborative randomised Phase III Trial: The timing of intervention with Androgen Deprivation in Prostate Cancer patients with a rising PSA.

*Principal Investigator: Dr Andrew Kneebone.*

### **Lung Tumour Volume**

Tumour Volume as an Independent Prognostic Factor in patients with non-small Cell Lung Cancer: A Protocol for a Prospective Database.

*Principal Investigator: Dr Geoff Delaney.*

### **TROG Rectum 01.04**

A randomised trial of Preoperative Radiotherapy for Stage T3 Adenocarcinoma of Rectum.

*Principal Investigator: Dr Andrew Kneebone.*

### **MA20**

A Phase III Study of Regional Radiation Therapy in early Breast Cancer.

*Principal Investigator: Dr Geoff Delaney.*

### **SC20 Bone Mets**

A Phase III International randomised trial of Single versus Multiple Fractions for Re-Irradiation of Painful Bone Metastases.

*Principal Investigator: Dr George Papadatos.*

### **TROG 03.01 Oesophageal**

A randomised Phase III Study in Advanced Oesophageal Cancer to compare quality of life and palliation of Dysphagia in patients treated with Radiotherapy versus Chemo-radiotherapy.

*Principal Investigator: Dr Andrew Kneebone.*

### **TROG 03.02 Gastric**

A feasibility study to evaluate Adjuvant Chemoradiotherapy for Gastric Cancer.

*Principal Investigator: Dr Andrew Kneebone.*

## **Medical Oncology**

### **Advanced Ovarian (S231)**

Phase II Study of First-Line, Single Agent Carboplatin followed sequentially by Gemcitabine and Paclitaxel in patients with Advanced Ovarian Cancer: An Australian and New Zealand Gynaecological group study.

*Principal Investigator: Dr Amanda Goldrick.*

### **AG0603G Oesophago-gastric Cancer Trial**

A randomised Phase II Study evaluating a weekly schedule of Docetaxel with Cisplatin and 5-FU (wTCF) or with Capecitabine (wTX) in Advanced Oesophago-gastric Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **ANZ 9311**

Comparison of high dose Chemotherapy plus Filgrastim with standard dose Chemotherapy in patients with advanced Breast Cancer.

*Principal Investigator: Dr Eugene Moylan*

### **Aromasin**

Randomized Phase II-III Study in First Line Hormonal Treatment for Metastatic Breast Cancer with Exemestane or Tamoxifen in postmenopausal patients.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Asymptomatic Colon**

Phase III Study of early Chemotherapy for Asymptomatic Metastatic Colorectal Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **ATAC**

Adjuvant Trial in Postmenopausal Breast Cancer. Arimidex, Tamoxifen alone or in combination (ATAC) - ANZ 9801.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### ATLAS

Adjuvant Tamoxifen Longer Against Shorter (ATLAS).  
Principal Investigator: Dr Stephen Della-Fiorentina.

### AZURE

Does adjuvant Zoledronic acid reduce recurrence in patients with high-risk Localised Breast Cancer.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### BAY 43-9006 Renal Cell Cancer Trial

A Phase III randomised study of BAY 43-9006 in patients with unresectable and/or Metastatic Renal Cell Cancer.  
Principal Investigator: Dr Elizabeth Hovey.

### Camptosar CPT-11 SCLC

A randomised, Phase III Trial comparing CPT-11 (Irinotecan HCL; Captosar Injection) / Cisplatin with Etoposide/Cisplatin in patients with previously untreated, extensive, Small-Cell Lung Cancer.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### Capecitabine

Expanded access program: Treatment guideline of Xeloda (Capecitabine) in patients who have failed or are resistant to previous treatment with Paclitaxel (Taxol) or Docetaxol (Taxotere) for locally advanced and/or Metastatic Breast Cancer.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### C-06

A clinical trial comparing Oral Uracil/TORFUR (UFT) plus Leucovorin (LV) with 5-Fluorouracil (5-FU) plus LV in the treatment of patients with Stages II and III Carcinoma of the Colon.  
Principal Investigator: Dr Eugene Moylan.

