

SOCIOBEHAVIOURAL RESEARCH

BC CANCER AGENCY

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Our Research Focus:

Our vision is a patient-centred cancer care system that integrates evidence-based knowledge of psychological, social, cultural and behavioural dimensions into all aspects of the cancer control continuum – from prevention to diagnosis to treatment to survival or palliative care – in order to improve the quality of life for patients and families. We support this mission through translational research focused on psychosocial interventions, cross-cultural care, palliative care and lifestyle behaviours.



Psychosocial Research investigates the benefits of psychosocial oncology such as counseling, support groups, expressive therapies and mindfulness meditation – in improving patient and family quality of life, and improving the ‘care’ in the cancer care system.

Cross-Cultural Research is an underdeveloped area of research and understanding. With British Columbia’s ethnic diversity and vulnerable populations, we aim to increase our understanding about the way culture affects patients’ health behaviours; their experience of cancer, and their interaction with the cancer care system. This knowledge will be translated into the planning and implementation of culturally competent, equitable and quality care interventions.

Palliative Care Research focuses on improving health care and quality of life for patients in the palliative and end-of-life stages by early identification and management of suffering associated with cancer. The research examines physical, psychosocial and spiritual aspects of this stage of life, and identifies resources that will enhance quality of life during this experience. We are also focusing on translating new research knowledge into improved clinical practice, and health system improvement.

Lifestyle Research focuses on the development of practical interventions aimed at helping patients to adopt improved lifestyle behaviours, thereby lowering the risk of recurrence and improving the quality of survival.

Oncology Nutrition focuses on the effects of nutrition-related symptoms on cancer mortality and quality of life.

We have developed a number of partnerships with research associates, academic researchers, policy and decision-makers, clinicians, and patients and families in order to ensure knowledge exchange, synthesis, translation, dissemination, and uptake. These interactions are key to the development of research understanding with broad clinical and health services application regionally, provincially and nationally.

Research Highlights from 2005-2006:

- **PSSCAN** (psychosocial screening tool): during 2005-2006 further work was completed to establish reliability and validity of the PSSCAN. The results confirmed that this newly developed screening tool was reliable and had content validity. At present the PSSCAN continues to be completed by every new cancer patient allowing clinicians to have a quick picture of patient's emotional and psychological status during the first visit.

NET Cross-cultural issues in cancer care and research

- **Cancer experience of ethnic populations.** Obtaining an accurate picture of the cancer experience among ethnic minorities is difficult and complex. Given that data on ethnicity is not readily available from the current databases, the team used an alternative approach to identify ethnic groups. List of surnames of Indian origin were compiled from telephone directories and manually entered into computer files as a proxy for ethnic origin. Using these lists we have been able to characterize the pattern of cancer incidence for BC Indo-Canadians compared to Indians living in India. Interestingly, it was found that BC Indo-Canadians cancer incidence patterns were more similar to those of the BC general population than those of patients living in India. At present we are studying cancer incidence, mortality and survival rates among patients of Indian, Chinese and Iranian cultural background.
- The NET demonstrated leadership in knowledge translation relative to the 10 palliative care NETs funded across Canada through its sponsorship of a KT Workshop in conjunction with a KT ICEBeRG Symposium that implemented a KT Interaction Model while building KT capacity in palliative and end-of-life care. NET accomplishments included: a Pan-Canadian Study of Palliative Care Providers was funded by CIHR that will look at the concepts of compassion fatigue and compassion satisfaction of professional caregivers; a Delphi process was used to identify core competencies in social work practice in hospice palliative care; quality of life in palliative cancer care was assessed using the Patient Outcome Scale (POS, Kings College London) across care settings and cultures to look at its validity as a tool that is sensitive to cultural dimensions of quality of life;
- **End of Life Care** -Research aimed at understanding use of health services for end of life care, revealed that from 1997 to 2003, there has been an increase in the proportion of patients dying out of hospital. Characteristics of patients more likely to die out of hospital were: being female, over 45 years of age, living in a neighborhood in the upper income and outside Fraser and Vancouver Coastal Health Authorities. From the standpoint of service planning, these data stress the need to further explore the causes of differential use of services across Health Authorities. Pilots also looked at the development of cultural and geographic indicators of end-of-life care in BC.

