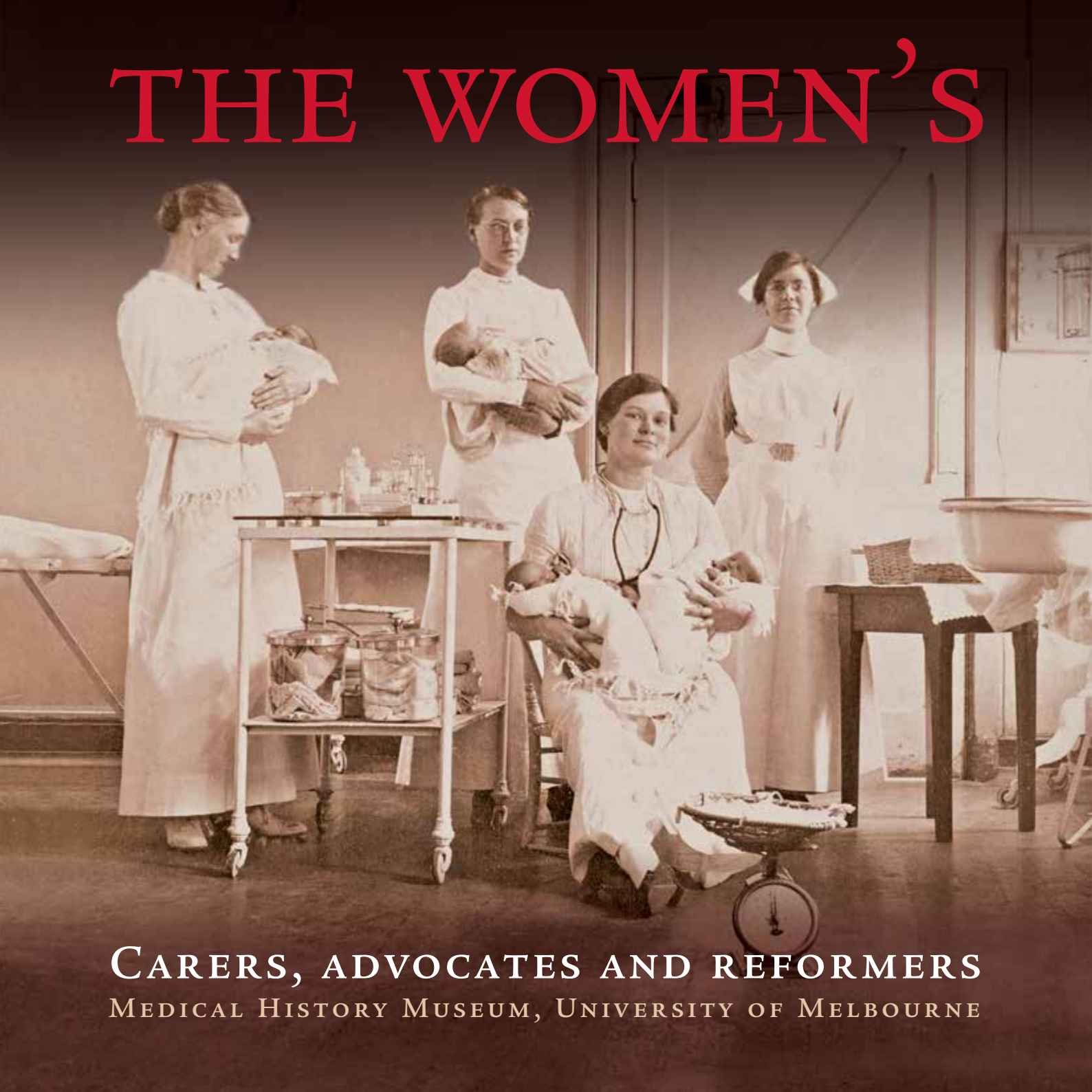
THE WOMEN'S



Carers, advocates and reformers

Medical History Museum, University of Melbourne

The Melbourne hospital popularly known as *The Women's* has played a critical role in the life of Victoria since its very beginnings. As historian Janet McCalman explains: 'The Royal Women's Hospital opened in August 1856 as the Melbourne Lying-In Hospital and Infirmary for the Diseases Peculiar to Women and Children, in a terrace house in Albert Street, East Melbourne. The colony was in the midst of a gold rush that would bring half a million people in the decade. Women were abandoned—pregnant and destitute—while their husbands and erstwhile lovers tried their luck on the goldfields. The need for a charity lying-in hospital for women without homes was urgent.'

The Women's: Carers, advocates and reformers explores the work of the hospital through the contributions of many remarkable individuals; public education and health campaigns; the training of nurses, midwives, doctors and other health professionals; and public policy and research. It follows the institution from its modest East Melbourne origins to its location today in the Parkville biomedical precinct, while also presenting the stories and knowledge of traditional owners.

THE UNIVERSITY OF MELBOURNE

the women's
the royal women's hospital
victoria australia

THE WOMEN'S

Carers, advocates and reformers

Edited by

Jacqueline Healy

Medical History Museum
University of Melbourne

Published 2019 by the Medical History Museum, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Victoria, 3010, Australia

medicalhistorymuseum.mdhs.unimelb.edu.au

Editor: Jacqueline Healy
Text editor: Belinda Nemec
Design: Janet Boschen Design
Photography: Lee McRae, Sugoi Imaging (front cover, pp. v, vi, viii, x, xii, 18, 26, 35, 44, 50, 54, 116, 121, 123, 127, 133, 135, 137, 141, 143, 147, 153, 167, 169, 171, 173, 175, 179, 181, 187 and 193) and Jane Poynter (pp. ii, 80, 92, 129, 131, 139, 145, 149, 151, 155, 161, 163 top, and 165); other photographs as credited
Printed in Australia
CTP and print by Adams Print

ISBN 978 0 7340 5525 5 (paperback)

NATIONAL LIBRARY OF AUSTRALIA

A catalogue record for this book is available from the National Library of Australia.

This catalogue, produced to support the 2019 exhibition *The Women's: Carers, advocates and reformers*, was generously sponsored by the Royal Women's Hospital. It also received funding from the Faculty of Medicine, Dentistry and Health Sciences as part of its continuing support for the preservation and sharing of the collections of its three museums (the Henry Forman Atkinson Dental Museum, the Medical History Museum, and the Harry Brookes Allen Museum of Anatomy and Pathology) for the benefit of the community and the generations of University of Melbourne students and alumni, many of whom contribute their own cultural treasures to the collections.

With thanks to Associate Professor Leslie Reti AM, Chair of the History, Archives and Alumni Committee, Royal Women's Hospital; Robyn Waymouth, Archivist, Royal Women's Hospital; students from the University of Melbourne Cultural Collections Program; and the Advisory Committee and staff of the Medical History Museum.

The exhibition *The Women's: Carers, advocates and reformers*, curated by Dr Jacqueline Healy, was held at the Medical History Museum, University of Melbourne, from 18 April to 2 November 2019.

Cat. 199 **Nipple bowls**, c. 1990s, stainless steel, 3.2 × 4.0 cm (diam.). A1990_18_083, Royal Women's Hospital Collection.

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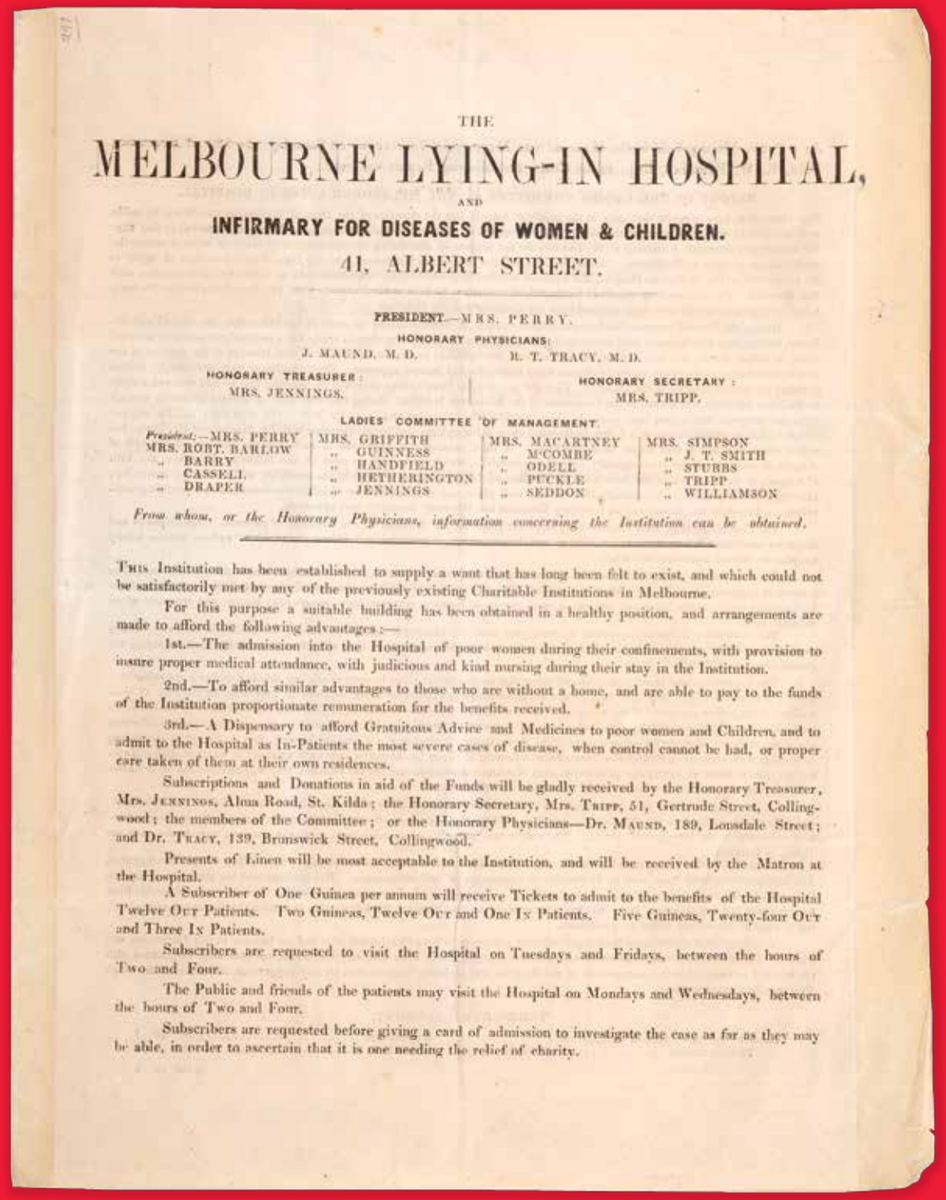
Cat. 27 Harvie & Sutcliffe (Melbourne, active c. 1890s–1908), **Operating theatre, Women's Hospital**, c. 1897, photograph, mounted; 25.4 × 30.4 cm. MHM00406, Medical History Museum, University of Melbourne.



THE

MELBOURNE LYING-IN HOSPITAL,

AND

INFIRMARY FOR DISEASES OF WOMEN & CHILDREN.

41, ALBERT STREET.

PRESIDENT.—MRS. PERRY.

HONORARY PHYSICIANS:

J. MAUND, M. D. R. T. TRACY, M. D.

HONORARY TREASURER: MRS. JENNINGS.

HONORARY SECRETARY: MRS. TRIPP.

LADIES COMMITTEE OF MANAGEMENT.

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" CASSELL	" HETHERINGTON	" PUCKLE	" TRIPP
" DRAPER	" JENNINGS	" SEDDON	" WILLIAMSON

From whom, or the Honorary Physicians, information concerning the Institution can be obtained.

THIS Institution has been established to supply a want that has long been felt to exist, and which could not be satisfactorily met by any of the previously existing Charitable Institutions in Melbourne.

For this purpose a suitable building has been obtained in a healthy position, and arrangements are made to afford the following advantages:—

1st.—The admission into the Hospital of poor women during their confinements, with provision to insure proper medical attendance, with judicious and kind nursing during their stay in the Institution.

2nd.—To afford similar advantages to those who are without a home, and are able to pay to the funds of the Institution proportionate remuneration for the benefits received.

3rd.—A Dispensary to afford Gratuitous Advice and Medicines to poor women and Children, and to admit to the Hospital as In-Patients the most severe cases of disease, when control cannot be had, or proper care taken of them at their own residences.

Subscriptions and Donations in aid of the Funds will be gladly received by the Honorary Treasurer, MRS. JENNINGS, Alma Road, St. Kilda; the Honorary Secretary, MRS. TRIPP, 51, Gertrude Street, Collingwood; the members of the Committee; or the Honorary Physicians—Dr. MAUND, 189, Lonsdale Street; and Dr. TRACY, 139, Brunswick Street, Collingwood.

Presents of Linen will be most acceptable to the Institution, and will be received by the Matron at the Hospital.

A Subscriber of One Guinea per annum will receive Tickets to admit to the benefits of the Hospital Twelve OUT Patients. Two Guineas, Twelve OUT and One IN Patients. Five Guineas, Twenty-four OUT and Three IN Patients.

Subscribers are requested to visit the Hospital on Tuesdays and Fridays, between the hours of Two and Four.

The Public and friends of the patients may visit the Hospital on Mondays and Wednesdays, between the hours of Two and Four.

Subscribers are requested before giving a card of admission to investigate the case as far as they may be able, in order to ascertain that it is one needing the relief of charity.

Foreword

Among the rich collections of the Medical History Museum at the University of Melbourne is the *First annual report of the Melbourne Lying-In Hospital and Infirmary for Diseases of Women and Children*, dated 13 December 1856. It states that one of the hospital's distinguishing characteristics would be 'the admission ... of poor women during their confinements, with provision to insure proper medical attendance, with judicious and kind nursing during their stay'. The hospital would, the report predicts, 'supply a want that has long been felt to exist, and which could not be satisfactorily met by any of the previously existing Charitable Institutions in Melbourne'. Thus began the history of the Royal Women's Hospital.

The hospital's History, Archives and Alumni Committee has collaborated with the university's Medical History Museum to produce *The Women's: Carers, advocates and reformers*, a major exhibition and accompanying book tracing the history of women's health in Victoria generally, and the Royal Women's Hospital in particular, through our combined collections.

The Royal Women's Hospital Archive and Historical Collection is currently undergoing a transformation. The official records and some photographs have been transferred to Public Record Office Victoria, where they will be preserved, catalogued and made accessible to researchers and the wider community. The historical collection, artefacts, photographs and other material will come under the university's custodianship at the Medical History Museum. Established in 1967 through a grant from the Wellcome Trust, today our museum holds more than 8000 items, covering the history of the Melbourne Medical School and the broader history of medicine in Australia and internationally. For 50 years this diverse collection of documents, photographs, artefacts, ceremonial objects, and medical and scientific equipment has flourished, thanks to the generosity of benefactors associated with the Melbourne Medical School. Together with alumni, their families and others, they have been crucial to building this valuable historical and cultural resource. The recent major addition from the Royal Women's Hospital greatly enriches the museum, and demonstrates the importance of the university's hospital partners in providing care, research and education. This publication and exhibition celebrate this significant collection.

Professor Mark Cook
Chair, Medical History Museum Advisory Committee, University of Melbourne

Cat. 62 Melbourne Lying-In Hospital and Infirmary for Diseases of Women and Children, ***First annual report***, Melbourne: Campbell Printer, 1856, printed booklet, 25.2 × 19.9 cm. MHMA0997.1, Australian Medical Association Archive, gift of AMA Victoria 2011, Medical History Museum, University of Melbourne.

Preface

In 1856, only two decades after the start of the small colonial settlement that would become the city of Melbourne, the Melbourne Lying-In Hospital and Infirmary for the Diseases Peculiar to Women and Children was founded, to benefit the colony's most disadvantaged and impoverished women. Like Melbourne Medical School—founded six years later in 1862—it was part of the early framework of health care that was emerging in the fledgling colony.

One of the hospital's founders, Dr Richard Tracy, would in 1864 become the University of Melbourne's first lecturer in obstetric medicine and diseases of women and children. These close connections between the university and the Royal Women's Hospital have continued through teaching and research, with both institutions leading the field in women's health.

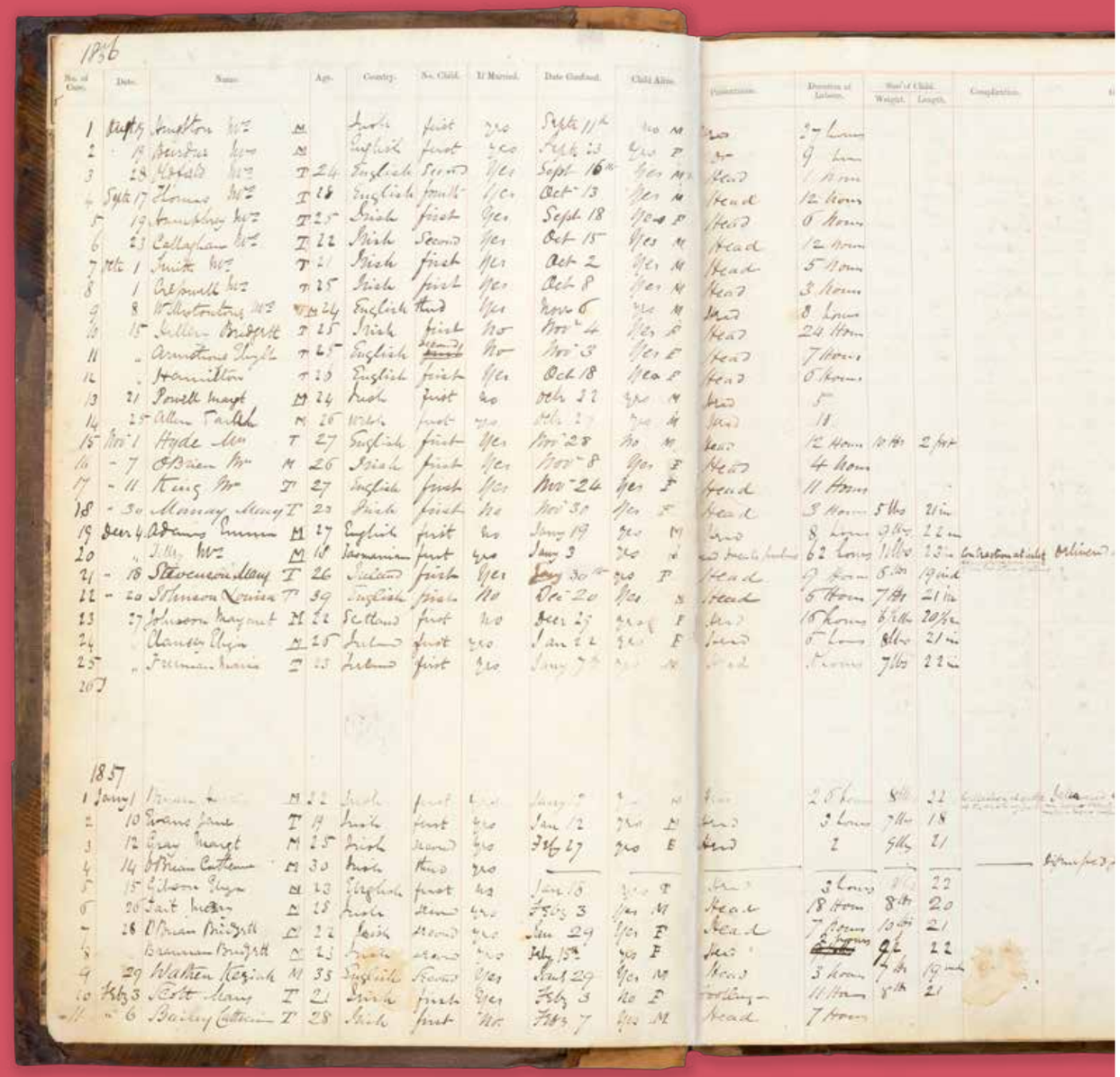
The exhibition and accompanying publication, *The Women's: Carers, advocates and reformers*, consider past, current and future endeavours in women's health. They explore the work of important individuals, revolutions in clinical care, legal reform on abortion and assisted fertility, professional and public education, and cutting-edge research. Importantly, the rich history of Indigenous peoples' knowledge and practices for pregnancy and childbirth is acknowledged through contributions by senior Victorian Indigenous women.

This book brings together prominent historians and health care professionals who are intrinsically connected to the work of the Royal Women's Hospital. Each writer presents an important part of the hospital's story from his or her particular cultural, historical, medical or personal perspective. I thank them all for their contributions.

The exhibition, presented at the university's Medical History Museum in partnership with the hospital's History, Archives and Alumni Committee, marks more than 160 years of the hospital's service to the women of Victoria. It draws on the collections of the Royal Women's Hospital, the Medical History Museum, and other significant repositories such as Public Record Office Victoria. I congratulate the Medical History Museum and the Royal Women's Hospital for revealing, through this project, so much about the history of women's health in Victoria, and for celebrating the achievements of the hospital and the university—and their continuing contribution to the health, safety and wellbeing of women.

Professor Shitij Kapur
Dean, Faculty of Medicine, Dentistry and Health Sciences
Assistant Vice-Chancellor (Health), University of Melbourne

Cat. 10 The Allan Studio (Collingwood, active 1887–1946), **Richard Thomas Tracy**, 1869, photograph, 48.2 × 40.9 cm. MHM00453, Medical History Museum, University of Melbourne.



A message from the Women's

The Royal Women's Hospital, 'the Women's', has had a proud history of service to the women and babies of Victoria since it admitted its first patient on 19 August 1856. We are therefore delighted to celebrate aspects of this history in the form of this exhibition, *The Women's: Carers, advocates and reformers*, and its accompanying catalogue.

The hospital has undergone name changes, location changes, varying forms of governance, and of course huge advances in practice. These are all discussed in this publication. What hasn't changed is the determination to provide the highest level of care possible, given the resources and capabilities of the time. In addition, the Women's has taught, researched, innovated and advocated. It is a big story. A tour of the exhibition and a reading of this book capture these endeavours with clarity and colour.

Where the Women's has arrived is a result of an evolution of its culture in the context of the Victorian community. The culture of the Women's has been informed by the past, and its future will grow from it. Last year there were 9367 babies born and 79,568 patients treated at the Women's. The nature of their involvement with the hospital reflects this culture, which is embodied in the Women's declaration: 'In everything we do, we value courage, passion, discovery and respect'.

Dr Sue Matthews
Chief Executive Officer, Royal Women's Hospital

Cat. 211 Melbourne Lying-In Hospital, ***Midwifery record book no. 1***, 19 August 1856 – 15 March 1879, bound volume, manuscript; 40.0 × 27.0 × 4.0 cm. VPRS 17382/P1, Unit 1 (A1991_05_001), Public Record Office Victoria.

Introduction

Following the move of the Royal Women's Hospital to Parkville in 2008, and the recent transfer of the hospital's objects and various other material to the University of Melbourne, it became clear that exhibiting this valuable collection would be an opportunity to tell a little of the history of the hospital, and of women's health more broadly. The aim is to demonstrate how far we've come, and to show how we got here. Together the exhibition at the Medical History Museum and this catalogue create a collage of particular historical events, people, philosophies and achievements—rather than a comprehensive history, or a history in depth. Through our project we do not attempt to tell the whole story, or offer an authoritative narrative such as the 1956 centennial history written by CE Sayers,[1] or the outstanding *Sex and suffering* by Janet McCalman.[2] Rather, our purpose is to vividly illustrate many of the remarkable individuals and achievements associated with a much-loved Melbourne institution.

The story of the Women's demonstrates a continuing dedication to the welfare of women and babies in Victoria, ever since the founders established the hospital in the gold rush period—a time that saw great fortunes being made, but also desperate poverty, when many people received virtually no medical services. In the following decades, the Women's continued to serve, and today still cares for, the most vulnerable. Among its many achievements and pioneering efforts, the Women's began teaching midwifery, the first Australian hospital to do so (as described by Madonna Grehan on pages 23–5, and Laura Bignell and Louise Sampson on pages 55–7); then in collaboration with the University of Melbourne began to teach medical students (see Shaun Brennecke's discussion on pages 117–20). In 1892 the university's first woman medical graduate, Dr Margaret Whyte, became a resident at the hospital; Jane Gunn tells Whyte's story on page 134. There was pioneering work in reducing the mortality and morbidity from sepsis in childbirth and induced abortion (as discussed by Christine Bayly on pages 81–3 and Suzanne Garland on pages 75–8). In later years, neonatal care changed around the world after Dr (later Dame) Kate Campbell discovered the cause of retrolental fibroplasia (blindness) to be excess oxygen administered to newborns (see Neil Roy's explanation on page 146). The Women's continued to improve care and lead the way in reproductive health, ultrasound, cancer, pre-cancer and many other fields.

Cat. 33 **Drs Ellen Balaam, Annie Bennett and Gweneth Wisewould and a nurse at the Women's Hospital**, c. 1915, photographic postcard, 14.0 × 9.0 cm. MHM2014.17, gift of Lois Parr, niece of Ellen Balaam, Medical History Museum, University of Melbourne.

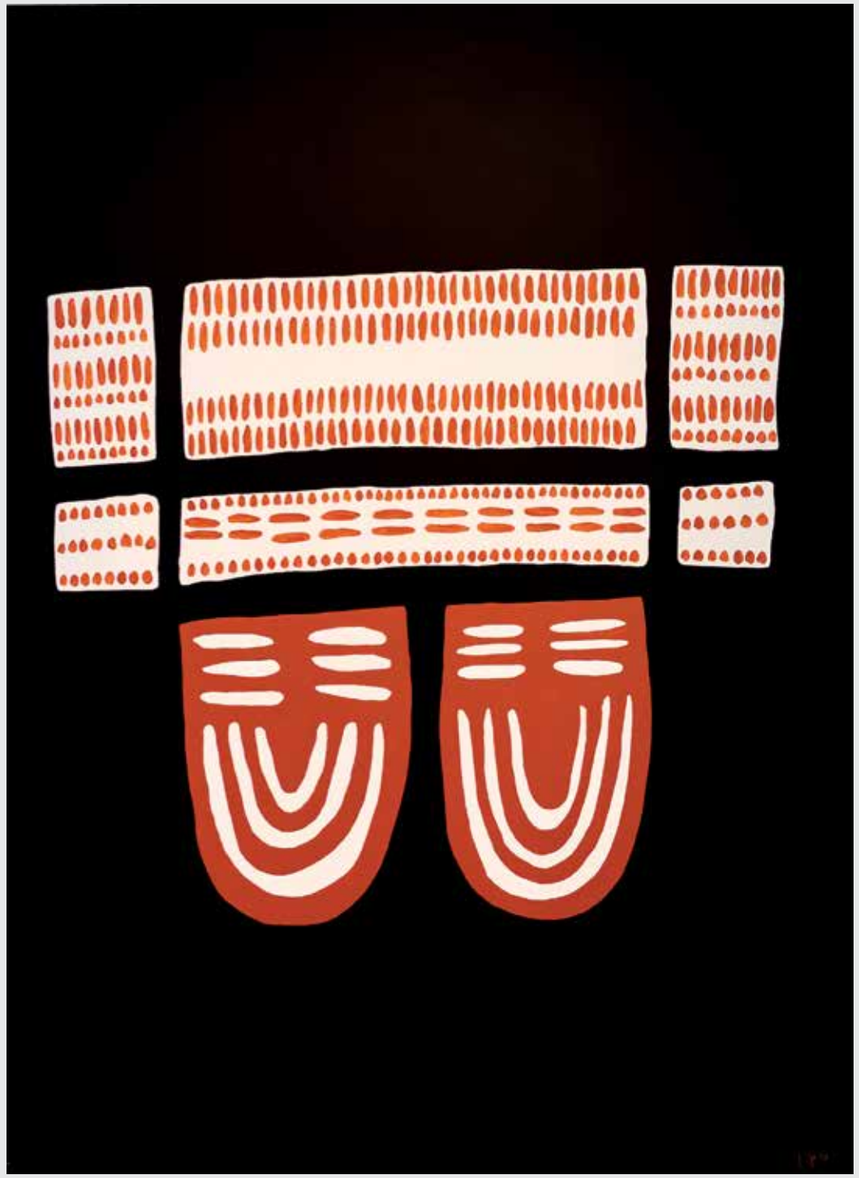
As well as always striving for clinical innovation and excellence in care, the hospital has long pursued a broader mission: to improve the social environment of women. This ambition is based on a close understanding that every individual's background and personal and economic circumstances are major determinants of their health and wellbeing. Dale Fisher explores this on pages 89–91. More recently, the voice of the Women's has been influential in reforming laws relating to abortion, assisted fertility, and violence against women. Hence our title, *The Women's: Carers, advocates and reformers*.

Associate Professor Leslie Reti AM
Chair, History, Archives and Alumni Committee
Royal Women's Hospital

1 Charles Edward Sayers, *The Women's: A social history to mark the 100th anniversary of the Royal Women's Hospital, Melbourne, 1856–1956*, Melbourne: Renwick Pride Printers for the Royal Melbourne Hospital, 1956.
2 Janet McCalman, *Sex and suffering: Women's health and a women's hospital: The Royal Women's Hospital, Melbourne, 1856–1996*, Melbourne University Press, 1998.

Charles Nettleton (1826–1902, active Melbourne 1854–90), **Eastern Hill**, c. 1862–79, showing the original Lying-In Hospital at 41 Albert Street, to the left of St Peter's Church. State Library Victoria.

CULTURAL AND HISTORICAL PERSPECTIVES



Thanampool woorkngan (woman's birthplace): Aboriginal women's birthing knowledge and practice

Introduction

When I was invited to contribute to the exhibition and catalogue *The Women's: Carers, advocates and reformers*, I felt honoured and excited. Birthing, birthing practices, midwifery, birth support, and Women's Business have long held a keen interest for me. I have five daughters and four granddaughters, and have worked as a birth support person in my family and community, attending more than 20 births. In another life I might have been a midwife.

So I will offer a cultural context and background in which Aboriginal women's birthing practices and knowledges differ from Western ones, as a result of our extensive medical knowledge and our deeply spiritual culture and way of understanding the world. I will begin with some background on the repercussions of the invasion and colonisation of our Country. Then I will discuss the Law of the Land—our Dreaming—and finally offer some insights into birthing practices and knowledges that were, and some that still are.

In my writing I mix the past and present tenses. I do this because many practices and knowledges have been diminished through colonisation, and today continue in only a few communities across Australia. But knowledge survives, held in our DNA, held in Country, waiting: now, Women's Law is being re-awakened.

Our shared story and acknowledgement

With the coming of the white man to the shores of our homelands, our ways of being were mortally threatened. The colonisers' established genocidal practices and processes were systematically applied to our peoples in an attempt to deny us: deny our existence, deny our identity, and deny our belonging. We were forced from our homelands, our Country; lives were lost in battles and massacres; families and clans were forcibly moved onto mission stations where they endured harsh restrictions imposed by government policies and administrators. These included missionaries' so-called benevolence, the removal of children, dividing of families, punitive scrutiny and control of our daily lives. No more were we allowed to sing our songs, speak our languages, or conduct our ceremonies—ceremonies of honour and renewal, perfectly in tune with and resonating with Country, the natural environment and the people. These customs and knowledges

Cat. 224 Vicki Couzens (Kirrae Wurrong and Gunditjmara clans of western Victoria, b. 1960), ***Thanampool karrakeet koong kamateeyt*** (woman's marks and body paint), 2017, acrylic on canvas, 80.0 × 45.0 cm. Collection of the artist.

have been denied to us through the inhumane and oppressive practices of the colonisers. In this way our identity has been fragmented. There are pieces missing, gaping wounds, in the body of our cultural knowledge, traditions and practices. Yet we have survived, each generation and family reclaiming, regenerating and remembering more of our birthright knowledge, which we have cherished and nurtured through the generations. In these times, through the work of those who have gone before us, we are reclaiming, regenerating, revitalising and remembering who we are and where we come from.

Law of the Land, language, and cultural expression

Aboriginal life, from the everyday through to the most secret and sacred, is governed by a holistic spiritual belief system founded in the Dreaming, which I distil into two quintessential principles or values: respect and relationship. These principles underpin the Law of the Land—that is, laws for living; how each person is connected to the great web of life through skin, kin, totems and Country. The Law determines your place, who you are, your belonging and how you live on Country: 'I feel it with my body, with my blood. Feeling all these trees, all this Country ... Earth. Like your father or brother or mother, because you born from earth'.[1] This Law is one of respect for all things, with a mandate to leave things as you find them. It involves caring for creatures and Country through sustainable conservation practices and ceremonial rituals that maintain ancestral stories and songlines. Because the land is the mother, we belong to her. We are charged with the responsibility to care for our Country, our mother, and all creatures, in perpetual seasonal cycles of renewal and regeneration.

As the longest-surviving culture on planet Earth, Aboriginal people possess a profound spirituality that arises from our innate knowing and deep understanding of place, belonging and the interconnectedness of all things in the continuity of Creation. This is expressed through stories, songs, dance, artefacts, and continuing cultural knowledge and practices. In this way we find our belonging, which in turn defines and makes us who we are. To know who you are, and where you come from, is to know your belonging and place. Land, language and belonging are fundamental to our being. The responsibility and obligation to look after the homelands of our family and clan group are a birthright handed down through bloodlines from generation to generation. Totemic relationships with birds, plants and animals connect us to both the physical and spiritual worlds, and underpin a reciprocal obligation to care for each other and for the natural environment. In this way our culture and language relate to, and are embedded in, the land.

Language, story, song and dance resonate with Country and place. The voice of the land is our language and songs, our stories are the body of the land, and the rhythm and heartbeat of the land are felt in the dance. Land and language are inextricably linked.

Language is directly connected to place, through mimicry of animals and nature in dance; the visual language in body art, motifs and symbols in stone etchings, sand paintings, and ceremonial ornaments; music, sound and vocalisation; and the naming and relationship of all things, embodying the interconnectedness of our existence.

From the Creation times all things came into being: the animals, the plants, the people and our Mother Earth. As the Ancestor beings lived, loved, fought and died, they created all the features of the natural world and the rules and laws for living. Their Dreaming stories and actions were transformed into the landscape: rivers, lakes and billabongs; hills, mountain ridges and valleys; sand hills and plains; caves and rock shelters. These places hold the stories of our Ancestors. These Dreaming stories are handed down through the generations in songs, stories, ceremony, ritual and dance. We are each born of the spirit of our Country. It is where we are conceived, it is our home, and it is where we belong.

Bringing forth new life: conception, pregnancy and birth

Mitochondrial DNA carries the individual code that makes each of us a unique individual. It is the seed of our 'knowing' and comes primarily from our mother's line.[2] I acknowledge all persons who have the female physiology that gives us the privileged capacity to create, nurture and give birth. This is, in Aboriginal Law, a sacred gift, respected and honoured as the ever-presence of universal concurrent Creation.

Birth, life, death: three pivotal transitions in human existence. Growing up into a woman with the capacity to give birth; becoming pregnant, nurturing a life within; giving birth, labouring to push forth a new life—these are all momentous and (hopefully) enriching and fulfilling experiences. Breastfeeding—the physicality of continuing to nourish your child—is something that our woman's body is designed to do, and a role that many women choose. The cycle of growth is made up of archetypal phases in a woman's life: growing from a girl-child into a young woman, then mother, and finally grandmother or crone. Being a mother is both gift and responsibility.

Birthing song

ngowata ngowata koornong poopoop	come, come little baby
ngowata ngowata	come come to us
ngathoongan ngarrakeetong	we are your family
wayapawan ngeerrang-an	meet your mothers
wayapawan koorrookee-an	meet your grandmothers
koornong poopoop, nyoorn nyoorn	do not cry, we keep you safe
ngowata ngowata koornong poopoop	come, come little baby.[3]

I wrote this song when I was exploring and reclaiming our Gunditjmara Women's Law. It is a reclamation of a birthing practice in which the midwife or midwives, grandmothers, aunties and other female relatives attend the mother during birth, providing physical care but also—and perhaps even more importantly—spiritual and emotional care, for mother and baby. Thus the song is a song of welcome, of kinship and naming. It is sung so that the baby hears the voices of her family. The tone is calming, welcoming, calling the baby to life.

The spiritual aspects of Aboriginal life cannot be ignored or diminished. They are all-powerful, ever-present and absolutely central to wellbeing and health. This is especially true at spiritually powerful yet vulnerable moments, such as birthing.

Conception, pregnancy, birth and motherhood are comprehensive and integrated spiritual, physical, mental and emotional processes and experiences. In our Law they are inextricable threads of the fabric of a continuing story of Creation:

> ... borning is not equivalent to Western birthing, but refers to a much wider and symbolic process. It is inseparable from and integral to the Dreamtime and the Law, the Land and its people. Aboriginal way by the Grandmothers Law is directed and carried out by the Aboriginal women in the security and ancestral tradition and the warmth of Alukura. Only the women participate and assist in childbirth, which they do in a non-invasive, supportive, dignified and knowing way.[4]

Not only did/do Aboriginal midwives possess extensive knowledge of antenatal care and birthing practices that sometimes resembled Western ones, but our midwives carried the added responsibility of nurturing the spiritual health and wellbeing of mother and child. An understanding of the spiritual aspect of birthing is lacking in the Western medical paradigm. In fact, Western medicine has generally degraded the veracity of Aboriginal knowledge and, out of ignorance, disregarded any possible benefits. Since colonisation, these knowledges and practices have been severely harmed, and their transfer down the generations has been interrupted. We now find ourselves drawn into debates about authenticity and legitimacy, compelled to justify our Indigenous beliefs and ways.

As with all Aboriginal knowledges and practices, there is more than meets the eye. A spiritual aspect and a deeper knowledge are embedded in any practice or behaviour, but these are not readily recognised by mainstream health organisations, pregnancy and childbirth carers and practitioners:

> Cultural safety can only occur when differences in culture are recognised and respected and these differences are incorporated into health service delivery. Australia has not progressed very far towards providing cultural safety for the Aboriginal population.[5]

Nevertheless, there were instances when Aboriginal midwives' knowledge was recognised and used to educate white people in rural Australia. In 1934 Dame Mary Gilmore recalled that:

> two well-respected nurses of the colonial period days in Wagga gained their midwifery knowledge from Aboriginal women and subsequently taught a local doctor whose obstetrical skills were insufficient for isolated rural practice.[6]

Again, this is not known or recognised—Indigenous knowledge has been silently appropriated.

Our Women's Law governs and regulates the practices, rites and rituals that surround and support conception, pregnancy and childbirth. Women have always been the keepers and practitioners of such knowledge and expertise, which developed and accumulated over millennia. From deep time, Aboriginal midwives took on the responsibility of caring for birthing mothers, preserving the many practices, rituals and rites undertaken before, during and after birth that ensured the physical, spiritual and emotional wellbeing of mother and baby.

Pregnant women were/are cared for by midwives and female family members. Mothers and grandmothers monitor the woman's diet, imposing food restrictions to ensure correct nutrition. Midwives and older female relatives were/are expert in observing and reading the early signs of pregnancy. They were/are adept at discerning any health problems during pregnancy and taking action to remedy them. Antenatal care included many checks and observations, similar to Western medical antenatal care, such as monitoring the growth and positioning of the baby, blood pressure, height of the fundus, and placement of the placenta.

Pregnancy and birthing are strictly Women's Business. To this end, all preparation is done by the women. Birthing trees are a significant part of this for many groups in Victoria: a tree hollow might be prepared by clearing out debris, and fresh leaves and barks gathered for use. Firewood is collected and prepared, along with any specific leaves, barks and herbs that might be needed for the physical or spiritual care of baby and mother. Water is brought to the site and kept in *yooroom* or coolamons. Along with smoke and fire, water is/was important for cleansing and sterilising—for both physical and spiritual wellness. Ashes were/are used to sterilise the umbilical site.

Stone knives or shell cutting implements are sharpened for use in cutting the cord. Fibres are gathered and made into string to tie off the cord. Different methods and natural fibres and plants are used across Australia. We have long known that cutting the cord is best done when the pulsating has ceased, and at a particular place along the cord. Only in recent times has Western medicine understood and encouraged this, after

'discovering' the rich nutritional and health benefits of these last pulsating transfers along the umbilical cord from placenta to baby.

Applying warmth, rubbing and massage, touch, cooling with water, singing and recounting stories are all ways in which Aboriginal midwives and attendants support the mother and baby. Activity and exercise are encouraged, as is being upright in a squat, or forward on hands and knees, as favoured positions for birth.

Postpartum care involves gathering up all the birthing aftermath and body fluids and materials, especially the placenta, which is usually buried, due to the sacred nature of birthing and the placenta's powerful energy. This energy can be dangerous to those who should not be part of this process. For this reason I will not reveal any further details in this public forum.

Final words

Women's Law and Women's Business have been damaged by colonisation. In particular, our birthing practices and knowledges have been harmed by the forced dislocation of people from Country, child removal, and all the other family-separation efforts of mainstream agencies and government legislation and policies across generations.

Although Western antenatal and birthing care bring many benefits to Indigenous families, there is still a huge gap preventing the inclusion of Aboriginal practices in mainstream settings and services. This will require time: we Aboriginal women are still reclaiming and regenerating important practices and ways to implement them, such as birthing on Country, having support from our families and, especially, taking care of the spiritual aspects of birthing.

Restoring our knowledge and practices and reigniting our secret Women's Business would, I believe, go a long way towards solving some of the serious health and social problems that are still part of our shared story in this post-colonial era.

Dr Vicki Couzens

1 Bill Neidjie, *Gagudju man*, Adelaide: Gecko, 2007, p. 39.
2 New research has found male mitochondrial DNA (S Luo et al., 'Biparental inheritance of mitochondrial DNA in humans', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 115, no. 51, 18 December 2018, pp. 13039–44).
3 © Vicki Couzens, 2009.
4 Helen Callaghan, 'Traditional Aboriginal birthing practices in Australia: Past and present', *Birth Issues*, no. 10, parts 3–4, 2001, pp. 92–100.
5 Bawinanga Women's Centre, 'Health and birthing in the bush', in *Birthing business in the bush*, Maningrida, NT: Bawinanga Women's Centre and Liquid Rain Design, 2004, http://pandora.nla.gov.au/pan/45070/20050711-0000/www.maningrida.com/mac/bwc/.
6 Mary Gilmore, *Old days, old ways: A book of recollections* (2nd edn), Sydney: Angus & Robertson, 1934, p. 152, cited in Judith Ann Barber, 'Concerning our national honour: Florence Nightingale and the welfare of Aboriginal Australians', *Collegian (Royal College of Nursing, Australia)*, vol. 6, no. 1, January 1999, pp. 36–9.

Badjurr-Bulok Wilam: Home of Many Women

Badjurr-Bulok Wilam means 'Home of Many Women' in Woiwurrung, the language of the Wurundjeri people. It is the name of the Aboriginal Women's Health Business Unit at the Royal Women's Hospital.

Badjurr-Bulok Wilam staff provide culturally holistic support and advocacy to Aboriginal and Torres Strait Islander women and their families, and to non-Aboriginal women who are having Aboriginal babies, who are patients at the Royal Women's Hospital. We aim to meet their social, emotional and cultural needs. Our work may include helping somebody obtain access to hospital services, providing them with information, organising referral to internal and external services, or offering other practical assistance. Badjurr-Bulok Wilam also provides secondary consultation and training to health professionals. Because the Women's is a tertiary specialist hospital, patients who use our services come from all across Austalia.

The first version of what could be described as the modern-day Aboriginal health liaison officer at the Women's was the Koori women's health project officer, a position established in the late 1990s. The words of the first officer, Nerida Sutherland, still ring true today:

> Aboriginal people have the right to the best avaliable health care, the right to make choices about where they receive this care and the right to expect that they will be treated with respect and dignity by those who are providing this care.[1]

The first Advisory Committee meeting took place at the hospital on 15 July 1997. The majority of women who attended were Aboriginal women involved in health and community services for the Aboriginal community, as well as key staff from the Women's.

The Royal Women's Hospital has a complex history with the Aboriginal and Torres Strait Islander community in Victoria. As a government agency, in the 19th century the hospital was given responsibility for enforcing certain provisions of the *Aboriginal Protection Act 1869*, namely, the removal of babies and children from their mothers, families, communities and culture. For this reason, hospital environments often trigger historical memories of the removal of children and of maltreatment, rather than being seen as places of healing and wellbeing. Aboriginal people's subsequent reluctance to seek early preventive health care often results in presentation with more acute and complex health problems.

In 2008, the Women's made a formal apology to the Aboriginal and Torres Strait Islander community, and affirmed its commitment to working and building a relationship of trust and partnership with Aboriginal and Torres Strait Islander peoples, communities and organisations. Each year, the hospital holds a special event in honour of the Stolen Generations, and has made a strong commitment to improving the lives of Aboriginal women, babies, families and communities across Austalia.

Badjurr-Bulok Wilam is the consultative and collaborative point for the Women's continuing programs and future events for Aboriginal people, which include:

- Baggarrook Yurrongi—caseload midwifery which provides continuity of care with a known midwife for pregnancy, labour, birth and postnatally
- Healing the Past by Nurturing the Future—a project to co-design perinatal awareness, recognition, assessment and support strategies for Aboriginal parents who have experienced complex childhood trauma
- Prevention of violence against women (PVAW) is a highly important area for the Women's. The PVAW Operations Group serves as a forum for discussion and support for project managers, officers, frontline managers and team leaders involved in PVAW efforts across the hospital
- Reconciliation Action Plan
- Aboriginal Employment Plan
- Aboriginal Advisory Committee
- Acceditation—public recognition that a healthcare organisation provides safe, high-quality care.

Gina Bundle

1 *Right of ways: Working towards improving access and equity for Indigenous women in mainstream health services. The Royal Women's Hospital Koori Women's Health Project Report*, Melbourne: Aboriginal Women's Health Business Unit, Royal Women's Hospital, 1997, p. 2.

The Women's Baggarrook Yurrongi (Woman's Journey) program for Aboriginal women celebrated its first birthday in March 2018. Pictured here are three Baggarrook midwives (wearing scarves), with some of the mothers and babies who participated in the program. Photograph by Michelle Putt. © Royal Women's Hospital, Melbourne, 2018.

From Lying-In to Royal Women's

The Royal Women's Hospital opened in August 1856 as the Melbourne Lying-In Hospital and Infirmary for the Diseases Peculiar to Women and Children, in a terrace house in Albert Street, East Melbourne. The colony was in the midst of a gold rush that would bring half a million people in the decade. Women were abandoned—pregnant and destitute—while their husbands and erstwhile lovers tried their luck on the goldfields. The need for a charity lying-in hospital for women without homes was urgent.

A group of evangelical ladies, led by Mrs Frances Perry, wife of the Anglican bishop of Melbourne, found two young doctors: Englishman John Maund and Irishman Richard Tracy. Both had studied in Scotland and Paris, and were determined to bring the latest in clinical medicine to the colony. The ladies' vision was charitable and reforming, whereas the doctors (who were also involved in Australia's first medical society and in founding Australia's first professional medical journal) envisaged a clinical institution regulated by careful patient records and scientific papers.

In 1858 the hospital moved to a large site on Madeline Street, later Swanston Street, Carlton, into premises designed by Tracy himself to the latest standards. The ladies wanted only married patients; Tracy, who had trained at the charitable Rotunda Hospital in Dublin, insisted that unmarried women also be admitted, just as they were in Ireland. In 1859 the Lying-In Hospital became the first in Australia to train nurses, and in 1865 it became the first specialist teaching hospital, when Tracy was appointed lecturer in obstetrics at the University of Melbourne's new medical school.

In the infirmary, women presented with childbirth injuries such as fistulae, prolapses and especially chronic infections. Others sought relief from painful menstruation and infertility. The medical response was perforce surgical, and Tracy was a brilliant operator, with a better survival record for his oöphorectomies than the great Lawson Tait in London. He invented a device for incising and enlarging the cervical os, in the mistaken belief that dysmenorrhoea and infertility were the result of a blockage. Most important of all was the successful, even if exceptionally difficult, relief of fistulae, which otherwise condemned

Cat. 64 Charles Nettleton (1826–1902, active Melbourne 1854–90), **Melbourne Lying-In Hospital**, c. 1868, photograph, mounted; 6.3 × 10.5 cm. MHMA1309.1, Australian Medical Association Archive, gift of AMA Victoria 2011, Medical History Museum, University of Melbourne.
The hospital's second premises, in Madeline Street, North Melbourne (now Swanston Street, Carlton), to which it relocated in 1858 after two years of operation in Albert Street, East Melbourne.

women to lives of exclusion and misery. But the most common complaints were sexually transmitted or puerperal infections, which brought on chronic pain, life-threatening sepsis, and infertility. A frontier society was dangerous for women, especially those without a reliable breadwinner. Prostitutes and 'ruined' women filled the wards of both the infirmary and the midwifery department.