### ECF Gastric

A Phase II feasibility study of pre-Operative and post-Operative Chemotherapy using Epirubicin, Cisplatin and Protracted Venous Infusion Fluorouracil (ECF) in Patients with advanced but operable Gastric Cancer.  
Principal Investigator: Dr Eugene Moylan.

### EFC5378 Odessey Prostate

Evaluation of two doses of SR31747A (75mg & 125mg) in Non-metastatic Androgen in-dependant Prostate Cancer. Randomised, double-blind, placebo controlled Phase II Study.  
Principal Investigator: Dr Elizabeth Hovey.

### ESPAC 3

Adjuvant Chemotherapies in Resectable Pancreatic Cancer (ESPAC-3v2).  
Principal Investigator: Dr Eugene Moylan.

### Exemestane

Randomised double-blind trial in post-Menopausal women with Primary Breast Cancer who have received Adjuvant Tamoxifen for 2-3 years comparing subsequent Adjuvant Exemestane Treatment with further Tamoxifen.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### Gemcitabine

Compassionate use of Gemcitabine in patients with Pancreatic Cancer.  
Principal Investigator: Dr Goldstein.

### Gemcitabine NSCLC

A Phase II Study of Gemcitabine in patients with Stage II or IV non-small Cell Lung Cancer.  
Principal Investigator: Dr Goldstein.

### Gemtax NSCLC

Randomised comparison of first line Docetaxel/Gemcitabine Doublet Chemotherapy versus sequential single agent Chemotherapy (Docetaxel followed by Gemcitabine) in Stage IIIB/IV NSCLC.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### Germ Cell Registry

Prognostic factors for survival and patterns of care for Germ Cell Tumours in Australia and New Zealand.  
Principal Investigator: Dr Goldstein.

### GLA Pancreas

An open label, controlled, randomised, parallel group Phase III Study in Unresectable Pancreatic Carcinoma to assess the effects of a combined Intravenous and Oral Dose Regimen of GLA added to existing treatment (either Best Supportive Care or Chemotherapy).  
Principal Investigator: Dr Eugene Moylan.

### GOG 0182

A Phase III randomised trial of Paclitaxel and Carboplatin versus Triplet or Sequential Doublet Combinations in patients with Epithelial Ovarian or Primary Peritoneal Carcinoma.  
Principal Investigator: Dr Amanda Goldrick.

### GOG 02-01

A Phase II Trial of Weekly Docetaxel (Taxotere) for patients with relapsed ovarian cancer who have previously received Paclitaxel.  
Principal Investigator: Dr Amanda Goldrick.

### Good Prognosis Germ Cell

Randomised Phase III Trial for good prognosis Germ Cell Tumours comparing two different regimes of Cisplatin, Etoposide and Bleomycin.  
Principal Investigator: Dr Goldstein.

### Her 2

Chemotherapy and Antibody Resonse Evaluation (CARE): A Phase III, multinational, randomised study of Recombinant Humanised Anti p185 (HER2) Monoclonal Antibody (rhuMAB HER2) combined with Chemotherapy in patients with HER 2 Overexpression who have not received Cytotoxic Chemotherapy for Metastatic Breast Cancer.  
Principal Investigator: Dr Amanda Goldrick.

### Her 2 Extension

An open-label extension study with Recombinant Humanised Ant-p185 (Her 2) Monoclonal Antibody (rhuMAB HER 2) for patients whose Metastatic Breast Cancer progressed during treatment on Protocol H0648g.  
Principal Investigator: Dr Amanda Goldrick.

### HERA

A randomised 3-Arm Multi-centre Comparison of 1 year and 2 years of Herceptin versus no Herceptin in women with HER2-positive Primary Breast Cancer who have completed Adjuvant Chemotherapy.  
Principal Investigator: Dr Eugene Moylan.

### Herceptin®

Open label, comparative, randomized, multicentre, multinational study of Herceptin® (Trastuzumab) given with Docetaxel (Taxotere®) versus Docetaxel as Single Agent First-line Metastatic Breast Cancer (MBC) patients with HER2neu Overexpression.  
Principal Investigator: Dr Amanda Goldrick.

### Herceptin® Extension

An open-label, multicenter, continuation trial of Recombinant Humanised Anti-p185 (HER2) Monoclonal Antibody (Herceptin® [Trastuzumab]) in patients with HER2 Overexpressing Tumours.  
Principal Investigator: Dr Amanda Goldrick.

