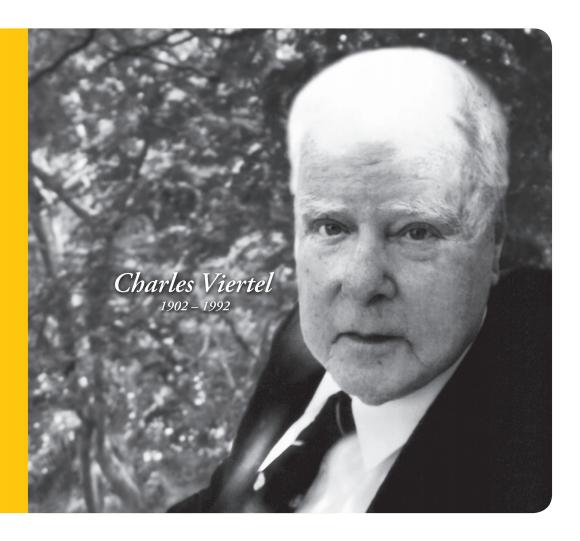


## Viertel Centre for Research in Cancer Control







The Sylvia and Charles Viertel Charitable Foundation was established in 1992, following the passing of Mr Charles Viertel, a prominent Queensland investor and philanthropist.

In 2004, the Foundation made a significant and ongoing commitment to Cancer Council Queensland in support of the Viertel Centre for Research in Cancer Control.

Cancer Council Queensland gratefully acknowledges the generous support of the Sylvia and Charles Viertel Charitable Foundation and its Chairman, Mr George Curphey OAM.

## Highlights in research for 2010

Descriptive epidemiology	3
Geographical inequalities	3
Cancer in children	4
Cancer causes and control	6
Skin cancer	6
Breast cancer	8
Community and applied psycho-oncology	9
Prostate cancer	9
Lifestyle and cancer	13
Professional research activity in 2010	10

Research to reduce the burden of cancer in our community

## Research highlights from 2010

- Publication of a comprehensive report on survival from childhood cancer showing that childhood cancer survival
  has continued to show significant improvement in recent years, mainly as a result of collaborative clinical trials
  of treatment.
- Publication of 37 scientific papers in peer-reviewed journals, demonstrating new findings and improved knowledge
  in cancer control for prostate cancer, skin cancer, breast cancer, colorectal cancer, brain tumour, childhood cancer;
  and in supportive care and geographical inequalities in cancer outcomes.
- 45 presentations at local, national and international conferences.
- Grant funding from external sources now at 51% of total centre funding.
- Associate Professor Peter Baade was awarded a prestigious 5-year Career Development Fellowship from the National Health and Medical Research Council.
- Continued our work to investigate the reasons for inequalities in cancer outcomes.
- Established collaborations with the Griffith Health Institute to develop a DNA and RNA biobank for genetic and molecular analysis of blood samples from women newly diagnosed with breast cancer.
- From our Melanoma Survivors Study we estimate that over 5,500 melanoma survivors can be expected to be experiencing distress but remain overlooked by health care professionals.
- Completed the 24-month post-treatment psychosocial assessments for men participating in our ProsCan Program, which will allow us to identify the early psychosocial and physical functioning outcomes of men following prostate cancer diagnosis and treatment.
- Men who participated in our Living with Advanced Prostate Cancer Project reported significant improvements in managing anxiety, including prostate cancer specific anxiety and fear of disease progression.
- Early results from our Beating the Blues After Cancer Study involving 690 participants from Queensland and NSW
  found that for cancer patients the majority of their unmet supportive care needs were psychological. For carers, their
  unmet needs were related to health care services and information related to the person diagnosed with cancer.



## Message from the Chief Executive Officer

#### Cancer is a distressing disease and its impact on our community is increasing.

It is the largest cause of total burden of disease in Queensland. Each year, more than 21,000 Queenslanders are diagnosed with cancer, a figure expected to rise to at least 30,000 each year by 2016.

In fact, the number of new cancer cases diagnosed in Queensland has been increasing by at least 3.5 per cent each year, outpacing Queensland's annual population growth.

These figures, and the continued growth and ageing of Queensland's population, make the Viertel Centre's epidemiological and psycho-oncological work essential to improving cancer outcomes.

Effectively controlling cancer requires determination and resources. And an unwavering collective commitment to find the causes of the disease, to learn how to prevent it and how to detect it early, to improve our management of the disease from curative treatment though to palliative care and to understand how best to provide for the social and psychological needs of those diagnosed and treated for cancer.

The Viertel Centre's research is fundamental to our efforts. It provides a foundation upon which cancer control activity is built. The research conducted in the Centre is vital not only to current patients, but to all Queenslanders. It enables us to translate findings into effective, state-wide programs for cancer prevention, early detection and improved patient care.

All program areas work together with the overall goal of improving cancer outcomes and reducing the burden of cancer on individuals and the community. Our research focus is unique in Queensland, driven by a team of researchers who are committed to supporting those affected by cancer.

The Viertel Centre has one aim: to provide all Queenslanders with the best possible prospects of preventing, detecting, effectively treating and surviving cancer. We are making progress in our mission, as this report demonstrates.

On behalf of the Viertel Centre's Executive Committee, I once again extend thanks to the Sylvia and Charles Viertel Charitable Foundation and its Chairman, Mr George Curphey OAM, for their long-term commitment to funding the Centre's pioneering work.

I also extend my thanks to the Viertel Centre's team of dedicated researchers, whose insight and initiative guide our progress.

We will continue to build on their work in our quest for a cancer free future.

Jeff Dunn

CEO



## Descriptive epidemiology

Through its Descriptive Epidemiology Research Program, the Viertel Centre for Research in Cancer Control (VCRCC) has continued its role as Queensland's primary source of cancer-related statistical information.

In 2010, the program focused on the vital task of improving understanding of the reasons for geographical inequalities in cancer survival and other outcomes in Queensland and in investigating the status of cancer in children.

#### Geographical inequalities in cancer outcomes

A primary focus of this program was to form a description of the geographical variations in cancer outcomes across Queensland, and investigate the possible reasons why these differences exist. The key resource for this research program is the data collected and maintained by the Queensland Cancer Registry. These data are enhanced and complemented by specifically designed research studies initiated by the VCRCC.

#### During 2010:

We continued work on the NHMRC-funded study investigating the reasons why colorectal cancer outcomes are
worse in rural areas of Queensland. Information on cancer stage (a major determinant of survival) was extracted
from pathology forms for over 28,000 patients, the first time that such a task has been attempted. Early work has
shown a significant association between distance from the nearest radiation facility, stage at diagnosis, and survival
outcomes. Using newly-developed multilevel analysis methodology, we have also shown that, independent of other
patient characteristics, breast cancer patients living in rural or disadvantaged areas are significantly more likely to be
diagnosed with advanced stage cancer.

#### Understanding patterns of geographical variation in cancer outcomes

Achieving health equity for all Australians, regardless of race, income and where they live, has been identified as the greatest health challenge faced by Australia. Before this goal can be realised, we need to understand how best to reduce these inequalities and improve cancer control equitably across all population groups. Specifically, what are the relative impacts of the various clinical, socio-demographic and psychological factors on screening, diagnostic, treatment and longer-term survival outcomes, and how do these differ by the characteristics of the geographical area in which people live? Advancing knowledge in this area will increase our capacity to develop and inform policy and other intervention efforts to improve the health of Australians generally and, more specifically, to reduce the disadvantage in cancer outcomes faced by a large section of our community simply because of where they live.