By the 1890s the hospital was delivering more than 1000 babies a year, more than many of its equivalents overseas. And as colonial Australians entered the fertility transition (the process by which the world's more prosperous nations went from high to low fertility) without the benefit of reliable contraception, induced abortion became the last resort. Methods ranged from contrived falls down stairs, to gin and hot baths, and, most commonly, the vast and very public trade in herbal concoctions to 'restore regularity'. But mechanical interference was the most common—and most dangerous—option, with new technologies proliferating: from the curette to clean products from the womb, to the Higginson syringe to blast the uterus with substances ranging from formaldehyde to Lifebuoy soap—even kerosene for one poor woman in the 1950s. Women often operated on themselves alone or were helped by relatives and friends. Private midwives and pharmacists became notorious as the 'professional face' of the 'backyard abortion' racket.

The result was that, just when the hospital gained control over puerperal infection in its labour ward with the introduction of rigorous antiseptic midwifery from 1888, the maternal death rate remained high due to post-abortal sepsis, a scourge that would peak in the 1930s and not disappear until after the Menhennitt ruling of 1969, which permitted the termination of a pregnancy that threatened the mental or physical health of a woman. The hospital's septic wards poisoned its image in the community, where it was regarded as 'the place where all the abortions went'.

Obstetrics remained central to medical general practice well into the 1970s, so University of Melbourne medical students benefited from memorable periods of residency at the Royal Women's Hospital, culminating in attending home births in the inner suburbs under the tutelage of the Royal District Nursing Service. This was often a student's first intimate encounter with the poor, and many were profoundly moved by the experience. The quality of obstetrics was high, in the sense that deaths were few (apart from women with other life-threatening complications), but patients were treated roughly, especially in the busy hospital, which matrons ran as a complex, germ-destroying military machine.

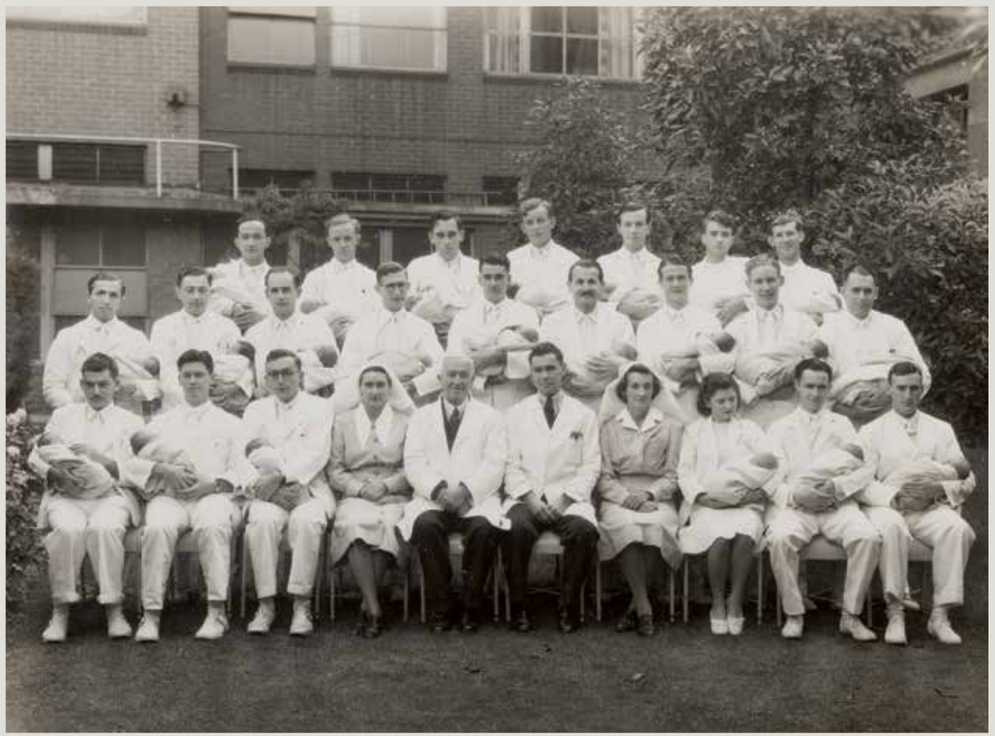
Middle-class nurses and doctors were shocked by the poverty, neglect by feckless husbands, alcohol abuse and violence, and were attracted to eugenicist solutions to reduce the proportion of 'problem families'. Most supported the 'soft eugenics' of child and maternal health clinics and antenatal care, public creches and kindergartens—measures that did protect children, especially during the grim inter-war years.

Through research the hospital had become, by the late 1930s, world-class in diagnosing and managing puerperal and post-abortal infections. It pioneered the use of caudal (epidural) anaesthesia during labour and the piping of gas to the labouring woman's bed. As it coped with waves of non-English-speaking immigrants from the 1950s, it struggled with cultural differences, but was innovative in treating thalassaemia (a genetic disorder causing severe anaemia, particularly common among certain ethnicities). As medical research grew in Australia, so did the hospital's research culture and breadth of inquiry: from perinatal medicine, to IVF, to substance abuse in pregnancy.

The Lying-In Hospital became the Women's Hospital in 1884, and 'Royal' in 1954. By the 1930s it was delivering more than 3000 babies a year, and by the 1960s more than 6000. A 'charity' hospital until the introduction of Medibank in 1974, it is now a full public tertiary hospital, with a private hospital attached. Developing particular expertise in treating puerperal and post-abortal infection, pre-eclampsia, diabetes in pregnancy, and infertility, and in providing neonatal intensive care, its clinical school has influenced standards in obstetrics and gynaecology throughout Australia. Midwives continue to conduct normal deliveries and instruct students. Second-wave feminism and multiculturalism transformed the hospital's culture from the 1970s and it became an exemplar in respecting patients' rights and complex needs. In 1996 it relinquished its independent board, amalgamating with the Royal Children's Hospital to form the Women's and Children's Healthcare Network, but in 2004 its independent board was restored. In 2008 it moved to new premises next to the Royal Melbourne Hospital, to benefit from technological and specialist synergies.

Professor Janet McCalman AC

Women's Hospital, April, 1946



H. Eizenberg, W. L. Jenkins, P. G. Hughes, J. J. McCarthy, J. L. Connell, D. Denton, W. L. Kermond.
S. Rose, H. Buckstein, D. Rabinov, J. P. Morris, G. M. Stubbs, H. M. Bower, D. F. Schlicht, H. M. Bray, W. Adeney.
E. Friedlich, W. R. Rogerson, S. Wiener, Sr. K. J. Teitz, Prof. M. Allan, Dr. C. K. Churches, Sr. B. Shannon,
Miss D. D. Bialestock, J. G. B. Cooper, H. Denehy.

Making a stand for women's lives and health

In the 1920s, the idea of 'lurking germs'—in foodstuffs, on 'foreign' clothing, in air currents or on personal items—gained currency in the popular press. At the Women's Hospital in Melbourne, fears about opportunistic germs that could kill in hours gained credibility when women in epidemic numbers developed potentially lethal bacterial infections complicating childbirth, miscarriage or induced abortion.

In 1925, the government statistician reported that for every 228 confinements in Victoria, one woman died. Today more than 50 times that number of confinements take place for a single woman to lose her life in childbirth. That stunning improvement started with a concerted local effort to find the evidence for what was actually taking place in and around childbirth.

Initially the Victorian Branch of the British Medical Association established an Obstetric Inquiry Committee, which in 1925 appointed Dr Robert Marshall Allan, a Queensland–born and bred, University of Edinburgh–trained obstetrician, to the new position of director of obstetrical research for Victoria. Allan, aged 39, set about collecting data on obstetric deaths and illness in the state, identifying possible causes and solutions. He brought to the task a capacity 'to meet emergencies quickly and solve them' honed at the Rotunda (Maternity) Hospital in Dublin, where he had been assistant master and lecturer for three years from 1911. His problem-solving and management skills were sharpened further by several years as a World War I army surgeon who became 'fully-fledged in all the grim work of war'. His bravery in Mesopotamia earned him a Military Cross, and his eloquence led to the 1916 publication of a book of his private wartime correspondence.[1]

Between 1925 and 1928, Allan undertook an exhaustive statewide survey of obstetric practices in private homes, personally interviewed doctors who attended childbirths, and inspected more than 150 hospitals registered to admit obstetric patients. He studied statistical trends in maternal death rates, and assessed the relevant scientific research under way, whether from a clinical, bacteriological, haematological or other standpoint.

Cat. 48 The Sears Studio (St Kilda, active c. 1900–1950s), ***Women's Hospital***, April 1946, photograph, glass, cardboard, metal, ink; 25.3 × 30.4 cm (frame). MHM02013.249, Saul Wiener Collection, Medical History Museum, University of Melbourne.
Professor Robert Marshall Allan is seated in the front row, fifth from the left.

His ground-breaking report on maternal morbidity and mortality in Victoria, released in 1929, was rigorous in its methods and perceptive in its analysis. It showed that the losses of mothers were greatest in women aged under 20 or over 35, in metropolitan rather than rural areas, and among higher rather than lower socio-economic groups. The main causes of deaths were infection (44 per cent), toxaemia of pregnancy (18 per cent), haemorrhage (12 per cent) and difficult labour, often involving trauma to the reproductive system and surgical intervention (10 per cent).[2]

Allan's report emphasised the need for significant improvements in the management of fever and infection associated with childbirth and pregnancy termination, the training of doctors, and the registration and training of obstetric nurses. It also helped shape the development of infant welfare centres, and the control and inspection of private hospitals and nursing homes where many obstetric procedures took place.

In 1929 Allan gained a superb opportunity to influence the clinicians of the future when he was appointed as the University of Melbourne's first professor of obstetrics and its first-ever clinical professor. Based at the Women's Hospital, he was well placed to educate medical students and graduate doctors, one of whom was Dr Arthur Machen 'Bung' Hill, a junior medical officer at the Women's in 1931, its medical superintendent from 1933 to 1935, and a member of its honorary gynaecological staff from 1938 to 1963. In 1931 Hill was 28 years old, a superlative, theatrical speaker, with a larrikin streak. That year he started collaborating with Hildred Butler, 'an exacting, awe-inspiring lady' who could stare down senior doctors if necessary. She was a 25-year-old University of Melbourne science graduate working on blood cultures and anaerobic bacteria at the Baker Medical Research Institute in Melbourne when she agreed to help Hill study a spate of 'appallingly frequent severe and fatal infections' among Women's Hospital patients.

By 1937, the smooth and rough combination of Butler and Hill had identified the four types of bacteria responsible for most of the serious infections complicating childbirth, miscarriage and abortion at the Women's. They referred to the bacterial agents, which included *Clostridium welchii* (now known as *Clostridium perfringens*), as 'the most colourful and dramatic infections in obstetrics'. When Hill visited Britain in 1935 he reported on 30 cases of infection treated at the Women's during the previous two years, and described for the first time six major clinical varieties of *Clostridium welchii* infection, 'each as distinctive as a primary colour in the solar spectrum'. The resulting international publication won him the British Medical Association's biennial award—a huge honour—and led to the development of a therapeutic serum by the Commonwealth Serum Laboratories in Melbourne.

At a time when bacteriology was cementing an international reputation as a crucial science for improving public health, the findings from Victoria provided fresh insights for countries worldwide experiencing the unacceptable wastage of lives and health of women.

The advent of sulpha drugs in the late 1930s and penicillin in the mid-1940s gave doctors and scientists new ways to deal with the problem. They were rewarded when death rates among women of child-bearing age began declining.

Although Butler and Hill collaborated on numerous projects and publications, they also retained their independent activities. In 1937 Butler's major medical textbook, *Blood cultures and their significance*, was published to considerable acclaim. The following year she was appointed as the first bacteriologist at the Women's, where she remained for the next 33 years, obtaining her Doctor of Science degree in 1946. After Butler's death in 1975, Hill described her as one of 'the immortals'. He highlighted the revolutionary (diagnostic bacterial smear) test she developed in 1941, and subsequently fine-tuned, to speed up the identification of lethal organisms that until then had taken two or more days to culture:

> She couldn't pick these damn things quick enough. These women were dying in a few hours. She sat down and, with a stroke of genius, and with special staining methods ... she could decide in 30 minutes what this particular infection was. That's been the basis of all our success in infection since that day.[3]

Between 1931 and 1960, the Women's cared for some 200,000 women who gave birth or were treated following miscarriage or abortion. Progress did not occur in a straight line of achievement, but in fits and starts that necessitated many reassessments of hospital practice and attitudes. A total of 429 women died from the infectious agents that Butler and Hill had identified as major culprits, with *Clostridium welchii* and the haemolytic streptococci being the most dangerous, accounting for 147 and 101 deaths respectively. Clarification of the overall problem in all its complexity, combined with methods for the prevention, rapid detection and diagnosis of infection, led to lasting changes in the way pregnancy and childbirth were managed, not only at the Women's, but elsewhere in Australia and the world.

Three larger-than-life hospital personalities—Robert Marshall Allan, Hildred Butler and 'Bung' Hill—helped make massive improvements to women's reproductive experiences and health.

Dr Ann Westmore

1 Robert Marshall Allan, *Letters from a young Queenslander*, Brisbane: Watson, Ferguson and Co., 1916, p. 112.
2 Robert Marshall Allan, 'Introductory lecture', *Speculum*, no. 126, July 1930, pp. 22–6.
3 AM Hill, 'Jean Crameri's farewell function', Royal Women's Hospital Archive.

The education of midwifery and infirmary/gynaecology nurses

The inaugural nursing staff of the Melbourne Lying-in Hospital consisted of the matron, Mrs Esther Gilbee, and two female servants.[1] Gilbee was not a midwife, but, having worked in private 'lunatic asylums' in London, she had extensive experience in nursing women affected by puerperal psychosis and other complications.[2]

With the hospital's move to a permanent location in Madeline Street in 1858, there was increased accommodation for patients, and separation of the lying-in (midwifery) and infirmary (gynaecology) wards. The staff of nurses expanded too. Occasionally a recovering patient was asked to assist them. Bedside attendants were referred to as 'nurses' or 'midwifery nurses'. Their nursing work consisted of 'feeding, nurturing, washing, applying treatments, managing bodily waste and cleaning'.[3] Matron was responsible for overall operations of the hospital and was expected to enforce cleanliness, neatness and obedience. She had the power to dismiss staff if necessary. This superintending position was occupied by non-nurses until 1896 when the matron fell ill and Sister Ellen Walter, the head infirmary nurse, was appointed for some weeks.

The Lying-In Hospital pioneered on-the-job education in the care of women. Training of one month was available as early as 1859. A 12-week scheme, implemented in 1861, is believed to be the first formal system of nursing education instituted in the Australian colonies. Pupils who completed the course and passed the examination received a certificate, qualifying them as a 'Ladies Monthly Nurse and Sick Nurse'. Up to 1872, 33 women were awarded this certificate. The hospital's management was immensely proud of this educational endeavour, which it considered a civic obligation.

Pupil nurses, later known as 'student nurses' and 'student midwives', formed the backbone of staffing. They lived at the hospital for the duration of their training, and paid for tuition. They were subject to strict rules, worked long hours and endured arduous conditions. As late as the 1960s, midwifery nursing students attended lectures in their 'off-duty' time, after a day shift, following a night-duty shift, or between a split shift.

In the 1860s, pupils were required to observe 100 cases of labour and after-care before they could conduct deliveries. They learnt anatomy, the care of women affected by sickness and pregnancy complications, as well as pre- and post-operative care for infirmary patients. According to their doctor teachers, nurses certificated by the Lying-In Hospital

Cat. 157 **Sister Guscott (sister in charge of the premature nursery), and a staff sister, gavage-feeding a premature baby in oxygen cot**, c. 1952, photograph, 23.5 × 18.5 cm. PA 1995_44_73_12, Royal Women's Hospital Collection.

were experts in normal birth—safe practitioners who understood complications and would not fail to seek medical help when needed.

A training scheme in infirmary nursing was inaugurated in 1888 and, for the first time, was separate from midwifery nursing. This new certificate featured an image of the new gynaecology wing, not the hospital. Subsequently, the nurses of the infirmary department were permitted to wear a badge on their sleeve with the initials 'WHI' (Women's Hospital Infirmary), to distinguish them from the midwifery department staff, who wore a large red cross. On the midwifery side, a coroner's finding in 1892 motivated the pupils to ask for their certificate to be changed from 'Ladies Monthly Nurse' to 'Midwife'. This was rejected, but in 1898 the pupils succeeded in changing their qualification to 'Obstetrical Nurse'. The midwifery pupil nurses then asked for a blue Maltese cross to appear on their certificate.

Hospital-based training in midwifery nursing and gynaecology nursing expanded, contracted and was modified over its lifetime, in response to in-house exigencies and external factors. Throughput of pupils was high, and attracting new ones was a perennial problem. By the 1890s the hospital was pressured by its doctors to restrict all training places to certificated general nurses, in preference to raw recruits. But the Ladies Committee of Management demurred, noting that trained nurses objected to the domestic work expected of pupils.

In 1901 the formation of a professional organisation forced this change. The Victorian Trained Nurses Association (VTNA) was an alliance of nurses and doctors, aimed at elevating nursing as a profession, to be achieved by standardising nursing education. The VTNA declared midwifery and gynaecology to be 'special' fields of nursing, for which a certificate in general nursing was a prerequisite. The Ladies Committee reluctantly agreed to this policy in 1902. But by 1905 shortages were so dire that the hospital reopened the midwifery and gynaecology pathways to raw recruits. Indicative of the work expected of pupils, recruits needed knowledge of 'cookery, cutting and doing needlework and household work'.

Attracting trained nurses to gynaecology especially remained difficult throughout the 20th century because it was not necessary for career advancement. In 1914 the hospital joined a 'circular' training scheme: pupils were based at the Women's gynaecology department for half of their term, and learnt general nursing at another hospital in Melbourne. During World War II a similar initiative encouraged country hospitals to rotate their pupils to the Women's for gynaecology experience.

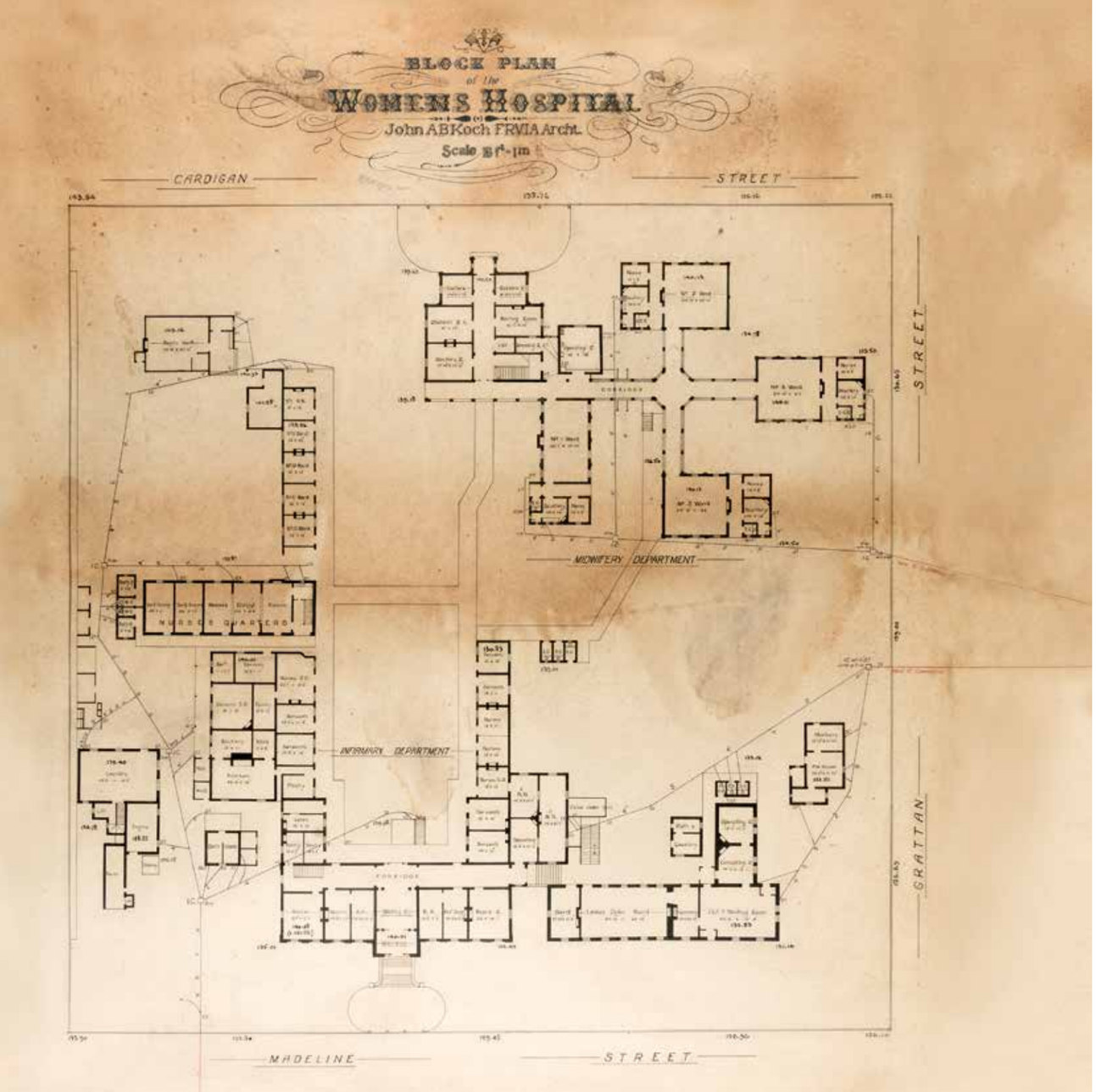
Midwifery nursing pupils, meanwhile, had trouble achieving the number of deliveries necessary to obtain registration, in the face of competition for that experience from rising numbers of medical students. Some midwifery nursing pupils were sent to the District Nursing Service and non-training maternity hospitals to reach the requisite number of deliveries. Chronic shortages of staff after World War II called for drastic action in the face of a baby boom. Nurses who married were permitted to continue working, and a new tier of nurse was introduced: the mothercraft nurse, who cared for postnatal women and their babies.

Evolving technologies of care inevitably reshaped training and practice. Postgraduate lectures for midwifery nurses in the 1930s included complications in labour, obstetric haemorrhage, the use of radium, and theatre techniques. There were also courses in administering anaesthetics. With the survival of smaller babies (and those born early)—made possible in the 1960s and 1970s—neonatal nursing developed as a specialty area of practice. By the 1980s, gynaecology nursing extended to the highly technological arena of fertility treatment. Oncology, breast care, and other areas have expanded as specialist fields. In the early 2000s, education in midwifery became a pathway distinct from nursing, resulting in different models of care informed by research and consumer choice.

After more than 130 years, training in the care of women by apprenticeship at the Women's Hospital ceased when all nursing and related education in Australia was transferred to the tertiary sector in 1994. The Women's continues to provide expert education in the care of women. Today that expertise is shared with university students and myriad practitioners gaining requisite clinical experience in areas of nursing, midwifery and related practice.

Dr Madonna Grehan

1 Madonna Grehan, 'Professional aspirations and consumer expectations: Nurses, midwives, and women's health', PhD thesis, School of Nursing and Social Work, University of Melbourne, 2009, p. 139.
2 Lee-Ann Monk, *Attending madness: At work in the Australian colonial asylum*, New York: Rodopi, 2008, pp. 138–9.
3 Grehan, p. 139.



Hospital buildings

Two themes run consistently through the annual reports of the Women's Hospital: the ever-increasing number of patients to be cared for, and the perpetual need for funds to provide that care.

From the first report—in December 1856, only four months after the hospital opened its doors in Albert Street, East Melbourne—the most pressing task for the committee of management was to raise the funds needed to maintain, build and expand the premises that their patients were to occupy. Subscribers were sought, appeals made through churches and municipalities, bazaars held, and deputations made to government.

The committee always had plans for improvement and expansion, but there were many years of severely overdrawn accounts and reduced donations, when only basic maintenance could be carried out. In good years, when the public responded to massive appeals, major works were undertaken.

The hospital's first home was 'a commodious and well situated house in Albert Street', leased by doctors John Maund and Richard Tracy, who recognised the great need for a lying-in (maternity) hospital. Within a year, two acres of land was promised by the government, and plans for a suitable building were approved by the committee. A building fund, the first of many, was opened for donations.

In October 1858 the founders' plans were realised when the governor of Victoria formally opened the new hospital in Madeline (now Swanston) Street, on a small part of the land that the hospital would occupy until 2008. The building was incomplete, but not so incomplete 'that it would interfere with the comforts of the patients, who possess at this time all the advantages resulting from a building which has been planned and erected with special reference to the object to which it is devoted'. Gas was connected, but not yet water.

That building was soon inadequate, but money was not available to expand. The spacious wards provided to the earliest patients became overcrowded, and infection was rife. Midwifery patients were boarded out while the wards were scrubbed and repainted. There was little understanding of how infection was transmitted, and blame was attributed variously to poor ventilation and overcrowding, or to infection brought into the hospital by patients. The maternal death rate in 1874 was 1 in 29. By 1884 it was 1 in 15. The septic state of the hospital was a national disgrace.

Cat. 133 John Augustus Bernard Koch (1845–1928), ***Block plan of the Women's Hospital***, 1906, ink on paper, 59.0 × 70.0 cm (plan), 73.0 × 82.0 cm (frame). A1990_18_562, Royal Women's Hospital Collection.
In 1906 an architectural competition was held for a new Women's Hospital. One of the seven entrants was JAB Koch. The successful entrants were JJ & EJ Clark.

Relief came in September 1888, when the Genevieve Ward Wing opened—a new and distinct midwifery department, separated physically from the infirmary and with a separate staff. By 1891 the death rate had fallen to 1 in 172. But again the hospital gradually became overcrowded, so much so that in 1907 and 1908 patients were accommodated on the floor.

Inevitably, whenever the midwifery department's problems were eased, the shortcomings of the infirmary department became the priority, and planning began to enlarge and reinvigorate the older building. The cycle of progressively upgrading and rebuilding departments continued until the 1960s.

As more patients were admitted, more nurses were needed to care for them, and their quarters had to be provided—in the same limited spaces. In 1897 a house adjacent to the hospital was rented for them but was found unsatisfactory. Three years later, plans were drawn up for a house in the hospital's grounds. In 1907 two cottages adjoining the hospital were bought for nurses' quarters.

The acquisition of properties close to the hospital was a preoccupation of the board for many years as it strove to ensure the hospital could continue to expand in step with the community's growth.

In 1906 architects were invited to submit designs for a new hospital, 'to be up to date in every department'; the winning entry provided the model for development until the 1940s. The construction that year of a Pathological [*sic*] Block with bacteriological laboratories and a special ward for eclamptic patients began 'the great work of rebuilding the hospital'.

A new building for outpatients and nurses' quarters facing Grattan Street opened in 1909. It was followed in 1911 by a new infirmary on the corner of Swanston and Grattan streets, designed to accommodate 31 ordinary gynaecological patients in two storeys of 16 beds each, 16 septic cases on the third floor, and 16 rooms for nurses. Each floor had its own surgical examination rooms, and a verandah on each side for convalescing patients. The building had an electric lift and lighting, and was heated by hot-water radiators.

The next phase of creating the new hospital envisaged in 1906 was the Edward Wilson Wing in Cardigan Street, a major addition to the midwifery department, which opened in 1917. By now the old infirmary building was completely inadequate; it was replaced by another wing running up Swanston Street on the site of the old 1858 building, housing an X-ray department, two theatres, and room for 72 patients. There was no shortage of patients, but a shortage of gynaecology nurses led to one floor being used for convalescing maternity patients.

In 1925 a nurses' home was built on the corner of Lynch and Cardigan streets, which could accommodate 112 nurses, and a third floor was added to the Edward Wilson Wing. In 1930 the hospital bought more of the small residential and industrial properties in Lynch Street, where it proposed to build a new services block. The timing was bad though, and funds were not available until 1936.

The Gertrude Kumm Wing added another 52 beds to the midwifery department in 1941; only ten years later another three storeys were added to it, such was the need.

The board announced in 1947 that it was to resume planning of the complete hospital. The ambitious plans included a 600-bed hospital (250 each for midwifery and gynaecology and a 100-bed isolation unit for treating sepsis, plus a paediatric unit among other services). But the post-war period brought chaos in the building industry, material shortages and the baby boom. Realising that the major works would be delayed for years, the hospital directed its efforts towards renovating existing buildings and moving functions offsite. Two suburban mansions, Tara Hall and Villa Alba, were bought for nurses' homes, and prefabricated units were built in Villa Alba's grounds for convalescent midwifery patients. A multi-storey nurses' home on Swanston Street was one of three towers planned, but by this time nurses no longer wanted to live in, so it soon became redundant.

The major building first planned in 1947 wasn't completed until 1972 and was likely out of date before it opened, such were the delays in raising the money for its construction. Nevertheless, it served until the Carlton site was vacated in 2008 with the move to the Women's current premises in Parkville.

Robyn Waymouth

A new era: Moving from Carlton to Parkville

In May 2001, the Victorian Minister for Health commissioned a comprehensive review of a proposal to redevelop the Royal Women's Hospital at its Carlton site. In 2002 the review recommended relocating the Women's to the site of the Charles Connibere Building at the Royal Melbourne Hospital, in neighbouring Parkville. On 6 October 2003 the Victorian government announced funding, and our project began.

The aim was to preserve the Women's unique status for thousands of Victorian women, while providing the most up-to-date facilities for maternity care, newborn services, and women's health services—including cancer and older women's services. An extensive community consultation process was undertaken, with nearly a thousand Victorians participating. This established that the new hospital should be a supportive, woman- and patient-centred environment, where women experience excellence in all aspects of women's health, and where staff are proud to work. The following essential principles were identified:

- to respect community values, including retention of gender separation and traditions of cultural and religious respect
- to provide the highest-quality staff, technology, teaching, training and research, while being cost effective and treating the optimal number of patients
- to provide access, including access by patients to the site, as well as access to technology, expertise and research
- to strike a balance between critical care and community care, general and specialist services, and obstetrics and gynaecology
- to offer family-friendly care that responds to the needs of the whole patient, and that protects privacy and dignity.

The new Royal Women's Hospital in Parkville was built under the State government's Partnership Victoria Program as a public–private partnership project (PPP). In simple terms, the government contracted a private consortium, the Royal Women's Health Partnership (RWHP), to construct the building and then maintain it 'as new' for 25 years.

Cat. 97 ***The Royal Women's Hospital, Melbourne***, 10 March 1972, photograph, 21.1 × 25.4 cm. MHMA1857.9, Australian Medical Association Archive, gift of AMA Victoria 2011, Medical History Museum, University of Melbourne.

Planning for the relocation began two years before the actual move, and was one of the core components of the project. It was undertaken by a partnership: the hospital, the Department of Human Services, RWHP and a range of community agencies (including the Metropolitan Ambulance Service, Melbourne City Council, and Victoria Police). Working as a team was pivotal to the success of the move to the new facility. Reconciling the contrasting priorities of private companies and public agencies that usually operate in different industries meant building relationships from scratch. However, with a common goal in mind, it was great to be part of a large and diverse team that was focused on building a brand-new hospital for all women and babies of Victoria, and continuing the work of the Royal Women's Hospital beyond its proud 150 years of operation.

The guiding principles for the move were to:

- ensure patient, staff and community safety
- manage risks
- minimise disruption to services
- minimise the time that the hospital was operating at both sites
- ensure that staff were well prepared and orientated to the new facility
- ensure clear communication between all involved
- be flexible, and responsive to changing demands
- minimise disruption to the local community.

The move itself took two weeks, and comprised two main components: the clinical move (patient transfers): two days; and the non-clinical move (equipment and furniture): 14 days.

The non-clinical move began with corporate services moving into 55 Flemington Road from 13 June 2008, while the clinical move occurred over the weekend of 21–22 June. The Metropolitan Ambulance Service and Neonatal Emergency Transport Service (NETS) were engaged for the clinical move, resulting in the successful transfer of 55 neonatal nursery babies, 68 women and 47 postnatal babies. This included transfers from Frances Perry House.

Due to high statewide maternity and neonatal demand, patient acuity was unable to be reduced in the nursery before the clinical move as planned. On the Friday evening before the move, three neonatal intensive care babies were admitted to the unit. The nursery subsequently had 55 babies to move, of whom 23 were on ventilators. The Women's

Since 2008 the Women's has occupied this purpose-built facility in the heart of the Parkville biomedical precinct. Photograph by Gil Meydan. © Royal Women's Hospital, Melbourne.

was the busiest neonatal nursery in the state for that weekend. However, four NETS vehicles made 31 transfers on the day, and all babies from the nurseries were successfully transferred, ahead of schedule and without complications.

On the Saturday, the day before the maternity clinical move, maternity activity was also particularly high. Ten women needed emergency caesarean sections—significantly more than the weekend average of three caesareans per day! In addition, there was a maternal medical emergency which resulted in an adult transfer to the Royal Melbourne Hospital's intensive care unit.

We developed several promotional items for women and babies transferred as inpatients from Carlton to Parkville. These included teddy bears for the last babies born at Carlton, the first babies born at Parkville, and all neonatal nursery babies transferred. Flowers were also given for the first birth at Parkville and last birth at Carlton. There was strong media interest; fortunately there were lots of 'happy snaps' as staff and families moved into the new hospital without incident.

Approximately 100 removalist staff worked in two teams across the Carlton and Parkville sites. They labelled, packed and transported all items for relocation, including beds, medical equipment, computers, folders, books, patient records, X-rays and various trolleys. For warranty reasons, specialist removalists dealt with laboratory specimens, radiology equipment and other sensitive items.

The new Royal Women's Hospital was fully operational from 9 am on Sunday 22 June 2008. The non-clinical move continued for another week.

The new location, physical environment, and equipment and technology presented significant hurdles for staff to overcome. To prepare them, a comprehensive training and orientation program was co-ordinated. Four training and orientation days were conducted, with shuttle buses carrying staff between the Parkville and Carlton sites throughout the day. The training and orientation program benefited approximately 1800 of the 2200 staff.

Approximately six months before the move, the Women's Foundation embarked on a drive to recruit 100 new volunteers for the Volunteer Guide Program, which operated like a concierge service to provide assistance to women and visitors to the new hospital. Approximately 30 volunteers stayed on as permanent guides.

The planning and implementation of the move of the Royal Women's Hospital from its Carlton home to a brand-new, state-of-the-art facility in Parkville was considered a huge success. Staff agreed that the move went well and that all departments had arrived safely.

Lisa Dunlop

Cat. 38 The Sears Studio (St Kilda, active c. 1900–1950s), **Resident medical officers at the Women's Hospital**, c. 1929, photograph, mounted; 25.0 × 31.0 cm. MHM04309, gift of Dr Lois Bell 2000, Medical History Museum, University of Melbourne.
Back row: Dr Betty P Darling, Dr WB Cameron, Dr BG Wood; front row: Dr Vera Scantlebury, [Dr William Alexander Birrell?], Dr Agnes Donaldson.

LEADING THE WAY

Maternity care and anaesthesia since 1856

The progression from the maternity services provided by the founders of the Royal Women's Hospital in 1856 to those provided now is almost inconceivable. The innovations at the Women's over more than 160 years are exceptional; the few described here are only a small sample of the extraordinary contributions of our predecessors.

Maternal deaths

Maternal mortality rates in the early days of the Women's were around 5 per cent, with a peak, in 1884, of 38 maternal deaths from 600 confinements. Puerperal sepsis, the scourge of maternity hospitals worldwide, was responsible for most. The lessons of Semmelweiss on handwashing proved as difficult to introduce to Melbourne as they had internationally.

The introduction in 1887 of assiduous methods of antisepsis to the regimen of midwifery resulted in a dramatic reduction in sepsis and the lowest maternal mortality for three decades. The liberal use of antiseptic agents on bedpans, catheters, enema tubes and instruments; regular handwashing; and the timely removal of soiled linen and used bedpans all contributed to this dramatic reduction in puerperal sepsis. The introduction of sulphonamides and then penicillin in the 1930s saw a further reduction in maternal deaths. Safe methods of blood transfusion, then the introduction in the late 1930s of ergometrine to treat post-partum haemorrhage, further reduced maternal mortality.

Today, fewer than ten women a year die in Victoria in the perinatal period. The majority of these maternal deaths are not directly related to childbirth; domestic violence, suicide and other non-obstetric causes predominate. Only one or two deaths per year, in a state where 70,000 women give birth annually, are now a direct consequence of pregnancy.

Operative vaginal delivery

Variations of Simpson's forceps have been used since the mid-1880s to deliver babies positioned correctly in the pelvis but who are distressed or delayed in the second stage of labour. The current favourite variation, Neville Barnes forceps, are the choice of today's obstetricians.

Many generations of obstetric consultants at the Women's have enthusiastically passed on to their juniors their mastery of operative vaginal delivery. This is most evident

Cat. 160 **Christmas, Ward 15, premature nursery**, 1952, photograph, 16.0 × 11.5 cm. PA 1995_44_060_031A, Royal Women's Hospital Collection.

in the teaching of rotational forcep delivery of the malpositioned fetus; that is, when the fetal head is incorrectly positioned in the maternal pelvis. The forcep technique that the Norwegian Christian Kjelland first described in 1916 has been taught, with precision and diligence, to obstetricians at the Women's for many decades. In expert hands, Kjelland forceps are the safest method for vaginal delivery of a malpositioned fetus, but the technique is difficult to master. Consequently the Women's, like most maternity units, favours vacuum extraction for delivering a malpositioned fetus. The vacuum extractor, invented in the 1950s by the Swede Tage Malmstrom, results in less trauma but more failed vaginal deliveries than does forceps delivery.

Caesarean section

Before the 1880s, caesarean sections were performed without anaesthesia, were often combined with a hysterectomy, and were associated with high rates of maternal mortality. The introduction of asepsis, and the classical caesarean section in the 1880s, resulted in fewer maternal deaths and better neonatal results. The classical technique was replaced by the lower-uterine segment incision in 1906. This operation was technically more difficult, but maternal morbidity was reduced and subsequent pregnancies were far safer, as the risk of uterine rupture was dramatically reduced.

Caesarean section rates at the Women's were around 2 per cent at the turn of the 20th century. At the turn of the 21st century they reached a peak of more than 30 per cent, and have since slowly dropped to around 28 per cent.

Anaesthesia and childbirth

The hospital's medical founders, Dr Richard Tracy and Dr John Maund, both had Scottish experience and were influenced by James Simpson of Edinburgh, who in 1847 had introduced chloroform anaesthesia to obstetrics. Maund first used chloroform at the Women's in 1862 to faciliate a forceps delivery after a 62-hour labour. Chloroform was subsequently used for caesarean section as well as for forceps deliveries. It was administered by the obstetrician, with the hospital's first anaesthetist not appointed until 1900.

In the early 20th century, twilight sleep (achieved with repeated doses of morphine) was introduced for obstetric analgesia, but there were no further significant advances until the appointment of Irish anaesthetist Dr Kevin McCaul in 1951. He introduced nitrous oxide to the labour wards and subsequently introduced spinal and epidural analgesia. This was in the face of significant opposition from obstetricians, who administered their own caudal injections—a practice that continued until 2003.

Epidural catheters were introduced in the 1960s, continuous epidural analgesia in the 1970s, and patient-controlled epidural analgesia in 2000. The latter gives women more control over their own analgesia, with less motor block, allowing more effective pushing at the appropriate time.

Milestones in maternity care at the Women's

In 1856 the first two midwifery patients were admitted to Australia's first public women's hospital. In 1859 the hospital became the first Australian hospital to train nurses and midwives. This was followed in 1865 by the commencement of medical student training.

In 1907 midwifery assistance was provided to women in their homes, in cooperation with the Melbourne District Nursing Society. The first antenatal clinic commenced in 1917. By 1935, some 100,000 babies had been delivered. This number reached 200,000 by 1956.

Rhesus testing was introduced in 1944, and blood transfusion followed two years later. Humidicribs were developed in-house, and were practically available, by 1949. The following year, domiciliary nursing began. In 1979 the family birth centre was opened, providing family-centred, low-intervention care in the safe confines of the Women's, with all backup services immediately available.

Candice Reed, Australia's first 'test tube baby', was born at the Women's in 1980. Evening antenatal clinics were pioneered in 1989, the young mums' clinic in 1991, and Australia's first multiple pregnancy clinic in 1997. The Women's moved to its current Parkville site in 2008 and began providing maternity services to Sandringham Hospital in 2013.

Maternal care today

The year 2019 will see the Women's providing support for women who choose home birth; an expansion of the Cosmos primary care midwife program; further development of the Midwives in Small Teams model of care; and a significant expansion of the maternal-fetal medicine service for women and fetuses with complex needs.

The future

Today the safety of childbirth is generally taken for granted, as maternal and perinatal mortality rates are exceptionally low. The new goal for maternity services is to maintain these historically low levels while improving the quality of the birth experience for women and their partners.

Professor Mark Umstad AM

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Surgery and breast care

As a stand-alone women's hospital providing maternity, gynaecology and newborn services, the Women's did not, for most of its history, employ surgeons or have a surgical unit. Rather, it drew upon the surgical expertise and facilities of nearby hospitals, namely Royal Melbourne and St Vincent's. Personal relationships between consultants at Royal Melbourne and the Women's resulted in an informal consultative service for those public and private patients at the Women's who required general surgical opinions. This was in part due to both hospitals being University of Melbourne teaching hospitals. Many surgical opinions were for breast problems, particularly those related to lactation and pregnancy.

In the 1970s, with increasing formality of appointments, three Royal Melbourne surgeons—Ian Russel, Donald 'Scotty' McLeish and Alan Cuthbertson—were made available to serve the Women's surgical needs, largely on an on-call consultative basis. In the early 1980s another Royal Melbourne surgeon, John Collins, took over a significant part of this on-call service. It became clear during the 1980s that treatment of breast disease was becoming a surgical specialty in its own right. Breast problems were common among patients of all ages at the Women's, and ranged from benign breast disease, to post-pregnancy and lactation difficulties, to cancer. A dedicated service was needed.

In 1987 a pilot program for mammographic screening in Victoria was established, led by Royal Melbourne. The Women's, in conjunction with the Freemasons Hospital, made a strong case to be a screening and assessment clinic. This was not universally supported, but eventually screening was established at the Women's, with assessment continuing at Royal Melbourne. The lobbying and development of this service were the combined result of the efforts of the nursing administration of the Royal Women's Hospital, in particular Kate Gilmore and Lesley Dwyer, and clinical consultant breast nurse Jill Storey. Hospital administration, in particular Mr Gary Henry and Mr Clive Wellington, supported this initiative and planning began for a comprehensive breast management service. This was strongly supported by senior medical staff and, under the guidance of obstetrician gynecologists Mr Don Byrne and Dr John McBain, the Breast Unit at the Women's was established, with a head surgeon and two assistant surgeons, in 1996. John Collins was appointed head of the unit, and Drs Narine Efe and Neil Collier were appointed as assistant surgeons. The roles of these surgeons also included the general surgical consultative role.

The Parkville breast service harnesses the complementary strengths of the Women's and Royal Melbourne hospitals. Pictured are Professor Bruce Mann, director of the Breast Tumour Stream, and colleague at the Victorian Comprehensive Cancer Centre. © Royal Women's Hospital, Melbourne, 2011.

This new Breast Unit grew rapidly, and the weekly operating session was filled almost immediately, with patients from the hospital and referrals from general practitioners and the screening service. Most work involved benign breast disease and problems, particularly breast abscesses in pregnancy, and breast pain, but as the service grew it saw increasing numbers of patients with malignant lesions. Its work was well supported by the radiology department, in particular by radiologists Drs Davis, Sloane and Kiss; pathology service was provided by Dr Bob Brown, an expert breast pathologist.

The Women's screening clinic was eventually closed when BreastScreen Victoria decided to open a central city clinic (the Rose Clinic), which would compete too closely with it. This occurred before the Women's moved to its new Parkville site in 2008.

By 2005 the Breast Unit had grown significantly; it was treating both benign and malignant disease through one busy outpatient clinic and one full operating session. Dedicated breast care nurse Robyn Cordner joined the staff, while Dr Kelly Phillips from the Peter MacCallum Cancer Centre provided medical oncology services and a referral service to Peter Mac for radiotherapy.

From its inception in 1996, until 2006, John Collins was head of the Breast Unit at the Women's, and also of the one at Royal Melbourne. When co-location of the two hospitals was mooted, amalgamation seemed sensible, and in 2006, leading up to the move from Carlton to Parkville, Professor Bruce Mann was appointed as head of the newly combined breast service. This was officially launched in February 2007, with services delivered via two weekly outpatient clinics at Royal Melbourne, one at the Women's, operating lists at both hospitals, and a single multidisciplinary meeting where all cancer patients' cases were discussed by a team of medical and radiation oncologists, surgeons, pathologists, radiologists and breast cancer nurses. A new position of breast surgical fellow was central to the merger, to support seamless care between the two hospitals. Fellows have come from Australia, England, Ireland, New Zealand and Belgium, with three previous fellows now members of the permanent surgical staff: Mr Robert Tasevski, Dr Anita Skandarajah and Mr Diarmuid O'Malley.

The combined service harnessed the complementary strengths of the Women's and Royal Melbourne, to offer excellent management of breast disease and develop clinical research. Strong links were also built with the Women's Mental Health Service, in particular through Dr Lesley Stafford.

A risk management service was established through Royal Melbourne's Familial Cancer Centre, to provide multidisciplinary care for people at high genetic risk of breast cancer, and a comprehensive breast reconstruction service was established. Initially this was part of the breast service, but from around 2014 it became an independent unit at the Women's, headed by Mr Dean Trotter.

Genetic screening has led to a progressively increasing number of women choosing prophylactic mastectomy and reconstruction. To meet the need for nipple and areola tattooing, breast care nurses were sent to England to undertake a tattooing course, and Australia's first nipple-tattooing service in a public hospital was established by Ms Monique Baldacchino in 2014.

Radiology is critical to breast cancer care, and the breast imaging services of the Women's and Royal Melbourne hospitals have been closely aligned. Dr Allison Rose was appointed to the Women's to allow coordination of breast imaging at the two hospitals. This coordination also benefits research: more patients can take part in studies of new imaging techniques.

In addition to routine presentation of all cases at a multidisciplinary meeting, a database was established to collect comprehensive information on all cases, and tissue banking implemented to provided annotated (but anonymised) samples for research. Thus the combined breast service is a major contributor to translational research work, particularly at the Walter and Eliza Hall Institute.

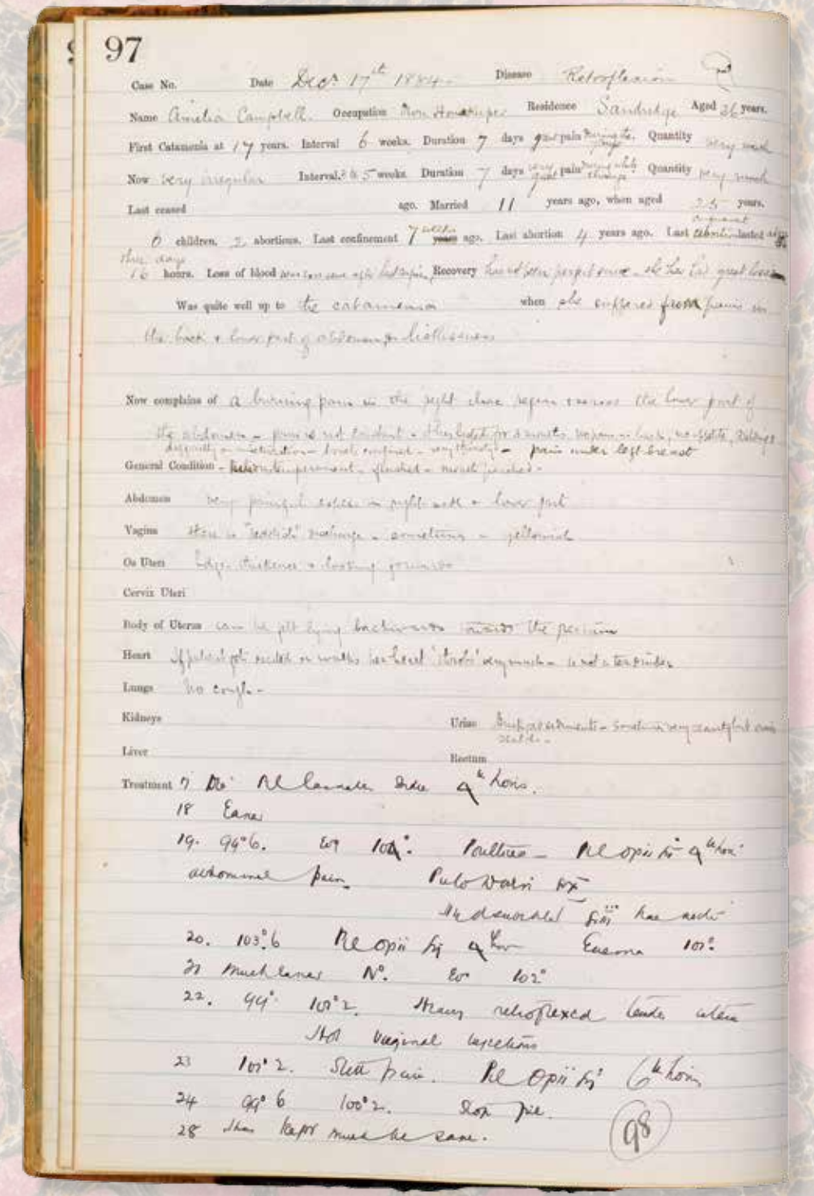
Many of these developments have been made possible by the generous support of Treasure Chest, a charity established by breast cancer survivor Pratika Lal to make breast reconstruction more readily available to public patients. Over the years, Treasure Chest has expanded its work, to providing care beyond reconstruction, increasing access to psycho-oncological services, purchasing equipment for new surgical techniques, and offering scalp-cooling caps to reduce the risk of hair loss during chemotherapy, among other worthwhile projects.

