

# Liverpool and Macarthur Cancer Services

Annual Report 2009 - 2010

# Contents

DIRECTOR'S REPORT	
LIVERPOOL CANCER THERAPY CENTRE	1
MACARTHUR CANCER THERAPY CENTRE	4
CLINICAL DEPARTMENTS	
GYNAECOLOGIC ONCOLOGY	6
HAEMATOLOGY	_
MEDICAL ONCOLOGY - LIVERPOOL	
MEDICAL ONCOLOGY - MACARTHUR	
PALLIATIVE CARE - LIVERPOOL	13
PALLIATIVE CARE - MACARTHUR	18
RADIATION ONCOLOGY	19
RADIATION THERAPY	
MEDICAL PHYSICS	
COLLABORATION FOR CANCER OUTCOMES, RESEARCH & EVALUATION	27
RESEARCH	
CLINICAL TRIALS	
SSWAH CLINICAL CANCER REGISTRY	38
CLINICAL SERVICES	
ADMINISTRATIVE SUPPORT - LIVERPOOL	
FINANCE AND ACTIVITY	43
ADMINISTRATIVE SUPPORT - MACARTHUR	
ALLIED HEALTH - LIVERPOOL	
ALLIED HEALTH - MACARTHUR	
NURSING - LIVERPOOL	
NURSING - MACARTHUR	
GRIMSON GROUND EAST - LIVERPOOL	60
CARE COORDINATORS	
PHARMACY - LIVERPOOL	_
PHARMACY - MACARTHUR	65
EDUCATION	
INFORMATION TECHNOLOGY	68
MULTI-DISCIPLINARY CARE	
BREAST	69
HEAD & NECK	70
LUNG	
NEURO	
iFIT	76
OUTCOMES AND ACHIEVEMENTS	
BREAST INTEREST GROUP	
RT BRACHYTHERAPY INTEREST GROUP	78
THORACIC INTEREST GROUP	
VOLUNTEERS	81
DONATION ACKNOWLEDGEMENTS	82
ACHIEVEMENTS	
VALUED EMPLOYEES OF THE MONTH	
VALE ANNE MADIE ODIECNI	100



I am writing this Director's Report as my first Annual Report since taking over the responsibility of the Liverpool Cancer Therapy Centre Director from Associate Professor Martin Berry. At the 2009 Annual General Meeting we farewelled Martin and wished him well in his new endeavours.

It has been an interesting time since stepping into the role, and an important time to reflect on the major achievements that have occurred at the Liverpool Cancer Therapy Centre since it opened its doors in 1995.



Professor Geoff Delaney
MBBS (Hons), MD, PhD, FRANZCR.
Area Director of Cancer Services

### **PATIENT CARE**

The service has grown enormously during this period of time and is now responsible for the delivery of radiotherapy treatments for approximately 1,900 new cancer patients per year and almost 10,000 chemotherapy treatments and other procedures per year. In addition, consultation services continue to increase in all of our services - Allied Health, Psycho-oncology, Gynaecological oncology, Haematology, Palliative Care, Oncology Nursing and Care Co-ordination. The Liverpool Cancer Therapy Centre continues to remain at the forefront of innovation into clinical practice and multi-disciplinary care throughout NSW.

Multi-disciplinary case discussions occur across many different tumour sites and they involve many different Medical and Allied Health disciplines. There are a number of multi-disciplinary clinics where Surgeons and Oncologists see patients in a group-setting to minimise the amount of time that patients are travelling to see medical staff.

The 2009 NSW Health Patient Survey results recently became available. The results are pleasing. Amongst the 252 patients who responded to the survey, their level of satisfaction was 98.4%, which was higher than the state average. The survey identified our service's strengths as the staff appearing to do everything they could for the patient, staff being able to be trusted with confidential information, patients being treated with dignity and respect and a high quality of care co-ordination. However, the survey also identified areas of weakness that we will continue to strive to improve – these areas include the overall appearance of the Cancer Therapy Centre, the need to develop more information for patients about cancer and better involvement of patients in decision-making. We have listened to this feedback. We have identified areas of the Cancer Therapy Centre that require upgrading, we have developed a Customer Satisfaction Committee to specifically identify patient needs and we are re-invigorating our Patient Education Committee. You can see from this, that patient feedback is useful and likely to lead to change. We have also formed a Community Participation Committee to have community members assist us in providing high quality care and to assist with fundraising.

The Cancer Therapy Centres have also tried to engage community better by holding their Annual General Meetings at a site outside of the hospital and by inviting local community members to attend and view what we have achieved. The first public AGM was held at the Casula Powerhouse last November and this was a resounding success and we hope to continue these in the future.

### **RESEARCH and EDUCATION**

We continue to go from strength to strength with cancer research in our department. As you will see in the Clinical Trials section of this report, our patients are involved in a vast array of clinical trials. Our Clinical Trials department from Liverpool and Macarthur also won a very prestigious award – the NSW Premier's Award for Innovation in Clinical Trials, which was a fantastic acknowledgement of the wonderful work being done by the group. We continue to also perform innovative Oncology Health Services research via the Collaboration for Cancer Outcomes Research and Evaluation. This group has been highly productive and has some exciting initiatives planned.

Another very exciting initiative has been the funding of the Ingham Health Research Building which is to be built directly across the road to the Liverpool Cancer Therapy Centre in 2012. This will house cancer research including Clinical Trials, the Collaboration for Cancer Outcomes Research and Evaluation, the Area Cancer Registry and perhaps wet laboratory space for cancer biology research. In addition, funding has been granted from the Federal Government Health and Hospital Fund for the building of a Radiation Oncology Research Linear Accelerator on the site of the Liverpool Cancer Therapy Centre. A research team has been formulated including significant collaborations developed with the Universities of Western Sydney, Sydney, Wollongong, and New South Wales. The research linear accelerator will be the co-location of a standard linear accelerator with an MRI scanner. The intent of such a device would be to localise tumours accurately using the MRI scanner and then to direct the radiotherapy very accurately to the tumour and avoid other tissues receiving radiation. There are many challenges in getting these two pieces of equipment working together. This research facility will place Radiation Oncology at the forefront internationally in terms of clinical research.

We are also delighted that the University of Western Sydney and Sydney South West Area Health Service have agreed to the formation of a Foundation Chair in Medical Oncology (with conjoint appointment to the University of New South Wales). We are pleased to announce the appointment of Professor Paul De Souza into the role. Paul has a distinguished career in researching new cancer drugs and will join us in February 2011. This increases the oncology research profile at Liverpool and Campbelltown, along with the previously appointed professorial chairs in Radiation Oncology, Pathology and Surgery. We continue to provide significant undergraduate and postgraduate training in our Cancer Service.

### **FUTURE CHALLENGES**

Along with growth of the service come a number of challenges. The growth in the population of the Sydney South West Area Health Service and the ageing of the population will result in a substantial increase in the number of patients with cancer in our Area over the next thirty years. There has been a massive increase in the number of people who reside in the south-west of Sydney and there are large land releases underway at Bringelly and Leppington. In addition, the projected increase in cancer incidence has resulted in significant planning of the new Liverpool Hospital to accommodate the increased population and the ageing of the population. Cancer Services staff have been significantly involved in the development of new

Cancer Service facilities. We have received funding for the opening of additional radiotherapy treatment facilities, chemotherapy treatment facilities and a haematology step down unit at Liverpool. The Haematology Department is also working towards the development of an inpatient allogeneic bone marrow transplant unit. Currently, patients requiring allogeneic transplant are transferred to other hospitals further away from their homes. The opening of the new hospital will also result in the provision of inpatient Palliative Care beds at Liverpool Hospital and an increase in Palliative Care Services. This is an exciting period of time with the development of new facilities.

The other major initiative is the commencement of planning of new cancer treatment and inpatient facilities at the Campbelltown Hospital as a part of Campbelltown Hospital's expansion, which will occur later this decade. This is due to the acknowledgement of the significant growth expected in the Macarthur region and also provides substantial opportunities with regard to new modules of cancer care.

At the time of writing this report, both the State and Federal governments were working towards the new Health Reforms that would see the removal of Area Health Services, and their replacement by local hospital networks. It is not clear at this time what effect, if any, this will have on cancer services, although I believe that we are in a strong position to be able to successfully work with whatever network arrangements are made.

### **THANKS**

It is our goal to deliver high quality cancer care, high quality cancer research and high quality cancer education. I believe that we do this. This has been achievable due to strong and committed staff, fantastic teamwork and innovative thinking. I also believe that we take on board the lessons that we learn, and are open to change. There are many projects and awards throughout this report that also suggest success. I am very proud of our team of staff and volunteers. Thank you to each and every one of them for their input into such a great service.

Lastly, I would like to pay credit to my predecessor, Associate Professor Martin Berry. It is quite hard to believe that it is only fifteen years since the first patient was treated at the new Cancer Therapy Centre at Liverpool Hospital, and during this time we have undergone substantial growth but also substantial innovation and we have been at forefront of this innovation. It is due credit to Martin and the team that we have been able to develop such a service.

**Professor Geoff Delaney** 

Director, Liverpool Cancer Therapy Centre

Area Director of Cancer Services

# Director's Report Macarthur Cancer Therapy Centre

2010 saw further increases in activity at the Macarthur Cancer Therapy Centre (MCTC) and the inpatient workload in Campbelltown Hospital. Major areas of growth include medical oncology at Bowral, and Palliative Care at Campbelltown and Camden. The Macarthur and Southern Highlands Cancer Service is the third busiest cancer unit in Sydney South West Area Health Service.

I am proud to report that the 2009 NSW Cancer Institute Patient Satisfaction Survey confirmed the excellent results seen in the 2007 and 2008 report, with above average scores in all measurements, including ongoing excellence in treating patients with dignity and respect, better co-ordination of care and waiting times, improved management of treatment side-effects and handling of confidential



Assoc. Prof. Stephen Della-Fiorentina MBBS (Hons.), FRACP

patient information. New areas of identified excellence included patient education regarding investigations and treatment. This recognition of sustained excellence by our patients is a reflection of the work of our staff and volunteers. Lower levels of satisfaction across NSW continue to be on providing information and managing patient anxieties, fears, relationship difficulties and delivering counselling services.

Improvements in patient services this year included the commencement of a Clinical Psychology service in March 2009, employment of a McGrath Foundation Breast Care Nurse in July 2009 and the appointment of a Clinical Nurse Consultant in Palliative Care. Two part-time medical oncologists and a full time Palliative Care specialist commenced work with us. A Complementary Therapy Room for massage, relaxation and Reiki opened in late 2009 with generous funding received from the '24-Hour Fight Against Cancer, Macarthur'.

The results of the Oncology Nurse Assessment Unit were presented at the NSW Cancer Institute Innovation programme as a potential model for other cancer units to adopt. Our commitment to education continues with the attachment of Nursing, Radiation Therapy and Allied Health students. This year saw the University of Western Sydney School of Medicine commence their Oncology attachment, a 4-week rotation at the MCTC and Camden Palliative Care Unit, with adoption of the Macarthur programme at the Blacktown, Bathurst and Lismore clinical schools.

The '24 Hour Fight Against Cancer, Macarthur' event was held again in October 2009, raising \$210,000, which has enabled the purchase of equipment for the management of Palliative Care patients in the community, lymphoedema management and enhancement of services at the Camden Palliative Care Day Hospital.

Research activity has increased with recognition of our work with Liverpool in being awarded the Cancer Institute NSW Premier's Award for Outstanding Cancer Research. The Southern Highlands Cancer Centre has commenced a clinical trials unit, with breast and prostate cancer trials currently available.

Our volunteers continue to provide great work and their dedication is greatly appreciated by patients, families and staff. I am thankful for the generosity of our donors; their work is recognised on our honour board. A special thanks to our valued employees recognised by their managers for outstanding work.

The commitment and dedication of all of our staff in providing patient focused services and teamwork has been recognised in the 2009 NSW Cancer Institute Patient Satisfaction Survey. Their continued drive for quality, safety and excellence in cancer care allows the Macarthur and Southern Highlands Cancer Centres to achieve our goal of delivering the best possible care to the patients, their carers and families of Macarthur, Wollondilly and Wingecarribee.

- my

Associate Professor Stephen Della-Fiorentina Director, Macarthur Cancer Therapy Centre

# Clinical Departments Gynaecologic Oncology

The unit faced another challenging year of clinical working, training and research. The number of new patients and follow-up visits continue to rise in response to the demands from the local population.

The team has been involved in the diagnosis, management and psychosocial support of women with gynaecological malignancies. Ovarian, endometrial and cervical cancers are the commonest gynaecological cancers we manage. We are also involved in the care of patients with other genital tract malignancies such as vaginal, vulval and gestational trophoblastic disease. The unit provides a consultative service to patients with familial cancer syndrome and facilitates the delivery of prophylactic surgery.



Dr. Felix Chan MBBS, FRANZCOG, MRCOG, CGO Director, Gynaecologic Oncology

The unit has weekly multi-disciplinary team meetings to discuss the management of patients. The pathology of patients who are newly diagnosed, who have received recent surgery or developed recurrent disease are also discussed. A management plan is established and the ongoing psychosocial follow up is carried out. Ongoing psychological support is paramount to ensuring the patient recovers from the emotional impact of the diagnosis and treatment. A teleconference morbidity and mortality meeting is regularly carried out between the Western and the Eastern zones to discuss the management of interesting cases. The growing number of patients with complex health problems who present with gynaecological cancer, will pose an ongoing challenge to the team in the future.

The patient support group has been meeting monthly, facilitated by experts who empower patients to help and support each other during this difficult time. The number of people attending these meetings continues to grow. A Social Worker also assists them to access the community service and financial assistance available from the government. Clinical training and research is strongly encouraged within the unit and following the retirement of Professor Houghton, the unit is actively looking for a suitable replacement to cope with the workload which has developed over the last three years.

A concert was held in April 2009 at Camden which raised funds for the gynaecological oncology service and contributed to the purchase of a colposcope. With the help of patients and the local community, it proved to be a very successful day.

The Gynaecological Oncology service has become integral part of the Area Cancer Service with offices now located in the Liverpool Cancer Therapy Centre. This allows an opportunity for future development and research.

The unit looks forward to another busy year within the constraints of available resources from the Area. The Director, Dr Felix Chan received a nomination as Australian of the Year 2009 for his contribution to the community and dedication to his current position.

### **Gynae-Oncology Group**

DIRECTOR CLINICAL FELLOW

Dr. Felix Chan Dr. Ahmed Maruid

Dr. Jyothi Marry

CLINICAL NURSE CONSULTANT CLINICAL PSYCHOLOGIST

Rosemary Craft Mariad O'Gorman

CLINICAL NURSE CONSULTANT

Rosemary Craft

ADMINISTRATIVE OFFICER SOCIAL WORKER

Parimalam Mohanvelu Deborah McAuley

PHYSIOTHERAPIST DATA MANAGER

Susan Cao Victor Ye

MEDICAL ONCOLOGISTS

Dr. Amanda Goldrick Dr. Lorraine Chantrill

Dr. Diana Adams

**RADIATION ONCOLOGISTS** 

Dr. Allan Fowler Assoc. Prof. Shalini Vinod

PALLIATIVE CARE PHYSICIANS

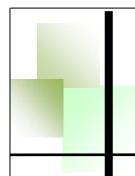
Dr. Louise Elliott Dr. Jacqueline Kerfoot

GYNAECOLOGICAL PATHOLOGIST

Dr. Leonardo Santos

**MEDICAL TEAM** 

Registrars Residents



# Clinical Departments Haematology

### **SERVICES**

Our services continue to expand and exceed our previous maximum. The 6.4 FTE Haematologists continue to oversee the busiest Haematology lab in the SSWAHS. The Clinical demand continues to grow and in May 2010 we saw 1,207 patients in the Haematology Clinic, which is 1.8 times the number we saw over the same period in 2006.



Assoc. Prof. David Rosenfeld MBBS, FRACP, FRCPA. Head of Haematology SSWAHS (Western Zone)

### STAFFING

Recruitment has been a challenge especially because our referral base has grown significantly since 2006 but as we are about to interview to fill a current vacancy, this will take us up to an establishment of 7.4 FTE Haematologists.

### Registrars:

We have 4.0 FTE registrars and are carrying vacancies of 2.0 FTE. We did use trust funds to appoint a Fellow but unfortunately she left to go on maternity leave. However, we expect to have 6.0 FTE registrars for 2011

#### Clerical Support in Haematology Consulting:

Since we have recently been given approval to increase our staffing establishment from 6.7 to 7.7 FTE, we are advertising for the new vacancy. The increase in clinical demand has impacted on our administrative work but an addition to our clerical support has enabled us to start clearing the remainder of the backlog.

### ACCOMMODATION

We look forward to the enhancement offered by the additional new office and clinic space which will be offered as part of the hospital redevelopment.

### ACCOMMODATION IN THE WARD

The use of a bone marrow enhancement grant has allowed us to fund an additional 0.4 FTE position in the Ambulatory Haematology Unit. This has provided us with the opportunity to offer more chemotherapy outpatient treatments. Because we accept patients from the whole area we also admit between 20 and 33 inpatients. Next year we will be moving into the top floor of the new building where we will continue to provide consults to Liverpool and user hospitals.

### TRIALS AND RESEARCH

Currently we have very limited capacity to engage in research but we are intending to fund a person to assist with outcomes research although the position has not yet been advertised. We have recently funded a scientist who is about to start and we are undertaking molecular mutational research for Leukaemia and MDS.

### ALLOGENEIC TRANSPLANTATION

This is on track to start in 2016. We do approximately 30 autografts per year and send away approximately 15 allogeneic transplants.

### **TEACHING**

We now have staff conjoined to the University of Western Sydney and have provided lectures to undergraduates and surgical primary candidates. We also provide teaching to our own staff and postgraduate, undergraduate, nurses and scientists from UNSW.

All our advanced trainees have passed and we have another person coming to join us in August from the UK.

### **LABORATORY**

Our workload continues to grow at a rate of about 8% year a year without the addition of any extra scientific staff. Currently we employ 2.5 FTE Haematologists to service the largest workload of any public laboratory in the country. We regularly process over 1,300 FBCs (plus the rest) on a daily basis and service the whole old SWSAHS comprising 6 hospitals and 2,500 beds.

## INFRASTRUCTURE STAFF SPECIALISTS

We are working towards appointing additional infrastructure support for clinics and research.

### **GOALS**

- The recruitment and retention of staff.
- The establishment of our own Allogeneic Transplantation Unit.

These goals remain difficult while there are such shortages of trained and training Haematologists.

### **Haematology Staff**

### STAFF SPECIALISTS

Assoc. Prof. David Rosenfeld Assoc. Prof. Lindsay Dunlop

Dr. Penelope Motum Dr. Anne Marie Watson Dr. Silvia Ling Dr. Nicholas Viiala Dr. Lye Lin Ho

### **REGISTRARS**

Dr. Mohamed Muhajir Dr. Gurdeep Parma Dr. Shyam Panicker Dr. Ghandi Ponniah

### **ADMINISTRATIVE SUPPORT**

Karen Clark Nicola Wilson Meegan Moore Sarojani Prasad Agnesh Prasad Helen Toupantziz Sharon Tyson



### **Clinical Departments Medical Oncology - Liverpool**

This year has been a year of consolidation for the Medical Oncology Department at the Liverpool Hospital. Over the past few years, a number of staff specialists have left the service. which has resulted in the department being under considerable strain. I was appointed as the Acting Director of Medical Oncology in September 2009. My main goals for the first 12 months were to develop a sustainable model of growth for the service (due to the increasing need), to attract new staff members to the department and to appoint a new Head of Department.



Professor Geoff Delanev MBBS (Hons), MD, PhD, FRANZCR **Acting Director** of Medical Oncology

During the past year, our patient numbers have increased, as have our treatment numbers. Medical Oncology saw approximately 900 new cancer patients this year, and performed a total of over 5,000 patient consultations and 10,000 chemotherapy treatments

or other procedures during the past year. This is an increase of 130% on last year. We have 3.8 full time Staff Specialists. Our staff specialists are Dr. Amanda Goldrick, who has worked tirelessly at Liverpool Hospital for the past fifteen years and continues to provide clinical services at 1.0 FTE. Dr. Weng Ng and Dr. Mahmood Alam, both former trainees of our Medical Oncology Department, have continued to increase their clinical load after being appointed Staff Specialist Medical Oncologists in the previous year. In addition, we welcomed back Dr. Michelle Harrison from maternity leave to continue with her 0.4 FTE appointment at Liverpool Hospital and a 0.4 FTE Medical Oncology consultative service at Royal Prince Alfred Hospital. We also are grateful to Dr. Mamta Bagia, who joined the group approximately twelve months ago as a locum staff specialist working 0.2 FTE, while she continues her postgraduate research; and Dr. Bahram Forouzesh, who has returned to our Department as a short-term locum. We have recently commenced recruitment to an additional Medical Oncology Staff Specialist position, which should be completed in the latter half of 2010. Medical Oncologists provide consultative services and attend all of the multi-disciplinary team meetings. They also provide teaching for undergraduates and postgraduates.

The best news for medical oncology has been the announcement that the University of Western Sydney and Sydney South West Area Health Service have supported the development of a Foundation Chair in Medical Oncology (with conjoint appointment to the University of New South Wales). We are pleased to announce the appointment of Professor Paul De Souza into the role. Paul has a distinguished career in researching new cancer drugs and will join us in February 2011. This will add substantial direction to the Department, particularly in research. Our staff specialists have done very well in the past in maintaining medical research in medical oncology, but it has been difficult to sustain due to a heavy clinical load and I hope that the appointment of a Professor with a research focus will provide better research opportunities.

Medical Oncology share four advanced trainees with the Macarthur Cancer Therapy Centre and continue to supervise a basic physician trainee. The Medical Oncologists are involved

with undergraduate and postgraduate medical training and remain passionate about providing good medical oncology teaching. A significant effort is put into placing patients onto clinical trials in order to improve patient care. Our clinical trial participation remains strong (and is increasing in strength) despite the complexities of admitting patients into trials from such a linguistically and culturally diverse mix of patients.

Plans for the next year include an increased capacity for medical oncology research, an enhancement to the staff profile and the facilitation of more patient treatments with the planned expansion of the chemotherapy delivery suite next year. The opening of the new hospital for Liverpool later this year also offers some great opportunities to enhance our medical oncology service and to recruit the additional staff members required to provide a service for a burgeoning population. This will also allow even more tumour site sub-specialisation and peer review.

Although a difficult year, in terms of workload, there are definite signs of increasing development in the Medical Oncology Department and the increases in workload have been able to be catered for safely.

### **Medical Oncology Staff**

### **ACTING DIRECTOR**

Professor Geoff Delaney

#### STAFF SPECIALISTS

Dr. Amanda Goldrick Dr. Mahmood Alam

Dr. Weng Ng

### **REGISTRARS - 2009**

Dr. Lina Pugliano Dr. Po Yee Yip

Dr. Baerin Houghton Dr. Anthony Linton Dr. Michelle Harrison

Dr. Mamta Bagia

Dr. Bahram Forouzesh (Locum)

#### **REGISTRARS - 2010**

Dr. Mun-Ngah Hui

Dr. Hilda High

Dr. Adnan Nagrial

Dr. Deme Karikios

# Clinical Departments Medical Oncology - Macarthur

The Department of Medical Oncology, Macarthur Cancer Therapy Centre, has continued to grow. At Campbelltown the department saw 536 new patients, 3,658 follow-ups and 4,753 chemotherapy occasions of service (OOS). 3.0 FTE Medical Oncologists provided the service, including Associate Professor Stephen Della-Fiorentina, Dr. Diana Adams and Dr. Lorraine Chantrill. We also welcomed Dr. Prunella Blinman and Dr. Belinda Kiely as permanent fractional staff specialists.

We remain part of the Sydney South West Medical Oncology advanced training network with four advanced trainees rotating through Macarthur from the Liverpool-Macarthur network. Dr. Adams leads the co-ordination of the programme. A basic trainee



Assoc. Prof. Stephen
Della-Fiorentina
MBBS (Hons), FRACP
Director of Medical Oncology

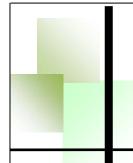
medical registrar and a Junior Medical Officer care for inpatients and cover the Ambulatory Day Unit. We train and supervise the junior staff and participate in the JMO training programme. Education and quality has been enhanced with weekly education sessions, a review of Clinical Indicators, and monthly morbidity and mortality meetings. Dr. Chantrill leads the Clinical Trial Unit and attends the Year 4 Curriculum Committee at the University of Western Sydney. Dr. Blinman brings leadership in lung cancer research and Dr. Kiely will be leading clinical trials in breast cancer.