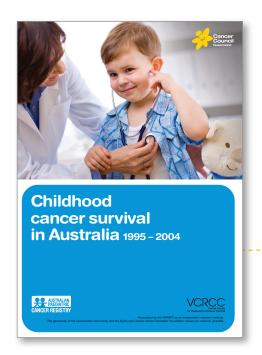
- We collaborated with external researchers in a successful funding application to the NHMRC to investigate the patterns of care, comorbidities and quality of life of Indigenous and non-Indigenous cancer patients. Also, in collaboration with the Co-operative Research Centre for Spatial Information at Queensland University of Technology (QUT), we were successful in obtaining funding to investigate spatial-temporal modeling of cancer incidence, survival and mortality. These two collaborative studies, complement our existing research studies and will provide critical information relating to the cancer experience for Indigenous people and development of statistical methodology for investigating spatial patterns in cancer outcomes.
- We continued to develop advanced statistical and spatial methodology that places the VCRCC at the forefront of
  this growing area of research. This is demonstrated in our collaborations with internationally-recognised researchers
  from universities and government and in our ability to attract research students to work with our teams to increase
  the knowledge base in this area.

#### Cancer in children

The VCRCC holds one of the few national childhood cancer registries in the world, the Australian Paediatric Cancer Registry (APCR). With appropriate ethical and legislative approvals, the APCR records clinical and treatment information of the more than 600 children each year diagnosed with cancer in Australia. Accurate and timely data collection is a key priority for the APCR. This is made possible through the assistance of all state and territory cancer registries in Australia and all treating paediatric oncology hospitals throughout Australia who provide information and allow our staff to collect information from their medical records.

- Staff from the VCRCC are committed to using information from the APCR to improve outcomes for children with cancer and ultimately to help identify and prevent the underlying causes of childhood cancer.
- In October 2010 the VCRCC published a broadranging report on childhood cancer survival in Australia, the first such detailed report to have been produced in this country. The report has received acclaim from patients' families and from clinicians working in this field. It will assist families of children affected by cancer to better understand the prognosis and may assist them in treatment decisions.



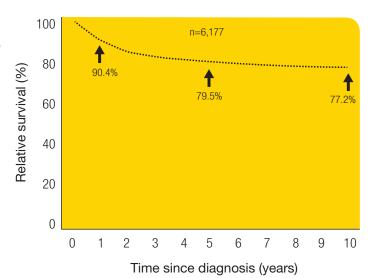


#### Viertel Centre for Research in Cancer Control Annual Report 2010

- Our research found that childhood cancer survival has continued to show significant improvement in recent years, mainly as a result of collaborative clinical trials of treatment.
- Another important finding was that rates of survival for Australian children diagnosed with cancer are similar to those reported in other developed countries, including the United States. This gives parents confidence that their child is receiving world class treatment in Australia.
- This work has attracted international attention, with two papers on childhood cancer incidence and survival in Australia published in the British Journal of Cancer during 2010, and three papers accepted for presentation at the premier international childhood cancer conference in late 2011.
- Some survivors of childhood cancer are known to experience long-term adverse health effects associated with their treatment, although detailed information is lacking. We are currently planning the first comprehensive population-based investigation of second malignancies and late mortality in Australians treated for cancer under the age of 15 years. This information is vital for ensuring appropriate long-term management of these patients, and for informing patients and their families of their long-term risks throughout adult life.

## Survival after a diagnosis of cancer in childhood

All childhood cancers, Australia, 1995 - 2004



## Cancer causes and control

#### Skin Cancer

Queensland records the highest incidence of melanoma and non-melanoma skin cancer in the world. In 2007, more than 2,600 individuals were diagnosed with melanoma and, with an increasing and ageing population, the number of people diagnosed with all forms of skin cancer is expected to increase. This will place an enormous and increasing burden on our health system. The VCRCC maintains an ongoing commitment to research into skin cancer that includes investigation of how skin cancer is managed, how patients fare after a diagnosis of melanoma, and our continued work into prevention and early detection.

#### Managing skin cancer in primary care

In Australia, general practitioners (GPs) have traditionally diagnosed and managed the vast majority of skin cancer in our community. However, more recently skin cancer clinics have emerged as an alternative form of service provision. Our previous work focused on comparing the diagnostic accuracy of GPs and skin cancer clinics in diagnosing skin cancer. As a follow-up during 2010 the VCRCC has been investigating management strategies used for treating skin cancer.

In 2010 some key findings from our skin cancer management study included:

- Approximately 44% of all consultations for a suspicious lesion resulted in a surgical procedure and this was similar for GP and skin cancer clinic patients.
- GPs were more likely than skin clinic doctors to wait and review a lesion of concern rather than treat immediately.
- For approximately one quarter of consultations a non-surgical procedure was carried out and this was marginally more common for GPs than skin cancer clinics (26.4% and 23.6%, respectively).
- Skin cancer clinics were significantly more likely to conduct a small punch biopsy of a suspicious lesion compared to mainstream GPs, whereas GPs were more likely to conduct a simple excision of a suspicious skin lesion.
- This study will assist the public to make informed decisions about their skin cancer treatment.



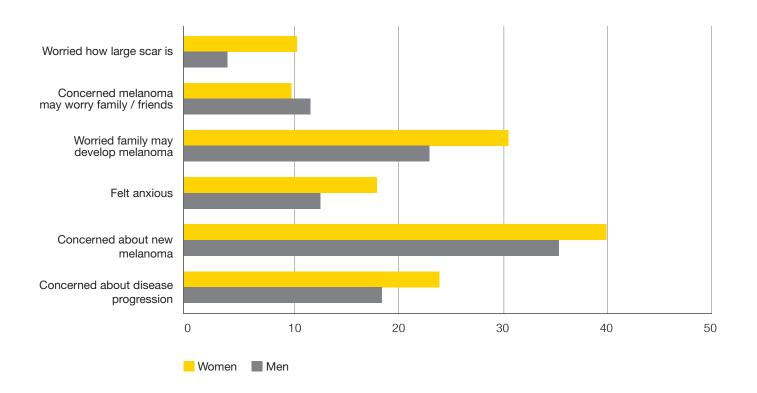
#### Viertel Centre for Research in Cancer Control Annual Report 2010

#### **Melanoma Survivors Study**

Our Melanoma Survivors Study represents the largest study internationally to examine health behaviours and levels of distress following a diagnosis of melanoma and includes over 2,500 patients. The results of this research have been presented at national conferences and included the following findings:

- Approximately 16% of melanoma survivors reported high levels of cancer-related distress. High distress was more common for women (19.5%) than men (12.7%) and in younger participants.
- As at 2007, it is estimated that over 34,000 people living in Queensland are living with a diagnosis of melanoma. Results of this study indicated that nearly 5,500 melanoma survivors are likely to be experiencing distress that remains untreated by health care professionals. Failure to detect and treat high distress can negatively affect cancer treatment outcomes and a patient's quality of life and can increase health care costs.