In 2006, the Victorian Comprehensive Cancer Centre (VCCC) was built, and the Peter Mac moved into the new facility on the south side of Grattan Street. The combined Women's and Royal Melbourne breast service merged with that of Peter Mac to form a single Breast Tumour Stream, with Bruce Mann appointed as director.

All chemotherapy moved from the Women's to the new facility, while the breast service at the Women's has focused more on initial diagnosis and management, and progressively built up its breast reconstruction service.

The Breast Unit at the Women's is now a partner in the VCCC Breast Tumour Stream, which cares for more than 600 new cases of breast cancer or pre-cancer each year. It offers comprehensive multidisciplinary care, and the full range of reconstructive options, in a setting that promotes research at all levels to improve the care that in the future should be available to every Victorian diagnosed with breast cancer.

Associate Professor John Collins, Professor Bruce Mann and Dr Rebecca A Szabo



Gynaecological care and women's health

Women's health is the branch of medicine that diagnoses, treats and helps prevent diseases and conditions that diminish a woman's physical or emotional wellbeing. Gynaecological care is the branch of physiology and medicine that deals with functions and diseases specific to women and girls, especially those affecting the reproductive system.

As the oldest women's hospital in Australia, the Women's has often led the way in gynaecological care and women's health in Victoria, Australia and globally. From very early on, the hospital has been a world-leading teaching hospital providing training of nurses, midwives and doctors in gynaecological care, surgery and women's health. While initially caring mostly for women during confinement and delivery (pregnancy and birth), the Women's has always sought to provide the best possible care for all aspects of women's health. From the outset, it helped women within its walls, while also providing education to ensure the broader community was well served by expertly trained doctors, midwives and nurses.

In 1859 the Women's became the first Australian hospital to commence training of both nurses and midwives. Not long after, in 1865, training of medical students in women's health began. In 1864 one of the founding doctors of the hospital, Dr Richard Tracy, performed the first successful ovariotomy (surgical removal of an ovarian tumour) in Victoria (and the second successful one in Australia). Later in 1949 an operation was demonstrated to students and nurses by television—the first such demonstration of its kind in the southern hemisphere.

20th-century advances at the Women's

In the 1930s, obstetrician and gynaecologist Dr Arthur Hill and microbiologist Dr Hildred Butler established the nature and types of *Clostridium welchii* abortional infections. They developed expertise in diagnosing the severity of infection and the best treatment—hysterectomy surgery, or drug therapy. Their research on post-abortion gas gangrene septicaemia, often the result of unsterile termination of pregnancies or 'backyard abortions', was vital, as women with these infections often died.

Cat. 213 Women's Hospital, ***Honorary physicians case book, infirmary department, unit 2, Dr B.H. [Balls-Headley] cases vol. 1***, 1884, bound volume, manuscript, 33.0 × 21.0 × 4.0 cm. VPRS 17390/P1, Unit 2, (A1991_40_20), Public Record Office Victoria.
Dr Walter Balls-Headley (1842–1918) in 1878 was appointed an honorary physician to the Women's Hospital and remained until 1900. During the 1890s Balls-Headley was one of the leading gynaecologists in Melbourne.

In 1944 the hospital's 'sterility' (later 'fertility') clinic began; over time it led the way in reproductive care and the introduction of laparoscopy, and was the beginning and later catalyst for the wider use of endoscopy at the Women's, as well as a world leader in reproductive science and health.

One of the most notable medical and scientific leaders at the Women's was Professor James Brown, who arrived here from Edinburgh in 1962 as first assistant in obstetrics and gynaecology at the University of Melbourne. His work and understanding of ovarian function helped make possible early techniques for egg pick-up in in-vitro fertilisation, and were used in the first successful IVF pregnancy in Britain. Brown's work both in Edinburgh and at the Women's was instrumental in the measurement of reproductive steroids for clinical management of menstrual cycles, for both fertility and contraception. He revolutionised reproductive medicine by enabling accurate monitoring of ovarian activity before the days of pelvic ultrasound, ushering in safe and effective monitoring for ovulation induction, IVF and prediction of spontaneous ovulation. Building on work by Brown and others, the Women's had the first IVF pregnancy in Australia, in 1978, when Dr Ian Johnston was head of reproductive biology and Alex Lopata the research embryologist.

The second half of the 20th century saw many improvements in women's health care, some due to societal and legal changes, others to medical advances. All shaped the care provided at the Women's. There were improvements in anaesthesia, antibiotic therapy, and understanding of the control mechanisms of ovarian function, leading to changes in available contraception, such as significant reductions in dose for oral contraceptives; injectable progestogens (depo provera, Implanon); and second-generation intra-uterine devices. Legalisation of abortion with the Menhennitt ruling in 1969 and later changes to reproductive rights and access to IVF also improved safety and access for all women.

Gynaecology at the Women's in the 21st century

The early 21st century has seen many significant changes in women's health care and gynaecology. There has been a decline in hysterectomy rates and a change in the type of operations performed for many benign gynaecological conditions. This has largely been due to advances such as new medications, novel ways to administer medications, technological developments such as mesh for prolapse repair, and advances in laparoscopy, hysteroscopy and second-generation ablation devices. Total laparoscopic hysterectomy has largely overtaken open hysterectomy and vaginal hysterectomy; although this is best practice it has created new challenges when training doctors in surgical techniques.

Before 2002, the hospital's obstetrics and gynaecology units collaborated by sharing staff and co-referring patients. Although each respective head was responsible for their own unit only, junior consultants and junior medical staff worked in both disciplines. There were four teams (named after the first four days of the week) in obstetrics-gynaecology, and the professorial unit (for research). But as each field became more specialised, and in recognition of the hospital's growing role as a tertiary-level referral centre for women across Victoria, the time came to distinguish between the two disciplines. This clear separation of gynaecology from obstetrics was unusual at the time in Australia and internationally—and in some places still is.

In 2002 the combined teams were disbanded under the guidance of then director of gynaecology Professor John McBain, and subsequently overseen by Professor Jeremy Oats, then by Associate Professor Leslie Reti (2009–17). The teams were replaced by distinct and separate maternity and gynaecology services, the latter comprising three general gynaecology units, each with a separate focus, as well as specialised and subspecialty units in reproductive services, urogynaecology, oncology and dysplasia. Now in 2019 there are two general gynaecology units and eight specialised women's health teams.

Separation into dedicated gynaecology units has allowed the larger general teams to advance and provide specialised expert care for women. From 2002 to 2018 these were Gynaecology 1, 2 and 3. In 2018 Gynaecology 3, which focused on pelvic floor problems and already shared a head of unit with the urogynaecology unit, was combined with the urogynaecology unit and continence clinic to form a single, larger pelvic floor unit.

The remaining general gynaecology units are Gynaecology 1 (first led by Associate Professor Reti and since 2009 by Dr Catarina Ang), with a focus on menstrual disorders and fibroids. It has formed strong links with other gynaecology units in the Women's and elsewhere in Victoria and Australia, and works closely with the radiology departments at the Women's, Royal Melbourne and Alfred hospitals, thus offering comprehensive best-practice care and advanced laparoscopic and open surgery. Gynaecology 1, together with the Women's radiology unit led by Dr Andrew Dobrotwir, oversees Australia's only public hospital use of magnetic resonance–guided focused ultrasound (MRgFUS) for uterine fibroids.

Gynaecology 2 focuses on women with endometriosis and pain, and has been led by Associate Professor Martin Healy since it formed in 2002. From the outset this unit has led the way in advanced laparoscopy and training for benign gynaecological conditions in Victoria and Australia. Over nearly two decades it has introduced routine shared lists with a colorectal surgeon, appointed a dedicated advanced laparoscopic fellow, and contributed to the pelvic pain clinic—a multidisciplinary clinic for women with chronic pelvic pain, which includes a psychologist, pain specialist and physiotherapist.

Some advances in gynaecology have been accompanied by controversy, and the Women's has led the way in responding. When concerns were first raised about power morcellation of fibroids at laparoscopy, the Women's banned the power morcellator and has since introduced evidence-based guidelines and consent for its use. The same

occurred when concerns were raised about harms caused by vaginal mesh, and the Women's made submissions to the government inquiry on the subject.

The Women's continues to work across all areas of women's health through its specialty clinics, including a clinic for women experiencing menopausal symptoms after cancer—one of only two such clinics in Australia, which was introduced by Professor Martha Hickey. Other specialised clinics are a multidisciplinary menopause clinic, vulvar clinic, African women's clinic, sexual health and sexual counselling clinic, and a nurse-led women's health clinic. The depth and breadth of gynaecology and women's health care is reflected in the number of specialised, often quaternary, services for which the Women's is renowned, and continues to lead in clinical care, research and education.

Gender equity in the workplace

It is notable that in 1896 another women's hospital opened in Melbourne: the Queen Victoria Hospital. This was in large part because female doctors at the time struggled to find employment at the Women's, which had a policy of 'the other things being equal, to recommend a male candidate'. The new hospital for women was founded by 11 female doctors, led by Dr Constance Stone. The Queen Vic, as it was fondly called, was the first hospital in Victoria to be run entirely 'for women, by women'. It was of particular benefit to poor women who were uncomfortable with male doctors, and was one of only three hospitals in the world that were founded, managed and staffed by women. In 1989 the Queen Victoria Hospital was closed and relocated to the Monash Medical Centre at Clayton.

In 2019, there is still progress to be made in achieving full diversity and inclusion in the workplace, including at leadership levels in many medical specialties, and at medical colleges including the Royal Australian and New Zealand College of Obstetricians and Gynaecologists. In the gynaecology service at the Women's, progress has been dramatic. Seven of the ten gynaecology teams are currently led by women, and there is a significant number of female clinicians working across all gynaecology units. In addition, the current clinical lead of gynaecology services is Dr Kym Jansen. The first-ever female head of the department of obstetrics and gynaecology at the University of Melbourne, Professor Martha Hickey, was appointed in 2010.

Dr Rebecca A Szabo

Professor Martha Hickey, professor of obstetrics and gynaecology at the University of Melbourne and director of the Women's gynaecology research centre, was instrumental in establishing a clinic for women experiencing menopause symptoms after cancer. © Royal Women's Hospital, Melbourne, 2012.

Care of the newborn

Little is known about the care of babies in the first 50 years of the Women's Hospital. From the early 1900s until approximately 1940, most of the infants' care was provided by midwives, based largely on intuition and anecdotal information, though these women had a wealth of experience. The first nursery for sick babies was established in 1939, followed in 1941 by the first nursery specifically for premature babies (in Ward 15 in the new Gertrude Kumm Wing, with 'ex-prems' convalescing on the balcony outside). Before the days of air conditioning, cooling was provided by a type of Coolgardie safe, with air forced into the nursery through wet hessian sheets. Sick full-term babies were cared for in the postnatal ward nurseries. Parents were not allowed in; they could only view their babies through a window.

Dr Kate Campbell was appointed honorary paediatrician in 1944. An astute clinician and teacher, she also made several important research contributions and was seen as the pioneer in specialist medical care of the newborn. Dr Campbell was joined by Dr Glyn White in 1951. The post-war era until about 1960 saw many improvements in neonatal care, but some brought unexpected complications, such as visual impairment from excess oxygen use; severe jaundice and brain damage from use of an early form of vitamin K to prevent haemorrhage; complications from three different groups of antibiotics; and poor brain growth from the then accepted practice of not feeding premature babies for two to three days. Babies of less than 36 weeks' gestation often fared poorly, and those of less than 32 weeks rarely survived.

The appointment of Dr Bill Kitchen in 1965 saw a more scientific approach to intensive care, with monitoring and correction of acid–base, glucose and oxygen. He recognised the importance of long-term follow-up after treatment, establishing a program that continues to this day, led by Professor Lex Doyle. Kitchen is considered the father of modern neonatal care in Melbourne. Into this era of modern nursing came Peggy Taylor and Moyra Kirk.

With the opening of the 3AW Block in 1969, the entire ninth floor was allocated to neonatal services—a major space expansion, and with air conditioning! At about this time it was recognised that parents could and should have access to their babies, and in more recent years actually be involved in their care.

Cat. 57 **Dr Kate Campbell examining a premature baby in an isolette**, 1974, photograph, 23.8 × 17.5 cm. MHM02260, gift of Winifred Crick, Medical History Museum, University of Melbourne.

The early 1970s saw the introduction of assisted ventilation. The ventilators were relatively simple, with poor humidification of gases, and complications were common. But the survival rate of small babies improved markedly.

The year 1976 brought two significant changes: appointment of the first full-time director of neonatal intensive care (Dr Laurie Murton), and establishment of the Newborn Emergency Transport Service (NETS), the statewide neonatal retrieval service. NETS had a team of six specialist transport nurses, with mobile intensive care equipment. It also developed a statewide education program, and introduced the concept of regional organisation of perinatal services.

Also in 1976, a neonatal intensive care nursing course was established, led by Sister Muriel Fielding. This significantly improved the quality of patient care. In 1985 Jan Horton took over as lecturer, and provided continuity as the program moved to La Trobe University in 1994. A further innovation at the Women's was the appointment in 1978 of a unit psychiatrist, in recognition of the need for parental support—and to help staff under stress.

In the early 1980s a milestone in the diagnosis of cerebral and cardiac problems was the development of ultrasound. Dr Lachlan de Crespigny was a world leader in using ultrasound to detect brain haemorrhage in premature babies. Subsequently ultrasound as a diagnostic tool was taken up with clinical precision and a research orientation by Dr Rex Betheras.

During the 1980s came the increasing problem of babies of substance-dependent mothers. Many required long stays in the nursery as they went through a difficult withdrawal process. A special clinic was established to help these families.

Throughout the 1980s, survival rates for babies of all gestations continued to improve: equipment such as ventilators and humidifiers technically improved, better techniques of ventilation were learnt, and better intravenous nutrition also contributed. Babies of 28 weeks' gestation and over 1000 grams in birthweight commonly survived, as did many smaller babies.

The early 1990s brought significant new therapies, with the introduction in 1991 of exogenous surfactant—the factor lacking in the lungs of premature infants and the main cause of death. Two years later, a new ventilation technique was introduced: high-frequency oscillation ventilation, a gentler technique than standard ventilation. By now babies of 26 weeks' gestation and well under 1000 grams in birthweight were commonly surviving, generally with good long-term health.

The neonatal fellowship training program commenced in the early 1990s and expanded over five years to provide 24-hour cover. The death in 1993 of Dr Laurie Murton, aged just 47, was a severe blow to the unit. From 1995 to 2004 the Women's joined the Royal Children's Hospital to form the Women's and Children's Healthcare Network. The neonatal units at both hospitals were administratively combined, but separate clinical care and staff were maintained, with some sharing of research programs.

In 1998 Professor Colin Morley from Cambridge University was appointed inaugural professor of neonatal research. With his enthusiasm and creative ideas he attracted other researchers, at both junior and senior medical levels, and he supported nursing research. The fellowship training program expanded further because of research opportunities, and many research grants were obtained. Areas studied included resuscitation, respiratory support techniques, assessment and management of brain injury, and the assessment of various therapies (often in collaboration with national and international colleagues), and continuation of the long-term follow-up program. By the early 2000s the research program had won international recognition, with researchers from the Women's being invited to give presentations at prestigious conferences in North America and elsewhere.

In 2008 the neonatal unit relocated to the Women's new site in Parkville. In designing the facilities, particular attention was paid to the effect of the environment on the developing brain, and on providing easy access for parents.

The most recent decade has seen continuing incremental improvement in clinical care, including less invasive forms of respiratory support, the use of induced hypothermia for severe birth asphyxia, and the introduction of probiotics to reduce severe bowel infection. Thanks to a skilled team of doctors, nurses and allied health specialists, the clinical results are among the world's best, even for babies born as early as 23 weeks of gestation.

More than 1700 babies per year are cared for in the neonatal unit. An exciting prospect for the near future is the development of an electronic medical record and management system. The Women's research program maintains its international standing, and receives continuing Program Grant support from the National Health and Medical Research Council. Focuses include further improvements in respiratory support, resuscitation, and long-term development following different interventions.

Dr Neil Roy AM

Nursing and midwifery

A young nurse or midwife starting their career at the Royal Women's Hospital in 2019 might wonder how much they have in common with their predecessors at Victoria's first 'lying-in' hospital in 1856. 'Very little in common' might be the first response. Nurses in the mid-19th century lived and worked apart from the world, rather like nuns. Wounds were sutured with silver wire, and mercury was the only treatment for widespread syphilis. With no pain relief in labour except chloroform, many women understandably were drunk when they arrived at hospital to deliver.

But, on reflection, there's a lot in common. The Women's continues to train nurses and midwives, just as it did a century ago. Nursing and midwifery work are still physically and emotionally exhausting, and continue to require courage and dedication.

Early nurses saw at first hand the wider context of a woman's life, including family violence, and the consequences of poverty—such as malnutrition. These experiences were the foundation of the social model of care for modern nursing and midwifery. We continue to care for women facing poverty, violence and other difficult social and personal circumstances. The context of extreme poverty is essential to understanding early nursing and midwifery at the hospital. As Janet McCalman writes: 'Melbourne may have been a comparatively young city, but it had terrible slums within half a century of its founding'.[1] The hospital was a direct response to the needs of women in dire poverty. However, being 'in need of care' was not the only requirement for admission. The Ladies Committee—mostly wives of clergy—regulated the process of tickets: 'An applicant would come with a reference ... [to] attest to her need and respectability. Sometimes she stood before the committee for forty minutes to be questioned'.[2]

From the hospital's first decades, matrons and sisters acted to professionalise nursing and midwifery. They advocated for recognition and respect for the expertise and atittudes that nurses and midwives brought to each woman's care—one of the continuing legacies on which the modern midwifery and nursing professions in Victoria have been built. The

Cat. 216 Darge Photographic Co. (Melbourne, est. by Algernon Darge, 1878–1941), **Doctors and nurses at the Women's Hospital**, September 1914, photograph, mounted; 18.0 × 30.0 cm (photograph), 31.0 × 44.0 cm (mount). Collection of Margaret and Eric Smith (great-nephew of Florence Green).
Back row: N[urse] Baker, N Green, S[enior] N[urse] Gordon, SN Evans, N Quade, N Austin, Dr Cook, N Palmer, N McKee, N Harvey, N Higgins, N Moroney; middle row: S Fankhauser, S Loxton, S Carlisle, Dr Embleton, Matron Capner, Dr McLaren, Dr M Robertson, S Baker, S Rachael Pratt; front row: N Weeks, N Plunkett, N Masson, N Swan, N Fox, N Caughey, SN Willock, N Northway, N Moloney, N Nicholson.

early matrons were not nurses, and were generally affiliated with Protestant churches. This influence waned in the last quarter of the 19th century, in response to the growing professionalism and status of nursing and midwifery. The first nurse matron was appointed in 1900. But some separation between Protestant and Catholic—both staff and patients—remained until at least the 1950s. Generally, St Vincent's was the 'hospital for Catholics'.

One of the principal ways to professionalise nursing and midwifery was through training and accreditation. Melbourne's 'Lying-in Hospital' was the first in Australia to train nurses and award certificates, from 1859—even before Florence Nightingale opened a maternity ward at King's College Hospital in London. In 1862, to qualify as a midwife, a nurse had to observe 100 cases of labour and deliver babies under supervision, and she had to pay for the privilege to train. In comparison, midwifery students in the 1960s–70s had to complete 20 births, including three to five complicated breech births, or forceps births. Winning professional respect and status was a lengthy battle, and it was overtly a power struggle against the medical profession. Today's multidisciplinary hospital teams that care for women and newborns emerged from the 19th-century reality in which nurses 'knew their place, stood to attention, deferred to doctors and spoke only when spoken to', although they 'resented their inferiority'. The doctors' authority was not just about 'male professional power over a female servant class, it was also necessary to the institutional creation of a modern hospital'.[3] Not only nurses suffered under that authoritarian system. Patients, especially poor ones, had little autonomy: 'If you were working-class, they just thought you were idiots. They don't tell you anything; you just learn the hard way'.[4] Antisepsis and asepsis brought even more controls, more rules: 'The good order of the ward became more important than the comfort of the patients'.[5]

Living conditions for nurses and midwives were tough, and the work exhausting. Midwives were expected to remain on duty until the women they supported in labour and birth were discharged; this could be weeks. Nurses saw in their patients the effects of poverty, ignorance, self-interest and worse (young girls impregnated and infected with syphilis), but also suffered the condescension and authoritarianism of male doctors. The lack of power in most areas of the lives of patients and nurses—all women—is evident in the experience of abortion and lack of access to contraception. Although accurate counts of induced abortion are elusive, Women's Hospital admissions for abortion or miscarriage as a ratio to deliveries rose from 1 to 8 in 1900, to 1 to 5 in 1910, and 1 to 2 in 1920, the last remaining fairly constant until 1935.[6] A recently retired midwife recalls that in her first-year class of 1970, about one-third of nurses had to drop out because they became pregnant.

It was nurses and midwives, along with progressive doctors, who led the push towards more patient-centred care. In the 1960s the Women's knew that it provided technically good care, but needed to give better emotional support to labouring mothers. By the 1970s there was increased activism and determination to establish midwifery as a profession separate from nursing and medical domination. In 1974 the matron attended the International Confederation of Midwives, and the family birth centre was opened in 1976. This transformed the way care was provided, and changed the way the Women's was viewed. Now it was a maternity hospital for all, not just the poor and unfortunate or the unrespectable.

Changes continued in the 1980s: the old culture was challenged and significant structural reforms introduced, such as decentralising control to nursing unit managers and team leaders. The pioneering ability of the Women's midwives continues to be evident, with the former director of nursing appointed in 2018 as chair of the independent Consultative Council on Obstetric and Paediatric Mortality and Morbidity—the first appointment of either a woman, or a nurse/midwife, to this role.

A transformational model of nursing was established, one based on values and encouraging risk-taking and shared responsibility. True partnership and valuing the patient's experience—the question *What is it you want us to do while you are here?* was first asked in 1986—is reflected today in the hospital's strategic plan, which states that 'patients and consumers are at the heart of everything we do'.[7]

Laura Bignell and Louise Sampson

1 Janet McCalman, *Sex and suffering: Women's health and a women's hospital: The Royal Women's Hospital, Melbourne, 1856–1996*, Melbourne University Press, 1998, p. 180.
2 McCalman, p. 10.
3 McCalman, p. 150.
4 1932 patient, cited by McCalman, p. 201.
5 McCalman, p. 122.
6 Lyn Finch and Jon Stratton, 'The Australian working class and the practice of abortion 1880–1939', *Journal of Australian Studies*, vol. 12, no. 23, 1988, pp. 45–64.
7 *Transforming healthcare for women and newborns: The Women's strategic plan 2016–2020*, Melbourne: Royal Women's Hospital, [2015].

Leading the way in pathology

Pathology is a fundamental branch of medicine that investigates the underlying causes of disease and their diagnosis. Hospital pathology laboratories examine body tissues and fluids, employing increasingly sophisticated instruments and skilled pathologists, to make a diagnosis and thereby help the clinician treat the patient. They are divided into different departments, the main ones being anatomical pathology (dealing with tissue and post-mortem samples), haematology (whole-blood samples), biochemistry (serum and body fluids) and microbiology (investigating the possibility of infection in the body).

The Royal Women's Hospital has always been at the forefront of scientific investigation in the care and management of the health of women and their babies. The pathology service underpins preventive care with aspects of screening and the diagnosis of diseases once they become apparent. Pathology was seen as important from the early years of the hospital, when the first pathology block was completed in 1908. The first paid pathologist was Dr Crawford Mollison (1892–1949), who was appointed in 1913. A University of Melbourne medical graduate who completed further studies in England and Europe, devoting himself to the fields of anatomical and forensic pathology, Mollison influenced pathology in Melbourne for 55 years.[1]

The first director of pathology, Professor Hans Bettinger (1897–1975), was appointed in 1939 at the time of the commencement of the new pathology building, thanks to a generous grant of £30,000 from Sir Charles Connibere. Bettinger, a German-trained anatomical pathologist, was ably assisted by Hildred Butler in microbiology, Vera Krieger in biochemistry and June Barrie in blood serology. Bettinger's most significant contribution to medicine and pathology was his skilled microscopic diagnosis of cancer. He oversaw the commencement of routine Rhesus factor (Rh) screening in 1941, not long after its discovery—which was instrumental in the progressive decrease in fetal and neonatal loss from Rh-mediated 'blue babies' (a dangerous anaemia caused by blood-type incompatibility between mother and fetus). In 1959 he introduced a cytology section, where examination of cervical smears could identify early or pre-cancers.[2]

Professor Harold Attwood (1928–2005), a skilled anatomical pathologist who took over Bettinger's post in 1965, developed a special microscopic method to identify amniotic fluid in lung tissues. This discovery explained why (rarely) some mothers suddenly died

Cat. 222 Peter Garnick (Australian, b. 1953), **Pathology lab: Specimens and photograph of staff**, 20 May 2008, photograph, 29.7 × 42.0 cm. Collection of the artist.

during labour through no fault of themselves or their caregivers. Attwood was also a distinguished historian, being central to the establishment of the Australian Society of the History of Medicine in 1986, and curator of the University of Melbourne Medical History Unit in 1981. He was instrumental in the production of the splendid facsimile edition of William Clift's copy of the *Atlas* (1799–1802) for Matthew Baillie's *Morbid anatomy of some of the most important parts of the human body*—the first book to treat pathology as an independent and emerging science.[3] A copy of this facsimile volume is held in the Medical History Museum of the Univeristy of Melbourne.

The next director and significant contributor to anatomical pathology in Melbourne was Dr Denys Fortune, who worked in, and published many scholarly articles on, gynaecological and perinatal pathology, from 1966 until his handover to Dr Andrew Östör in 1990. Fortune was president of the Royal College of Pathologists of Australasia in 1989–91; skilled in the science of cytology, he was conferred with a life membership of the Australian Society of Cytology in 2017.

Dr Andrew Östör (1943–2003) was, together with his family, a Hungarian refugee following the brutal crushing of the anti-Communist uprising in 1956. He trained at the University of Melbourne, overcame a life-threatening lymphoma, and went on to become a world expert in gynaecological pathology. He published 82 scientific papers, collaborated on 14 research projects and broadened the understanding of early squamous and glandular carcinoma. He was a spirited and thoughtful colleague who welcomed clinical and social interactions with his peers.

Dr Vera Krieger (1901–1992) was a notable biochemist from the mid-1930s, who wrote many papers on the laboratory testing of kidney function—an important contribution to the management of eclampsia, a severe and often fatal complication of pregnancy in the pre-war years.[4]

Medical science and pathology specialists in diseases of the blood (haematology) have worked alongside colleagues caring for women and their babies for many years. The 1940s to '60s was a period of rapid translation of basic science through translational research into prevention of what was a major cause of neonatal morbidity and mortality: haemolytic disease of the newborn due to anti-D. (Women who lacked the Rh factor often developed antibodies that affected the following pregnancy, causing severe jaundice and anaemia in their newborn. In the 1950s this was one of the leading causes of neonatal mortality.) In the 1960s Dr William Kitchen (1926–2012) published the Women's experience of neonatal exchange transfusion, with more than 100 procedures performed annually to treat babies born with this serious disease. The first successful trials of the use of anti-D in pregnant women were announced at the 1966 Sydney conference of the International Society of Blood Transfusion by researchers from the US and UK, and Australia became an early adopter of this treatment, celebrating the 50th anniversary of this successful program in 2017. Haemolytic disease caused by this antibody is now rare, with the Women's performing fewer than ten exchange transfusions per year.

Haematologists today continue the pioneering work of Professor Rex Betheras (1933–2002) in haemoglobin disorders or thalassaemia, identifying women and their partners who carry genetic disorders of haemoglobin that may, in combination, cause serious disease in their children. Recent changes in patterns of immigration, together with the broad availability of genetic diagnosis and prenatal testing, have expanded our ability to offer care to these women and their families.

Severe bleeding during childbirth and venous thromboembolism remain leading causes of maternal morbidity and mortality, with haematologists continuing to work with obstetric and midwifery colleagues to better manage and prevent these diseases.[5]

The pathology department went through a period of re-organisation and turmoil over the years 1995–2001, when the new government decided that the Royal Children's and Royal Women's hospitals should be amalgamated into a 'network'. The two separate pathology departments were amalgamated and remain so, despite the separation of the hospitals in 2004. There is, however, individual specialisation at the two sites, so that the study and quality of diagnosis of the unique disorders of children and women are strongly maintained. From 2001 to 2018 the Women's Hospital pathology department has been staffed mainly by dedicated women pathologists who have maintained and contributed their skills in the fields of obstetric, gynaecological, breast and perinatal diseases. The establishment, under the auspices of the Women's, of the Victorian Perinatal Autopsy Service over the past three years is helping us answer difficult questions on why babies and fetuses die.

Pathology is a science that is mostly hidden behind excellent care of women and their babies. It is the foundation of understanding what can and does go wrong, and can inform the clinician on how to prevent or deal with a problem once it arises.

Dr Virginia Billson

1 *Book of remembrance, 1956–1975*, Royal Women's Hospital Archives.
2 *Book of remembrance*.
3 Geoffrey Kenny, 'Tribute: Harold Dallas Attwood', *Health & History*, vol. 7, no. 1, 2005, pp. 102–6.
4 *Book of remembrance*.
5 This section on haematology was kindly provided by Dr Helen Savoia.

A window into the fetal world

The advent of ultrasound (US) at the Royal Women's Hospital in 1972 was an exciting and momentous occasion. This new technology, at the forefront of modern obstetrics, contributed to the huge reductions in perinatal morbidity and mortality over the last 50 years. Embryology and fetal development came alive through visions of fetal activity and anatomical development, and for the first time placental assessment and accurate dating were possible.

The Women's first US machine, a diasonograph 1103, was purchased with a bequest of £23,975 from philanthropist Alex Cato, at the behest of Dr Grantley Shelton. In 1972 obstetrician and gynaecologist Ian Ross and radiologist John Street put the new machine to good use, performing approximately 1000 scans in the first 12 months. Other obstetricians, including Beresford Buttery, John Neil and Greg Davison, took a keen interest, becoming experts in the new technology.

US technology improved rapidly and the Women's machine was upgraded to a new model of diasonograph in 1976. Ian Ross persuaded management to set up a fund from private fees to fund this purchase, a fundraising method that still supports the acquisition of new US machines.

In 1978 Dr Hugh Robinson was recruited from Glasgow as US director, a position he held until 1996. This important researcher and ultrasonologist had trained and worked with Ian Donald, the 'father of ultrasound'. His 1972 paper on the early detection of fetal heart activity was ground-breaking, and his CRL or crown–rump length charts (to measure the length of the fetus) are still used today, in a modified version. Under his direction, all women delivering at the hospital were offered a mid-trimester scan, and total annual scan numbers increased from 2000 in 1978 to 11,000 by 1994. Robinson brought with him skills in amniocentesis, transvaginal chorion villous sampling (CVS) and intra-uterine peritoneal transfusion.

Dr Lachlan de Crespigny joined Robinson's team in 1979, and together they were involved in the 1982 introduction of intravascular intra-uterine transfusion (IV IUT), and later of fetal exchange transfusion. They published the first paper on the paralysing of fetuses undergoing IV IUT, pioneered transabdominal CVS in Australia, and introduced continuous US monitoring during amniocentesis and all intra-uterine procedures. Many

Dr Nicole Woodrow, ultrasonologist, performing ultrasound on a patient in 2018. Photograph by Nicole Cleary. © Royal Women's Hospital, Melbourne.

other fetal interventions were developed, including skin biopsy, placement of pigtail catheters in the fetus, and aspiration of fluid collections. They worked closely with the IVF research team, describing for the first time the US appearance of the follicle, and of ovulation itself. De Crespigny also described the appearance of intraventricular haemorrhage in neonatal brains.

Dr Andrew Ngu joined the team in 1983, becoming a dedicated US specialist for 29 years and training many junior staff and doctors. In 1989 Dr Amanda Sampson joined the US department and was accepted, in 1990, as Australia's first RACOG-certified obstetric and gynaecological ultrasound (COGU) subspecialist trainee, graduating in 1992. She and her colleagues published the results of the first eight years of intravascular intra-uterine transfusion at the Women's, confirming their excellence. Since that time, more than 25 COGU and maternal-fetal medicine subspecialists from across Australia have been trained at the Women's.

In 1994 the US department, having outgrown its space in the radiology area, moved to new premises adjacent to the perinatal day assessment unit and the genetics department. This allowed an innovative, integrated, collaborative approach to the care of high-risk women and their babies. In 2007 the department moved again, into the 'new' hospital in Parkville, this time integrated with the radiology department (the Pauline Gandel Imaging Centre). Regrettably, we were now separated from the genetics and perinatal departments, but the new department offered closer collaboration with radiology, especially in the burgeoning area of fetal and maternal MRI (magnetic resonance imaging).

In 1996 Dr Lachlan de Crespigny was appointed as director and remained until 2000, when he resigned under difficult circumstances. US and prenatal diagnosis can be controversial, due to the late termination of pregnancy ('feticide'), which uses US guidance to place the needle. At this time Victoria's termination laws were still part of the criminal code. In 1999 the Women's administration referred a very difficult case to the state coroner, despite a multidisciplinary medical team approving the late termination. This left Dr de Crespigny and other senior staff suspended and unsupported by hospital administration, with several resigning over the next two years. More than six years passed before an investigation found no fault in patient care. These events had a profound effect on US personnel, and galvanised widespread support for termination law reform in Victoria, in which de Crespigny played a pivotal role. The consequent benefit to the women of Victoria is inestimable.

As a direct result of this case, a formal multidisciplinary fetal medicine unit (with maternal-fetal medicine and COGU subspecialists, obstetricians, paediatricians, geneticists, psychiatrists, midwives and obstetric subspecialty trainees) was instituted, to assess fetal anomalies, provide fetal interventions in the US department, and care for the mothers. In 2001 Dr Amanda Sampson was appointed as director and remained in this position until 2010, retiring in 2016. Her interest in teaching, and in US and MRI of the fetal brain, led to a new concept of a US service, with US assessment of pregnancy now available in several sites in the hospital. The early pregnancy assessment unit was set up in 2004 in the emergency department, and US assessment was extended into the perinatal unit. Training for junior medical, general practitioner and nursing staff was introduced. RANZCOG membership trainees began training in US in the department, many continuing to work there afterwards.

In 2003–04 an extensive review recommended major upgrades in US machine quality, reflecting the complexity of work being performed. Digital recording, reporting and image storage were introduced, and by 2006 well over 15,000 scans were being performed per annum. In 1999 Dr Louise Kornman joined the department, providing much-needed US subspecialist support. In 2010 Dr Nicole Woodrow became director, managing a rapid expansion in demand for services across many departments, at a time of severe monetary constraints. Most notable were the introduction of endometriosis scanning with bowel preparation, improved cardiology services, and the advent of chromosomal microarray in prenatal diagnosis.

Since 2014 Dr Ricardo Palma Dias has been director of US. The addition of a dedicated data manager / research assistant has resulted in a significant increase in research and audit work, with more than 30 papers published between 2014 and 2018. Highlights include the introduction of the fetal cardiology unit in 2015, a fifth US scan room with a new US machine in the PG (prompt gamma) imaging centre, and a new dedicated US reporting area for the obstetric US supervisor in 2016. Expansion continued with two upgraded US machines in perinatal, and connection of the new US machine at Sandringham Hospital to the PG imaging centre storage and reporting systems.

In 2019 the Women's US service includes ten US machines across five sites; 25,000 doctor-performed scans (65 per cent obstetric and 35 per cent gynaecological); 450 amniocentesis and CVS; about ten intra-uterine transfusions and 200 tubal assessments each year. Staff include COGU and maternal-fetal medicine subspecialists, subspecialty trainees, general obstetricians and gynaecologists, general practitioners, many RANZCOG-approved trainees, and midwives.

Dr Amanda Sampson

Treating and studying cancer

The division of Royal Women's Hospital medical staff into separate obstetric and gynaecology units in the 1950s sowed the seeds for the development of a radio-surgical unit, particularly for the management of cancer of the cervix, headed by Drs Arthur 'Bung' Hill and Graham Godfrey, with Drs Bill Holman and Geoffrey Kurrle as radiation oncologists. Subsequently, each gynaecology unit took responsibility for one particular tumour type. For instance, the Churches/Chanen unit together with the professorial unit took over managing patients with cervical cancer.

The concept of subspecialisation in cancer emerged in the 1970s, and referrals from within the hospital of women with cancer slowly led to the centralisation of care that we now take for granted. The Women's oncology unit was initially led by Mr Barry Kneale, who had a special interest in endometrial malignancies, and by Mr William Chanen, who had a special interest in cervical cancer and (with Mr Vernon Hollyock) in the colposcopic assessment and conservative management of women with abnormal Pap smears. This ground-breaking work led to a sharp reduction in the need for hysterectomy for dysplasia (pre-cancer) of the cervix.

Radiation treatment was undertaken over the years under the supervision of Drs Geoffrey Kurrle, Seamus Campbell, James Matar, Susan Ludgate, Sam Leung, David Bernshaw, Pearly Khaw and Associate Professor Kailash Narayan, initially at the original Peter MacCallum site in Little Lonsdale Street and subsequently in East Melbourne, then at the Victorian Comprehensive Cancer Centre in Parkville. Expert specialist cytopathology and histopathology were led by Drs Hans Bettinger, Robert Barter, Harold Attwood, Colin Laverty, Denys Fortune and Andrew Östör, and ultimately by Jan Pyman.

With the support of the Anti-Cancer Council of Victoria, the Women's oncology unit established the Victorian Hydatidiform Registry in 1975 under the direction of Dr Alwyn Long—ten years later under Professor Michael Quinn. This quickly became the referral source for women with these rare placental tumours across Victoria, and indeed in many cases for other states in Australia.

Subspecialist training in gynaecologic oncology became established in the USA in 1973; the Women's followed this trend very quickly, with Associate Professor Robert Rome and Professor Quinn undertaking further training in the USA and Canada respectively.

Cat. 220 Peter Garnick (Australian, b. 1953), **Case conference: Michael Quinn silhouette**, 13 May 2008, photograph, 29.7 × 42.0 cm. Collection of the artist.

Medical oncology was in its infancy in the early 1980s, and all cytotoxic therapy (chemotherapy) was prescribed by gynaecological oncologists. This all changed with the appointment of Professor Brian Hillcoat, and subsequently of Drs James Bishop, Kelly Phillips and Danny Rischin, all based at the Peter Mac and all subspecialists with a particular interest in women's cancer. Professor Quinn was appointed director in 1987 and Associate Professor Rome associate director and director of the dysplasia unit. Multidisciplinary team care was quickly established, including a dedicated oncology social worker and dietitian, and dedicated oncology nurses, bringing a holistic approach to patient care. Dr Barbara Thomson gave invaluable support at this time.

In parallel with these events, the Australian Society of Gynaecologic Oncologists was founded in 1986, with Michael Quinn and Robert Rome among the 12 original members. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG), after much deliberation and considerable resistance, established gynaecological oncology as its first subspecialty, comprising a three-year training program and an exit examination. We have trained more than 30 national and international fellows since then, with two of our trainees becoming consultants: Deborah Neesham in 1998 and Orla McNally, originally from Ireland, as the unit director in 2009. The unit also became responsible for a three-month rotation of registrars training for membership of RANZCOG.

It quickly became apparent that our unit's facilities in Ward 53 were inadequate, and in 1992 a committee was formed to raise money for renovations. The campaign, named 'Lend a name, Lend a hand', was chaired by Dulcie Boling (chairman of News Limited Magazine Group and editor of *New Idea*) and included Mary Murdoch from the hospital's board of management, chief financial officer Russell Green, and public relations officer Annette Wood, with a strong community presence led by Margaret Heffernan and Diana Dundon. The campaign raised $3 million, half of which was matching funds provided by the state government through the support of health minister Marie Tehan. Australia's first stand-alone cancer joint inpatient and outpatient unit, which included six chemotherapy beds, opened in June 1996. It had 21 single rooms with en suite bathrooms, a double room for palliative care patients, a quiet room and a laundry.

The new unit served us well and, as patient numbers increased, research flourished, with a dedicated laboratory—led by Greg Rice and later Nuzhat Ahmed—supported by the University of Melbourne's department of obstetrics and gynaecology under Professor Roger Pepperell.

We were fortunate when the Women's supported a prodigious full-time data manager, Margot Osinski; she and Dr Jeffrey Tan developed an oncology database which was invaluable for monitoring our productivity, recording decisions from tumour boards and aiding our research. Likewise, a dysplasia database proved enormously useful. Clinical trials burgeoned after Michael Quinn, Danny Rischin and Michael Friedlander (from Sydney) established the Australian and New Zealand Gynaecological Oncology Group in 2000. ANZGOG now has 860 members and a huge research output. Our unit quickly became Australia's major contributor to clinical trials, very ably supported by Julene Hallo, our amazing research nurse.

The hospital's move to Parkville in 2008 meant the loss of our stand-alone inpatient and outpatient unit, as we were moved in with general gynaecology, though with ready access to a complex care unit for our patients. Asscociate Professor Orla McNally became the new director in 2009 and Mr David Wrede was appointed to lead the dysplasia unit. Subsequent visiting medical officer appointments have included Dr Vivek Arora (a former fellow and now director of the oncology unit at Sydney's Royal Hospital for Women) and more recently Dr Anthony Richards.

A number of major advances have been made since then, including a significant move to laparoscopic surgery, which has brought reduced morbidity and better recovery after surgery. We have introduced pre-operative admission preparation clinics, day-of-surgery admission, an aim for a laparoscopic approach, and early discharge with support in place. Ours is the first unit in Australia to introduce sentinel lymph node assessment in endometrial and cervical cancer, and mainstream genetic testing for patients with ovarian cancer. Greater participation in clinical trials and first-class data collection have resulted in the production of two unique triennial reports.

When the Peter McCallum Cancer Centre opened in Parkville in 2016, the chemotherapy beds at the Women's were closed. Nonetheless, local cooperation has flourished, with Orla McNally being appointed as lead of the gynaecology cancer unit at Peter Mac, and Clare Scott from the Women's as professor of gynaecological oncology at the University of Melbourne. The future for women with cancer has never looked brighter.

Professor Michael Quinn AM

Overcoming infertility

In its early days, fertility treatment at the Women's had two streams: the surgical and the medical. The surgical began in 1947, with a clinic for women having difficulty conceiving. It investigated the woman's fallopian tube function, performed a biopsy of the endometrium, and examined the husband's semen. If natural pregnancy did not ensue, adoption was a common choice.

The medical stream investigated the woman's ovulatory function by measuring urinary products of oestrogen and progesterone. In the 1950s, women not ovulating or menstruating regularly were prescribed cyclical hormone therapy to mimic the natural cycle. In 1960 the Women's provided Australia's first successful treatment of profound ovulatory failure, using daily injections of purified pituitary gonadotrophin (HPG). But these hormones, obtained from human cadavers, were later shown to carry a small risk of Creutzfeldt-Jakob disease. From 1964 an oral treatment, Clomid, became available for less resistant cases.

HPG often led to multiple pregnancy, despite meticulous attention to daily urinary oestrogen monitoring of the ovarian response (ultrasound monitoring was introduced in the late 1970s). Routine measurement of ovulatory status on 'day 21' of an idealised 28-day cycle caused many women with normal but longer cycles to be given Clomid unnecessarily, bringing an increased twin-pregnancy rate. From 1976, the ability to measure prolactin by radio-immuno assay uncovered a further category of ovulatory failure, which was very successfully treated with the drug bromocriptine, without increased multiple-pregnancy risk.

The hospital's reproductive biology unit, started in 1976, was meant to bring the medical and surgical sides together. The andrology unit gave precise semen analysis and introduced frozen donor sperm—obtained mostly from medical students, who donated more often from bravado than from a full understanding of the consequences of their donation. The promise of anonymity that they were given eventually proved meaningless. Nonetheless, donor insemination was now viable for many couples, while the number of babies placed for adoption fell precipitously (from 500 per annum to 50, over five years), thanks to better contraception, available abortion, changing societal attitudes, and the supporting mother's pension. The Women's appointed the world's first medical social

Some members of the Women's reproductive services team in 2017—laboratory manager Harold Bourne, Professor John McBain (centre) and Dr Debra Gook—with a photograph of the 1983 team. Photograph by Michelle Putt. © Royal Women's Hospital, Melbourne.

workers to provide information and counselling to couples contemplating IVF treatment.

The Women's started working towards IVF in 1974, in conjunction with doctors at the Queen Victoria Hospital (later Monash Medical Centre). Much frustratingly unsuccessful work was done at both centres, the Women's team being the more active owing to a particularly supportive hospital board of management, heavily influenced by Dr Ian Johnston, chairman of senior medical staff. In 1980 Australia's first (and the world's third) IVF baby, Candice Reed, was conceived and born at the Women's. Sadly, the exclusion of the Monash doctors from the resulting publication led to a professional rift that never healed.

In our first successful IVF year, 1979, women being treated averaged 28.3 years of age; most had irreversible tubal blockage. Four decades later, the average age is close to 38 years. In 1979, the chance of success was 2 per cent—only one of the 50 women we treated gave birth to a child. Nowadays the chances are much higher, and most women younger than 40 will be successful if they can undergo multiple treatments.

But such improvement is achieved only by incremental steps, involving many research scientists, clinicians and patients. For instance, the recovery of multiple eggs often led to multiple embryos. Originally, we transferred up to four embryos, because the chance of live birth per embryo was around 5 per cent; the most frequent result of even a four-embryo transfer was no pregnancy! But as embryo culture improved, so did the percentages, and in 1984 Mrs Muir gave birth to the world's first IVF quadruplets. That led us to gradually decrease the embryo transfer number. By 1988 we found that more of our babies born came from frozen embryos than from fresh ones.

GIFT (gamete intro-fallopian transfer) enjoyed a longer duration than it deserved. Placing two eggs and sperm in each fallopian tube had a high success rate but higher multiple-pregnancy rate, exposing the inadequacy of our culture systems. Once these improved, this treatment had no future, other than in Catholic institutions where IVF was not permitted.

From 1990, the Women's was the world pioneer in preserving the fertility of women about to undergo certain life-saving medical treatments. Research on mice demonstrated the feasibility of freezing and then thawing and transplanting ovarian tissue, although Victorian legislation delayed its clinical application for more than a decade; the first transplant occurred in 2006. The Women's collaborated with oncology units statewide and led other units in Australia in the steps required to build a successful fertility preservation service.

Where a man's spermatozoa are severely low in number, lack motility or are abnormal in shape, conventional IVF (sperm placed beside the egg in culture) is seldom successful. In 1992 the Women's was Australia's first clinic to perfect and introduce the technique of capturing, immobilising and then injecting a single spermatozoon into the cytoplasm of an oocyte.

The Women's has always been the hospital of last resort for the women of Victoria. Our chronic viral illness clinic is a modern-day example of that. Devised and run in conjunction with infectious disease physicians from the Alfred Hospital's Burnet Institute, it alone in Australia offered fertility options to those with persistent HIV or hepatitis C infection, by storing sperm with reduced viral load, then using it for insemination. In 1998 our endocrine clinic was re-named the endocrine and metabolic service, acknowledging the increasing role of obesity and polycystic ovarian syndrome in causing infertility. The Women's collaborated with the Murdoch Children's Research Institute and Melbourne IVF (a private fertility clinic) to develop a method for testing—using a single cell—the complete chromosomal make-up of an embryo in culture. This replaced partial chromosome testing in 1999 and is now the industry standard.