The Southern Highlands Cancer Centre in Bowral continues to expand with 206 new patients and 1,434 follow-up patients seen and 1,530 chemotherapy occasions of service delivered. The partnership with Ramsay Health continues such that patients seen by the medical oncologist are able to receive chemotherapy locally irrespective of their private health insurance. Commencement of a clinical trials unit and a wig library has improved patient services in the Southern Highlands.

The University of Western Sydney Medical School is now in its fourth year with oncologists providing clinical teaching to Years 1 and 2. This year saw the first 4-week clinical placement of students within the Macarthur Cancer Centre, co-ordinated with oncology units in Blacktown, Lismore and Bathurst. The centre has two honours students from the University researching breast and cervix cancer. Publications, presentations and invitations to lecture have increased.

The Macarthur unit continues to innovate and lead the way in the electronic cancer record, implementing paperless chemotherapy prescribing in January 2010. The New South Wales Cancer Institute is seeking to adopt many of the quality initiatives the centre has commenced by adopting clinical benchmarks in chemotherapy administration. We remain a resource for other cancer units visiting us to gain understanding in implementing electronic prescribing.

The teamwork and integration of the Medical, Nursing, Allied Health and Pharmacy staff in education, quality, service planning has allowed us to innovate and further improve safe quality of care to our patients.



# Clinical Departments Palliative Care - Liverpool

### INTRODUCTION

The Liverpool Hospital Palliative Care Service is part of the SSWAHS Area Palliative Care Service. Currently this service provides an area-wide model of care with the Liverpool Hospital Service being part of the Western Zone Service. It is a consultative service providing inpatient consultations, outpatient clinics and community consultations. The medical staff provide an on call after hours service to all hospitals, community and Braeside/Camden Palliative Care units.



Dr. Rebecca Strutt
MBBS (Hons), MD, PhD,
FRANZCR.
Acting Director of
Palliative Care

### STAFFING

There is funding for 2.1 FTE staff specialists with Dr. Rebecca Strutt,

Head of Department (0.8 FTE), Dr. Jennifer Wiltshire (0.8 FTE), Dr. Louise Elliott (0.4 FTE) and Dr. Jackie Kerfoot (0.1 FTE but currently on maternity leave). There are 3.0 FTE Nursing positions including Charmaine O'Connor CNC, Naomi Ellis and Jodie Peronchik. The departmental secretary is Michelle Moors. There is 1.0 FTE Basic Physician Trainee and 1.0 FTE Advanced Trainee networked through the Sydney Institute of Palliative Medicine.

Charmaine O'Connor is new to the team and her mentorship and clinical skills are proving to be invaluable. Michelle Moors, who was also recently appointed, has experience working in Cancer Services at Campbelltown Cancer Therapy Centre.

### **SERVICES**

The consultative service at Liverpool Hospital continues to be very busy. The medical service is seeing an average of 80 - 90 new patients per month as well as providing a daily on-call service for the community and some home visits in the Liverpool Area. There are 3 outpatient clinics per week but the waiting time for new patients is currently 2 months.

### **VOLUNTEERS**

We have a team of 5 active Volunteers who provide a visiting/support service to Palliative Care patients throughout the hospital. One volunteer participates in the writing of the bereavement cards to families known to the Palliative Care Service, which is always appreciated by families. Volunteers visit the hospital from Wednesday through to Friday.

### END OF LIFE CARE PATHWAY (EOLCP)

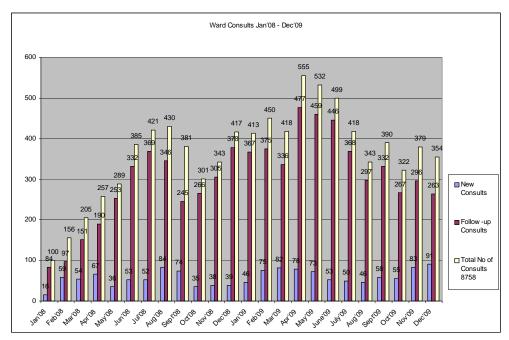
EOLCP continues on wards Grimson Ground East, 1 East, 2 West, 3 West, 5 East and the Aged

Care Unit. The pathway will be rolled out to the rest of the hospital when a co-ordinator is appointed, starting with Medical Assessment Unit.

The EOLCP has been awarded:

- First Prize in Category 2C in the SSWAHS Area Quality Awards Competition presented on 26 August 2009
- Finalist in the NSW Health Awards in 2009.

### **ACTIVITY**



New consults run at an average of 80-90 per month with average of 418 medical consultations on the ward each month.

### RESEARCH

Meera Agar continues to be very active in the Palliative Care Clinical Studies Collaborative, and Braeside is a participating clinical trial site. There have been 2 successful trials completed at Liverpool over the last year; the PEACH (palliative extended care at home) and MET (medical emergence team) trials.

### PALLIATIVE CARE INPATIENT UNIT AT LIVERPOOL

At the time this annual report is being prepared there is no firm date for the opening of the new unit at Liverpool Hospital.

### **CHALLENGES**

The existing consultative service requires another 1.0 FTE staff specialist to cope with the existing referral pattern. The challenges for the department is the need to recruit staff for the opening of the Palliative Care Unit at Liverpool including new staff specialists, and

experienced Nursing staff and Allied Health personnel to ensure quality patient care continues in the new unit.

### **PUBLICATIONS**

- Agar M, To T; Plummer J, Abernethy A, and Currow D. Anticholinergic load, health care utilisation and survival in people with advanced cancer: a pilot study. *Journal of Palliative Medicine*. Accepted 26th January 2010.
- Clark K, Lam L, Agar M, Chye R and Currow D. The impact of opioids, anticholinergic medications and disease progression on the prescription of laxatives in hospitalised Palliative Care patients: a retrospective analysis. *Palliative Medicine*. 2010. In press. Accepted 19th January 2010.
- Currow D, Agar M and Shelby-James S. Costs of delays in multi-site ethical approvals and ongoing study oversight. The Medical Journal of Australia. Accepted 21st December 2009. In press.
- Currow D, Shelby–James T, Plummer J, Rowett D, **Agar M**, Glare P, Spruyt O and Hardy J. Planning phase III multi-site clinical trials in Palliative Care: the role of consecutive cohort audits to identify potential participant populations. *Supportive Care in Cancer*. Accepted 3rd November 2009. In press.
- Currow D, Smith J, Davidson P, Newton P, Agar M and Abernethy A. Do the trajectories of dyspnoea differ in prevalence and intensity by diagnosis at the end of life? A consecutive cohort study. *Journal of Pain and Symptom Management*. Accepted 29th September 2009. In press.
- Currow D, **Agar M**, Plummer J, Blyth F and Abernethy A. A random household population prevalence survey of adult rates of chronic pain. *Australian and New Zealand Journal of Public Health*. Accepted 8th October 2009. In press.
- Agar M, Currow D, Seidel R, Plummer J, Carnahan R and Abernethy A. Changes in anticholinergic load from regular prescribed medications in Palliative Care as death approaches. *Palliative Medicine*. 2009. 23. 257-265.
- Ward A, Agar M and Koczwara B. Collaborating or co-existing Attitudes of Medical Oncologists toward Specialist Palliative Care. *Palliative Medicine*. 13th October 2009, 10.1177/0269216309107004.
- Currow D, Agar M, Smith J and Abernethy A. Does palliative home oxygen improve dyspnoea? Palliative Medicine. Accepted 3rd February 2009. In press.

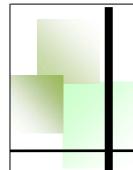
### ACTIVE RESEARCH PROJECTS

Dr Meera Agar, et al	Randomised control trial of oral risperidone, oral haloperidol, and oral placebo with rescue subcutaneous midazolam in the management of delirium in Palliative Care inpatients.	NHMRC  Cancer Institute NSW research innovation grant  Palliative Care Clinical Studies Collaborative, Commonwealth Department of Health and Ageing. Flinders University
Dr Meera Agar, et al	Prospective study of Medical Emergency Team calls to define issues of end of life decision-making, symptoms and transition in goals of care.	NHMRC

### Competitive grants/scholarships (research):

Investigators (indicating principle CIA)	Project title	Grant name / scheme / ID	Funding body	Amount per year (s)
M Agar (CIA), D Currow, B Draper, P Schofield, P Phillips and R Carnahan	Predictors of delirium in advanced cancer,	Cancer trials NSW, Clinical trials nurse support	Cancer Council NSW	NA
M Agar (CIA), K Hillman, L Elliott, J Chen and J Harlum	Prospective study of Medical Emergency Team calls to define issues of end of life decision-making, symptoms and transition in goals of care.	NHMRC ID 510397. Palliative Care research programme, research development grant.	NHMRC	2009 - \$48,700
M Agar (CIA), J Harlum and J Wiltshire.	Palliative Extended and Care at Home Packages evaluation project.	National Palliative Care programme, Palliative Care for people at home	Commonwealth Dept of Health and Ageing.	2008 - \$153,997 2009 - \$131,886.96
M Agar (CIA), G Caplan, M Hill, B Draper, D Rowett, C Anderson, D Currow, T Shelby-James and P Lawlor	Randomised control trial of oral risperidone, oral haloperidol and oral placebo with rescue subcutaneous midazolam in the management of delirium in Palliative Care inpatients.	NHRMC 480476 Palliative Care research programme, research development grant.	NHMRC	2009 - \$25,000 2010 - \$25,000
M Agar (CIA), G Caplan, M Hill, B Draper, D Rowett, C Sanderson, D Currow, T Shelby-James and P Lawlor	Randomised control trial of oral risperidone, oral haloperidol and oral placebo with rescue subcutaneous midazolam in the management of delirium in Palliative Care inpatients.	Common- wealth Dept of Health and Ageing. Palliative Care Clinical Studies Collaborative.	Commonwealth Dept of Health and Ageing	2008 - \$182,714 2009 - \$182,714
D Currow, P Frith, J Plummer, P Allcroft, B Fazekas, A Abernethy, M Agar (CIA) and M Briffa	Providing the evidence to improve the care of patients with refractory dyspnoea at the end-of-life through systematic research.	NHMRC 426785 Palliative Care research programme, priority driven research grant	NHMRC	2008 - \$89,410 2009 - \$79,810 2010 - \$76,366

P Davidson, H Krum, D Leung, P McDonald, D Currow, P Newton, G Toffler, M Agar (AI) and A Abernethy	Oxygen to relieve dyspnoea in non-hypoxaemic patients with end-stage heart failure.	NHMRC 458814. Palliative Care research programme, priority driven research grant.	NHMRC	2008 - \$85,050 2009 - \$85,050 2010 - \$36,250
M Agar (CIA), G Caplan, M Hill, B Draper, D Rowett, C Sanderson, D Currow, T Shelby-James and P Lawlor	Randomised control trial of oral risperidone, oral haloperidol and oral placebo with rescue subcutaneous midazolam in the management of delirium in Palliative Care inpatients.	Cancer Insti- tute NSW, research innovation grant 2009	Cancer Institute NSW	2009 - \$50,000
M Agar (CIA), A Walker, J Harlum, L Kuwahata, R Strutt, E Correy, J Wiltshire and L Elliott	Sydney South West (Western Zone) Palliative Care Service Clinical Trials Unit.	Cancer Institute NSW, Clinical trials nurse and data management grant.	Cancer Institute NSW	2009 - \$88,548 2010 - \$84,900
M Agar, T Davidson, K Clark, J Clayton, P Good, M Lovell, C Sanderson and L Lobb	NSW Palliative Care Clinical Trials Collaborative Research Group	Cancer Insti- tute NSW Research infrastructure grant 09/CIG/1-01	Cancer Institute NSW	2009/10 - \$173,445 2010/11 - \$170,530 2011/12 - \$184,532



# Clinical Departments Palliative Care - Macarthur

The Macarthur Palliative Care Service is part of the SSWAHS Area Palliative Care Service, with clinicians providing consultative care to outpatients of the Macarthur Cancer Therapy Centre (MCTC), inpatients of Campbelltown, Camden and Bowral Hospitals, a domiciliary service to the Macarthur and Wingecarribee regions, as well as coordinating care in the 10-bed inpatient Palliative Care Unit at Camden.

COAG enhancement funding and the assistance of the 24-hour Fight Against Cancer Macarthur have enabled the team to develop the Palliative Care Day Therapy Centre, located on the ground floor of Camden Hospital, in the UMCCC. Limited services have recently commenced whilst further recruitment occurs, with plans to expand to admitting

Dr Amanda Walker MBBS, Dip Pall Med (Hons) FAChPM Area Medical Director of Palliative Care SSWAHS

10 patients per day on Wednesdays and Thursdays, providing comprehensive multi-disciplinary care to community patients of the Macarthur region.

The medical service welcomed local trainee, Dr. Heidi Gregory, who has commenced as a 0.8 FTE Staff Specialist, working alongside Dr. Lynne Kuwahata and Dr. Amanda Walker (Area Medical Director) with two Advanced Trainees positions, one based at Camden and one based at the MCTC.

Colleen Carter has commenced as the long-awaited CNC covering both the consultative service in Campbelltown Hospital and the MCTC, as well as the Camden Palliative Care Unit. We have also welcomed Catherine Geoghegan to the Rosemeadow community service, assisting Kathleen Schofield (CNC). In Wingecarribee, Jane Mahony has left to pursue educational opportunities at the University of Western Sydney with Mira Glavan being promoted to CNC.

Jacinta Humphries provides social work services to inpatients, outpatients and community patients of the Macarthur region, ably assisted on the ward by MCTC social worker Gloria Yu.

Palliative Care volunteers continue to provide support to patients and families in their homes and in the Camden Palliative Care Unit. We farewell with our gratitude Cathy Conwell, who has massaged the hands and feet of our patients every week over many years.

# Clinical Departments Radiation Oncology - Liverpool

It is a pleasure to offer my first report as Director of Radiation Oncology. The department has flourished under the leadership of Professor Geoff Delaney and my colleagues share with me in thanking him for his strong leadership and wonderful mentoring over many years. The last 12 months have been another busy time for Radiation Oncology at Liverpool and Campbelltown Hospitals. We have continued to see a rise in the number of patients seen. We continue to provide clinical services at Liverpool, Campbelltown, Bankstown and Bowral. We have faced significant challenges but with the hard work and goodwill of the staff across both centres we have managed to overcome these issues. We will continue to challenge ourselves for the benefit of our patients.



Dr. Dion Forstner MBBS, FRANZCR. Director of Radiation Oncology

Just as we did last year, we have again faced the excitement and challenge of installing a new linear accelerator at Liverpool. It is obviously exciting to get new technology into the department but it does result in significant disruption in the department and added stress to our existing linear accelerators. During this time the staff still needed to treat the same number of patients although the treatment capacity was reduced by one third. This resulted in a waiting list for treatment which we expect will disappear once the new machine is commissioned. It is anticipated that commissioning will be completed in October 2010.

We have expanded our Intensity Modulated Radiation Therapy Programme (IMRT) programme and plan further expansion in the next year. We are also moving towards more image guided radiotherapy including kilovoltage cone beam CT scans during treatment.

The coming year is an exciting one as the new building at Liverpool Hospital opens. Within the next 12 months a major redevelopment of the Liverpool Cancer Therapy Centre will commence. This will allow for further expansion of radiotherapy services over the next four years.

### STAFFING

The biggest change for us has been the departure of Associate Professor Martin Berry. At the beginning of 2010 he went on long service leave and his last day with us was 11 July 2010. Martin drove the establishment of the Liverpool and Macarthur Cancer Therapy Centres and leaves with them as his legacy. He has made an enormous contribution to the care of patients in South West Sydney and we wish him well in his new endeavours in the private sector.

Dr. Shalini Vinod was appointed a conjoint Associate Professor with the University of New South Wales. In late 2009 Mark Sidhom moved into a permanent staff specialist position. Mark has a long list of achievements and is a huge asset to our department. In mid 2010 we

welcomed Dr. Karen Lim as a staff specialist. Karen was previously a registrar with us and has been doing a fellowship at Princess Margaret Hospital in Toronto for the past 3.5 years in the area of MRI-based planning with a particular interest in gynaecological malignancies.

Dr. Kavita Morarji, who was previously a registrar with us, was appointed to a locum staff specialist position for 12 months. Dr. Miriam Boxer, who was also previously a registrar, took on a fellow position with us for 2010, working in the areas of lung and head & neck cancers.

We farewelled Dr. Andrew Fong who held a Research Fellow position with our department in 2009 - 2010 during which time he completed several projects.

For the last 12 months we have had the pleasure of Dr. Madhavi Goonetilleke working with us. Dr. Goonetilleke is an experienced Radiation Oncologist who has worked in India and Jamaica. She is currently completing requirements for Fellowship of the Royal Australian and New Zealand College of Radiologists.

### **EDUCATION**

Our education and training program for radiation oncology registrars has continued to be very successful. Dr. Kavita Morarji and Dr. Miriam Boxer have now completed their training and have been awarded Fellowship of the Royal Australian and New Zealand College of Radiologists.

Our department forms part of the Southern New South Wales Radiation Oncology Training Network. Registrars are now rotating regularly between the other hospitals in the network (Wollongong, Prince of Wales, St. George and Canberra). This will hopefully improve the experience for all the trainees within the group. We have had our first registrars undertaking the new radiation oncology curriculum.

Congratulations go to several staff members who completed Masters degrees with Dr. Denise Lonergan completing her Masters in Medical Education at University of Sydney. Sankar Arumugam has completed his examinations to become an accredited physicist in an impressively short time. Giselle Condos completed a MBA from University of Tasmania supported by SSWAHS. Kathy Andrew finished her Masters in Health Science (Advanced Radiation Therapy) at the University of Sydney. Shivani Kumar attained her Masters of Public Health in Program Design and Management at the University of NSW. Vikneswary Batumalai completed her Masters in Health Science (Behavioural Health) at the University of Sydney.

### RESEARCH

This year, research has continued to be a big focus for our department, as is witnessed by the large number of original presentations and posters at national and international meetings. Different groups from within the department won an impressive total of four prizes at the FRANZCR Combined Scientific Meeting in 2009. At the COSA meeting, the lung and neuro-oncology groups from the department received prizes for their oral abstracts. Several staff members also achieved publications in peer-reviewed journals. It is fantastic to see a significant majority of the research involving collaborations that have been established across different work groups including medical and non-medical disciplines. There has been continuing co-operative research between radiation oncology, radiation therapy and medical physics and also significant collaborative research being conducted between radiation oncology and nuclear medicine. I am pleased to say these relationships continue to grow.

Last year there was the awarding of federal funding to Liverpool Hospital for the building of a research facility and the installation and development of a dedicated research bunker. The research bunker will be completed over the next 3 years. Planning for this facility is progressing well being led by Professors Delaney and Barton. We have been very fortunate to secure Associate Professor Paul Keall's involvement in the project. Paul is an internationally renowned physicist who is returning to Australia on a prestigious Australian Fellowship. Paul was most recently the Director of Medical Physics at Stanford University but previously worked in our department between 1996 - 1997.

It is an exciting time to be part of such an energetic department working across both sites. Again, a lot has been achieved in the past twelve months. With the commitment and dedication of our staff, I am very confident that this department will continue to achieve a high standard of care for all our patients. Our provision of services across both Liverpool and Macarthur is an example of how well departments can function across sites and we are hoping the forthcoming changes resulting from the National Health and Hospitals Network agreement allow us to strengthen the service rather than fragment it.

### Radiation Oncology Staff

### **DIRECTOR**

Dr. Dion Forstner

### STAFF SPECIALISTS

Professor Geoff Delaney Assoc. Prof. Shalini Vinod

Dr. Mark Sidhom Dr. Allan Fowler

Dr. Kavita Morarji (Locum)

Dr. Karen Wong

#### REGISTRARS

Dr. Jeremy De Leon Dr. Mei Ling Yap

Dr. Madhavi Goonetilleke (Honorary)

Dr. Patrick Wong Dr. Thang Du Huynh Dr. Miriam Boxer Dr. Eng-Siew Koh Dr. Denise Lonergan Professor Michael Barton Dr. George Papadatos Assoc. Prof. Martin Berry

Dr. Andrew Fong (Fellow)

Dr. Mimi Tieu Dr. Annie Lee

Dr. Chelsie O'Connor Dr. Leily Gholamrezaei

# Clinical Departments Radiation Therapy

This year has again been an exciting and challenging one for Radiation Therapy (RT). Radiation Therapy staff continue the past patterns of maternity leave with a lot of comings and goings, with some RTs going off on maternity leave and others returning either full or part time. We have maintained our staffing levels at maximum capacity and been able to back-fill to cover the part-time or maternity leave staff with temporary contracts in order to maintain safe levels of service delivery. We have also welcomed a number of new staff to join our service. Several RTs have stepped up into higher grade duties to both senior and managerial roles to cover the maternity absences and have performed these roles very professionally.



Lynette Cassapi DCR(T) BSc (Hons) Director of Radiation Therapy

Four Professional Development Year (PDY) staff completed their training with us in March 2010, however because of funding constraints we were unable to take on more new graduates to undertake their PDY with us in 2010. This year LCTC and MCTC, together with the Sydney Cancer Centre at RPAH continued the arrangement for all SSWAHS PDY staff to rotate through all three centres. This was designed to assist in the clinical education of the PDYs so that they can experience working on different linear accelerators and planning systems and gain an appreciation of differing radiation therapy techniques which are in use across all three centres. This has proved to be very successful and will be repeated in future years.

The whole RT team engaged in two Radiation Therapy Planning Days held at the Education Centre at Campbelltown Hospital in May 2010, where we were all able to participate in some personality and team working exercises, as well as contributing to some brain-storming activities in the afternoon in order to highlight areas where we can make further mprovements to our service, technique delivery and patient care provision. This has resulted in the production of an RT Plan for 2010/2011 with some short, medium and longer terms goals. The RT group is looking forward to 2011 and is eager to participate in all the exciting new developments which are proposed for the centre over the next 12 months and beyond.



Daniel Moretti BAppSc, MRT (Radiation Therapy) Deputy Director Liverpool



Joanne Veneran BAppSc, MRT (Radiation Therapy) Head of Planning



Kirrily Cloak BAppSc, MRT (Radiation Therapy) Head of Treatment



Nicole Cusack BAppSc, MRT (Radiation Therapy), Master of Health Mgt Deputy Director Macarthur

This includes both the physical changes to the infrastructure, and the advancements in technology and treatment techniques that new equipment will allow us to utilise, and so greatly benefit our patients. We are also looking forward to driving some specific patient care improvement initiatives to refocus attention on essential aspects of patient care that we provide.

The two Research, Development & Imaging roles continue to enable all RT staff to have access to rostered Research & Development time in order to assist with the multi-disciplinary projects and research being undertaken within the departments. All of this hard work was rewarded with the acceptance of seven presentations at the 2009 Combined Scientific Meeting of The Royal Australian and New Zealand College of Radiologists (RANZCR), (including the Faculty of Radiation Oncology (FRO), The Australian Institute of Radiography (AIR) and the Australasian College of Physical Scientists & Engineers in Medicine (ACPSEM) held in Brisbane in October 2009. At this combined meeting, Daniel Moretti was awarded the Siemens Radiation Therapist Prize: Most applicable / beneficial Radiation Oncology presentation by a Radiation Therapist for his presentation on 'Development of a Radiotherapy Wiki for comprehensive document management'. At the same meeting Vikneswary Batumalai was awarded the Novartis Oncology: Best Clinical Outcomes in Breast Cancer Therapy Award for her presentation on variability in Clinical Target Volume Delineation for Tangential Breast Irradiation. RT staff have continued to expand their technical knowledge by attending many other conferences and training courses during 2007/2008, both within Australia and overseas, with many presentations being given.

There are also a number of RT staff currently undertaking postgraduate study, including Masters Degrees in subjects across the Management, Business and Clinical fields. Congratulations go to Giselle Condos for being awarded her MBA (UTas), Shivani Kumar for completing her Masters of Public Health in Program Design and Management (UNSW), Vikneswary Batumalai for completing her Masters in Health Science (Behavioural Health) (USyd) and Kathy Andrew for completing her Masters in Health Science (Radiation Therapy) (USyd). Kirrily Cloak and Matthew Fuller also completed the SSWAHS Management Development Programme and were awarded their Diploma in Frontline Management.

The Liverpool M2 Siemens linac was decommissioned in late February 2010 and it is anticipated that clinical treatment delivery using the new M2 Elekta linac will commence in October 2010. All RT staff have been exemplary in meeting the challenges of rostering, flexibility in work shifts and patient scheduling, challenges that accompany the removal and replacement of a linear accelerator whilst maintaining safe and effective treatment delivery across the Service. IMRT treatment delivery continues to increase and this past year has also seen the introduction into clinical use of the Kilovoltage Cone Beam technology on the new M1 linac. This continues to be an exciting time in radiation therapy, with new technology and equipment making advances in treatment delivery more accessible to increasing numbers of our patients.