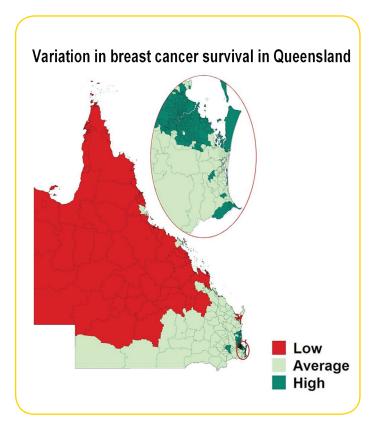
## Percentage of men and women with moderate to high levels of concern since melanoma diagnosis



#### **Breast cancer**

Breast cancer is the most common cancer affecting Australian women. Major inequalities exist in survival and psycho-social outcomes for women with breast cancer who live in rural and remote areas or in areas of disadvantage. There is little understanding of the precise reasons underlying these disparities. In 2010 the VCRCC was awarded a Cancer Australia grant to undertake an investigation of the reasons for inequalities in breast cancer outcomes. This study will enable us to determine whether the geographical areas in which women live have an impact on survival and other outcomes from breast cancer independent of the characteristics of the woman herself. This will provide targeted information and an opportunity for health care providers and policy makers to improve the future management of women with breast cancer. During 2010 the VCRCC undertook the pilot work for this project including:

- The development of telephone and self-administered questionnaires.
- Piloted telephone interviews with 50 women newly diagnosed with breast cancer. The piloting of the telephone interview in particular allowed us to refine and further develop the questionnaire to ensure we are able to capture all necessary data.
- Established collaborations with the Griffith
  University's Health Institute to establish a DNA and
  RNA biobank to undertake genetic and molecular
  analysis of blood samples from women participating
  in the breast cancer project.





# Community and applied psycho-oncology

#### **Prostate cancer**

Prostate cancer is the most common cancer among men in developed countries, with Australia and New Zealand currently recording the highest incidence rates of prostate cancer worldwide. In 2007, 19,403 Australian men were diagnosed with prostate cancer, with this number predicted to increase to 29,000 cases in 2011. The increasing incidence along with high survival rates mean a large cohort of men in our community are living with the outcomes of the diagnosis and treatment of their prostate cancer. Therefore, it is important that research into prostate cancer focuses on the wellbeing of men diagnosed with this disease so that men and their families can be best supported through diagnosis, treatment and future care.

## The ProsCan Program: Patterns of care and health-related outcomes for men newly diagnosed with prostate cancer in Queensland

The ProsCan Program is a longitudinal study of the pathways to care and psychosocial and physical functioning outcomes of men diagnosed with prostate cancer in Queensland. Recruitment for ProsCan was completed in 2007 with 1,074 men taking part.

#### 2010 highlights include:

- The completion of 24-month post-treatment psychosocial assessments which will be analysed to identify the early psychosocial and physical functioning outcomes of men following prostate cancer diagnosis and treatment.
- The collection of data from Medicare Australia and the Australian Bureau of Statistics (ABS) commenced in 2010 and this data is expected to arrive in early 2011.
   Medicare data will be used to evaluate the economic impact of prostate cancer treatment and ABS data will be used to determine if men diagnosed with prostate cancer have different health and socio-demographic characteristics to the general population.
- Additional funding was secured to extend the ProsCan program to annual assessments up to 10 years post diagnosis. This extension will allow us to better investigate the long-term outcomes of men who have undergone treatment for prostate cancer and the survivorship issues they face.

# Describing and predicting the psychosocial distress of partners of men with prostate cancer: ProsCan Partners Study

Treatment for prostate cancer can result in significant side-effects, including urinary, bowel and sexual dysfunction. These issues are personally distressing for the patient and may have a substantial impact on intimate relationships with partners. The ProsCan Partners Study was undertaken to identify the long term psychosocial experiences of partners of men with prostate cancer and to identify the factors which may predict poorer outcomes in partners. Results from this project will inform the development of future support programs at Cancer Council Queensland for partners of men with prostate cancer. In 2010 we:

- Finalised recruitment of the partners of men in the ProsCan program with 465 partners agreeing to participate in the Partners Study.
- Information collected on the partners will be matched to the ProsCan program men to identify how the distress and psychosocial experiences of the man and his partner interact. It is anticipated that these analyses will be undertaken in 2011.

## Preventive health behaviours of the families of men with prostate cancer

Men with a family history of prostate cancer are at increased risk of developing prostate cancer and, unlike many other cancers, a family history of prostate cancer does not change the cancer screening guidelines for these men. This project is examining the preventive health behaviours of men with a family history of prostate cancer and explores how men make decisions about their health behaviours.

#### Highlights from 2010 include:

- Recruitment of 419 brothers and sons of men participating in the ProsCan Program.
- Early findings are showing a diversity of experiences with prostate cancer.
- A comparison group of 300 men from the general population have also been recruited.
- Data analysis is now underway with initial analyses focusing on comparing the experiences of firstdegree relatives with men from the population sample. It is anticipated that results from these analyses will be published in 2011 and 2012.

## Development and evaluation of a new support program for men diagnosed with prostate cancer

Men diagnosed with localised prostate cancer are often faced with the challenge of making a treatment decision. Research has shown that men can experience significant distress around their treatment decision making and this can persist for some time after treatment. All men taking part in the ProsCan Program who were diagnosed with localised disease were offered the opportunity to participate in a randomised controlled trial of a psychosocial support intervention designed to assist men to make an informed treatment decision and to adjust to their diagnosis and side-effects of treatment. Over 740 men from the ProsCan Program agreed to participate in the trial of the support intervention, making this the largest randomised controlled trial of a decision support intervention internationally.

All men participating in the trial have completed their support calls with the specialist prostate care nurses who delivered the intervention. Analysis of the data from the support intervention will be undertaken in 2011 and will inform service delivery and future support programs at Cancer Council Queensland for men with prostate cancer.

# ProsCan for Couples: Randomised controlled trial of early intervention to improve sexual and couple functioning after prostate cancer

The most substantial long term morbidity from prostate cancer is sexual dysfunction with consequent adverse changes in couple and intimate relationships. Research to date has not identified an effective way to improve sexual and psychosocial adjustment for both men with prostate cancer and their partners. ProsCan for Couples is a randomised controlled trial of a couples based intervention that targets the specific challenges couples experience at diagnosis of localised prostate cancer and after radical prostatectomy. The study will compare the effectiveness of nurse delivered support vs. peer delivered support vs. usual care in providing support to couples; and is the first randomised controlled trial internationally to look at peer support as a model of service delivery for couples after prostate cancer.

- Recruitment for ProsCan for Couples continued throughout 2010, with 170 couples in the program to date. Recruitment is expected to be completed in early 2011.
- While the support intervention was initially developed for couples who had not yet undergone treatment for prostate cancer, feedback from clinicians, couples and peer support volunteers highlighted the relevance of the program for couples who were post-surgery. As a result, in 2010 ProsCan for Couples was expanded to include couples who had already undergone surgery for prostate cancer.