### IBCSG IX

Adjuvant Therapy for postmenopausal patients with Node Negative Breast Cancer.  
Principal Investigator: Dr Amanda Goldrick.

### IBSG 12-93

Adjuvant therapy for post/perimenopausal patients with node positive breast cancer who are suitable for endocrine therapy alone.  
Principal Investigator: Dr Goldstein.

### Intravesicular Bladder

Phase II Trial of Intravesicular Gemcitabine in patients with Transitional Cell Carcinoma of the bladder.  
Principal Investigator: Dr Elizabeth Hovey.

### IRESSA

A randomised, double blind, Phase III Comparative Trial of Two Doses of ZD1839 (Iressa) in combination with Paclitaxel and Carboplatin versus Placebo in combination with Paclitaxel and Carboplatin in chemotherapy-naïve patients with advanced (Stage III or IV) Non-small Cell Lung Cancer.  
Principal Investigator: Dr Stephen Della-Fiorentina.

### **Irinotecan**

A Phase II Study of Irinotecan, Leucovorin and Fluorouracil in advanced Gastric Cancer.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **JMAT**

A Phase II Study of MTA (LY231514) and Vinorelbine administered in patients with Locally Advanced or Metastatic Non-small Cell Lung Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **Letrozole**

A Phase III Study to evaluate Letrozole as Adjuvant Endocrine Therapy for Post-menopausal women with Receptor (ER and/or Pgr) Positive Breast Cancer.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Letrozole AR/BC3**

Letrozole versus Aminoglutethimide plus Cortisone Acetate in advanced Breast Cancer.

*Principal Investigator: Dr Goldstein.*

### **LIFE**

A randomised trial evaluating Eloxatin® (Oxaliplatin) combined with two different 5-Fluorouracil Regimes in patients with previously untreated advanced Colorectal Cancer (ACC).

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **NavXel**

Phase II Study of Intravenous Vinorelbine (Navelbine®) + Capecitabine (Xeloda®) in patients with advanced Breast Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **NESP**

A randomised, double-blind, placebo-controlled, dose-finding study of Novel Erythropoiesis Stimulating Protein (NESP) administered by Subcutaneous (SC) Injection for the treatment of Anaemia in subjects with Solid Tumours receiving Multicycle Chemotherapy.

*Principal Investigator: Dr Amanda Goldrick*

### **Oligodendroglial**

Phase II Study of Temozolomide Therapy for Anaplastic Oligodendroglial containing Gliomas.

*Principal Investigator: Dr Elizabeth Hovey.*

### **Oxaliplatin – MOSAIC**

Multicentre International study of Oxaliplatin/5-FU-LV in the Adjuvant Treatment of Colon Cancer - MOSAIC C98.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Pancreatic Cancer (CPT-11)**

A randomised, open-label, multicentre, Phase III Study comparing the efficacy and safety of Gemcitabine and Irinotecan HCl (CPT-11) to Gemcitabine alone in patients with locally advanced or Metastatic Pancreatic Cancer who have not received prior Systemic Therapy.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Panorex**

A prospective randomised multicentre Phase III clinical trial comparing the effects of PANOREX injection plus 5-Fluorouracil/Leucovorin versus 5-Fluorouracil/Leucovorin versus PANOREX injection alone, in patients with Surgically Resected Stage III (Dukes' C) Carcinoma of the Colon, incorporating amendments numbers one, two and three.

*Principal Investigator: Dr Eugene Moylan.*

### **Patient PACT**

Patient's perceptions of Adjuvant Chemotherapy for early Breast Cancer: What makes it worthwhile?

*Principal Investigator: Dr Eugene Moylan.*

### **PROTAT**

A feasibility and efficacy study of Taxotere/Prednisone in combination with Thalidomide in Hormone Refractory Prostate Cancer. The Pro Tat Study.

*Principal Investigator: Dr Elizabeth Hovey.*

### **Recurrent Ovarian (S202)**

Phase II Study of Gemcitabine and Oxaliplatin of second line treatment of patients with recurrent Ovarian Cancer: An Australian and New Zealand Gynaecological Oncology Group Study.