Key Research Staff

<i>Researcher name</i>		<i>Position & Cross-Appointments</i>
Richard Doll	MSW, MSc	Provincial Leader Cancer Rehabilitation Director, Sociobehavioural Research
		Adjunct Prof, Faculty of Health Sciences, SFU
		Adjunct Prof, Health Care & Epidemiology, UBC
Joanne Stephen	PhD	Researcher
		Adjunct Prof, Dept of Health, SFU (2006)
Maria Barroetavena	PhD	Researcher
		Adjunct Prof, Dept. of Health Sciences, SFU
		Adjunct Prof (2005), Clinical Assistant Professor (2006), Health Care & Epidemiology, UBC
Maxine Alford	RN , PhD	Research Associate
		Regional Professional Practice & Academic Leader, Nursing, BCCA
Ellen Balka	PhD	Research Associate
		Professor, Communication, SFU
Lynda Balneaves	RN, PhD	Research Associate
		Assistant Professor, Nursing, UBC
Lori Brotto	PhD	Research Associate
		Assistant Professor, Obstetrics & Gynaecology, UBC
Susan Cadell	PhD	Research Associate
		Assistant Professor, Social Work, UBC
Gwen Chapman	PhD	Research Associate
		Associate Prof, Nutrition, UBC
Lyren Chiu	RN, PhD	Research Associate
		Assistant Professor, Nursing, UBC
Michael Forlenza	PhD, MPH	Research Associate
		Assistant Professor, Health Sciences, SFU
Gillian Fyles	MD, PhD	Research Associate
		Medical Leader, BCCA CSI Pain and Symptom Management/ Palliative Care
Donna Jeffery	PhD	Research Associate
		Assistant Professor, Social Work, UVIC
Arminée Kazanjian	Dr Soc	Research Associate
		Professor, Health Care & Epidemiology, UBC
Anne Leis	PhD	Research Associate
		Assoc. Prof, Epidemiology & Community Health, U Sask
Wolfgang Linden	PhD	Research Associate
		Professor, Psychology, UBC
Greg Miller	PhD	Research Associate
		Assistant Professor, Psychology, UBC
Gary Poole	PhD	Research Associate
		Instructor, Health Care & Epidemiology, UBC

Training

A.) Course Instruction

MC Barroetavena	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
M Boyle	UVIC Social Work 580: Perspectives on Health Illness and Dying
M Boyle	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
J Christopherson	BCCA Case Discussions, Family Practice Preceptorship Course
L Downie	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
K Flood	BCCA Case Discussions, Family Practice Preceptorship Course
K Flood	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
G MacKenzie	BCCA Psychosocial Oncology Practice, Family Practice Preceptorship Course
P Mackenzie	UVIC Social Work 580: Perspectives on Health Illness and Dying
P Myers	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
S Sample	UBC SOWK 570 Psychosocial Oncology: Grief, Loss and Survivorship
J Stephen	BCCA Psychosocial Oncology Practice, Family Practice Preceptorship Course

B.) Summary of Trainees and Degrees Completed

	<i>Total No. of Current Students</i>	<i>New CIHR Investigator</i>	<i>Post-doctoral</i>	<i>Post-graduate</i>	<i>Undergraduate</i>
2005	3	-	-	2	1
2006	3	1	-	2	-

C.) Current Students – Degrees Completed

<i>Name of Student</i>	<i>Supervisor</i>	<i>Date Completed</i>
MACP (Counselling Psych)		
Naoko Metz	MC Barroetavena	2006