#### Mindfulness Mediation Group Intervention. Living with Advanced Prostate Cancer (LAPC) for men with advanced disease

This project investigated the acceptability and effectiveness of a Mindfulness Meditation Group program for men with advanced prostate cancer. The study arose from a growing awareness of the unmet needs of men with advanced prostate cancer and increasing evidence for mindfulness meditation as an effective treatment approach for people coping with cancer. The group program was trialled in Brisbane, the Gold Coast and Townsville and was facilitated by psychologists (staff of Cancer Council Queensland's Cancer Counselling Service) who were specially trained in the provision of mindfulness meditation groups.

#### In 2010, evaluation of group activity revealed that:

- Participants experienced significant improvements in managing anxiety, including prostate cancer specific anxiety and fear of disease progression. The majority of men reported that they liked meditating and that learning how to meditate was very helpful. Most men reported ongoing engagement in formal meditation practice three months after conclusion of the program.
- A mindfulness meditation tip sheet and audioresource for patients has been produced, along with a resource for health professionals who are considering running mindfulness meditation groups for men with advanced prostate cancer. These resources will be freely available to people on the beyondblue and Cancer Council Queensland websites in 2011.
- Cancer Council Queensland Cancer Counselling Service has now commenced Mindfulness Meditation Groups for patients and carers with different types and stages of cancer in Brisbane and Townsville.

#### Biological markers and prostate cancer

In the absence of a single definitive test for the diagnosis of prostate cancer, it is important to investigate the gene patterns and biological markers that are likely to be important in the development and progression of prostate cancer. Identifying these patterns and markers will assist in identifying men who are at greater risk of developing prostate cancer, and in particular identifying cases of more aggressive disease. Improvements in prostate cancer diagnostic testing will facilitate a holistic approach to understanding and managing diagnosis and treatment.

## Investigation of genetic markers in men with prostate cancer

The number of men diagnosed with prostate cancer varies substantially between different ethnic groups, which may indicate that genetics plays an important role in prostate cancer development, and highlights the need for genetic research into prostate cancer. In collaboration with researchers at the Queensland University of Technology (QUT) and Queensland Institute of Medical Research (QIMR), the ProsCan Program continues its involvement in studies that investigate genes that may be involved in prostate cancer. In addition, the ProsCan Program remains a member of the PRACTICAL Consortium, an international consortium of prostate cancer projects aimed at investigating genetics on an international level. In all these studies, the blood samples provided by the ProsCan Program men are combined with blood samples taken from other projects to look at the genes associated with prostate cancer.



- QUT and QIMR have isolated genomic DNA from the blood of 1,000 prostate cancer patients and 1,400 unaffected control individuals, and have begun studies to identify genetic patterns that may be related to prostate cancer risk, progression and outcomes.
- The PRACTICAL consortium has studied genetic patterns previously reported to be associated with prostate cancer in smaller national studies to try and identify if these patterns are significant worldwide. Thus far, the consortium has verified several of these reports, and recent work has also identified a number of new genes (such as THADA, ITGA6, PDLIM5, TET2, SLC25A37 (mitoferrin), NKX3-1, IGF2, PACSIN2) that may be involved in the pathogenesis of prostate cancer, which can lay a foundation for future therapeutic interventions.



New evidence suggests sunlight exposure may be associated with reduced risk for a number of cancers including prostate cancer through its role in the production of vitamin D. This study will investigate the relationship between sun exposure, vitamin D and prostate cancer progression in two large Australian prostate cancer cohort studies, Cancer Council Queensland's ProsCan Program and Cancer Council New South Wales' Prostate Cancer Outcomes Study. Changes in genes that affect Vitamin D function will be investigated and information on participants' history of sun exposure will be gathered. The information obtained from this project will inform clinicians and patients about the possible effects of sun exposure and vitamin D in the prevention of prostate cancer recurrence or progression.

#### Highlights in 2010 included:

 Continued recruitment with 676 ProsCan Program men now agreeing to take part in the study by December 2010. Recruitment is expected to be completed in early 2011, with the finalisation of interviewing and blood collection occurring by mid-year.



 Preparations are underway to collect data from the Queensland Cancer Registry and Medicare Australia on diagnostic variables and disease recurrence. It is anticipated that this data will be finalised in 2011 and will help determine whether sun exposure and vitamin D levels are related to the recurrence or progression of prostate cancer.

## Lifestyle and cancer

## CanChange: Trialing a lifestyle intervention for colorectal cancer survivors

A significant number of colorectal cancer survivors have poor lifestyle behaviours post-diagnosis. Many are physically inactive, eat a poor diet and are overweight or obese which negatively impacts on their cancer recovery, overall quality of life, risk of cancer recurrence and potentially survival. As such there is a need to develop and trial supportive care programs or interventions for colorectal cancer survivors with a focus on lifestyle behaviours. CanChange is a randomised controlled trial investigating the effects of a lifestyle intervention on lifestyle factors and health outcomes for recently diagnosed colorectal cancer survivors.

#### Highlights in 2010 include:

- 410 colorectal cancer survivors have been recruited into the study.
- Baseline results indicate that 88% of participants were insufficiently active, 65% were overweight, only 9% ate the recommended five serves of vegetables per day and about 54% the recommended two serves of fruit per day, and 32% consumed alcohol at high risk levels. These behaviours were worse than the general Queensland population.
- The intervention was highly acceptable to participants with 98% reporting that it met their expectations, 92% said it helped them achieve their health goals, 99% were satisfied with the intervention, and 80% said they received 'excellent' support from their health coach.

## CanPrevent: Developing and trialling a lifestyle intervention to reduce risk of colorectal cancer in first degree relatives of colorectal cancer survivors

First degree relatives (parents, siblings, children) of colorectal cancer survivors are around two to eight times more likely to develop colorectal cancer themselves. VCRCC researchers are developing and pilot testing a novel telephone-delivered lifestyle intervention for relatives of colorectal cancer survivors. The intervention aims to promote healthy lifestyle behaviours and appropriate colorectal cancer screening to support participants to reduce their cancer risk.

#### In 2010 we:

- Completed phase one of the study which involved focus groups with first degree relatives to assist with the development of the intervention.
- Phase two of the study has commenced with an overwhelming response from interested participants. This response highlights the desire for information and support by those at risk of colorectal cancer to improve their lifestyle and reduce their risk. Phase two is a trial of the intervention, with 20 participants, to test the acceptability and short-term effectiveness.

## Supportive care research

#### Beating the blues after cancer study

The diagnosis of cancer is for most people an anxious and bewildering time. High levels of psychological distress are common, and effective support can be hard to find. In 2008, with funding from Cancer Australia and beyondblue, we commenced our Beating the Blues After Cancer study to directly address this need. In brief, the project aims to assess the efficacy and cost-effectiveness of psychological interventions designed for cancer patients and carers who have high levels of distress and who have contacted the Cancer Council Helpline in Queensland and New South Wales for support.

#### Highlights during 2010 included:

- Completed recruitment of 690 participants into the study.
- The most common cancer diagnoses amongst these participants were breast, colorectal, and prostate cancer.
- For the carers in the study, the person they provided support for was most frequently their spouse/partner or parent and less commonly a child or sibling.
- For patients, the majority of the unmet supportive care needs were psychological.
- For carers, their unmet needs were related to health care services and information related to the person diagnosed with cancer.