*Principal Investigator: Dr Amanda Goldrick.*

### **Sesame SR48692 SCLC**

A double-blind, randomized, Phase II-III maintenance study of SR48692 versus placebo in patients with extensive stage Small Cell Lung Cancer, following a first line chemotherapy with Cisplatin + Etoposide.

*Principal Investigator: Dr Eugene Moylan.*

### **SOFT**

A Phase III Trial evaluating the role of Ovarian Function Suppression and the role of Exemestane as Adjuvant Therapies for pre-menopausal women with Endocrine responsive Breast Cancer.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Tarceva OSI-774**

A randomised Placebo Controlled Study of OSI-774 (Tarceva) plus Gemcitabine in patients with locally advanced, Unresectable or Metastatic Pancreatic Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **Taxotere**

An Intergroup Phase III Trial to evaluate the activity of Docetaxel, given either sequentially or in combination with Doxorubicin, followed by CMF, in comparison to Doxorubicin alone or in combination with Cyclophosphamide, followed by CMP, in the adjuvant treatment of Node-Positive Breast Cancer Patients. *Principal Investigator: Dr Eugene Moylan.*

### **Text**

A Phase III Trial evaluating the role of Exemestane plus GnRH Analogue as adjuvant therapy for post-Menopausal women with Endocrine Positive Breast Cancer.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

### **Tiber**

An open-label, non-comparative, two-arm, Phase II Trial of ZD1839 (IRESSA) in patients with Hormone-Intensive (ER and PgR Negative) or Hormone-Resistant (ER and/or PgR Positive) Metastatic or inoperable locally advanced Breast Cancer.

*Principal Investigator: Dr Eugene Moylan.*

### **Xcytrin PCYC-0211**

A randomised Phase III Trial of Xcytrin (Motexafin Gadolinium) injection for the treatment of Brain Metastases in patient with non-small Cell Lung Cancer undergoing whole Brain Radiation Therapy.

*Principal Investigator: Dr Stephen Della-Fiorentina.*

# CCORE Report

**Associate Professor Michael Barton** – *Director of CCORE*

The Collaboration for Cancer Outcomes Research and Evaluation (CCORE) is a research unit attached to the Liverpool Cancer Therapy Service. It was founded by the Radiation Oncology Department in 1999 to improve the outcomes of cancer treatment by the better use of existing knowledge. We have particular expertise in radiotherapy but have broad interests in all areas of cancer management. Our staff includes radiation oncologists, a medical oncologist, an epidemiologist, a data manager and project officers. We have long-standing collaborative arrangements with other leading cancer specialists, epidemiology services and health services research groups. In the last six years we have published 40 peer-reviewed journal articles and 12 commissioned reports. We have received nearly two million dollars in project grants.

CCORE has a wide range of activities that extend from the individual cancer patient to the organisation of cancer services at a State or National level. We have been involved in the planning and evaluation of radiotherapy services in NSW, Victoria and nationally and have particular expertise in the utilisation, costs and cost-effectiveness of radiotherapy services as well as cancer services in general.



*CCORE Staff (standing l to r): Dr J Shafiq, Dr P Das, Dr S Thompson, Mr R Thode, Ms K Tynan. (seated l to r): Dr E Hovey, Dr G S Gabriel and A/Prof M Barton.*

We have published patterns of care studies in colorectal and lung cancers.

We have developed a distance-learning course in the applied sciences of oncology. This course covers radiobiology, physics, cancer anatomy, chemotherapy, communication skills, critical appraisal, symptom control and molecular biology. It is funded by the International Atomic Energy Agency, an organisation within the United Nations family. The course is provided as an interactive CD-ROM and has been piloted in Egypt, Argentina, the Philippines, Pakistan and Malaysia. In the future we plan to use this course to help trainee doctors to become cancer specialists throughout Africa, Asia and South America.

Last year we reviewed the feasibility of establishing a radiotherapy service in the Northern Territory. We performed a snapshot of cancer services in NSW for the Cancer Institute NSW and for the NSW government, we have updated measures of the complexity of different radiotherapy treatments that will allow better comparison of efficiency between departments. We have explored similar measures for chemotherapy.