From the earliest IVF cases, surgeons at the Women's donated their surgical fees for laparoscopic egg retrieval to the hospital, to pay the salaries of the nursing, scientific and counselling staff. Once IVF was no longer a research project, private patients paid for their treatment and the Victorian government funded 300 treatment cycles for public patients each year. Soon the waiting time for a free cycle was five years. In 1991 the Australian government agreed to fund IVF treatment through Medicare, following lobbying by the Women's Ian Johnston, ACCESS Australia and the Fertility Society of Australia. The Women's contracted Melbourne IVF to provide services under Medicare; state-funded treatment ceased and the waiting list disappeared.

In 1984 Victorian law made treating an unmarried person with IVF an offence punishable by gaol. In 2000 Dr John McBain successfully sued the Victorian government and others in the Federal Court to have that discriminatory ban removed. Two years later he was sued by the Catholic Bishops Conference, which sought a prohibition on his practice. But the High Court ruled in his favour; single women and same-sex couples can now have their reproductive needs fully met at the Women's.

Associate Professor John McBain AO

Microbiology

Historical background

Microbiology became a specialty at the Women's Hospital at a time when sepsis was very common, in the pre-antibiotic era. Puerperal sepsis of mothers immediately after childbirth was frequent, and largely caused by *Streptococcus pyogenes* (group A strep). Post-partum sepsis from *Clostridium perfringens* (*welchii*) was common too, and associated with illegal abortions.

The first microbiologist at the Women's was Dr Hildred Butler (appointed in 1938). In response to the significant morbidity and mortality caused by sepsis at that time, Butler devised a rapid technique for presumptive pathogen diagnosis of sepsis by the use of immediate Gram-staining of genital smears made at the bedside from genital secretions, defining the likely pathogen by the morphology of organisms seen, and the white cell responses. To support this, she operated a 24-hour-a-day, seven-days-a-week microbiological diagnostic service.

When Butler retired in 1971 her position was taken up by Dr David Leslie (1971–75), who focused on anaerobic infections, followed by Professor Lyn Gilbert (director 1979–84) and subsequently Professor Suzanne Garland (1984–2018).

Diagnostic and clinical service

In 1995 the Women's and the Children's hospitals were combined into a network service. The combined microbiological diagnostics for the Children's and for obstetrics, gynaecology and neonatology at the Women's were led by Suzanne Garland as divisional director of pathology services. From 1995 to 2005 Garland alone directed the Women's clinical microbiology and infectious diseases service, including infection control; since 2005 the role has been shared on a six-monthly rotation with Associate Professor Andrew Daley, a paediatrician and clinical microbiologist at the Children's.

As a fully qualified sexual health physician, Garland worked for a session each week at the Melbourne Sexual Health Service (1986–2000) and from 1986 to 1997 in the communicable diseases clinic of the Women's (with Dr Bruce Johnson). That clinic is now headed by Dr Alex Marceglia. Garland set up a much-needed clinic for infectious diseases for pregnant women, now headed by Associate Professor Michelle Giles, an adult infectious diseases physician who trained with Garland. Each year, microbiology and infectious diseases registrars have been supervised through the department.

In mid-2018, the Royal Women's Hospital's diagnostic and clinical services were moved as a contracted service to the Royal Children's Hospital.

The Women's Hospital pathology laboratory, 1947. Photograph: *The Age*.

Research

In addition to new clinical and diagnostic services, Garland established an internationally recognised research group, whose main emphasis is the translation of scientific findings into clinical care, thus providing evidence to support cost-effective changes to clinical practice. The group's research concentrates on infections pertaining to pregnancy and gynaecology, and of the neonate, as well as sexually transmitted infections. Garland was first inspired in this area when working as a microbiology registrar at the Women's under the leadership of Professor Gilbert, who was a mentor and instilled her interest in infections in women and babies and sexual health. Many subsequent research projects have emerged from clinical queries, or problems observed in the laboratory, leading to an approach that is truly bench-to-bedside, and back again.

Molecular microbiology

Following her return from Harvard University, in 1984 Garland was appointed as director of microbiology at the Women's, bringing with her new tools in molecular microbiology. She established a research group (funded independently from competitive grants) which included research scientist Dr Sepehr Tabrizi, who was instrumental in validating the use of molecular techniques (PCR or polymerase chain reaction) on self-collected genital samples. PCR revolutionised the screening and diagnosis of genital infections, particularly sexually transmitted infections and agents difficult or impossible to grow by standard techniques, even before the development and commercial availability of assays. In recognition of this, in 1998 the team (Sepehr Tabrizi, Shujun Chen and Suzanne Garland) received a public health award for excellence in research from Victoria's Department of Human Services. The work revolutionised the medical profession's thinking, for example, about *Chlamydia trachomatis*, which was difficult to diagnose as it requires cell-culture lines: our research determined the epidemiology and problems caused by this organism in Australia, which include tubal infertility, post-abortal pelvic sepsis, and conjunctivitis. Another example is *Mycoplasma genitalium*, an uncultivatable organism that causes upper genital tract infections similar to chlamydia. This bacterium has significant antimicrobial resistance, but we found that the new testing, which also determines resistance to first-line antibiotics, assists in guiding appropriate treatment. Today, much of the molecular microbiology developed by the research group for different pathogens has been translated into diagnostics that benefit patients of both the Women's and the Children's hospitals.

Group B streptococcus infection (GBS)

As a registrar at the Women's in 1979–80, Garland, together with Gilbert, observed significant morbidity and mortality among newborn infants, caused by GBS infection.

In 1995 the Women's and the Children's hospitals had a combined microbiological diagnostics service, led by Dr Suzanne Garland (pictured). © Royal Women's Hospital, Melbourne, 2012.

They began evaluating the efficacy of screening pregnant women for GBS and then administering penicillin to those found to be carrying the bacterium. The study reported a dramatic reduction in GBS sepsis among their newborns. Today this practice is routine, and will continue until a GBS vaccine becomes available. The Women's subsequently led a national study to determine whether such treatment may increase the antimicrobial resistance of GBS, in the light of increased antibiotic resistance of many bacteria globally. Our findings are now applied in antimicrobial management techniques. Recently one of our MDRP (Doctor of Medicine Research Project) students conducted an audit of the level of compliance with these changes to clinical practice.

Preventing infection

When an outbreak of methicillin-resistant *Staphylococcus aureus* (MRSA) occurred in the neonatal intensive care unit (NICU) early in her career at the Women's, Garland established an infection-control plan. Vigilant screening, and cohorting of those newborns carrying the bacterium, ultimately eradicated the MRSA—this was the birth of infection control at the Women's, established by Garland. Through a subsequent project funded by the Department of Human Services, involving close collaboration with colleagues in the NICU, we reduced neonatal sepsis by introducing hand-hygiene precautions with strict compliance, a regime that continues today.

Human papillomavirus (HPV)

In the late 1970s, it was recognised that the human papillomavirus could cause cervical cancer. The Women's introduced PCR molecular techniques to screen for this virus, because it cannot be cultured, and Garland, collaborating with professor of gynaecology and oncology Dr Michael Quinn, began researching the role of HPV in not only cervical, but also vulvar and anal cancer. The success of the phase-three clinical vaccine trials at the Women's led to the Australian government's decision to implement universal HPV immunisation for young girls, followed by young boys.

The Women's also led an important national study into the prevalence of HPV in the population before vaccination. This gave Australia reliable baseline data against which the effectiveness of the vaccine is now being measured. Currently, the microbiology team at the Women's holds the government tender for measuring vaccine effectiveness across Australia. This work has been a world first, leading other countries to follow suit by introducing preventive HPV vaccination into their national immunisation programs. In recognition of this, the molecular biology laboratory at the Royal Women's Hospital has been given regional reference status by the World Health Organization.

Professor Suzanne Garland AO

The levonorgestrel intra-uterine system (Mirena) has provided long-term contraception and control of heavy periods, significantly reducing the need for hysterectomy. © Royal Women's Hospital, Melbourne, 2018.

PUBLIC HEALTH MOVEMENTS

Contraception and abortion

The main methods of birth control used in Victoria during the Royal Women's Hospital's first hundred years were abstinence, withdrawal and abortion, with increasing use of barrier contraception during the 20th century. From time to time a medical voice would be raised, advocating provision of contraceptive advice to women for whom further pregnancies were considered unsafe; the District Nursing Society supported such a clinic in 1934, when the Women's would not. Generally it seemed that doctors and the establishment did not approve of contraception.

'Unlawful abortion' was an offence in Victoria from colonial times, firstly under British law and later under the Victorian *Crimes Act*. This was taken to mean that abortion was illegal; there were prosecutions, inquests, some convictions and many acquittals, as well as police graft and corruption. Without contraception or abortion services until the 1970s, the hospital's main role in this area was caring for women with haemorrhage or infection resulting from unsafe abortions performed or attempted in the community. The workload was substantial. As ever, pregnant women who felt unable to bear a child would seek help where they could, regardless of the risks and stigma. They would take drugs or poisons, use douches, instrument themselves, or pay others to insert knitting needles, syringes, coathangers or slippery elm bark into the uterus. These methods were unsafe for women and carried risks of prosecution for both woman and provider; the wealthy could have curettes discreetly performed by trained doctors, ostensibly for other reasons, which was considerably less dangerous.

Women came to the hospital with pain, bleeding and claims of miscarriage—some were moribund. Afraid of prosecution, they avoided telling what had gone before, although the patterns were all too recognisable. Police would sometimes be called, especially to take 'dying depositions', when staff or the board feared that the hospital might otherwise be seen as party to an offence.

There was a busy infection ward and a high surgical caseload, sometimes as many as 30 curettes in a day, to empty women's uteri of retained or infected pregnancy tissue. Women died of their complications with awful frequency—two or more a month before the advent of penicillin.

Cat. 146 **'The "Spring rim" Dutch cap pessary' contraceptive diaphragm**, c. 1940, rubber, cardboard, paper, ink; 3.5 × 6.8 × 7.0 cm. A1994_19_002, Royal Women's Hospital Collection.

The oral contraceptive pill came to Australia in 1961 and women took it enthusiastically. While some individual practitioners offered contraceptive advice on a case-by-case basis, it was another ten years before the hospital launched its family planning clinic, led by Dr Gytha Betheras, who had been invited to set up the service, provided doctors would work unpaid. She assembled a team of women doctors who thought the work important enough to do on a voluntary basis. By then they could offer oral and intra-uterine contraception, as well as barrier methods and information about withdrawal and periodic abstinence; sterilisation was available through the gynaecology clinics.

Meanwhile, in 1969, Justice Menhennitt delivered a ruling that described circumstances in which an abortion was lawful. After Dr Bertram Wainer was unable to provoke arrest by claiming to have performed a series of abortions, it was apparent that there was little appetite for prosecution in cases where the Menhennitt ruling was considered to apply, and doctors developed some confidence in providing safer services more openly. Dr Wainer established an overt abortion service in 1972.

The Women's established its 'Pregnancy Advisory Service' in 1975 to provide abortions for public patients. Although this decision was contested, Dr Michael Kloss and others championed respect for women's rights and health, and they prevailed. Many of the staff were women who also worked in the family planning clinic; both services continue today, integrated as the Abortion and Contraception Service.

In the 1970s a $2 contribution purchased the right to vote in hospital board elections, so anti-abortion activists signed up and attempted to vote representatives onto the board, but they were outnumbered by supporters of women's access to abortion. Protesters took to demonstrating outside the hospital and confronting women and staff entering the premises, until an injunction was obtained in 1986 to prevent this.

Protesters targeted other services until legislation ended this problem across Victoria in 2015 by providing 'safe access zones', prohibiting such protests and harassment within 150 metres of any premises where abortion services are provided.

The Women's has continued to advocate for change: staff provided information and evidence to the Law Reform Commission and to proponents of the *Abortion Law Reform Act 2008*, which finally removed abortion by qualified health professionals from the *Crimes Act*. So ended the risks that women and health professionals could be prosecuted for having or performing abortions, which are now properly subject to relevant health and professional regulation.

The Women's has been active in the introduction of 'medical' abortion—the use of drugs to trigger a miscarriage-like event, which is preferred by many women to surgical abortion. This required advocacy for repeal of a specific legislative barrier to importation of mifepristone (RU-486) which had been introduced in 1996. That law changed in 2006, and the following year the Women's was able to provide some access to medical abortion for the Victorian women who most needed it, until it became more generally available in Australia in 2012.

In 2019 a broad range of effective contraceptive options and early abortion care can be safely provided in the community, but for many Victorian women these are still not readily accessible. The Women's provides direct care to those with the greatest need for specialist tertiary facilities for medical or social reasons (including disadvantage), and works to support timely community access to suitable services by offering training, education and consultation.

Recognition and delivery of contraception and abortion services as integral to health care services across Victoria can be expected to reduce the need for abortion, and to allow it to be done early when necessary.

Postscript

When I began my specialist training at the Women's in 1980, it seemed to me that the abortion service was an integral and accepted part of the hospital's work, despite the protests outside. I took it for granted, not appreciating how recently it had commenced. I later came to understand that the consultants who taught me strongly supported the service because they had worked in the old infection ward and had seen the damage and death caused by unsafe abortion. The further such harm recedes into history the better, but there is a risk that the fading memory may weaken efforts to advocate for safe, accessible services.

Dr Christine Bayly

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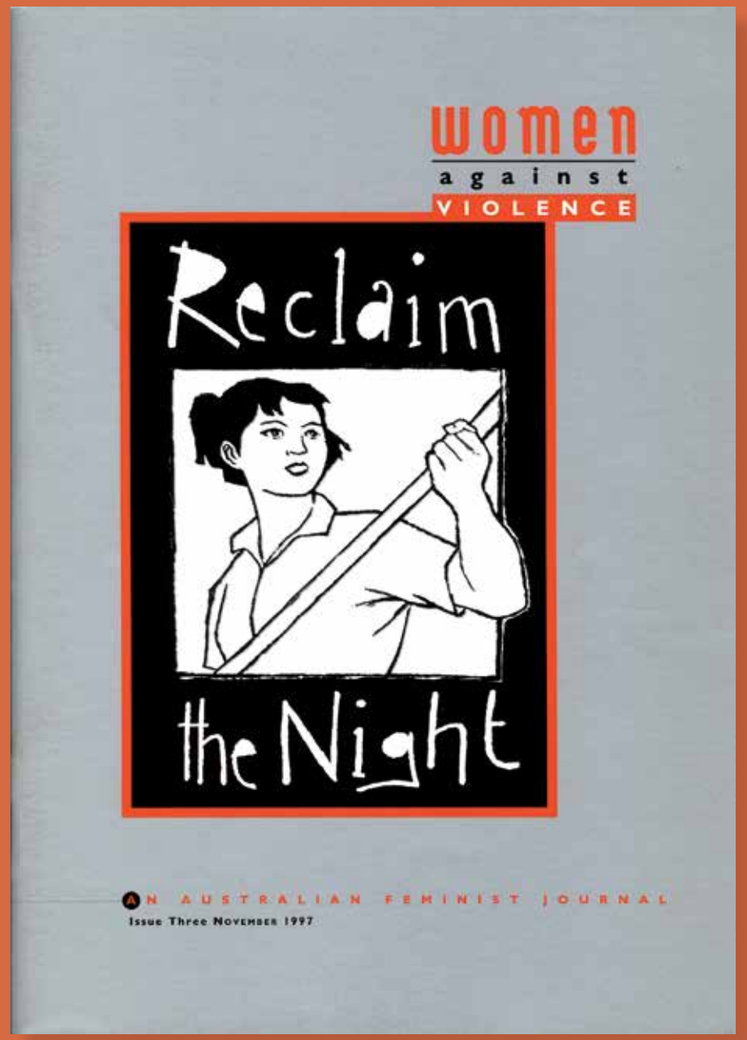

Responding to sexual assault

The Women's Hospital has cared for women who have been sexually assaulted since its earliest days, incorporating the phrase 'Infirmary for Diseases of Women' in its name to distinguish it as more than a 'lying-in' (maternity) hospital. But in early years the treatment of women presenting with such trauma was not well documented. In more modern times, Dr David Laurie analysed individual medical records from 1960 to 1974 that had been coded as 'coital trauma'. He found 67 major injuries to the vagina. The women were aged between 14 and 70. Fourteen were postmenopausal, six pregnant and four were shocked, requiring blood transfusion. This was the tip of the iceberg, with no records of those women not so severely physically injured. The hospital's service to assaulted women was principally clinical, offered according to a medical model, and provided by hospital clinicians not specially trained for such work.

In 1979 the Queen Victoria Medical Centre (QVMC) received government funding to establish a room in its casualty department for the examination of rape victims. By 1984 there were three dedicated services in Victoria: the QVMC and the Geelong Rape Crisis Centre delivered a medical model of care, while the Australian Women Against Rape—Melbourne Women's Switchboard provided counselling.

In 1984, while plans to move the QVMC to join the new Monash Medical Centre at Clayton were progressing, a group at the Women's started to investigate the feasibility of setting up a centre to care for survivors of sexual assault, this time in a woman-centred, holistic, strategic way. Consultation began with QVMC's rape crisis centre staff, police surgeon Dr Peter Bush, the head of the Victoria Police sexual offences squad, and Victoria's director of public prosecutions. Data was gathered on all the rape crisis centres in Australia. Finally Dr Leslie Reti was funded by the Tracy Maund Trust to travel to the US to visit five sexual assault centres and attend the US umbrella organisation's National Coalition Against Sexual Assault (NCASA) conference. A proposal was written which argued for acute crisis care, continuing counselling, an outreach program, plus education and training. It also proposed autonomy for the centre, through a committee of management and a full-time director with a staff of counsellor-advocates, the first time we used the term. The centre was to be located off the hospital site, to emphasise the non-medical approach.

Cat. 203 CASA House (Centre Against Sexual Assault), ***Reclaim the night***, *Women Against Violence: An Australian Feminist Journal*, issue 3, November 1997, printed journal, 30.0 × 21.0 cm. A2000_04_03, Royal Women's Hospital Collection.

The proposal was accepted by the Women's board of management and a detailed submission to the Victorian government's Rape Study Committee was prepared. After a formal tender process involving several hospitals, the Women's was successful in securing the centre in 1985. A steering committee first met in February 1986, and morphed into the formal committee of management. There were six hospital representatives and six community representatives—a very unusual form of governance for the time. The coordinator's job description listed eight responsibilities, of which five involved more than providing services, such as raising awareness, liaising with the media, and forming relationships with other agencies. The hospital received more than 30 applicants from all sorts of backgrounds: social workers, psychologists, one doctor, and two ministers of religion. Kate Gilmour, an outstanding advocate for women, was appointed. She started working full-time to establish the centre and in July she travelled to the United States to attend the NCASA conference. Following this the planning was complete, but funding was not finalised. In November 1986 we wrote to the minister of health that, given the imminent move of the QVMC to Clayton, time for some overlap was essential. A month later, the minister responded, confirming that $125,000 was being granted to the hospital in 1986–87 and $250,000 in the full year thereafter to establish CASA. Counsellor-advocates were appointed and on 19 June 1987 CASA House was officially opened, in one of the hospital's terrace houses in Cardigan Street, by Mrs Nancye Cain, wife of the premier of Victoria.

Since that time, CASA House has provided counselling, support and advocacy; delivered education and training; and expanded its work to include prevention programs in schools, universities and youth homelessness services. The aim continues to be the elimination of sexual violence. CASA House publishes and promotes the rights of victim/survivors in reports, programs and community campaigns, for instance:

- *The right to play safely: A report on violence against women in sport and recreation* (2003)
- *Emergency medical response to sexual assault* (DVD, 2006)
- *The 'No means no' show* (comedy performance for teenagers in partnership with Absolutely Women's Health, Royal Women's Hospital and Nelly Thomas, 2003)
- *16 songs for 16 days of activism to stop violence against women* (project with young homeless people and hip hop artists, which resulted in a 16-track hip hop CD and booklet dealing with intimate partner violence and sexual violence, 2011)
- The Sexual Assault Prevention Program for Secondary Schools (commenced in 2004 to promote young people's safety and wellbeing and demonstrate respectful and empowering relationships). It influenced the Respectful Relationships program for preventing gender-based violence in Victoria, which was introduced into school curriculums in 2018.

Consistent with the philosophy of respecting the rights of people accessing counselling and advocacy, a victim/survivor network, called Friends of CASA House, was created in 2004. The year 2005 marked the end of an era, when CASA House moved to new premises in the Queen Victoria Women's Centre, Lonsdale Street, Melbourne. It now also employs counsellors one day per week in the outer-Melbourne suburbs of Broadmeadows, Sunbury and Craigieburn.

The activism and advocacy of feminists, existing CASA services, and Royal Women's Hospital board members led to the establishment in 1992 of the after-hours TELSASA (Telephone Service Against Sexual Assault), to better support survivors of sexual assault across all of Victoria. TELSASA's purpose was also to serve survivors who often required care and support after hours, when there were no specialist services available. In 2002 TELSASA morphed into the Victorian Statewide Sexual Assault Crisis Line (SACL), which is administered from the Women's. It has provided a continuous service to people throughout Victoria through 24-hour-a-day, seven-day-a-week crisis counselling; provision of information, referral and advocacy to survivors of past and recent sexual assault; and coordinated immediate crisis care response to survivors of recent assault who require urgent care.

Associate Professor Leslie Reti AM, with staff of CASA House and SACL

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A powerful social model of health

One aspect of the Women's that sets it apart from other hospitals is its use of the social model of health for planning and organising its services for the benefit of the community. A vital element of the social model of health is its focus on the prevention of disease, as well as on treating illness. It is important to realise that if the health and wellbeing of an individual or community are to improve, all factors—social, cultural, environmental and economic—need to be considered, not only the physical and biological determinants of health.

The social model believes in the strength of community effort to promote health and wellbeing. This is more powerful than simply diagnosing and treating the patient, which can sometimes just be a quick fix that does not deal with the conditions that caused the illness, and therefore cannot prevent it from reoccurring. The main causes of health inequalities lie outside the health care system. It is not so much what clinicians do, or don't do, for patients that causes health inequalities, but the conditions in which people are born, grow, live, work and age.

As a hospital specialising in women's health, the Women's made a decision to shift its emphasis from sex differences (the biological) to gender differences (the social) in its service and community development, to improve the health and wellbeing of all women in Victoria. Women have different economic, social and political opportunities from men. This is called gender difference. Many gender factors contribute to a higher incidence of certain health problems, including anxiety and depression, in women. Such factors include financial disadvantage, lower levels of education, lower rates of working outside the home, the heavier burden of being a carer, and more frequent exposure to discrimination, harassment, and family or intimate partner violence (which used to be called domestic violence).

More research is being undertaken to better understand these and other sex and gender effects on women's mental health. Prevention and treatment programs that are woman-centred and take into account each woman's social, cultural and economic situation will help to ensure the best results for women's mental health. The evidence and statistics on violence against women in Australia are both shocking and increasing: nearly one in five adult women is subject to intimate partner violence. A 2004 study found

Some members of the education program team for family and reproductive rights. Left to right: Egigayehu Chanyalew, Marie Jones, Nigisti Mulholland, Medina Idriess and Katie Beveridge. Photograph by Michelle Putt. © Royal Women's Hospital, Melbourne, 2019.

that intimate partner violence is responsible for more ill health, disability and premature death in Australian women under the age of 45 than any of the other well-known risk factors, including high blood pressure, obesity and smoking. And these statistics are getting worse, not better. Women who have been exposed to violence have a greater risk of developing many health problems, including depression, anxiety, eating disorders and substance abuse. Intimate partner violence can also harm women's reproductive health, bringing an increased risk of sexually transmitted infections, abnormal Pap tests, unplanned pregnancies, pregnancy complications, abortions and miscarriage.

Violence against women is a complex problem, but we do know that cultural, social and economic factors all play a part. One main underlying factor is women's and men's unequal access to power and money, which has been noted by the World Health Organization. Intimate partner violence is alarmingly common and has overwhelming repercussions for women's health, but is rarely discussed or given much publicity. There is emerging recognition that violence against women is more than just a question of law enforcement: like high blood pressure, smoking and obesity, violence is a major women's health problem. The establishment of the Centre for Women's Mental Health—the first of its kind in Australia—is a fine example of how the Women's Hospital has responded to a particular social problem.

The Women's is one of the very few health services that applies the social model of health and focuses on prevention and health equity. This means that the Women's:

- makes efforts to prevent ill health and support good health, as well as treating illness
- considers place, seeking to influence environmental, social and economic conditions in order to improve the health of residents—especially those living in the most disadvantaged areas
- collaborates with other sectors
- focuses on population health
- takes action on the social determinants of health, as well as offering medical treatment
- designs programs for all the community, while targeting groups in particular need.

The Women's has a long and proud history of advocating for greater attention to women's health in policy, practice and resources allocated to matters that particularly or only affect women. These include the ground-breaking Centres Against Sexual Assault, programs for preventing violence against women (and now family violence), Australia's first women's mental health service and research centre that goes beyond postnatal depression, sexual health programs, women's wellbeing programs, chronic pelvic pain clinic, and pregnancy termination services.

The Women's was instrumental in bringing about abortion law reform in Victoria, and advocated for the introduction of abortion by medication into Australia. The Women's advocacy and influence in advancing women's health has differentiated it from the traditional women's health services provided by others. The hospital's advocacy extends to matters of patient privacy, and diversity: the inclusion of Aboriginal women, young women, disadvantaged women—the full and rich diversity of women living across all of Victoria.

The Women's is a true Victorian icon and, for more than 160 years, its mission has been to improve the health and wellbeing of women and newborns. The Women's today continues to play a vital role in Australia's progressive social and cultural society. To reduce health inequities by gender we must keep investing in women's health. A specific focus on social and economic factors benefits the environments in which women live, work and socialise, so that women from all backgrounds can have access to tools that can improve their health. Women are the centre of families and communities, and research shows that looking after women's health results in healthier families and a healthier community.

The Royal Women's Hospital holds a very special place in the hearts and minds of many Victorians, past and present, and it will continue to offer holistic services to future generations of women and their families.

Adjunct Professor Dale Fisher

Women from many lands and cultures

Whether during the gold rush or as a result of a new wave of immigration caused by conflict, women of all cultures, speaking many languages, have found care at the Women's.

The hospital has served women of diverse backgrounds since its opening as the Lying-In Hospital in 1856. Among the first patients were a large number of women from Ireland, though fewer from England or Scotland. The birthplace of expectant mothers presenting at the hospital over its first three decades of operation is reported by Janet McCalman in her book *Sex and suffering*: in 1857, 56 per cent were Irish, 37 per cent were English, 3.7 per cent were Scottish and none was born in Australia. In 1887, 76.9 per cent were Australian-born, 13.5 per cent English and only 6.1 per cent Irish.[1]

Due to the gold rush, Australia's population—and particularly Victoria's—grew significantly and rapidly. In 1851 Victoria's population was approximately 78,000; by 1861 it was about 500,000. In 1855 construction of a large synagogue in South Yarra began, demonstrating that a noticeable diversity in Melbourne had commenced. After World War II, an Australian government immigration program was launched in an effort to increase the entire nation's population. Between the late 1940s and the 1960s more than 3 million European migrants arrived in Australia. In the beginning, the majority were selected from Britain, but the government soon started to look elsewhere. Many newer immigrants were from Poland and Latvia, and Germans—who had previously been banned from immigration—started to arrive. Post-war migration also saw a significant influx of Italian and Greek families.

Not surprisingly, health professionals at the Women's were encountering difficulties in communicating medical information and instructions to patients, as English was not most patients' first language. Until 1955, staff employed for cleaning and other chores were also acting as language facilitators, a very risky situation. Did the patients receive the correct information? Did the health professionals know the limits of the worker's fluency? That same year, when the highest numbers of patients were from Italy and Greece, the Women's employed its first 'proper' interpreter: a young woman called Liliana Ferrara. A proxy bride like many of her patients, Liliana spoke Italian, Greek, Arabic, French and English. As described in *Sex and suffering*, 'medical terminology and sexual knowledge was also a discovery for her; there was no school for interpreters as there would be later'.[2]

The languages and cultures represented among patients and staff have changed over the years. Pictured are participants in a community consultation session. © Royal Women's Hospital, Melbourne, 2015.

There were no specialised courses for interpreters at that time and no NAATI (National Accreditation Authority for Translators and Interpreters). NAATI was established in 1977 and was the first of its kind worldwide. This was also the year in which Prime Minister Malcolm Fraser commissioned the Galbally report, which showed the need for more services to migrants. One of the report's 57 specific recommendations was for the Commonwealth to introduce a new program, to share equally with the states the costs of providing additional state-operated translation and interpreter services to meet needs in areas of prime state responsibility. Well ahead of the Galbally report, the Women's had since 1964 recognised the value of multilingual health information for patients and visitors by printing pamphlets in German, French, Italian, Polish, Hungarian and Greek. From the 1970s, the interpreting services at the Women's developed into a department, providing assistance to more non-English speaking patients through interpreters and translated fact sheets. During those years, cultural and language diversity were evident in patients and also staff at the Women's: there were Greek, Italian, Dutch, Yugoslav, Polish, English and Scottish workers.

It was at this time that multiculturalism was born at the Women's. Over the decades we have seen changes in the languages and cultures represented among patients and staff, due in particular to emigration triggered by world events, such as the fall of Saigon in 1975; the fall of East Timor to Indonesian troops in 1975; the 1970s political situation in South America, when dissidents sought refuge from countries such as Chile, Argentina and Uruguay; Lebanon's civil war from 1975 to 1990; and the wars in the former Yugoslavia from 1991 to 2001. The arrival of people from so many different countries increased the breadth and quantity of interpreting and translation services needed at the Women's.

Today at the Women's a group of in-house NAATI-certified interpreters covers 17 languages, with further assistance provided when needed by interpreters booked through recognised agencies. More languages, and emerging languages, are in demand—and not only spoken languages: deaf or hearing-impaired patients need the assistance of AUSLAN (sign language) interpreters, and the Women's makes every effort to serve these patients.

In one year at the Women's there are about 20,000 requests for interpreters, in up to 80 languages. The most frequently requested language currently is Arabic (we can deduce that this is because there are 26 countries where Arabic is recognised as the offficial language), followed by Mandarin, Cantonese, Vietnamese, Italian, Greek, Turkish and some of the languages spoken in Ethiopia. The most difficult languages to provide for nowadays include Nepali, Pushtu (spoken mostly in Afghanistan and Pakistan), Mongolian, Hakha Chin (mostly from Myanmar) and Punjabi.

At the Women's, we know that, to provide high-quality health services, we need effective communication, especially with patients with low English proficiency. This is why having an interpreter is imperative, and why the Royal Women's Hospital language services department strives to promote this message in all forums.

Cav Poni Poselli

1 Janet McCalman, *Sex and suffering: Women's health and a women's hospital: The Royal Women's Hospital, Melbourne, 1856–1996*, Melbourne University Press, 1998, p. 18.
2 McCalman, p. 263.

Social work

Early years

In 1933 the board of the Royal Women's Hospital decided to employ a medical almoner to assist with the growing number of patients presenting in poverty. Eight other hospitals had already established such a position, beginning with the Royal Melbourne in 1929. In 1934 the Women's secured the necessary funding and employed Marion Urquhart as its first almoner. Initially she encountered resistance from hospital staff: the doctors virtually ignored her, while the nurses resented her coming onto the wards and supposedly disturbing their patients. Urquhart's main role was to assess a patient's capacity to pay, and ensure that she received maximum benefit from her hospital treatment. She supported more than 150 women a fortnight, working from a tiny office that had previously been the room where blood samples were taken—indeed blood stains were still visible on the walls.

The government helped pregnant and nursing mothers by providing vegetables and milk through maternal and child health centres, but in emergencies the hospital could provide small gifts and loans to patients from its modest 'Samaritan Fund'. Travel vouchers were also given to patients attending the outpatient clinics. From 1938 to 1966 the chief social worker was Isobel Keep (née Strahan). In the 1940s the main reasons for referral were inadequate income, unsuitable housing, poor nutrition, lack of childcare, and family violence. Another prevalent difficulty was single women wanting to relinquish their babies, a common response to social attitudes at the time. In 1941 the Women's established an adoption service, which continued for 47 years and was instrumental in bringing progressive reforms to Victoria's *Adoption Act*.

Although offering material aid and financial counselling were central to the social worker's role, by the late 1950s a need for counselling for emotional and social difficulties became apparent, with alcoholism and illegitimate and unwanted pregnancies becoming the most frequent causes for referral. Following World War II, millions of immigrants arrived in Australia, necessitating the employment of interpreters and bilingual almoners. By 1964 five almoners were employed. The sexual revolution of the 1960s brought the contraceptive pill, which initially was available to married women only. But by the end of that decade it became available to all women. In 1969 abortion was deemed lawful in Victoria under certain circumstances.

Cat. 150 ***Almoner Miss Isobel Strahan***, 1948, photograph, 47.0 × 60.0 cm. A1991_18_001_284, Royal Women's Hospital Collection.

The 1970s were a decade of social change. The Council for Single Mothers and their Children was established; by 1972 some 60 per cent of single mothers kept their babies, and in 1973 the supporting mother's benefit was introduced. The year 1975 saw the controversial establishment of the Medibank-funded 'Pregnancy Advisory Service'. It provided assessment and counselling to pregnant women about their options: continuing the pregnancy and keeping the baby, continuing the pregnancy and pursuing adoption, and termination. Following a termination, contraception was offered. In 1981 the hospital's reproductive biology unit appointed its first social worker—a world first for the newly introduced IVF program.

To the end of the 20th century

In 1987 CASA (Centre Against Sexual Assault) House opened, recognising the need to provide specific support for women affected by sexual assault. Social workers were the main profession employed in this area. In 1991 the Sexual Assault Crisis Line was established, providing statewide 24-hour support to victim/survivors of sexual assault. In 1995 a social worker was appointed as reproductive loss coordinator, to provide a multidisciplinary approach to reproductive loss. Over the years the hospital has become a leader in the way it supports bereaved families.

In 1998 the Local Links Project was introduced, in conjunction with the Broadmeadows Community Health Service, to provide local support and information groups for Turkish and Lebanese–speaking pregnant women and new mothers. Following the 1997 *Bringing them home* report on Australia's stolen generations, social workers began to advocate for culturally sensitive practice, and recognised the need to employ Aboriginal workers to support Aboriginal women and families attending the hospital. The Women's offered formal recognition, and an apology to the Aboriginal community, for its role in breaking up Indigenous families. In 1999 the Aboriginal Women's Health Business Unit was established. Now known as Badjurr-Bulok Wilam, meaning 'Home of Many Women' in the Woiwurrung language of the Wurundjeri peoples, it offers culturally appropriate support and advocacy services to Aboriginal and Torres Strait Islander women to help meet their social, emotional and cultural needs. Badjurr-Bulok Wilam also provides a place where these patients and their families can sit and yarn with Aboriginal and Torres Strait Islander hospital liaison officers.

Into the 21st century

In 2002 the clinic for women with individual needs was established, to support and advocate for pregnant and parenting women with disabilities. By 2004 the social work service consisted of 40 social workers from six different departments. That year they provided support to 3447 women on 23,153 occasions of service. In 2008 the hospital moved to Parkville, where team care clinics commenced: social workers were placed in these clinics and became part of a multidisciplinary team. This raised our profile and allowed us to play a greater role in patient care.

In 2014 we underwent a review and became a three-stream department: two maternity streams and one gynaecology/oncology stream. An active response social worker role (formally known as the crisis social worker) was developed to support patients attending the emergency department or requiring an immediate response. Today social work continues as a three-stream department: maternity, maternity/gynaecology/oncology, and abortion and contraception. Our practice is built on offering patient-centred care to both outpatients and inpatients. Additionally, we work in bereavement, child protection and family violence.

Today our department has 67 staff, working in the Centre Against Sexual Assault, the Sexual Assault Crisis Line, three social work teams, Badjurr-Bulok Wilam, family accommodation, and pastoral care. We have 23 social workers working alongside multidisciplinary teams across the hospital, including clinics and units for maternity care, young women, women with individual needs, multiple pregnancy, fetal medicine, neonatal intensive care, abortion and contraception, gynaecology and oncology. We also have a leave cover social worker and, being a teaching hospital, we offer a new graduate social work program. The social work department has always invested time and energy in the development of student social workers; we take on between one and four students per annum.

Social workers at the Royal Women's Hospital continue to advocate for social change, and strive to meet the needs of the patients and families we serve.

Christina Coldebella, Sandra Mazzone and Fiona Creaven

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Nutrition and dietetics

The importance of nutrition for the health of childbearing women attending the Melbourne Lying-in Hospital is evident from the very earliest records of the hospital. In her book *Sex and suffering* Janet McCalman documents various nutrition-related problems dating back to 1856, when the hospital first opened its doors.

Between 1856 and the late 1860s, a deformed pelvis was a dreaded complication of pregnancy, which put at risk the life of both baby and mother. Such deformation was often a consequence of rickets, caused by lack of vitamin D and exacerbated by lack of exposure to sunlight. Hospital records show that women who had emigrated from Ireland or Scotland and been exposed as adolescents to the great potato famine (1845–49) were at particular risk. For these women who had suffered malnutrition during the years of the famine, improved nutrition in Australia meant better health and larger babies, which made the problem of a deformed pelvis even more serious.

McCalman mentions that in the 1850s and 1860s Melbourne's food supply lagged behind its growing population, offering limited variety, especially in fresh fruits and vegetables, which brought problems such as scurvy and anaemia. A 'strengthening diet' rich in starchy foods and milk was recommended for pregnant women to gain condition.

Late onset of menstruation was an indicator of malnutrition and being underweight. Today the average age of menstruation in Australia is 12, but in the 1880s only 10 per cent of girls had menstruated by the time they were 13. In 19th-century Australia, tuberculosis was a common threat to women's reproductive health. Poor living conditions, excessive workload and poor diet weakened their immune system and increased the risk of tuberculosis. In particular, working-class women ate less well than their men, exacerbating their risk. In the 1930s, the Great Depression caused hardship among Australia's working class, further limiting their access to food. This in turn harmed mothers and their infants, with a fall in mean birth weight of 3.2 ounces (approximately 100 grams)—about one-third of the decline in mean birth weight that occurred during the Dutch wartime famine of 1944–45.

In 2017, a landmark study conducted at the Women's found that a healthy diet alone can control gestational diabetes, without putting the mother at greater risk of having a big baby. Marlouka Van Eisenhart Rothe attended the diabetes clinic at the Women's after being diagnosed with gestational diabetes. Photograph by Krista Eleftheriou. © Royal Women's Hospital, Melbourne, 2017.

In the 1940s and 1950s, increasing rates of pre-eclampsia (a potentially fatal onset of high blood pressure in later pregnancy) became a major concern and, for the first time, diet was used as a therapy to treat a clinical condition. This was based on the 'Crown Street' experiment, initiated by the Royal Women's Hospital in Crown Street, Sydney, and aimed at limiting an expectant mother's weight gain. Obstetric staff were issued instructions that all patients were to be educated on diet, all patients weighing more than 10 stone (63.5 kilograms) were to be referred to the dietitian, and total weight gain during preganancy was not to exceed 1.5 stone (9.5 kilograms). Women were advised to limit sweet foods and treats and increase protein-rich foods, traditionally reserved for working men. This new regime conflicted with old beliefs in the need to eat for two and the 'strengthening diet'. But the fear of pre-eclampsia drove rigid surveillance and weight-monitoring, which for the first time made being thin desirable. Between 1952 and 1954 the pre-eclampsia rate at the Women's halved, but the approach soon became controversial and was abolished at the Women's, although not until 1980 did the National Health and Medical Research Council recommend against weight-reduction diets in pregnancy. Current weight-gain guidelines for healthy-weight women are 11.5–16 kilograms.

Fascinating evidence of changes in ideas on nutrition over the decades can be gleaned from posters promoting foods as sources of nutrients. In particular, one poster promotes fat for energy and 'heat', showing foods such as butter, cream and meat fats —clearly before the days of high cholesterol, heart disease and overweight! The most significant difference between nutrition in the 20th century and today is that we now battle the consequences of feast rather than famine. We have also learnt much about the effects of nutrition on maternal and fetal development and the longer-term health of mothers and babies. In response to growing evidence of the link between folic acid deficiency and neural tube defects, in 1998 the Institute of Medicine recommended that women capable of becoming pregnant should consume 400 micrograms of folic acid daily; in 2009 mandatory folic acid fortification of bread flour was introduced. Iodine deficiency has also been recognised as harming fetal development, with mandatory iodine fortification of specific foods introduced in 2009 and, more recently, a recommendation that women take an iodine supplement before and throughout pregnancy.

The development of dietetic services

The profession of dietetics in Australia probably evolved from the nursing profession, which encompassed nutrition in its early days. The separate profession of dietetics did not begin until the early 1930s, with the establishment of separate training for dietitians and the formation of the Dietitians Association (in Victoria in 1935 and New South Wales in 1939). This new stream of qualified dietitians did cause some resentment among the pioneering nurse-dietitians over what they regarded as an encroachment upon their territory!

The first record of dietetic services at the Women's is found in the 1945–46 annual report, with mention of dietitian Sister Leane, ably assisted by Sister Higgins. There is little more detail about the history of dietetics at the Women's during these early years and, unfortunately, no known record of the first qualified dietitian employed there, though we can assume that a dedicated dietetic service was established and gradually evolved over several decades.

There is some evidence of the activities of dietitians throughout the 1980s and 1990s, including lectures on nutrition in pregnancy given to student midwives in 1981, and photographs of promotional activities to raise staff awareness of diabetes in 1986. In 1985–86, the Women's was the site of what we believe was the first (and possibly only) formal industrial strike action by dietitians, who walked off the job in protest at understaffing. This protest, led by chief dietitian Rosalie Boyce, was successful in increasing dietetic staff and conditions at the Women's.

Nutrition and dietetics today

The nutrition and dietetics service has evolved from its humble beginnings to become a highly specialised service, involved in the management of a wide spectrum of conditions, from infertility to pregnancy, and from pre-term babies to older women's health. In addition to our clinical work, we are actively involved in teaching and training programs for our student dietitians, we run group education programs for our patients, and we undertake research. Our department has a statewide and national reputation in our various fields of nutrition for women's health. We have come such a long way, and we will continue to grow and evolve.

Elisabeth Gasparini

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The Women's Alcohol and Drug Service

The Women's Alcohol and Drug Service (WADS) is a great example of the Royal Women's Hospital's innovation in health care and service to the most poor and disadvantaged women in Victoria. This chapter has been drafted in consultation with Dr Len Kliman, who established the service as medical head of unit. Len's pioneering work laid the foundations for a determined and continuing campaign to improve health care for seriously disadvantaged pregnant women, whose life stories are often invisible in mainstream society.

WADS was formed in the late 1980s, in response to a growing demand for specialist services for maternity patients dependent on alcohol or other drugs. Before 1985 such treatment in Victoria was disjointed, with little liaison between medical and nursing care and drug rehabilitation services. Research demonstrated the importance of providing team care—combining obstetric, paediatric, nursing and social work staff—and the significant benefits of liaising with community services to facilitate continuity of care for women and their children. With the support of senior medical staff at the Women's, the chemical dependency clinic was established. The first of its kind in Victoria, it provided perinatal care and paediatric support to women and infants affected by drug or alcohol use. Though its title reflected community and professional knowledge about drug dependence at the time, the prescience of its founders is remarkable, given the problems caused by substance use and socio-economic disadvantage that our community faces today.

The service quickly developed and grew in response to demand. Continuing state government funding was secured in 1987 through the National Campaign Against Drug Use, first enabling the employment of a midwife and social worker. Within a few years WADS was treating around 120 patients a year, from across the state. Premises in Cardigan Street, Carlton, were purchased to provide a more comfortable and welcoming environment, separate from the general hospital. The late Dr Les Markman was integral to the establishment of the clinic. This well-known neonatal paediatrician was skilled in managing withdrawal from alcohol and drugs in newborns, known as neonatal abstinence syndrome.

Dr Theresa Lynch (centre) consults with colleagues at the Women's Alcohol and Drugs Service. © Royal Women's Hospital, Melbourne, 2016.

The service operated as a statewide referral centre for advice on helping pregnant women affected by drug and alcohol use. Research, primarily medical in focus, was also undertaken. As WADS was the only service of its type, staff began an education program for other medical professionals on obstetric complications associated with drug and alcohol use.

Among WADS' early achievements was collaboration with community pharmacies in the dispensing of methadone on their premises. The care of women with HIV also became a responsibility around this time. Len Kliman recognised that most women who acquired HIV in the first ten years of the epidemic injected drugs; he believed that their care should be managed at the Women's Hospital. This work was done in partnership with the infectious diseases unit at the Alfred Hospital.

Within ten years, WADS' multidisciplinary staff included two obstetricians, a paediatrician, two midwives and two social workers, supported by a pharmacist and dietitian. This expansion reflected the broad needs of the women, which extended well beyond assistance for substance use.

As substance use became more prevalent around the late 1990s, a review found that the best way for the Women's to care for women with especially complex needs would be if those with less complex alcohol and drug dependence could be served in their local area. This meant establishing local clinics, which was done with limited or no funding. WADS adjusted its service to 50 per cent clinical work and 50 per cent training and support to other services.

Over the next two decades, WADS continued to operate and develop a true social model of care, in recognition of the now well-documented cycle of disadvantage that many of these women experience, and the very broad-ranging health and wellbeing needs that must be met if they are to escape the cycle of disadvantage. WADS is still the only statewide drug and alcohol service providing specialist clinical services and professional support for pregnant women with complex substance use and alcohol dependence. It has sustained its focus on strengthening tertiary services and providing research-led care for women and newborns with complex needs, fostering innovation in the development of services for women and infants affected by drug and alcohol use.

In addition to clinical care, WADS provides a 24-hour on-call addiction medicine service, clinical practice guidelines for other maternity hospitals, and secondary consultations and mentoring to a broad range of health professionals around Victoria.

Since 2012, WADS has expanded its multidisciplinary team even further, to include a research midwife, addiction specialist, housing access worker, and outreach social worker. In 2018, our team has more than 16 members, and each year WADS supports the delivery of more than 75 babies and the care of more than 200 women, including access to detoxification and rehabilitation services, and forensic support.

The ever-increasing complexities of substance use and psychosocial disadvantage was recognised by the WADS pioneers. Since then, scientific research increasingly confirms not only the social, but also the biological, basis for our important clinical work. Substance use, trauma and socio-economic disadvantage affect people not only in the 'here and now', but also longitudinally, influencing health later in life and even the health of subsequent generations. While the use of illicit and licit drugs has changed over the decades, polydrug use has remained prevalent among women attending WADS. Since 2011 WADS has witnessed a change in substance from predominantly heroin to amphetamines, rising from 13 per cent of patients in 2011 to more than 50 per cent in 2016. There are also more requests from rural and disadvantaged communities for specialist advice on caring for women and infants exposed to alcohol and drug use, trauma and social disadvantage. These requests are as common as those seeking help for opioid exposure.

Women come to WADS with horrendous experiences of childhood trauma, violence, sexual assault, neglect, poverty, homelessness and mental illness. Too often they face inescapable prejudice when undertaking treatment, which creates barriers to their access to just and compassionate care. Following in its founders' footsteps, WADS today builds community partnerships to dismantle the discrimination, social and economic disadvantages and inequities in health care endured by these pregnant women. We are supported and inspired in our efforts by the values of the hospital to care for Victoria's most poor and disadvantaged women, to improve their health and prospects.

Integral to WADS' success has been our unfailing, dedicated, compassionate, non-judgemental and understanding staff. Principles of care include a strong emphasis on the baby and working on the strengths of each woman, her competencies and aspirations. In many ways the story of WADS is not implausible. It is a story of human kindness and dedication to providing excellent clinical care for pregnant women who have alcohol or drug problems or psychosocial difficulties.

Dr Theresa Lynch and Associate Professor Yvonne Bonomo

Mental health

The Royal Women's Hospital provides comprehensive physical, psychological and emotional care for women with a wide range of health problems across the entire lifespan, as well as care during pregnancy and the postnatal period. In 2016 the hospital released a strategic plan which noted that mental health was a high priority for the organisation. From its beginnings as a limited clinical service, the Women's now hosts a Centre for Women's Mental Health, which is recognised nationally and internationally as a leading research and clinical unit.

Mental health problems are the most common complication of pregnancy. They include pre-existing disorders in women who then become pregnant, as well as problems that may arise for the first time during pregnancy or in the postnatal period. For this reason the Women's has had mental health clinicians on its staff for many decades. Initially these were sessional psychiatrists working in outpatient clinics and as needed, providing consultations for women who developed psychiatric problems at the time of confinement. In the 1990s the service expanded with the appointment of a psychiatry registrar, consistent with the provision of consultation-liaison psychiatry services in general hospitals across the country.