Close links continue to be forged between the RT groups at Liverpool / Macarthur and RPAH with the combined RT management group meeting regularly each year. This group has collaborated to establish consistency of RT Position Descriptions as well as to review with treatment and planning protocols. Radiation Therapy staff continue to be dynamic participants in the many site-specific and technique specific multidisciplinary Interest Groups that are active across our Service.

### **Radiation Therapy Staff**

### **DIRECTOR**

Lynette Cassapi

#### **SENIORS**

Kylie Dundas James Latimer Som Rattanavong Renee Voysey
Matthew Fuller Annie Lau Christine Tawfik Andrew Wallis
Odette King Alison Dunning Rebecca Ko

### RESEARCH AND DEVELOPMENT

Vicky Batumalai Melanie Rennie Shivani Kumar David Sampson

### RADIATION THERAPISTS

Leisa Holmes Kathy Andrew Hung Nguyen Revna Stirton Cesar Ochoa Steven Tran Ewa Aren Ewa Juresic Carly Ballard Josip Juresic Lucy Ohanessian Jessica Turley Skye Blakeney Sarah Keats Danielle Parrot Tess Vuong Kate Caldwell Thien Le Penny Phan Sandie Watt Giselle Condos Vanessa Leong **Judy Plante** Jim Yakobi Ashika Maharaj Aisha Rasool Christina David Adam Zammit James McKay Joshua Sams Isabella Franji Cara McKibbon Adrianna Scotti Alicia Haman Janelle Hardie Shayne Smith Carol Nguyen

# Clinical Departments Medical Physics

The Medical Physics group has been active in a number of areas over the year. Significant effort has been put into reviewing and optimising quality assurance procedures for accelerators, CT scanners, dosimetry equipment, orthovoltage and brachytherapy apparatus. The Medical Physics Wiki (PhysWiki) was developed and work has commenced on migrating the Planning Data Manual onto it, in addition to increasing its use as a repository for knowledge within the group. Commissioning of the Philips Pinnacle Treatment Planning System was progressed with it being released for imaging and contouring purposes early in 2010 and beam modelling being at an advanced stage at the time of writing. Planning for the replacement of the old M2 linac (Siemens MD2) commenced around November 2009 and the



Gary Goozée B Sc (Hons), DipEd, MSc, MACPSEM Director of Medical Physics

unit was decommissioned and removed in March 2010 with the replacement unit, an Elekta Synergy, being installed in May 2010 with Acceptance Testing underway by late June of this year.

Following the successful Ingham Research Institute grant for a research linear accelerator and bunker in 2009, the Research group, together with others in the department have been investigating options for the research linear accelerator and bunker. After discussions with many collaborators it was agreed that a combined MRI linac will be developed within the research bunker. This project will be undertaken in collaboration with the Universities of Wollongong, Sydney, Newcastle and Stanford USA and will be led by Associate Professor Paul Keall. A combined MRI linac will provide the ability for real time imaging during radiotherapy treatment. A long term goal of the project is the ability to also perform functional imaging during radiotherapy and incorporate this into clinical practice.

The MRI-linac will also provide us with opportunities to expand our current areas of research. Electronic Portal Imaging Detector (EPID) dosimetry investigations in collaboration with the University of Sydney and Newcastle are continuing. This work is assessing our current EPIDs for use in patient treatment dose verification and looking into the design of a new EPID which would achieve high quality imaging and dosimetry. Investigations into the use of imaging for radiotherapy are also continuing. This has included determining the most appropriate method of assessing the variation in target volumes due either to uncertainty in target delineation or change in patient anatomy over the course of treatment and comparing the radiation imaging dose and secondary cancer risk for breast imaging and treatment. We have also continued to assess the use of PET in radiotherapy treatment planning in collaboration with the nuclear medicine department.

The Research group currently has 4 PhD students and 3 MSc students involved in projects as well as a research physicist and a number of clinical physicists. This year we have also benefited from the regular involvement of Professor Peter Metcalfe from the University of Wollongong. We will be seeking to expand this group further as the MRI-linac project develops.

### **Medical Physics Staff**

**DIRECTOR** 

Gary Goozée

DEPUTY DIRECTOR - LIVERPOOL DEPUTY DIRECTOR - MACARTHUR

Virendra Patel Satya Rajampakse

SENIOR RESEARCH PHYSICIST

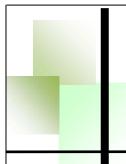
Lois Holloway

SENIOR MEDICAL PHYSICISTS

Phil Vial Vinod Nelson
Remy George Paul Simpson
Sankar Aramugan Shrikant Despande

MEDICAL PHYSICS REGISTRARS

Jarrad Begg Tania Tehnovik Michael Jameson Tony Young



# Collaboration For Cancer Outcomes, Research & Evaluation

### HIGHLIGHTS AND ACHIEVEMENTS

Throughout 2009/2010 CCORE continued to pursue many avenues of research with project managers and researchers involved in a wide range of activities. Some of the many key activities and achievements were:

### RESEARCH PROJECTS

### Estimation of the Optimal Number of Radiotherapy Fractions for Cancer Patients.

Dr. Karen Wong, Radiation Oncologist, has been enrolled in the PhD program at the University of New South Wales since 2007 under the supervision of Professor Michael Barton and Professor



Professor Michael Barton OAM MBBS, MD, FRANZCR. Professor of Radiation Oncology Faculty of Medicine, UNSW Research Director, CCORE Director of CCORE

Geoff Delaney. The aim of this research is to construct an evidence-based model to estimate the optimal number of radiotherapy fractions per cancer patient and per treatment course, building on the existing optimal radiotherapy utilisation model. This data can provide a benchmark for service delivery and for comparison with actual fractionation in practice. The model can also be applied to predict future radiotherapy workload and hence aid in future radiotherapy services planning in Australia.

An estimation of the optimal endocrine therapy utilization rate in breast cancer CCORE has developed an optimal utilisation model for endocrine therapy in breast cancer, using current Australian epidemiological data.

### A comparison of breast cancer treatment rates in British Columbia, Scotland, and Western Australia, and a comparison with models of "optimal" therapy

In an international collaborative project with the British Columbian Cancer Agency in Canada, NHS Tayside in Scotland, and the Royal Perth Hospital in Western Australia, CCORE is comparing breast cancer treatment rates in these jurisdictions, and is comparing the optimal treatment utilisation models for radiotherapy, chemotherapy, and hormone therapy with the original and previously published theoretical models.

#### The use of wikis with clinical guidelines: a review

CCORE is collaborating with the University of Sydney in the pilot of clinical guideline wikis in oncology. This is a background literature review and analysis of the current published data.

#### Patterns of radiotherapy retreatment project

CCORE is involved in a three-year study aimed at describing patterns of radiotherapy retreatment by cancer type in order to develop methods of modelling retreatment for better service planning and benchmarking.

Cancer survivorship and late effects of cancer therapy: (e.g. lymphoma and brain tumour survivors)

#### Hodgkins Lymphoma survivors:

 Long-term follow up for Hodgkin Lymphoma survivors: Patterns of care across Australia and New Zealand completed with plans to develop ANZ guidelines for management of long-term survivors.

### Brain tumour survivors:

- Assessing new screening tools for cognitive and behavioural impairment in primary brain tumour
- Developing novel psychosocial interventions for managing changes to cognitive, emotions and behaviour in brain tumour survivors.

#### Touchscreen 'Quality of Life' project

CCORE collaborated with the Psycho-oncology Co-operative Research Group (PoCoG) School of Psychology, University of Sydney in a Cancer Institute NSW funded project on development of an economic evaluation model for use in cancer clinical trials using Liverpool Hospital Cancer Therapy Centre Touchscreen QOL data.

#### A review of the evidence of management of skin toxicity during radiation therapy

A project aimed at development of a protocol for evidence-based management of skin toxicity during radiation therapy through systematic literature review including meta-analysis and a survey of radiotherapy departmental skin toxicity management practices in Australia and New Zealand. (Accepted for publication in 2010)

### Radiotherapy planning study for Non-Small Cell Lung Cancer (NSCLC) using Positron Emission Tomography (PET)

A radiotherapy planning study assessing the Dosimetric implications of the addition of 18FDG-Positron Emission Tomography (PET) in CT-based radiotherapy planning for Non-Small Cell Lung Cancer (NSCLC). (Accepted for publication in 2010)

### Radiation Oncology Network

The Southern NSW Radiation Oncology Training Network was initiated with a pilot programme in 2008. The participating hospitals include Prince of Wales, St George, Liverpool, Campbelltown, Wollongong and Canberra. Initially five registrars were appointed to the network and these registrars are now in their 3rd year of specialist training. During 2010, the number of Network trainees is to be increased to 16. Successful rotation of registrars to most of the participating hospitals has taken place and the first Canberra rotation is to be arranged for the beginning of 2011.

A formal evaluation of the Network was performed in June 2009. This confirmed that the trainees and the participating hospitals were happy with the progress of the Network. It also raised issues which can now be addressed over the next 12 months.

During the pilot programme, the NSW Cancer Institute provided a 12-month grant to support a 0.6 FTE Education Support Officer position. The evaluation highlighted the importance of this position. NSW Health has since agreed to support the continuation of this position as a 1.0 FTE for the next 3 years.

### **APPOINTMENTS**

### Professor Michael Barton, CCORE Research Director was appointed:

- Member, Radiation Oncology Implementation Committee (RORIC) Workforce Subcommittee
- Chair, Independent Review Committee, Clinical Practice Guidelines for the Management of Locally Advanced and Metastatic Prostate Cancer

### **COMMISSIONED REPORTS**

- Simpson GK, Wright KM, Simpson T, **Koh E-S**, Firth R, Whiting D, Younan K. Addressing the Behavioural and Cognitive Sequelae of Adults with Brain Tumour: Trialling a Behavioural Consultancy Model. *Cancer Institute NSW NSWOG Neuro-Oncology Project*. September 2009.
- Shafiq J, Barton M. Radiation therapy risks: prioritizing patient safety. Talking Point. On-line report - Medical Physics Web. 4th August 2009. http://medicalphysicsweb.org/cws/article/opinion/39997
- Barton M, Shafiq J, Noble D, Lemer C. The French Nuclear Safety Authority Review: Contrôle review n° 185: Safety in external radiotherapy treatments. WHO Radiotherapy risk profile (November 2009). pp 88-89.

### INVITED SPEAKER

### Professor Michael Barton, CCORE Research Director

- At invitation of The French Nuclear Safety Authority (ASN). International conference: 'Modern Radiotherapy: Challenges and advances in radiation protection of patients'. Versailles, France. 2nd—4th December, 2009.
  - Presentations:
  - ⇒ Radiotherapy risk profile.
  - ⇒ Safety in External Radiotherapy.
- At invitation of Cancer Action Team, Addenbrookes Hospital, Cambridge. Meeting. 'Modelling of Radiotherapy Demand' London, 7th December, 2009. To consider the clinical / scientific evidence and the limitations of current modelling, especially around locality differences in cancer incidence, stage, co-morbidity and radiotherapy use.
  - ⇒ Demand Modelling in Australia.
  - ⇒ Effectiveness and cost effectiveness of radiotherapy: what is the impact of missed radiotherapy?
  - ⇒ Comparison worldwide actual radiotherapy utilisation rates.
- Clinical Oncology Society of Australia Annual Scientific Meeting. Gold Coast Queensland.
   November 2009.
  - ⇒ Guidelines for the Management of Adult Gliomas.
- RANZCR Annual Scientific Meeting. Brisbane, Queensland. October 2009.
  - ⇒ Guidelines for the Management of Adult Gliomas.

### Dr. Eng-Siew Koh

- Simpson GK, Koh E-S, Wright K M, Simpson T, Firth R, Whiting D, Younan K. Cancer Institute NSW Journal Club. 28th October 2009.
  - ⇒ Novel approaches to the assessment and management of behavioural and cognitive impairment in adults with primary brain tumour.

### INVITED EXPERT

### Professor Michael Barton, CCORE Research Director

Invited to Accra, Ghana, 5th—7th May 2010 by <u>VUCCnet</u> (Africa Regional Cancer Training Network) - co-ordinated by PACT (International Atomic Energeny Agency's (IAEA)
 Programme for Action for Cancer Therapy). To foster African knowledge, development, education and training capacity in order to make comprehensive cancer control sustainable.

### **SEMINAR**

On 3 June 2009, CCORE / CTC held a very successful 10<sup>th</sup> Interdisciplinary Radiation Oncology Seminar at the Thomas & Rachel Moore Education Centre, Liverpool Hospital, titled 'Integrated Approach to the Management of Lower GI Cancer'. Seminar topics included:

- Pre-operative radiotherapy for rectal cancer: short or long course?
- Long vs. short course radiotherapy a surgical perspective
- Outcomes of colorectal cancer across South Western Sydney implications for practice
- Online imaging in pelvic malignancies
- Role of radiotherapy in treatment of liver cancers
- An overview of RPA diamond technique for anal cancer
- Colorectal cancer when and how to PET
- The role of MRI in rectal cancer
- Target delineation guidelines in preoperative rectal cancer



L to R – back row standing: Dr. Gabriel S Gabriel, Robyn Hittmann, Professor Geoff Delaney,
Dr. Weng Ng, Dr. Susannah Jacob, Dr. Mark Sidhom
L to R – sitting: Dr. Eng-Siew Koh, Dr. Karen Wong, Professor Michael Barton (Research Director CCORE),
Dr. Jesmin Shafiq

Funding Body	Chief Investigators	Title Of Project	Total Amount Received For Research Grant	Amount Received In 2009	Brief Lay Description	Administering Institution
NHMRC	Professor Phyllis Butow, University of Sydney NSW 2006 Assoc. Investigators: MB Barton CCORE, D Adams, N Pavlakis, J Clayton, M Tattersall, R Epstein, P Davidson, J Young	Improving QOL at the end of life: A randomised controlled trial of a doctor/nurse/ patient intervention	\$660,800	\$230,000	To evaluate the effect of a combined cancer patient oncologist - health service intervention for patients with advanced incurable cancer and a prognosis estimated by their doctor to be 2-12 months. The intervention aims to promote discussion and mutual understanding between patient / care giver and clinicians about prognosis, end of life issues and treatment goals in order to improve the quality of remaining life	Sydney University
- Institute	M King, MB Barton, W Ng, R Viney, P Grimison	Development of cancer-specific multi-attribute health states from the QLQ-C30 for use in economic evaluation	\$47,814		Development of cancer-specific multi-attribute health states from the QLQ-C30 for use in economic evaluation	SSWAHS
C'wealth of Australia	MB Barton, IHRI	Ingham Health Research Facilities	\$51.6m		For the construction of the Ingham Health Research Facility, Liverpool Hospital	SSWAHS
Radiation Oncology Section, Dept Of Health and Aging, Canberra/ NATA	MB Barton, P Vial, L Cassapi	Implementation of National Radiation Oncology Standards Program	\$45,000	\$45,000	Study of the feasibility and costs of implementing a national radiation oncology standards program	SSWAHS

### **CCORE Research Members**

#### **CCORE RESEARCH DIRECTOR**

Michael Barton Professor of Radiation Oncology Faculty of Medicine, UNSW

#### **PROJECT MANAGERS**

Dr. Gabriel S. Gabriel - UNSW Dr. Susannah Jacob - CCORE

Dr. Jesmin (Rokeya) Shafiq - CCORE

#### DIRECTOR OF CANCER SERVICES, SSWAHS

**Professor Geoff Delaney** 

#### DIRECTOR OF RADIATION ONCOLOGY, LIVERPOOL & MACARTHUR

Dr. Dion Forstner

#### RADIATION ONCOLOGISTS

Dr. Denise Lonergan
Dr. Mark Sidhom

Dr. Karen Wong Assoc. Prof. Shalini Vinod

MEDICAL ONCOLOGIST

Dr. Weng Ng

#### RESEARCH ASSISTANTS

Patricia Gruver - Data Manager UNSW

Zhixin Liu - Biostatistician UNSW

Dr. Eng-Siew Koh

Dr. Andrew Fong

MEDICAL PHYSICS

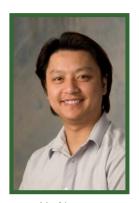
Philip Vial

### Research Clinical Trials

2009 - 2010 has been an extraordinary year for the clinical trials department, highlighted by winning the 2010 Cancer Institute Premiers Award for 'Innovation in Clinical Trials'.

#### Key achievements include:

- NEAF submission and approval as lead site for 4 trials: (Sunitinib, Algeta Prostate, Expect, Cougar 2).
- Further streamlining of th process of submitting SSA with our Regulatory Governance Officer as evidenced by the volume of studies approved by the RGO this year. This also includes submitting trials in conjunction with the Macarthur Cancer Therapy Centre at Campbelltown Hospital.



Vu Nguyen BSc (Hons) Research Manager

- SSA submission of 22 trials to the Regulatory Governance Officer, of which 18 trials have been approved by the RGO.
- Total number of patients recruited to studies at the site, increased from 81 in the previous year reported (2008) to 140 in 2009.
- Agreements put in place with the Department of Haematology to become part of the South West Sydney Cancer Service Research Group has led to the approval and activation of 2 Haematology studies in 2009.
- Increased participation in the labour intensive pharmaceutical sponsored studies.
- Successfully negotiated site procedures with Pathology Department to continue to perform trial related activities for 2010.
- Incorporation of the role of Clinical Trial Nurse into the unit.
- Site has been audited 3 times in 2009 (MK0646, IBIS II and Radiant), with no major findings.
- A total of 111 monitoring visits by Study Sponsors were completed in 2009.

The CTC Clinical Trials Unit is aiming to continue the success that it has achieved in 2009 - 2010 and will be looking at increasing the activation of clinical trial, including participation in studies for rare cancer types.

## Clinical Trials Open To Recruitment At Liverpool

Algeta Prostate A double-blind, randomised, multiple dose, phase Radiation Oncology III, multi-centre study of Alpharadin in the treatment of patients with hormone refractory prostate cancer

with skeletal metastases

2 APOCC Patterns of Cancer Care for Aboriginal People in Radiation Oncology

NSW

3	BETH	A multi-centre phase III randomised trial of adjuvant therapy for patients with HER-2 positive or high-risk node negative breast cancer comparing chemotherapy plus Trastuzumab with chemotherapy plus Trastuzumab plus Bevacizumab	Medical Oncology
4	BIBF1120	Multi-centre, randomised, double-blind, phase III trial to investigate the efficacy and safety of oral BIBF1120 plus standard Pemetrexed therapy compared to placebo plus standard Pemetrexed therapy in patients with stage IIIB / IV or recurrent NSCLC after failure of first line chemotherapy	Medical Oncology
5	Bones Exercise	Prevention of osteoporosis as a consequence of hormone treatment in post-menopausal women treated for breast cancer	Medical Oncology
6	BR29 NSCLC	A double blind, randomised trial of Cediranib versus placebo in patients receiving Paclitaxel / Carboplatin chemotherapy for the treatment of advanced or metastatic non-small cell lung cancer	Medical Oncology
7	CATS - BNP	Prediction of cardiotoxicity using serum N-terminal pro-B-type natriuretic peptide in breast cancer patients receiving adjuvant Trastuzumab.	Medical Oncology
8	COMPLETE	A randomised, open-label, phase III study of taxane based chemotherapy with Lapatinib or Trastuzumab as first-line therapy for women with HER-2 / neu positive metastatic breast cancer	Medical Oncology
9	COU-AA-302	Phase III, randomised, double-blind, placebo- controlled study of Abiraterone Acetate (CB7630) plus Prednisone in asymptomatic or mildly symptomatic patients with metastatic castration-resistant prostate cancer	Medical Oncology
10	Haemoglobiopathies	Establishing the burden of illness and unmet needs of patients with haemoglobinopathies living in NSW, Australia	Haematology
11	IBIS II - Bone Sub-Study	A randomised, double-blind trial to assess the effects of bone mineral density and bone markers of Anastrozole when used to prevent breast cancer in post-menopausal women	Medical Oncology
12	IBIS II - DCIS	An international multi-centre study of Tamoxifen versus Anastrozole in post-menopausal women with hormone sensitive ductal carcinoma in situ (DCIS)	Medical Oncology
13	IBIS II - Prevention	An international, multi-centre study of Anastrozole versus placebo in post-menopausal women at increased risk of breast cancer.	Medical Oncology
14	MK0646 Colorectal	A phase II / III study of MK-0646 treatment in combination with Cetuximab and Irinotecan for patients with metastatic colorectal cancer	Medical Oncology

15	OVAR16	A phase III study to evaluate the efficacy and safety of Pazopanib monotherapy versus placebo in women who have not progressed after first-line chemotherapy for epithelial ovarian, fallopian tube or primary peritoneal cancer	Medical Oncology
16	PETTAC6	Pre-operative chemo-radiotherapy and post-operative chemotherapy with Capecitabine and Oxaliplatin versus Capecitabine alone in locally advanced rectal cancer (PETTAC6)	Medical Oncology
17	Portec	Randomised phase III trial comparing concurrent chemo-radiation and adjuvant chemotherapy with pelvic radiation alone in high-risk and advanced stage endometrial carcinoma	Radiation Oncology
18	POST Study	Post-operative concurrent chemo-radiotherapy versus post-operative radiotherapy in high-risk cutaneous squamous cell carcinoma of the head and neck	Radiation Oncology
19	RAVES	A randomised trial of a shorter radiation fractionation schedule for the treatment of localised prostate cancer	Radiation Oncology
20	Receiving End	On the receiving end: Patient perceptions of the side effects of cancer chemotherapy in 2008	Medical Oncology
21	SC20 Bone Mets	A phase III international randomised trial of single versus multiple fractions for re-irradiation of painful bone metastasis	Radiation Oncology
22	SORCE	A randomised, double-blind study comparing Sorafinib with placebo in patients with resected renal cell carcinoma at high or intermediate risk of relapse	Medical Oncology
23	STARS	A randomised comparison of Anastrozole commenced before and continued during radiotherapy for breast cancer versus anti-oestrogen therapy delayed until after radiotherapy	Radiation Oncology
24	TC Survivor	Understanding the physiological sequelae of surviving testicular cancer	Medical Oncology
25	TOAD	A collaborative phase III trial: The timing of intervention with androgen deprivation in prostate cancer patients with rising PSA	Radiation Oncology
26	TROG 03.01 Oesophagus	A randomised phase III study in advanced oeso- phageal cancer to compare quality of life and pal- liation of dysphagia in patients treated with radio- therapy versus chemo-radiotherapy	Radiation Oncology
27	TROG 07.01 DCIS	A randomised phase III study of radiation doses and fractionation schedules in non-low-risk ductal carcinoma in situ (DCIS) of the breast	Radiation Oncology

# Clinical Trials Open To Recruitment At Macarthur

1	Abraxis Pancreatic	A randomised phase III study of weekly ABI-007 plus Gemcitabine versus Gemcitabine alone in patients with metastatic adenocarcinoma of the pancreas	Medical Oncology
2	BIBF1120	Multi-centre, randomised, double-blind, phase III trial to investigate the efficacy and safety of oral BIBF1120 plus standard Pemetrexed therapy compared to placebo plus standard Pemetrexed therapy in patients with stage IIIB / IV or recurrent NSCLC after failure of first line chemotherapy	Medical Oncology
3	Bones Exercise	Protocol 0609-1 53M - Prevention of osteoporosis as a consequence of hormone treatment in post-menopausal women treated for breast cancer	Medical Oncology
4	CA125 Decision Aid	Improving communication and decision making about treatment options for asymptomatic ovarian cancer patients with rising CA-125: The development and pilot of a Decision Aid	Medical Oncology
5	CATS BNP	Prediction of cardiotoxicity using serum N-terminal pro-B-type natriuretic peptide in breast cancer patients receiving adjuvant trastuzumab	Medical Oncology
6	COMPLETE	A randomised, open-label, phase III study of taxane based chemotherapy with Lapatinib or Trastuzumab as first-line therapy for women with HER2 / neu positive metastatic breast cancer	Medical Oncology
7	Fortis M	A phase III, randomised, double-blind, placebo- controlled study of oral talactoferrin in addition to best supportive care in patients with non-small cell lung cancer who have failed two or more prior treatment regimens	Medical Oncology
8	IBIS II - Bone	A randomised, double-blind trial to assess the effects on bone mineral density and bone biomarkers of anastrozole when used to prevent breast cancer in post-menopausal women	Medical Oncology
9	IBIS II - DCIS	An international multi-centre study of tamoxifen versus anastrozole on post-menopausal women with hormone sensitive ductal carcinoma in situ (DCIS)	Medical Oncology
10	IBIS II - Prevention	An international multi-centre study of anastrozole versus placebo in post-menopausal women at increased risk of breast cancer	Medical Oncology
11	RAVES	A randomised trial of a shorter radiation fractionation schedule for the treatment of localised prostate cancer	Radiation Oncology
12	Receiving End	On the receiving end: Patient perceptions of the side effects of cancer chemotherapy in 2008	Medical Oncology

13 SC20 Bone Mets A phase III international randomised trial of single Radiation Oncology versus multiple fractions for re-irradiation of painful bone metastases 14 **STARS** A randomised comparison of anastrozole Radiation Oncology commenced before and continued during radiotherapy for breast cancer versus anti-oestrogen therapy delayed until after radiotherapy 15 TOAD A collaborative phase III trial: The timing of Radiation Oncology intervention with androgen deprivation in prostate cancer patients with a rising PSA (TOAD) **TROG 07.01 DCIS** 16 A randomised phase III study of radiation doses Radiation Oncology

and fractionation schedules in non-low risk ductal carcinoma in situ (DCIS) of the breast

### **Clinical Trials Staff**

#### **MANAGER**

Vu Nguyen

#### **RESEARCH OFFICERS**

Jennifer Aung Suyen Moncada Joseph Gancia Anne Whatman

#### **CLINICAL TRIALS NURSES**

Danielle Martens Gail Dwyer

## Research SSWAHS Clinical Cancer Registry

The Cancer Information Program oversees the progress of the Clinical Cancer Registry, system infrastructure, data collection and monitoring of activity, and provides a communication link for Information managers involved with Cancer Services.