In 2002-03 CCORE assembled a team of experts to examine the management of cancer in Victoria to develop a cancer services framework for their Department of Human Services. This study examined surgery, radiotherapy, chemotherapy, palliative care and other support services. It has formed the basis of a twenty million dollar reorganisation of the management of cancer services in Victoria.

CCORE was involved in the development of the Single Machine Department trial in Victoria that has established one linear accelerator departments in Bendigo, Ballarat and LaTrobe. The departments act as spokes of hub centres in Melbourne. We designed the evaluation strategy in collaboration with the Centre for Health Program Evaluation at the University of Melbourne.

In 2001 the Commonwealth Department of Health and Ageing asked us to examine all the evidence for radiotherapy to estimate the proportion of cancer patients should be treated that way. Previous estimates were based on opinion rather than evidence. We have shown that 52% of all new cases of cancer should receive radiotherapy. This study is a world first and will have major effects on the provision of radiotherapy services in Australia and overseas.

Currently in NSW the proportion of people who do receive radiotherapy varies but overall is about 37%. We have studied the differences between actual and optimal use of radiotherapy for some specific cancers. For breast or head and neck cancers the use of radiotherapy appears optimal but for other cancers such as rectal or lung, it appears that a large proportion of patients do not receive appropriate treatment. Our studies of the patterns of care of lung cancer in the South Western Sydney and Northern Sydney Areas Health Services highlighted the fact that many patients do not receive the treatment that might help them. It was interesting to note that there was little difference between Northern and South Western Sydney.

In 2001, we drew up a plan for the development of cancer services in Papua New Guinea. This plan also examined the feasibility of radiotherapy services for remote and isolated communities.

In other studies we determined the willingness of cancer patients to wait for radiotherapy and examined the levels of anxiety in patients after their treatment had finished. CCORE developed a touchscreen computer system to record the symptoms of treatment and the levels of anxiety and depression of cancer patients.

CCORE actively supports further education and development of its staff. We have a position for a recently qualified radiation oncologist to undertake a higher degree in health services research. Staff members have qualified the following higher degrees;

1. A/Prof Geoff Delaney MD
2. Dr Shalini Vinod MD
3. Dr Andrew Hui MMed(Clin Epi)
4. Dr S Jacob MHA
5. Dr Gabriel S Gabriel FAFPHM

In addition two staff members are undertaking PhDs, one is training for Fellowship of the Faculty of Public Health Medicine, and one is undertaking a higher qualification in health economics.

# Fund Raising and Volunteers

## Fund Raising

The facilities at Liverpool for treating cancer and caring for cancer patients and families have been provided through a mixture of government funding and donations. Donations fill funding needs not supported by government grants and insurance reimbursement. Over the last 10 years, 3000 individuals and organisations have helped in our quest to sustain and expand life-saving research programs, and to enhance care and comfort for cancer patients. Charitable gifts to Liverpool Cancer Services provide vital support for our programs in research, patient care, and cancer education.

The following are a few examples of how gifts have helped:

- **Research(Clinical Trial) Fund**

Support ongoing research into prevention, detection, treatment and supportive care for patients with cancer.

- **Education Fund**

Sponsoring Cancer staff to attend specialised training; funding cancer-training courses offered at Liverpool.

- **Patient Care Fund**

Purchase of equipment and resources for patient and visitors comfort on the ward and CTC.

Fundraising activities such as raffles, dinners, head shaving and morning teas, have been supported by the generosity of our community, and this has led to initiatives such as the establishment of the Patient and Family resource centre that provides educational resources for patients and families to acquire knowledge about the diagnosis and treatment of their illness. Information sessions, support groups and translating information into other languages are funded through donations.

Special items that have been able to be replaced and/or upgraded include wheelchairs, pumps and other medical equipment. This would not have been possible without support of donations.

## Volunteers

Liverpool Cancer Services is fortunate to have the assistance of a dedicated group of volunteers who give up their time to help patients find their way around the centre, and lend a listening ear.

The Busby Auxilliary, affectionately known as 'the pink ladies', focus on making the patients more comfortable during their visit, and they do this selflessly. They are also tireless in their fundraising efforts; raffles, cake stalls, and morning teas would not be successful without the continued support of our fantastic volunteers.