However, in the mid-2000s, under the leadership of board chair Dr Rhonda Galbally and chief executive officer Ms Dale Fisher, a vision was developed for a comprehensive mental health program. This was designed to deal with the mental health problems of women at all stages of their lives, and was based on a bio-psycho-social approach to understanding mental health and preventing and treating mental illness. The provision of comprehensive mental health services for all women was consistent with the Women's philosophy of providing the best possible care. The vision became reality through the establishment of the Centre for Women's Mental Health, founded with generous financial support from the Pratt Foundation.

The Centre for Women's Mental Health commenced operation in 2007 with the appointment of Professor Fiona Judd as director. Its purpose was to improve the mental wellbeing of women in Victoria through the provision of high-quality clinical and therapeutic services, research, education and evidence-based resources. Initially the centre focused on developing comprehensive clinical services for women attending the

The Centre for Women's Mental Health is now led by Professor Louise Newman (centre). © Royal Women's Hospital, Melbourne, 2017.

hospital—and making mental health part of 'core business'. Thus, all maternity teams have a dedicated consultant psychiatrist, supported by a psychiatric registrar and psychiatric nurse, who work alongside obstetricians and midwives in outpatient clinics. In addition, infant mental health specialist clinicians provide parent–infant support and interventions in both the maternity and the neonatal intensive care units. Specialist care is also provided to women with cancer and those with a range of gynaecological problems.

Alongside the expansion of clinical services, research was developed, concentrating on three areas of inquiry: perinatal mental health, gynaecological cancer, and midlife and menopause. These research streams were led respectively by Professor Judd, Dr Lesley Stafford and Dr Christina Bryant. From the outset the centre was linked with the departments of psychiatry and psychology at the University of Melbourne, and as a result students undertaking master's or PhD degrees joined the centre's research programs.

Another focus of the centre's early years was education. This included the establishment of positions for trainee clinical psychologists to spend time working with staff in the centre, as well as placements for psychiatry trainees—initially those training in general psychiatry, later also child psychiatry and those with a special interest in infant mental health.

In 2014, Professor Judd retired from the role of director and was replaced by Professor Louise Newman. Consistent with its longstanding emphasis on providing holistic care, the centre has continued to support efforts aimed at raising awareness of mental health across the entire hospital, and offers a program of staff training in recognising and responding to mental health problems. The centre provides mental health services for vulnerable groups, including women experiencing the trauma of family violence, women with mental illness, and women of refugee background. The particular needs of these groups, and the difficulties such women might face in early parenting, are a focus of both clinical activities and research. Strengthening psychology services across the range of clinical services has allowed greater opportunities for raising awareness and training in the field, work that Associate Professor Stafford has led in her role as director of clinical psychology.

The Centre for Women's Mental Health has attracted continuing financial support for women's mental health research from the Liptember organisation, and in the area of women's cancer, and has developed a strong research program and series of publications. Providing research training and support for higher-degree students now presents opportunities for expanding these activities and sustaining a strong academic unit.

Professor Louise Newman AM and Professor Fiona Judd

Midwife Natalie Jeantou assisting with a birth. Photograph by Meredith O'Shea. © Royal Women's Hospital, Melbourne, 2017.

THE FUTURE

The future of women's health and women's hospitals

Women have been fighting for equality since the days of suffragettes and women's liberation, but recent events across the globe have proven that there is still much work to be done. The #MeToo movement and the Women's Marches have allowed women to speak out against systems that are meant to support them but in fact do not, and these include the health system. It is imperative that we increase our focus on women's health and apply a gender lens to protect and improve the health of women now and into the future. Hospitals and health services such as the Royal Women's Hospital are leading the way.

Women continue to be among the most vulnerable people in our societies. The World Health Organization states:

> Some of the sociocultural factors that prevent women and girls [from benefiting] from quality health services and attaining the best possible level of health include unequal power relationships between men and women; social norms that decrease education and paid employment opportunities; an exclusive focus on women's reproductive roles; and potential or actual experience of physical, sexual and emotional violence.[1]

A stronger emphasis on women's health does not mean ignoring men's health or taking resources away from men's health. It simply acknowledges that women and men are different. While that may seem obvious, the health system has often worked on the assumption that, with the exceptions of breast cancer, obstetrics and gynaecology, women and men are the same.

If something affects men and women differently, we need to know how and why, and act on that information. This is important in medical research, health care and public policy. Albert Einstein said: 'We can't solve problems by using the same kind of thinking we used when we created them'. Healthy women are the core of healthy communities. So, we need to think differently. It's time for a 'she change'.

Carmen Barry, associate unit manager in the day surgery team, with patient and family. Photograph by Ellen Smith.

Medical research
It is not unusual for medical research and drug trials to exclude women, even when women are affected by the condition being studied or would be prescribed the drugs that are being tested. This tradition originates from the assumption that oestrogen cycles would affect the results of studies, which is exactly why medical research should look at men and women separately, and should consider the results with a specific lens on women. We need to close this health gap.

Health care
Health care professionals must examine and understand the differences in how women and men present with and respond to heath concerns. For example, women and men have distinctive responses to stress; depression is more common in women than in men; and women present differently with a heart attack. Health care and treatment must be tailored to women and men accordingly.

Critically, we need to ensure that 'women's health' does not refer only to a woman's physical condition, but to her total wellbeing. Physical conditions are, of course, important—and we must continue to focus on them—but health conditions that are not specific to women only, such as cardiac disease, must be examined and treated through a gender lens and holistic health approach.

Public policy
Women's health is often affected by public policy. Women's health, problems and circumstances are still seen in many instances as 'secret women's business'. Subjects such as menopause and periods are still not talked about as a normal part of life, access to abortion is not yet legal in every state in Australia, and populist political movements around the world are threatening much of the progress that has been made.

The pay gap continues, with women still earning less than men for the same work. Shockingly, violence against women is more damaging to the health of Victorian women aged 15–44 years than any other well-known risk factors, including high blood pressure, obesity and smoking. And an Aboriginal woman is 45 times more likely to experience domestic violence than is a non-Aboriginal woman.

Questioning and overturning social norms and gender inequalities are essential for ensuring the health of women and girls. Such efforts require programs that involve many sectors of society, and strategies that target structural determinants, including gender equality and the empowerment of women. Laws, policies, protocols and guidelines are needed for all sectors.

Hospitals and health services dedicated to women's health
Hospitals and health services designed specifically for women and girls are necessary to ensure that all people have access to timely, effective and affordable care. Further, such services must advocate for public policy that best supports this. The Women's has led the advocacy and advancement of women's health and wellbeing since 19 August 1856, when the first patient was admitted to the Melbourne Lying-In Hospital and Infirmary for the Diseases Peculiar to Women and Children, launching a proud legacy of excellence in care for the most vulnerable people in Victoria.

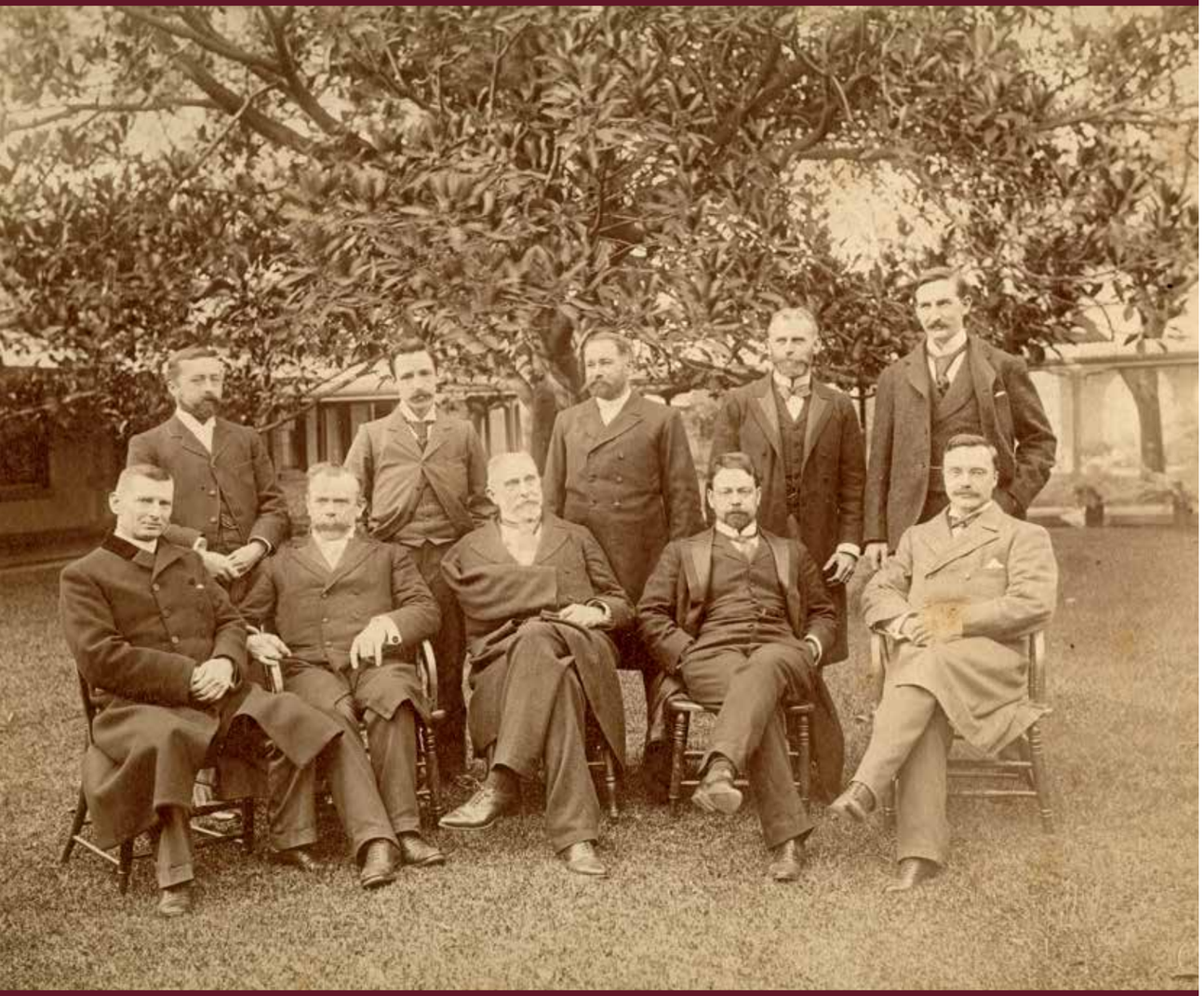
The Women's, alongside its national and international counterparts, brings 'secret women's business'—such as menopause, periods, pelvic pain, endometriosis, incontinence, unwanted pregnancy, and infertility—out of the darkness and into the mainstream, and through research and clinical experience adds to the evidence supporting best practice for women's health.

More than that, women's hospitals play a role in developing and implementing important legislation and government policies that improve the health of women. Laws and policies have a direct bearing on the realisation of health and human rights by women and girls, including their right to sexual and reproductive health. Policy and laws on questions such as access to abortion, prevention of family violence, access to IVF for LGBTQI individuals, and women's mental health are a strong part of the Women's legacy.

The need for health care and services tailored specifically for women is clear, and the Women's' long history demonstrates just how far we have come in achieving this. But much more needs to be done. Women's hospitals and health services will continue to lead the way in moving us forward. It's time for a 'she change'.

Dr Sue Matthews

1 World Health Organization, 'Health topics: Women's health', www.who.int/topics/womens_health/en/.



Education and research

Education and research have been central to the daily functioning of the Women's from its earliest years.

Founded in 1856, the Melbourne Lying-In Hospital and Infirmary for the Diseases Peculiar to Women and Children trained nursing and midwifery students from 1859. Also in 1862, a medical school opened at the University of Melbourne; two years later, Dr Richard Tracy, who along with Dr John Maund had been one of the founding figures of the hospital, was appointed inaugural lecturer in diseases of women and children.

By the 1880s, pupil midwives and medical students were conducting most of the deliveries at the hospital, with their formal teaching supervised and provided by the hospital's medical staff. Formal recognition and accreditation of the hospital's role in nursing and midwifery training came in 1902, when the newly formed Victorian Trained Nurses Association, in association with its national body, granted the hospital registration as a 'special training school' that could authorise certificates in gynaecological nursing and midwifery.

In 1924, with a view to improving the quality of obstetric care in Victoria, one of the hospital's doctors, Dr JW Dunbar Hooper, began a campaign to boost education and research in this field of clinical practice. He believed that:

> the day is fast approaching, thanks to the enthusiasm of some of the members of the obstetric staff of the Women's Hospital, when that institution will make full use of the enormous clinical material at its disposal which is said to be the largest in the British Empire. Very soon that institution must be in charge of a master in obstetrics who will be the superintendent and have an enthusiastic, energetic professional staff to work with him so that the annual reports of the Women's Hospital in the near future will show a great diminution in maternal mortality and morbidity and be of such value to the medical profession in Australia as to equal the force and influence of the Rotunda Hospital reports in Dublin.[1]

Cat. 25 Harvie & Sutcliffe (Melbourne, active c. 1890s–1908), **Staff at the Women's Hospital**, c. 1897, photograph, mounted; 25.3 × 30.4 cm. MHM00407, Medical History Museum, University of Melbourne.
Back row: Dr GH Fetherston (1829–1901), Dr P Ward Farmer, Dr G Herne, Dr FWW Morton (1857–1930), Dr JDK Scott; front row: Dr G Rothwell Adam (1853–1925), Dr MU O'Sullivan (1853–1917), Dr W Balls-Headley (1842–1918), Dr Felix Meyer (1858–1937), Dr JW Dunbar Hooper (1860–1934).

Dunbar Hooper's efforts culminated in 1925 in the appointment by the University of Melbourne of Dr R Marshall Allan as director of obstetric research; with the university's establishment in 1929 of a chair in obstetrics, he became the first professor. This arrangement cemented the relationship between the hospital and the university, a mutually beneficial association that had begun 50 years previously, and which continues to this day. The university's students and researchers have had the benefit of a large public women's hospital in close proximity, and the hospital has had the benefit of collaboration in research and advances in clinical practice. While the initial focus of collaborative efforts was to improve medical training—including training that dispensed with outdated practices—increasingly the range of work expanded to take advantage of the many remarkable advances being made in medical science, to the benefit of the hospital's patients.

Early examples of such developments included the collaboration in the late 1920s between University of Melbourne biochemist Vera Krieger and the hospital's Dr John S Green, who worked together on the biochemistry of blood and urine in cases of 'toxaemia', or pre-eclampsia as it is called now. In the 1930s, the ground-breaking laboratory and clinical researches of bacteriologist Hildred Butler, in association with the hospital's Dr Arthur Machen 'Bung' Hill, on *Clostridium welchii* infections—at that time a devastating cause of maternal mortality—brought the hospital international recognition.

A further major stimulus to this flourishing evolution of research-embedded clinical practice was the appointment of Professor Sir Lance Townsend to the university chair of obstetrics in 1951. He recruited world-leading researchers, such as Professor James B Brown, to support the hospital's infertility program, and also commenced research into Rh incompatibility (a blood incompatibility between mother and fetus) and premature birth. These initiatives led to major new clinical care services in the hospital, including IVF and neonatal intensive care.

Townsend's successor, Professor Roger Pepperell, continued this modus operandi with his recruiting of important clinician researchers into the professorial unit (as the university's department of obstetrics and gynaecology was then called), to usher the hospital into the new world of medical sub-specialisation in the areas of infertility, gynaecological oncology, ultrasound, and perinatal medicine (now maternal-fetal medicine).

The hospital also fostered the academic development of midwifery education and research in its collaboration with La Trobe University, in 1995 appointing Professor Ulla Waldenstrom to the newly created chair of midwifery at the hospital.

Cat. 53 Biochemist Dr Vera Krieger (1901–1992). Detail from photograph taken at her farewell from the pathology department of the Royal Women's Hospital, on 28 October 1966. MHM00708, Medical History Museum, University of Melbourne.

The relocation of the hospital in 2008 from its previous Carlton site to its current Parkville site has enabled its clinical services, educational activities and research collaborations to benefit from a central position in Melbourne's biomedical precinct. Now it is in close proximity to more than 30 other hospitals, teaching and research centres, and biotechnology organisations.

In recent years, in keeping with a continuing growth in the scope and number of clinical services offered, the hospital has sought to underpin expansion with its support of associated academic appointments and research centres. The hospital's research environment now includes centres for research not only in obstetrics and gynaecology, but also in midwifery, neonatology, microbiology, anaesthetics, oncology, mental health, allied health and, most recently, family violence. This continues the hospital's long tradition of fruitful investment in, and welcoming interactions between, scientists and clinicians, to translate basic research findings into improved care, not only for those women and babies cared for in the hospital itself, but also for women and babies everywhere. This latter aspiration is evidenced by the more than 200 publications generated annually by the research endeavours of hospital staff.

Today, the Royal Women's Hospital, in association with its lifelong partner the University of Melbourne, is a celebrated training institution in a wide range of health professions, and a hospital recognised internationally for its research. This reputation helps attract and retain high-quality clinical and research staff, and facilitates national and international collaborations and exchanges, both of which provide the basis for the world-class standard of care sought by hospital and patients alike.

Professor Shaun Brennecke

1 JW Dunbar Hooper in *Medical Journal of Australia*, 25 July 1925, p. 105, cited in Janet McCalman, *Sex and suffering: Women's health and a women's hospital: The Royal Women's Hospital, Melbourne, 1856–1996*, Melbourne University Press, 1998, p. 167.

Cat. 140 Stokes & Sons Pty Ltd (Melbourne, est. 1911), **Lapel pin**, *Women's Hospital Appeal 1929: My Brick*, 1929, metal, 5.0 × 2.7 cm. A2007_09_001, Royal Women's Hospital Collection.

Cat. 154 **Lapel pin**, *3AW Mothers Day Appeal*, c. 1951, metal, 2.2 cm (diam.). A2007_08_001, Royal Women's Hospital Collection. The hospital's first Mothers Day Appeal was held in 1951.

TURNING POINTS

What's in a name?

The Royal Women's Hospital, Australia's first public women's hospital, opened in Melbourne on 19 August 1856. Today it is one of the oldest and best-known maternity hospitals in the world.

Founded as a hospital where disadvantaged women could give birth safely and receive proper medical and nursing care, its original name was the 'Melbourne Lying-In Hospital and Infirmary for Diseases Peculiar to Women and Children', typically wordy for the time. In 1884 this was shortened to the more practical 'Women's Hospital'. The 'Royal' was conferred by Queen Elizabeth II on 6 September 1954, following her spectacularly popular tour of Australia earlier that year, the first visit here by a reigning British monarch. The following decade or two saw the height of popularity of the royal family in Australia; no greater accolade could then be conferred on a public institution.

But in the public mind, the hospital has always been affectionately known as *The Women's*, and over the last 20 years this name has been increasingly embraced by the hospital itself. Since our 2008 move from Carlton to Parkville, *The Women's* is the name proudly illuminated in big, bold letters on the front of the building. Such is the recognition of the hospital in the life of Melbourne and Victoria, that no other words are needed to tell the public who we are and what we do.

The four very different items shown on pages vi, 121 and 123 illustrate the hospital's evolution, and associated name changes, over more than 160 years: from the relatively small gold rush Melbourne of the 1850s, through Marvellous Melbourne of the boomtime 1880s, Depression-era Melbourne of the 1930s, to World War II and its aftermath, exemplifying close links to Britain.

Today, Melbourne is a diverse and multicultural world city of nearly 5 million people. But one thing has not changed over the last 162 years: the hospital known widely and proudly as The Women's continues to provide outstanding specialist care for women and newborn babies—in Melbourne, and throughout Victoria and Australia—evolving with the changing clinical and social needs of the community.

Dr Mark Garwood

Cat. 187 **Coat of arms: *The Royal Women's Hospital, Melbourne***, 1979, aluminium, enamel paint; 39.5 × 25.5 cm. A1995_26_001, Royal Women's Hospital Collection.
This design, derived from the City of Melbourne's coat of arms, was first used by the hospital in 1951. It was adapted slightly in 1954 when 'Royal' was added to the hospital's name.

Caring for women since 1856

It is distressing to even contemplate women's health experiences in early Melbourne—especially birthing. Lack of the advanced knowledge, extensive training of clinicians and sophisticated resources that we have today meant that many women died in childbirth—as, sad to say, did their babies. This was the lot of Victorian women amid the bustling gold rushes of the 1850s.

It is even more distressing to consider the needs of pregnant women who were living in destitute circumstances with no access to clean, healthy, supportive conditions in which to deliver their babies.

Thankfully, in 1856 a group of Melbourne women had the vision, compassion and determination to make these destitute women a priority. Led by Mrs Frances Perry (1814–1892) and two young doctors, Richard Tracy and John Maund, a Ladies Committee leased a terrace house in Albert Street, East Melbourne, for the purpose. The Melbourne Lying-In Hospital and Infirmary for Diseases Peculiar to Women and Children offered a beacon of safety and hope for women who, through no fault of their own, were Melbourne's most vulnerable, in need of compassion and proper medical attention, including kind nursing. I imagine kindness may have been a gift that many had not received before.

Over the ensuing 160-plus years, the hospital has relocated several times, and has trained and employed numerous clinical leaders and researchers in women's health. Hundreds of thousands of babies have been born, and women's gynaecological and obstetric needs have been met with a safe and caring approach.

The Royal Women's Hospital has never forgotten its original charter, and still today prides itself on its compassionate work on behalf of our state's most vulnerable women. Women from low socio-economic backgrounds, homeless women, recent arrivals without English language or family support, those suffering from alcohol or drug abuse, victims of domestic violence—all are offered the best of health care, delivered in a respectful manner that acknowledges each patient's particular needs and preferences.

The Royal Women's Hospital remains a much-loved and needed beacon for women.

Lyn Swinburne AO

Batchelder & O'Neill, **Frances Perry**, c. 1863, albumen paper carte-de-visite, 9.0 cm × 5.8 cm (image). Collection of the National Portrait Gallery, Canberra.

Dr John Maund: single-minded, gentle and affable

When the ailing John Maund MD, MRCS decided to emigrate to Australia in the early 1850s, he could not have imagined that in the five years left to him he would co-found and help manage a women's hospital, found and co-edit one of Australia's earliest medical journals, and help bring together opposing medical societies. That he achieved so much before his death from dysentery and enteritis in Melbourne in 1858 says much about the spirit and work ethic of this thoughtful English-born Victorian.

Maund (1823–1858) had been a delicate child in Worcestershire, and by the time he set sail for Victoria as a 29-year-old ship's surgeon late in 1852 he was suffering from tuberculosis. He had trained in medicine (in England, Scotland and France) and practised as a physician and surgeon (in Wales and England). He was also a qualified analytical chemist (trained in England), having concluded that this type of work would suit his state of health better than medicine. But during the voyage to Australia his enthusiasm for medical practice reasserted itself.

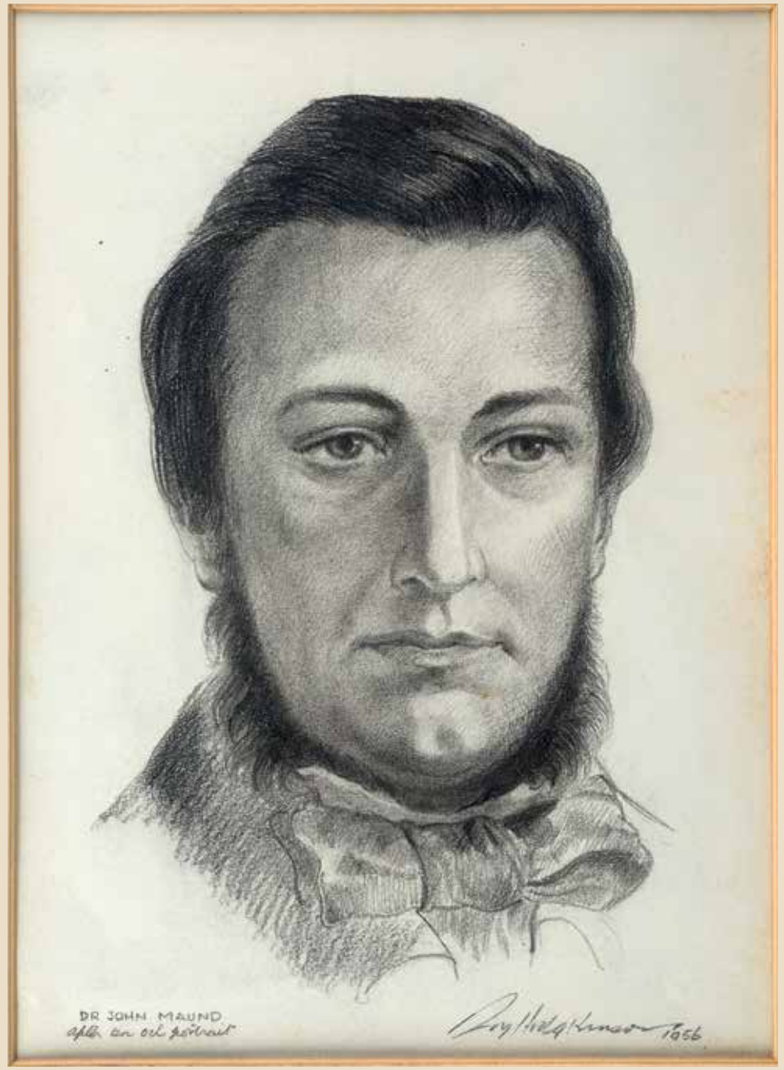
At the time, the colony of Victoria was gripped by gold fever and needed skilled immigrants. Maund obtained the new government position of analytical chemist, in which he did important work on water contamination and supply. He also practised medicine and was soon in the thick of medical politics.

After joining the Victorian Medical Association, he helped achieve its union (in 1855) with a rival body. As inaugural secretary of the resulting Medical Society of Victoria he proposed and co-edited the *Australian Medical Journal*, first published in 1856. Also in 1856, he and Irish-born Dr Richard Tracy, with the support and involvement of a group headed by the Anglican bishop's wife, Frances 'Fanny' Perry, established a hospital for the care of women giving birth. It was known as the Melbourne Lying-In Hospital and subsequently became the Women's Hospital (and later the Royal Women's Hospital). Although generally cooperative with the Ladies Committee, Maund and Tracy reserved the right to admit poor, single women.

This drawing, created in 1956 after a painted portrait by Nicholas Chevalier commissioned posthumously by the Medical Society of Victoria, captures Maund's defining characteristics of single-mindedness, gentleness and affability.

Dr Ann Westmore

Cat. 170 Roy Hodgkinson (Australian, 1911–1993), after Nicholas Chevalier (Russian/Swiss, 1828–1902), ***Dr John Maund***, 1956, pencil on paper, 39.9 × 33.6 cm (frame), 22.1 × 16.0 cm (image). A1999_31_014, Royal Women's Hospital Collection.



Dr Tracy's ovariotomy instruments

Like Dr John Maund and Dr Richard Tracy, many of the early doctors of Melbourne came to Australia as ship's surgeons, seeking new opportunities. However, despite having travelled great distances, these medical men continued to benefit from the support of professional networks in their country of origin.

The founders of the Melbourne Lying-In Hospital were Mrs Frances Perry (1814–1892), wife of the first Anglican bishop of Melbourne, and two socially progressive and talented doctors: Dr Richard Thomas Tracy (1826–1874) and Dr John Maund (1823–1858).

Six years after the Lying-In Hospital was established, the Melbourne Medical School opened its doors, in 1862. Recruitment of staff began in earnest with the arrival in 1863 of the first professor of medicine, George Britton Halford. Richard Tracy, a graduate of Glasgow and Dublin, was appointed the following year as lecturer in obstetric medicine and diseases of women and children.

Tracy performed the first successful ovariotomy in Victoria, in 1864, and became renowned locally and internationally for a series of successful ovariotomies. Shown here are his ovariotomy instruments, which were selected and sent from England by his mentor, Sir Thomas Spencer Wells, surgeon to Queen Victoria and a leader in obstetrics, who pioneered this surgical procedure for relieving women suffering from ovarian tumours. Tracy corresponded with Wells from Melbourne and was instructed by him in the technique. Tracy's success rate ultimately exceeded that of Wells, with only four deaths from 20 operations, performed in the Lying-In Hospital and in private homes—despite never having seen the operation performed.

The kit, presented to the Royal Women's Hospital in 1963, contains pins and thread, scalpel and bistoury (narrow-bladed surgical knife), scissors, Spencer Wells' pedicle needle and needle holder, a vulsellum forceps (with hooked tips), Adams' double sharp hook for raising the peritoneum, Spencer Wells' pedicle clamps with detachable handles, and, most interestingly, one form of Spencer Wells' ovariotomy trocar and cannula (to drain fluid).

This set of instruments, used by Tracy in his trailblazing surgery, tells us about the close relationship between two colleagues, and the capacity of a medical professional in Australia in the 1860s to be a leader in his field.

Richard Walpole

Cat. 122 John Weiss & Son (London, est. 1787), **Ovariotomy instruments**, c. 1864, wood, metal, rubber, tortoiseshell; 8.0 × 23.3 × 31.5 cm (box). A1990_16_001, presented to the Royal Women's Hospital by Tracy descendant Robert Tracy-Inglis 1963, Royal Women's Hospital Collection.

Euphemia Turnbull, pioneer in social care

Euphemia Turnbull was a pioneer at the Lying-in-Hospital and Infirmary for the Diseases Peculiar to Women and Children, which later became the Royal Women's Hospital. She served on the Ladies Committee, also known as the committee of management, from 1858, becoming vice-president (1877–81) and president (1882–88), and continuing on as a member until 1901. Pictured here is a set of sterling silver items that was presented to her on the occasion of her resignation as president of the committee, on 31 July 1888.

Euphemia Turnbull, born in Edinburgh in 1820, married Dr William Mackie Turnbull in 1851, and together they had four children. Dr Turnbull was elected honorary physician to the Lying-In Hospital in 1858, upon the death of Dr John Maund, one of the hospital's two founding doctors. Turnbull was the third honorary physician appointed to the hospital, a position that he held until his death from tuberculosis in 1867 at the age of just 47.

Mrs Turnbull was one of the founders of the Melbourne Ladies' Benevolent Society, which began in 1845 as the Presbyterian Female Visiting Society, established in response to the plight of Melbourne's 'deserving poor'. The society supplied food, clothing and other necessities to the poor at home, particularly women in Fitzroy and surrounding inner-city areas. It was acknowledged as one of the principal social providers until the Commonwealth government began to assume a greater role in the 1940s.

Upon Euphemia Turnbull's death in 1907 at the age of 86, *The Argus* newspaper described her as 'a good and useful woman, full of good works among the sorrowful and suffering'. One of very few women mentioned in the *Statistics of the colony of Victoria*, she set a strong example to other women and established a pathway for them to follow.

The Royal Women's Hospital has been served by many fine women over the ensuing decades, contributing their time, money, expertise and philanthropic efforts to ensure that the women of Victoria receive the best treatment available—particularly those women and their families who suffer from poverty, and the most in need.

Jane Trembath

Cat. 129 William Drummond & Co. (Melbourne, active 1885–2002), **Tea service**, 1888, sterling silver, ebony; various dimensions: 12.5 × 23.0 × 10.0 cm (teapot). A2000_48_002, Royal Women's Hospital Collection.

The art of giving

On 7 November 1885, Melbourne's *Argus* newspaper reported:

> The last public appearance of Miss Geneviève Ward in Melbourne will be agreeably and gratefully remembered, for long years to come, in association with a munificent act of charity, bold almost to audacity in its conception, and brilliantly successful in its execution, resulting in the acquisition of the large sum of £2,680 for the benefit of the Melbourne Lying-in Hospital. Foregoing the pecuniary advantage to be legitimately expected from two performances of 'Antigone' to be given on her own account in the Melbourne Town-hall, during the race week, and acting on the thoughtful suggestion of Lady Loch, Miss Ward applied all the energies of her energetic nature to the organisation of an entertainment which should pour—as she hoped—something like £3,000 into the coffers of a necessitous and deserving charity. The idea of inducing some scores of our leading people to pay £10 each for a seat in the balcony, and several hundreds of our fellow-citizens to disburse £1 each for a chair in the body of the hall, to witness the production of an English version of the Greek drama, with the accompaniment of Mendelssohn's music, occasioned a good deal of head-shaking at first, but Miss Ward had every confidence in the liberality of the Melbourne public where the sacred cause of charity was concerned, and the event has proved that that confidence was thoroughly well founded.[1]

Geneviève Ward (1838–1922), renowned American-born opera singer and actor, toured extensively internationally and was very popular in Australia. During her 1885 Australian tour she gave the proceeds of a performance to the Women's Hospital building fund. The money supported the construction of a new midwifery department in Cardigan Street, which was named in her honour; Ward was also named a life governor of the hospital. To express the thanks of the women of Melbourne, the lord mayor of Melbourne presented her with this illuminated address.

Dr Jacqueline Healy

1 *Argus*, 'Performance of Antigone at the Town-hall', 7 November 1885, p. 12.

Cat. 128 **Illuminated address presented to Geneviève Ward**, 1885, coloured ink on paper, leather binding; 48.0 × 36.0 cm. A1992_02_001, Royal Women's Hospital Collection.

The significant seven

Look carefully into the faces of these remarkable women, and what do you see? Determination and grit, combined with a caring compassion? Perhaps these students should be known as the significant seven, for their trailblazing role in shaping health care—particularly the neglected area of women's health care—in Victoria. Here they sport their scholars' gowns and mortar boards, the signs of one struggle overcome. Between them they can list the achievements of successfully advocating for the admission of women to the University of Melbourne to study medicine in 1887, contributing significantly to the Lying-In Hospital, which later became the Royal Women's Hospital, and the creation of the Queen Victoria Hospital (a hospital for women, run by women).

Not only did these women need vision, courage and strength of mind to reach these milestones; they also needed to overcome many obstacles: discrimination, lack of funds, and institutional barriers. They all joined the legendary Dr Constance Stone in forming the Victorian Medical Women's Society, which is still active today. Two of them played particularly important roles in the history of the Royal Women's Hospital. Margaret Whyte was the first female medical graduate to be employed there, as assistant resident doctor. Her appointment in 1892 was no doubt assisted by the fact that she had graduated in 1891 as the top medical student of her year, winning many prizes and awards—including a scholarship in surgery, obstetric medicine, and diseases of women and children. Her career at the Women's was probably cut short, as she married Dr Charles Martell and retired from clinical practice. Helen Sexton was the first female doctor to be awarded honorary visiting status at the Women's, an inspirational pioneer who would lead the way for hundreds of female doctors.

One can only wonder whether, when they posed for the camera, these seven women realised just how precious the photograph would become.

Professor Jane Gunn

Cat. 23 **First women students at the University of Melbourne School of Medicine**, 1887, photograph, mounted; 28.0 × 33.0 cm. MHM02037, Medical History Museum, University of Melbourne.
Left to right, with year of graduation: Helen Sexton (1892), Clara Stone (1891), Lilian Alexander (1892), Margaret Whyte (1891), Grace Vale (1894), Annie O'Hara (1894), Elizabeth O'Hara (1893).

An aid for breastfeeding

Breastfeeding rates have varied over time, with the lowest rate recorded in 1970, when only 10 per cent of Victorian infants were continuing to breastfeed at six months of age. Rates increased over the 1970s and 1980s, but knowledge about how to support successful breastfeeding was limited.

Mothers routinely stayed in hospital ten days after giving birth, and were encouraged to rest. Babies were separated from their mothers, looked after in a nursery, and brought to their mother at specified times. Maternity hospitals instructed mothers to breastfeed on a rigid schedule. On the first day postpartum, breastfeeds were three minutes on each breast at each feed. On the second day, five minutes per breast, then seven minutes per breast on day three, increasing to ten minutes per breast on day four and thereafter.

The focus was on timing the length of feeds, which was thought to help mothers' nipples become used to breastfeeding; there was no consideration of *how* the baby attached to the breast. Nipple damage was common, as infants often had a shallow attachment to the breast. Mothers were provided with bowls containing cotton wool and water, so they could wash their cracked nipples (illustrated on page ii). Ungvita was a commonly used topical treatment, as it contains vitamin A, which was thought to improve skin healing. Topical agents containing fat-soluble vitamins are no longer recommended for breastfeeding women, as there are concerns about ingestion by the infant.

Since the late 1980s, maternity staff have strived to help new mothers breastfeed successfully and without pain. The Royal Women's Hospital became the first public hospital accredited by the Baby Friendly Health Initiative, in June 1995, and has since been reaccredited six times.

Associate Professor Lisa Amir

Cat. 14 **Dr Wansbrough's metallic nipple shields**, c. 1880, pewter, cardboard, paper, ink; shields 2.3 × 4.5 cm (diam.). MHM01443, Medical History Museum, University of Melbourne.

Cat. 15 **'The Comfort' breast shield**, c. 1880, boxwood, cardboard, paper, ink, synthetic, fabric; each shield 2.9 × 5.6 cm (diam.). MHM01442, Medical History Museum, University of Melbourne.

Dr JW Dunbar Hooper, leader in education

John William Dunbar Hooper (1860–1934) was born in Dinapore, India, in 1860, the eldest son of Sir William Roe Hooper, sometime surgeon-general to the Indian Medical Service. He was educated at Epsom in England and studied medicine at Edinburgh, qualifying in 1883. After practising briefly in Scotland, he spent a year in India, then came to Melbourne in 1886, where he established a very successful practice in Collins Street.

Dunbar Hooper had a long association with the Women's Hospital, initially as a resident medical officer, and then as a member of the honorary staff. In 1924, in response to concerns about the quality of care afforded to pregnant women in Victoria, Dunbar Hooper chaired a committee established by the Victorian Branch of the British Medical Association, 'to enquire into the condition of midwifery work in this State and to report the result of findings and recommendations to B.M.A. Council'. After exhaustive enquiries, the committee recommended that:

- the standard of obstetric work generally could and should be raised
- the teaching of obstetrics should be carried out under the guidance and control of a director or professor appointed by the University of Melbourne Council, who should be the lecturer and give practical clinical instruction and possess the necessary hospital facilities for doing so.

The committee also announced that the Edward Wilson Trust had placed £10,000 at the disposal of the university for the purpose of obstetric research, and concluded:

> Finally, in asking you to accept this report, allow us to express the hope that the conscientious and ungrudging labour which it represents may be the spark to fire a train of research and reform which will bring lasting benefit to those whom it most concerns—Australian mothers and their infants.

Subsequently, in 1925 Dr R Marshall Allan was appointed director of obstetric research at the Women's Hospital by the University of Melbourne, and in 1928 he was appointed to the newly created University of Melbourne chair of obstetrics. In honour of Dunbar Hooper's role in establishing this academic leadership position at the Women's, the University of Melbourne chair of obstetrics and gynaecology at the hospital was named after him in 1967.

Professor Shaun Brennecke

Cat. 127 **Examination couch**, c. 1885, wood, leather, horsehair, metal; 93.0 × 186.0 × 70.0 cm. A2002_21_001, gift to the Royal Women's Hospital by Dr Stewart Johnston, Royal Women's Hospital Collection.
This couch was used by Dr Dunbar Hooper in his Collins Street rooms.

Long forceps for difficult births

Sir James Young Simpson (1811–1870), professor of midwifery at the University of Edinburgh, introduced his eponymous long obstetric forceps to clinical practice in 1845. The forceps were 35 centimetres in total length. The two blades, each 16 centimetres long, had two curves. The cephalic curve was designed to accomodate the moulded fetal head (temporary elongation caused by the head moving through the birth canal), which was often extreme after prolonged labour or in the presence of cephalopelvic disproportion (when the head is too large to fit pass through the mother's pelvis). The pelvic curve was designed to accommodate the maternal pelvic axis, but was less pronounced than in the previous long, double-curved forceps. The fenestrations of the blades made for a lighter instrument and also allowed a firmer grip of the fetal head as the parietal eminences (the points on the skull marking the maximaum diameter of the head) were gripped by the fenestrations.

The shank was 5 centimetres long; located between the blades and the handle, it gave additional length to allow the lock to remain outside the vagina after application. The lock was a classic English double-slot lock, enabling the forceps to remain locked between contractions. The ebony handles were 12 centimetres long and incorporated depressions to fit the operator's fingers.

The forceps were deemed more suitable for the contracted pelvis with a reduced antero-posterior diameter (a pelvis that is narrow from front to back), which was a common situation in the 19th century. Simpson recommended that one blade be applied over the fetal occiput (the back of the baby's head) and the other blade obliquely over the fetal brow. This oblique application was believed to reduce the risk of maternal urethral injury and to be less injurious for a fetus that was being delivered through a contracted pelvis. He also recommended a gentle oscillatory movement of the fetal head, to improve the chances of success and reduce the risk of fetal injury.

Professor Mark Umstad AM

Cat. 119 Hewlett & Sons (London), **Simpson's short midwifery forceps**, c. 1840s, nickel-plated metal, ebony; 24.0 × 8.0 × 3.9 cm. A1994_09_005, Royal Women's Hospital Collection.

Cat. 121 W Skidmore & Company Ltd (Sheffield, England, est. c. 1851), **Simpson's long midwifery forceps**, c. 1860s, nickel-plated metal, ebony; 34.5 × 9.0 × 7.5 cm. A1994_09_004, Royal Women's Hospital Collection.

Regulating midwifery and nursing

From the mid-1880s, across Australia, nurses who had trained in modern hospitals sought to differentiate their work from that of untrained attendants. With governments unwilling to regulate the provision of care, trained nurses pursued voluntary self-regulation, to establish nursing as a reputable, professional undertaking for which education and training were essential.

Two early efforts at professionalising—the Victoria Trained Nurses Association (1886–87) and the Nurses Association of Australasia in Melbourne (1892–95)—failed. After rejecting an invitation to join a newly established, Sydney-based organisation, in 1901 Victoria's nurses and doctors formed a different body: the Victorian Trained Nurses Association. Awarded a royal charter in 1904, it became the Royal Victorian Trained Nurses Association (RVTNA).

The RVTNA worked to apply consistent standards in training. It determined which hospitals were recognised as official training centres, the duration of courses, and curricula. It also set and conducted examinations. Membership was contingent on evidence of training or, as a gesture to uncertificated women in practice in 1901, demonstration of bona fides. All members could purchase the RVTNA's distinctive badge.

Registers of RVTNA members were published, although infrequently, and were available to the public. Each edition had two sections: a general register and a special register, the latter listing those nurses whose qualifications were deemed to be in 'special' fields of nursing, including midwifery and gynaecology. Nurse Florence Green registered in 1914.

Although the RVTNA influenced standards in hospital training, bedside attendance in the community remained open to anyone who pursued it—trained or untrained. But by 1914 community opinion had shifted, as calls grew to protect women and babies from so-called ignorant midwives. Sustained lobbying from various quarters convinced Victoria's parliament that statutory control of midwifery work was necessary. Following tortuous debate, the *Midwives Act 1915* (Vic) introduced compulsory registration for all women attending maternity cases, including midwives and midwifery nurses, trained and untrained. Attendance by men, other than registered doctors, was declared illegal. Eight years later, the *Nurses Registration Act 1923* (Vic) was entered on the statute books after lengthy, complex argument. It contained a curious clause that entitled women trained in midwifery nursing, but not in general nursing, to register as a State Registered Nurse. One of them was Nurse Florence Green.

Dr Madonna Grehan

Cat. 217 Green Bros (Williamstown, active 1915–18), **Florence Green in private nurse uniform**, 1916, photograph, mounted; 13.5 × 9.0 cm (photograph). Collection of Margaret and Eric Smith (great-nephew of Florence Green).

A midwifery nurse's case

Florence Green (1876–1964) trained as a midwifery nurse at the Women's Hospital in a two-year scheme designed for women without prior qualifications in nursing. (For general nurses, the course was one year.) Those enrolled in midwifery training at the Women's were referred to as 'midwifery pupil nurses', yet their certificates bore the title 'Obstetrical Nurse'. This term was adopted in 1898 after the pupils requested replacement of the longstanding title 'Ladies Monthly Nurse'.

Having qualified in June 1915, Nurse Green attended women privately at their homes. Her official case book records 22 births across Melbourne from 1916 to 1925. Being a midwifery nurse, not a midwife, Green always worked with a doctor.

Green's accoutrements of practice reflect stipulations of the *Midwives Act 1915* (Vic) and its subordinate legislation, the *Regulations for Midwives 1916*. These prescriptive rules applied to midwives and midwifery nurses alike, trained and untrained. They covered every aspect of midwifery work, even practitioners' clothing and equipment. Immediate notification to the Midwives Board was mandatory for stillbirths, maternal deaths and cases of puerperal sepsis. Infection was an insidious threat to childbearing women, making cleanliness elemental in the midwifery nurse's arsenal.

As was required, Green's case is lined with a draw-sheet. Starched white aprons, collar, cuffs and studs, cloth belts with silver buckles, cap, silk stockings, and a silk handkerchief seem ready for the next wearing. A large enamel dish holds a nail brush, gallipots for solutions, and a kidney dish for injections. Other items include a glass urinary catheter and pipettes, enemata, a measuring glass for medications, syringes and needles, bottles, bandages, cotton swabs and gauzes. There are artery and other forceps, scissors, twine to tie the umbilical cord, safety pins, and a metal spoon for measuring baby formula.

Mercurochrome, mercuric potassium iodide, and methylated spirits were antiseptics. Iodine was for skin preparation and also vaginal douching. According to Green's lecture notes from the Women's, strychnine sulphate 1:30 'may be given for the heart after eclamptic fits ceased'.

Nurse Green's eclectic artefacts of her profession—her case, badges, watches, spectacles, register, thermic charts, legislation, advice leaflets and ephemera—present a rare window onto the trained midwifery nurse practising in early 20th-century Melbourne.

Dr Madonna Grehan

Cat. 135 **Florence Green's midwifery case**, 1916, leather, cloth, metal; 12.0 × 30.0 × 43.0 cm. A2018_12_001, gift of Margaret and Eric Smith (great-nephew of Florence Green) 2018, Royal Women's Hospital Collection.

Dame Kate Campbell DBE, pioneer in neonatal care

Paediatrician Dr Kate Isabel Campbell (1899–1986) was a pioneer of neonatal care. Born in Hawthorn, Melbourne, she was an outstanding school student. She entered the University of Melbourne Medical School in 1917, graduating MBBS in 1922, and MD in 1924.[1]

Medical residency was difficult for women then, but Campbell was accepted at the Women's and began working closely with Dr Vera Scantlebury Brown, a pioneer of child welfare. Thus began a lifelong association with the Victorian Baby Health Centres Association, for which Campbell was medical officer until 1965. With Scantlebury Brown she wrote *A guide to the care of the young child* (1947), the standard textbook for infant welfare nurses through seven editions to 1972.

In 1926 Campbell was appointed paediatrician to the Queen Victoria Hospital, where she began working with newborn babies. She also practised privately in Collins Street and was paediatrician at the Women's (1944–65). In 1929 she began teaching at the University of Melbourne, training generations of doctors in medicine of the newborn, describing their 'vocabulary', imitating their squeaks, snuffles and grimaces—all of which told her what the baby was feeling. She was an outstanding diagnostician, renowned for spending late-night hours observing and chatting away to delicate pre-term babies. She developed neurological function tests, brought diagnostic brilliance and clinical rigour to neonatal medicine in Australia, and championed maternal bonding.

