

Dr. Lorraine Shack
Curriculum Vitae, University of Calgary
Faculty of Medicine

I. BIOGRAPHICAL DATA

Lorraine Shack
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Calgary, T3G 3H3
Home: 403-922-3142

Director Surveillance & Reporting,
Cancer Measurement Outcomes Research and Evaluation (C-MORE),
CancerControl Alberta, Alberta Health Services,
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and
Adjunct Assistant Professor in Preventative Oncology (Primary appointment)
and Community Health Sciences,
University of Calgary,
Tom Baker Cancer,
1331 29th Street, NW,
Alberta, T2N 4N2

II. ACADEMIC RECORD

- i. BSc Biology (Minor Psychology) (Distinction awarded) (1996 - 2000)
University of Victoria, Victoria, Canada
- ii. MSc in Epidemiology (2001-2002)
A Model of HIV in the sexually active population of Hlabisa district, Kwa-Zulu Natal, South Africa; the effect of increased condom use and symptomatic treatment of STIs on HIV incidence.
London School of Hygiene and Tropical Medicine, London, England
- iii. Ph.D Cancer Epidemiology (2005 to 2009)
What factors influence socioeconomic inequalities in colorectal cancer survival?
London School of Hygiene and Tropical Medicine, London, England
Supervisors: Dr. Bernard Rachet and Prof. Michel Coleman

III. AWARDS AND DISTINCTIONS

- 2016 Dept of Oncology, Best paper of the year.
- 2010 Junior Investigator travel award and grant review observer, Canadian Cancer Society Research Institute (\$1,000)
- 2004-2009 National Health Service sponsored PhD
- 2008 Honourable mention at Health Protection Agency annual conference, for collaborative cancer cluster work: *Remembering Sharon and Rebecca: Community Health and Contaminated Land*
- 1999 Beta-sigma phi scholarship
- 1997 & 1998 Co-op scholarship (awarded two years)

IV. ACADEMIC/EMPLOYMENT APPOINTMENTS

- 2013-current *Director, Surveillance and Reporting, Cancer Measurement Outcomes Research and Evaluation (C-MORE), Alberta Health Services*
- 2009-current *Adjunct Assistant Professor in Preventative Oncology and Community Health Sciences, University of Calgary, Canada*
- 2009-2013 *Research Leader, Public Health Innovation and Decision Support (formerly Alberta Cancer Board), Surveillance and Health Status Assessment, Alberta Health Services*
- 2004-2009 *Cancer Epidemiologist and manager, North West Cancer Intelligence Service, National Health Service, Liverpool, England*
- 2005-2009 *Honorary Lecturer at University of Liverpool, in Division of Public Health*
- 2002-2004 *Statistician, Information and Statistics Division, Epidemiology and Statistics Group, National Health Service, Edinburgh, Scotland*

VI. EDUCATIONAL ACTIVITIES

- i. *Undergraduate*
 - a. Lecturer on Cancer for HSOC 311 2010-2011
- ii. *Graduate*
 - a. External examiner Sayeeda (Amber) Sayed, External examiner, PhD candidacy Community Health Sciences, U of C, Thyroid cancer, Aug 30, 2017
 - b. Fawz Makki, Survival benefit of chemotherapy in oropharyngeal cancer patients treated with surgery and post-operative radiation, MSc Thesis
 - c. Supervisor for practicum WeiWei Wen, MPH practicum, University of Alberta, April 2014
 - d. Mentor (Ted Pfister), MSc in Epidemiology, 2012/13
 - e. Supervisor for student (Dr. Silvina Mema) in MSc in Community Medicine self-directed course, 2011
 - f. Tutor and teaching assistant on Cancer survival short course, London School of Hygiene and Tropical Medicine, London,

- England 2006-2007
- g. Lecturer and tutor for MPH, University of Liverpool, England 2005-2007
- iii. *Continuing medical education*
Chair the Care about Cancer Pre-conference workshop *Become a knowledge translator – putting evidence into action for prevention and early detection*, Edmonton, June 15th