F Best  
J Blunt  
V Dargan  
D Day  
N Dean  
P Dicker  
J Drinnan  
M Flood  
M Gunn  
D Haynes  
J Higgs  
T Hodges  
C Keogh

E Lowe  
J Maloney  
V McCarthy  
J McPherson  
A Musscatella  
L Powell  
W Saxton  
V Spruce  
A Tangi  
D Thomson  
J Watson  
B Wright



## **Look Good Feel Better Wig Library**

– A Cosmetic Industry Community Service Program

This program is dedicated to helping women, men and teenagers face cancer with confidence. Experienced beauty industry volunteers teach patients beauty techniques including skincare, makeup application, and creative ways with scarves, turbans, hats and wigs. All these help to minimise the appearance-related side effects from some treatments and explain some of the changes that occur during treatment. The workshops are designed to help boost self esteem and confidence. Some of the partners who have contributed are:

L Evans	D Haynes
K Giufre	D Matthews
S Pinkerton	J Wright
S Harrold (National Program Manager)	N Holyoake (Facilitator)
M Legaspi	J Meehan (NSW Manager)
M Thackeray	

The Wig Library was set up by the Social Work Staff early in 1989 from monetary donations from local services clubs and donations of wigs from local people. At that time the Wig Library was one of only two in NSW the other being at Prince of Wales Hospital. In 1992 an application was made to the Liverpool City Council's Annual Donation Program and \$2,000 was received. In 1996 the activities of the Wig Library were passed on to the professional hairdresser and hospital volunteer Victoria Nasso and her assistant Berenice Dwyer.

Victoria Nasso has been the driving force behind the Wig Library. This is one of the most appreciated services provided to chemotherapy patients who lose their hair as a result of their treatment. This small but effective group of volunteers see around 500 patients every year, matching them to wigs, and ensuring there is a variety of quality wigs available.

Fiona Gould and Sharon Smith have helped to build the library of wigs into a very worthwhile service. The service helps to retain patient self-esteem. The library relies on donations to maintain the service, and has had tremendous support.





# Acknowledgement of Staff



*Director, 1995.*

The staff members listed below have all worked at Liverpool CTC during the past 10 years.

## **Allied Health**

Heather Aldis	Merran Findlay	Lisbeth Lane	Meredith Porter
Teresa Anderson	Riki Franklin	Thomas Law	Katherine Pronk
Gerald Au	Rubinee Gabutero	Jerric Leav	Alison Pryor
Angela Baker	Amin Gadalla	Charis Liu	Sandra Quelch
Nicola Belcastro	Gillian Giles	Hiey Ly	Teresa Simpson
Rosemary Bendrey	Kathleen Glenday	Robyn Macdonald	Patricia Snell
Natalie Butler	Megan Grennan	Danielle McIntosh	Julie Stabb
Anna Chow	Diana Hayes	Lance Muir	Josephine Tamara
Gabrielle Coffey	Gayathri Jegendran	Carlie Naylor	Lily Tran
Traci Cook	Megan Jones	Christine	Melinda Woodward
Jenella Cottle	Melinda Jung	Openshaw	Ying Wu
Melanie D'Costa	Bianca Kinnear-White	Maria Plaza	Georgette Yacoub
Joanne Davis	Rebecca Lai	Annette Polizois	