The program committee developed a strategic plan and has been steadily implementing its goals within five focus areas. This years' progress has been impressive, so a brief summary of each has been provided below.



Sandra Avery Grad Dip Bus Tech. Program Manager

#### ESTABLISHMENT OF INFORMATION GOVERNANCE

An Advisory Committee was established with members from the Area Cancer Executive, IM&TD, Clinical Cancer Registry, Cancer Data Managers, CINSW and Consumer representation. Regular status reports are now provided to CINSW and the Area Cancer council against the program's targets.

#### DEVELOP A SUSTAINABLE REPORTING FRAMEWORK

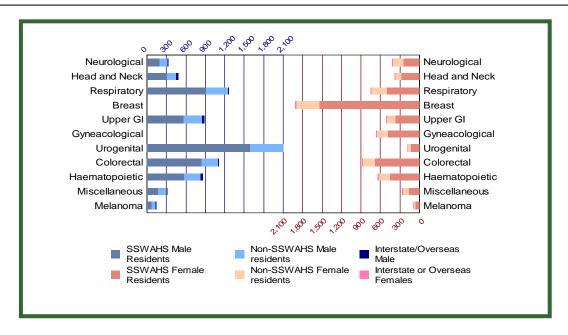
The Clinical Cancer Registry has commenced a consultative process for reporting against tumour specific clinical data. They have designed generic reports, and met with most of the tumour groups to discuss scope, constraints, and changes required to the reports to make them specific to each group. These reports are intended to provide indicative information around public cancer service levels that can be benchmarked against the rest of the state. Registry information is also being used for clinical quality reviews and research within the SSWAHS.

The Clinical Cancer Registry collects disease, staging, treatment and multi-disciplinary information for patients seen within the public sector. Three years of data from July 2005 to June 2008 has been completed - the most frequent presentation of cancer for men in SSWAHS is

prostate cancer, and for women breast cancer.



L to R - standing: Kirsten Duggan, Sandra Avery, Sandra Farrugia, Mahbuba Sharmin, Angela Berthelsen, Joyiti Prakash L to R - front: Christine MacDonald, Isobelle Anscombe



## STAFF DEVELOPMENT PROGRAMS THAT WILL IMPROVE DATA COLLECTION

There is a diverse data management population within Cancer Services. Opportunities are being developed for these staff to obtain cancer specific skills within the SSWAHS. A series of workshops are being designed to include cancer coding and notification, data collection standards and quality review, development of Clinical Indicators, current cancer systems overviews and report writing.

In October, two Information Managers presented at the National Cancer Registrars Association (NCRA) Convention in New Orleans, resulting in a very positive article being published in the Advance news magazine.

(http://health-information.advanceweb.com/editorial/content/editorial.aspx?cc=219483)

#### INSTITUTE A QUALITY ASSURANCE PROGRAM

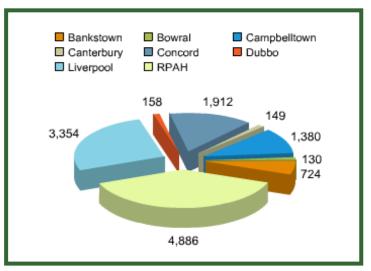
The Clinical Cancer Registry has developed a Quality Assurance Program to monitor the accuracy of data collected and reported. Comprehensive edits have been written to regularly review validation rules, and audits are conducted and documented for reference to Quality Committees and groups across the Area Health Service. Anomalies are reported to appropriate source system administrators, to improve the data in patient systems.

Information requests have been logged centrally, to ensure that privacy and ethical considerations for data release comply with policies.

## MAXIMISE USE OF ELECTRONIC DATA COLLECTION SYSTEMS & MEASUREMENT TOOLS

A review of patient information systems in use within SSWAHS has identified gaps in the electronic record, and steps have been taken to close these gaps. Improving electronic source information and links is a priority for cancer services to improve the quality of the care provided to patients through timely information provision.

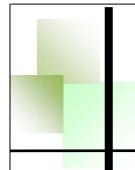
To compliment clinical data collection, a central activity tool has been developed to view more easily the occasions of service for each of the major cancer treatment providers in SSWAHS. This reporting tool has been made available on the Cancer Services Intranet site. The adjacent graph shows the total number of new referrals to the service for 2009 was 12,700 (indicative of services included in the data definitions – some services have not yet taken up use of the activity tool).



#### CLINICAL CANCER REGISTRY PROJECTS

The Clinical Cancer Registry team have collected 18 months of data over the last 12 months. Some of the team projects this year have included:

- The design of tumour-specific reports.
- The development of field validation reports, documented in quality assurance program.
- The development of improved data feeds.
- Comparatively reviewed source feed vs. HIE & cancer notification table data.
- The upgrading of Precis Hospital to Metriq V1.1.
- The creation of business objects universe and reports for the provision of minimum dataset to CINSW.
- A clerical review of case matching to NSW Central Cancer Registry for 2006.
- The provision of case extracts to CLEAR study.
- The provision of cases for Aboriginal Patterns of Cancer Care study.
- Involvement in a Colorectal 10 year case study
- The co-ordination of electronic surgical data collection in theatres for the referral of specimens.
- Various levels of involvement in improving documentation of multi-disciplinary discussion and referral systems.



## Clinical Services Administration - Liverpool

The clinical administrative team across both Liverpool and Macarthur have had a busy 12 months supporting the 19% increase in patient flow, of which 7.5% were new patients attending both centres. In addition to the increase in patient flow, the staff have also had to adjust to the introduction of the electronic medical record (EmR) MultiAccess™ (MA8.3). Thankfully (EmR) MultiAccess™ (MA8.3) has been introduced with ease and has ensured clinical notes are more easily accessible across Liverpool, Macarthur, Bowral, Bankstown and community health centres. This system has enabled significant improvements in documentation to occur between the different departments. Our revenue has also increased with the new RCE billing system that went live in September 2009. Overall, the administration teams have become more effective, having developed a broader range of skills to support the needs of a multi-disciplinary department.

Maree Cain Liverpool Operations Manager

Although there have been many changes over the past twelve months, the single most important change to the Liverpool Cancer Therapy Centre was the relocation of the Medical Oncology clinics to LCTC. While the Bigge Street clinics ran smoothly, at times it proved difficult for the patients who were unwell to have easy access to the hospital resources and for the oncology specialists to be off-site from the inpatients. In the middle of the year, the Radiation and Medical Oncology, Palliative Care, Gynaecology, and Area Cancer Services staff all moved into the new offices in Elizabeth Street so that the clinical area could be renovated. Once the renovations are completed this will provide enough extra clinic room space to accommodate approximately 300 extra patients every week. I am pleased to say the physical changes and the extra patient load did not deter the dedicated administration team who were very professional ensuring the clinics ran smoothly for the patients and the clinicians. All the secretaries pulled together and tackled the many extra challenges which come with any relocation, including the transcription queue of over 6,890 letters which had been dictated over the last financial year. The move has been a positive step forward for the department, as it has not only brought the patients back to one location but the whole Cancer Services team are together again.

### **Administration Staff**

#### **BUSINESS MANAGER**

Maree Cain

INFORMATION MANAGER IT SUPPORT

Phan Sayaloune David Warner

**TRANSCRIPTIONISTS** 

Heather Patchett Karen Singh

SECRETARIAL SUPPORT

Caryn Knight Melissa Carmagnola

Narelle Barnett Elise Thomas
Parimalum Mohanvelu Deborah Young
Leanne Aarts Sharyn Duncan
Michelle Moors Arlene Roach

**CLINICAL ADMINISTRATION** 

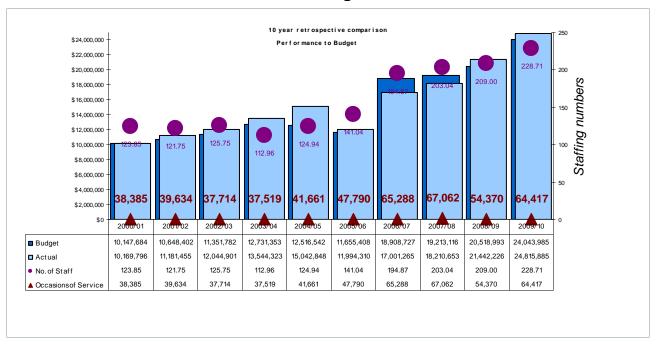
Brigida Sbezzi Joanne Yeo
Holanda Bentancor Ida Ravindraraj
Kristy Jemison Franca Serafin
Naomi Holm Helen Rawson
Kriston Nicholls Dorella Lutzen
Natalie Girard Dean Ralph

Danielle Gibbs

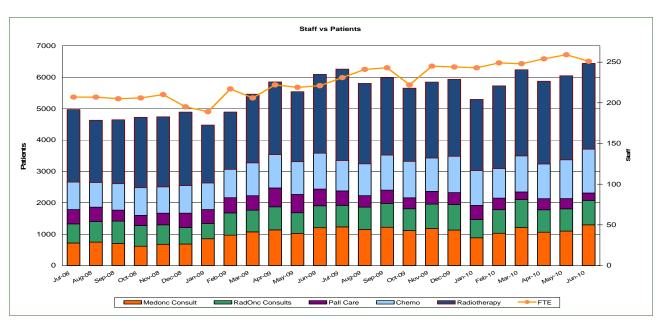
### **Finance And Activity**

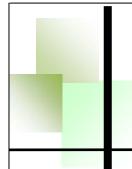
This report shows a 10 year comparison of budget, expenditure, staff and activity for Liverpool and Macarthur Cancer Services.

There has been a 10% growth in staff over the past 12 months, attributable to the change in service structure and the cancer institute funded grants.



The table below shows a more detailed distribution of activity compared to the staffing numbers.





## **Clinical Services Administration - Macarthur**

This past year has been a hectic time for the MCTC Administration Team. Although at times we have found ourselves under resourced, we have continued to provide an excellent service to our customers and maintained our professional approach. This can be evidenced by feedback from our Patient Surveys where the Administration Team received high scores on a regular basis.

This year the MCTC Administration Team was fortunate to have been involved in the Aboriginal Traineeship Program that assists in providing employment opportunities for members of our Aboriginal Community. The training program not only assisted our Aboriginal Trainee but allowed our staff to practise and learn new skills compiling a training program and facilitating this training. I am pleased to report that 'our trainee' showed a high level of competency in most areas of the

Sue Connor Macarthur Operations Manager

MCTC Administration roles and has now taken up a permanent position within the Macarthur Health Service.

As with all other departments within the Macarthur Health Service, the MCTC Administration Team has been involved in the Macarthur Safety Challenge. This challenge was designed to achieve a culture of excellence in Health and Safety. The Safety Challenge undertaken by the Administration Team was 'Making our Workplace Safe and Efficient'. Our goal was to plan and distribute our workload fairly and safely, document and promote improvements to our systems, and change work practices to improve personal safety whilst still maintaining organisational performance expectations. I am pleased to report that the review of work processes being undertaken has had an immediate impact on our daily workload. The Administration Team has also been involved in an 'above and below the line behaviour' program, a Customer Service Focused Program directed at staff in identifying positive / problem behaviour.

The MCTC is fortunate to be a recipient of donations from the 24-hour Fight against Cancer Committee Macarthur. This committee works tirelessly to raise funds for services and equipment for Cancer patients at the MCTC, Palliative Care and Paediatric Ambulatory Care at Campbelltown and Camden Hospitals. The committee has this year alone provided funding to the value of \$135,380.00. Over the last 5 years they have raised over \$600,000.00 and are well on their way to reaching the \$1,000,000.00 mark this year – watch this space.

Training and developing for our staff is a priority and I am delighted to advise that Leanne Radovic our Customer Service Officer has completed the Supervisor Development Program and will be graduating in June. Congratulations Leanne.

### **Administration Staff**

#### **BUSINESS MANAGER**

Sue Connor

IT SUPPORT TRANSCRIPTIONISTS

Janice Warner Delma Bird

Suzanne McIntyre

**SECRETARIAL SUPPORT** 

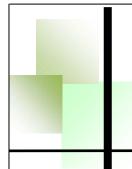
Colleen Reynolds Sharon Davidson

Jodie Wilson

**CLINICAL ADMINISTRATION** 

Annette Ryan Rosalyn Frederick
Julie O'Brien Allira Blackburn
Leanne Radovic Amanda Margharita

Lorraine Laird Nicole Marchbank



# Clinical Services Allied Health - Liverpool

The Allied Health services at Liverpool Cancer Therapy Centre are a multi-disciplinary team of Social Workers, Dieticians, Speech Pathologists, Occupational Therapists, Physiotherapists and Clinical Psychologists who work together with other Cancer Therapy staff in order to provide quality services to inpatients and outpatients, their families and carers. A summary of their work and achievements throughout the past year is outlined below.

#### **PLANNING**

Representatives from the different Allied Health disciplines attend the various service committees with a view to both strengthening their working relationship with the rest of the cancer centre and also contributing to the relevant planning / decision-making processes. These include:

- The Combined Liverpool-Macarthur CTC Management Committee Meetings
- LCTC Operational Committee Meetings Social Work
- LCTC Customer Service Committee Meetings Clinical Psychology
- Education Committee Meetings Social Work
- Radiation Oncology Planning Day Speech Pathology
- Area Cancer Services Council Meetings Clinical Psychology

LCTC Allied Health regularly liaise with each of the other disciplines and with the LCTC management on related issues. This is achieved through:

- Regular Allied Health staff meetings
- Representatives from Speech Pathology and Dietetics meeting with LCTC management representatives to discuss issues relevant to their respective services
- Joint meetings with MCTC Allied Health Staff

#### PATIENT FOCUS

Allied Health representatives participate in various internal and external meetings regarding patient care / services. In particular:

- Cancer Institute 'NSW NSWOG' meetings (including Head & Neck, Neuro-oncology)
- MDTs within LCTC
- 'NSW Social Work Oncology Group'
- Speech Pathology is represented on 'Enable' the NSW expert working group for communication and Respiratory Home Appliances
- Dietetics is represented on the Advisory Group for the Cancer Council's 'ENROCH' study (Healthy lifestyle and risk modification program for cancer survivors and their partners / caregivers)

#### Cross-discipline initiatives within Allied Health which provide patient-focused care include:

- A combined Speech Pathology / Dietetics Head and Neck Clinic for the management of swallowing and nutrition problems for patients with Head and Neck Cancer.
- The establishment of a multi-disciplinary Head and Neck (H+N) Pre-treatment Clinic for high risk Head and Neck Cancer patients commenced in January 2010.
- Allied Health reviewed the co-authored sections of 'Understanding Head and Neck Cancers' as part of a Cancer Institute NSW initiative.
- Speech Pathology drove the corporate Laryngectomy policies and procedures working party, which is almost completed and ready for publication.
- Social Work and the Breast Care Co-ordinator have developed a telephone support programme for Breast Cancer Survivors which will be piloted for the next 12 months.
- Social Work is working in conjunction with the Leukaemia Foundation to start a Support Group for Haematology patients with a particular focus on younger patients.
- The Liverpool Lymphoedema Service is provided by both Physiotherapists and Occupational Therapists, who continue to offer increased treatment time and co-management of patients.
- With the addition of the Level 1-2 rotating Physiotherapist, non-lymphoedema patients
  referrals are reviewed promptly. This includes the assessment and treatment of various
  musculoskeletal and neurological problems associated with cancer and associated
  treatments and outpatient mobility assessment and equipment prescription.

#### OTHER INITIATIVES

- An LCTC Dietician is a member of the Dietician sub-committee looking at the development of Evidence Based Practice Guidelines for the Nutritional Management of Patients with Head and Neck Cancers.
- Speech Pathology have contributed to the writing of Clinical Guidelines for eviQ on early glottic cancer.
- Social Work are involved working with Cancer Institute NSW to develop a brochure on 'Driving after the diagnosis of Brain Tumour'.
- The Liverpool Lymphoedema Service have revised their referral intake form and formalised the referral processes, in an effort to standardise referral intake across SSWAHS.
- The Liverpool Lymphoedema Service continues to work on the development of patient education brochures that are in line with current professional standards.
- The Lymphoedema Service has implemented and plans to continue Lymphoedema Awareness Groups which target patients attending the clinic by education and information strategies.

#### PROFESSIONAL STANDARDS

Allied Health staff continue to attend relevant training, workshops, or conferences, both in-house and externally to enhance service quality and standards. These include:

- A Dietician and Speech Pathologist who attended the ANZHNS conference in Perth
- A Dietician who attended the Cancer Institute Education Day for Head and Neck Cancer, PG-SGA Training Workshops. The Dietetics department also regularly attends the Oncology Interest Groups for Dieticians in NSW and chairs the Area Speciality Group for Oncology for Dieticians in SSWAHS.
- A Speech Pathologist co-presented the inaugural hospital wide Laryngectomy Education seminar.

- Speech Pathology is involved in training Registrars working in the Emergency Department managing Laryngectomy emergencies; the UNSW IV year Medical Students Teaching Program in Oncology
- Social Workers have attended a 1 day workshop on 'Working with Drawing in Grief Counselling'.
- Social Work has attended the workshop on 'Advance Care Planning'.

#### **QUALITY IMPROVEMENT INITIATIVES**

- Dieticians and Speech Pathologists at Macarthur, Liverpool and RPA continue to collect Clinical Indicators across the 3 sites for Head & Neck Cancer patients undergoing radiotherapy +/- chemotherapy.
- The Liverpool Lymphoedema Service:
  - ⇒ has received funding and purchased equipment for early detection of Lymphoedema (i.e. the impede-med). Work Practice Guidelines for usage are currently being developed to facilitate patient care
  - ⇒ is looking at implementing Clinical Indicators that are comparative across the Area Health Service to benchmark service provision with other sites
  - ⇒ continues work on competencies for staff via joint sessions. Service delivery issues and Quality Improvement Projects continue to be discussed at bi-monthly meetings
- Lymphoedema Therapists both Physiotherapists and Occupational Therapists continue to update their skills in treatment and management of lymphoedema clients through regular attendance to relevant courses and training programs

#### ORGANISATIONAL DEVELOPMENT

#### Staffing issues:

- Social Work continues to experience decreased staffing levels due to leave, vacancies, and difficulties providing related cover
- Liverpool Physiotherapy and Occupational Therapy have combined their Lymphoedema Service into one so as to enhance services to patients, share resources and conduct joint Quality Improvement Projects. Current staffing has been reduced to 3 part-time therapists total due to maternity leave and staff rotating out of the clinical area
- Occupational Therapy referrals from LCTC are currently seen by the community based
   Occupational Therapists due to staffing shortages
- Physiotherapy referrals for musculoskeletal and neurological problems are being seen by the Oncology Physiotherapy Service
- The Speech Pathology level 1-2 vacancy in Head and Neck Cancer rotation was filled in January 2010

#### POPULATION FOCUS

Allied Health regularly conducts, or co-conducts with other disciplines, various patient Education and Support Group Programmes, or is involved in providing relevant education to participants during such programmes. These include:

- Living with Breast Cancer
- Gynae-oncology Support Group
- Brain Tumour Support Group

- Haematology Stem Cell Education Programme
- Laryngectomy Support Group

#### **ACADEMIC FOCUS**

- All Allied Health disciplines have taken student placements to maintain an academic link between teaching and clinical practice
- A Speech Pathologist, Dietician and a Care Co-ordination co-authored the poster
   'Establishment of a combined Nursing and Allied Health pre-treatment clinic for high risk Head and Neck Cancer patients' presented at the ASOHNS
- Dissemination of Phase 1 of the joint research project with Speech Pathology and Dietetic services to Service Managers Meeting and SSWAHS Speech Pathology Research Showcase day

#### **FUTURE PLANS**

 To continue with the service initiatives and quality improvement initiatives by the various disciplines outlined above

### **Allied Health Staff**

OCCUPATIONAL THERAPY PHYSIOTHERAPY

Monica Vasquez Evangeline Nikas

Newway Zhou

**SOCIAL WORK** 

Simone Hallett Teresa Gardner
Kim Brauer Debra McAuley
Teresa Simpson Rachael Curry

DIETETICS SPEECH PATHOLOGY

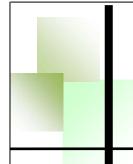
Katherine Pronk Candice Baxter

Veronica Da Silva

CLINICAL PSYCHOLOGY

Astrid Przezdziecki Gerald Au

Mariad O'Gorman



## Clinical Services Allied Health - Macarthur

Allied Health at Macarthur Cancer Therapy Centre has grown over the past year with the introduction of new disciplines to the team. The Allied Health team consists of Clinical Psychologists, Dieticians, Diversional Therapists, Occupational Therapists, Social Workers, and Speech Pathologists. These Allied Health clinicians work within the Macarthur Cancer Therapy Centre, Camden Palliative Care Unit and Macarthur Community Palliative Care to provide services to both inpatients and outpatients, their families and carers. They work together with other Cancer Therapy and Palliative Care staff to meet the range of patient needs and continually strive to provide a quality service.

Staffing in Allied Health at MCTC has grown over the past year and a summary of their work and achievements throughout the past year are outlined below.

#### **PLANNING**

- Allied Health Representatives attended:
  - ⇒ Combined CTC Executive Committee Planning Day.
  - ⇒ Radiation Oncology Planning Day.
  - ⇒ MCTC executive meetings.
  - ⇒ SWOG (SW Oncology Group) at Cancer Council (Social Work).
  - ⇒ Social Work in Palliative Care Group (MCTC/Palliative Care Social Work).
  - ⇒ Palliative Care, Oncology and Lymphoedema Clinical Network Group (Occupational Therapy).
- Allied Health liaised with Charlotte Smedley (Area Cancer Services Development Manager) regarding the growing needs of Allied Health in cancer care.
- Allied Health attended:
  - ⇒ Regular site and combined Allied Health meetings.
  - ⇒ Relevant Case Conferences and MDT meetings.
  - ⇒ Relevant Community Support Groups to provide education and support.
- There was liaison between sites and departments to improve efficiency of patient management and service provision by Allied Health practitioners:
  - Regular case conference psychosocial meeting attended by Social Work, Clinical Psychology and Diversional Therapy.

#### PATIENT FOCUS

 There was a focus on continuity of care with Occupational Therapy, Speech Pathology and Clinical Psychology providing inpatient care to patients previously known to their outpatient service.

- Clinical Indicators were collected by the following disciplines:
  - ⇒ Diversional Therapy
    - Achievement of patient improvement with regards to intervention and leisure practices.
  - ⇒ Clinical Psychology
    - Provision of continuity of care by Clinical Psychology to inpatients admitted to general medical ward with continued outpatient service.
  - ⇒ Occupational Therapy
    - \* AUStoms for any patients requiring a home visit lasting greater than 60 mins in either Palliative Care or MCTC.
    - \* Lymphoedema Clinical Indicators looked at improving waiting list times and reviewing data received from review visits.

#### ⇒ Dietetics

- For Head and Neck (H&N) Cancer patients: frequency of contact and percentage weight loss.
- For upper gastrointestinal (UGI) cancer patients: Dietician referrals, Dietetic contact and timeliness of this intervention.

