

St. Vincent's BreastScreen is a multi-centred breast cancer screening program which participates in clinical and collaborative research aiming to investigate breast cancer risk factors and improve breast cancer detection and treatment.

About us

St. Vincent's BreastScreen is a large screening and assessment service of BreastScreen Australia.

In 2008 we screened 39,000 women through a network of nine urban and rural screening centres throughout Victoria. Assessment of abnormalities through to diagnosis of cancer is performed at the assessment centre on the Fitzroy campus.

The aim of screening for breast cancer is to detect malignancy at the early stage. This is associated with a reduction in mortality from breast cancer and reduced morbidity from treatment. Approximately 2,500 women undergo assessment at St. Vincent's BreastScreen Assessment Centre each year.

Seven multidisciplinary clinics are conducted each fortnight and more than 200 new breast cancers are detected each year.

All screening, assessment and surgical outcomes are entered into the BreastScreen Victoria database, which provides an excellent clinical research source. St. Vincent's BreastScreen is audited regularly against a comprehensive set of criteria including small cancer detection.

Highlights

The Victorian Breast Screening Pilot Project marked its 20th anniversary in October with a two day seminar convened by Chief Radiologist, Assoc Prof Jennifer Cawson. Titled 'International Breast Cancer Update: celebrating 20 years of screening', the seminar featured international speakers Prof Stefano Ciatto who is widely published and sought after as a speaker in breast cancer, and Prof Rosalyn Given-Wilson of the RANZCR Breast Imaging Group from the United Kingdom screening program. Also speaking was Prof Christobel Saunders from Western Australia, Clinical Director of BreastScreen South Australia and our local facility. The conference was opened by the Minister for Health, the Hon Daniel Andrews MP and special guest was Emeritus Prof of Radiology William S Hare, a noted advocate of breast screening.

Research applications in the clinical setting

Our investigations into Atypical Ductal Hyperplasia diagnosed by needle core biopsy (NCB) have extended our understanding of this condition and have led to higher specificity for NCB, thereby reducing open surgical biopsies in many cases (Hoang, Cawson, Kitchen).

Our published experience with a severe haematoma using large gauge vacuum-assisted needle biopsy has led to more stringent care with selection of patients for this technique and assessment of bleeding tendencies (Yap, Rouse, Cawson).

Our work with breast density and screening policy (Kavanagh et al) may lead to changes in screening intervals for women of differing breast densities. Other breast density work (Dite, Gurrin, Byrnes et al) is offering insight into the causes of breast density, a major risk factor for both breast cancer and false negatives in screening.

A publication on the impact of celebrity illness on breast imaging services provides an insight into population responses to alarming information. This will be helpful in forming messages for medical personnel and consumers (Kalaher, Suddert, Cawson et al).

The team

Assoc Prof Jennifer Cawson, Director; Caroline Baker, Surgeon; Elaine Bevington, Surgeon; David Butterfield, Surgeon; Lindsay Castles, Surgeon; Erin Cosgriff, Program Manager; Hamish Ewing, Surgeon; Dr David Van Gelderen, Radiologist; Dr Kirsten Gordon, Radiologist; Patrick Hayes, Surgeon; Michael Henderson, Surgeon; Dr Greg Hill, Radiologist; Anthony Hyett, Surgeon; Dr Henry Karsz, Radiologist; Dr Anne Lynch, Radiologist; Dr Frank Malara, Radiologist; Dr Kirti Mehta, Radiologist; Dr Anusha Naidoo, Radiologist; Jane O'Brien, Surgeon; Dr Mei Pang, Radiologist; Dr Wendy Perret, Radiologist; Dr Gudrun Peters, Radiologist Fellow; Dr Gareth Phillips, Radiologist; Prof Alex Pitman, Radiologist; Cathie Poliness, Surgeon; Dr Hannah Rouse, Radiologist; Dr Bronwen Slater, Radiologist; Wanda Stelmach, Surgeon; Dr Rodney Taft, Radiologist; Pamela Wilkins, Data Manager

Collaborations

- University of Melbourne
Departments of Molecular, Environmental, Genetic and Analytic Epidemiology
- Key Centre for Women's Health in Society
- St. Vincent's Medical Imaging Department
- St Vincent's Institute

Grants

Campbell I, Hopper J, Stagoll O, Kavanagh A, Mitchell G, Mann B, Fox S, French P, Cawson J, Bottema M, Trelaor S, Balleine R, Southey M, English D, Baglietto L, Stone J

Integration of BreastScreen with an epidemiological, molecular and translational research program. National Breast Cancer Foundation, (2008), \$2,500,000

Thompson E, Shah M, Hill P, Cawson J, Morrison W

Molecular profiling and epidemiological refinement of mammographic density as a predictor of breast cancer risk. St. Vincent's Research Endowment Fund, (2008), \$30,000