Select Current Contributions

<i>Name</i>	<i>Membership/Committee Involvement</i>
MC Barroetavena	Member, BCCA/UBC Ethical Review Committee
	Member, AMSSA Health Committee
R Doll	Member, Rebalance Focus Action Group, Canadian Strategy for Cancer Control
	Founding Member, Canadian Association of Psychosocial Oncology
	Chair, Policy Committee for Supportive Care, Can. Assoc. of Prov. Cancer Agencies
	Advisory Board Member, Institute of Cancer Research, CIHR
G Fyles	Member, Clinical Trials Symptom Control Group, NCIC
	Chair, UBC/BCCA PSMPC Research Sub-Committee
	Co-Medical Director, Kelowna Palliative Response Team
J Stephen	Member, Medical Advisory Board, Canadian Breast Cancer Foundation

Current Research Projects

1. A methodology to understand cancer screening behaviour of culturally diverse populations: A feasibility study using administrative data	
<i>PI: A Kazanjian (UBC) Co-I: G Hislop, MC Barroetavena, M Borugian, A Chen, M DesMeules, S McDermott CIHR \$97, 890 (2006-2007)</i>	Developmental work is underway to ascertain the feasibility of linking the BCCA Cancer Registry with Canadian Immigration data. The purpose of this project is to understand the use of screening programs by immigrants.
2. A phase II trial of a soy beverage for subjects without clinical disease with rising prostate specific antigen after radical radiation for prostate cancer	
<i>PI: W Kwan, Co-I: G Duncan, C Van Patten, M Liu, JLim \$67, 257 Hecht Foundation (2004 – 2005)</i>	To evaluate the effect and tolerability of a daily soy beverage as a treatment for prostate cancer biochemical failure after radical radiation
3. Can Telehealth offer practical alternatives for delivery of health care services?	
<i>PI: B Weinerman Co-I: A Kazanjian, R Doll, J den Duyf, H Garden, F Lau, J Fyfe, J Stephen MSFHR HSPRN Operating Grant \$120, 000 (2005 – 2007)</i>	The goal is to examine how the use of remote communication technology, specifically video consultation, affects oncology care for patients in rural communities.
4. Cancer and complementary and alternative medicine team	
<i>Co-PI: A Leis, M Verhoef Co-I: J Stephen, H Boon, M O'Beirne, E Guns, R Doll, L Chiu, J Younus, D Oneschuck, B Leung L Balneaves, E Maunsell, NCIC – SCR N CAT Research Team \$583, 400 (2000 – 2007)</i>	The NCIC funded research team on Complementary alternative therapies (CAT) is developing an internationally recognized and coherent program of research in CAT based on the NCIC cancer control framework. The general goal of the program is to reduce the cancer burden in Canada through studies on the role of CATs and cancer prevention, survival and quality of life, and the integration if evidence based CAT within the cancer care system.
	<i>This program supports the following components:</i>
	Can mind influence the course of cancer? Identifying the methodological, conceptual and practical challenges for a fair and rigorous study <i>PI: J Stephen \$10,000 (2006-2007)</i>
	Exploring integration issues in the use of complementary and alternative therapies by Chinese cancer patients <i>PI: L Chiu; Co-I: L Balneaves, R Doll, MC Barroetavena, A Leis \$5,000 2003-2005)</i>
	Prevalence of traditional Chinese medicine use among Chinese cancer patients in British Columbia, Canada <i>PI: A Leis, Co-I: LChiu, R Doll, MC Barroetavena, M Ferro, M Chung, T Koru-Sengul \$5,000 (2005); \$10,000 (2006)</i>