VII. PROFESSIONAL ACTIVITIES

- i. Membership in professional and learned societies
 - 2013-current Canadian College of Health Leaders
 - 2010-current American College of Epidemiology
 - 2009-current Public Health Institute (member)
 - 2009-current Public Health Association of Canada (member)
 - 2007-current Canadian Society for Epidemiology and Biostatistics (Member)
 - 2006-current Society for Social Medicine (member)
 - 2004-2009 UK Association of Cancer Registries (member)
 - 2005-2009 Cheshire and Merseyside Public Health Network (member)
 - 2004-2006 UK Association of Public Health (member)
- ii. Professional service:
 - 2018- current Research and Data Use committee, NAACCR, member.
 - 2015-current Data Use and Publication Committee, Canadian Council of Cancer Registries, Chair.
 - 2015-current Canadian Council of Cancer Registries, Core Committee, member
 - 2014-current Member, Technical Working Group, System Performance Reporting, Canadian Partnership Against Cancer.
 - 2013-current International Cancer Benchmarking Partnership, Module 5: Exploration of Early Deaths.
 - 2013-current Alberta Prostate Cancer Research Initiative, collaborator
 - 2014-2017(disbanded) Analytic Capacity Building committee, Canadian Partnership Against Cancer.
 - 2014-2016 (disbanded) Survival Analysis Task Force, North America Association of Central Cancer Registries.
 - 2014 Scientific Officer, Innovative Prevention grant review, Canadian Cancer Society
 - 2012-2014 Member of the TBCC planning committee
 - 2009-2013 Member of the Methodological working group, Canadian Cancer Survival and Prevalence Network, CPAC
 - 2011 Member and lead for Care about Cancer Pre-

	conference workshop (Become a knowledge translator – putting evidence into action for prevention and early detection)
2011	Member of the organizing committee for Measuring Health Inequalities workshop
2010-2011	Member, Alberta Colorectal Cancer Screening Program (ACRCSP), Performance Measurement and Evaluation Working Group
2010	Scientific Officer, Panel C grant review, Canadian Cancer Society
2004-2009	UK Association of Cancer Registries Analysis working group (NW representative)
2005-2009	National Cancer Information System Policy Group for National Cancer Intelligence Network (NW England representative)
2005-2009	Merseyside and Cheshire Cancer Network, Bowel Cancer Screening Programme, Primary care and Health Inequalities Group (member)

VIII. RESEARCH SUPPORT

2018-2020	Collaborator , Impact of maternal cancer and in-utero exposure to chemotherapy on long-term child health. (CIHI \$306,000) Lead: Amy Metcalf
2017-2021	Collaborator , Palliative Care Early & Systematic (PaCES). (Alberta Health & CIHR Partnerships for Health System Improvement for Cancer Control program \$1.7 million) Lead: Ayn Sinnarajah
2017-2019	Collaborator , Survival, recurrence and obstetrical outcomes after pregnancy-associated and postpartum cancer. (CIHR New Investigator Operating Grant \$45,000) Lead: Amy Metcalf.
2017-2019	Collaborator , Patterns of Care and Outcomes in Indigenous Patients with Cancer. (CIHR catalyst grant- Indigenous approaches to wellness \$75,000) Lead: Winson Cheung.
2016-2018	Co-Investigator , Determinants of cancer stage at diagnosis (CIHR, \$229,351) Lead: Karen Kopcuik
2016-2017	Co-Lead , Geospatial and spatio-temporal analyses of thyroid cancer incidence (CPAC & DUPC joint project)
2014-current	Team member , Alberta Prostate Cancer Research Initiative
2014-2017	Collaborator , NOVEL-2, Evaluation of nurse led breast cancer clinics (AHS, Cancer Strategic Clinical Network \$10,000)
2014-2016	Co-Lead , Canada wide: Survival by stage, Joint Analytic Project (CPAC led)