#### Making sense of brain tumour project

Cancer and brain injury are both major causes of death and disability in Australia and other countries. Although brain tumour represents only approximately 1.4% of all cancers in Australia, this serious and chronic illness combines the effects of cancer and brain injury and thus poses serious threat to the person's survival, functioning and self-identity. Further, most of these individuals experience a progressive decline in function. In recognition of this, the VCRCC is working with collaborators at Griffith University to develop and evaluate a counselling and rehabilitation program for people with brain tumour and their caregivers. The program is designed to meet the varying needs of people with a benign or malignant tumour and thus is targeted towards the current patient/ carer group utilising Cancer Council Queensland's Brain Tumour Support Service. The Making Sense of Brain Tumour Project provides 10 sessions of home-based counselling and rehabilitation and aims to improve psychological well-being and everyday functioning of individuals with primary brain tumour and their family members.

#### In 2010

- Recruitment for the program began through Cancer Council Queensland's Brain Tumour Support Service, neurosurgeons, hospitals, and other supportive care organisations.
- Development of home-based counselling and rehabilitation interventions.
- Preliminary results indicate that for those who complete the program there is a significant benefit to mental health, functional well-being and quality of life.



# Professional research activity in 2010

#### **Publications**

During 2010 the VCRCC continued with its strong publication record. In 2010 we published 37 papers in peer-reviewed journals. VCRCC research findings continue to be widely cited by other researchers reflecting the importance of the work undertaken within the centre.

\*Bolded names belong to VCRCC research staff

#### VCRCC's peer-reviewed publications for 2010

**Aitken JF,** Elwood JM, **Baade PD, Youl PH,** English DR. Clinical whole-body skin examination reduces the incidence of thick melanomas. International Journal of Cancer. 2010;126(2):450-458.

**Baade P,** Aitken JF, Ferguson M, Gardiner RG, Chambers SK. Diagnostic and treatment pathways for men with prostate cancer in Queensland: investigating spatial and demographic inequalities. BMC Cancer 2010; 10:452.

**Baade P,** Herrero Hernández E, Freedman DM, Smithers M, Fritschi L. Association between melanoma, ALS and PD – the possible role of treatment [Letter]. Neuroepidemiology 2010; 35:303-304.

**Baade P,** Youlden D, Valery P, Hassall T, **Ward L,** Green A, Aitken J. Population-based survival estimates for childhood cancer in Australia during the period 1997-2006. British Journal of Cancer 2010; 103:1663-1670.

**Baade P, Youlden D,** Valery P, Hassall T, **Ward L,** Green A, **Aitken J.** Trends in childhood cancer incidence in Australia, 1983-2006. British Journal of Cancer 2010; 102(3):620-6.

**Baade P,** Turrell G, **Aitken JF.** A multilevel study of the determinants of area-level inequalities in colorectal cancer survival. BMC Cancer 2010;10:24.

**Baade P,** Turrell G, **Aitken JF.** Geographic remoteness, area-level socioeconomic disadvantage, and advanced breast cancer: a cross-sectional multilevel study. Journal of Epidemiology and Community Health (In press Dec 2010).

**Baade P, Youlden D, Chambers S.** How long have I got? Using conditional probability to provide more relevant information about cancer survival outcomes. Medical Journal of Australia (In press Oct 2010).

Beadle G, Francesconi A, **Baade P.** Acute myeloid leukemia after breast cancer: therapy-related or host associated? European Journal of Clinical & Medical Oncology 2010; 2(1) 167-175.

Beesley V, Janda M, Eakin E, Auster J, **Chambers SK**, **Aitken J, Dunn J**, Battistutta D. Gynaecological cancer survivors and community support services: referral, awareness, utilisation and satisfaction. Psycho-Oncology 2010; 19(1):54-61.

**Chambers SK, Baade P,** & Pinnock C. Supportive care intervention in prostate cancer: Recent Advances and Future Challenges. Cancer Forum. 2010;34:1:23-26. Invited manuscript.

Cust AE, Armstrong BK, Goumas C, Jenkins MA, Schmid H, Hopper JL, Kefford RF, Giles GG, **Aitken JF**, Mann GJ. Sunbed use during adolescence and early adulthood is associated with increased risk of early-onset melanoma. Int J Cancer 2010. [Epub ahead of print].

DiSipio T, Hayes SC, Newman B, **Aitken J**, Janda M. Does quality of life among breast cancer survivors one year after diagnosis differ depending on urban and non-urban residence? A comparative study. Health and Quality of Life Outcomes 2010; 8:3-10.

**Dunn J,** Occhipinti S, Campbell A, **Ferguson M, Chambers SK.** Benefit finding after cancer: the role of optimism, intrusive thinking and social environment.
Journal of Health Psychology 2010. [Epub ahead of print].

Elliott KS, Zeggini E, McCarthy MI, Gudmundsson J, Sulem P, Stacey SN, Thorlacius S, Amundadottir L, Gro" nberg H, Xu J, Gaborieau V, Eeles RA, Neal DE, Donovan JL, Hamdy FC, Muir K, Hwang S, Spitz MR, Zanke B, Carvajal-Carmona1 L, Brown KM, Australian Melanoma Family Study Investigators¤, Mann GJ, Hopper JL, **Aitken JF**, Kefford RF, Giles GG, Armstrong

BK, Hayward NK, Macgregor S, Tomlinson IPM, Lemire M, Amos CI, Murabito JM, Isaacs WB, Easton DF, Brennan P, The PanScan Consortium¤, Barkardottir RB, Gudbjartsson DF, Rafnar T, Hunter DJ, Chanock SJ, Stefansson K, Ioannidis JPA\*. Evaluation of association of HNF1B variants with diverse cancers: collaborative analysis of data from 19 genome-wide association studies. PLoS ONE | www.plosone.org 1 May 2010 | Volume 5 | Issue 5 | e10858

Geller AC, Greinert R, Sinclair C, **Aitken J,** Boniol M, Breitbart E, Capellaro M, Doré J, Elwood M, Fletcher SW, Gallagher R, Gandini S, Halpern AC, Katalinic A, Lucas R, Marghoob AA, Nolte S, Schüz J, Tucker MA, Volkmer B, Weinstock MA. A nationwide population-based skin cancer screening in Germany: Proceedings of the first meeting of the international task force on skin cancer screening and prevention (September 24 and 25, 2009). Cancer Epidemiology 2010; 34(3): 355-8.

**Hawkes AL**, Hughes KL, **Hutchison SD**, **Chambers SK**. Feasibility of brief psychological distress screening by a community-based telephone helpline for cancer patients and carers. BMC Cancer 2010; 10:14.

Hawkes AL, Lynch BM, Owen N, Aitken JF. Lifestyle factors associated concurrently and prospectively with co-morbid cardiovascular disease in a population-based cohort of colorectal cancer survivors. European Journal of Cancer 2010 [Epub ahead of print].

**Hutchison S, Sargeant H, Morris B, Hawkes AL, Clutton S, Chambers S.** A community based approach to cancer counselling. Psycho-Oncology 2010. [Epub ahead of print].

Janda M, **Baade P, Youl PH, Aitken JF,** Whiteman DC, Gordon L, Neale RE. The skin awareness study: promoting thorough skin self-examination for skin cancer among men 50 years or older. Contemporary Clinical Trials 2010;31(1):119-130.