#### ⇒ Speech Therapy

- \* Commenced trial of PICI (Performance Indicators/Clinical Indicators) for patients with Head and Neck Cancers who are undergoing Radiation Therapy +/- chemotherapy. This trial measures examining process indicators (service provision) and outcome measures (maintenance of oral intake or swallowing exercises during and post treatment). This trial is to be completed across six Sydney metropolitan hospitals as part of the Speech Pathology Head and Neck Peer Supervision group
- Vocal quality and use following voice therapy.
- Laryngectomy Outcome Measures.

#### ⇒ Social Work

- Continued to maintain continuity of care model in Social Work service delivery for oncology and Palliative Care patients in all settings.
- Continued support and development of Complementary Therapy program for patients and carers in MCTC.
- Provision of in-servicing by a range of Allied Health staff to fellow CTC staff and community services including:
  - ⇒ Allied Health presented to Medical Oncology regarding their scope of practice.
  - ⇒ Speech Pathology presented to the Nursing staff regarding communication and swallowing management for patients with a Laryngectomy.
  - ⇒ Speech Pathology updated and implemented area wide patient handouts for voice, communication, swallowing and Laryngectomy care for use post surgery and during / post-radiation / chemotherapy.
  - ⇒ Occupational Therapy presented on their role in CTC and Palliative Care.
  - $\Rightarrow$  Occupational Therapy presented to CTC their role in the area of lymphoedema.
  - ⇒ Diversional Therapy presented on their role in CTC and Palliative Care.
  - ⇒ Social Work regularly presented 'Breaking Bad News' to UWS Medical Students as part of the ongoing Lecture Program.
  - ⇒ Allied Health in-services were given to the UWS Medical Students on various topics.

#### PROFESSIONAL STANDARDS

- Establishment of MCTC Diversional Therapy Policies and Procedures.
- Attendance at Clinical Networks / Specialty Groups. These allow networking between sites, sharing of resources, development / comparison of Clinical Indicators and

- discussion regarding practice guidelines.
- Speech Pathology chaired and attended SSWAHS Speech Pathology Clinical Network.
- Speech Pathology attended regular Senior H&N Speech Pathology Peer Supervision meetings.
- Completion of SSWAHS voice competencies for staff training and skill development by Speech Pathologists.
- Occupational therapy attended bi-monthly area wide Clinical Network Group for Oncology / Palliative Care and Lymphoedema.
- Completion of clinical competencies for Occupational Therapists in CTC and Palliative Care
- Policies and procedures for Occupational Therapists working in Palliative Care and CTC were updated.
- New Diversional Therapy policies were written.
- There was a cessation of Diversional Therapy services to CTC and Palliative Care.
- Regular supervision was provided to the MCTC staff by experienced Clinical Psychologists working within an oncology setting
- The Clinical Psychologists regularly attended the bi-monthly meetings of 'Psychology in Oncology'.
- Regular psycho-oncology meetings and peer supervision was offered to the staff within the MCTC psychology team.
- There was a consultation with SSWAHS Area Director of Psychology regarding development of a Clinical Psychology Service.
- Staff attended specialty workshops specific to psychological care within oncology, as well as attending workshops developing therapeutic skills aimed to enhance treatment outcomes.

#### ORGANISATIONAL DEVELOPMENT

- The establishment of an MCTC Diversional Therapy referral, initial assessment and home visit forms to improve intake and information records.
- The establishment of a Diversional Therapy program that covers both MCTC and Palliative Care Unit.
- The review of new MCTC Occupational Therapy initial assessment and home visit forms to improve intake and information records.
- The review of new lymphoedema referral and initial assessment forms to improve intake and information records.
- The establishment of temporary full-time Clinical Psychology service at MCTC.
- An evaluation of the Dietetics Electronic Assessment Templates and usefulness of data collection. This resulted in a change to practice which improved efficiency and refined data collection.
- The establishment of a Speech Pathology Initial Assessment and Discharge Templates to improve intake and information records.
- A review of Dietician referrals for prostate cancer patients, and Dietician involvement in development of an education booklet for Prostate Cancer patients undergoing radiotherapy. This resulted in a streamlining of information provision.
- The development of a Clinical Psychology assessment for new referrals.
- The development of standardized documentation methods to ensure confidentiality for psychological clinical notes and self-rating measures.
- Facilitating liaison between Social Work and Clinical Psychology at MCTC through regular psychosocial meetings and facilitating development of a 'Psychosocial' service in consultation with Social Work.
- Continuing to develop and strengthen referral pathways to Consultation Liaison

- Psychiatry for coverage of MCTC outpatients.
- Working collaboratively with the Director of MCTC to establish a Consultation, Liaison Psychiatry coverage for MCTC outpatients.

#### POPULATION FOCUS

- Provision of education to various patient groups including:
  - ⇒ Information on leisure practices and community links to MCTC Diversional Therapy patients.
  - ⇒ Lymphoedema Prevention Education group commenced by Occupational Therapy and assisted by Breast Care Nurse.
  - ⇒ Social Work involved with Complementary Therapies of Reiki, Art therapy, Meditation and Muscle therapy.
  - ⇒ Social Work received a donation for 'Grief Workbooks for children' from Tripodi Transport.
  - ⇒ Social Work received donation of 'Journey of Two Hearts' and 'Over the Rainbow' books for cancer patients and their family.
- Ongoing provision of patient and carer groups including:
  - ⇒ Diversional Therapy Group for patients.
  - ⇒ Lymphoedema education booklets reviewed and reproduced and given to patients during all education sessions.
- Provision of continuity of care by Occupational Therapists to inpatients admitted to general medical ward with continued outpatient service.
- Developing further links in community including organising meetings with Community Mental Health to provide information on Clinical Psychology service at MCTC.
- Involvement in meeting with the Park Central Clinic Mental Health Unit in Campbelltown Private Hospital to develop referral pathways.

#### **ACADEMIC FOCUS**

- Continued involvement in all relevant Education and In-service Programs.
- Supervision provided to students of all disciplines within MCTC for Allied Health and Medical Students.
- Speech Pathology attended:
  - ⇒ FEES (Fiberoptic Endoscopic Evaluation of Swallowing) course by Joseph Murray.
  - ⇒ ANZHNS (Australia and New Zealand Head and Neck Society) Conference in Perth, WA.
- Occupational Therapy:
  - Completed a joint qualitative research between Occupational Therapy and UWS into women with lymphoedema occupations post breast cancer. Results were presented at the World Occupational Therapy conference in Chile.
  - ⇒ Attended a course at St Vincent's Hospital entitled the 'OT role in Palliative Care'
- Clinical Psychology involved in:
  - ⇒ Relevant education groups and in-services. Clinical Psychology attending bi-monthly 'Psychologists in Oncology' meetings.
  - ⇒ 'Acceptance and Commitment Therapy: Introductory workshop'.
  - ⇒ 'Acceptance and Commitment Therapy: Advanced workshop'.
  - ⇒ 'The Whole person Symposium: Integrated patient care' and 'Dignity Therapy Workshop'.
  - ⇒ SSWAHS annual psychologist training day.
- Social Work involved in:
  - ⇒ Relevant education groups and in-services throughout the year.

#### **FUTURE PLANS**

- Ongoing liaison between centres and AH staff to improve patient access, standards of care, service provision and management of waiting times.
- Continued development of relevant competencies in specialist areas (e.g. H&N and Laryngectomy management, lymphoedema).
- Speech Pathology to complete trials of:
  - ⇒ Head and Neck / Laryngectomy management competencies
  - ⇒ PICI data
- Ongoing research with UWS.
- Development of therapeutic groups offered to MCTC outpatients by Clinical Psychology department.
- Development of client-therapy satisfaction survey created to assess Clinical Psychology service
- Development of outcome measures for Clinical Psychology service.
- Social Work and Clinical Psychology to continue to develop patient brochure for counseling team.
- Development of Energy Conservation Education Group by Occupational Therapy.
- SW to develop and implement Distress Thermometer (Universal screening tools for measuring distress).
- SW to establish services in Palliative Care Day Therapy Centre

### **Allied Health Staff**

SOCIAL WORK DIETETICS

Jenella Cottle Rebecca Phillips

Jacinta Humphries Kit Lai
Gloria Yu Hayley Patterson

SPEECH PATHOLOGY DIVERSIONAL THERAPY

Armalie Muller Rebecca Day (until March 2009)
Katherine Symeou

OCCUPATIONAL THERAPY

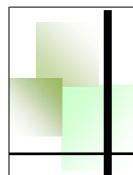
Erin Sweedman

(In MCTC, Ward Based, Palliative Care and Lymphoedema)

Katie Faddy Rebecca Tyson
Michael Bayley Catherine O'Sullivan
Megan Holt Stacey Wheeler
Jill Larson Rebecca Donnelly

CLINICAL PSYCHOLOGY

Carlie Jordan Mey Teoh



# Clinical Services Nursing - Liverpool

#### STAFFING DEVELOPMENTS

There have been many changes to staffing this year. Justine Kemsley the NUM of CTC remains on maternity leave with Amy Wholohan now Acting NUM.

Lenore Knapman finished her secondment as Acting NUM and is now our Medical Oncology CNC. Karl Jobburn has returned to Liverpool in a secondment role as Haematology CNC, Gai Fairnham commenced as Bone Marrow CNC and Charmaine O'Connor has commenced as Palliative Care CNC.

Amy Wholohan

We have filled our Care Co-ordinator positions with Vicki Buglass as Breast Care Co-ordinator, Abby Krigge as Haematology Care Co-ordinator, and Karen Robinson as Neurology Care Co-ordinator.

This year we were fortunate to have two new Registered Nurses join our team. Kim Sharkey, who joins the Radiation Bay Nursing Team and Lesly Regalado who started with us in the Chemotherapy Day Centre. As LCTC no longer has an Educator position, our regular nursing staff have taken on the job of Preceptor and Educator to our new staff, and have been fantastic. An especially big thank you to Aura Serrano and Diana Ngo who have gone above and beyond in their efforts to provide ongoing chemotherapy education.

#### PROFESSIONAL DEVELOPMENT

Our nursing staff are always striving to improve their knowledge and as a result have undertaken a variety of on and off the job training.

- Diana Ngo RN has commenced the Graduate Certificate in Cancer and Haematology Nursing.
- Amanda Baldwin is continuing her studies towards a Bachelor of Nursing degree and is at the end of her second year.
- Yvette Furney has completed a Diploma in Acute Care and is continuing on to an Advanced Diploma in Acute Care. Congratulations Yvette!
- Rhonda Eke attended a Pain Management Course and an OH&S course and is now the OH&S Nursing Representative for LCTC.
- Amy Wholohan has begun attending management courses and is taking part in the 'Take the Lead' management program.
- Lesly Regalado attended the Falls workshop and is now the Falls Champion for LCTC.
- Kim Sharkey attended an Infection Control Course and is now the Infection Control Resource Nurse for LCTC.

#### NURSING DEVELOPMENTS

This year has focused on a review of current nursing practices within LCTC with an aim to improve services, and increase patient and staff satisfaction. So far there have been several successful changes.

#### **Radiation Nursing**

The most significant change to Radiation Nursing this year has been the redevelopment of the clean utility room into a procedure room, and the relocation of Medical Oncology overspill treatments from the Radiation Nursing Bay to the Chemotherapy Day Centre. This has given the Radiation Bay nurses the time and space they need to provide quality high standard care to LCTC Radiation Patients.

The LCTC nurses have begun a 'Core Skill Education Program'. In this, our nurses have started rotating positions in a bid to give all our nurses the skills and knowledge that will enable them to work in whichever capacity is required. So far this year we have had two chemotherapy nurses rotate into the Radiation Nursing Bay for education. So far this has been very successful and staff that are on leave from the Radiation Bay now have back-up staff available who are trained to step in and keep up the high quality of service provision we expect to provide for our patients.

In addition, we have also rotated the Radiation Clinic Nurse position. This role is being reviewed and developed as part of a need identified in this year's Radiation Planning Day. This is being done in consultation with the MCTC NUM, Radiation Oncologists at both sites, LCTC NUM and LCTC Clinic Nurse. Already, this role is doing well and has produced a Clinical Brachytherapy Pathway, which is currently being trialled.

#### **Chemotherapy Nursing**

There have also been significant changes to the Chemotherapy Day Centre. The Day Centre underwent a small redevelopment in order to incorporate three more treatment chairs. The 'Core Skill Education Program' is also operating in the Day Centre so that to date, we have had one radiation nurse gain chemotherapy accreditation, with another in the process of completing this training package.

For the first time, we have introduced a role for an Enrolled Nurse into the Day Centre. The Enrolled Nurse, whilst not trained to give chemotherapy at this time, is still trained to a suitable level to enable them to be a valued and useful member of the Day Centre. The Enrolled Nurse, whilst having a smaller patient load (of non-cytotoxic treatments), also acts as a co-ordinator and helps to streamline communications and workflow between the nursing, medical and pharmacy staff and patients. This role is also continually reviewed with view to improvement.

There have been a number of changes to the Medical Oncology Clinic Nurse role with the most distinctive feature being that patients receive their education from the clinic nurse in the days leading up to their first treatment, rather than from the treating nurse on their first day of treatment. This has been enormously successful, with high levels of patient and staff satisfaction being received.

### **Nursing Staff - Liverpool**

NURSE UNIT MANAGER

**ACTING NURSE UNIT MANAGER** 

Justine Kemsley (Maternity Leave)

Amy Wholohan

**CLINICAL NURSE CONSULTANTS** 

Lenore Knapman - Medical Oncology

Karl Jobburn - Haematology (Secondment)

Rosemary Craft - Gynae Oncology

Charmaine O'Connor - Palliative Care

Gai Fairnham - Bone Marrow

**CARE CO-ORDINATORS** 

Sharon Linden - Colorectal

Tania Luxford - Lung

Luci Dall'Armi - Head & Neck

Vicki Buglass - Breast (Secondment) Karen Robinson - Neuro Oncology

Abby Krigge - Haematology

**CLINICAL NURSE SPECIALIST** 

**Betty Silaphet** 

**REGISTERED NURSES** 

Joanne Bartley

Rhonda Eke Monika Fowler (on leave)

Diana Ngo

Vinodine Onawale

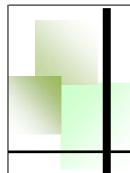
Lesly Regalado Aura Serrano Kim Sharkey Tanya Tesauro

**ENROLLED NURSES** 

Amanda Baldwin

**Carol Doherty** 

Yvette Furney



## Clinical Services Nursing - Macarthur

The past year demonstrates continuing change and development within our nursing team. Our staffing levels have increased slightly due to the recruitment of permanent full time and part time staff.

#### **ACHIEVEMENTS**

Macarthur Cancer Therapy Centre (MCTC) nursing staff continue
to play a major role in providing ongoing support and input into
the further development, implementation and evaluation of
MultiAccess™ and Mosaiq™ (upgraded electronic information
system). The electronic booking system has eliminated the
need for paper request forms. The MultiAccess™ education
package that has been developed and implemented for MCTC
nursing staff has been reviewed and updated.

Denise Burns

- The Acute Ambulatory Nursing Assessment Unit was opened at the MCTC in March 2008. The Assessment Unit operates from 08.30am to 17.00pm Monday to Friday and provides assessment and management of toxicities and complications for patients receiving chemotherapy and / or radiation therapy. The implementation of the Assessment Unit and establishment of the Assessment Nurse role continues to demonstrate reduced waiting times from patient presentation to review by the Assessment Nurse and Medical Officer, decreased time from patient presentation to commencement of treatment and less patients requiring presentation and admission to the Emergency Department. The majority of patients presenting to the Assessment Unit who require admission to hospital are now admitted directly from MCTC to the ward area. This has resulted in reduced transfer time and eliminates the need for patients to be admitted via the Emergency Department.
- Patient and Staff Questionnaires were developed to assess information and feedback regarding the Assessment Unit. The initial questionnaires were conducted at 6 and 12 month intervals post establishment of the MCTC Assessment Unit and demonstrated a positive response from both patients and staff.
- The Vascular Access Device training program which has been implemented within
  Emergency Department and various ward areas of Campbelltown Hospital continues to
  facilitate staff training and credentialing in the management of Vascular Access Devices,
  therefore providing the best quality care to patients who have such devices. Designated
  'Superusers' within ward areas continue to provide training and credentialing for
  nominated staff members within their specific areas.
- A number of new policies and procedures have been developed and implemented.
- Monthly quality audits are completed, documented and evaluated by the MCTC nursing staff.
- Twice-weekly nursing in-services have been conducted with presentations from the medical, nursing, allied health, community and pharmaceutical companies.
- Annual chemotherapy re-credentialing continues, this quality activity ensures that the nursing staff who administer cytotoxic agents are aware of and are practising current up

- to date best practice. There is documented evidence of competency.
- The MCTC Radiation Therapy nursing staff have developed and implemented a number of Key Performance Indicators
- MCTC is allocated two Transitional Registered Nurses per year and a number of students from various university faculties who are undertaking their degree in nursing.
- Two MCTC Registered Nurses are undertaking the Graduate Certificate in Cancer Nursing at the College of Nursing.
- An MCTC Registered Nurse is the Principal Investigator for a Clinical Trial which will
  investigate Nail Toxicity in patients with Breast Cancer who are receiving Docetaxel
  treatment.
- MCTC nursing staff conduct bi-monthly Hand Hygiene Audits. There is documented evidence of staff compliance ranging from 80 - 100% per audit, since the introduction of the '5 Moments for Hand Hygiene' program.
- All MCTC nursing staff have attended Customer Service Training and actively participate
  in customer service activities and promotion including nomination of two Nursing
  Customer Service Champions and submission of two posters for the annual Customer
  Service Promotion Day.
- The 'Above and Below the Line Behaviour Program' has been implemented by the nursing team who have identified a number of key criteria to be monitored and evaluated.
- The Macarthur Health Service (MHS) Safety Challenge is another initiative in which the
  nursing team are participating. The nursing staff have chosen 'Making Our Workplace
  Time and Resource Efficient As Well As Safe' as their challenge and have identified
  several strategies to address this challenge.
- Our MCTC Clinical Nurse Educator has accepted a secondment to a Haematology Clinical Nurse Consultant position at Liverpool Hospital.
- Jenny Treloar the McGrath Foundation Breast Care Nurse commenced in July 2009.
- Colleen Carter the Palliative Care Clinical Nurse Consultant commenced in September 2009

### **Nursing Staff**

#### NURSE UNIT MANAGER

Denise Burns

Karl Jobburn

#### **REGISTERED NURSES**

Yamileth Aguilar
Kelly Bourke
Linda Craig (part-time)
Bernadette de Souza
Jennifer Mitchell (part-time)

**CLINICAL NURSE EDUCATOR** 

CLINICAL NURSE CONSULTANTS

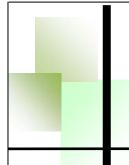
Colleen Carter - Palliative Care

Michelle O'Mochain Chong Noi Peacock Jhoanne Plan (part-time) Suzanne Rochfort Samantha Beverley

#### TRANSITIONAL REGISTERED NURSES

Melissa Patch Deborah Denholm

Jenny Treloar - McGrath Foundation Breast Care Nurse



## Clinical Services Nursing - Ground East

Over the last 12 months, GGE has seen many staff changes. While some resigned to travel overseas and work, others secured more senior positions within Cancer Services. This created a huge deficit in nursing numbers and active recruitment has been ongoing over the last 6 months. At present we have a 3.0 FTE deficit but recruitment is still ongoing.

#### PROFESSIONAL DEVELOPMENT

Professional development within the unit is encouraged and has been ongoing throughout the year. Inservices are run at least weekly and all staff are given the opportunity to attend.

Donna Boman

Many staff have attended workshops or have been booked into a workshop over the coming months. These workshops will increase their clinical skills and some will become our resource nurses from attending these workshops.

- Wound Management Evelyn Macey and Joan Losloso
- OH&S Aaron Manson
- ABC Palliative Care Nardy Lucero, Scharokin Davood
- Falls Management Julie Stone
- Advanced Care Planning Julie Stone
- Cannulation Aimee Torres, Sara Hitchcock, Elizabeth Newland, Aaron Manson, Sladjana Starcevic, Swastika Rajan
- Documentation and Legal Issues May Valdez, Aaron Manson
- Intravenous Sedation Sinuu Seula-Talagi
- Customer Service and Complaints Handling Elizabeth Newland, Phillip Wearden
- Head and Neck Seminar June McEachern and Evelyn Macey
- CPR Train the Trainer Achamma Roy
- ECG Interpretation Achamma Roy
- In Charge Workshop Achamma Roy
- Hand Hygiene Workshop Nardy Lucero
- Update on Systemic Cancer Treatments Sara Hitchcock
- Take the Lead Workshops Donna Boman
- Introduction to Haematology May Valdez
- Graduate Certificate in Cancer and Haematology Diane Coller

#### CHEMOTHERAPY EDUCATION

Over the last 12 months, the ward has lost a significant number of chemotherapy accredited staff. The focus over the last 6 months has been to get our new staff trained and accredited in chemotherapy accreditation. Although this is a slow process it is coming along nicely.

#### **QUALITY ACTIVITIES**

There are numerous quality activities occurring within the unit. These include our regular clinical audits which are attended by members of staff and Aaron Manson attends to the OH&S audits. Falls risk assessments and reduction in falls is also an ongoing quality activity. An audit completed in May 2009 showed a 31.3% compliance with completing the falls risk assessment. In March 2010, the ward achieved 74% compliance. With Julie Stone becoming the falls champion for the ward, we will continue to work on improving this. The five moments of hand hygiene audit is also conducted regularly. GGE performs well in the audit scoring around 80%. The ward is also engaged in the Essentials of Care program.

While it has only just started, the introduction of single use sphygmomanometer cuffs in late June this year has reduced the incidence of VRE within the unit. In June 2010, there were 14 new cases of VRE. In July 2010, there were only 2 cases reported. The infection prevention unit and the ward will continue to monitor this and hope that these good results continue.

Apheresis underwent NATA accreditation in June 2010 with a successful outcome. The ward participated in EQuIP and contributed to the EA rating achieved in infection control.

#### **NEW BUILDING**

The ward is also preparing to move in early December 2010 to the new building. Planning and preparation for this move has already begun and is proving to be an exciting but demanding task. This ward has been purpose built for our haematology / oncology patients and hopefully we have captured the main requirements for our patients.

#### CONCLUSION

It has been a very busy 12 months. Over the next 12 months we plan to continue the professional development of staff so that we can maintain a safe and high standard of care for our patients.

### **Nursing Staff**

NURSING UNIT MANAGER CLINICAL NURSE EDUCATOR

Donna Boman Aaron Manson

**CLINICAL NURSE SPECIALISTS** 

Phillip Wearden (Apheresis)

Karen Baker (part-time)

June McEachern

May Valdez

Sally Carey (maternity leave)

CHEMOTHERAPY NURSE

Sara Hitchcock

REGISTERED NURSES

Hang Gilbang (part-time)

Evelyn Macey (part-time)

Georgina Rees (part-time)

Milagros Rivero

Achamma Roy

Joan Losloso (part-time)

Lissy Joy

Katarzyna Rybka

Scharokin Davood

Jessica Dickford

Julie Stone

Fafi Awad

Naga Ponnam

Jening Lagunzad

Lissy Joy

Allison Hill (part-time)

Dianne Coller

Aishna Shrasta

Swastika Rajan

**ENROLLED NURSES** 

Nardy Lucero Melissa Keough

Sladjana Starcevic (part-time) Aimee Torres (part-time)

APHERESIS STAFFING

Sinuu Seuala-Talagi Elizabeth Newland



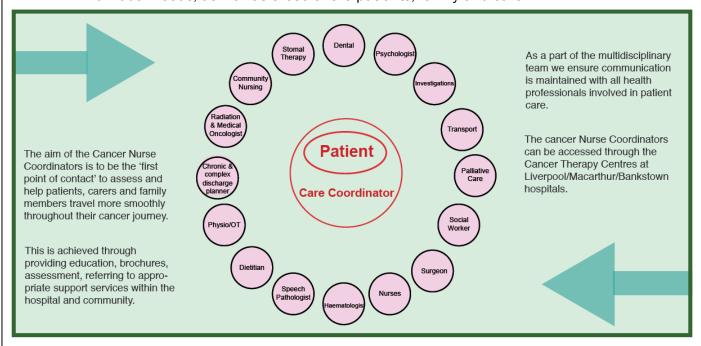
# Clinical Services Nursing - Care Coordinators

In 2005 the Cancer Institute NSW funded positions for Cancer Nurse Coordinators. 6 of these positions currently exist for SSWAHS - Western Zone.

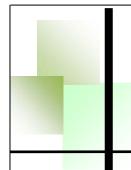


The Cancer Institute NSW describes a Cancer Nurse Coordinator role as:-

"To coordinate the care of patients diagnosed with cancer, to ensure continuity of care and timeliness of treatment and access to appropriate services based on the patients' individual needs, as well as those of the patients, family and carer".