2014-2017	Co-Investigator , An investigation of the influence of comorbidity on early death from lung cancer; International Cancer Benchmarking Project – module 5.2 (no additional funding)
2012-2014	Co-Investigator , Risk factors and epidemiology of HPV associated cancers in Alberta (Alberta Cancer Foundation, Joe’s Team, \$12,500)
2011-2014	Team member , Optimizing Colorectal Cancer Screening team (Funder: Faculty of Medicine/AHS Emerging Team Grant \$300,000)
2011-2012	Principle Investigator , Youth Artificial Tanning Survey (Funder: Alberta Cancer Prevention Legacy Funding, \$50,000)
2010-2012 Prevention	Principle Investigator , Alberta Tobacco Survey (Funder: Alberta Cancer Prevention Legacy Funding, \$52,000)
2008-2011	Co-Investigator , Population Health Innovative Investigator grant for BENEFIT cancer prevention study (Funder: Alberta Cancer Prevention Legacy Funding, \$1,000,000),

IX. INVITED ADDRESSES/PRESENTATIONS

- i. Invited Addresses
 - a. Outcomes of Survival by Stage project: A CPAC joint analytic initiative. Shack LG, Dewar R, Nishri D. June 23, 2016, *Canadian Partnership Against Cancer* sponsored National Webinar
 - b. Introduction to relative survival by stage – Part 1: survival basics. Jan 22, 2015. *Canadian Partnership Against Cancer* sponsored webinar (international).
 - c. Setting the stage; background information on the Young Adult population. Alberta Tobacco Stakeholders Workshop, Edmonton, Feb 15-16, 2012
 - d. International comparisons in cancer survival; How does Canada compare? Community Health Sciences and Institute for Public Health seminar series, Feb 18th, 2011. *jointly with Dr. Heather Bryant, Canadian Partnership Against Cancer*
 - e. Cancer Survival: different questions, different methods. Grand Rounds Preventative Oncology, University of Calgary. March 24th, 2010. *jointly with Dr. Heather Bryant, Canadian Partnership Against Cancer*
 - f. *Cancer Epidemiology*. British Oncology Pharmacy Association (BOPA), October 17-19th 2008, Liverpool, UK.
 - g. Cancer in the Isle of Man 1994-2005 trends and comparisons. Review of Cancer in IOM report. Nov 6th, 2008
- ii. Presentations (selected presentations)
 - a. Projection of Cancer Incidence in Alberta’s Tomorrow Project from

- 2017 to 2036. Jason Xu, Lorraine Shack. Canadian Society of Epidemiology and Biostats Conference. Banff, Alberta. June 1, 2017.
- b. Care Delivery Models for Patients with Early Breast Cancer Undergoing Active Treatment: Is There Another Way to Address the Needs of a Growing Population? Edith Pituskin, Krista Rawso, Lorraine Shack, Shuang Lu. Canadian Association for Nurses in Oncology. Calgary, Alberta, Oct 23, 2016.
 - c. Using survival by stage and socioeconomic status to explain lung and colorectal cancer survival differences. Chadder, R. Rahal, G. Lockwood, J. Niu, R. Dewar, D. Nishri, L. Shack, H. Bryant, in collaboration with the System Performance Steering Committee and Technical Working Group. Mumbai, Oct 7-10, 2015. IARC Annual Conference
 - d. The BEnEFIT study; Does reimbursing the cost of commercial weight control programs influence weight loss? (poster) Shuang L, Shack L *et al.* Montreal, June 19-20, 2011.
 - e. Does reimbursing the cost of commercial weight control programs influence weight loss? (Poster) Shack L, Shuang L, *et al.* Society of Behavioural Medicine, Washington DC, April 27-30, 2011
 - f. Changing Behaviours: Exploring incentives in Prevention and Screening. Care about Cancer Conference, Edmonton, June 18th, 2011. *Jointly with Monica Schwann*
 - g. *Cancer coding and its use in Epidemiology.* Institute of Health Record Information & Management, October 6th 2008, Liverpool, UK.
 - h. *Variations in colorectal cancer survival in the North West of England.* Postgraduate Forum for Research on social aspects of health, illness and medicine May 23rd, 2007
 - i. Shack LG, Kelly J, Moeller H, Williams EMI. *Where do Lung Patients die on Merseyside and Cheshire?* Palliative Care Conference, May 2005, Liverpool, UK.