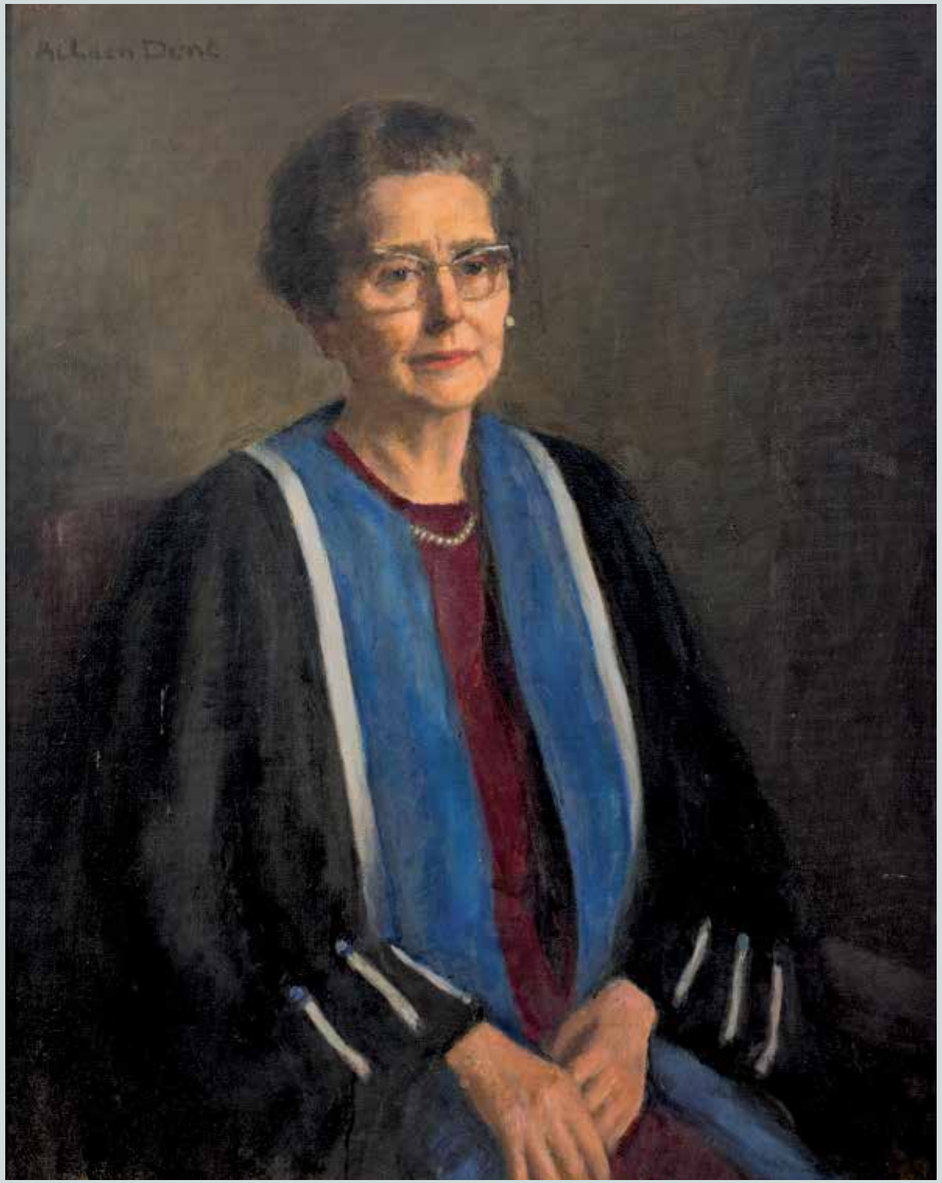
In research, Campbell's most outstanding contribution was in establishing that excess therapeutic oxygen could lead to blindness among premature babies. Other research covered infection control, neonatal feeding, jaundice, electrolyte and fluid balance, the effects of delivery trauma, and Rh incompatibility and its management, including exchange transfusion.

Dame Kate retired in 1976. She was revered for her wisdom, diffidence, courtesy and sense of fun. She dressed impeccably, characteristically wearing a hat. She was the first woman president (1965–66) of the Australian Paediatric Association. The University of Melbourne conferred an honorary doctorate of laws in 1966.

Dr Neil Roy AM

1 This text is derived from Janet McCalman's entry on Kate Campbell in the *Australian dictionary of biography*. I thank Dr McCalman for kindly granting permission to publish it here.

Cat. 186 Aileen Dent (Australian, 1890–1979), **Dame Kate Campbell**, 1972, oil on canvas, 98.0 × 80.0 cm. A2008_48_238, gift of Mrs Henry Dennett 1972, Royal Women's Hospital Collection.



Fighters of infection: Dr Arthur 'Bung' Hill

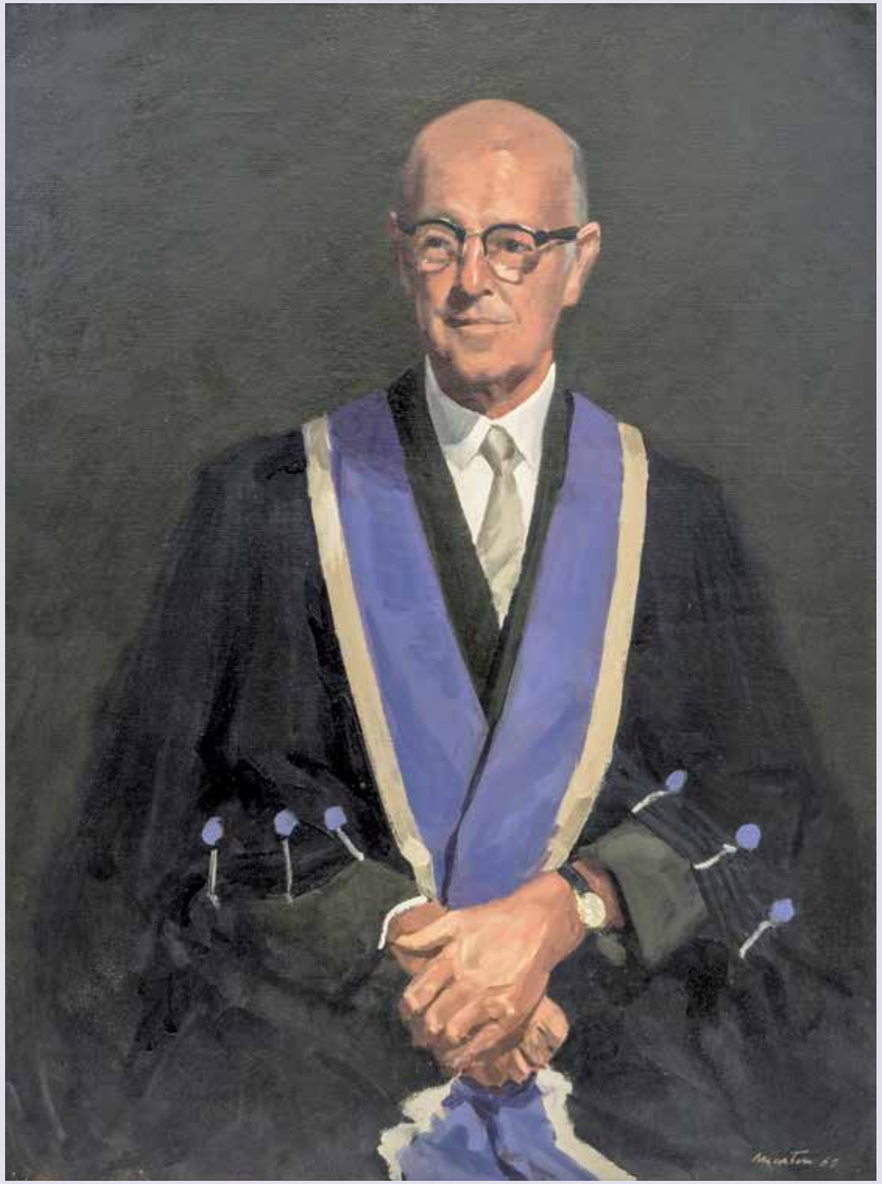
Dr Arthur Machen 'Bung' Hill (1903–1979) received his medical degree from the University of Melbourne in 1927, his MD in 1931, and diploma of gynaecology and obstetrics in 1933. He became a lecturer and examiner for the university, as well as a gynaecologist obstetrician at the Women's. Here he began his research on patterns of puerperal sepsis, plus post-abortal gas gangrene caused by *Clostridium perfringens* (*welchii*).[1] At that time clostridial infections were often a result of unsterile termination of pregnancies by unqualified abortionists. Hill examined the clinical cases and devised treatment according to the type and severity of infection, determining whether surgery (hysterectomy) or antitoxin was required.

Hill worked very closely with the Women's Hospital bacteriologist, Dr Hildred Butler. Using Butler's rapid diagnostic technique, penicillin could be swiftly administered, thus dramatically reducing the poor outcome for group A streptococcal (*Streptococcus pyogenes*) sepsis and *Clostridium perfringens sepsis*.[2] Drs Hill and Butler were two of the first scientists to describe the significant morbidity and mortality associated with beta haemolytic streptococci other than types A, in particular that of group B streptococcus.[3]

Hill was made a Fellow of the Royal College of Surgeons, Edinburgh, and was awarded the Katherine Bishop Harman Prize in obstetrics by the British Medical Association for his report on clinical cases of gas gangrene post-abortal and puerperal. He was senior gynaecological surgeon at the Women's from 1951, retiring from this role in 1963 and thereafter being appointed as honorary consultant surgeon. He received an OBE in 1976.

Professor Suzanne Garland AO

1 AM Hill, 'Why be morbid? Paths of progress in the control of obstetric infection 1931 to 1960', *Medical Journal of Australia*, vol. 1, no. 4, 25 January 1964, pp. 101–11.
2 HM Butler and AM Hill, 'Haemolytic streptococcal infections following childbirth and abortion. I: Determination of virulence of Group A strains', *Medical Journal of Australia*, vol. 1, no. 7, February 1940, pp. 222–8.
3 AM Hill and HM Butler, 'Haemolytic streptococcal infections following childbirth and abortion. II: Clinical features with special reference to infections due to streptococci of groups other than A', *Medical Journal of Australia*, vol. 1, no. 9, March 1940, pp. 293–9.



Cat. 181 Alan Martin (Australian, 1923–1989), **Dr Arthur M Hill**, 1968, oil on linen, 117.0 × 92.0 cm. A2001_03_002, gift of the family of Dr Arthur M Hill 1982, Royal Women's Hospital Collection.

Fighters of infection: Dr Hildred Mary Butler

Dr Hildred Mary Butler (1906–1975) was the first bacteriologist employed at the Royal Women's Hospital. She received her BSc (1928) and DSc (1946) from the University of Melbourne. In 1928 she was appointed as bacteriologist at the Baker Medical Research Institute. At that time severe infections with significant morbidity and mortality were common in women before and after childbirth, or following abortion. From 1931 Butler was examining material from patients at the Women's with severe sepsis. She recognised the importance of the role of haemolytic streptococci (*Streptococcus pyogenes*), *Staphylococcus aureus* and *Clostridium perfringens* (*welchii*) in severe sepsis, as well as anaerobic organisms, and in 1937 published an important monograph on the significance of blood cultures.[1]

Dr Butler transferred to the Women's in 1938 as bacteriologist; there she worked closely with obstetrician Dr Arthur Machen 'Bung' Hill, and was instrumental in establishing a 24-hour, seven-days-a-week bacteriological service. This was during an era of significant sepsis following childbirth, and she described the importance not only of *Streptococcus pyogenes* (group A strep or GAS), but also aerobic streptococci of types other than A, such as group B streptococcus (GBS), at a time when infections could kill more rapidly than they could be cultured in the laboratory. To overcome this, Dr Butler developed a rapid method of diagnosis, by collecting smears at the bedside from vaginal or cervical discharges. These swabs were smeared immediately onto a glass slide for Gram staining, followed straight away by microscopy, before plating them out onto an agar plate for culture. By avoiding the need to put swabs into transport media to be sent to the laboratory the next day, Butler saved much time, enabling immediate targeted treatment, which saved the lives of many women. Thus she pioneered the presumptive diagnosis of sepsis by a Gram-stained smear, examining the morphology of the bacteria and nature of the white cell response. This technique was still used at the Women's when Dr David Leslie, followed by Professor Lyn Gilbert and then Professor Suzanne Garland, were the microbiologists in charge.

Dr Butler retired in 1971.

Professor Suzanne Garland AO

1 HM Butler, *Blood cultures and their significance*, Monographs of the Baker Institute of Medical Research, no. 3, London: J & A Churchill, 1937.

Cat. 180 Alan Martin (Australian, 1923–1989), **Dr Hildred M Butler**, 1967, oil on masonite, 78.0 × 67.0 cm. A2001_03_001, gift of Dr Arthur M Hill 1975, Royal Women's Hospital Collection.

Our first professor of obstetrics and gynaecology

Lance Townsend (1912–1983) was appointed as the first professor of obstetrics and gynaecology at the Women's in 1951, serving until his retirement from the University of Melbourne in 1977. During his quarter-century as professor and chairman of the department, all obstetrics and gynaecology teaching was initially done at the Women's, until the Mercy Hospital in East Melbourne was established as a clinical school, with Norman Beischer as the first professor of obstetrics and gynaecology there.

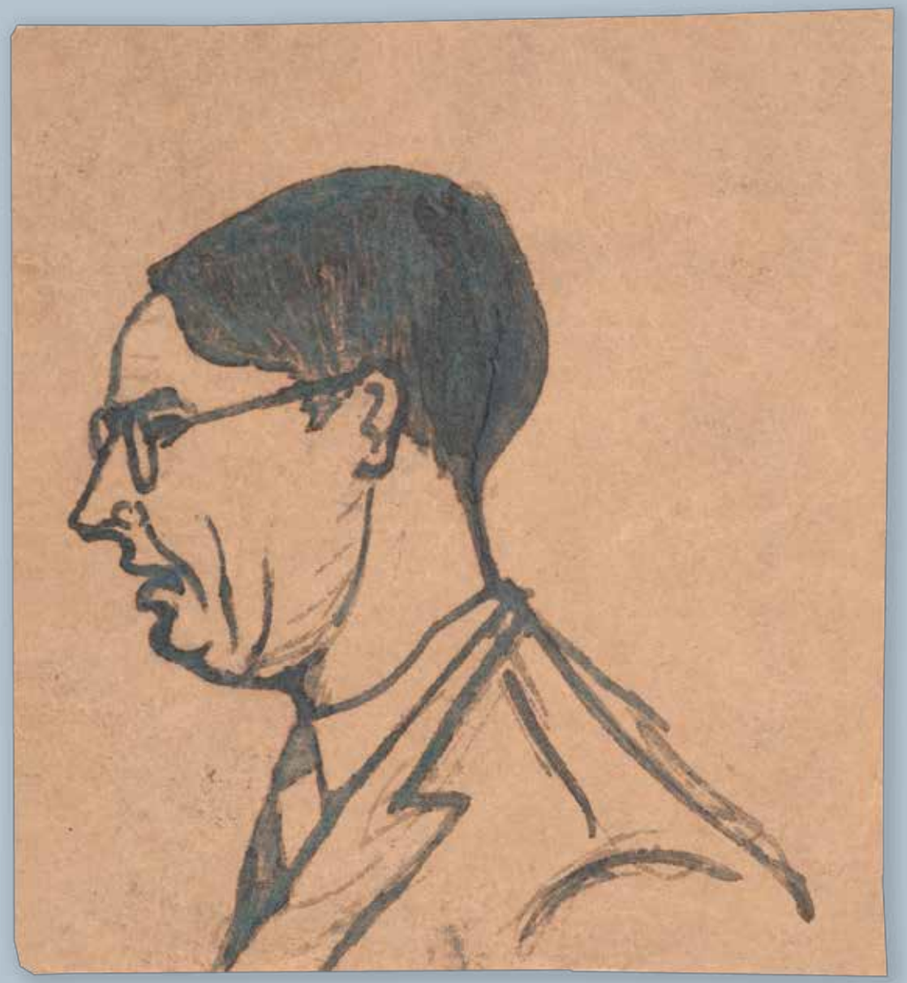
Townsend was heavily involved in all teaching, administration and clinical duties at the Women's. He was on its board of management during most of his appointment and was closely involved in decisions in clinical care, research and teaching. All medical students had to wear white clothing (shirts, trousers, socks and shoes), had to deliver 20 babies during their 12-week teaching term (ten weeks in their fifth year and a two-week refresher in sixth year), had to live in and be always contactable, and were involved not only in deliveries but also in the woman's total care in labour—considerably greater involvement than today.

The university clinical service cared for some 20 per cent of all pregnant women, supervising their antenatal care, deliveries and postnatal care, and for a similar proportion of gynaecology patients. Townsend supervised this but also performed difficult gynaecology operations (including malignancies) and shared the consultant duties in running the delivery suites. He set up the professorial unit to encourage research, appointing world leaders such as scientist James Brown, who had developed techniques for measuring total oestrogen levels in the menstrual cycle and urine oestriol levels in pregnancy. Townsend directed Brown to evaluate these tests further, and encouraged their use for recognising pregnancies at risk. The method was further developed by Norman Beischer until it was superseded by technologies such as ultrasound and cardiotocography. Measurement of total oestrogen in the non-pregnant state revolutionised the assessment and treatment of patients with infertility, and made the Women's one of the world's best services for treatment of such patients.

Townsend was involved in establishing the Australian College of Obstetricians and Gynaecologists (later RANZCOG). He was knighted in 1970.

Professor Emeritus Roger Pepperell

Cat. 49 James Milne (1924–2018), ***Lance***, c. 1950, ink on paper, 7.0 × 6.5 cm. MHM02718, gift of Dr James Milne 1987. Medical History Museum, University of Melbourne.



Preventing anaesthesic deaths in labour

Born in Carrickmacross in County Monaghan, Ireland, in 1914, Kevin McCaul graduated in medicine from the Royal London Hospital in 1939. After a distinguished military career during World War II, he became one of the early proponents of epidural and spinal local anaesthesia in obstetrics and gynaecology.

In 1951 McCaul was appointed as the inaugural director of anaesthesia at the Women's Hospital, on a two-year contract, in response to a serious problem: before his arrival, analgesia in labour was provided by injection of pethidine or heroin; for relief of severe labour pain, general anaesthesia with chloroform and ether was commonly administered. But there was a high maternal mortality from asphyxiation of vomitus under general anaesthesia. McCaul was to radically change attitudes and practices governing analgesia in labour. He introduced antenal education and relaxation classes, and nitrous oxide/oxygen analgesia as routine in labour. Lumbar epidural, caudal and spinal anaesthesia were popularised.

Thus the Women's became the first hospital in the world to abandon general anaesthesia in labour. No further maternal anaesthetic deaths occurred. Specific training for anaesthetic registrars in obstetric and gynaecological anaesthesia was commenced, later combined with paediatrics for local, interstate and New Zealand trainees. This revolution in care resulted in McCaul's permanent appointment as director, a position he held until his retirement. His elegant 'single-shot' epidural technique established the Women's as the major teaching and research centre for regional anaesthesia in Australia and New Zealand. An advocate for training and safety, he was one of the initial examiners for the Faculty of Anaesthetists of the Royal Australasian College of Surgeons, dean of that faculty from 1970 to 1972, and foundation chairman of the Victorian Consultative Council of Anaesthetic Mortality and Morbidity in 1976. Many awards followed: honorary fellowships of the Faculty of Anaesthetists, Royal College of Surgeons in Ireland (the first Australian awarded this honour), and of the Royal College of Obstetricians. He was the first anaesthetic professorial associate in the University of Melbourne's department of obstetrics and gynaecology, and received the Robert Orton Medal for distinguished service to anaesthesia. At the scientific meeting marking his retirement in 1978, it was stated that Dr Kevin McCaul 'had done more for women than anyone else in Australia'.

Dr Andrew Ross

Cat. 192 Eleanor 'Nornie' Gude (Australian, 1915–2002), **Dr Kevin McCaul** MBE, 1980, oil on linen, 120 × 94 cm. A2008_48_236, Royal Women's Hospital Collection.

The world's first IVF quads

In 1984, in-vitro fertilisation was still a largely unsuccessful technology. The chance of a live birth per embryo transferred was only around 5 per cent. Nevertheless, because ovarian stimulation resulted in many eggs for fertilisation, occasionally many embryos developed. At the Royal Women's Hospital, four embryos for transfer to the mother was the largest number used. Mostly the result was no pregnancy, but for those women who did conceive after the transfer of four, the results were as follows: single baby 64 per cent, twins 26 per cent, triplets 8 per cent, and quadruplets 2 per cent.

Mrs Helen Muir's IVF treatment occurred on the cusp of embryo freezing becoming a reliable technology. Due to the difficulty of carrying four babies, she was obliged to be in hospital from 28 weeks' pregnancy and, by 34 weeks, she could scarcely breathe! The Muir quads—all boys—were born at 34 weeks' gestation. They weighed 2071 grams, 1775 grams, 1816 grams and 2108 grams. All four are now healthy, grown men.

While this was hailed as a great achievement—the world's first IVF quads—the Women's team used that lesson to reduce to three the maximum number of embryos transferred, and thereafter adopted an embryo-freezing strategy. Nowadays, more than 80 per cent of embryo transfers are single.

Pictured in the photograph are the Muir quads and Ken Mountain (paediatrician), Ian Johnston (head of the reproductive biology unit at the Women's) and Andrew Speirs (Mrs Muir's IVF doctor and also her obstetrician).

Associate Professor John McBain AO

Cat. 197 Royal Women's Hospital, **Drs Ken Mountain, Ian Johnston and Andrew Speirs (left to right) holding the Muir quadruplets**, 1984, photograph, 20.2 × 25.2 cm. A1995_44_001, Royal Women's Hospital Collection.

Dr Hugh Robinson, pioneer in ultrasound

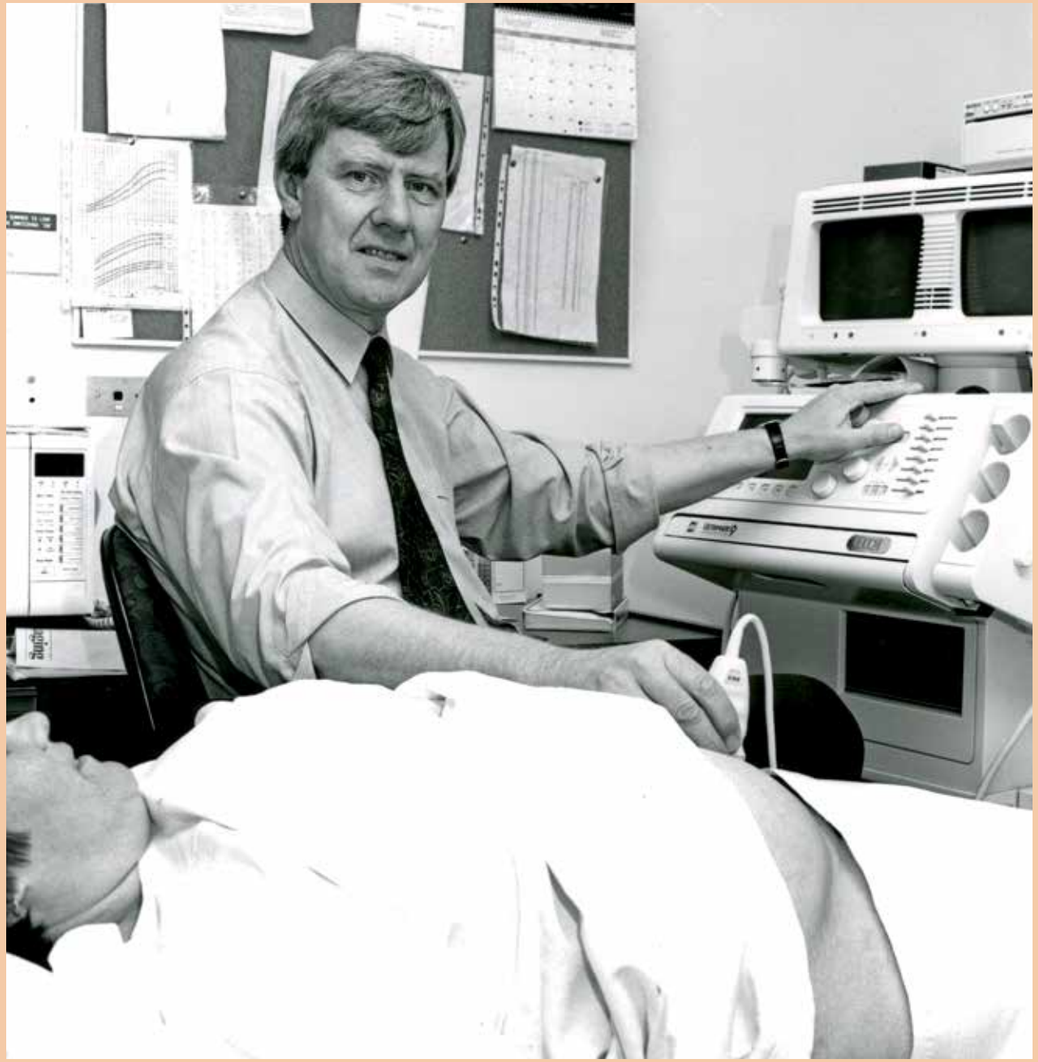
Dr Hugh P Robinson, MB ChB (Glasgow, 1967), MD (Glasgow, 1978), FRCOG (1983), FRACOG and DDU (1979), COGUS (1990), had an outstanding public and private career in obstetric and gynaecological ultrasound. From 1978 to 1996 he was director of ultrasound at the Women's, where his extraordinary diagnostic, ultrasound, clinical and research skills set the standard for all future scanning. He developed many invasive obstetric procedures, including intravascular exchange transfusion of the anaemic fetus in Rh disease,[1] and transabdominal chorion villous sampling (CVS). He published (with Dr Lachlan de Crespigny) the first ultrasound description of ovulation,[2] aiding IVF pioneers.

Robinson is known worldwide for his groundbreaking research in Glasgow on early detection of the embryonic fetal heart, and early dating with crown–rump length (CRL).[3] He has published more than 80 journal articles (30 or more as the primary researcher), contributed chapters on prenatal diagnosis to several textbooks, and held numerous roles at the Women's and on RANZCOG committees. He was instrumental in developing the training requirements for the ultrasound subspecialty (Certification in Obstetrical and Gynaecological Ultrasound, 1990), and chaired the ultrasound subspecialty committee (1987–94). He represented RANZCOG and COGU on government committees and was a founding member of the Australian Association of Obstetric and Gynaecological Ultrasonologists (1995–99).

Dr Hugh Robinson has made an enormous contribution to obstetric and gynaecological ultrasound throughout Australia by supporting trainees, young doctors and the new ultrasound industry. He continued in private practice until 2006, when he retired to run his vineyard on the Mornington Peninsula, where he can found today for a chat and advice.

Dr Amanda Sampson

1 A Ngu, HP Robinson et al., 'Ultrasound-guided fetal blood exchange transfusion for severe erythroblastosis', *Australian and New Zealand Journal of Obstetrics and Gynaecology*, vol. 27, no. 1, March 1987, pp. 70–1.
2 LJ de Crespigny, HP Robinson et al., 'Ultrasonic observation of the mechanism of human ovulation', *American Journal of Obstetrics and Gynecology*, vol. 139, no. 6, 15 March 1981, pp. 636–9.
3 HP Robinson, 'Detection of fetal heart movement in the first trimester of pregnancy using pulsed ultrasound', *British Medical Journal*, vol. 4, no. 5838, 25 November 1972, pp. 466–8.



Cat. 202 **Dr Hugh Robinson with patient at the Women's Hospital**, c. 1993, photograph, 16.5 × 16.5 cm. A1991_23_051_092, Royal Women's Hospital Collection.

Hearing the infant's heart

Monaural fetal stethoscope

The stethoscope was invented by French physician René Laennec in 1816. To avoid the embarrassment of auscultating (listening to) a woman's chest by placing his ear directly to the skin, he fashioned a cylinder from 24 sheets of paper. The sounds produced were not only louder but also clearer. He subsequently developed a wooden version made in two pieces: one end with a hole to place against the ear and the other end a hollowed-out cone.

Although Laennec preferred the name *le cylindre* for his invention, the term 'stethoscope' was soon adopted. It was derived from the Greek roots *stethos* meaning chest, and *skopein* meaning to observe.

Laennec's colleague Jacques-Alexandre le Jumeau de Kergaradec modified the original *cylindre* for obstetric use. His instrument featured a wide earplate, and a flared bell to prevent the stethoscope from rocking on the abdomen during auscultation.

Adolphe Pinard, professor of clinical obstetrics in the Faculté de Médecine in Paris, is recognised as the pioneer of modern antenatal care. In 1895 he developed a version of the fetal stethoscope, the eponymous Pinard stethoscope, which remains in use throughout the world today, particularly in less wealthy countries.

Sonicaid

Sonicaid was a British medical electronics company renowned for developing early ultrasound scanners and Doppler fetal monitors. 'Sonicaid' became widely used as a generic term for Doppler fetal monitors and is now a registered trademark of Huntleigh Healthcare.

In the early 1970s, Sonicaid's medical research director, Frederick (Doug) Fielder, developed a portable instrument that revolutionised fetal heart-rate monitoring. For the first time, the fetal heart could be heard by everybody in the room, rather than only being audible to the user of the fetal stethoscope. The technology used a 2 MHz continuous Doppler ultrasound wave. A cylindrical acrylic lens turned the pencil beam into a fan-shaped beam with a 44 degree angle. Significant processing was then used to produce an audible signal.

Professor Mark Umstad AM

Cat. 142 J Gray & Son (Sheffield, England, active 1849–1962), **Monaural stethoscope (Pinard)**, c. 1937, metal, 18.1 × 6.5 cm. A2003_99_194, Royal Women's Hospital Collection.

Cat. 184 Sonicaid Ltd (West Sussex, England, active early 1970s–1987), **Fetal heart detector D205**, c. 1970, mixed media including metal, formica, rubber, metal, plastic; 11.0 × 29.0 × 18.5 cm. A1993_03_103, Royal Women's Hospital Collection.

Transporting babies

This incubator was constructed in 1949 by Mr Jack Murphy, chief engineer of the Women's Hospital, under the supervision of paediatrician Dr Kate Campbell and medical superintendent Dr William Refshauge. It was used for transporting newborn infants from delivery suites or operating theatres to the baby nurseries, replacing the open cots previously used. It was also used for transporting babies to the Children's Hospital if they required surgery or specialist care.

The sides and base are constructed of wood, and the top has sliding acrylic panels for access and observation. The carry-cot is suspended by springs on each corner to improve the ride. Essential warmth is provided by five hot-water bottles hanging on hooks on the inside walls, with a thermometer showing the temperature inside the cot. Oxygen is provided from a cylinder placed externally in the recess at one end, with gauges showing the capacity of the cylinder and the flow rate. The oxygen is directed through a pipe that runs around the inside of the cot between the walls and the hot-water bottles, thus warming the gas before it is delivered to the baby via a rubber tube emerging from the end of the pipe.

The incubator is heavy, requiring two porters to lift and carry it. It also has a three-wheeled trolley for transporting it along corridors and between buildings. This incubator design is based on principles used in various mobile incubators in use in the USA, and was the forerunner of the modern transport incubator. In the 1940s and 1950s commercial transport incubators such as the Acclibator, Port-o-Cot and Thermocot were developed.

Modern neonatal transport was introduced in 1976 with the launch of the Newborn Emergency Transport Service at the Women's; transport incubators were now electrically powered, had multiple monitors, included facilities for intravenous infusion and ventilation support, and could be used in fixed-wing and rotary-wing aircraft, as well as in road ambulances.

Today's service has its own ambulances, specially fitted out for neonatal transport, and the modern incubator is part of a module providing full life-support facilities.

Dr Neil Roy AM

Cat. 151 Women's Hospital, **Ambulance for transporting premature baby**, 1949, wood, metal, rubber, acrylic; 85.0 × 115.0 × 70.0 cm. A1990_18_005, Royal Women's Hospital Collection.

Cat. 177 **Baby in transport incubator**, c. 1960, photograph, 10.0 × 12.0 cm. PA Folder_43_21, Royal Women's Hospital Collection.

Exchange transfusion of blood in newborn infants

Before any effective treatment was available, severe erythroblastosis (where the fetus is forced to make more red blood cells because it is becoming progressively anaemic) caused by Rhesus isoimmunisation (blood incompatibility between mother and fetus, with the mother's antibodies attacking the baby's Rhesus D-positive red blood cells) had a dreadful prognosis for the baby. Many fetuses became severely anaemic and hydropic (accumulating excessive fluid throughout the body) and died in utero. Those born alive would often succumb quickly to the effects of hydrops or prematurity, and others would develop severe jaundice, which would damage their brain, leading either to death or to survival with neurological damage, such as profound deafness and severe athetoid cerebral palsy.

Exchange transfusion has been in clinical use since the 1940s, and improved the outcomes from severe erythroblastosis. Between 1951 and 1968 there were 1830 exchange transfusions performed on 1160 infants at the Women's—an average of 102 exchanges per year, most of which (74 per cent) were for severe erythroblastosis caused by Rhesus isoimmunisation. However, mortality associated with exchanges in babies with this condition was high, at 9.8 per cent. One of the causes of death was the use of cold blood taken from the refrigerator for the exchange. However, once a device was developed for warming blood to 36 degrees Celsius before it was given to the baby, the mortality rate fell substantially.

The average number of exchange transfusions performed at the Women's was recently reported to have dropped to only 6.4 per year over the 10-year period from 2001—a fraction of the number performed in the 1950s and 1960s. This means that experience in performing these transfusions has also fallen, and it is hard to train younger paediatricians in the technique. Rhesus isoimmunisation was still the main cause in the 2000s (71 per cent, or 36 out of 51 babies treated), despite the use of anti-D prophylaxis, introduced more than 50 years ago. Complications still occur during exchange transfusions, but they should not be related to the blood being too cold or too hot; today it is kept very close to body temperature by warming devices, such as the one shown here.

Professor Lex Doyle

Cat. 171 Birko Electrics (Australia, est. c. 1939), Sunvic Controls Ltd (Great Britain, est. 1940s), **Blood warmer with TSNC thermostat control**, c. 1960, metal, rubber, plastic; 35.0 × 24.0 × 21.0 cm. A1990_18_054, Royal Women's Hospital Collection.

Exchange blood transfusion

This blood transfusion set was probably used by Dr Glyn White at the Women's in the 1950s, and passed on to his nephew and successor, Dr Rex Betheras. It is a set of tubing, three-way taps, syringe and umbilical catheter, used for exchange blood transfusion (ET) in babies with dangerously high levels of serum bilirubin. Excess bilirubin was usually caused by haemolysis in Rh disease (a blood-type incompatibility between mother and baby), potentially leading to brain damage, cerebral palsy, deafness and even death.

The principle of ET is that, by incrementally removing the unhealthy blood from the baby and replacing it with fresh, compatible blood, the bilirubin is removed, along with the haemolysing red cells, and the antibodies from the mother that cause the haemolysis. Concomitant anaemia is also corrected. The process is complex. First, the blood must be carefully matched. Then blood from the bottle passes through coils of tubing in a container of warm water to bring it to body temperature, then to one of the three-way taps connected to the syringe. The syringe must be heparinised to prevent clotting. The second three-way tap connects the first one to the umbilical catheter and to tubing going to a waste blood bag.

The operator inserts the catheter into the baby's umbilical vein; the taps are turned so that blood is removed from the baby into the syringe; the taps are then turned to have this blood sent to the waste bag; blood is then taken from the fresh source into the syringe, and thence into the baby. Each manoeuvre requires careful adjustment of the taps. This sequence is repeated many times until the equivalent of twice the original blood volume of the baby has been exchanged, resulting in a 75–80 per cent reduction in bilirubin.

Of note is the umbilical catheter, which is a rubber feeding tube. Modern sets have specialised plastic catheters and improved, simpler tap systems.

ET for Rh disease was a frequent procedure until the introduction in the 1970s of anti-D antibody for mothers to prevent the condition, following which Rh disease became rare. ET is still required for other causes of high bilirubin, but is a highly specialised procedure.

Dr Neil Roy AM

Cat. 178 S & RJ Everett & Co. Ltd (London, est. 1936), **Blood transfusion set**, c. 1965, metal, glass, rubber tubing; irregular dimensions. A1996_14_001, Royal Women's Hospital Collection.

Multilingual communication—from 1961 to today

The Commonwealth Bank Migrant Information Service first issued this 39-page booklet, *Obstetric phrases*, in 1961. Used in the absence of interpreters by nursing staff caring for patients at various maternity hospitals, including the Women's, it has simple phrases in Italian, German, 'Yugoslav' and Greek.

Such publications signalled a growing realisation that Australia was changing forever, developing into a multilingual nation. The booklet attempts to make Australia a more welcoming country, by meeting the particular needs of newly arrived migrants who were helping boost the birth rate.

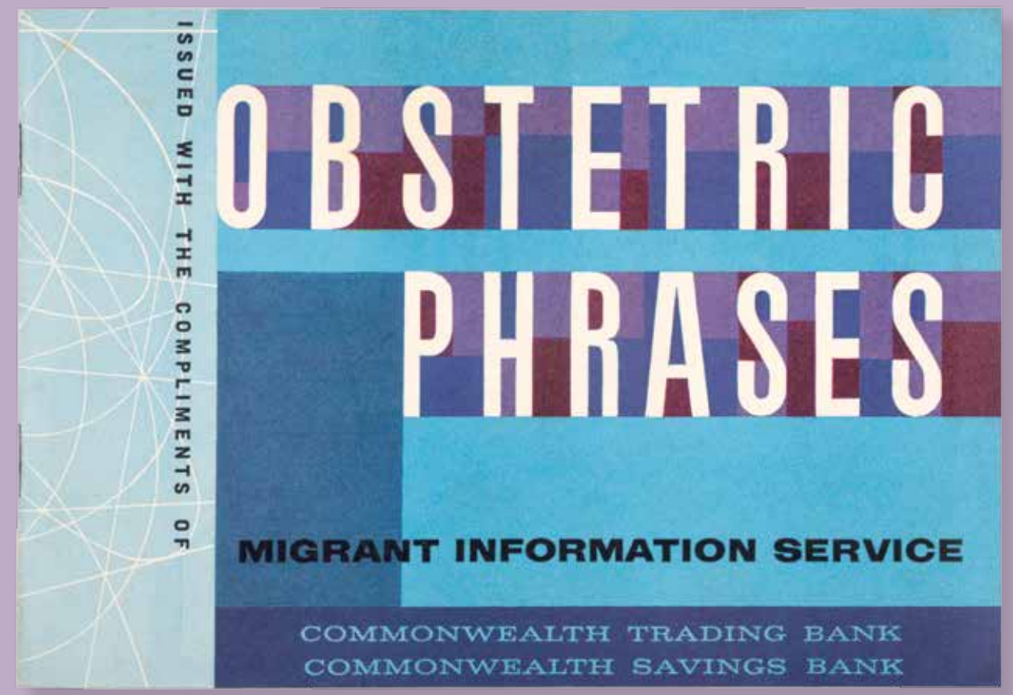
This simple booklet places great importance on pronunciation: next to every translation are English phonetic transcriptions to help staff in the wards make themselves understood. But there is no help offered for understanding patients' responses. Later, staff started using pictorial cue cards: a cup for 'Are you thirsty?'; a grimacing face for 'Are you in pain?'. But, like the 1961 booklet, these cards posed closed questions, requiring only a yes or no answer, with no opportunity for discussion or elaboration. Today, telephone interpreting—or in some cases video interpreting—is widely used.

These days there is also a strong emphasis on preventive health measures. Printed fact sheets, leaflets and posters that help people recognise and prevent many ailments are available in all hospitals and health centres. The Women's currently distributes 40 different fact sheets in 15 languages. Fifty-eight years after that first four-language booklet was distributed, multilingual health information is available to the majority of Victorians: each of the 74 language services on SBS Radio includes a health segment; ethnic print media distribute health information; the internet plays a big role (including patients seeking information online from their country of origin); and a health translation directory is available to all. Things have changed.

Nevertheless, there is still progress to be made in one important field: medical research. Patients of limited proficiency in English are seldom included in clinical trials, perhaps because of the cost of employing interpreters. Including a greater diversity of patients in such work would be a worthwhile investment in the health and wellbeing of the entire community.

Cav Poni Poselli

Cat. 173 Commonwealth Bank of Australia Migrant Information Service, ***Obstetric phrases***, 1960, Sydney: Printed by Shepherd & Newman, printed booklet, 12.4 × 18.1 cm. A2000_03_240, Royal Women's Hospital Collection.



Death from abortion

There were 43 deaths at the Royal Women's Hospital from septic (infected) abortion in the period covered by this clinical report (1939–40). Some probably followed spontaneous miscarriage, but most were likely due to unsafe self-induced or 'backyard' abortion; stigma and fear of prosecution were strong disincentives to declaring such a history, and some women were brought in moribund, unable to tell any story. The women averaged 30 years of age and four previous births (in a range from one to ten).

Fifteen of these women were known to have had 'interference' with their pregnancy, most commonly syringing or passing a catheter into the uterus, also use of a knitting needle or pills, the latter resulting in lead poisoning for one woman. Four denied interference, four reported falls resulting in miscarriage, while others reported that miscarriage, pain or bleeding had led to their presentation at the hospital.

'Unlawful abortion' was an offence under the *Crimes Act* in Victoria until 2008. While it remained illicit, the care of women with complications of unsafe abortion contributed substantially to the hospital's workload, with a busy infection ward and daily operating lists for the necessary curettes; for every death, many women were treated who survived.

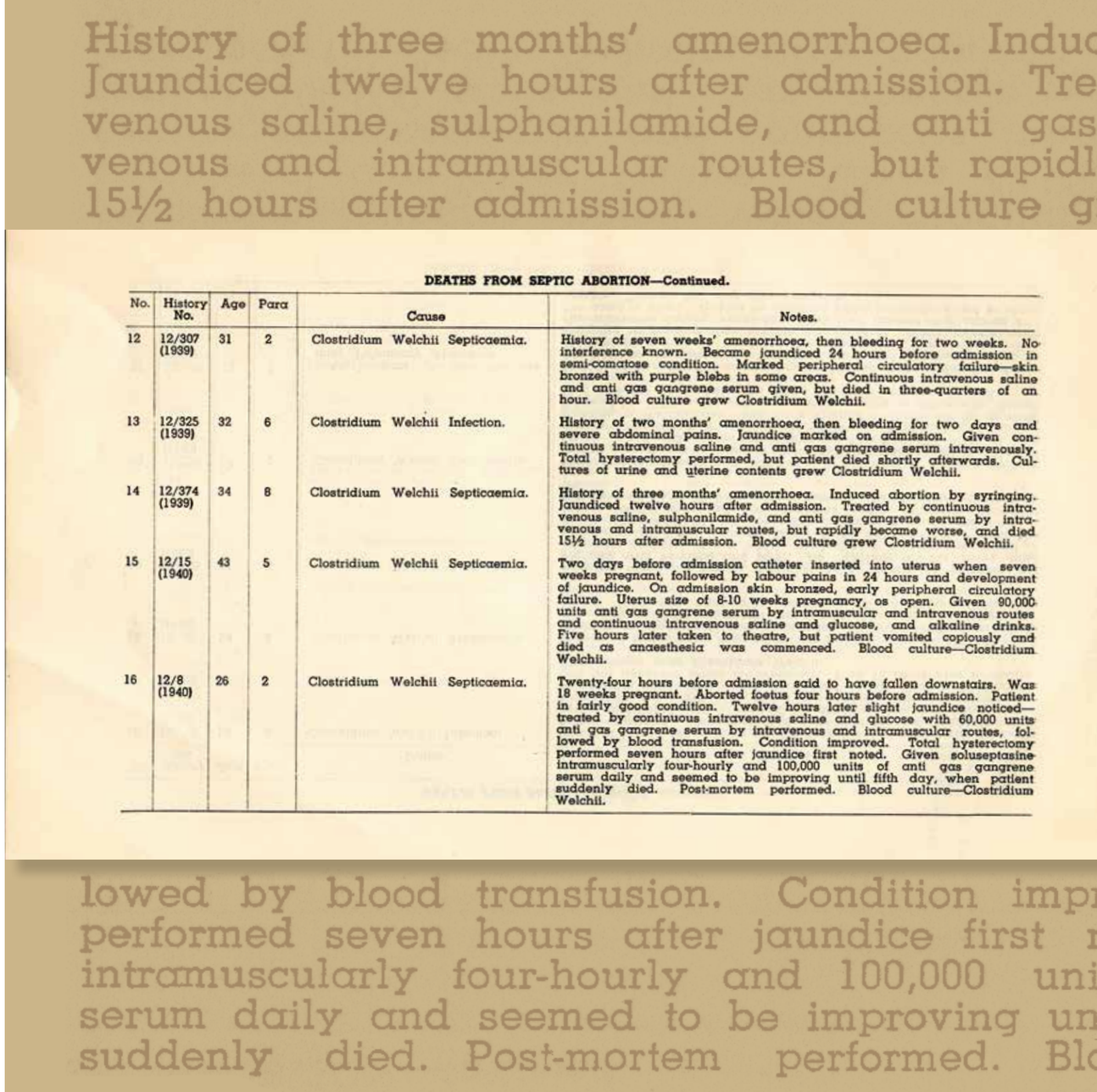
In 1969 clarification by case law of what constituted lawful abortion resulted in increased availability of safe abortion, including the public abortion service established at the Women's in 1975. Experience here followed the global pattern of plummeting septic abortion rates and substantial falls in maternal death rates as safe legal abortion became more accessible, concurrent with more effective contraceptive methods and better access to them.

Victoria's *Abortion Law Reform Act 2008* finally removed abortion (by a qualified person) from the *Crimes Act*, so that women no longer ran a risk of prosecution for having an abortion, nor doctors for providing them.

Women seek abortion by whatever means available to them if they are pregnant and feel unable to bear a child. Still in the 21st century around 25 million abortions annually are unsafe (about 45 per cent of all abortions worldwide), resulting in at least 8 per cent of global maternal mortality—an estimated 22,800 deaths each year.

Dr Christine Bayly

Cat. 145 'Deaths from septic abortion—continued', from Women's Hospital, ***Medical and clinical report of the Women's Hospital Melbourne for the twelve months from 1st July, 1939 to 30th June, 1940***, 1940, printed volume, 21.3 × 13.9 cm. A2000_35_009, Royal Women's Hospital Collection.



DEATHS FROM SEPTIC ABORTION—Continued.

No.	History No.	Age	Para	Cause	Notes.
12	12/307 (1939)	31	2	Clostridium Welchii Septicaemia.	History of seven weeks' amenorrhoea, then bleeding for two weeks. No interference known. Became jaundiced 24 hours before admission in semi-comatose condition. Marked peripheral circulatory failure—skin bronzed with purple blebs in some areas. Continuous intravenous saline and anti gas gangrene serum given, but died in three-quarters of an hour. Blood culture grew Clostridium Welchii.
13	12/325 (1939)	32	6	Clostridium Welchii Infection.	History of two months' amenorrhoea, then bleeding for two days and severe abdominal pains. Jaundice marked on admission. Given continuous intravenous saline and anti gas gangrene serum intravenously. Total hysterectomy performed, but patient died shortly afterwards. Cultures of urine and uterine contents grew Clostridium Welchii.
14	12/374 (1939)	34	8	Clostridium Welchii Septicaemia.	History of three months' amenorrhoea. Induced abortion by syringing. Jaundiced twelve hours after admission. Treated by continuous intravenous saline, sulphanilamide, and anti gas gangrene serum by intravenous and intramuscular routes, but rapidly became worse, and died 15½ hours after admission. Blood culture grew Clostridium Welchii.
15	12/15 (1940)	43	5	Clostridium Welchii Septicaemia.	Two days before admission catheter inserted into uterus when seven weeks pregnant, followed by labour pains in 24 hours and development of jaundice. On admission skin bronzed, early peripheral circulatory failure. Uterus size of 8-10 weeks pregnancy, os open. Given 90,000 units anti gas gangrene serum by intramuscular and intravenous routes and continuous intravenous saline and glucose, and alkaline drinks. Five hours later taken to theatre, but patient vomited copiously and died as anaesthesia was commenced. Blood culture—Clostridium Welchii.
16	12/8 (1940)	26	2	Clostridium Welchii Septicaemia.	Twenty-four hours before admission said to have fallen downstairs. Was 18 weeks pregnant. Aborted foetus four hours before admission. Patient in fairly good condition. Twelve hours later slight jaundice noticed—treated by continuous intravenous saline and glucose with 60,000 units anti gas gangrene serum by intravenous and intramuscular routes, followed by blood transfusion. Condition improved. Total hysterectomy performed seven hours after jaundice first noted. Given soluseptasine intramuscularly four-hourly and 100,000 units of anti gas gangrene serum daily and seemed to be improving until fifth day, when patient suddenly died. Post-mortem performed. Blood culture—Clostridium Welchii.