	<p><i>Use of alternative therapies by Chinese living in Canada</i> PI: L Chiu; Co-I: R Doll, MC Barroetavena \$5,000 (2004 – 2005)</p> <p><i>Towards the development of a lifestyle counseling intervention for cancer patients</i> PI: J Stephen; Co-I: C Van Patten, H Gunn \$5,000 (2006-2008)</p> <p><i>Complementary therapy use by individuals at high risk for hereditary cancer</i> PI: L Balneaves; Co-I: JL Botoroff, M McCullum, M Verhoef, H Boon; \$4, 893</p> <p><i>Use of alternative therapies by Chinese living in Canada</i> PI: L Chiu; Co-I: R Doll, MC Barroetavena; \$5, 000 (2004 – 2005)</p>
5. Cancer health behaviours, attitudes towards sexuality, and acculturation: Decreasing disparities in East Asian women	
<p>PI: L Brotto Co-I: MC Barroetavena, B Gorzalka Hampton Fund Research Grant in the Humanities and Social Sciences \$35,000 (2006 – 2008)</p>	<p>The aim of this project is to study the role of acculturation in the interaction between cancer screening barriers and aspects of intimacy (e.g., sexual attitudes and behaviours). The findings will then be used to establish the basic components of a 1-session psycho-educational intervention designed to address some of the barriers to cancer screening among East Asian women.</p>
6. Chemotherapy anxiety reduction for breast cancer (CARE-BC): An RCT testing effectiveness of self-administered stress management training in five community settings	
<p>PI: J Stephen Co-I: R Doll, MC Barroetavena, et al. CBCF</p>	<p>For project description see Fraser Valley Centre.</p>
7. Complementary therapy decision-making processes of advanced cancer patients	
<p>PI: L Balneaves, UBC Co-I: JL Botoroff, TLO Truant CIHR \$28,344 (2005) \$49,238 (2006) \$126, 673 (2005 – 2008)</p>	<p>The specific aims of this project are to describe the unique and dynamic characteristics of complementary therapy decision-making processes, the differences in these decisions between women and men and across cancer types, the social context within which these decision-making processes take place; and lastly to describe the information resources used by advanced cancer patients as well as their unmet information needs.</p>

8. Complementary therapy decision-making processes of palliative breast and prostate cancer patients: A feasibility study	
<p>PI: L Balneaves, UBC Co-I: JL Bottoroff, BJ Davison, TLO Truant, R O'Brien, M Verhoef, D Oneschuk CBCRA - DEX \$37, 633 (2004 – 2006)</p>	<p>The goal is to devise sampling and data collection procedures to explore the social natures of treatment decision making and the role of other family members.</p>
9. Current status of psychosocial oncology care in Canada	
<p>PI: A Leis (U Sask) Co-I: R Doll, J Taylor-Brown, E Maunsell NCIC \$35, 000 (2003-2005)</p>	<p>This study is an environmental scan to generate a comprehensive inventory of psychosocial oncology care in Canada.</p>
10. Family caregiver coping in end of life cancer care	
<p>PI: K Stajduhar (UVic) Co-I: G Fyles, D Barwich NCIC \$301,182 (2004 –2007)</p>	<p>The overall research question guiding this study is: Why do some palliative/end of life family caregiver groups cope better than others even when under similarly heavy caregiving demands? Research will be conducted with a focus on knowledge translation for clinical practice, health policy and education.</p>
11. Information needs and information seeking behaviours of young women with breast cancer	
<p>PI: J Stephen Co-I: F Wong, E Balka SSHRC</p>	<p>For project description see Fraser Valley Centre.</p>
12. Kelowna palliative response team – cost effectiveness/quality of life pilot	
<p>PIs: G Fyles, S Broughton, C Mathieson, AM Broemeling et al NCIC \$35,000 (2003-2005)</p>	<p>The Kelowna palliative response team (PRT) is an after-hours crisis response team for patients and their family members registered with the Kelowna Palliative Care Program who wish to die at home. Pilot research is evaluating the cost effectiveness and quality of life outcomes of PRT.</p>
13. Measurement of functional impairments and adaptational efforts in persons with malignant gliomas: A prospective mixed methods study	
<p>PI: M Parkinson, R Cashman, J Stephen, M McKenzie, G MacKenzie, J Yao, M Ruckman, J Millard Brain Tumour Foundation of Canada Grant \$13,828 (2006)</p>	<p>The objective is to more fully understand the challenges faced by high grade glioma patients in the year following treatment.</p>