X. PUBLICATIONS

i. Peer reviewed manuscripts

1. Pham TM, Sikdar KC, Cheung WY, Roa W, Eckstrand A, Kaposhi B, Shack L. Premature mortality due to malignancies of the Central Nervous System in Canada, 1980-2010. *Neuroepidemiology*. 2018; **50(3-4)**: 195-299.
2. Pham TM, Sikdar KC, Kaposhi B, Lupichuk S, Yang H, Shack L. Premature mortality due to breast cancer among Canadian women: an analysis of a 30-year period from 1980 through 2010. *Eur J Public Health*. 2018; **28(2)**:348-352.
3. Lüchtenborg M, Morris EJA, Tataru D, Coupland VH, Smith A, Milne RL, Marvelde LT, Baker D, Young J, Turner D, Nishri D, Earle C, Shack L, Gavin A, Fitzpatrick D, Donnelly C, Lin Y, Moller B, Brewster DH, Deas A, Huws DW, White C, Warlow J, Rashbass J, Peake MD.

Investigation of the international comparability of the population-based routine hospital data set derived comorbidity scores for patients with lung cancer. *Thorax*. 2018; **147(4)**: 339-349.

4. Shack L, Lu S, Weeks LA, Craighead P, Kerba M. Determining the need and utilization of radiotherapy in cancers of the breast, cervix, lung, prostate and rectum: A population level study. *Radiother Oncol*. 2017; **122(1)**: 152-158.
5. Bonaventure A, Harewood R, Stiller CA, Gatta G, Clavel J, Stefan DC, Carreira H, Spika D, Marcos-Gragera R, Peris-Bonet R, Piñeros M, Sant M, Kuehni CE, Murphy MFG, Coleman MP, Allemani C; CONCORD Working Group. Worldwide comparison of survival from childhood leukaemia for 1995-2009, by subtype, age, and sex (CONCORD-2): a population-based study of individual data for 89 828 children from 198 registries in 53 countries. *Lancet Haematol*. 2017; **4(5)**: e202-e217.
6. Matz M, Coleman MP, Carreira H, Salmerón D, Chirlaque MD, Allemani C; CONCORD Working Group. Erratum to "Worldwide comparison of ovarian **cancer** survival: Histological group and stage at diagnosis (CONCORD-2)". *Gynecol Oncol*. 2017; **147(3)**: 725.
7. Matz M, Coleman MP, Sant M, Chirlaque MD, Visser O, Gore M, Allemani C; CONCORD Working Group. Erratum to "The histology of ovarian **cancer**: Worldwide distribution and implications for international survival comparisons (CONCORD-2)". *Gynecol Oncol*. 2017; **147(3)**: 726.
8. Matz M, Coleman MP, Carreira H, Salmerón D, Chirlaque MD, Allemani C; CONCORD Working Group. Worldwide comparison of ovarian **cancer** survival: Histological group and stage at diagnosis (CONCORD-2). *Gynecol Oncol*. 2017 Feb;144(2):396-404.
9. Chadder J, Dewar R, Shack L, et al. A first look at relative survival by stage for colorectal and lung cancers in Canada. *Current Oncology*. 2016; **23(2)**: 119-124.
10. Allemani C, Weir HK, Carreira H, Harewood R, Spika D, Wang XS, Bannon F, Ahn JV, Johnson CJ, Bonaventure A, Marcos-Gragera R, Stiller C, Azevedo e Silva G, Chen WQ, Ogunbiyi OJ, Rachet B, Soeberg MJ, You H, Matsuda T, Bielska-Lasota M, Storm H, Tucker TC, Coleman MP; CONCORD Working Group. Global surveillance of **cancer** survival 1995-2009: analysis of individual data for 25,676,887 patients from 279 population-based registries in 67 countries (CONCORD-2). *Lancet*. 2015 Mar 14;385(9972):977-1010. doi: 10.1016/S0140-6736(14)62038-9
11. Shack LG, Lau H, Huang L, Doll C, Hao D. Temporal, age and gender

trends in human papillomavirus (HPV)-related non-cervical cancers in Alberta, Canada. *CMAJ open*. 2014; **2(3)**:E127-32.