*RT and Physics Team, 1995.*

## **Administration / Clerical / Secretarial / Transcription**

P Abdy	Leah Einfalt	Julie Macarthy	Rachel Sergeant
Gail Adams	Barbara Elliott	Sezan Malcok	Brigida Sbezzi
Isobelle Anscombe	Heather Elliott	T Marquez	Karolyne Shah
Rosalie Atkin	K Ellis	Therese Mathis	Vivian Shaw
R Atkinson	Darren Faulds	Lisa Miller	Robyn Shipley
Tammy Attard	Linda Garwood	S Neal	Sue Slater
Narelle Barnett	Grace Gilmore	Rachel Newell	Laura Smith
Holanda Bentancor	Vicki Gill	Kriston Nicholls	Matthew Smith
Ashti Bibani	Sue Graham	L O'Connor	Theresa Stephenson
Rachel Bryant	Hong Huynh	Lyn Ounthoulay	Lyn Torning
Maree Cain	Tammy Halls	Heather Patchett	S Murray
Patricia Calvaresi	Robyn Hittman	A Paltaci	Devika
Suzanne Campbell	Michelle Howard	Tiffany Paul	Varnakulasingham
Annette Chauvier	Hong Huynh	Dianne Plummer	Sarah Volcic
Tricia Cheal	Natasha Jones	Dean Ralph	Leanne Wafer
P Childs	Diane Kelly	Corina Ramon	Judy Walker
Helene Clark	Cheryl Knight	Sharon Rawley	Helen Walsh
Leanne Cooke	Dina Kkokotas	Colleen Reynolds	Lyn White
D Cottrell	Michelle Kotsou	Janette Robinson	Barbara Wiczorek
Carmel Cripps	Darleine Lakos	Beverley Ryan	Victor Ye
Jo-Ann Deveney	Robyn Leechburch-	Fatgieya Sallie	Deborah Young
Suhirtha Edward-	Auwers	Franca Serafin	
Navarathnasingham	Cheryl Long		



*Secretarial and Transcription, 1995.*

## **Business Management**

Paul Anderson	Peter	Sandra Avery
David Kelly	Apostolopoulos	Stephanie Parker
Gerard Viswasam	Anthony McShane	



*Clinic Support, 1995.*



Care Coordinators a new initiative in 1995.

### Care Coordination

Sharon Cassar Clare McCarthy Nick Wilcox  
Anne – Marie Griffin Luciana Ward

### Clinical Trials

Anil Amaratunga Masrura Kabir Shashi Nair Seini Taufa  
Denise Burns Bonawentura Malkus Vu Nguyen Melinda Wright  
Jackie Hammer Evie Mann Iman Ridda Suzanne Wright

### Computer Support / Data Management

Sharon Behan Corina Grech Denise McDonnell Debra Vincent  
Angela Berthelsen John Hallett Ann Morgan (Lantis Admin)  
Richard Bryson Inas Hanna Phan Sayaloune Melinda Wright  
Sue Gerrey Alexander Koshman

### Collaboration for Cancer Outcomes Research & Evaluation (CCORE)

Sharon Behan Susannah Jacob Sharon Miles Richard Thode  
Gabriel Gabriel Bill Kricker Jesmin Shafiq Kate Tynan



Senior Nurses, networking 2004.

### Medical Oncology

Diana Adams Richard Eek Elizabeth Hovey Weng Ng  
Mahmoud Alam Peter Ellis Patricia Kho Pirooz Poursoltan  
Basim Al-Bharani Bahram Farouzesah Fred Kirsten Eva Segelov  
Ray Ashgari Amanda Goldrick Geraldine Lake Glen Sheh  
Tony Chan David Goldstein Gavin Marx David Thomas  
Stephen Della-Fiorentina Charlotte Grimley Eugene Moylan Kiran Virik



Valued Employee Awards, 2004.

### Nursing

Rosalie Atkin Doris Dadic Tony Hecimovic Jennifer Mitchell  
Diana Aston Anja DeRuyter Alison Hill Amy O'Donnell  
Cindy Aquilina Bernadette Donovan Melissa Hinton Deborah Phillips  
Karen Baker Lorraine Douglas Cassandra Hobbs Christine Robinson  
Susan Baker Gail Dwyer Leanne Hollis Victoria Rutten  
Janine Ballard Rhonda Eke Karl Jobburn Aura Serrano  
Maria Biancotti Virginia Foley Justine Kemsley Betty Silaphet  
Kelly Bourke Rhoda Gamildien Lenore Knapman Moira Stephens  
Kay Brown Dawn Gaston Molly Lees Jodie Stewart  
Vicki Buglass Kathryn Gibson Helen Lierz Fiona Tait  
Denise Burns Hang Gilbang Gwen Long Sinuu Seuala-Talagi  
Marcela Carrasco Barbara Gildea Tania Luxford May Valdez  
Mary Causer Anne-Marie Griffin Evelyn Macey Amelia Wariner  
Margaret Chalker Paul Grimmond Debra McDonald Jennei Weber  
Thu Tram Chee Nicky Hackett June McEachern Carla Wilson  
Barbara Commins Rhonda Haywood Sally Meighan Rachel Woodward  
Joan Coslo Edith Hawker Carly Mitchell



Chief of RT and Physics, 1995.