Being diagnosed with a cancer can become very overwhelming for patients and their families. The Care Coordinator assigned to a patient, works within a multidisciplinary team. This team of people are involved in the management of a cancer patient before, during and after treatment.



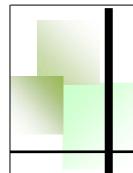
# Clinical Services Pharmacy - Liverpool

In the past year, Liverpool Cancer Therapy Pharmacy have continued to deliver service to the Medical Oncology and Haematology Departments. Staffing levels have changed slightly with Rebecca Grundy taking extended leave. Due to the increased services within the centre and to other departments (including rheumatology, and gastroenterology) it is a positive move to have a third pharmacist join the department and ensure that quality clinical pharmacy services are delivered in a timely and satisfactory manner. The three pharmacists this year are Sugantha Thumbadoo, Vy-Vy Tran and Queenie Lin (part-time) and one full-time pharmacy assistant David House. This year, Vy-Vy is due to complete her Masters of Clinical Pharmacy and is undertaking a research project designed for Haematology outpatients.

Sugantha Thumbadoo Acting Senior Oncology Pharmacist

We continue to provide the same quality service which includes:

- Provision of a Clinical Pharmacy service to Medical/Radiation Oncology and Haematology inpatients and outpatients
- Provision of information to Medical and Nursing staff
- Established patient education service
- Chemotherapy production service
- Involvement with the Cancer Therapy Research Committee and Clinical Trials
- Involvement with compassionate use programmes
- Participation in multidisciplinary team meetings



# Clinical Services Pharmacy - Macarthur

This has been another busy year for MCTC pharmacy staff with several changes to staffing.

Nicole Dewar has been employed as 0.2 FTE Pharmacy Technician with Debra Vandine continuing as 0.8 FTE technician.

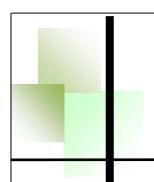
Pirkko Boyd is our Senior Clinical Pharmacist 1.0 FTE and Brett Ly is our Clinical Pharmacist 0.4 FTE. Amy Micalef has been working one morning per week as part of the Clinical Oncology Pharmacist training. She has been trained in MultiAccess™ and Powerchart™ and has attended several Oncology Pharmacy courses throughout 2009 and 2010. Currently we are fully staffed and well placed to continue to train new staff to cover staff annual leave, sick leave, ADOs, etc.

Pirkko Boyd Senior Oncology Pharmacist

Our chemotherapy checking processes have continued to improve and evolve using MultiAccess™ enhancements of the electronic prescribing programme. Pharmacist's checking of chemotherapy orders is now totally paperless and orders are completed using electronic signatures.

The Pharmacy Department continues to be involved and have input into the MELON meetings to discuss future enhancements to the programme and to give feedback to the committee on the impact of the changes. The electronic prescribing programme will be upgraded to MOSAIC by the end of this year. Our pharmacists also contribute to protocol development within the Medical Oncology department and have input into policies and procedures.

Clinical Trials participation has also increased and the Pharmacy Department is involved in the ordering and accountability of the trial drugs, which are being evaluated to ensure that we adhere to the monitoring requirements of the drug trial sponsors. Some of the trials require electronic monitoring (IVRS) and data entry of all medications dispensed to patients and all of our pharmacists are trained in these processes.



### Education

Cancer Services have various education programmes running throughout the year. The ongoing education groups and support groups are broken up into a range of programmes.

#### PATIENT EDUCATION

The Cancer Services Website has the patient orientation DVD which informs new patients of what their journey through Cancer Therapy Centre will be like. It informs the patients of what they can expect when they attend their first appointment, receive chemotherapy or radiation treatment, inpatient stay information, support groups, hospital services e.g. Interpreter service, transport, dietician, social workers, psychologists and other services.

The Cancer Council Information Centre is run by volunteers to help patients and relatives access information via computers located within their centre to look up a wide range of education and support information. You will also find available a range of booklets, leaflets, tumour site information packs as well as merchandise. There is also the opportunity for family members to call the Helpline.

#### **STAFF**

Ongoing in-services, planning days, research meetings, Multi-disciplinary team meetings, allow various opportunities to the staff. Some programmes include:-

- Regular inservice sessions
- Radiation therapy In-Service Program
- Medical Physics Research Meeting
- Radiation Oncology Registrar Tutorials
- Nurses Palliative Care Education
- Nursing Education Programmes (Tuesday and Thursdays)
- Radiation Oncology Interesting Cases / Audit Meeting

OIS department hold various meetings to update key staff with technology improvements, Super-user training, discuss new projects, audits on documentations and planning for upgrades.

Wednesday Education / Journal Club meetings provide staff with updates on clinical advances, presentations, research, procedure changes and QA. This is advertised weekly and located under Clinical Services for the SSWAHS in Public Folders in Outlook Calendar.

## Journal Club Guest Speakers 2009 - 2010

Speaker	Organisation	Topic
Professor Tomas Kron	President of Australasian College of Physical Scientists And Engineers In Medicine	Image Guidance For Radiotherapy In Urological Malignancies: Databases and Adaptation
Dr. Amanda Walker	Area Director of Palliative Care	Update On Local Palliative care Services
Sandra Avery	Cancer Information Program Manager, SSWAH Clinical Cancer Registry	Clinical Cancer Registry: Incidence and Reporting
Dr. Rebecca Strutt	Director of Palliative Care, Liverpool Hospital	The Integration of Quantitative and Qualitative Research In Palliative Care: A Case Study
Professor William Price	Director of Biomedical Mag- netic Resonance Facility and Director of the UWS node of the NCRIS National Imaging Facility	Magnetic Resonance and Translation Motion
Associate Professor Martin Stockler	Associate Professor of Cancer Medicine and Clinical Epidemiology at The University of Sydney, Consultant Medical Oncologist at the Sydney Cancer Centre – RPA and Concord Hospitals, and Co-Director of Oncology at the NHMRC Clinical Trials Centre	Making sense of trial designs, endpoints, and sample sizes
Leslie Gibbs	OH&S Officer / Manager, Liverpool Hospital	Occupational Health & Safety
Professor Anatoly Rosenfeld	Director of the Centre For Medical Radiation Physics at the University of Wollongong	Advanced Semi-Conductor Do- simetry In Radiation Therapy: New Concepts, Development and Applications
Various	Radiation Showcase	5 minute presentations giving an overview of current research being undertaken

# Information Technology

2010 has been another busy year for the IM&T committee with multiple concurrent projects in progress.

The principal project is the planned upgrade of MultiAccess™ Electronic Medical Record (EMR) to the newer version, Mosaiq™. While MultiAccess™ has been successful and popular, its time has come to be replaced as it will soon no longer be supported by the vendor. The upgrade involves the purchase of expensive hardware and software and a lengthy and complex installation, commissioning and testing process. In this process, we have been greatly assisted by the Area Information Management and Technology Division. Our newest team member, IT analyst David Warner, has impressed all with his enthusiasm and ability.

Dr. Allan Fowler Chairperson IM&T Committee

Other projects include the setting up and testing of data links between MultiAccess<sup>™</sup> and the Hospital-wide EMR, Powerchart<sup>™</sup>. There are plans to enable chemotherapy delivery to be done at the bed or chair-side with the use of wireless technology. A program for digital voice recognition to facilitate transcription has begun, although much work remains to be done.

## **IM & T Committee**

CHAIRPERSON DATA MANAGER /
DEPUTY CHAIRPERSON

Dr. Allan Fowler Phan Sayaloune

IT ANALYSTS BUSINESS MANAGERS

Janice Warner Maree Cain
David Warner Sue Connor

ONCOLOGY INFORMATION
SYSTEM MANAGER
ONCOLOGY INFORMATION
SYSTEM ANALYST

Nasreen Kaadan Thanh Tranh

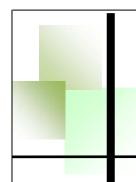
NURSING

MEDICAL PHYSICS RADIATION THERAPY

Gary Goozée Lynette Cassapi

Amy Wholohan Suzanne McIntyre

**SECRETARY** 



## Multi-Disciplinary Care Breast

During the 12 month period 1 July 2009 to 30 June 2010 there have been 519 new breast cancer patients at our centres. Weekly Multi-Disciplinary Team (MDT) breast meetings are held at Liverpool Hospital and fortnightly at Campbelltown Hospital. Bankstown has now commenced fortnightly breast meetings. We have an increasing attendance of health professionals at these meetings.

There is regular, weekly attendance from Radiation Oncology, Medical Oncology, Surgery, Pathology, Radiology, Genetics, Clinical Trials, Social Work and the Breast Cancer Care Co-ordinator. The role of the Cancer Genetics Counsellor has increased throughout the year and plans are in place to increase this service.

Patients continue to be recruited to numerous clinical trials currently in progress for breast patients, covering the areas of medication, surgery, radiotherapy and lifestyle.

The bi-annual 'Living with Breast Cancer' support group continues to be a success with many of these women going on to join one of the local patient-run support groups in the area. Significant Allied Health support for our cancer centres also provide the following services for our breast cancer patients; lymphoedema education and management, financial advice, Social Work, psycho-oncology (including counselling, relaxation therapies, needle phobia management, etc.) and dietary advice. The Macarthur Cancer Therapy Centre also offers a range of complementary therapies. The success of this program is thanks to the team effort of a number of dedicated Allied Health professionals in Cancer Services.

In the past year we welcomed two Breast Nurse Co-ordinators to our Breast Team. Ms. Vicki Buglass joins us as the Breast Nurse Co-ordinator at Liverpool and Bankstown Hospitals. We also welcomed Mrs. Jenny Treloar as the McGrath Breast Care Nurse at Campbelltown and Bowral. Jenny was funded by the McGrath Foundation. Both nurses have provided an excellent service for our breast cancer patients and their relatives.

Professor Geoff Delaney Chairperson Breast Tumour Stream

## Multi-Disciplinary Care Head & Neck

The Head and Neck group meets weekly each Tuesday, and conducts a clinic that is usually the busiest in Cancer Therapy both in terms of the number of staff attending and the number of patients being seen. On average 3 new patients and 28 follow-up patients are seen. New patients are able to see a Head and Neck Surgeon, ENT Specialist, Radiation Oncologist, Care Co-ordinator, Oral Medicine and Pathology Specialist, Speech Pathologist and Dietician all in one day. A working case discussion conference is held for each new patient.

On alternate weeks, a formal Multi-Disciplinary Team (MDT) meeting is held where patient case histories are presented with Radiology, Nuclear Medicine and Pathology review. Management issues are discussed and documented. MDT proceedings are recorded live into the Multi-Access™ electronic letter and later mailed to General Practitioners.

Highlights of 2010 have included the adoption of new forms of induction chemotherapy for advanced Head and Neck Cancer following recent scientific evidence. Intensity Modulation Radiation Therapy (IMRT) is a sophisticated form of radiation therapy delivery which is now in routine use at both Liverpool and Macarthur Cancer Therapy Centres for almost all Head and Neck Cancer patients. An Allied Health pre-treatment assessment clinic has been implemented to provide further assistance to patients and families. A long awaited highlight is the pending release from migration restrictions of Dr. John McGuinness to become a free Australian.

## **Head & Neck Tumour Group**

CARE CO-ORDINATOR PALLIATIVE CARE PHYSICIAN

Luci Dall'Armi Dr. Rebecca Strutt

**SURGEONS** 

Dr. Jonathan Clark Dr. Philip Y Yeung (ENT)

Dr. John McGuinness Dr. Balazs Lorincz (Surgical Fellow)

Dr. Bruce Ashford

RADIATION ONCOLOGISTS MEDICAL ONCOLOGISTS

Dr. Dion Forstner
Dr. Allan Fowler
Dr. Prunella Blinman

ORAL MEDICINE PATHOLOGISTS

Dr. Sue-Ching Yeoh Dr. Kasim Ismail

Dr. Ben Karim

NUCLEAR MEDICINE PHYSICIAN GASTROENTEROLOGIST

Dr. Peter Lin Tan Dr. David Abi-Hanna

## **RADIOLOGIST**

Dr. Ramesh Cuganesan

**NURSES** 

Amy Wholohan Yvette Furney

**DIETETICS** 

Katherine Pronk Rebecca Phillips

**SOCIAL WORK** 

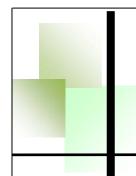
Teresa Simpson

Luci Dall'Armi Care Coordinator Head & Neck Tumour Program SPEECH PATHOLOGY

Candice Baxter Armalie Muller

**RADIATION THERAPY** 

Shivani Kumar Vicki Batumalai



## Multi-Disciplinary Care Lung

The Lung Cancer Multi-Disciplinary Team (MDT) meets weekly using video-conference facilities between Liverpool and Macarthur Cancer Therapy Centres. The meeting is attended by all relevant specialties (Cardiothoracic Surgeon, Respiratory Physician, Radiation Oncologists, Medical Oncologists, Palliative Care Physician, Radiologist, Nuclear Medicine Physician). Members of the team are active in the Australasian Lung Cancer Trials Group and the NSW Lung Cancer Oncology Group.

Data is collected on all patients presented, a management plan is recorded and the GPs are notified of the outcomes. The group has written protocols for the treatment and follow-up of lung cancer patients. These have been updated this year to reflect the new TNM staging system for lung cancer. Patient recruitment into clinical trials is also discussed at this forum.

The group has a Lung Cancer Co-ordinator who attends the meetings and meets most newly diagnosed lung cancer patients to provide information, support and helps them navigate their path through the treatment process. The Lung Cancer Co-ordinator collects information about the patient's level of distress using the validated Distress Thermometer and makes referrals to Allied Health and other support services as needed.

The group continues to be active is research which has resulted in the following presentations and publications.

## **PUBLICATIONS**

Vinod SK, Sidhom MA, Gabriel GS, Lee MT, Delaney GP. Why do some Lung Cancer patients receive No Anti-Cancer Treatment? *Journal of Thoracic Oncology*. December 2009. In Press.

## POSTER PRESENTATIONS

Vinod SK, Sidhom M, Gabriel GS, Lee M, Delaney GP. Why do some Lung Cancer patients receive No Anti-Cancer Treatment? 13th World Conference in Lung Cancer. San Francisco 2009. *Journal of Thoracic Oncology*. 2009; 4S: S422 [Abstract PD 1.3.3]

Sidhom M, Vinod SK, Gabriel GS, Lee M, Delaney GP. Guideline-based recommended therapy in the management of lung cancer: why are patients not treated according to guidelines? 13th World Conference in Lung Cancer. San Francisco 2009. *Journal of Thoracic Oncology*. 2009; 4S: S426 [Abstract PD 1.4.3]

Kang S, Koh ES, Vinod SK, Jalaludin B. Cost analysis of Lung Cancer Management in South-Western Sydney. 13th World Conference in Lung Cancer. San Francisco 2009. *Journal of Thoracic Oncology.* 2009; 4S: S426 [Abstract PD 1.4.2] **Sidhom M**, **Vinod S**, **Gabriel G**, **Lee M**, **Delaney G**. Why are some lung cancer patients not treated according to guideline recommended therapy? RANZCR Annual Scientific Meeting. Brisbane 2009. *J Med Imaging Rad Oncol*. 2009; 53 S1: A265: Abstract P139. Best Poster in Radiation Oncology Prize.

## ORAL PRESENTATIONS

**Luxford T, Vinod SK, Koh E, Tran T, Baker K.** Use of a validated assessment tool in lung cancer patients to identify symptom burden: the value of nursing-led care co-ordination model. COSA. Gold Coast 2009. Best of the Best Oral Lung Abstracts. *Asia-Pacific JCO* 2009; 4 (S2): A168. (Presenter T. Luxford).

Koh ES, Kang S, Vinod SK, Jalaludin B. The cost of definitive and palliative management in non-small cell lung cancer. COSA Gold Coast. 2009. *Asia-Pacific JCO*. 2009; 4 (S2): A167. (Presenter ES Koh).

Kang S, Koh ES, Vinod S, Jalaludin B. Cost analysis of Lung Cancer Management in South-Western Sydney. RANZCR Annual Scientific Meeting. Brisbane 2009. *J Med Imaging Rad Oncol.* 2009; 53 S1: A48: Abstract 055 (Presenter S Kang).

## CURRENT RESEARCH

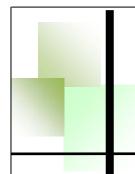
Comparing the patterns of care for patients discussed at the Lung MDT and those who are not (2005-2008).

## **FUTURE AIMS**

- To hold GP education sessions
- To organise Lung Cancer Support Groups for patients and their carers
- To improve the process of care by lobbying for appropriate diagnostic facilities etc

Assoc. Prof. Shalini Vinod Chairperson Lung Cancer Tumour Group

Lung Tumour Group				
	SURGEON			
	RADIATION ONCOLOGISTS			
	MEDICAL ONCOLOGISTS			
	70			



## Multi-Disciplinary Care Neuro-Oncology

The Neuro-Oncology Multi-Disciplinary Team (MDT) in SSWAHS (Western Zone) continues to develop as an active group with a focus on the management of patients with malignant and benign primary brain tumour diagnoses.

We have successfully recruited Karen Robinson to the long awaited role of Neuro-Oncology Care Co-ordinator, and she is helping to provide a vital service to patients and carers with complex care trajectories.

The project entitled 'Addressing the Cognitive and Behavioural Sequelae of the Adults with Brain Tumour: a collaboration between neurosurgical services, cancer services and brain injury researchers' has resulted in numerous local, national and international presentations. Pleasingly, the Fact Sheets produced addressing management of these sequelae have been utilised nationally and also been translated by overseas brain tumour advocacy groups.

A follow-up study comparing the use of various screening tools to detect cognitive and behavioural changes in brain tumour patients was presented at the COSA ASM in November 2009 by UNSW ILP4 medical student Helen Ke. The project co-supervised by Dr. Koh and Dr. Grahame Simpson was awarded the 'Best of the best' oral neuro-oncology abstract.

## CLINICAL CANCER REGISTRY

Kirsten Duggan is the data manager who ably oversees treatment and outcome data, as well as novel data on benign tumours not currently collected in other Area Health Services.

## NEURO-ONCOLOGY CLINICAL TRIALS OPEN IN SSWAHS (WZ)

- NCIC-EORTC-TROG phase III trial in Low Grade Glioma
- Australian Genomics and Clinical Outcomes of Glioma (AGOG), Cancer Council NSW (epidemiologic, blood and tumour sample-based study).

## CURRENT RESEARCH GRANTS

• Cancer Institute NSW Health Innovations Grant 'Implementation of a Neuro-oncology Care Co-ordinator' (2010–11).

## CONTRIBUTIONS TO STATE AND NATIONAL INITIATIVES

- Members of the MDT continue to be active participants in NSWOG Neuro-Oncology and Co-operative Trials Group for Neuro-oncology (COGNO).
- Release of the Clinical Practice Guidelines for the 'Management of Adult Gliomas: astrocytomas and oligodendrogliomas': Chair, Brain Tumour Guidelines - Professor Michael Barton.

- Central Nervous System Tumours, Structured Pathology Reporting of Cancer, 2010. The Royal College of Pathologists of Australasia: Dr Eng-Siew Koh, Member of Expert Committee.
- GMCT Clinical Networks Neurosurgery Executive members, Assoc. Prof. Mark Sheridan and Kylie Wright represent the SSWAHS-WZ.

## **FUTURE RESEARCH ENDEAVOURS**

- A study comparing the use of various screening tools to detect cognitive and behavioural changes in brain tumour patients.
- Development of a phase II trial of the EDUCATE psycho-educational program phase II trial: 'Managing changes to cognition, emotions and behaviour after brain tumour'.

The highly successful Brain Tumour Support Group, co-ordinated by Kylie Wright and Teresa Simpson, has now celebrated its seventh year anniversary, with a diverse monthly program catering for complex patient and carer needs. A poster at the 2009 COSA ASM entitled 'Long-term Facilitation of a Hospital-based Brain Tumour Support Group: Trials and Triumphs' was presented. A publication co-authored by Kylie and Teresa, 'Planning and Maintaining a Brain Tumour Support Group', has been accepted for publication in the *Australasian Journal of Neuroscience*.

Dr. Eng-Siew Koh Stream Leader Neuro-Oncology Tumour Group

## **Neuro-Oncology Tumour Group**

## **NEUROSURGERY**

Assoc. Prof. Mark Sheridan Assoc. Prof. James van Gelder

Dr. Balsam Darwish

**NEUROSURGICAL TRAINEES** 

Dr. Renata Bazina Dr. Joanne Lee

**RADIATION ONCOLOGY** 

Dr. Eng-Siew Koh Professor Michael Barton Dr. George Papadatos

**RADIOLOGY** 

Dr. Ramesh Cuganesan

PALLIATIVE CARE

Dr. Rebecca Strutt Dr. Jennifer Wiltshire

**NEUROSURGICAL NURSING** 

Kylie M. Wright

SPEECH PATHOLOGIST

Candice Baxter

**CLINICAL CANCER REGISTRY** 

Kirsten Duggan

Dr. Simon McKechnie Dr. Renata Abraszko

Dr. Matthias Jaeger

Dr. Vanessa Sammons

**MEDICAL ONCOLOGY** 

Dr. Mahmood Alam Dr. Bahram Forouzesh Dr. Diana Adams

**PATHOLOGY** 

Dr. Alar Enno

**SOCIAL WORK** 

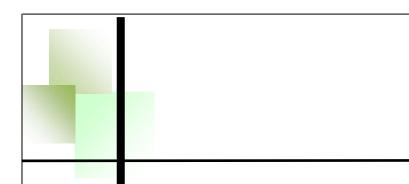
Teresa Simpson

**CARE CO-ORDINATOR** 

Karen Robinson

CLINICAL PSYCHOLOGIST

Gerald Au



The 'Integrating Functional Imaging in Radiotherapy Treatment' (iFIT) workshop was held on 27 February, 2010 at Liverpool Hospital. This was a workshop run collaboratively by the Departments of Radiation Oncology and Nuclear Medicine with the aim of promoting cross-specialty collaboration and understanding the integration and pitfalls of nuclear medicine and radiation oncology with regard to multimodality therapy planning. It was the first workshop of its kind to be held in Australia.

iFIT

The workshop included departmental tours, a plenary session with key speakers from Melbourne (Professor Tomas Kron, Mr. Jason Callahan) and Brisbane (Dr. Aravind Kumar, Dr. Margot Lehman, Ms. Cathy Hargrave) and a panel discussion with clinical cases with local and invited speakers. There were 75 attendees from all over Australia. The post-workshop feedback was positive with 80% stating that the workshop was very good and 14% outstanding. Most participants were keen for an ongoing annual workshop on this topic although this will be handed over to the ANZSNM and RANZCR to pursue.

## iFIT Committee

## **CONVENORS**

Dr. Ivan Ho Shon

NUCLEAR MEDICINE

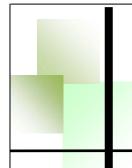
Dr. Seu Som Peter Peralta Sithouen Sam

**ANZSNM** 

**Tracey Smith** 

Assoc. Prof. Shalini Vinod RADIATION ONCOLOGY

Dr. Lois Holloway Carol Nguyen Melanie Rennie



## Outcomes and Achievements Breast Interest Group

The Breast Interest Group meets bi-monthly with representatives from Radiation Oncology, Radiation Therapy and Medical Physics. We strive to improve service delivery with regard to treatment of breast malignancies by engaging in research and development.

## **OUTCOMES**

- The breast cancer radiotherapy protocol has been updated to reflect changes in practice.
- A study assessing the interobserver variability in clinical target volume delineation in tangential breast irradiation has been completed and a manuscript of the study is currently being prepared for publication in a peer-reviewed journal.
- There has been ongoing involvement in various TROG initiated breast clinical trials.

## **PRESENTATIONS**

## **Oral Presentation**

Batumalai V, Koh ES, Delaney G, Holloway L, Jameson M, Papadatos G, and Lonergan D. Variability in clinical target volume delineation for tangential breast irradiation: Comparison between RO and RT. RANZCR – CSM 2009. *A101* 

## **CURRENT RESEARCH FOCUS**

- Quantifying the treatment toxicity and second cancer risk reduction for Magnetic Resonance Image (MRI) guided breast radiotherapy
- Large Breast Immobilization Study (with Westmead)
- What factors affect the level of set-up error for radiation therapy to the breast?