12. Shack LG, Bryant H, Lockwood G, Ellison L, Conditional relative survival: A different perspective to measuring cancer. *Cancer Epidemiology*. 2013; **37(4)**: 446-8
13. Shack LG, Shah A, Lambert PC, Rachet B. Cure by age and stage at diagnosis for colorectal cancer patients in North West England, 1997-2004: a population-based study. *Cancer Epidemiology*. 2012; **36(6)**: 548-53.
14. Moran A, O'Hara C, Khan S, Shack L, Woodward E, Maher ER, Laloo F, Evans DG. Risk of cancer other than breast or ovarian in individuals with BRCA1 and BRCA2 mutations. *Familial Cancer*. 2012; **11(2)**: 235-42.
15. Moffat E, Shack LG, Petz G, Sauve J, Hayward K, Coleman R. The cost of obesity and overweight in 2005: A case study of Alberta, Canada. *Canadian Journal of Public Health*. 2011; **102(2)**:144-48.
16. Ellison LF, Bryant H, Lockwood G, Shack L. Conditional survival analyses across cancer sites. *Health Report*. 2011; **22(2)**:21-5.
17. Shack LG, Rachet B, Williams EMI, Northover JMA, Coleman MP. Does the timing of comorbidity affect colorectal cancer survival? A population-based study. *Postgraduate Medical Journal*. 2010; **86**: 73-78.
18. Nur U, Shack LG, Rachet B, Carpenter JR, Coleman MP. Modelling relative survival in the presence of incomplete data: a tutorial. *International Journal of Epidemiology*. 2010; **39**: 118-28.
19. Woods LM, Rachet B, Shack LG, Catney D, Walsh P, Cooper N, White C, Mak V, Steward J, Comber H, Gavin A, Brewster D, Quinn M, Coleman MP and the UK Association of Cancer Registries. Survival from twenty common adult cancers in the United Kingdom and the Republic of Ireland during the late twentieth century. *Health Statistics Quarterly*. 2010; **46**: 7-26.
20. Quaglia A, Tavilla A, Shack L, Brenner H, Janssen-Heijnen M, Allemani C, Colonna M, Grande E, Grosclaude P, Vercelli M and the EURO CARE working group. The cancer survival gap between elderly and middle-aged patients in Europe is widening. *European Journal of Cancer* 2009. 2009; **45**: 1006-1016.

21. Shack LG, Jordan C, Thomson CS, Mak V, Møller H on behalf of the UK Association of Cancer Registries. Variation in incidence of breast, lung and cervical cancer and malignant melanoma of skin by socioeconomic group in England. *BMC Cancer*. 2008; **8**: 271-280.
22. Coleman MP *et al.* and the CONCORD Working Group. Cancer survival in five continents: first world-wide comparison (CONCORD study). *The Lancet Oncology*. 2008; **9**: 730-756.*Named author as part of the working group
23. Coleman MP *et al.* and the CONCORD Working Group. Life tables for world-wide comparison of relative survival for cancer (CONCORD study). *Tumori*. 2008; **95**: 658-668.*Named author as part of the working group
24. Shack LG, Rachet B, Brewster DH, Coleman MP. Socioeconomic inequalities in cancer survival in Scotland 1986-2000. *Br J Cancer*. 2007; **97**: 999-1004.
25. Shack LG, Wood HE, Kang JY, Brewster DH, Quinn MJ, Maxwell JD, Majeed A. Small intestinal cancer in England & Wales and Scotland: time trends in incidence, mortality and survival. *Aliment Pharmacol Ther*. 2006; **83**: 213-214.