14. Oncology nutrition: infrastructure program – team planning award	
<p><i>PI: R Levy-Milne</i> <i>Co-I: TG Hislop, M Alford, J de Boer, PJ Naylor, E Guns, Olfiffe, L Mroz, C Van Patten, et al.</i> <i>MSFHR Training</i> <i>\$25 000 (2006-2007)</i></p>	<p>The purpose is to create a research team for the development and advancement of research in Oncology Nutrition. The proposed planning activities include four conference calls, a two-day workshop and two educational sessions, including a Lunch-and-Learn teleconference and a two-day conference sponsored by the BC Cancer Agency where the Oncology Nutrition Research Team will showcase current research.</p>
15. Overcoming systemic barriers to psychosocial support: Understanding the needs of Chinese cancer patients and their caregivers	
<p><i>PI: MC Barroetavena</i> <i>Co-I: S Kwong, R Doll</i> <i>Vancouver Foundation</i> <i>\$24,279 (2004-2005)</i></p>	<p>This project is aimed at furthering our understanding of the psychological, social and cultural needs of Chinese cancer patients and caregivers. The main objective of the study is to work in collaboration with the Chinese community to include participants' values and beliefs in the planning of resources.</p>
16. Palliative care in a cross-cultural context: A new & emerging team (NET) for equitable and quality cancer care for culturally diverse populations	
<p><i>Co-PI: R Doll, A Kazanjian (UBC)</i> <i>Co-I: MC Barroetavena, G Fyles, A Leis, G Johnston</i> <i>CIHR</i> <i>\$263,555 (2005)</i> <i>\$266,500 (2006)</i> <i>\$1,395,875 (2004-2009)</i></p>	<p>The goal is to develop research and training capacity in the area of cultural and cancer palliative care, and to advance knowledge and translate it into education, training, policies and practices that promote a health system offering equitable care for culturally diverse Canadians and to improve the quality of life of patients and their caregivers.</p> <p><i>The emerging team supports the following components</i></p> <p><i>Implementation of a psychosocial distress screening tool (PSSCAN) in the cancer trajectory from diagnosis to palliative care</i></p> <p><i>PIs: W Linden, MC Barroetavena Co-I: G Mackenzie</i> <i>\$25,000 (MSFHR), 2006</i></p> <p>New BCCA patients admitted between 3/2005 and 9/2006 will complete the P-SCAN (Psychological Screening for Cancer). Data will also be collected at 6 and 12 months after the admission date. Findings will help to characterize the pattern of psychological distress at various time points in the cancer care continuum and will be correlated with socio-demographic variables.</p> <p><i>Characterizing access to end of life care among culturally diverse groups</i></p> <p><i>Co-I: MC Barroetavena, G Johnston (2005)</i> Building on data from Nova Scotia, the goal is to establish cultural indicators and link them into quality, population-based end of life and palliative</p>