## **Breast Interest Committee**

## RADIATION ONCOLOGY

Professor Geoff Delaney Dr. Denise Lonergan Dr. George Papadatos

## **RADIATION THERAPISTS**

Vikneswary Batumalai James Latimer Giselle Condos Adrianna Scotti

## MEDICAL PHYSICS

Dr. Lois Holloway Tony Young Satya Rajapakse

Janelle Hardie Melanie Rennie Steven Tran Thien Le

## Outcomes and Achievements RT Brachytherapy Group

The Brachytherapy group meets monthly with representatives from Radiation Oncology, Radiation Therapy and Medical Physics. We strive to improve service delivery with regard to treatment of Brachytherapy to gynaecological malignancies, oesophageal, bronchial and head and neck cancers.

In gynaecological brachytherapy we are moving toward implementation of image-based brachytherapy planning. We have created a protocol for contouring of organs at risk and evaluation of dose volume histograms for cervix cancer brachytherapy. Currently we are gaining familiarity with MRI contouring prior to first brachytherapy insertion. We have also completed an audit of cervical cancer patients treated between 2000-2006 analysing outcomes and toxicities.

## **PRESENTATIONS**

- Caldwell K, Lau A, Vinod SK, Fowler A, Ohanessian L. A DVH comparison study of OAR for cervix brachytherapy. RANZCR Annual Scientific Meeting, Brisbane 2009. J Med Imaging Rad Oncol 2009. 53 S1: A169: Abstract 012
- Caldwell K, Lau A, Vinod SK, Fowler A, Sampson D, Ohanessian L. A DVH Comparison study of organs at risk for cervix brachytherapy. Australasian Brachytherapy Group Meeting. Melbourne 2010.
- Sridharan S, Vinod SK, Lau A. Incorporating chemotherapy in the management of cervical carcinoma and the outcomes achieved. Submitted to RANZCR 2010.

## RESEARCH

Currently our research is focussing on

- Contouring of GTV and organs at risk on MRI images prior to brachytherapy and testing importation of images in the Plato planning system
- Updating the vaginal brachy plan library
- To complete Head and Neck Brachytherapy protocol

## RT Brachytherapy Committee

## RADIATION ONCOLOGY

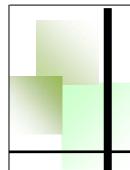
Associate Professor Shalini Vinod Dr. Allan Fowler

RADIATION THERAPISTS

Annie Lau Kate Caldwell David Sampson Lucy Ohanessian MEDICAL PHYSICS

Virendra Patel Sankar Arumugam

Adrianne Scotti Ewa Juresic Thien Le Reyna Stirton



## Outcomes and Achievements Thoracic Interest Group

The Thoracic Interest Group meets monthly with representatives from Radiation Oncology, Radiation Therapy and Medical Physics. We strive to improve service delivery with regard to treatment of thoracic malignancies (mainly lung and oesophageal cancer) by engaging in research and development.

## **OUTCOMES**

- Updated the lung cancer radiotherapy protocol to reflect changes in practice.
- Implemented a kilovoltage conebeam CT protocol to ensure that tumour motion is encompassed by the planned radiotherapy fields.
- Completed a radiotherapy planning study assessing the impact of PET in radiotherapy planning for lung cancer. The study has been accepted for publication in the Journal of Medical Imaging and Radiation Oncology.
- Completed patient accrual to a study designed to measure set-up errors in patients undergoing radiotherapy for lung cancer.
- Completed PET boost study which evaluated boosting dose to a smaller volume delineated using high FDG-PET intensity. Manuscript currently in progress for Medical Dosimetery.

## **PRESENTATIONS**

- Oral Presentation. Shivani Kumar: Dosimetric implications of the addition of 18FDG-PET in CT-based radiotherapy planning for Non-Small Cell Lung Cancer. RANZCR - CSM - 2009. A109.
- Poster Presentation. Isabella Franji: Determining the setup accuracy for lung cancer patients undergoing curative radiotherapy at Liverpool & Macarthur Cancer Therapy Centres, NSW. A219.

## **PUBLICATIONS**

• Vinod SK, Kumar S, Holloway L, J Shafiq. Dosimetric implications of the addition of 18 fluorodeoxyglucose-positron emission tomography in CT-based radiotherapy planning for non-small-cell lung cancer. *JMIRO* 2010. 54: 152-160.

## RESEARCH

Currently our research is focussing on:-

- Oesophagus PET study: Evaluating contouring variation with and without fused PET in oesophageal cancer and assessing the impact on dosimetry.
- Active breathing coordinator- Comparing tumour motion measured on ABC vs PET vs KV conebeam CT.

## **Thoracic Interest Committee**

## **RADIATION ONCOLOGY**

Associate Professor Shalini Vinod

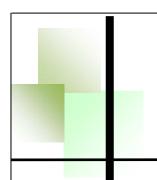
Dr Eng-Siew Koh Dr. Denise Lonergan Dr. Karen Wong Dr. Miriam Boxer

## **MEDICAL PHYSICS**

Dr. Lois Holloway Tony Young

## **RADIATION THERAPISTS**

Isabella Franji Matthew Fuller Shivani Kumar Kathy Andrew Skye Blakeney Cara McKibbin Cesar Ochoa Sandie Watt



## Volunteers

Liverpool Cancer Therapy Centre (CTC) has a team of dedicated volunteers. The volunteers are multi-talented and play a broad range of roles at the Cancer Therapy Centre. Tasks include supporting the patients and their families, providing tea and coffee, assisting with administrative tasks (such as helping with filing), contributing to the general amenities to ensure the CTC remains a pleasant and homely environment (for example, by watering the plants and supplying magazines).

The volunteers play an important role in health promotion and fund raising for both the Cancer Council of NSW and the CTC. They continue to host the CTC Patient Christmas morning tea, cooking all the cakes and biscuits. They participate in major public fundraising activities each year including the Biggest Morning Tea and Daffodil Day.

## LIVERPOOL CANCER THERAPY

## Victoria McCarthy Elizabeth Low Carol Keogh Barbara Wright Dutch Day Joy Maloney Fay Cooper

## **WIG LIBRARY**

Robyn	Gould
Fiona	Cavan

## MACARTHUR CANCER THERAPY

Neolene Wright
Beatrice Atwell
Kathleen Forshaw
Paulette Medbury
Arelin (Rell) Hodgson
Dorothy Kwasniak
Catherine Bourke
Grant O'Donnell

## LIVERPOOL CANCER COUNCIL

June Harrison
Lorraine Mahoney
Joanne Jekki
Judith Poultons
Gillian Tindale
Gloria Worthington
Janelle Southwell
Kamal Hadid
Pronita Karki

## LOOK GOOD, FEEL BETTER

Lyn Georgeson Merrilyn Usher Kim Cawthorne Norah Naslan Lyn Evan

## MACARTHUR COMPLIMENTARY

**THERAPY** 

Bob Valk - Massage Therapy
Dee Russell - Massage Therapy
Nicole Psaroudis - Reiki / Meditation
Kerrie Wearing - Reiki
Jenny Kelly - Reiki
Sophie Cram - Reiki
Bettina Mandera - Reiki
Trish McLoughlin - Reiki
Helen Milne - Reiki



Donations fill funding needs not supported by government grants and insurance reimbursement. Over the past 12 months, 97 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 and morning teas have been supported by the generosity of our community, and this has lead 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 pumps, wheelchairs, and other medical equipment. A purchase of an ECG machine for the centre was the result of dedicated fundraising by The Inner Wheel Club Liverpool Combined. The Lions Club of Liverpool donated funds and with the support of Bunnings, who supplied the labour and plants, the garden outside the chemotherapy suite was totally rejuvenated providing a lovely setting in which patients and relatives can sit during their treatment.

Liverpool Cancer Services would like to thank the following people / organisations for their kind donation:-

## **Donations 2009 - 2010**

## PATIENT CARE TRUST FUND

The Gumnut Baby Shop

Associate Professor Martin Berry SWS Prostate Cancer Group

Italian Affair Committee

Jimmy Lin

Mr. & Mrs. Kidd L & D Drummond

Susan Kelly

Accurate Plumbing

S Pennell

R & K Tavener G Drummond P & M Sullivan R & T Slaviero A Drummond

P Bates N Thompson

C Brock

G & C McKirdy M A & S G Kelly

Compliance Occupational Canley Heights RSL Club R L & N M Curuand

Belinda, Sean, Jarrod & Charlotte Parmenter

Giulio Perinetto John Noice J A & N J Hunter Catherine Tischler

**Bruce Guy** 

Charles & Jennifer McMonnies All Saints Catholic Senior College Graham & Beverley Thompson

Lois Bonett
J C & J S Forley
Denise Cole
T K & V L Pham
Kylie Bonett

Southern Highlands Lantern Club

Kyunok Ke Barry Meltzo Victoria Sinpe Piedad Maston Luis & Ann Robalino

Delia Tripodi Sylvia Mogielnicki Maria Valdes

Emma Sukkar Sao Cheng Ly M E & W L Butcher

Karina Garea & Robert Bosetti

Mya Ma

Washington Munoz

G Sandoval

The Inner Wheel Club Liverpool Combined

R & W Halicek M & T Thomson Brown Onions

R Morejon & M Gavilaney

A & P Khan Hazel McRitchie Adele Stephenson Amber Bowness Amy Cryer Aqua Pucciarelli

Belinda Ng

Carolyn Steadman Neeta Gupta Nicky Cropp Peda Fefinou Peter Perih Robert Kovacs

Rodney Macnamara Roxanne Robinson Sabine Theuerkorn Sarah Whitland Sonia Borg Sue Traynor Tim Banks Ty Traynor Nic Sargisson Danny Andrieni Regina Oszetzky

George Kalaitzakis Simon Cahill Jason Corkery Cath Lorimer Louise Spence Eileen Mathews Liz Spence Trish Keipa Tristram Mason Maria Michael L Duong & Family

Bunnings

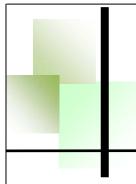
Lions Club of Liverpool

WIG	LIBRARY	
-----	---------	--

Rotary Club of Liverpool Greenway

Rotary Club of Liverpool West

The MCTC is fortunate to be a recipient of donations from the 24hr Fight against Cancer Committee – Macarthur. This committee works tirelessly to raise funds for services and equipment for Cancer patients at the MCTC, Palliative Care and Paediatric Ambulatory Care at Campbelltown and Camden Hospitals. The committee has this year alone provided funding to the value of \$135,380.00. Over the last 5 years they have raised over \$600,000.00 and are well on their way to reaching the \$1,000,000.00 mark this year – watch this space.



## **Achievements**

**AWARDS** 

## Sidhom M, Vinod SK, Gabrial G, Lee M and Delaney GP.

Why are lung cancer patients not treated according to guideline recommended therapy? **Wiley-Blackwell Best Exhibit Award for Best Poster** - Royal Australian and New Zealand College of Radiologists CSM 2009

## Sidhom M, Vinod SK, Grabiel G, Lee M and Delaney GP.

Why are some lung cancer patients not treated according to guideline recommended therapy? **Best Poster in Radiation Oncology Prize** - Royal Australian and New Zealand College of Radiologists ASM 2009. Brisbane

## Shafiq J.

Development of a bone metastases module to accompany EORTC QLQ-C30. **Best Abstract** - Ingham Health Research Institute Research Showcase 2009.

## Palliative Care Team.

Liverpool Hospital End Of Life Care Pathway Project.

Inaugural NSW Palliative Care Gala Award - Innovations in Practice 2009

## Moretti D and Cassapi L.

Development of a radiotherapy Wiki for comprehensive document management.

Siemens Ltd Medical Solutions Radiation Therapist Prize: Most Applicable / Beneficial Radiation Oncology Presentation by a Radiation Therapist - Royal Australian and New Zealand College of Radiologists CSM 2009

## Luxford T, Vinod SK, Koh ES, Tran T and Baker K.

Use of a validated assessment tool in lung cancer patients to identify symptom burden: The value of nursing-led care coordination model.

Best of the Best Oral Lung Abstracts - Clinical Oncological Society of Australia (COSA) ASM 2009

## Ke H, Koh ES, Simpson G and Whiting D.

Screening for cognitive impairment in primary brain tumour: Is the Montreal Cognitive Assessment a more sensitive tool than the Mini-Mental State Examination?

Best of the Best Oral Neuro Oncology Abstracts - Clinical Oncological Society of Australia (COSA) ASM 2009

### Fong A.

A comparison of breast cancer treatment rates in British Columbia, Scotland, New Zealand and Western Australia and a comparison with models of 'optimal therapy'.

Fellowship of Royal Australian and New Zealand College of Radiologists (FRANZCR) 2009

## Fong A.

\$25,000 prize for Fellowship to carry out research in Radiation Oncology.

Hospira Withers and Peters Fellowship Prize 2009

### Dall'Armi L.

SSWAHS Nurses & Midwives Achievements Award 2009

### Baxter C.

SSWAHS Area Speech Pathology Clinical Excellence 2009

## Batumalai V, Koh ES, Delaney GP, Holloway LC and Jameson M.

Variability in clinical target volume delineation for tangential breast irradiation: Comparison between Radiation Oncologists and Radiation Therapists.

Novartis prize for Best Clinical Outcomes in Breast Cancer Therapy - Royal Australian and New Zealand College of Radiologists CSM 2009

## Luxford T.

Hesta - Liverpool Hospital Employee Excellence Award - October to December 2009

## **BOOK CHAPTERS**

## Delaney GP, Stebbing J, Thompson AM.

Breast Cancer (non-metastatic).

BMJ Publishing Group Clinical Evidence Handbook.

June 2009. ed. BMJ Publishing Group. 2009: 588-91

## Delaney GP, Stebbing J, Thompson AM.

Breast Cancer (non-metastatic).

BMJ Publishing Group Clinical Evidence Handbook.

December 2009. ed. BMJ Publishing Group. 2009: 606-9

## Yip PY, Goldrick A, Della-Fiorentina S and Chantrill L.

Retrospective review of adjuvant Trastuzumab use in the Western Zone of Sydney South West Area Health Service (WZ SSWAHS).

Medical Oncology Group of Australia (MOGA). Sydney 2009

## **CONFERENCE PROCEEDINGS**

## Yap ML, Vinod SK, Ho-Shon I, Fowler A, Lin M, Gabrial G and Holloway LC.

The registration of diagnostic vs planning FDG PET-CT in radiotherapy planning for non-small cell lung cancer.

13th World Conference on Lung Cancer. San Francisco 2009.

### Yap ML, Vinod SK, Ho-Shon I, Fowler A, Lin M, Gabriel G and Holloway LC.

The accuracy of registration of 18FDG PET-CT to radiotherapy planning CT for non-small cell lung cancer.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

## Yap ML, Vinod SK, Ho-Shon I, Fowler A, Lin M, Gabriel G and Holloway LC.

The registration of diagnostic vs planning FDG PET-CT in radiotherapy planning for non-small cell lung cancer.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

## Wright K, Simpson T and Koh ES.

Long term facilitation of a hospital-based brain tumour support program. Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009 Poster

Whiting D, Simpson G, Koh ES, Simpson T, Wright K, Firth R and Younan K.

Multi-tiered intervention study for patients, carers and health providers to address challenging behaviours after brain tumour.

3rd Quadrennial Meeting of the World Federation of Neuro-Oncology. Yokohama, Japan 2009

## Vinod SK, Sidhom M, Gabriel G, Lee M and Delaney GP.

Why do some lung cancer patients receive no anti-cancer treatment? 13th World Conference on Lung Cancer. San Francisco 2009

Vinod SK, Goldsbury D, Simonella L, Delaney GP, and O'Connell D. Underutilisation of radiotherapy for lung cancer radiotherapy in NSW Australia. 13th World Conference on Lung Cancer. San Francisco 2009

## Vinod SK.

Outcomes of curative radiotherapy for lung cancer in South Western Sydney. Royal Australian and New Zealand College of Radiologists CSM. Brisbane 2009 Poster

## Vinod SK, Holloway LC, Prasad S, Andrew K, Blakeney S, Franji I, McKibbin C, Shafiq J, Koh ES and Fuller M.

Emmission Tomography (PET) in CT based radiotherapy planning for non-small cell lung cancer (NSCLC).

Royal Australian and New Zealand College of Radiologists CSM. Brisbane 2009

### Vinod SK.

Outcomes of curative radiotherapy for lung cancer in South Western Sydney. Royal Australian and New Zealand College of Radiologists CSM. Brisbane 2009

## Sithoeun S, Ho-Shon I and Vinod SK.

Investigating the incremental time difference and radiation exposure in setting up PET / CT scans in radiotherapy planning position.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

## Simpson T, Wright K, Whiting D, Simpson G, Koh ES, Firth R and Younan K.

Patient functional status is strongest correlate of challenging behaviour after brain tumour. A resource for patients, carers and health providers.

3rd Quadrennial Meeting of the World Federation of Neuro-Oncology. Yokohama, Japan 2009 Oral Presentation

## Simpson G, Koh ES, Simpson T, Wright K, Firth R, Whiting D and Younan K.

The prevalence of behavioural sequelae in patients diagnosed with brain tumours and the development of information resources.

World Federation of Neurosurgical Nursing. Toronto 2009 Poster

## Moretti D and Cassapi L.

Development of a radiotherapy Wiki for comprehensive document management Combined Scientific Meeting (CSM). Brisbane 2009

## Sidhom M, Vinod SK, Gabriel G, Lee M and Delaney GP.

Guideline-based recommended therapy in the management of lung cancer: Why are patients not treated according to guidelines?

13th World Conference on Lung Cancer. San Francisco 2009

## Sidhom M, Vinod SK, Gabriel G, Lee M and Delaney GP.

Why are some lung cancer patients not treated according to guideline recommended therapy? Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009

## Sam S, Ho-Shon I and Vinod SK.

Investigating the incremental time difference and radiation exposure in setting up PET / CT scans in radiotherapy planning position.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009.

## Prasad S, Franji I, Blakeney S, Ochoa C, Andrew K, McKibbin C, Fuller M, Vinod SK, Koh ES and Lonergan D.

Determining the set-up accuracy for lung cancer patients undergoing curative radiotherapy at Liverpool and Macarthur Cancer Therapy Centres NSW.

Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009

## Morarji K, Fowler A, Vinod SK and Ho-Shon I.

Impact of FDG-PET on delineation for radiotherapy in lung cancer.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009.

## Luxford T, Vinod SK, Koh ES, Tran T and Baker K.

Use of a validated assessment tool in lung cancer patients to identify symptom burden: The value of nursing-led care coordination model.

Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Lin P, Vinod SK, Lin M, Ho-Shon I and Seu S.

Incremental clinical value of a dedicated RT planning FDG PET-CT over staging PET-CT in non-small cell lung cancer.

Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

## Koh ES, Simpson G, Whiting D, Wright K, Simpson T, Firth R and Younan K.

Patient functional status is strongest correlate of challenging behaviour after brain tumour. 3rd Quadrennial Meeting of the World Federation of Neuro-Oncology. Yokohama, Japan 2009 Oral Presentation

### Koh ES. Kang S. Vinod SK and Jalaludin B.

The cost of definitive and palliative management in non-small cell lung cancer. Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Koh ES.

Patients behaving badly - Challenging behaviour in cancer patients workshop on 'Cognitive and Behavioural impairment in cancer'.

Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Koh ES, Kang S, Vinod SK and Jalaludin B.

Comparison of direct medical costs in managing lung cancer with curative versus palliative intent.

Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Koh ES.

Overview - Dealing with patients with cognitive and behavioural problems. Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Kang S, Koh ES, Vinod SK and Jalaludin B.

Cost analysis of lung cancer management in South Western Sydney. 13th World Conference on Lung Cancer. San Francisco 2009

## Kang S, Koh ES, Vinod SK and Jalaludin B.

Cost analysis of lung cancer management in South Western Sydney. Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009

## Jameson M, Holloway LC, Vial P, Vinod SK and Metcalfe P.

Contouring studies in radiotherapy: A review of methods used to compare contours. Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009

## Goldrick A, Della-Fiorentina S, Chantrill L and Yip PY.

Retrospective review of adjuvant Trastuzumab use in the Western Zone of Sydney South West Area Health Service.

Medical Oncology Group of Australia (MOGA). Sydney 2009 Poster

## Fuller M, Tattersall M, Fowler A, Vinod SK and Koh ES.

FDG-PET directed radiotherapy dose escalation in non-small cell lung cancer. Australia and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

## Forstner D, Koneru S, Shafiq J, Ng W and Fowler A.

Implementation of an integrated electronic health related quality of life (HRQOL) assessment tool into routine clinical practice.

Australian and New Zealand Head & Neck Society 11th ASM. Fremantle 2009

### Duggan K and Sharmin M.

Cancer systems interoperability: Turning Australian registrar dreams into reality.

National Cancer Registrars Association 35th Educational Conference. New Orleans 2009

## Duggan K and Sharmin M.

Advocating our cancer information resource: An Australian perspective.

National Cancer Registrars Association 35th Educational Conference. New Orleans 2009

## Dall'Armi L, Simpson G, Forstner D, Simpson T and Kwa B.

Patterns of information needs and affective distress for people with head and neck cancer and their family members.

Australian and New Zealand Head & Neck Society 11th ASM. Fremantle 2009 Oral Presentation

Currow D, Agar M, Smith J and Abernethy A.

Does home oxygen improve dyspnoea. A consecutive cohort study.

11th European Association for Palliative Care Congress. Vienna 2009

Currow D, Agar M, Plummer J and Abernethy A.

A random whole-of-population prevalence survey of adult rates of chronic pain.

Australian Pain Society AGM. Sydney 2009

## Caldwell K, Lau A, Vinod SK, Fowler A and Ohanessian L.

A DVH comparison study of OAR for cervix brachytherapy.

Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009 Oral Presentation

## Begg J, Holloway LC, Franich R and Kron T.

Comparison of optical density obtained from 2D projections and 3D reconstruction for an optical CBCT scanner.

Combined Scientific Meeting (CSM). Brisbane 2009

## Batumalai V, Koh ES, Delaney GP, Holloway LC and Jameson M.

Variability in clinical target volume delineation for tangential breast irradiation: Comparison between radiation oncologists and radiation therapists.

Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009 Oral Presentation

## Barton M.

Development of Australian Guidelines (Brain Tumours).

Clinical Oncological Society of Australia (COSA) 36th ASM. Gold Coast 2009

## Barton M.

Radiotherapy risk profile. Modern radiotherapy: Challenges and advances in radiation protection of patients.

Presented by The French Nuclear Safety Authority. Versailles, France 2009

Ball D, Fisher R, Burmeister BH, Poulsen M, Graham P, Penniment M, Vinod SK, Krawitz H, Joseph D, Wheeler G and McClure B.

The complex relationship between lung tumour volume to survival in patients with non-small cell lung cancer (NSCLC) treated by definitive radiotherapy.

13th World Conference on Lung Cancer. San Francisco 2009

Oral Presentation

Ball D, Fisher R, Burmeister BH, Poulsen M, Graham P, Penniment M, Vinod SK, Krawitz H, Joseph D, Wheeler G and McClure B.

The complex relationship between lung tumour volume to survival in patients with non-small cell lung cancer (NSCLC) treated by definitive radiotherapy. (TROG study 9905)

Royal Australian and New Zealand College of Radiologists ASM. Brisbane 2009

## Agar M, Currow D, Seidel R, Plummer J, Carnahan R and Abernethy A.

Changes in anticholinergic load from regular prescribed medications in palliative care as death approaches.

11th European Association for Palliative Care Congress. Vienna 2009

## Agar M, Draper B, Philips P, Griffiths R, Harlum J, Sanderson C and Currow D.

Descriptive study of decision making by palliative care, aged care, aged care psychiatry and oncology nurses caring for confused patients in an inpatient setting.

11th European Association for Palliative Care Congress. Vienna 2009

## Yakobi J and Jameson M

The effectiveness of head and neck contouring atlas in critical structure delineation. Combined Scientific Meeting (CSM). Brisbane 2009

## Kumar S, Franji I, Blakeney S, Ochoa C, Andrew K, McKibbin C, Vinod SK, Koh ES, Lonergan D, Fuller M, Sidhom M, Holloway LC, Tawfik C, Rennie M, Young T, Arumugam S

Determining the setup accuracy for lung cancer patients undergoing curative radiotherapy at Liverpool and Macarthur Cancer Therapy Centres, NSW.

Combined Scientific Meeting (CSM). Brisbane 2009

## Jameson M, Holloway LC, Vial P and Metcalfe P.

Contouring variability and its effect on radiobiology.