Janda M, Neale RE, **Youl P,** Whiteman DC, Gordon L, **Baade P.** Impact of a video-based intervention to improve the prevalence of skin self-examination (SSE) in men 50 years or older: the randomized Skin Awareness trial. Archives of Dermatology (In press Dec 2010).

Janda M, **Youl P,** Bolz K, Niland C, Kimlin M. Knowledge about health benefits of vitamin D in Queensland Australia Preventive Medicine 2010; 50(4):215-6.

Jones L, Leach L, **Chambers SK**, & Occhipinti S. Scope of practice of the breast care nurse: a comparison of health professional perspectives. European Journal of Oncology Nursing. 2010; 14 (4): 322-327.

Kam LYK, Knott VE, Wilson C, **Chambers SK.** Using the theory of planned behavior to understand health professionals' attitudes and intentions to refer cancer patients for psychosocial support. Psycho-Oncology 2010. [Epub ahead of print]. Langbecker D, **Youl PH,** Kimlin M, Remm K, Janda M. Factors associated with recall of media reports about vitamin D and sun protection. Aust NZ J Public Health (Accepted Nov 2010).

Legg M, Occhipinti S, **Ferguson M, Dunn J,** Chambers SK. When peer support may be most beneficial: The relationship between upward comparison and perceived threat. Psycho-oncology 2010. [Epub ahead of print].

Lynch BM, Owen N, **Hawkes AL, Aitken JF.** Perceived barriers to physical activity for colorectal cancer survivors. Support Care in Cancer 2010; 18: 729-734.

McDowell ME, Occhipinti S, **Ferguson M, Chambers SK.** Prospective predictors of psychosocial support service use after cancer. Psycho-Oncology 2010; DOI: 10.1002/pon.1774.

Morris BA, Campbell M, Dwyer M, Dunn J, Chambers SK. Survivor identity and posttraumatic growth after participating in challenge-based peer support programs. British Journal of Health Psychology (In press 28 Sep 2010).

Obermair A, **Youlden DR**, Young JP, Lindor NM, Baron JA, Newcomb P, Parry S, Hopper JL, Haile R, Jenkins MA, 2010. Risk of endometrial cancer for women diagnosed with HNPCC-related colorectal carcinoma. International Journal of Cancer; 127(11):2678–2684.

Ownsworth T, **Chambers SK, Hawkes A,** Walker D, & Shum D. Making sense of brain tumour: A qualitative investigation of personal and social processes of adjustment. Neuropsychological Rehabilitation 2011 Jan;21(1):117-37.



#### Viertel Centre for Research in Cancer Control Annual Report 2010

Ownsworth T, **Hawkes A, Chambers SK,** Walker D, & Shum D. Applying a biopsychosocial perspective to investigate factors related to emotional adjustment and quality of life for individuals with brain tumour. Brain Impairment 2010 Dec;11(3):270-280.

Rosendahl C, Hansen C, Cameron A, Bourne P, Wilson T, Cook B, Baker M, Keir J, Dicker T, Reid M, Williamson R, Weedon D, Soyer P, **Youl P,** Wilkinson D. Measuring performance in skin cancer practice: The SCARD Initiative. Int J Dermatol. 2010 [Epub ahead of print]

Royle J, **Baade P,** Joske D, Fritschi L. Risk of second cancer after lymphohematopoietic neoplasm. International Journal of Cancer. 2010 Sep 30. [Epub ahead of print]

Siskind V, Hughes MB, Palmer J, Symmons J, **Aitken J,** Martin N, Hayward N, Whiteman D. Risk factors for second primary melanomas. Journal of Investigative Dermatology 2010 (In press).

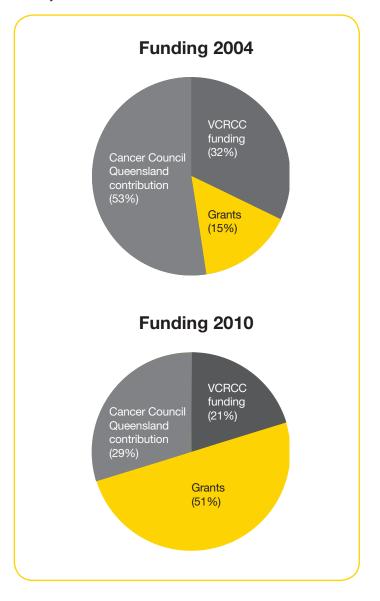
Siskind V, Hughes MCB, Palmer J, Symmons JM, **Aitken JF,** Martin NG, Hayward NK and Whiteman DC. Nevi, family history, and fair skin increase the risk of second primary melanoma. Journal of Investigative Dermatology 2010. [Epub ahead of print].

White KM, Hyde MK, O'Connor EL, Naumann L & **Hawkes A.** Testing a belief-based intervention encouraging sun safety among adolescents in a high risk area. Preventive Medicine 2010; 51:325-328.

**Youl P, Baade P,** Parekh S, English D, Elwood M, **Aitken J.** Association between melanoma thickness, clinical skin examination and socioeconomic status: results of a large population-based study. International Journal of Cancer, July 2010. [Epub ahead of print].

#### **Grants**

Reflecting our continuing commitment to supplementing our research funding through external sources, VCRCC researchers applied for a number of grants. Applications for funding are made through the National Health and Medical Research Council (NHMRC) and Cancer Australia, two of Australia's peak medical research funding bodies. Applications undergo a rigorous scientific review process which includes an examination of the scientific quality of the application, the track record of the researchers and the overall significance of the project in relation to health outcomes. At the end of 2010, VCRCC were awarded three new project grants totaling nearly \$1.7 million over three years.



## Nationally competitive grants during 2010

**Baade P,** Turrell G, **Aitken J,** Krnjacki L, Wilson L. Determinants of area-level inequalities in colorectal cancer survival: a multilevel study. NHMRC Grant #561700 (2009-2011: \$374,500).

Chambers SK, Clutton S, Hutchison S, Ferguson M, Foley E, Broughton S, Gardiner RA, Salmon C. A project to develop a mindfulness group intervention "living with advanced prostate cancer" (LAPC) for men with advanced prostate cancer. Cancer Council Queensland, beyondblue (2009-2010: \$41,490).

**Steginga (Chambers) SK,** Girgis A, Occhipinti S, Turner J, Carter R, **Dunn J.** Improving the psychosocial health of people with cancer and their carers: A community based approach. Cancer Australia, beyondblue (2009-2011: \$540,284).

**Steginga SK.** Population health career development award: \$370,000; National health and Medical Research Council. Project grant 496003; 2008-2011.

Hawkes, A. Steginga, SK. Baade, P. Courneya, K. Pakenham, K. Randomised controlled trial of a multidisciplinary cancer rehabilitation program for colorectal cancer survivors: Cancer Australia Priority Grant, \$532,450, 2008-2010

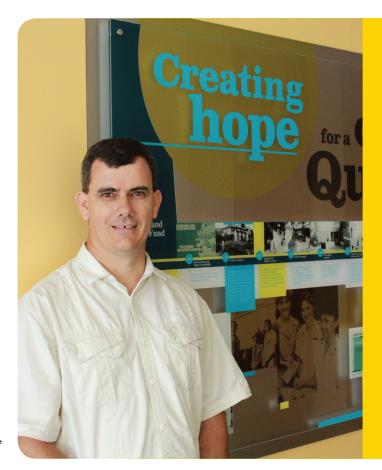
**Steginga SK,** Schover, L. Halford, K. Occhipinti, S. Gardiner RA, **Dunn J.** Randomised controlled trial of early intervention to improve sexual and couple functioning after prostate cancer: \$577,438; National Health and Medical Research Council. Project grant 496001; 2008-2010.