Naming and shaming

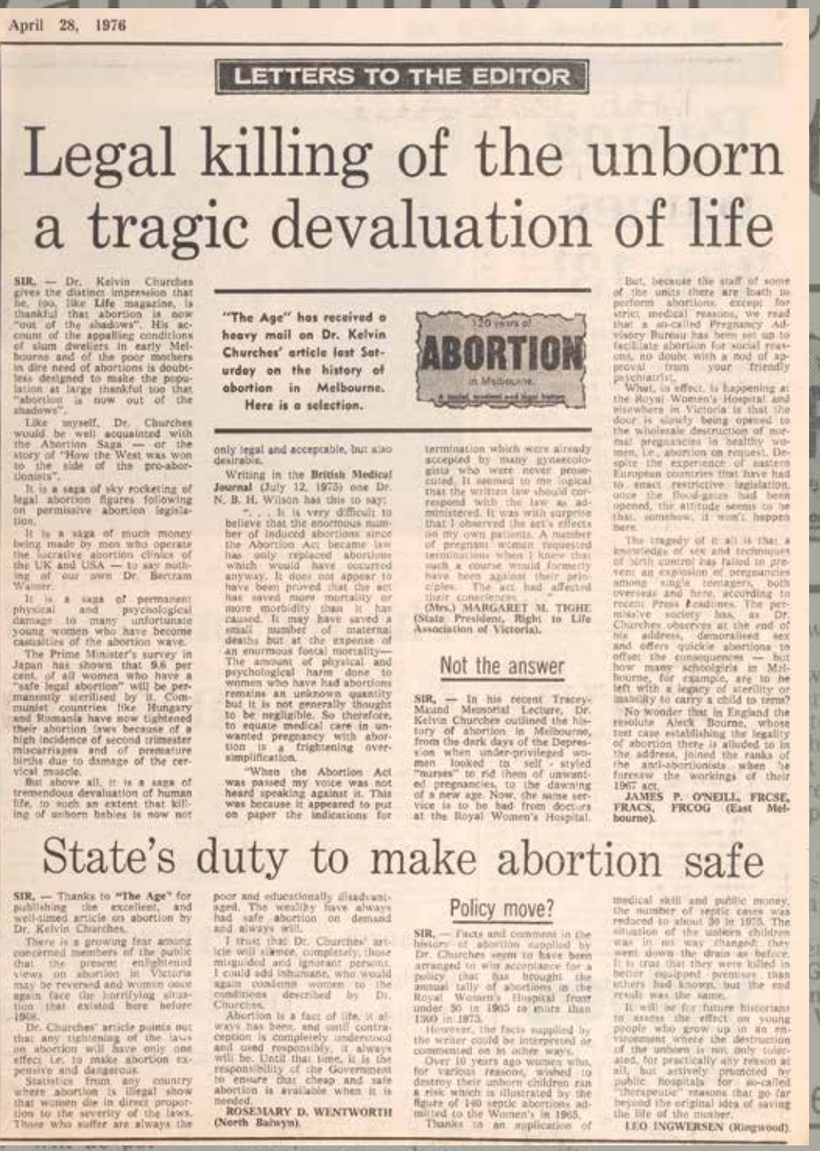
In the normally sedate annual Tracy-Maund Lecture in 1976, a senior consultant, Dr Kelvin Churches, dropped a bombshell. It was seven years since Mr Justice Menhennitt's ruling in *R v. Davidson*, which permitted the termination of a pregnancy if medical opinion determined that continuing the pregnancy posed too grave a risk to a woman's physical or mental health. In the meantime, Dr Bertram Wainer had successfully tested the ruling, and the Kaye commission of inquiry into police corruption had blown up the racket whereby a group of medical practitioners paid protection money to police. Yet few doctors had the courage to offer safe abortions to women now that it was technically legal, most remaining craven before public opinion.

Dr Churches exposed the hypocrisy of a society that shamed women but not men, that had tolerated dangerous amateur and professional practices which too often ended in infection and even death, that cared little that the rich had always had their 'troubles' removed—in the basement of Scott's Hotel or in the Lumeah Hospital, owned by the then chancellor of the University of Melbourne—while the poor aborted themselves and died. A small elite of doctors had become very rich on the abortion trade, while most non-Catholic gynaecologists did not blink at performing dilatation and curettage to relieve their private patients of an unwanted child. Kelvin Churches named and shamed. But his criticism was also for those conservative gynaecologists who considered contraceptive advice outside their professional responsibilities.

Few doctors would openly perform terminations, but by 1975 the Royal Women's Hospital's Pregnancy Advisory Service opened, led by two male consultants, Gad Trevaks and Michael Kloss, and supported by 'Gytha's girls'—women doctors who had been recruited to run, on a voluntary basis, a family planning clinic led by Gytha Betheras. Thus, after more than a century of tragedy in its wards, and despite intrusive protests from the Right to Life movement, the hospital established a safe and accessible service for the termination of pregnancy.

Professor Janet McCalman AC

Cat. 109 Margaret M Tigue, James P O'Neill, Rosemary D Wentworth, Leo Ingwersen, ***Letters to the editor***, *The Age*, 28 April 1976, newspaper cutting, 31.0 × 21.2 cm. Australian Medical Association Archive, gift of AMA Victoria 2011, Medical History Museum, University of Melbourne.



April 28, 1976

LETTERS TO THE EDITOR

Legal killing of the unborn a tragic devaluation of life

"The Age" has received a heavy mail on Dr. Kelvin Churches' article last Saturday on the history of abortion in Melbourne. Here is a selection.

120 years of ABORTION in Melbourne. A social, medical and legal history

SIR, — Dr. Kelvin Churches gives the distinct impression that he, too, like **Life** magazine, is thankful that abortion is now "out of the shadows". His account of the appalling conditions of slum dwellers in early Melbourne and of the poor mothers in dire need of abortions is doubtless designed to make the population at large thankful too that "abortion is now out of the shadows".

Like myself, Dr. Churches would be well acquainted with the Abortion Saga — or the story of "How the West was won to the side of the pro-abortionists".

It is a saga of sky rocketing of legal abortion figures following on permissive abortion legislation.

It is a saga of much money being made by men who operate the lucrative abortion clinics of the UK and USA — to say nothing of our own Dr. Bertram Wainer.

It is a saga of permanent physical and psychological damage to many unfortunate young women who have become casualties of the abortion wave.

The Prime Minister's survey in Japan has shown that 9.6 per cent. of all women who have a "safe legal abortion" will be permanently sterilised by it. Communist countries like Hungary and Rumania have now tightened their abortion laws because of a high incidence of second trimester miscarriages and of premature births due to damage of the cervical muscle.

But above all, it is a saga of tremendous devaluation of human life, to such an extent that killing of unborn babies is now not only legal and acceptable, but also desirable.

Writing in the **British Medical Journal** (July 12, 1975) one Dr. N. B. H. Wilson has this to say:

". . . It is very difficult to believe that the enormous number of induced abortions since the Abortion Act became law has only replaced abortions which would have occurred anyway. It does not appear to have been proved that the act has saved more mortality or more morbidity than it has caused. It may have saved a small number of maternal deaths but at the expense of an enormous foetal mortality—The amount of physical and psychological harm done to women who have had abortions remains an unknown quantity but it is not generally thought to be negligible. So therefore, to equate medical care in unwanted pregnancy with abortion is a frightening over-simplification.

"When the Abortion Act was passed my voice was not heard speaking against it. This was because it appeared to put on paper the indications for termination which were already accepted by many gynaecologists who were never prosecuted. It seemed to me logical that the written law should correspond with the law as administered. It was with surprise that I observed the act's effects on my own patients. A number of pregnant women requested terminations when I knew that such a course would formerly have been against their principles. The act had affected their conscience."

(Mrs.) MARGARET M. TIGHE (State President, Right to Life Association of Victoria).

Not the answer

SIR, — In his recent Tracey-Maund Memorial Lecture, Dr. Kelvin Churches outlined the history of abortion in Melbourne, from the dark days of the Depression when under-privileged women looked to self - styled "nurses" to rid them of unwanted pregnancies, to the dawning of a new age. Now, the same service is to be had from doctors at the Royal Women's Hospital.

But, because the staff of some of the units there are loath to perform abortions, except for strict medical reasons, we read that a so-called Pregnancy Advisory Bureau has been set up to facilitate abortion for social reasons, no doubt with a nod of approval from your friendly psychiatrist.

What, in effect, is happening at the Royal Women's Hospital and elsewhere in Victoria is that the door is slowly being opened to the wholesale destruction of normal pregnancies in healthy women, i.e., abortion on request. Despite the experience of eastern European countries that have had to enact restrictive legislation, once the flood-gates had been opened, the attitude seems to be that, somehow, it won't happen here.

The tragedy of it all is that a knowledge of sex and techniques of birth control has failed to prevent an explosion of pregnancies among single teenagers, both overseas and here, according to recent Press Readiness. The permissive society has, as Dr. Churches observes at the end of his address, demoralised sex and offers quickie abortions to offset the consequences — but how many schoolgirls in Melbourne, for example, are to be left with a legacy of sterility or inability to carry a child to term?

No wonder that in England the resolute Alex Bourne, whose test case establishing the legality of abortion there is alluded to in the address, joined the ranks of the anti-abortionists when he foresaw the workings of their 1967 act.

JAMES P. O'NEILL, FRCSE, FRACS, FRCOG (East Melbourne).

State's duty to make abortion safe

SIR, — Thanks to **"The Age"** for publishing the excellent, and well-timed article on abortion by Dr. Kelvin Churches.

There is a growing fear among concerned members of the public that the present enlightened views on abortion in Victoria may be reversed and women once again face the horrifying situation that existed here before 1969.

Dr. Churches' article points out that any tightening of the laws on abortion will have only one effect i.e. to make abortion expensive and dangerous.

Statistics from any country where abortion is illegal show that women die in direct proportion to the severity of the laws. Those who suffer are always the poor and educationally disadvantaged. The wealthy have always had safe abortion on demand and always will.

I trust that Dr. Churches' article will silence, completely, those misguided and ignorant persons. I could add inhumane, who would again condemn women to the conditions described by Dr. Churches.

Abortion is a fact of life, it always has been, and until contraception is completely understood and used responsibly, it always will be. Until that time, it is the responsibility of the Government to ensure that cheap and safe abortion is available when it is needed.

ROSEMARY D. WENTWORTH (North Balwyn).

Policy move?

SIR, — Facts and comment in the history of abortion supplied by Dr. Churches seem to have been arranged to win acceptance for a policy that has brought the annual tally of abortions in the Royal Women's Hospital from under 50 in 1965 to more than 1300 in 1973.

However, the facts supplied by the writer could be interpreted or commented on in other ways.

Over 10 years ago women who, for various reasons, wished to destroy their unborn children ran a risk which is illustrated by the figure of 140 septic abortions admitted to the Women's in 1965.

Thanks to an application of medical skill and public money, the number of septic cases was reduced to about 30 in 1973. The situation of the unborn children was in no way changed: they went down the drain as before. It is true that they were killed in better equipped premises than others had known, but the end result was the same.

It will be for future historians to assess the effect on young people who grow up in an environment where the destruction of the unborn is not only tolerated, for practically any reason at all, but actively promoted by public hospitals for so-called "therapeutic" reasons that go far beyond the original idea of saving the life of the mother.

LEO INGWERSEN (Ringwood).

Works in the exhibition

MEDICAL HISTORY MUSEUM, UNIVERSITY OF MELBOURNE

1 Cyprus
Infant feeding cup, c. 1750–1550 BC
ceramic, slip glazed
8.8 × 12.4 cm (diam.)
Transferred from the Department of Classical Studies, University of Melbourne
MHML0042
Ceramic feeding cup from the Middle Bronze Age.
(see opposite, top right)

2 Greek design
Infant feeding cup, c. 700–475 BC
terracotta (red ware with black slip decoration)
13.0 × 8.5 × 7.0 cm
MHM02248
(see opposite, bottom right)

3 Greek culture, southern Italy
Infant feeding cup, c. 450 BC
earthenware, slip glazed
8.7 × 8.1 × 7.0 cm
MHM02247
(see opposite, bottom left)

4 Roman
Two feeding bottles, c. 200 AD
glass, coated
9.9 × 7.8 × 5.5 cm (each)
Transferred from the Department of History, University of Melbourne
MHML0041.1 and MHML0041.2
(see opposite, top left: MHML004.1)

5 **Infant feeding vessel**, c. 1000 AD
cow horn
10.6 × 11.6 × 5.0 cm
MHM02249

6 **Three boat-shape feeding bottles**, c. 1840
glass
5.0 × 14.0 × 5.0 cm
6.0 × 19.0 × 6.5 cm
7.0 × 26.0 × 9.0 cm
MHM02246.1, .2, .3

7 **'The Cherub' feeding bottle**, c. 1840
glass
5.5 × 23.0 × 7.2 cm
moulded in bottle *THE / CHERUB / BOAT SHAPE / FEEDER*
MHM02107.1

8 Lying-In Hospital, Dublin
Certificate for diploma of obstetrics, awarded to Charles Travers Mackin, 26 November 1841
paper, ink, metal, silk, wax
35.0 × 20.5 × 1.2 cm
Gift of Mr Patrick M Hamilton
MHM02464
One of the founding doctors of the Melbourne Lying-In Hospital, Richard Thomas Tracy (1826–1874), studied in Dublin.

9 S Maw, Son & Thompson (London, active c. 1820s–1940s)
'The Alexandra' feeding bottle, c. 1860
glass, rubber, wood, bone
moulded in glass *THE ALEXANDRA / FEEDING BOTTLE / S. MAW, SON & THOMPSON / TRADE MARK*
6.7 × 14.2 × 9.0 cm
MHM02103

10 The Allan Studio (Collingwood, active 1887–1946)
Richard Thomas Tracy, 1869
photograph
48.2 × 40.9 cm
MHM00453
Dr Richard Thomas Tracy (1826–1874) was one of the two founding doctors of the Melbourne Lying-In Hospital.
(see page viii)

11 Melbourne Lying-In Hospital
Attendance certificate in midwifery, awarded to George Thomas Teague, 28 April 1873
paper, ink
16.6 × 20.9 cm
Gift of Ken Teague 1982
MHM00558

12 Lying-In Hospital, Dublin
Certificate provided to William Butler Walsh, with seal attached, 1877
paper, ink, wax
35.7 × 25.1 cm (certificate)
Gift of Miss D Butler Walsh 1971
MHM00613

13 Dr AV Macan (1843–1908)
Letter of recommendation for William Butler Walsh, 1877
ink on paper
18.2 × 23.0 cm
Gift of Miss D Butler Walsh 1971
MHM00627

14 **Dr Wansbrough's metallic nipple shields**, c. 1880
pewter, cardboard, paper, ink
shields 2.3 × 4.5 cm (diam.)
box 3.0 × 6.3 × 6.3 cm
printed on lid *Dr. Wansbrough's metallic nipple shields, recommended by the most Eminent Medical Men for the prevention & cure of sore nipples*.
MHM01443
(see page 137, top)

15 **'The Comfort' breast shield**, c. 1880
boxwood, cardboard, paper, ink, synthetic, fabric
each shield 2.9 × 5.6 cm (diam.)
insertion teat 2.6 × 2.8 cm (diam.)
box 4.2 × 10.2 × 7.2 cm
printed inside packaging *The Medical Profession strongly advise that ALL MOTHERS should use a Breast Shield, especially during the first week of Nursing, as a protection against the pain arising from tender nipples. Breast Shields are invaluable in cases where the nipples are insufficently large for the child to suck with freedom and comfort … The Shield fits close to the breast preventing suction of air by the child, also leakage, which causes annoyance and discomfort to the mother*.
MHM01442
(see page 137, bottom)

Opposite: Cat. 1, 2, 3, 4 (details above).

16 Maw (London, active c. 1820s–1940s)
'The Challenge' feeding bottle, c. 1880–1910
glass
7.8 × 17.8 × 9.8 cm
moulded on bottle *THE CHALLENGE / FEEDING BOTTLE*
moulded on stopper *No. 36846 MAW LONDON ENGLAND*
MHM02104

17 Kuwa (Germany)
Feeding bottle, c. 1880–1910
glass, rubber, wood, bone
18.3 × 5.4 cm (diam.)
MHM02109
Feeding bottle with integrated thermometer and gradations up to 8 ounces.

18 **Feeding bottle**, c. 1880–1910
glass, rubber, wood, bone
19.1 × 7.7 × 6.6 cm
MHM02108

19 Dr Felix Henry Meyer (1858–1937)
Patient case book, 1882–83
bound volume
Gift of Mrs Felix Meyer 1967
MHM04158
Compiled while Dr Felix Henry Meyer was the sole resident medical officer at the Melbourne Lying-In Hospital (1881–85).

20 Melbourne Lying-In Hospital
Twenty-seventh annual report of the committee of management of the Melbourne Lying-In Hospital and Infirmary for Diseases of Women & Children
Melbourne: Fergusson & Moore
printed booklet, 1884
21.5 × 14.0 cm
MHM00699

21 **Epistle: dedicatory document for Dr Felix Meyer**, 1885
paper, cardboard, paint
30.6 × 24.2 cm
MHM01733
Dedicatory epistle to Dr Felix Meyer (1858–1937), written upon his retirement from the Melbourne Lying-In Hospital's infirmary wards.

22 **Lieutenant-Colonel Gerald Herbert Fetherston**, c. 1886
photograph, mounted
20.0 × 14.0 cm
Gift of Miss Fetherston
MHM05932
Dr Gerald Herbert Fetherston (1829–1901) was resident medical officer at the Melbourne Lying-In Hospital 1860–65. He was elected an honorary member of staff in 1869 and served until 1891. His wife, Sarah Ellen Fetherston (née Harvey), was matron 1860–64. Dr Fetherston served as a surgeon in the Victorian (Colony) Military Forces from 1886, and was promoted to surgeon-colonel in 1898.

23 **First women students at the University of Melbourne School of Medicine**, 1887
photograph, mounted
28.0 × 33.0 cm
MHM02037
left to right, with year of graduation: Helen Sexton (1892), Clara Stone (1891), Lilian Alexander (1892), Margaret Whyte (1891), Grace Vale (1894), Annie O'Hara (1894), Elizabeth O'Hara (1893)
(see page 135)

24 George H Lang (Melbourne, active c. 1887–1932)
The Women's Hospital, c. 1890
photograph, mounted
26.9 × 35.4 cm
MHM00408

25 Harvie & Sutcliffe (Melbourne, active c. 1890s–1908)
Staff at the Women's Hospital, c. 1897
photograph, mounted
25.3 × 30.4 cm
MHM00407
back row: Dr GH Fetherston (1829–1901), Dr P Ward Farmer, Dr G Herne, Dr FWW Morton (1857–1930), Dr JDK Scott
front row: Dr G Rothwell Adam (1853–1925), Dr MU O'Sullivan (1853–1917), Dr W Balls-Headley (1842–1918), Dr Felix Meyer (1858–1937), Dr JW Dunbar Hooper (1860–1934)
(see page 116)

26 George H Lang (Melbourne, active c. 1887–1932)
The Women's Hospital, c. 1900
photograph, mounted
26.7 × 35.6 cm
MHM00409

27 Harvie & Sutcliffe (Melbourne, active c. 1890s–1908)
Operating theatre, Women's Hospital, c. 1897
photograph, mounted
25.4 × 30.4 cm
MHM00406
(see page v)

28 Mayer & Meltzer (London, active c. 1848–1950)
Spencer Wells' ovariotomy trocar, c. 1900
metal, brass
10.8 × 27.1 × 4.2 cm (both parts)
Gift of the estate of Dr Felix Meyer
MHM01838
Dr Thomas Spencer Wells (1818–1897), surgeon to Queen Victoria, improved the ovariotomy trocar with a hook fitting to secure the cyst.

29 Walter F Wyatt (superintendent, Women's Hospital)
Circular notifying contributors and life governors of a special general meeting, 1910
printed leaflet
41.2 × 12.1 cm
MHM00700

30 Advisory Board of the Women's Hospital
Rules adopted at meeting held on Wednesday, 29th June, 1910
Melbourne: Modern Printing Co. Ltd, 1910
printed leaflet
20.0 × 13.0 cm
MHM00702

31 **Students Frank L Trinca and Douglas C Pigdon holding their first babies at the Women's Hospital**, 1914
photograph, mounted
17.7 × 20.0 cm
Courtesy of Dr John Trinca 2002
MHM05917
(see page 193)

32 ***5th year medical students, Melbourne University***, 1914
silver-gelatin emulsion photograph, mounted
21.3 × 28.5 cm (photograph)
30.1 × 33.2 cm (mount)
Gift of Michael Silverstein 2016
MHM2016.81
JV Guest, ER Kerr, FF McMahon, H Halloran, ER Welch, ST Appleton, RG Woods, K McK Doig, AS Anderson, M Sorokiewich, F Colahan, Samuel Charles Fitzpatrick, JC Harper, JE Shelley, J Hughston, K Moore, WAH Birrell, G Sleeman, MR Hughes, HB Graham, GC Scantlebury, R Birnie, VB Alexander, JEM Wigley, AN Dickson, AEV Hartkopf, PN Whitehead, LL McMahon, HW James, Miss G Wisewould, Miss M Lane, NL Prichard, WS Newton, TA Wright, RW Hogg, Miss EN Balaam, Miss AL Bennett, Miss EJ Davies, W Rogerson, GC Bury, W O'Shanossey, E Glassford, J Shanasy.

33 **Drs Ellen Balaam, Annie Bennett and Gweneth Wisewould and a nurse at the Women's Hospital**, c. 1915
photographic postcard
14.0 × 9.0 cm
Gift of Lois Parr, niece of Ellen Balaam
MHM2014.17
background: Dr Ellen Balaam (1892–1985) and Dr Annie Bennett (1891–1940)
foreground: Dr Gweneth Wisewould (1884–1972); unidentified nurse stands to the right
These three doctors were to make a remarkable contribution to medicine in Victoria. Ellen Balaam was the first woman from her continuation school (now known as MacRobertson Girls' High School) to graduate in medicine, and the first woman to do general surgery in Melbourne. Annie Lister Bennett devoted her life to medicine and the community of the Goulburn Valley at Mooroopna in Victoria. Gwen Wisewould struggled to establish a practice in Melbourne so moved in Trentham in 1938, where she ran a practice until her death in 1972.
(see page xii and front cover)

34 Women's Hospital and Infirmary for Diseases Peculiar to Women, Melbourne
Certificate of life governor, awarded to Dr Felix Meyer, 1918
paper, ink
33.6 × 25.1 cm
Gift of Mrs Felix Meyer 1975
MHM03328
(see page 187)

35 University of Melbourne Studio
Dr Hilda Kershaw with medical students, holding babies at the Women's Hospital, 1918
photographic postcard
9.0 × 14.0 cm
MHM04572
back row: Spech Jackson (graduated 1919), Ern Chenoweth (1920)
front row: Robert Southby (1921), Dr Hilda Kershaw (1917), Carl Wood (1920)

36 Women's Hospital
The by-laws of the Women's Hospital (Incorporated) Melbourne
Melbourne: Shipping Publishing Co.
printed booklet, 1919
21.5 × 13.9 cm
MHM00703

37 The Sears Studio (St Kilda, active c. 1900–1950s)
Intern students group at the Women's Hospital, 1923
photograph, mounted
21.4 × 30.2 cm
Gift of David Judkins 2014
MHM2014.436
standing: Ron Fisher, Gordon Livingstone, Harry Judkins, John Blewett
seated: Eric Fargie, Basil Stafford, Ian Hart, James Broben, Dr John Green (medical superintendent)

38 The Sears Studio (St Kilda, active c. 1900–1950s)
Resident medical officers at the Women's Hospital, c. 1929
photograph, mounted
25.0 × 31.0 cm
Gift of Dr Lois Bell 2000
MHM04309
back row: Dr Betty P Darling, Dr WB Cameron, Dr BG Wood
front row: Dr Vera Scantlebury, [Dr William Alexander Birrell?], Dr Agnes Donaldson
(see page 35)

39 The Sears Studio (St Kilda, active c. 1900–1950s)
Medical graduate students posed in the grounds of the Women's Hospital, c. 1930s
photograph
15.3 × 20.0 cm (photograph)
24.5 × 30.1 cm (mount)
Gift of Rupert Refshauge Bergin 2017
MHM2017.7

40 **Sims' vaginal speculum**, c. 1930
chrome-plated brass
10.5 × 18.0 × 4.0 cm
On loan from the Barrie Thompson Collection
MHML0241

41 The Mothers' Clinics for Constructive Birth Control and Racial Progress (London, est. 1921)
Racial occlusive cap, c. 1930
instructions for contraceptive device
printed leaflet
22.0 × 14.3 cm
MHM04298
Contraceptive caps, also called cervical, vault or diaphragm caps, are barrier contraceptives: they sit over the cervix and act as a barrier to prevent sperm from entering the uterus. This 'Racial' brand of cervical cap was modified by Dr Marie Stopes (1880–1958). 'Racial' related to Stopes' belief in eugenics, the theory popular in the early 1900s that selective breeding could remove 'undesirables' from society. Stopes founded the Society for Constructive Birth Control, opened the first of her birth control clinics in London in 1921, and is best remembered as a feminist and birth control pioneer.

42 Women's Hospital, maternity department
Patient record, June 1931
paper, ink
31.5 × 20.5 cm
Gift of John Paull 2012
MHM2012.157
Patient record of E—— P——, admitted on 17 June 1931. Professor Marshall Allan was the honorary surgeon.

43 Women's Hospital, maternity department
Patient record, July 1931
paper, ink
31.5 × 20.5 cm
Gift of John Paull 2012
MHM2012.158
Patient record of L—— E——, admitted on 11 July 1931. Professor Marshall Allan was the honorary surgeon.

44 The Sears Studio (St Kilda, active c. 1900–1950s)
Women's Hospital staff, students and babies, c. 1937–38
photograph (mounted), ink, pencil
24.6 × 30.3 cm
Previously the University of Melbourne Collection, gift of Dr Bruce Robinson
MHM00414
back row: Willis, Strang, Nelson, Summons, Lowe, Taylor, Alexander
front row: O'Donnel, Lang, Robinson, Marshall Allan, RM Rowe, Clegg, Fraser, Sherwin

45 The Sears Studio (St Kilda, active c. 1900–1950s)
Women's Hospital, 1938
photograph, mounted
24.7 × 30.2 cm
MHM02910
back row: DL Mercer, GV Rudd, MM Gooey, B Widmer, AJM White, LP Gray, JW Perry, Dr Gauld
front row: KH Morrison, JM Gunson, Dr R McK Rome (superintendent), Professor R Marshall Allan, J Refshauge, JD Craddock, LR Trudinger

46 **Dr Henry Crawford Mollison**, c. 1940
photograph, mounted
33.1 × 26.7 cm
MHM00530
Dr Crawford Henry ('Mollie') Mollison (1863–1949) was government pathologist at the city morgue for 55 years, a lecturer in medicine at the University of Melbourne, and pathologist at the Women's Hospital.

47 **Dr Kate Campbell**, c. 1943
photograph, mounted
23.9 × 18.8 cm
Gift of Winifred Crick
MHM02256
Dr Kate Isabel Campbell (1899–1986), was a pioneer of neonatal care, and the Women's Hospital's first paediatrician.

48 The Sears Studio (St Kilda, active c. 1900–1950s)
Women's Hospital, April 1946
photograph, glass, cardboard, metal, ink
25.3 × 30.4 cm (frame)
Saul Wiener Collection
MHM02013.249
back row: H Eizenberg, WL Jenkins, PG Hughes, JJ McCarthy, JL Connell, D Denton, WL Kermond
middle row: S Rose, H Buckstein, D Rabinov, JP Morris, GM Stubbs, HM Bower, DF Schlicht, HM Bray, W Adeney
front row: E Friedlich, WR Rogerson, S Weiner [Wiener], Sr KJ Teitz, Professor M Allen [Allan], Dr CK Churches, Sr B Shannon, Miss DD Bialestock, JGB Cooper, H Denehy
(see page 18)

49 James Milne (1924–2018)
Lance, c. 1950
ink on paper
7.0 × 6.5 cm
Gift of Dr James Milne 1987
MHM02718
Caricature of Acting Professor Lance Townsend (1913–1983), from a series of 26 drawings entitled 'Some characters seen in the course of a medical education' by Dr James Milne.
(see page 153)

50 Hellige Inc. (New York, est. 1927)
Hemometer, c. 1950
plastic, glass, rubber
5.9 × 15.9 × 10.1 cm (box)
incised on box *WD 34. R.W.H.*
written in ball-point pen on cloth tape on box *Ward 34, Standard: 13.9 / Hemometer: 14.3 / Do not remove / Please use it after hours*
Gift of the Royal Women's Hospital 1986
MHM01693
A compact kit for determining the haemoglobin in the blood by diluting an acidified sample and comparing it with a coloured standard. Used in Ward 34 of the Women's.
(see opposite)

51 **Pathology building, Royal Women's Hospital**, c. 1954
photograph
9.0 × 11.6 cm
MHM00720

52 Charles Edward Sayers (1901–1979)
The Women's: A social history to mark the 100th anniversary of the Royal Women's Hospital, Melbourne, 1856–1956
Melbourne: Renwick Pride Printers for the Royal Melbourne Hospital, 1956
Gift of Dr Murray W Verso 2012
MHM2012.389

53 **Dr Vera Krieger, Dr Hans Bettinger and Dr Hildred Butler**, 1966
photograph
12.4 × 19.6 cm
MHM00708
Taken at farewell for biochemist Dr Vera Krieger (1901–1992) from the pathology department of the Royal Women's Hospital, on 28 October 1966.
(see page 118)

54 ***The Royal Women's Hospital Bulletin***, vol. 1, no. 18, November 1966
printed newspaper
27.9 × 21.6 cm (folded)
MHM00695
Issue featuring the retirement of biochemist Dr Vera Krieger (1901–1992).

55 **Dame Annie Jean Macnamara, Professor George Paton and Dame Kate Campbell DBE in University of Melbourne ceremonial robes**, c. 1966–71
photograph
12.2 × 16.8 cm
MHM02198

56 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
'Lippes loop' intra-uterine contraceptive device, c. 1970s–80s
plastic, paper, cellophane, ink
inserter 33.3 cm (length)
loop 3.0 cm (diam.)
Gift of the estate of Dr T Wright and Dr E Balaam 2000
MHM02013.89.2

57 **Dr Kate Campbell examining a premature baby in an isolette**, 1974
photograph
23.8 × 17.5 cm
Gift of Winifred Crick
MHM02260
(see page 50)

58 **Sir Lance Townsend**, 1980
photograph
19.7 × 12.1 cm
MHM00690
Dr Lance Townsend (1913–1983) became the University of Melbourne's first professor of obstetrics and gynaecology in 1951. He was dean of medicine 1971–77 and was knighted in 1970.

Cat. 50 Hellige Inc. (New York, est. 1927), **Hemometer**, c. 1950, plastic, glass, rubber; 5.9 × 15.9 × 10.1 cm (box). MHM01693, gift of the Royal Women's Hospital 1986, Medical History Museum, University of Melbourne.

AUSTRALIAN MEDICAL ASSOCIATION ARCHIVE, MEDICAL HISTORY MUSEUM (gift of AMA Victoria 2011)

59 Royal College of Surgeons, Edinburgh
Certificate permitting Dr David Elliot Wilkie to practise surgery and pharmacy, 1838
paper, ink, wax
41.0 × 32.0 cm
MHM03804
Dr David Elliot Wilkie MD, MRCS, LRCS (1815–1885) arrived in Adelaide in 1838 as a ship's surgeon, moved to Melbourne in March 1839, and practised medicine in partnership with Dr David Patrick, becoming an honorary physician at the Melbourne Hospital in 1840, specialising in diseases of women and children. His address on the alleviation of fetal distress delivered on 1 December 1846 was the first-recorded scientific paper in the Port Phillip District.

60 University of Edinburgh
Certification that David Elliot Wilkie studied obstetrics and the diseases of women, 1838
paper, ink, wax, plastic
66.7 × 37.5 cm
MHM03806

61 Lying-In Hospital, Dublin
Attendance certificate for obstetrics lectures, provided to Gerald Herbert Fetherston, 10 November 1856
paper, ink, wax, ribbon
37.3 × 38.0 cm (certificate)
5.6 cm diam. (seal)
MHM03845

62 Melbourne Lying-In Hospital and Infirmary for Diseases of Women and Children
First annual report
Melbourne: Campbell Printer, 1856
printed booklet
25.2 × 19.9 cm
MHMA0997.1
The Melbourne Lying-In Hospital changed its name to the Women's Hospital in 1884. 'Royal' was conferred by Queen Elizabeth II on 6 September 1954.
(see page vi)

63 Carey Reese
Cartoon satirising Dr RT Tracy and Dr LJ Martin, c. 1867
cardboard, paper, ink, type
21.1 × 27.5 cm
MHMA1225.10
(see opposite)

64 Charles Nettleton (1826–1902, active Melbourne 1854–90)
Melbourne Lying-In Hospital, c. 1868
photograph, mounted
6.3 × 10.5 cm
MHMA1309.1
The hospital's second premises, in Madeline Street, North Melbourne (now Swanston Street, Carlton), to which it relocated in 1858 after two years of operation in Albert Street, East Melbourne.
(see page 14)

65 Richard Tracy (1826–1874)
'A short history and description of the Lying-In Hospital and Infirmary for Diseases of Women and Children at Melbourne (Australia), with some account of what has been done in it'
Obstetric Society of London, 1871
printed journal
21.6 × 14.2 cm
MHMA0204.2

66 James Jamieson (1840–1916)
Letter to the committee of the Medical Society of Victoria, 28 August 1879
paper, ink, plastic
25.5 × 20.1 cm (folded)
MHMA0946.1
In this letter Dr Jamieson criticises Dr Balls-Headley's statements about *placenta previa*.

67 Women's Hospital maternity department
Medical chart for Bessie Martin, 1906
paper, ink
33.9 × 21.1 cm
MHMA1449.1
Bessie Martin, aged 17, was admitted to the maternity department of the Women's Hospital on 25 October 1906. The document includes patient details and temperature chart.

68 **Staff members and students holding babies at the Women's Hospital,** November 1909
photograph, mounted
11.5 × 16.3 cm (photograph)
17.1 × 22.7 cm (mount)
MHMA1471.12
back row: WA Fraser, WM Abbott
middle row: LEH Crowther, unidentified honorary staff member, Alfred Maclure (1883–1956, resident medical officer), KS Cross
front row: AM Grant

69 **Students and staff, Women's Hospital**, c. 1917
photograph, mounted
16.9 × 21.4 cm (photograph)
19.5 × 23.1 cm (mount)
Gift of Mitchell Henry O'Sullivan
MHMA1313.7
Mitchell Henry O'Sullivan among hospital staff and other medical students, including W Joan Hayes, Elizabeth Sweet and student Eric Gandevia

Cat. 63 Carey Reese, **Cartoon satirising Dr RT Tracy and Dr LJ Martin**, c. 1867, cardboard, paper, ink, type; 21.1 × 27.5 cm. MHMA1225.10, Australian Medical Association Archive, gift of AMA Victoria 2011, Medical History Museum, University of Melbourne.
The Melbourne Lying-In Hospital and its medical co-founder Dr Richard Thomas Tracy (1826–1874) were not without their critics. This cartoon appeared in about 1867 when Dr Lawrence Joseph Martin (1826–1879) became honorary physician to the hospital after a bitterly fought election, in which it was said that Tracy used undue influence to achieve this end. Tracy, shown here wrapped in a toga, stands on the steps of the Lying-In Hospital ('St Jabbers Hospital') and Martin stands below. References are made to mistakes in the diagnosis of ovarian tumours, wind and pregnancy, and to an erroneous statement of Tracy's that decomposing tissue could be restored by dipping in spirit. Martin's remark refers to Tracy's failure to have a son (Tracy and his wife had seven daughters). There are crude allusions to the Irish origins of both men, and to mortality in the hospital.

70 **Women's Hospital staff and doctors, Melbourne**, c. 1927
photograph, cardboard, paper, ink
21.5 × 19.0 cm (cardboard and protective paper)
15.2 × 20.1 cm (photograph)
MHMA1313.8
Women's Hospital staff and doctors, including Peter Slater, DL Yoffa, Matron McDonald, [KL Chambers or Roy Chambers]

71 Herbert Turner and AE Broomhall for the Nurses Board of the State of Victoria
Further regulations relating to the registration of nurses
Melbourne: HJ Green, Government Printer, 1927
Extract from *Victoria Government Gazette*, no. 172, 14 December 1927, pp. 3921–6
printed leaflet
24.2 × 15.4 cm
MHMA1165.1

72 The Sears Studio (St Kilda, active c. 1900–1950s)
The Women's Hospital, 1946
photograph, mounted
24.5 × 30.1 cm
MHMA1342.1
back row: AD Corney, N McH Ramsey, W McLaren, FJ Mouser, AC Green, TT Currie, PA Crooke, K Krokoos, AW Hopper, DJM Bartram, SC McKay
front row: FH Raynor, PCB Bradley, PM Dow, RW Webster, Sister KJ Teitz, Professor R Marshall Allan, Dr CK Churches, Sister BK Phillips, LD Hurley, GFE Deravin, WE Downey

73 Women's Hospital
The 89th annual report of the committee of management of the Women's Hospital for the year ending 30th June, 1946
Melbourne: Renwick Pride, 1946
printed booklet
15.1 × 18.7 cm
MHMA1873.7

74 Lance Townsend (1913–1983)
'Obstetrics through the ages'
Medical Journal of Australia, vol. 1, no. 17, 26 April 1952
printed journal
27.0 × 20.8 cm
MHMA0771.1

75 Lance Townsend (1913–1983)
'Obstetrics today and yesterday'
Medical Journal of Australia, vol. 2, no. 10, 4 September 1954
printed journal
27.0 × 20.8 cm
MHMA0771.2

76 Royal Women's Hospital
Medical and clinical report of the Royal Women's Hospital, Melbourne, Australia, 1958
printed volume
21.5 × 14.1 cm
MHMA1134.1

77 Royal Women's Hospital
Centenary of nurse training in Australia 1862–1962, c. 1962
printed volume
22.1 × 14.7 cm
MHMA1165.4

78 Dr Frank MC Forster (1923–1995)
'Richard Thomas Tracy and his part in the history of ovariotomy'
offprint from *The Australian and New Zealand Journal of Obstetrics and Gynaecology*, vol. 4, no. 3, September 1964
Melbourne: AH Massina & Co., 1964
printed booklet
24.0 × 18.4 cm
MHMA1434.1

79 Dr Frank MC Forster (1923–1995)
'A case of ovariotomy instruments sent by Thomas Spencer Wells to Richard Thomas Tracy'
London: Headley Brothers Ltd, 1965
offprint from *The Journal of Obstetrics and Gynaecology of the British Commonwealth*, vol. 72, no. 5, October 1965, pp. 810–15.
printed booklet
24.6 × 18.3 cm
MHMA1434.2

80 Colin Ferguson Macdonald (1895–1969)
'X-rays and the changing years', 1967
transcript of the 1967 Richard Tracy Memorial Lecture
typescript
26.0 × 20.6 cm
MHMA1693.7

81 ***The Royal Women's Hospital Bulletin***, vol. 1, no. 21, May 1967
printed newspaper
26.9 × 21.4 cm
MHMA1693.8

82 Isabel Carter (b. 1916)
'The baby saver'
The Herald, 9 February 1968
newspaper cutting
59.5 × 24.5 cm
MHMA1796.1
Article about Professor Lance Townsend and his work to reduce the mortality rates of babies.

83 ***Birthplace: Official Publication of the Royal Women's Hospital Melbourne***
vol. 1, no. 1, June 1968
printed journal
27.7 × 21.5 cm
MHMA1857.13

84 **Supplement to *Birthplace*: Special building issue**
1 June 1968
printed booklet
38.2 × 25.5 cm
MHMA1857.16
Features the construction of new buildings for the Royal Women's Hospital.

85 ***Birthplace: Official Publication of the Royal Women's Hospital Melbourne***
vol. 1, no. 2, September 1968
printed journal
27.7 × 21.5 cm
MHMA1857.10

86 ***Birthplace: Official Publication of the Royal Women's Hospital Melbourne***
vol. 1, no. 3, December 1968
printed journal
27.6 × 21.5 cm
MHMA1857.11

87 Royal Women's Hospital
111th annual report, 1968
printed volume
24.7 × 18.0 cm
MHMA1873.8

88 ***Birthplace: Official Publication of the Royal Women's Hospital Melbourne***
vol. 1, no. 4, March 1969
printed journal
27.7 × 21.5 cm
MHMA1857.12

89 ***Birthplace: Official Publication of the Royal Women's Hospital Melbourne***
vol. 2, no. 1, June 1969
printed journal
27.4 × 21.8 cm
MHMA1914.8

90 **'What happened to Lois's 35 nursery mates?'**
The Herald, 9 March 1970
newspaper cutting
23.4 × 28.2 cm
MHMA1857.4
Article about the record of 36 babies born in 24 hours at the Royal Women's Hospital.

91 Royal Women's Hospital
Medical and clinical report of the Royal Women's Hospital, Melbourne, Australia, 1970
printed booklet
21.5 × 14.1 cm
MHMA1134.2

92 Royal Women's Hospital
113th annual report, 1970
printed booklet
24.2 × 18.1 cm
MHMA1873.9

93 Royal Women's Hospital
Hospital 114th annual report, 1971
printed booklet
24.1 × 18.0 cm
MHMA1873.10

94 M Johnson
The Royal Women's Hospital Melbourne, 1972
photograph
19.8 × 25.0 cm
MHMA1857.8
The hospital photographed from the east side of Cardigan Street, after the houses had been demolished.

95 M Johnson
The Royal Women's Hospital Melbourne, 25 January 1972
photograph
19.8 × 25.0 cm
MHMA1857.7

96 ***A history of the Royal Women's Hospital***, 1 March 1972
paper, ink
24.7 × 19.0 cm
MHMA1914.3

97 ***The Royal Women's Hospital, Melbourne***, 10 March 1972
photograph
21.1 × 25.4 cm
MHMA1857.9
(see page 30)

98 Derek Ballantine (author)
Bill Tindale (photographer)
'Where it's a woman's world', 1972
reprint of newspaper article from *The Sun News-Pictorial*, 3 May 1972
41.2 × 58.8 cm
MHMA1857.1
Article about the beginnings of the Melbourne Lying-in Hospital and its achievements in women's and children's medical care.

99 ***General information for the Royal Women's Hospital Opening Ceremony***, 1972
paper, ink
33.0 × 21.5 cm
MHMA1857.20

100 ***The official opening of the Royal Women's Hospital 3AW Community Service Board Block***, 7 May 1972
printed booklet
24.3 × 17.8 cm
MHMA1857.18

101 Royal Women's Hospital
115th Annual Report, 1972
printed booklet
24.0 × 18.0 cm
MHMA1873.11

102 Royal Women's Hospital
116th annual report, 1973
printed booklet
24.2 × 18.1 cm
MHMA1873.12

103 **Family grave of Dr Richard Thomas Tracy, Melbourne General Cemetery**, 7 November 1974
photograph
18.0 × 24.7 cm
MHMA1225.4
Photograph of the family grave of Dr Richard Thomas Tracy (1826–1874), commemorating the centenary of his death. Attendees include J Cunningham, Mr Gillespie, Matron Lawson, Dr F Forster, Mrs Joy Snedden and Dr J Nattrass.

104 **Commemorative plaque for Dr Richard Thomas Tracy, Melbourne General Cemetery**, 7 November 1974
photograph
17.4 × 24.7 cm
MHMA1225.5

105 ***Newsletter Bulletin Published for the Men and Women of the Royal Women's Hospital, Melbourne***, vol. 7, no. 6, November–December 1974
paper, ink
27.4 × 22.2 cm
MHMA1225.7

106 Royal Women's Hospital
117th annual report, 1974
printed booklet
22.2 × 28.0 cm
MHMA1873.13

107 Royal Women's Hospital
Annual report, 1975
printed booklet
21.6 × 27.8 cm
MHMA1873.14

108 Dr Kelvin Churches
120 years of abortion in Melbourne: A social, medical and legal history
reprint of newspaper article from *The Age Review*, 24 April 1976
printed booklet
60.0 × 42.8 cm
MHMA2159.2
The article presents the history and most notable cases and consequences of illegal abortion in the past century, and improvements to women's health achieved by legalisation. It also discusses the position and development of the practice at the Royal Women's Hospital.

109 Margaret M Tigue
James P O'Neill
Rosemary D Wentworth
Leo Ingwersen
Letters to the editor
The Age, 28 April 1976
newspaper cutting
31.0 × 21.2 cm
Four letters responding to Dr Kelvin Churches' article on abortion. 'Legal killing of the unborn a tragic devaluation of life', by Mrs Margaret M Tigue (state president, Right to Life Association of Victoria); 'Not the answer', by James P O'Neill FRCSE, FRACS, FROG; 'State's duty to make abortion safe', by Rosemary D Wenworth (North Balwyn); 'Policy move', by Leo Ingwersen (Ringwood).
(see page 173)

110 Jo Wiles
'Opening delivery bowled him over'
The Age, 24 June 1977
newspaper cutting
31.6 × 17.1 cm
MHMA1796.2
Article about Professor Lance Townsend and his work, in light of his forthcoming retirement.

111 Barbara Hooks
'Memories of women slowly dying of sepsis: Praise for abortion ruling'
The Age, 3 October 1977
newspaper cutting
18.8 × 29.5 cm
MHMA1857.5
Recollections of Mr Jim Cunninghan (retiring secretary of the Royal Women's Hospital) on the legality of abortion, medical students' training, and hospital costs.

112 Planned Parenthood Clinic, Prahran (Melbourne)
Jotting on contraception and contraceptive failure, December 1977
paper, ink
24.8 × 18.6 cm
MHMA2159.3

113 Dan McDonnell
'Nurses look back', 14 February 1979
paper, ink
19.8 × 29.1 cm
MHMA1165.3
Article about three former nurses who began their training at the Royal Women's Hospital: Pearl Finn, Ruby McKay and Dorothy Doyle.

114 Royal Women's Hospital
Set of six postcards
Melbourne: The Weekly Times, 1981
printed postcards
10.3 × 15.0 cm
MHMA2366.4

115 Royal Women's Hospital
Our 125 years, 1981
paper, ink
27.9 × 21.0 cm (folded)
MHMA2366.5

116 Royal Women's Hospital
Caring for women: The Royal Women's Hospital, 1981
paper, ink
29.7 × 21.0 cm
MHMA2366.6

117 Hedda Moye
'125 years of caring'
The Sun, 12 August 1981
newspaper cutting
40.2 × 59.6 cm
MHMA2366.1
Article about the Royal Women's Hospital for its 125th anniversary in 1981.

118 Royal Women's Hospital
125th anniversary year: The Royal Women's Hospital annual report, 1981
printed volume
21.5 × 27.8 cm
MHMA2366.7

ROYAL WOMEN'S HOSPITAL COLLECTION

119 Hewlett & Sons (London)
Simpson's short midwifery forceps, c. 1840s
nickel-plated metal, ebony
24.0 × 8.0 × 3.9 cm
stamped on handle *HEWLETT / SONS / LONDON*
A1994_09_005
(see page 141, top)

120 Melbourne Lying-In Hospital
Prospectus: *The Melbourne Lying-In Hospital, and Infirmary For Diseases of Women and Children*, 1856
framed document: paper, wood, glass
47.0 × 39.0 cm (frame)
verso in black ink *Women's Hospital / First Committee year 1856 / Presented by Mrs D'Ebro 1929 (Blanche Tracy D'Ebro)*
Gift of Blanche Mary Tracy D'Ebro 1929
A1990_18_556
Blanche Mary D'Ebro (née Tracy, 1859–1943, daughter of hospital co-founder Dr Richard Tracy) served as honorary secretary and committee member of the Women's Hospital 1902-10, and as the committee's representative on the hospital's advisory board for a further two years. Her husband, architect Charles D'Ebro, served as a trustee of the hospital site from 1903 until his death in 1920.

121 W Skidmore & Company Ltd (Sheffield, England, est. c. 1851)
Simpson's long midwifery forceps, c. 1860s
nickel-plated metal, ebony
34.5 × 9.0 × 7.5 cm
stamped *W. SKIDMORE / SHEFFIELD*
A1994_09_004
(see page 141, bottom)

122 John Weiss & Son (London, est. 1787)
Ovariotomy instruments, c. 1864
wood, metal, rubber, tortoiseshell
8.0 × 23.3 × 31.5 cm (box)
inscribed on case *Richard / Thos Tracy / MD*
Presented to the Royal Women's Hospital by Tracy descendant Robert Tracy-Inglis 1963
A1990_16_001
These instruments belonged to Dr Richard Tracy (1826–1874). They were assembled for him by his mentor, Sir Thomas Spencer Wells.
(see page 129)

123 FJ Stubbs & Co. (Victoria, active c. 1858–1908)
Dr Richard Tracy, 1869 (reprinted 1900)
photograph
47.0 × 39.0 cm (frame)
Gift of Blanche Mary Tracy D'Ebro, daughter of Dr Tracy, 1929
A1990_18_052
Dr Richard Tracy (1826–1874) was one of the two founding doctors of the Melbourne Lying-In Hospital.