Combined Scientific Meeting (CSM). Brisbane 2009

## Holloway LC, Prasad S and Forstner D.

Possibility of altered fractionation for IMRT nasopharynx treatments: A modelling study. Combined Scientific Meeting (CSM). Brisbane 2009

## Holloway LC, Miller J, Prasad S and Vinod SK.

A program to generate radiobiological and dosimetrick values for dose volume histogram files. Combined Scientific Meeting (CSM). Brisbane 2009

## Deshpande S, Vial P and Holloway LC.

An intercomparison of dose response for 3 Siemens amorphous silicon EPIDs. Combined Scientific Meeting (CSM). Brisbane 2009

## Cho G, Kuncic Z, Holloway LC and Baldock C.

Tumour response modelling based on radiobiological image data. Engineering & The Physical Sciences in Medicine. Canberra 2009

### Cevlan A. Vial P and Holloway LC.

Characterisation of EPID response with and without additional build up. Combined Scientific Meeting (CSM). Brisbane 2009

## Arumugam S and Holloway LC.

Comparison of dose from kilovoltage and megavoltage cone beam Computed Tomography. Engineering & The Physical Sciences in Medicine. Canberra 2009

### Arumugam S and Holloway LC.

The influence of penumbra modelling on IMRT dosimetry. Combined Scientific Meeting (CSM). Brisbane 2009

Gustafsson H, Vial P, Kuncic Z, Baldock C, Denham J and Greer PB.

Intensity-modulation radiation therapy verification with a novel modified EPID design.

Combined Scientific Meeting (CSM). Brisbane 2009

Gustafsson H, Vial P, Kuncic Z, Baldock C and Greer PB.

IMRT Dosimetry: Direct dose to water dosimetry for pre-treatment verification using a modified EPID.

European Society for Therapeutic Radiology and Oncology. Barcelona 2009

## Vial P, Deshpandeb S, Arumugam S, Goozée G and Holloway LC.

Simple and efficient pre-treatment IMRT verification using EPIDs.

Engineering & The Physical Sciences in Medicine. Canberra 2009

## Fyles AW, Lim K, Small W, et al.

Variability in delineation of clinical target volumes for cervix cancer intensity-modulated pelvic radiotherapy.

American Society of Radiation Oncology 51st ASM. Chicago, Illinois 2009

## Stewart J, Lim K, Brock K, et al.

Optimizing replanning of IMRT of cervix cancer based on dosimetric assessment of treatment process.

American Society of Radiation Oncology 51st ASM. Chicago, Illinois 2009

## Caldwell K, Lau A, Vinod SK, Fowler A and Ohanessian L.

A DVH comparison study of OAR for cervix brachytherapy. Australasian Brachytherapy Group meeting. Melbourne 2010 Oral Presentation

## Kumar S, Juresic E, Barton M and Shafiq J

Management of skin toxicity during radiation therapy: A review of the evidence. Combined Scientific Meeting (CSM). Brisbane 2009

## Vinod SK, Holloway LC, Prasad S, McKibbin C, Andrew K, Blakeney S, Franji I, Shafiq J, Koh ES and Fuller M.

Dosmetric implications of the addition of 18FDG-Positron Emission Tomography (PET) in CT-based radiotherapy planning for non-small cell lung cancer (NSCLC) Combined Scientific Meeting (CSM). Brisbane 2009

## Vial P, Dehspande S, Goozée G and Holloway LC.

Dosimetric characteristics and potential applications of the ImRT MatriXX operating in movide mode.

Engineering & The Physical Sciences in Medicine. Canberra 2009

## Tran T, Vial P and Holloway LC.

Prostate hypofractionation: A modelling study considering IMRT treatment plans.

Engineering & The Physical Sciences in Medicine. Canberra 2009

### Holloway LC and Vial P.

A software program to determine possible fractionation schedules tailored for individual patients based on normal tissue tolerances.

Engineering & The Physical Sciences in Medicine. Canberra 2009

## Vial P, Ceylan A, Deshpande S and Holloway LC

Beam start-up characteristics: A comparison of four Siemens and one Electa linac. Combined Scientific Meeting (CSM). Brisbane 2009

## Quinn A, Holloway LC, Zealey W and Metcalfe P.

How to turn a good image into a bad one: An image simulation process to reduce patient exposure.

Combined Scientific Meeting (CSM). Brisbane 2009

## Quinn A, Holloway LC, Arumugum S, Delaney GP, Batumalai V, Nelson V, Owen K, Goozee G, Vial P and Metcalfe P

Contralateral breast dose and secondary risk: A comparison between treatment kV and MV cone-beam imaging

Combined Scientific Meeting (CSM). Brisbane 2009

## Nelson V, McLean D and Holloway LC

Use of thermoluminscent dosimetry (TLD) for quality assurance of orthovoltage x-ray therapy machines.

7th International Conference on Luminescent Detectors and Transformers of Ionizing Radiation LUMDETR. Krakow, Poland 2009

## Miller J, Fuller M, Vinod S, Suchowerska N and Holloway LC

The significance of choice Radiobiological (NTCP) models in treatment plan objective functions

Combined Scientific Meeting (CSM). Brisbane 2009

## Gustafsson H, Vial P, Kuncic Z, Baldock C and Greer PB

EPID dosimetry: Effect of different layers of material on absorbed dose response

## Stafford-Bell F, Agar M and Seppelt I.

Prognostic characteristics of a Medical Emergency Team population with a known life-limiting illness.

World Congress of Internal Medicine. Melbourne 2010

**Oral Presentation** 

## Stafford-Bell F, Agar M and Seppelt I.

Prognostic characteristics of a Medical Emergency Team population with a known life-limiting illness.

European Association for Palliative Care 6th Research Congress. Glasgow 2010 Poster Presentation

## **Agar M**, Lobb L, Wilkinson A, Currow D, **Elliott L, Strutt R**, Tang J, Petrie N, Collier A, **Harlum J,** Chen J, Stevenson J and Hillman K.

Prospective study of medical emergency team (MET) calls to define issues of end of life decision making, symptoms and transitions in goals of care.

European Association for Palliative Care 6th Research Congress. Glasgow 2010 Poster Presentation

## **Agar M**, To T, Plummer J, Abernethy A and Currow D.

Anticholinergic load, health care utilisation and survival in people with advanced cancer. A pilot study.

European Association for Palliative Care 6th Research Congress. Glasgow 2010 Poster Presentation

Currow D, **Agar M**, Dal Grande E, Burns C, Wilkinson A and Abernethy A. Caregiving trajectories mirror different patterns of functional decline by diagnosis. European Association for Palliative Care 6th Research Congress. Glasgow 2010 Poster Presentation

## To T, Greene A, Agar M and Currow D.

A cross sectional audit of palliative care needs in the acute hospital setting. European Association for Palliative Care 6th Research Congress. Glasgow 2010 Poster Presentation

## Faddy K, Bye R, Cummings A and Newman C.

The impact of post-breast cancer lymphoedema on women's occupations. World Federation of Occupational Therapy Conference. Santiage, Chile 2010 Poster

## Batumalai V, Tran T, Blakeney S, Sampson D, Moretti D, Cloak K, Wallis A, Cusack N and Fuller M.

Implementation and use of assessments as an electronic checklist in radiation oncology. Elekta Australasian User's Meeting. Kingscliff 2010 Poster

## Tran T, Kaadan N, Vinod SK, Luxford T, Batumalai V and Koh ES.

Multi-Access and crystal reports: Simply a database and report writer or a research tool? Elekta Australasian User's Meeting. Kingscliff 2010 Poster

## Koczwara B, Barton M, Grimison P, Blinman P and Walpole E.

Crossing Sally: The shortage of medical oncologists and low chemotherapy utilization in Australia.

American Society of Clinical Oncologists (ASCO) Annual meeting. Chicago, Illinois 2010 Abstract Presentation

## Francis K, Barton M, Grimison P, Blinman P and Walpole E.

Crossing Sally: The shortage of medical oncologists and low chemotherapy utilization in Australia.

American Society of Clinical Oncologists (ASCO) Annual meeting. Chicago, Illinois 2010 **Dall'Armi L, Baxter C, Simpson T, Bell K, Forstner D** and McGuinness J.

A pre-treatment clinic for high-risk Head and Neck cancer patients: A new multidisciplinary care coordinator and allied health service.

Cancer Care Coordination Conference. Gold Coast 2010 Oral Presentation

**ELECTRONIC CITATION** 

## Shafiq J and Barton M.

Radiation therapy risks: Prioritizing patient safety.

Medical Physics Web. 2009

### **GRANTS**

Butow PN, **Barton M**, **Adams D**, Pavlakis N, Back M, Clayton J, Tattersall M, Epstein R, Davidson P and Young J.

Improving QoL at the end of life: A randomised controlled trial of a doctor / nurse / patient intervention.

National Health and Medical Research Council (NHMRC). \$660,800 (3). 2009-2011

## Barton M, Shafiq J, Ng W, Viney R, Grimison P and King M.

Development of cancer-specific multi-attribute health states from the QLQ-C30 for use in economic evaluation.

Cancer Institute. \$41,814. 2009

Funding for a Clinical Trials Nurse at Southern Highlands Cancer Centre.

NSW Cancer Institute . \$129,000 over two years (2). 2009

## Aung JCC.

Education Scholarship Post-graduate Diploma in Clinical Research (Oncology). Cancer Institute NSW. \$19,800 over two years. 2010

## **IN PRESS**

## Ward A, Agar M and Koczwara B.

Collaborating or co-existing: Attitudes of Medical Oncologists toward Specialist Palliative Care. *Palliative Medicine* 2009

## Vinod SK, Goldsbury D, Simonella L, Delaney GP and O'Connell D.

Underutilisation of radiotherapy for lung cancer radiotherapy in NSW, Australia. *Cancer* 2009

Miller EKA, Graham PH, O'Toole SA, McNeil CM, Browne L, Morey AL, Eggleton S, Bertrov J, Theocharous C, Capp A, Nasser E, Kearsley J, **Delaney GP**, **Papadatos G**, Fox C and Sutherland R.

Prediction of local recurrence, distant metastases and death following breast-conserving therapy in early-stage invasive breast cancer using a five biomarker panel. *Journal of Clinical Oncology* 2009

## Jacob S, Hovey E, Vinod SK, Delaney GP and Barton M.

Estimation of an optimal chemotherapy utilisation rate for lung cancer: An evidence-based benchmark for cancer care.

Lung Cancer 2009

Currow D, Agar M, Smith J and Abernethy A.

Does palliative home oxygen improve dyspnoea?

Palliative Medicine 2009

Lim K, Small W Jr, Portelance L, Creutzberg C, Jürgenliemk-Schultz IM, Mundt A, Mell LK, Mayr N, Viswanathan A, Jhingran A, Erisckson B, De Los Santos J, Gaffney D, Yashar C, Beriwal S, Wolfson A, Taylor A, Bosch W, El Naqa I, Fyles A

Consensus guidelines for delineation of clinical target volume for intensity-modulated pelvic radiotherapy for the definitive treatment of cervix cancer.

International Journal of Radiation Oncology Biology Physics. 2010. May 14

### **INVITED LECTURES**

## Vinod SK and Ho-Shon I.

Radiation and Nuclear Medicine: A marriage made in heaven or trouble in paradise. Australian and New Zealand Society of Nuclear Medicine 39th ASM. Sydney 2009

Simpson G, Koh ES, Wright K, Simpson T, Firth R, Whiting D and Younan K.

Novel approaches to the assessment and management of behavioural and cognitive impairment in adults with primary brain tumour.

Cancer Institute NSW Journal Club. 2009

### Patel V.

Liverpool experience with cement compensators in radiotherapy. International Conference on Medical Physics, Radiation Protectionand Radiobiolgy ICMPRPR-2k9. Jaipur, India 2009

### Barton M.

Round table discussion: Training, education and staffing: Focus on low and medium income countries

Invited Panel Member: IAEA ICARO, Vienna 2009

### Barton M.

Consultant's Meeting: Development of a the Medical Physics and Radiation Oncology / Biology parts of the NAHU (Division of Human Wealth) Website.

International Atomic Energy Agency. Vienna 2009

### Barton M.

Demand modelling in Australia: Effectiveness and cost effectiveness of radiotherapy: What is the impact of missed radiation therapy.

Modelling of Radiotherapy Demand Meeting - Cancer Action Team. 2009

## Allen B and Patel V.

Appropriate technology for palliative care in developing countries. International Conference on Medical Physics, Radiation Protectionand Radiobiology ICMPRPR-2k9. Jaipur, India 2009

### **JOURNALS**

## Agar M.

Management of delirium in the patient with cancer pain.

16th International Conference for Indian Association of Palliative Care. New Delhi 2009 Wright K, Simpson T and Koh ES.

Long term facilitation of a hospital-based brain tumour support program. *Asia-Pacific Journal of Clinical Oncology.* 2009. 4: A236

## Vinod SK.

Quantitative evaluations for the optimal utilisation of radiotherapy in lung cancer. Asia-Pacific Journal of Oncology & Haematology. 2009. 1: 37-44

## Vinod SK, Holloway LC, Prasad S, McKibbin C, Andrew K, Blakeney S, et al.

Dosimetric implications of the addition of 18FDG-Positron Emission Tomography (PET) in CT-based radiotherapy planning for non-small cell lung cancer (NSCLC).

Journal of Medical Imaging and Radiation Oncology. 2009. 53: A109

## Vinod SK, Caldwell K, Lau A, Fowler A, and Ohanessian L.

A DVH comparison study of OAR for cervix brachytherapy.

Journal of Medical Imaging and Radiation Oncology. 2009. 53: A169

## Vinod SK, Sidhom M, Gabriel G, Lee M and Delaney GP.

Why do some lung cancer patients receive no anti-cancer treatment? *Journal of Thoracic Oncology.* 2009. 4S: S422

## Vinod SK, Goldsbury D, Simonella L, Delaney GP and O'Connell D.

Underutilisation of radiotherapy for lung cancer radiotherapy in NSW, Australia.

Journal of Thoracic Oncology. 2009. 4S: S662

## Vinod SK.

Outcomes of curative radiotherapy for lung cancer in South Western Sydney. *Journal of Medical Imaging and Radiation Oncology.* 2009. 53:L A278

## Starmer DL and Barton M.

Advances in cancer management: At what cost to medical student education? *Journal of Cancer Education*. 2009. 24: 233-7

## Simonella L, O'Connell D, Vinod SK, Esmaili N, Hensley MH, Goldsbury D, et al.

No improvement in lung cancer care: The management of lung cancer in 1996 and 2002 in New South Wales, Australia.

Internal Medicine Journal. 2009. 39: 453-8

## Sidhom M, Vinod SK, Gabriel G, Lee M, and Delaney GP.

Guideline-based recommended therapy in the management of lung cancer: Why are patients not treated according to guidelines?

Journal of Thoracic Oncology. 2009. 4S: S426

## Sidhom M, Vinod SK, Gabriel G, Lee M and Delaney GP.

Why are some lung cancer patients not treated according to guideline recommended therapy? *Journal of Medical Imaging and Radiation Oncology.* 2009. 53: A265

## Shafiq J, Barton M, Noble D, Lemer C and Donaldson LJ.

An international review of patient safety measures in radiotherapy practice.

Radiotherapy and Oncology. 2009. 92: 15-21

## Prasad S, Franji I, Blakeney S, Ochoa C, Andrew K, McKibbin C, et al.

Determining the set-up accuracy for lung cancer patients undergoing curative radiotherapy at Liverpool and Macarthur Cancer Therapy Centres, NSW.

Journal of Medical Imaging and Radiation Oncology. 2009. 53: A219

### Ng W. Jacob S. Delanev GP and Barton M.

Estimation of an optimal chemotherapy utilisation rate for head and neck carcinoma: Setting an evidence-based benchmark for the beast-quality cancer care.

European Journal of Cancer. 2009. 45: 2150-9

## Miller JL, Fuller M, Vinod SK, Suchowerska N and Holloway LC.

The significance of the choice of radiobiological (NTCP) models in treatment plan objective functions.

Australasian Physical and Engineering Sciences in Medicine. 2009. 32 (2): 81-7

## Luxford T, Vinod SK, Koh ES, Tran T and Baker K.

Use of a validated assessment tool in lung cancer patients to identify symptom burden: The value of nursing-led care coordination model.

Asia-Pacific Journal of Clinical Oncology. 2009. 4: A168

## Koh ES, Kang S, Vinod SK and Jalaludin B.

The cost of definitive and palliative management in non-small cell lung cancer.

Asia-Pacific Journal of Clinical Oncology. 2009. 4: A167

### Koh ES.

Patients behaving badly - Challenging behaviour in cancer patients workshop on 'Cognitive and behavioural impairment in cancer'.

Asia-Pacific Journal of Clinical Oncology. 2009. 4: A151

## Koh ES, Kang S, Vinod SK and Jalaludin B.

Comparison of direct medical costs in managing lung cancer with curative versus palliative intent.

Asia-Pacific Journal of Clinical Oncology. 2009. 4: A167

## Ke H, Koh ES, Simpson G and Whiting D.

Screening for cognitive impairment in primary brain tumour: Is the Montreal Cognitive Assessment a more sensitive tool than the Mini-Mental State Examination?

Asia-Pacific Journal of Clinical Oncology. 2009. 4: A173

## Kao S, Shafiq J, Vardy J and Adams D.

Use of chemotherapy at end of life in oncology patients.

Annals of Oncology. 2009. On Line

## Kang S, Koh ES, Vinod SK and Jalaludin B.

Cost analysis of lung cancer management in South Western Sydney. Journal of Medical Imaging and Radiation Oncology. 2009. 53: A48

## Jameson M, Holloway LC, Vial P, Vinod SK and Metcalfe P.

Contouring studies in radiotherapy: A review of methods used to compare contours.

Journal of Medical Imaging and Radiation Oncology. 2009. 53: A230

## Jacob S, Ng W, Asghari R, Delaney GP and Barton M.

Estimation of an optimal chemotherapy utilisation benchmark rate for colorectal cancer. An evidence-based benchmark for cancer care.

European Journal of Cancer. 2009. 45: 2503-9

## Harris K, Chow E, Zhang L, Velikova G, Bezjak A, et al.

Patients' and Health Care Professionals' evaluation of health-related quality of life issues in bone metastases.

European Journal of Cancer. 2009. On Line

## Fong A, Bromley R, Beats M, Vien D, Dineley J and Morgan G.

A dosimetric comparison of intensity modulated radiotherapy techniques and standard wedged tangents for whole breast radiotherapy.

Journal of Medical Imaging and radiation Oncology. 2009. 53: 92-9

Chow E, Hird A, Velikova G, Johnson C, Dewolf L, Bezjak A, et al.

The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire for patients with bone metastases: The EORTC QLQ-BM22.

European Journal of Cancer. 2009. 45: 1146-52

## Boxer M, Forstner D, Kneebone A, Delaney GP, Koh ES, Fuller M, et al.

Impact of a real-time peer review audit on patient management in a radiation oncology department.

Journal of Medical Imaging and Radiation Oncology. 2009. 53: 405-11

## Holloway LC.

Of what use is radiobiological modelling?

Australasian Physical and Engineering Sciences in Medicine. 2009. 32 (2): xi-xiv

## Vial P, Gustafsoon H, Oliver L, Baldock C and Greer PB.

Direct-detection EPID dosimetry: Investigation of a potential clinical configuration for IMRT verification.

Australasian Physical and Engineering Sciences in Medicine. 2009. 54: 7151-69

## Gustafsson H, Vial P, Kuncic Z, Baldock C and Greer PB.

EPID dosimetry: Effect of different layers of materials on absorbed dose response.

Medical Physics. 2009. 36 (12): 5665-74

## Jabob S, Wong K, Delaney GP, Adams P and Barton M

Estimation of an optimal utilisation rate for palliative radiotherapy in newly diagnosed cancer patients.

Journal of Clinical Oncology. 2010. 22 (1): 56-64.

## Kumar S, Juresic E, Barton M and Shafiq J

Management of skin toxicity during radiation therapy: A review of the evidence *Journal of Medical Imaging and Radiation Oncology*. 2010 54 (3): 264-279

Lim K, Small W Jr, Portelance L, Creutzberg C, Jürgenliemk-Schultz IM, Mundt A, Mell LK, Mayr N, Viswanathan A, Jhingran A, Erisckson B, De Los Santos J, Gaffney D, Yashar C, Beriwal S, Wolfson A, Taylor A, Bosch W, El Naga I, Fyles A

Consensus guidelines for delineation of clinical target volume for intensity-modulated pelvic radiotherapy for the definitive treatment of cervix cancer.

International Journal of Radiation Oncology Biology Physics. 2010. May 14

## Batumalai V, Koh ES, Delaney GP, Holloway LC and Jameson M.

Variability in clinical target volume delineation for tangential breast irradiation: Comparison between radiation oncologists and radiation therapists.

Journal of Medical Imaging and Radiation Oncology. 2009. 53: A101

## Agar M, Currow D, Seidel R, Plummer J, Carnahan R and Abernethy A.

Changes in anticholinergic load from regular prescribed medications in palliative care as death approaches.

Palliative Medicine. 2009. 23: 257-265

## **REPORTS**

Simpson G, Wright K, Simpson T, Koh ES, Firth R, Whiting D and Younan K.

Addressing the behavioural and cognitive sequelae of adults with brain tumour: Trialling a behavioural consultancy model. 2009

## Dall'Armi L, Forstner D, Simpson G and Simpson T.

Developing information resources for people with head and neck cancer. 2009

### **THESIS**

## Vial P.

Aspects of clinical dosimetry in intensity modulated radiation therapy. University of Sydney. 2009

## **UNIVERSITY ACHIEVEMENTS**

## Wong K.

Conjoint Lecturer. University of New South Wales. 2009

## Vinod SK.

Title of Associate Professor. 2009

### Vial P.

Doctor of Philosophy. University of Sydney. 2009

## Lonergan D.

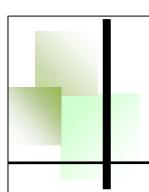
Master in Medical Education. University of Sydney. 2009

## Fong A.

Conjoint Associate Lecturer. University of New South Wales. 2009

## Duggan K.

Masters in Public Health. University of New South Wales. 2009



## Valued Employees

## Liverpool

July 2009
August 2009
September 2009
October 2009
November 2009
December 2009
January 2010
February 2010
March 2010
April 2010
May 2010
June 2010

Karen Singh Jodie Peronchik Sandie Watt Isabella Franji Diana Ngo Candice Baxter Lenore Knapman Keri Owen Thanh Tran Joshua Sams Amanda Goldrick David Warner Transcription
Palliative Care Nurse
Radiation Therapist
Radiation Therapist
Registered Nurse
Speech Pathologist
Medical Oncology CNC
Medical Physicist
OIS System Analyst
Radiation Therapist
Medical Oncology
IT Analyst

## Macarthur

December 2009 January 2010 February 2010 March 2010 April 2010 May 2010 June 2010 Jhoanne Plan
Joshua Sams
Kathy Andrew
Leanne Radovic
Jenny Treloar
Julie O'Brien
Administration Team

Registered Nurse Radiation Therapist Radiation Therapist Administration CNC Breast Nurse Administration Administration



## 31 January 1960 - 6 August 2010

Anne-Marie began her nursing career in 1978 at St. Vincent's Hospital, Darlinghurst. After completing her training, she travelled to the UK, and it was while she was working at the Marsden Hospital in London, she developed an interest in Oncology and completed her Oncology Nursing certificate. After returning to Australia, Anne-Marie undertook further studies in Psychotherapy and also graduated as a Master in Public Health.



Anne-Marie continued to work in Oncology, taking on positions at Westmead Hospital, RPA and Liverpool Hospital, as well as the Cancer Institute and Cancer Council. She has presented at Cancer focused

conferences, written many Cancer related guidelines, policies and protocols, and assisted with setting up the SSWAHS Cancer registry. Her contribution to Cancer Services, locally & globally, will prove a great legacy for cancer care.

Since 1995 she has been employed at Liverpool Hospital on three different occasions, in the capacity of Oncology CNC, Nurse Unit Manager GGE and Breast Care Coordinator. She was always very professional in her manner and worked diligently in the roles that she undertook. She treated patients with compassion, dignity and understanding and had a real "soft spot" for those who were socially or mentally disadvantaged.

She had a passion for improving patient care, and readily volunteered for any committee with such a focus. She ran a Breast Cancer Support group here at Liverpool and was also involved with the Cancer Council Breast Cancer Support group.

In 2003, shortly after commencing her position as Breast Care Coordinator, Anne-Marie was diagnosed with Breast Cancer. The fact that she continued to work in her role and support her patients, while undergoing treatment, is a tribute to her inner strength and determination. In 2009, she undertook a secondment to the Cancer Institute, as it became apparent that she would require further treatment, which would be delivered at RPA.

Anne-Marie loved life, she loved people and she loved to socialise. She was very close to her family and many friends and liked nothing more than spending time with them. She also enjoyed travelling. As soon as she returned from one trip, she would be enthusiastically planning her next, even if it was just a weekend getaway, never letting her disease stand in her way.

Anne-Marie is survived by her long term partner, Julian, whom she married on 1 February 2009. The fact that she died of the same disease that she helped so many women combat, is a cruel, sad irony of life.