	<p>care data in BC. Indicators of culture will be examined as predictors of risk for dying out of hospital. Development of cultural indicators will contribute to an assessment of the role of culture on health practices, service utilization, and morbidity and mortality outcomes for use in Canadian linked End of Life studies.</p> <p><i>Phase I of traditional Chinese medicine (TCM) and complementary and alternative medicines (CAM) use by Chinese Canadians in palliative care</i></p> <p><i>PI: A Leis; Co-I R Doll, MC Barroetavena (2005-2006)</i> Mandarin and Cantonese speaking cancer patients will be invited to participate in a study assessing their use of TCM and CAM. Findings will be compared with the general population of cancer patients.</p> <p><i>Use of the palliative outcome scale (POS) in tertiary palliative care</i></p> <p><i>PI: G Fyles; Co-I: A Kazanjian, MC Barroetavena (2005-2006)</i> This project will assess the cross-cultural dimensions of quality of life, quality of care and patient and family satisfaction, as measured by the Palliative Outcome Scale (POS) developed by Higgins. Information will be used to build a quality of life database.</p>
17. Perceptions of cancer care providers on the barriers and facilitators to providing integrated breast cancer care: A pilot study	
<p><i>PI: L Balneaves, UBC</i> <i>Co-I: J Bottorff, J Stephen, H Boon</i> <i>CBCRA Grant</i> <i>45,000 (2005 -2007)</i></p>	<p>The pilot study will explore the attitude of cancer care providers regarding integrated cancer care. The findings will then be used to inform a larger national survey regarding the feasibility of introducing a more integrated approach to care into clinical cancer settings for patients of all cancer types.</p>
18. Perceptions of health care providers about integrative breast cancer care: A pilot study	
<p><i>PI: L Balneaves, UBC</i> <i>Co-Pi: J Bottorff, J Stephen, H Boon</i> <i>CBCRA</i> <i>\$49,661 (2006)</i></p>	<p>The goal is to develop a survey instrument for use in a national study on the feasibility of introducing a more integrative approach to cancer care</p>
19. Quality of life for palliative patients and their caregivers	
<p><i>PI: R Cohen (Royal Victoria Hosp, Montreal)</i> <i>Co-I: G Fyles, A Leis, P Porterfield et al.</i> <i>NCIC</i></p>	<p>For project description see Centre for the Southern Interior.</p>

20. Randomized controlled trial comparing mindfulness-based stress reduction (MBSR) to supportive-expressive therapy (SET) on psychological and biological outcomes	
<i>PI: L Carlson</i> <i>Co-I: J Stephen, S Sample, et al</i> <i>CBCRA Grant</i> <i>\$49, 124 (2006)</i> <i>\$572,231 (2006-2009)</i>	The goal is to compare the efficacy of two psychosocial interventions, MBSR and SET, to each other and a control condition on psychological and biological parameters in breast cancer patients.
21. The family context of food decision-making in diverse ethnocultural groups	
<i>PIs: G Chapman, B Beagan (UBC)</i> <i>Co-I: S Sekhton et al</i> <i>CIHR</i> <i>\$132,681 (2006)</i> <i>\$398, 820 (2003 – 2006)</i>	The purpose of this study is to examine how families from three diverse ethnocultural groups make decisions about what they eat, and how those decisions relate to culture, gender, life-stage, and health concerns. The three ethnocultural groups included in the study are Punjabi British Columbians, African Nova Scotians, and European Canadians living in British Columbia and Nova Scotia. Findings from the project will help in the development of future health promotion programs.
22. Understanding the current practice of interpreting: Implications for policy development	
<i>PI: MC Barroetavena</i> <i>Co-I: S Cadell, G MacKenzie</i> <i>SSHRC</i> <i>\$49, 580 (2005 – 2006)</i>	The goal is to understand the experience of certified health care interpreters in British Columbia and contribute new knowledge towards the development of best practices for British Columbia with applicability across Canada
KNOWLEDGE TRANSFER	
23. Communication in cancer care: The trajectory of interaction between patients and health care professionals	
<i>PI: S Thorne (UBC)</i> <i>Co-PI: G Hislop, S Harris, S Sample</i> <i>CCS/ NCIC</i> <i>\$246, 376 (2005 – 2008)</i>	The goal is to discover which patterns of communication are particularly helpful or unhelpful for cancer patients
24. Moving forward after breast cancer: A pilot study of an online skills and support intervention for post-treatment younger women	
<i>PI: J Stephen</i> <i>Co-I: L Brotto, W Linden, A Kazanjian, G MacKenzie</i> <i>CBCF BC/Yukon Grant</i> <i>\$150,000 (2006-2008)</i>	The goal is to develop a 12 week online skills and support group "Moving Forward after Breast Cancer" for young women. The goals are to 1) provide information about frequently-asked questions of women post treatment; 2) facilitate goal setting among participants related to "moving forward"; 3) teach relevant coping skills; and 4) develop knowledge base to move forward.