**Steginga SK,** Gardiner RA, Nicol D, **Aitken J,** Occhipinti, S. Predicting and promoting long term adjustment for men with prostate cancer: Proscan. \$289,564; National Health and Medical Research Council. Project grant 442301; 2007-2011.

**Youl P, Baade P,** Whiteman D, Del Mar C, **Aitken J.** An examination of the management strategies used in treating suspicious skin lesions in primary care. Cancer Australia. \$321,019; 2008-2010.

## **Awards**

Peter Baade was awarded an NHMRC Career Development Fellowship to conduct a co-ordinated and focused program of research to better understand why cancer outcomes depend on where a person lives. This provides strong recognition from national research peers of the important results this research program has already achieved, and the relevance of this body of research for future cancer control efforts.





## Scientific Conferences

In 2010, VCRCC researchers were again well represented at local, national and international conferences with nearly 50 presentations.

## Conference presentations in 2010 included:

#### Barker T.

Recruitment and participation challenges: Strategies employed in the sun exposure, Vitamin D and Outcomes of Prostate Cancer Study in Queensland, Oral presentation, Public Health Association of Australia Queensland State Conference, July 20, Brisbane.

#### Burns S.

How to build an inclusive support group, Oral presentation, Prostate Cancer Foundation of Australia 2nd International Conference, August 7 2010, Gold Coast.

#### Burns S.

Couple based intervention for prostate cancer, Oral presentation, Nursing & Psycho-Oncology Meeting, 11th National Prostate Cancer Symposium, August 13 2010, Melbourne.

#### Burns S.

ProsCan for couples – supporting men and their partners through radical prostatectomy. 33rd Annual Oncology Group Nurses Group Conference, September 10th 2010, Gold Coast.

#### Burns S.

Treatments for localised disease dilemmas in decision making, Oral presentation, Prostate Cancer Foundation of Australia 2nd International Conference, August 6 2010, Gold Coast.

#### Chambers SK.

Addressing the mental health consequences of cancer: the beating the blues project. Gold Coast Health and Medical Research Conference, Dec 2nd, Gold Coast.

#### Chambers SK.

Anxiety and depression after prostate cancer, Invited presenter, Rural health education foundation/Beyond blue national satellite broadcast, May 19th 2010, Sydney.

#### Chambers SK.

Beating the blues after cancer: Randomised controlled trial of a tele-based psychological intervention for high distress patients and carers, Poster, 12th World Congress of Psycho-Oncology, May 28th 2010, Quebec.

#### Chambers SK.

Coping with breast cancer as a young woman. 2nd National conference for young women with breast cancer, invited presentation. September 11th 2010, Gold Coast.

#### Chambers SK.

Identifying Empirical Targets for Intervention in Men with Prostate Cancer, Oral presentation, 12th World Congress of Psycho-Oncology, May 27th 2010, Quebec.

#### Chambers SK.

ProsCan: A multi- disciplinary prostate cancer research program. Public Health Seminar Series. Invited Presentation. September 21st 2010, Cancer Council New South Wales, Sydney.

#### Chambers SK.

Providing psychosocial support to men with prostate cancer: Focus, timing and access, invited speaker, nursing & Psycho-Oncology meeting, 11th National Prostate Cancer Symposium, August 13th 2010, Melbourne.

#### Chambers SK.

Research and service in peer support and prostate cancer: The challenge ahead, oral presentation, prostate cancer foundation of Australia 2nd international conference, August 6th 2010, Gold Coast.

#### Chambers SK.

Supporting couples following prostate cancer diagnosis: peer support as a model for intervention, oral presentation, 12th World Congress of Psycho-Oncology, May 27th 2010, Quebec.

#### Chambers SK.

Translating Peer Support into a Research Setting: Working with Different Priorities, Oral presentation, 12th World Congress of Psycho-Oncology, May 28th 2010, Quebec.

#### Chambers SK.

Translation to the community: an integrated model for making research count. Brisbane Research Australia Philanthropy Seminar "Connecting philanthropy to health and medical Research" Invited Presentation. September 14th, Brisbane.

#### Chambers, SK.

Group collaboration and coping skills for crisis in survivors' group. First Shanghai Breast Cancer Rehabilitative Forum and 3rd Global Chinese Breast Cancer Groups Alliance. Invited Presentation. April 23rd, Shanghai China.

#### Chambers, SK.

The needs of the patients: a model of caring from social institutions' perspective. First Shanghai Breast Cancer Rehabilitative Forum and 3rd Global Chinese Breast Cancer Groups Alliance. Invited Presentation. April 24th, Shanghai China.

#### Chambers, SK.

Translating psychosocial research in cancer – barriers, challenges and targets. Keynote speaker. 10th Biennial Behavioural Research in Cancer Control (BRCC) Conference. April 16th, Perth.

#### Chambers, SK.

Making decisions about prostate cancer treatments, Invited Presentation, 11th National Prostate Cancer Symposium, 13th August 2010, Melbourne.

#### Clutton, S.

Adjustment to a diagnosis of Cancer. CCQ Cancer Care Education Program for Unregulated Health Workers, July, Brisbane.

#### Clutton, S.

Identifying distress and providing support for people diagnosed with breast cancer. 33rd Annual Oncology Nurses Group Conference, September, Gold Coast.

#### Cramb S, Mengersen K, Baade P.

Bayesian disease Mapping: Choices and conundrums. October 4th-5th 2010, Surfers Paradise. [poster]

#### Cramb S, Mengersen K, Baade P.

Bayesian disease mapping: Choices and conundrums. Statistical Modelling and Inference Conference. 2nd-4th February 2010, Queensland University of Technology, Brisbane. [poster]

#### Hawkes A, Gollschewski S, Lynch B, Chambers SK.

A randomised controlled trial of a lifestyle intervention for colorectal cancer survivors ('CanChange'): Development and pilot testing. Australasian Society for Behavioural Health Medicine 7th Annual Scientific Conference, Novotel Hotel, February 10th-12th 2010, Brisbane.

#### Hawkes A.

Preliminary findings from proactive heart: a tele-based secondary prevention program for myocardial infarction patients (Keynote Speaker). Challenges in Cardiology 2010, Brisbane, Australia, April 9-10 2010.

### Hawkes AL, Murray R, Pakenham K, Courneya K, Baade P, Chambers S.

Behavioural Research in Cancer Control Conference, Freemantle, April 14-16 2010. A randomised controlled trial of a telephone-delivered lifestyle support program for colorectal cancer survivors ('CanChange'): study methodology and progress (oral presentation).

#### Hawkes AL, Oldenburg BO, Taylor B, Atherton J.

Australasian Society Behavioural Health and Medicine Annual Meeting, Brisbane, February 10-12 2010. Feasibility of a tele-based secondary prevention program for myocardial infarction patients – 'ProActive Heart' (oral presentation).