ii. Non-peer reviewed manuscripts

26. Surveillance & Reporting; 2012 Report on Cancer Statistics in Alberta. (2015). Edmonton: CancerControl AB, Alberta Health Services.
27. Zhu, C., & Shack, L. (2012). Effective approaches to increase breast, cervical, and colorectal cancer screening in ethnically and culturally diverse communities: A systematic review. Calgary, Alberta: Public Health Innovations and Decision Support, Alberta Health Services.
28. Stewart AG, Adams R, Keenan R, Kowalczyk G, Lamont H, Meredith W, Shack L. Remembering Sharon and Rebecca – investigating leukaemia and chemical pollution in Cheshire. Chemical Hazards and Poisons Report. June 2010; 17. Health Protection Agency, London, England.
29. Möller H, Shack L, Moran A. Lung cancer in the North West of England. 2008. NWCIS, Manchester.
30. Stewart A, Morris G, Watts J, Adams R, Keenan R, Kowalczyk G, Lamont H, Meredith W, Shack LG, Frost N, Witherington P. Report into the circumstances around two cases of Acute Myeloid

Leukaemia: Remembering Sharon and Rebecca. 2008. Health Protection Agency, Chester.

31. Lemon D, Flatt G, Shack L, Ellison T, Moran A. Excess cancer mortality and incidence by PCT in the North West, 2001-2005. 2007. NWCIS, Manchester
32. Shack L, Khan S, Moran A. Cancer Incidence projections in the North West. 2007. NWCIS, Manchester
33. Flatt G, Shack L, Moran A. Spearhead Primary Care Trusts and progress toward decreasing cancer mortality, North West, 1995-2005. 2007. NWCIS. Manchester
34. Turner L., Shack L, Sharpe J. Bowel Cancer Screening Programme: To support the implementation of the Bowel Cancer Screening Programme in Cheshire and Merseyside. Bowel Cancer Screening Programme Health Inequalities Group. 2006. NHS, Liverpool
35. Möller H, Shack L, Ashraf A. Lung cancer in Cheshire and Merseyside. NWCIS, 2006. NHS, Liverpool
36. Shack L, Kelly J, Möller H, Bishop S, Moran A, Williams EMI. Preliminary report on Place of Death for cancer patients in Merseyside and Cheshire. Merseyside and Cheshire Cancer Registry, November 2005. NHS, Liverpool.
37. Ashraf Z, et al. Care Homes staffing project: report of the pre-pilot and pilot phases of the study. 2006. National Health Services Scotland. Edinburgh.
38. Shack L. Ovarian Cancer. In Morrison D (ed.). NHS Quality Improvement Scotland: Clinical Outcome Indicators 2003. NHS QIS, Edinburgh.

iii. Abstracts – published peer reviewed

- a. J. Chadder, R. Rahal, G. Lockwood, J. Niu, R. Dewar, D. Nishri, L. Shack, H. Bryant, in collaboration with the System Performance Steering Committee and Technical Working Group. Using survival by stage and socioeconomic status to explain lung and colorectal cancer survival differences. IARC conference Mubai Oct 2015.
- b. Shack LG, Lu S, Kerba M, Craighead P. Determining the need and utilization of radiotherapy in cancers of the breast, cervix, lung, prostate, and rectum in Alberta, Canada. 2013 ASCO Quality Care Symposium. (abst no: 116)

- c. Hao D, Lau HY, Huang L, Doll CM, Dort JC, Shack LG. ASCO An analysis of the temporal, age, and gender trends in human papillomavirus (HPV)-related versus non-HPV-related head and neck cancers (HNC) in Alberta, Canada. *J Clin Oncol* 31, 2013 (suppl; abstre12505)
- d. Shack LG, Lu S, Weeks LA, Craighead PS, Kerba M. Determining the need and utilization of radiotherapy in cancers of the breast, cervix, lung, prostate and rectum in Alberta, Canada. *J Clin Oncol* 31, 2013 (suppl 31; abstr 116)
- e. Shack LG, Rachet B, Nur U, Coleman MP. Role of tumour stage and co-morbidity on socioeconomic inequalities in survival among colorectal cancer patients. *Am J of Epi* 2008; **167**: s27