124 Fergusons & Mitchell (Melbourne)
Illuminated address presented to Dr Richard Tracy, 1873
ink, gold, paper, leather
37.5 × 29.0 cm
on front cover *Address to R. T. TRACY ESQ MD*
signed *Thomas T A'Beckett, Chairman*
A1990_09_004
Illuminated address presented to Dr Richard Tracy in 1873, acknowledging his service to the Melbourne Lying-In Hospital.

125 Richard Thomas Tracy
Diary, 1873
cloth, paper, ink
19.0 × 12.0 cm
A2000_14_001

126 **Baby's bassinet**, 1880
metal, wire, paint
73.0 × 68.0 × 45.5 cm
A2010_31_001
This type of bassinet was used in the hospital from the late 1800s until about 1969. Several photographs in the collection, dating from the 1880s, show these bassinets in use.

127 **Examination couch**, c. 1885
wood, leather, horsehair, metal
93.0 × 186.0 × 70.0 cm
Gift to the Royal Women's Hospital by Dr Stewart Johnston
A2002_21_001
Examination couch used by Dr JW Dunbar Hooper (1860–1934) in his Collins Street rooms. Dr Hooper was an honorary physician at the Women's Hospital 1888–98. The chair of obstetrics and gynaecology at the University of Melbourne was named in his honour in 1951.
(see page 139)

128 **Illuminated address presented to Geneviève Ward**, 1885
coloured ink on paper; leather binding
48.0 × 36.0 cm
tooled in gold on front of binding *PRESENTED TO MISS GENEVIÈVE WARD IN GRATEFUL REMEMBRANCE OF HER GENEROSITY TO THE WOMEN'S HOSPITAL OF MELBOURNE NOVEMBER 6TH 1885.*
A1992_02_001
(see page 133)

129 William Drummond & Co. (Melbourne, active 1885–2002)
Tea service, 1888
sterling silver, ebony
12.5 × 23.0 × 10.0 cm (teapot)
3.5 × 5.5 cm (burner)
9.0 × 14.5 × 12.0 cm (kettle stand)
8.0 × 10.0 × 4.7 cm (milk jug)
7.5 × 13.2 × 6.2 cm (sugar bowl)
stamped on base of teapot *H & S / DRUMMOND / MELB 2329*
engraved *PRESENTED TO / MRS TURNBULL / BY THE MEMBERS OF / Committee / and Honorary Medical Staff / of the / WOMEN'S HOSPITAL / on the occasion of her resignation / of the office of / PRESIDENT / July 31st / 1888*
A2000_48_002
(see page 131)

130 **Mourning locket**, 1892
jet, gold chain, silk, photographic paper
43.0 × 34.0 × 10.0 cm
engraved monogram *CA*
A2003_11_001
A locket portrait of Frances Perry (1814–1892), co-founder and first president of the Melbourne Lying-In Hospital and Infirmary for Diseases Peculiar to Women and Children.

131 W & T Avery Ltd (Birmingham, England, est. 1818)
Baby scales with basket, c. 1900
metal, enamel, wicker
43.0 × 69.0 × 39.0 cm
engraved *British made at Birmingham England*
A2015_07_001

132 **Nurses, mothers, and babies in wire bassinets in ward**, c. 1900
photograph
17.0 × 23.0 cm
A1991_23_051_24

133 John Augustus Bernard Koch (1845–1928)
Block plan of the Women's Hospital, 1906
ink on paper
59.0 × 70.0 cm (plan)
73.0 × 82.0 cm (frame)
A1990_18_562
In 1906 an architectural competition was held for a new Women's Hospital. One of the seven entrants was JAB Koch. The successful entrants were JJ & EJ Clark.
(see page 26)

134 Women's Hospital and Infirmary for Diseases Peculiar to Women, Melbourne
Nurse's certificate, issued to Lois Bales, c. 1915
paper, ink
32.5 × 23.7 cm
A1991_12_036
The certificate reads *Women's Hospital / Infirmary for Diseases Peculiar to Women / Melbourne. / This is to certify that / Lois Bales / has received Instruction in the / Special work of the Gynaecological / Department of this Hospital for a period of six months and, after / due examination, was found to be competent to discharge the duties of a / Gynaecological Nurse*.

135 **Florence Green's midwifery case**, 1916
leather, cloth, metal
12.0 × 30.0 × 43.0 cm
Gift of Margaret and Eric Smith (great-nephew of Florence Green) 2018
A2018_12_001
This midwifery case was used by nurse Florence Green (1876–1964).
(see page 145)

136 Royal Victorian Trained Nurses Association
Badge, 1918
metal
3.0 cm (diam.)
Royal Victorian Trained Nurses Association
Gift of Margaret and Eric Smith (great-nephew of Florence Green) 2018
A2018_12_001_132

137 **Badge**, 1919
metal
2.5 cm (diam.)
SRN [Senior Nurse]
Gift of Margaret and Eric Smith (great-nephew of Florence Green) 2018
A2018_12_001_131

138 **'Wishbone' contraceptive device**, c. 1920s
copper- or gold-plated metal
6.0 × 3.0 cm
A2003_99_041
Intra-cervical contraceptive devices came into use in the late 19th century. This 'wishbone' type was developed in Germany in around 1880 and patented by Carl Hollweg in 1902. The flat end sat against the vaginal wall, with a stem protruding through the cervix into the uterus. The device works by preventing a newly fertilised embryo from implanting and growing in the lining of the uterus. Cervico-uterine devices were mostly surpassed by the intra-uterine device (IUD), which sits entirely inside the uterus, reducing the risk of bacterial transfer between cervix and uterus.

139 Department of Public Health, Victoria Midwives Board Victoria
The Midwives Regulations and Acts
Melbourne: HJ Green, Government Printer, 1924
printed booklet
22.0 × 14.0 cm
Gift of Margaret and Eric Smith (great-nephew of Florence Green) 2018
A2018_12_001_138

140 Stokes & Sons Pty Ltd (Melbourne, est. 1911)
Lapel pin, 1929
metal
5.0 × 2.7 cm
WOMEN'S HOSPITAL / APPEAL 1929 / MY BRICK
A2007_09_001
(see page 121)

141 Sybil Mary Frances Craig (Australian, 1901–1989)
Nurse Muriel Darroch (née Hamilton), 1931
pastel on paper
84.0 × 66.0 cm
inscribed *S.M. Craig*
Gift of artist Sybil Craig while a patient in Ward 33 of the Royal Melbourne Hospital in the 1980s
A1996_48_001

142 J Gray & Son (Sheffield, England, active 1849–1962)
Monaural stethoscope (Pinard), c. 1937
metal
18.1 × 6.5 cm
A2003_99_194
(see page 161, top)

143 Royal Melbourne Hospital
Certificates and degrees awarded to Betty Lawson, 1937
leather, paper, ink
various dimensions
A2000_03_009
A collection of personal certifications, including certificate awarded on 15 May 1937 by Royal Melbourne Hospital, Melbourne Training School for Nurses, to Betty Constance Lawson (1915–2006), for general nursing.

144 **X-ray machine**, 1938
photograph
16.5 × 16.5 cm
A1991_18_001_018
From an album of historic and current photographs compiled in the 1980s by the Public Affairs Department of the Women's.

145 Women's Hospital
Medical and clinical report of the Women's Hospital Melbourne for the twelve months from 1st July, 1939 to 30th June, 1940, 1940
printed volume
21.3 × 13.9 cm
A2000_35_009
(see page 171)

146 **'The "Spring rim" Dutch cap pessary' contraceptive diaphragm**, c. 1940
rubber, cardboard, paper, ink
3.5 × 6.8 × 7.0 cm
A1994_19_002
(see page 80)

147 **Grafenberg ring set**, c. 1940s
silver
9.5 × 3.0 × 3.0 cm
A2003_99_106
Gift of Dr Bertram Vanrenen
Set of 13 silver Grafenberg rings, an intra-uterine contraceptive device, threaded and secured on a length of wire.

148 G Turton and Sons (Sheffield, England)
Destructive instrument set and tray, c. 1940
metal
5.5 × 37.0 × 32.0 cm (tray)
A1994_33_001
This set of instruments was last used in about 1950, but was kept in readiness at the Women's Hospital until 1990.

149 Graham Edwin King (Australian, 1915–2008)
Sister Jean Crameri, 1945
oil on board
50.5 × 38.0 cm (board)
59.0 × 46.0 cm (frame)
signed lower right *G. E. King 45*
A2005_21_199
Jean Frances 'Cram' Crameri RN, RM, Cert.R.San 1 (1909–2005) was on the staff of the Royal Women's Hospital for 41 years, starting as a pupil midwife in 1934 and retiring as deputy matron in 1975.

150 ***Almoner Miss Isobel Strahan***, 1948
photograph
47.0 × 60.0 cm
A1991_18_001_284
(see page 96)

151 Women's Hospital
Ambulance for transporting premature baby, 1949
wood, metal, rubber, acrylic
85.0 × 115.0 × 70.0 cm
A1990_18_005
Constructed by the Women's Hospital engineer, Jack Murphy, in co-operation with Drs William Refshauge and Kate Campbell.
(see page 163, top)

152 **X-ray therapy**, c. 1950
photograph
16.5 × 16.5 cm
A1991_18_001_018

153 **Cuff from nursing uniform**, c. 1950
cotton
9.5 × 23.5 cm
written in ink *B.C. Lawson*
stamped *Made expressly for SNOW'S Melbourne / Nurse 3 ½ x 8'F1313*
A1994_18_007_001
From the uniform of Betty Lawson (1915–2006), matron of the Royal Women's Hospital 1955–77.

154 **Lapel pin**, c. 1951
metal
2.2 cm (diam.)
3AW MOTHERS DAY APPEAL / FOR THE WOMENS HOSPITAL
A2007_08_001
The hospital's first Mothers Day Appeal was held in 1951.
(see page 121)

155 **Architectural drawing of the Royal Women's Hospital**, 1951
photograph of architectural drawing
15.5 × 19.2 cm
A1991_18_001_211
Aerial view of the proposed new buildings for the Royal Women's Hospital on the corner of Swanston and Grattan Streets, Melbourne.

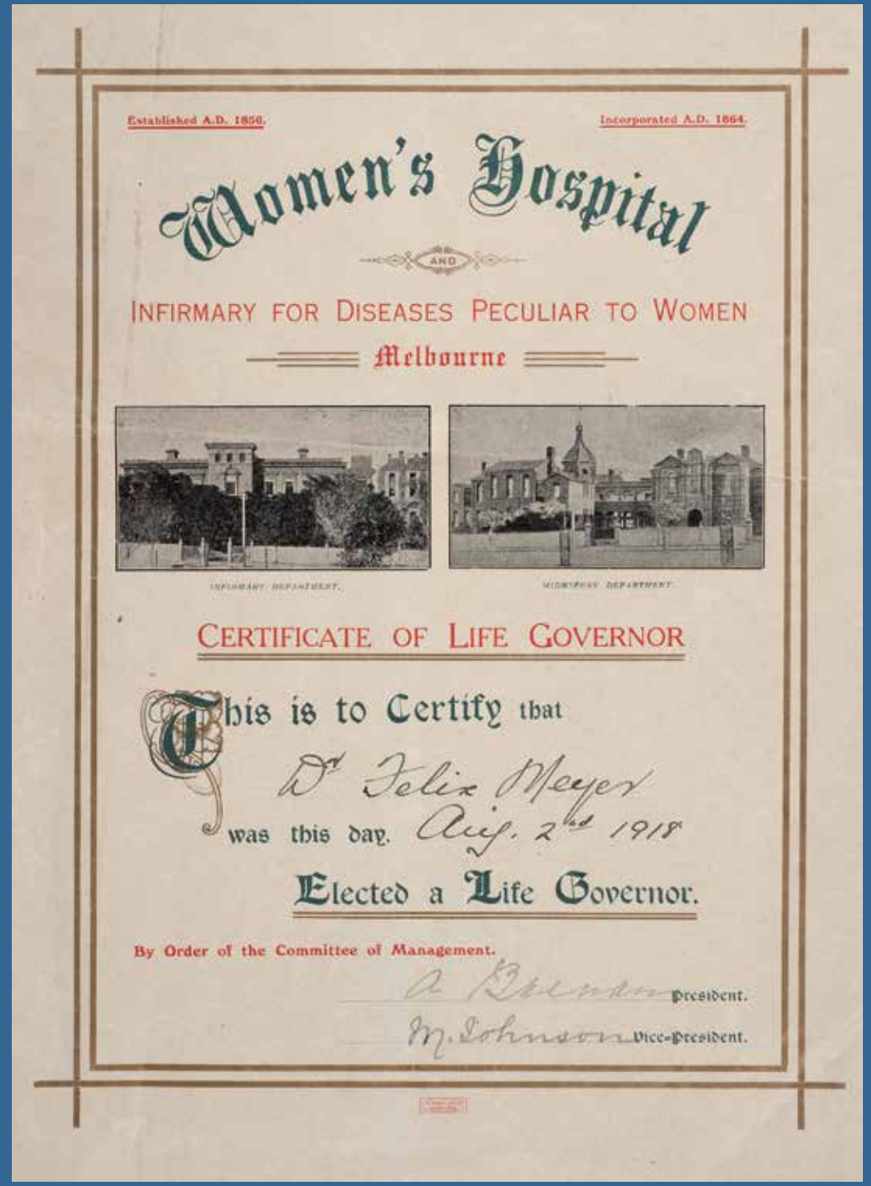
156 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
Diaphragm test set, c. 1952
metal, plastic
11.0 × 10.5 × 0.7 cm
A2003_99_086
Set of seven metallic coil-spring test rings for fitting contraceptive diaphragms.

157 **Sister Guscott (sister in charge of the premature nursery), and a staff sister, gavage-feeding a premature baby in oxygen cot**, c. 1952
photograph
23.5 × 18.5 cm
PA 1995_44_73_12
(see page 22)

158 **Cots dressed for Christmas, Sister Ferguson on left**, 1952
photograph
11.5 × 16.0 cm
PA 1995_44_73_14

159 **Christmas, Ward 15, premature nursery**, 1952
photograph
11.5 × 16.0 cm
PA 1995_44_060_031B

Cat. 34 Women's Hospital and Infirmary for Diseases Peculiar to Women, Melbourne, **Certificate of life governor, awarded to Dr Felix Meyer**, 1918, paper, ink; 33.6 × 25.1 cm. MHM03328, gift of Mrs Felix Meyer 1975, Medical History Museum, University of Melbourne.


Established A.D. 1856. Incorporated A.D. 1864.

Women's Hospital

AND

INFIRMARY FOR DISEASES PECULIAR TO WOMEN

Melbourne

CERTIFICATE OF LIFE GOVERNOR

This is to Certify that

Dr Felix Meyer

was this day. Aug. 2nd 1918

Elected a Life Governor.

By Order of the Committee of Management.

President.

Vice-President.

160 **Christmas, Ward 15, premature nursery**, 1952
photograph
16.0 × 11.5 cm
PA 1995_44_060_031A
(see page 36)

161 **Interior of the labour ward at the Royal Women's Hospital**, c. 1953
photograph
20.3 × 25.8 cm
A1991_18_001_027

162 **Nurse attending baby in wire bassinet in nursery**, 1954
photograph
16.5 × 21.0 cm
A1991_18_001_301
(see inside back cover)

163 The Sears Studio (St Kilda, active c. 1900–1950s)
Women's Hospital, St Vincent's Group, 1954
photograph, mounted
24.7 × 29.8 cm (mount)
PA1990_18_056
Medical students holding babies, with Professor Lance Townsend and Charge Sister T Webb.
back row: C Parker, LM Grogan, A Horgan, GI Auburn, B Zselenyi, A Couldery, MJ Kirwan, FJ O'Rouke, J Xipell
middle row: MC Green, FX Lyons, RC Oliphant, L Lenaghan, H Sherlock, AE Prendergast, K Green, R Lenaghan, F Gorman
front row: M Thresher, U McKenna, JA Henderson, NJ Callan, WS Reynolds, Sister T Webb, Professor SL Townsend, JH O'Brien, JG Parer, MF O'Brien, J Banfield, M Mulcahy

164 The Accli-Bator Company
Accli-Bator (portable baby incubator), c. 1955
plexiglas, aluminium, metal, bakelite, electrical cording and parts, vinyl
45.0 × 90.0 × 37.0 cm
A1991_41_001_001
The Accli-Bator was described by its manufacturer as a 'portable incubator for use in the nursery or home or for pre-warming in automobiles or ambulances'. It superceded the ambulance constructed at the Women's in 1949 (Cat. 150), and was commonly used for transporting premature or ill babies by ambulance during the 1950s–60s, in this instance by the East Gippsland Ambulance Service.

165 **Baby bottle warmer**, c. 1955
metal, plastic, rubber
40.0 × 60.0 × 40.0 cm
A1991_41_001_002
Part of the equipment for the Accli-Bator portable baby incubator.

166 **Visilon**
Baby bottle, c. 1955
plastic, rubber
20.0 × 5.5 cm
A1991_41_001_003
Part of the equipment for the Accli-Bator portable baby incubator.

167 **Nurse's veil**, after 1955
cotton
63.0 × 64.0 cm
A1994_18_001
This veil belonged to Matron Betty Lawson (1915–2006). The tatting was done by Sister Durant.

168 **Three pupil nurses and babies**, 1956
photograph
19.5 × 25.5 cm
PA 1991_18_01_47_48
(see inside front cover)

169 **Druids and Gillott Wings of the Royal Melbourne Hospital, Swanston Street**, 1956
photograph
9.8 × 12.2 cm
A1991_18_012_097
The infirmary department was housed in these buildings until 1969.

170 Roy Hodgkinson (Australian, 1911–1993)
after Nicholas Chevalier (Russian/Swiss, 1828–1902)
Dr John Maund, 1956
pencil on paper
39.9 × 33.6 cm (frame)
22.1 × 16.0 cm (image)
A1999_31_014
inscribed *Dr JOHN MAUND / After an oil portrait / Roy Hodgkinson / 1956*
Dr John Maund (1823–1858) was one of the two founding doctors of the Melbourne Lying-In Hospital. This sketch is based on a posthumous portrait of Dr Maund made in 1863 by Nicholas Chevalier.
(see page 127)

171 Birko Electrics (Australia, est. c. 1939)
Sunvic Controls Ltd (Great Britain, est. 1940s)
Blood warmer with TSNC thermostat control, c. 1960
metal, rubbber, plastic
35.0 × 24.0 × 21.0 cm
engraved *The Royal Women's Hospital*
A1990_18_054
Blood was warmed in this device before exchange transfusions. Neonatal paediatrician William Henry 'Bill' Kitchen (1926–2012), a pioneer in the intensive care of newborns, remembered building the first warmer from an industrial gluepot.
(see page 165)

172 Lazar Marguiles (1895–1982), designer
Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931), manufacturer
Gynekoil intra-uterine device, c. 1960
plastic
7.0 × 3.0 cm
Gift of Dr Bertram Vanrenen
A2003_99_130
Gynekoil was the first plastic intra-uterine device (IUD), introduced to the USA in the early 1960s, and used until the early 1970s. The rigid tail made it easier for women to check that the device was in place.

173 Commonwealth Bank of Australia Migrant Information Service
Obstetric phrases, 1960
Sydney: Printed by Shepherd & Newman
printed booklet
12.4 × 18.1 cm
A2000_03_240
(see page 169)

174 *The Age* photographer
'The Clock Man' in the outpatient department of the Royal Women's Hospital, with a trainee nurse, c. 1960
photograph
11.8 × 16.2 cm
A1991_18_012_076

175 **Neonatal transport incubator being loaded into transport ambulance by Dr Neil Roy**, c. 1960
photograph
19.5 × 24.5 cm
PA Folder_43_28
Dr Neil Roy was director of the Neonatal Transport Service. The ambulance is being loaded in the Cardigan Street courtyard of the Royal Women's Hospital.

176 **Nurse operating the Coolgardie safe air-cooling system for the Ward 15 premature baby nursery, Kumm Stephens Wing**, c. 1960
photograph
19.5 × 24.5 cm
PA Portraits_43_37

177 **Baby in transport incubator**, c. 1960
four photographs
10.0 × 12.0 cm
PA Folder_43_21
(see page 162, bottom)

178 S & RJ Everett & Co. Ltd (London, est. 1936)
Blood transfusion set, c. 1965
metal, glass, rubber tubing
irregular dimensions
A1996_14_001
Set comprising syringe, tubing, filter, tap and stopcock, assembled and used by Dr Rex Betheras (1933–2003) for exchange transfusion of Rh-immunised babies.
(see page 167)

179 Fawns & McAllan Pty Ltd (New South Wales)
Gynepositories, before 1966
hexylresorcinol, cardboard, ink
3.6 × 10.0 × 8.0 cm
A1994_19_003
Hexylresorcinol has local anaesthetic, antiseptic and anthelmintic properties.

180 Alan Martin (Australian, 1923–1989)
Dr Hildred M Butler, 1967
oil on masonite
78.0 × 67.0 cm
Gift of Dr Arthur M Hill 1975
A2001_03_001
Hildred M Butler, DSci (1906–1975) was the first bacteriologist at the Women's Hospital (1938–71).
(see page 151)

181 Alan Martin (Australian, 1923–1989)
Dr Arthur M Hill, 1968
oil on linen
117.0 × 92.0 cm
Gift of the family of Dr Arthur M Hill 1982
A2001_03_002
Dr Arthur Machen 'Bung' Hill (1903–1979) was a gynaecologist, obstetrician and researcher at the Women's Hospital (1938–63).
(see page 149)

182 **Ex-premature nursery, Ward 15, Royal Women's Hospital**, 1968
photograph
36.0 × 50.0 cm
PA1990_18_563

183 **Intensive care, Royal Women's Hospital**, 1968
photograph
34.0 × 42.0 cm
PA1990_18_564

184 Sonicaid Ltd (West Sussex, England, active early 1970s–1987)
Fetal heart detector D205, c. 1970
mixed media including metal, formica, rubber, metal, plastic
11.0 × 29.0 × 18.5 cm
written on adhesive tape *Do not remove from LW 24*
A1993_03_103
The equipment was 'used when other avenues for listening to difficult fetal hearts had failed, eg. the ear, pinards, medical stethoscope. Issued in October 1969, discontinued 21/10/1992'.
(see page 161, bottom)

185 Bates, Smart and McCutcheon Architects (est. 1852)
The Royal Women's Hospital, Swanston St, c. 1970
print on paper
47.0 × 60.0 cm
A2000_50_130

186 Aileen Dent (Australian, 1890–1979)
Dame Kate Campbell, 1972
oil on canvas
98.0 × 80.0 cm
Gift of Mrs Henry Dennett 1972
A2008_48_238
Dame Dr Kate Isabel Campbell (1899–1986) was a pioneer of neonatal care, and the Women's Hospital's first paediatrician.
(see page 147)

187 **Coat of arms: *The Royal Women's Hospital, Melbourne***, 1979
aluminium, enamel paint
39.5 × 25.5 cm
A1995_26_001
This design, derived from the City of Melbourne's coat of arms, was first used by the hospital in 1951. It was adapted slightly in 1954 when 'Royal' was added to the hospital's name.
(see page 123)

188 Shirley Bourne (Australian, 1924–2006)
Betty Constance Lawson, c. 1980
oil on canvas
106.0 × 90.0 cm
A2005_36_001
Portrait of Betty Constance Lawson (1915–2006), matron of the Royal Women's Hospital 1955–77, commissioned by past and present nursing staff of the hospital.

189 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
'Lippe's loop' intra-uterine contraceptive device, c. 1980
plastic
36.0 × 5.0 cm
moulded on introducer handle *ORTHO*
stamped on back of packaging *Expires August 1984*
A2003_99_185
The first 'Lippes loop' intra-uterine device (IUD) was introduced in 1962. It was a plastic double 'S' loop, a trapezoid-shaped IUD that fitted closely around the contours of the uterine cavity.

190 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
Contraceptive diaphragm, c. 1980
plastic, latex
2.0 × 10.2 cm (diam.)
A1990_18_144
The diaphragm, sometimes referred to as a 'Dutch cap', is a barrier-type female contraceptive device.

191 Gaumard Scientific Models Inc. (Coral Gables, Florida, USA, est. 1946)
Teaching model, 1980
plastic, rubber, vinyl, metal
45.7 × 50.7 × 23.8 cm (case)
A2008_48_028
Model of a woman's pelvis and abdomen with removable components, used for teaching.

192 Eleanor 'Nornie' Gude (Australian, 1915–2002)
Dr Kevin McCaul MBE, 1980
oil on linen
120 × 94 cm
signed lower left *Nornie Gude*
A2008_48_236
Dr Kevin McCaul (1914–1998) founded the Royal Women's Hospital anaesthesia department in 1951; it was the first obstetric anaesthesia department in Australia. McCaul was director of anaesthetics 1952–79.
(see page 155)

193 Parker Healthcare (Australia, est. 1965, incorporated 1984)
Atom 'Transcapsule' transport incubator TC 500, 1980s
metal, acrylic, rubber, plastic, cotton, mechanical parts
45.0 × 83.0 × 43.0 cm
A2008_48_016
Developed from the 'Thermocot' designed in Melbourne by an engineer from CIG (Commonwealth Industrial Gases, active 1935–89), which in turn was an upgrade from the 'Port-o-Cot', also made by CIG.

194 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
Set of contraceptive diaphragm rings and applicator, c. 1981
plastic, metal
10.0 × 13.0 × 13.5 cm
A2003_99_094

195 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
Box of contraceptive diaphragms, c. 1981
plastic
10.0 × 13.0 × 13.5 cm
A2003_99_094_001
Coil-spring fitting-ring kit of contraceptive diaphragms.

196 Ortho Pharmaceutical Corporation (New Jersey, USA, est. 1931)
Applicator for contraceptive diaphragm, c. 1981
plastic
19.0 × 2.0 cm
A2003_99_094_002

197 Royal Women's Hospital
Drs Ken Mountain, Ian Johnston and Andrew Speirs holding the Muir quadruplets, 1984
photograph
20.2 × 25.2 cm
A1995_44_001
The Muir quads were the world's first surviving 'test-tube' (IVF) quadruplets, born on 6 January 1984 at the Royal Women's Hospital. Dr Ian Johnston was head of the reproductive biology unit, Ken Mountain was a paediatrician, while Andrew Speirs was Mrs Muir's IVF doctor and obstetrician.
(see page 157)

198 Newborn Emergency Transport Services, Melbourne
Newborn baby in incubator with mother and staff, c. 1989–90
photograph
20.0 × 22.5 cm
PA 1995_44_73_15
centre: Dr Sue Jacobs, NETS registrar
right: Fay Presbury, NETS associate charge nurse

199 **Nipple bowls**, c. 1990s
stainless steel
3.2 × 4.0 cm (diam.)
A1990_18_083
Nipple bowls used in Ward 32, Edward Wilson Wing (est. 1915)
(see page ii)

200 Peter Corlett (Australian, b. 1944)
Newborn babies, 1991
plaster, foam
42 × 25 × 13 cm
A1995_56_001, 002, 003

201 Multilan AG (Switzerland)
Multiload CU250 intra-uterine contraceptive device, c. 1993
plastic, nylon, copper, paper
33.5 × 7.5 cm
expiry date marked *11/05/1993*
A1996_48_016

202 **Dr Hugh Robinson with patient at the Women's Hospital**, c. 1993
photograph
16.5 × 16.5 cm
A1991_23_051_092
(see page 159)

203 CASA House (Centre Against Sexual Assault)
Reclaim the night
Women Against Violence: An Australian Feminist Journal, issue 3, November 1997
printed journal
30.0 × 21.0 cm
A2000_04_03
(see page 84)

204 ***The Sorry book, National Sorry Day: 26th May 1998***, 1998
book of signatures
22.0 × 30.5 cm
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

205 CASA House (Centre Against Sexual Assault)
Answers for Women
Women Against Violence: An Australian Feminist Journal, issue 16, 2004–05
printed journal
30.0 × 21.0 cm
A2005_01_127_

206 **Sorry day ceremony**, 2007
series of photographs
15.0 × 20.0 cm (photograph)
21.0 × 30.0 (mount)
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

207 **Sorry Day ceremony**, 2007
photograph
21.0 × 29.5 cm
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

208 **Victorian Aboriginal Women's Art Project report**, 2007
unpublished document
30.0 × 22.0 cm
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

209 **Sorry Day event**, 2014
photograph
30.0 × 21.0 cm
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

210 **Sorry Day event**, 2015
photographs
30.0 × 21.0 cm
Badjurr-Bulok Wilam Aboriginal and Torres Strait Islander Women and Families Place Collection

PUBLIC RECORD OFFICE VICTORIA

211 Melbourne Lying-In Hospital
Midwifery record book no. 1, 19 August 1856 – 15 March 1879
bound volume, manuscript
40.0 × 27.0 × 4.0 cm
VPRS 17382/P1, Unit 1
(A1991_05_001)
(see page x)

212 Melbourne Lying-In Hospital
Midwifery record book no. 2, 18 March 1879 – 21 March 1889
bound volume, manuscript
40.0 × 27.0 × 4.0 cm
VPRS 17382/P1, Unit 2
(A1991_05_002)

213 Women's Hospital
Honorary physicians case book, infirmary department, unit 2, Dr B.H.* [Balls-Headley] *cases vol. 1, 1884
bound volume, manuscript
33.0 × 21.0 × 4.0 cm
VPRS 17390/P1, Unit 2
(A1991_40_20)
(see page 44)

PRIVATE COLLECTIONS

214 Arthur Gordon Green (1881–1933)
Florence Green, 1911
photograph
13.5 × 9.0 cm
written in ink on verso *Taken by Gordon Oct 1911*
Collection of Margaret and Eric Smith (great-nephew of Florence Green)
Photographers Allan Charles Green (1878–1954) and Arthur Gordon Green (known as Gordon, 1881–1933), were brothers of Florence Green (1876–1964). They had been taking photographs since 1900 or earlier. The formally constituted Green Bros photographic business in Williamstown was active 1915–18.

215 Talma & Co. (Melbourne, active c. 1890s–1930s)
Florence Green in student nurse uniform, 1913
photograph
13.5 × 9.0 cm
written in ink on verso *September 1913 "Talma"*
Collection of Margaret and Eric Smith (great-nephew of Florence Green)

216 Darge Photographic Co. (Melbourne, est. by Algernon Darge, 1878–1941)
Doctors and nurses at the Women's Hospital, September 1914
photograph, mounted
18.0 × 30.0 cm (photograph)
31.0 × 44.0 cm (mount)
printed on mount *Phone: 499 / "Darge" / 175 Collins St / Melbourne*
back row: N[urse] Baker, N Green, S[enior] N[urse] Gordon, SN Evans, N Quade, N Austin, Dr Cook, N Palmer, N McKee, N Harvey, N Higgins, N Moroney
middle row: S Fankhauser, S Loxton, S Carlisle, Dr Embleton, Matron Capner, Dr McLaren, Dr M Robertson, S Baker, S Rachael Pratt
front row: N Weeks, N Plunkett, N Masson, N Swan, N Fox, N Caughey, SN Willock, N Northway, N Moloney, N Nicholson
Collection of Margaret and Eric Smith (great-nephew of Florence Green)
(see page 54)

217 Green Bros (Williamstown, active 1915–18)
Florence Green in private nurse uniform, 1916
photograph, mounted
13.5 × 9.0 cm (photograph)
24.0 × 17.0 cm (mount)
printed on mount *Green Bros, Williamstown*
Collection of Margaret and Eric Smith (great-nephew of Florence Green)
(see page 143)

218 Allan Charles Green (1878–1954)
Florence Green, 1934
photograph
13.0 × 10.0 cm
16.0 × 12.0 cm (mount)
written in ink on mount *With love from Auntie Flo 9-2-34.*
Collection of Margaret and Eric Smith (great-nephew of Florence Green)

219 **Florence Green in garden**, c. 1950s
photograph
11.0 × 7.0 cm
Collection of Margaret and Eric Smith (great-nephew of Florence Green)

220 Peter Garnick (Australian, b. 1953)
Case conference: Michael Quinn silhouette, 13 May 2008
photograph
29.7 × 42.0 cm
Collection of the artist
(see page 66)

221 Peter Garnick (Australian, b. 1953)
Neonatal intensive care unit: Door between wards, 13 May 2008
photograph
29.7 × 42.0 cm
Collection of the artist

222 Peter Garnick (Australian, b. 1953)
Pathology lab: Specimens and photograph of staff, 20 May 2008
photograph
29.7 × 42.0 cm
Collection of the artist
(see page 58)

223 Peter Garnick (Australian, b. 1953)
Royal Women's Hospital, view from Cardigan Street, 7 June 2008
photograph
29.7 × 42.0 cm
Collection of the artist

224 Vicki Couzens (Kirrae Wurrong and Gunditjmara clans of western Victoria, b. 1960)
Thanampool karrakeet koong kamateeyt (woman's marks and body paint), 2017
acrylic on canvas
80.0 × 45.0 cm
Collection of the artist
(see page 4)

225 Vicki Couzens (Kirrae Wurrong and Gunditjmara clans of western Victoria, b. 1960)
Koorookee kooramookyan (grandmother's cloak, basket and digging stick), 2017
possum skin, twine, wood
170 × 120 cm approx.
Collection of the artist
This is the grandmother's cloak, so it speaks to the birth–life–death cycle: of girl, mother, grandmother. It speaks to the role of the grandmothers, the midwives in our traditional women's birthing practices and Women's Law stories. Women carried their babies and children in cloaks, and we were buried in our cloaks.

Contributors

Associate Professor Lisa Amir, MBBS, MMed, PhD, is a general practitioner and lactation consultant who works in breastfeeding medicine at the Royal Women's Hospital in Melbourne and in private practice. A principal research fellow at La Trobe University's Judith Lumley Centre, she is the author of more than 100 peer-reviewed articles on breastfeeding.

Dr Christine Bayly, MD, BS, MPH, FRANZCOG(ret), is a retired gynaecologist, who trained at the Women's in the 1980s and worked there throughout her career, mainly in infertility, contraception and abortion care. Many of her teachers and mentors had worked at the Women's in the days of unsafe abortion.

Laura Bignell, RN, RM, PG Dip (Neonatal Nursing), MHA, is the chief midwifery and nursing officer and director of neonatal service (nursing) at the Women's. Laura's focus is to ensure models of care are both contemporary and innovative, supporting midwives and nurses to work to their full scope of practice, including opportunities for advanced practice.

Dr Virginia Billson, MBBS, FRCPA, GDB, graduated MBBS from the University of Melbourne in 1973, served her residency at the Royal Melbourne Hospital, and was a pathology registrar at St Vincent's, Western and Queen Victoria hospitals. She was a specialist histopathologist 1982–2018 at the Repatriation General, Royal Melbourne, Mercy and Women's hospitals, and director of anatomical pathology at the Women's 1995–99.

Associate Professor Yvonne Bonomo, MBBS, PhD, FACAM, FRACP, is a physician in addiction medicine and adolescent medicine. She is medical head of unit at the Women's Alcohol and Drug Service, and associate professor and director of addiction medicine at St Vincent's Hospital, Melbourne.

Professor Shaun Brennecke, MBBS, BA, BMedSci(Hons), DPhil, FRANZCOG, occupies the University of Melbourne Dunbar Hooper chair of obstetrics and gynaecology at the Royal Women's Hospital, where he is also director of maternal-fetal medicine, and head of the pregnancy research centre.

Gina Bundle is a Yuin/Manero woman who currently lives and works on Wurundjeri land in Melbourne. She joined what is now known as Badjurr-Bulok Wilam in 2015 as the Aboriginal hospital liaison officer, and became the Badjurr-Bulok Wilam program co-ordinator in 2017.

Christina Coldebella, MSocWork, worked in the areas of foster care and disability before moving to the Women's in 2009, where she has held various roles including working with new graduates, in various maternity clinics, and in the neonatal intensive care unit. She is currently a team leader and the Women with Individual Needs social worker. Christina has an interest in the area of vicarious trauma.

Associate Professor John Collins, MBBS, FRACS, FACS, specialist breast surgeon, was a leading breast and general surgeon in Australia and New Zealand, and later dean of education for the Royal Australasian College of Surgeons. He was instrumental in establishing breast screening and cancer services in both countries.

Professor Mark Cook, MBBS, MD, FRACP, FRCP, is director of the Graeme Clark Institute; Sir John Eccles Chair of Medicine in the Department of Medicine, University of Melbourne; director of neurology at St Vincent's Hospital; and president of the Epilepsy Society of Victoria. He also chairs the Advisory Committee of the Medical History Museum.

Cat. 31 **Students Frank L Trinca and Douglas C Pigdon holding their first babies at the Women's Hospital**, 1914, photograph, mounted; 17.7 × 20.0 cm. MHM05917, courtesy of Dr John Trinca 2002, Medical History Museum, University of Melbourne.

Dr Vicki Couzens is vice-chancellor's Indigenous research fellow in the School of Media and Communications, College of Design and Social Context, RMIT University, Melbourne. An artist and Gunditjmara Kirrae Wurrong woman from western Victoria, she actively promotes the culture of her people.

Fiona Creaven, BSocSci, MSocSci, MSocWork, GradCertMgt, is currently the manager of the social work department at the Women's. Previously she has held roles in the Victorian Department of Health and Human Services, and in Ireland, in a range of areas including child protection.

Professor Lex Doyle, MD, BS, MSc, FRACP, is a neonatal paediatrician with an almost 50-year association with the Women's. He has performed hundreds of exchange transfusions—the most on any one baby was 12. He is now working full-time in research and teaching at the hospital since retiring from clinical practice in 2006.

Lisa Dunlop, RN, RM, BaAppSc, MHA, was executive director of clinical operations at the Women's from mid-2010 to mid-2018. Before commencing in that role she directed the Women's redevelopment project, with organisation-wide responsibility for the coordination of the project and relocation to Parkville.

Adjunct Professor Dale Fisher, BA(Bus), MBA, **Hon Fellow Monash University**, was chief executive of the Royal Women's Hospital 2004–13. She was chief executive of the Peter MacCallum Cancer Centre 2013–18, and since December 2018 has been chief executive of the Silver Chain Group, a leading provider of home and community care.

Professor Suzanne Garland, AO, MBBS, MD, FRCPA, FRANZCOG *ad eundem*, FAChSHM, FASM, FFSc(RCPA), is a clinical microbiologist and sexual health physician, particularly in infectious diseases related to reproductive health and the neonate. She is professor of reproductive and neonatal infectious diseases in the University of Melbourne's department of obstetrics and gynaecology at the Women's; honorary research fellow in infection and immunity at the Murdoch Children's Research Institute; and director of women's infectious diseases research at the Women's.

Dr Mark Garwood, MBBS, MBA, FRACMA, FCHSM, has been chief medical officer at the Royal Women's Hospital since 2015.

Elisabeth Gasparini, BSc, GradDipDiet, GradDipBA, is an accredited practising dietitian and manager of nutrition and dietetics at the Women's, where she leads a team of highly skilled dietitians. She oversees the extensive clinical services of the department, as well as undertaking research, teaching and consumer education.

Dr Madonna Grehan, RN, RM, GradDip (HlthEth), PhD, is an honorary fellow in the School of Health Sciences at the University of Melbourne. She is an independent historian, an oral history interviewer for the National Library of Australia, and president of the Australian and New Zealand Society of the History of Medicine.

Professor Jane Gunn, MBBS, PhD, FAHMS, FRACGP, DRANZCOG, is professor and foundation chair of primary care research at the University of Melbourne, and deputy dean of the Faculty of Medicine, Dentistry and Health Sciences. A general practitioner, she leads a research program in mental health, focusing in particular on depression and multimorbidity.

Dr Jacqueline Healy, BA(Hons), MBA, PhD, is senior curator of the Medical History Museum and of the Henry Forman Atkinson Dental Museum, University of Melbourne. She was inaugural director of Bundoora Homestead (the public art gallery of the City of Darebin), director of the Museum and Art Gallery of the Northern Territory, and director of public programs at the National Gallery of Victoria.

Professor Fiona Judd, MBBS, DPM, MD, FRANZCP, is a professorial fellow in psychiatry at the University of Melbourne. She was director of the Centre for Women's Mental Health at the Women's 2007–14. She has undertaken clinical work and research in consultation-liaison psychiatry for more than 30 years, with a particular interest in women's mental health. Currently she leads the perinatal and infant mental health team in Hobart, Tasmania.

Professor Shitij Kapur, MBBS, PhD, FRCPC, FMedSci, is dean, Faculty of Medicine, Dentistry and Health Sciences, and assistant vice-chancellor (health), University of Melbourne. A clinician-scientist with expertise in psychiatry, neuroscience and brain imaging, especially schizophrenia and its treatment, he advises various public charities and pharmaceutical companies, has received national and international awards and fellowships, and serves on the board of the Royal Melbourne Hospital, the Walter and Eliza Hall Institute and the St Vincent's Research Institute in Melbourne.

Dr Theresa Lynch is a social worker who has managed the Women's Alcohol and Drug Service at the Royal Women's Hospital since September 2010.

Professor Bruce Mann, MBBS, PhD, FRACS, is a surgical oncologist and specialist breast surgeon at the Peter MacCallum Cancer Centre, director of breast cancer services for the Royal Melbourne and Royal Women's hospitals, a professor of surgery at the University of Melbourne, and director of advanced surgical training at the Royal Melbourne.

Dr Sue Matthews, RN, BA, MHScN, DPH, Wharton Fellow, is chief executive officer of the Royal Women's Hospital. She has a long history as a nurse and administrator in women's health in Canada and Australia, and has won numerous awards, including being named one of Canada's top 100 most powerful women. Under her leadership, the Women's Hospital won the Premier's Large Health Service of the Year Award for 2016.

Sandra Mazzone, BSocWork(Hons), Advanced MSocWork, is team leader of the social work department at the Women's. She has been in the social work profession for 21 years, the last 12 years in the field of women's maternity health. Before this she worked in the alcohol and other drug sector as coordinator of the forensic counselling team, which included working in prisons as a drug educator and counsellor.

Associate Professor John McBain, AO, MB, ChB, MRCOG, FRANZCOG, came to Australia from Scotland in 1976 to join the group of doctors researching IVF. He was chairman of Melbourne IVF 1998–2005, head of reproductive services at the Women's 2002–18, and is a principal fellow in obstetrics and gynaecology at the University of Melbourne.

Professor Janet McCalman, AC, BA, PhD, FAHA, FASSA, is an eminent scholar in her field of Australian social history, with particular expertise and reputation in the history of health and medicine. She is a Redmond Barry Distinguished Professor of the University of Melbourne, and a professor of history in the Melbourne School of Population and Global Health.

Professor Louise Newman, AM, BA(Hons), MBBS(Hons), PhD, FRANZCP, is director of the Centre for Women's Mental Health at the Royal Women's Hospital, and professor of psychiatry at the University of Melbourne.

Professor Emeritus Roger Pepperell, MBBS, MDMon, MGO, FRACP, FRCOG, FRANZCOG, FACOG(Hon), was a professor in obstetrics and gynaecology at the University of Melbourne. His work includes research, teaching, clinical care, and medico-legal assessment when complications occur in obstetrics and gynaecology. He is a senior member of the board of examiners of the Australian Medical Council (AMC), which assesses overseas-trained doctors wishing to practise in Australia, and continues to examine in obstetrics and gynaecology for the AMC.

Cav Poni Poselli is manager of language services at the Women's. A NAATI-certified interpreter, she has qualifications in languages, interpreting, translating, multicultural studies, marketing and public relations. She has held leadership roles and served on various boards and committees in Melbourne's multicultural community. Poni won the Walter Schauble National Gold Award for Ethnic Broadcasting.

Professor Michael Quinn, AM, MGO, MRCP (UK), FRCOG, FRANZCOG, CGO, retired in 2016. He has chaired all three major international committees dealing with gynaecological cancer, being the Gynaecological Cancer Intergroup, the FIGO Oncology Committee and the International Gynecologic Cancer Society. He currently chairs the Gynaecological Cancer Advisory Committee at Cancer Australia.

Associate Professor Leslie Reti, AM, MBBS, SM, FRCOG, FRANZCOG, is director of clinical governance at the Women's and chair of its History, Archives and Alumni Committee, and was previously clinical director of cancer, gynaecology and perioperative services. He co-founded CASA House and was the initial chair of its committee of management. He has had a long involvement in clinical governance at hospital, state and national levels.

Dr Andrew Ross, MBBS, FFARACS, FANZCA, GDip(Hlth & MedLaw), GDipPsych, was a staff specialist anaesthetist (1981–83), deputy director of anaesthesia (1983–90), and director of anaesthesia (1990–93) at the Women's; director of anaesthesia at the Mercy Hospital (1999–2007) and visiting medical officer intensivist at the Alfred Hospital (1986–2014).

Dr Neil Roy, AM, MBBS, FRACP, was a consultant paediatrician at the Women's from 1975 to 2007. He was inaugural director of the Newborn Emergency Transport Service (1976–99), and divisional director (medical) of neonatal services at the Women's 1995–2007.

Dr Amanda Sampson, MBBS, FRANZCOG, DDU, COGU, trained in obstetrics and gynaecology at the Women's after residencies at the Alfred and Royal Children's hospitals. Her ultrasound experience began in 1989 as a certified obstetric and gynaecological ultrasound trainee at the Women's and she became an ultrasound subspecialist in 1992. She was clinical director of ultrasound at the Women's 2002–10.

Louise Sampson, BA, leads the Partnering with Consumers program at the Women's. With a public health background, she worked in developing countries on reproductive, maternal and child health programs for nearly two decades, with International Planned Parenthood, and Save the Children. In the 1990s she was president of Options, the ACT's law reform campaign to remove abortion provisions from the *Crimes Act*.

Lyn Swinburne, AO, TPTC, DipEd, DSocSci (*Honoris causa*, Swinburne), chair of the board of the Royal Women's Hospital, is a prominent advocate for women's health and a longstanding consumer spokesperson, particularly on behalf of Australians personally affected by cancer. Following her own diagnosis of breast cancer in 1993, Lyn founded Breast Cancer Network Australia, which now has more than 120,000 members.

Dr Rebecca A Szabo, MBBS, MClinEd, FRANZCOG, GCH (Pal Care), SpecCertClinRes (Onc), is an obstetrician/gynaecologist and medical educator, clinical lead of women's health education and simulation at the Women's, and a senior lecturer at the University of Melbourne. She completed most of her training at the Women's, and also in Albury Wodonga (2005), Chiang Mai (2007) and Royal Prince Alfred Hospital, Sydney (2008).

Jane Trembath is chair of the Royal Women's Hospital Foundation.

Professor Mark Umstad, AM, MBBS, MD, FRCOG, FRANZCOG, trained at the Royal Women's Hospital in Melbourne, and at the Queen Mother's Hospital in Glasgow, where he completed his doctoral thesis (MD) on intrapartum fetal monitoring. He is director of maternity services at the Women's and a clinical professor at the University of Melbourne.

Richard Walpole is a member and former chairman of the History, Archives and Alumni Committee of the Royal Women's Hospital. He is a descendant of hospital founder Dr Richard Tracy, and his family has maintained strong links with the Women's for five generations.

Robyn Waymouth, BArch, GradDip (Info Mgt), began her professional career in architecture, graduating from RMIT in 1989. As a result of her interest in architectural history and its documentation, archives supplanted architecture, and she has been archivist at the Women's since 1990.

Dr Ann Westmore, BSc, MSc, PhD, is a writer and historian of medicine, who has done extensive work for the Royal Women's Hospital's *Our History* website. She has also facilitated several Witness Seminars for the hospital on its history.

The University of Melbourne's Faculty of Medicine, Dentistry and Health Sciences has three museums: the Medical History Museum, the Harry Brookes Allen Museum of Anatomy and Pathology, and the Henry Forman Atkinson Dental Museum.

The exhibition and catalogue *The Women's: Carers, advocates and reformers* draw on the rich collections of the Medical History Museum (including that of the Australian Medical Association), the Royal Women's Hospital, Public Record Office Victoria, and private lenders.

museums.mdhs.unimelb.edu.au

Front cover: Cat. 33 **Drs Ellen Balaam, Annie Bennett and Gweneth Wisewould and a nurse at the Women's Hospital**, c. 1915, photographic postcard, 14.0 × 9.0 cm. MHM2014.17, gift of Lois Parr, niece of Ellen Balaam, Medical History Museum, University of Melbourne.

Inside front cover: Cat. 168 **Three pupil nurses and babies**, 1956, photograph, 19.5 × 25.5 cm. PA 1991_18_01_47_48, Royal Women's Hospital Collection.

Inside back cover: Cat. 162 **Nurse attending baby in wire bassinet in nursery**, 1954, photograph, 16.5 × 21.0 cm. A1991_18_001_301, Royal Women's Hospital Collection.

Back cover: Associate Professor Jeanie Cheong, neonatal paediatrician. Photograph by Darren James. © Royal Women's Hospital, Melbourne, 2018.