### Hawkes AL, Pakenham K, Courneya K, Baade PD, Chambers SK, Youl PH.

CanChange: A trial of a telephone delivered lifestyle intervention for colorectal cancer survivors. Clinical Oncological Society of Australia Annual Scientific Meeting. Melbourne 9-11th November 2010. (Poster)

### Hawkes AL, Patrao TA, Pakenham K, Courneya C, Baade PD, Chambers S.

A randomised controlled trial of a telephone-delivered lifestyle support program for colorectal cancer survivors ('CanChange'): Program Satisfaction. Public Health Association of Australia Conference, 19th & 20th July 2010, Brisbane.

#### Hawkes, AL.

Psychosocial influences determining Australians' sun safe practices. Under the Queensland Sun Symposium, July 2010, Brisbane.



#### Viertel Centre for Research in Cancer Control Annual Report 2010

#### Hutchison S.

Beating the blues after cancer: a randomised controlled trial of a tele-based psychological intervention for high distress patients and carers, Oral presentation, 27th International Congress of Applied Psychology, 15th July, Melbourne.

### Morris BA, Campbell M, Dwyer M, Dunn J, Chambers SK.

The role of peer support programs based on challenge events in influencing survivor identity and posttraumatic growth. Clinical Oncological Society of Australia Annual Scientific Meeting. Melbourne 9-11th November 2010.

### Patrao T, Hawkes A, Pakenham K, Courneya C, Baade PD, Chambers S.

A randomised controlled trial of a telephone-delivered lifestyle support program for colorectal cancer survivors ('CanChange'): program satisfaction. 33rd Annual Oncology Nurses Conference, September 9th-10th 2010, Gold Coast.

#### Murray R.

A randomised controlled trial of a telebased lifestyle support program for colorectal cancer survivors: CanChange. Invited Presentation. 10th Biennial Behavioural Research in Cancer Control (BRCC) Conference, April 14th, Perth.

#### Rolls, T.

Rolling with emotions: practical skills for the health professional. 33rd Annual Oncology Nurses Group Conference, September, Gold Coast.

#### Rolls, T.

The Cancer Counselling Service: a snapshot of a faceto-face psycho-oncology service. The 33rd Annual Oncology Nurses Group Conference, September, Gold Coast.

#### Stubbings, H.

Adjustment to a diagnosis of cancer as part of the CCQ cancer care education program for registered nurses, August, Townsville.

#### Youl P.

Diagnosing skin cancer in primary care: mainstream general practitioners and skin cancer clinic doctors, Invited speaker, Under the Queensland Sun Symposium. Queensland Health, Royal Brisbane Hospital, 29th July 2010.

#### Youl P.

Psychosocial outcomes in melanoma survivors, Invited seminar, Queensland Institute of Medical Research, 3rd August 2010, Brisbane.

#### Youl P.

Skin Cancer in Australia. Invited Lecture. University of Queensland, Jan 30th, Brisbane.

#### Youl P

What is cancer control? Invited Presenter, Cancer Registration in the Pacific, May 7th 2010, CCQ, Brisbane.

### Youl PH, Baade PD, Parekh S, Elwood M, English DR, Aitken JF.

Is there an association between melanoma thickness, clinical skin examination and socioeconomic status? Results from a large population-based case-control study. Australasian Epidemiology Association Annual Scientific Meeting. Sept 30th-October 1st, 2010. Sydney.

### Youl PH, Baade PD, Parekh S, English DM, Elwood M, Aitken JF.

Association between melanoma thickness, clinical skin examination and socioeconomic status: results from a large population-based case-control study. Clinical Oncological Society of Australia Annual Scientific Meeting. Melbourne 9-11th November 2010.

#### Youlden D.

Setting the scene: female breast cancer statistics in Queensland with a focus on urban/rural variation. 33rd Annual Oncology Group Nurses Group Conference (Gold Coast), September 2010, Gold Coast.

## Additional service to research and the broader community during 2010

#### **Cancer Council Australia**

National Public Health Committee: Pip Youl

Aboriginal and Torres Strait Islander Sub-Committee: **Pip Youl** 

#### Conference organising committees

Oceania Tobacco Control Conference Organising Committee 2010-2011: Suzanne Chambers

#### **Expert advisory committees**

Abbot Patient Program Development Group

ANZUP Cancer Trials Group Limited Quality of Life Committee

ANZUP Cancer Trials Group Limited Scientific Advisory Committee

BreastScreen Queensland

Prostate Cancer Foundation of Australia Nurse Working Group

#### **Professional memberships**

Australasian Brachytherapy Group

Australasian Epidemiological Group

Australian & New Zealand Urological Nurses Society

Australian Research Council

Cancer Nursing Society of Australia

Clinical Oncological Society of Australasia

Multinational Association of Supportive Care in Cancer

Oncology Nurses Group

Psycho-Oncology Co-operative Research Group

Queensland Urological Nurses Society

Urological Society of Australia and New Zealand

Queensland Epidemiological Group

#### Reviews for journals

Archives of Dermatological Research

Australian Family Physician

Australian New Zealand Journal Public Health

BioPsychoSocial Medicine

**BMC** Dermatology

**BMC Family Practice** 

**BMC Gastroenterology** 

**BMC Public Health** 

British Journal of Cancer

British Journal of Dermatology

British Journal of Urology International

Cancer Causes Control

Clinical and Experimental Dermatology

Health Promotion Journal of Australia

Health Psychology

International Journal of Cancer

International Journal of Gynecological Cancer

Journal of Psychosomatic Research

Medical Journal of Australia

Pan American Journal of Public Health

Patient Education and Counselling

Preventive Medicine

Psychology Health and Medicine

Psycho-Oncology

Quality of Life Research

Respirology

Supportive Care in Cancer

#### **Book reviews**

Reviews for funding bodies

National Health and Medical Research Council: Suzanne Chambers, Pip Youl, Peter Baade, Joanne Aitken

The Prostate Cancer Charity, UK: Suzanne Chambers

United Kingdom National Institutes of Health: Pip Youl





#### **Brisbane**

553 Gregory Terrace Fortitude Valley Qld 4006

**T:** 07 3634 5100 **F:** 07 3257 1306

#### Bundaberg

Ground floor, 312 Bourbong Street Bundaberg West Qld 4670

**T:** 07 4150 4500 **F:** 07 3259 8401

#### **Cairns**

169 Aumuller Street Bungalow Qld 4870 T: 07 4047 5500 F: 07 3259 8478

#### **Gold Coast**

Cnr Short Street & Marine Pde Southport Qld 4215 T: 07 5503 3700 F: 07 3259 8457

#### Mackay

Level 3, 45 Victoria Street Mackay Qld 4740 **T:** 07 4842 2000 **F:** 07 3259 8371

#### **Rockhampton**

43 Upper Dawson Road Rockhampton Qld 4700 T: 07 4932 8600

**F:** 07 3259 8480

#### **Sunshine Coast**

Shop 4, Credit Union Australia Plaza, Cnr Maroochydore Road & Baden Powell Street Maroochydore Qld 4558 T: 07 5451 6000

#### **Townsville**

F: 07 3259 8470

24 Warburton Street North Ward Qld 4810 **T:** 07 4796 8400 **F:** 07 3259 8507

#### Toowoomba

137 Herries Street Toowoomba Qld 4350 T: 07 4690 5800 F: 07 3259 8481