Selected presentations

Cawson J

- '20 years of screening in Victoria', International Breast Cancer Update: celebrating 20 years of screening, Werribee, October 2008

Lin S, Thompson E, Hill P, Cawson J, Campbell I, Hopper J, Haviv I, Jenkins M, Southey M

- 'Understanding mammographic density and its relevance to breast cancer risk', Kestone Conference Meeting, August 2008

Pitman AG, Zentner L, Taft RD, Shnier D, Mercuri V, Mehta K, Kremer S, Lawson J, Cawson JN, Gledhill S, Kok P

- Poster presentation, 'Diagnostic accuracy of mammography readers and their memory performance have no correlation with each other', Radiology Society of North America, Chicago, IL, 2008

Publications

Cawson JN, Nickson C, Amos AF, Hill G, Whan A, Kavanagh K 2008, 'Invasive breast cancers detected by screening mammography in BreastScreen Australia: a detailed comparison of CAD-assisted single reading and double reading', *Medical Imaging and Radiation Oncology*

Dite GS, Gurrin LC, Byrnes GB, Stone J, Gunasekara A, McCredie MRE, English DR, Giles GGG, Cawson JN, Hegele RA, Chiarelli AM, Yaffe MJ, Boyd NF, Hopper JL 2008, 'Predictors of mammographic density measures: insights from a novel regression analysis of a twin study', *Cancer Epidemiol Biomarkers and Prevention* 17 (12): 3474-81

Heriot G, McKelvie P, Pitman AG 2008, 'Diagnostic errors in patients dying in hospital Radiology's contribution', *Journal of Medical Imaging and Radiation Oncology (in press)*

Hill PA, Cawson JN 2008, 'Collagenous spherulosis presenting as a mass lesion on imaging', *The Breast Journal*, 14 (3) 301-3

Hill P A DM 2008, 'Mantle cell lymphoma with bilateral palpable breast', *The Breast Journal*, 3:303-305

Hoang JK, Hill P, Cawson JN 2008, 'Can mammographic findings help discriminate between atypical ductal hyperplasia and ductal carcinoma in situ after needle core biopsy?', *The Breast*:200817(3):282-288

Kavanagh AM, Byrnes G, Nickson C, Cawson JN, Giles GG, Hopper J, Gertig D, English D 2008, 'Improving mammographic screening outcomes: should screening policies focus on mammographic density, hormone therapy or age?', *Cancer Epidemiol Biomarkers and Prevention*, 17 (10): 2818-24

Kelagher M, Studdert D, Cawson JN, Miller J, Kavanagh AM, Dunt D 2008, 'Use of breast cancer screening and treatment services by Australian women, 24-44 years of age; following Kylie Minogue's breast cancer diagnosis', *International Journal of Epidemiol*, 37 (6): 1326-32

Kok P, Glendhill G, Cawson J, Kremer S, Lawson J, Mehta K, Mercuri V, Shnier D, Taft R, Zentner L, Pitman AG 2008, 'Memory performance patterns in screening mammography readers: highlighters and memorisers', *Journal of Medical Imaging and Radiation Oncology*, 52: A16

Pitman AG, Van Dijk J, Cunningham NJ 2008, 'Resuscitation skills for radiologists: a short paper (Peer Reviewed Journal Publications)', *Journal of Medical Imaging and Radiation Oncology*, 52:463-470

Pitman A, Gledhill S, Cawson J, Kremer S, Lawson J, Mehta K, Mercuri V, Shnier D, Taft R, Zentner L, Kok P 2008, 'Radiologist memory performance over time: 'memoriser' type memory shows a time related decline', *Journal of Medical Imaging and Radiation Oncology*, 52, A45 (abstract) Supplement 1 :RANZCR 59th Annual Scientific Meeting Radiology Abstracts EO1

Pitman AG, Zentner L, Taft RD, Shnier D, Mercuri V, Mehta K, Kremer S, Lawson J, Cawson JN, Gledhill S, Kok P 2008, 'Diagnostic accuracy of mammography readers and their memory performance have no correlation with each other', *The Radiology Society of North America (RSNA)*

Rouse HC, Godoy MCB, Lee WK, Phang PT, Brown CJ, Brown JA 2008, 'Imaging findings of unusual anorectal and perirectal pathology: a multimodality approach', *Clinical Radiology*, 20; 5:10

Seale MK, Koh WL, Mercuri V, Henderson M, Drummond R, Cawson JN 2008, 'Imaging surveillance of the breast in a patient who developed scleroderma after breast conserving surgery and radiotherapy', *The Breast Journal*, December, 37 (6): 1326-32