### Palliative Care

Meera Agar Naomi Ellis Bronwyn Heron Megan Luhr-Taylor  
Andrew Broadbent Louise Elliott Justin Hussein Gail Scott  
Colleen Carter Robyn Halloran Sharon Loudoun Laura Woodlands  
Debbie Couldridge

### Pharmacy

Robert Bayley Michelle Findley Maria Lambell Susan Sole  
Pirkko Boyd M Hall Lindy Leslie Sugantha  
Gayle Cave Amanda Hilton Jan Lewis Thumbadoo  
Robyn Cavill Fariba Khosravan Rhea McFarlane Debra Vandine  
Alison Fagan



Nursing Staff OTC, 2005.



Radiation Therapy Staff, 2004.



Transport.

### Physics

Michael Bailey	Lynne Greig	Vinod Nelson	Mark West
Wayne Beckham	Sam He	Virendra Patel	Jon Whitaker
Jeremy Booth	Robin Hill	Mario Perez	May Whitaker
Gwi-Ae Cho	Lois Holloway	Satya Rajapakse	Rena Widita
Oona Collins	Paul Keall	Guangli Song	Matthew Williams
Robert Comerford	Ming Kong	Geoff Ticehurst	Rodney Zanetic
Bach-Phuong Dao	Jacqueline Lees	Thu Tran	Jason Aarts
Gary Goozee	Fabrice Monte di Sopra	Jaime Varas	Tania Bartrom

### Radiation Oncology

Lynette Austen	Allan Fowler	Peter Lin	Thomas Shakespeare
Michael Barton	Fiona Hegy-Johnson	James Mackean	Marketa Skala
Martin Berry	Andrew Hui	Rowena Martin	Kirsty Stuart
Gillian Campbell	Andrew Kneebone	Kavita Moraji	Stephen Thompson
Geoffrey Delaney	Minjae Lah	George Papadatos	Michael Veness
Vanessa Estall	Mark Lee	Upendra	Shalini Vinod
Carolyn Featherstone	Karen Lim	Parvathaneni	Margaret Wallington
Dion Forstner			

### Radiation Therapy

Vanessa Adam	Leanne Elich	Isabella Ramundi	Luke Ridding
Hadi Almoammar	Anne Fitzpatrick	Annie Lau	Sarah Roberts
Ann Amos	Marcia Fleet	Thien Le	David Sampson
Val Antoff	Susan Foot	Sonia Lee	Julie Smith
Anthony Arnold	Kate Francis	Belinda Margetts	Megan Tattersall
Kirriy Banister	Jen Fraser	Natalie McFarlane	Christine Tawfik
Teresa Barker	Matthew Fuller	Darien Montgomerie	Vincent Towell
Maysa Bassal	Melissa Glazier	Stephanie Munday	Thanh Tran
Kate Caldwell	Sean Hall	Hung Phuc Nguyen	Winston Tse
Judith Carter	Janelle Hardie	Trinh Nguyen	Yvonne Tuohy
Lynette Cassapi	Jillian Hawes	Melanie Offner	Joanne Veneran
Vicky Cawood	Matthew Hoffman	Alyson O'Leary	Renee Voysey
Indra Ceplitis	Leisa Holmes	Craig Opie	Kim Walker
Mancy Chan	Sally Hudson	Paul Opperman	Kyle Whitney
Ashika Chand	Stephen Jones	Roshni Prasad	Carly Willox
Webert Chen	Josip Juresic	Shivani Prasad	Odette Wilson
Colin Crispin	Nasreen Kaadan	Katherine Pronk	Candy Wong
Nicole Cusack	Jihoon Kim	Somkhith Rattanavong	Jim Yakobi
Kylie Dundas	James Latimer	Georgie Rees	Alex Yartsev

### Support Services

Nick Arena	Henry Castillo	Van Nguyen
Joe Attard	Allan Hutchinson	Monica Tibbles

### SWS Cancer Services Development Team

Martin Berry	Ross Hamilton	Kate Tynan
Bill Kricker	Sharon Behan	

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