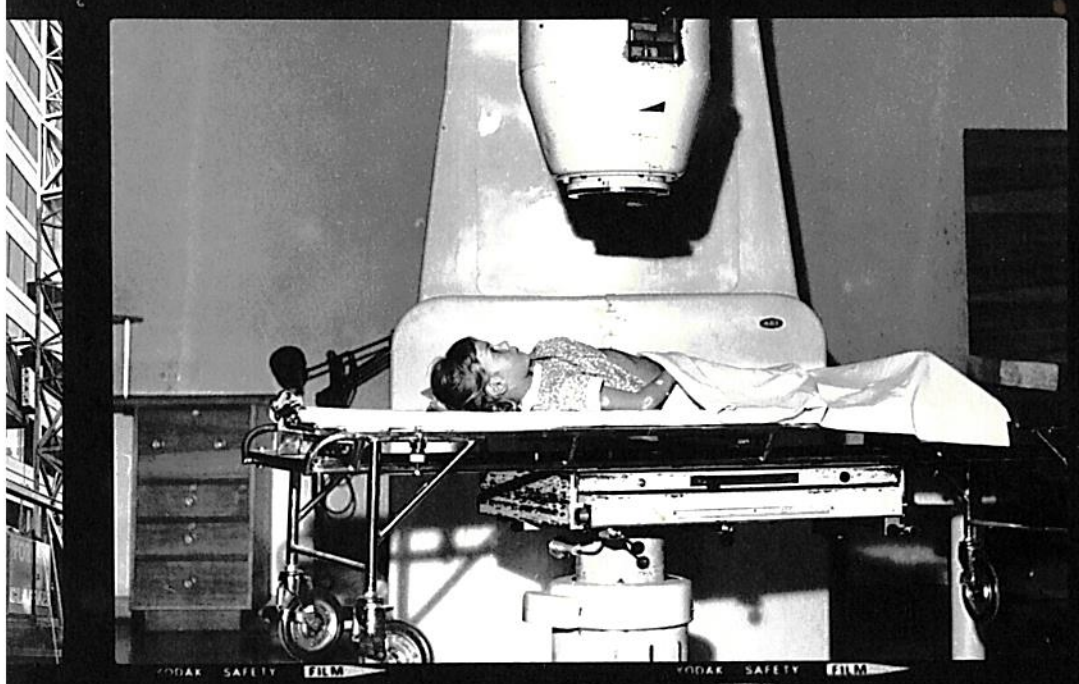
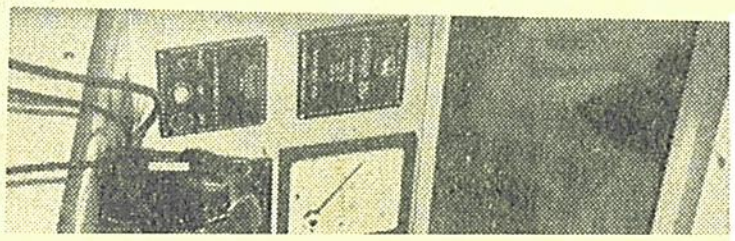




Page 14—THE SUN, Sat., July 24, 1954

CANCER

a few days the Peter MacCallum linic will begin excavating the site or a 4,000,000-volt X-ray machine ch could be so dangerous that its rator will watch it through a "win-" of water three feet thick.

machine, known as a accelerator, will be sur-ed by concrete up to five nick and will cost a total out £80,000.

will be the next step in the oment of the clinic, which ficially opened on June 30.

the existing clinic, bricks ost 10/ each, the small ob-ion windows that cost £250 each and plastic bags of hundreds-and-thousands are helping medical science to fight cancer.

The clinic has so far cost about £630,000. It is the best and largest in Australia and is as good as any in the world.

The special bricks are used for protection in the walls of the clinic's deep X-ray therapy department in the basement of the old Queen Victoria Hospital in Little Lonsdale-st.

The old hospital, refurbished, re-

Our History

Peter Mac

The history of Peter Mac is much like that of many public hospitals — a real need in the community; passion and a commitment from influential people to fulfil that need; expansion shaped by growing populations; evolutions in medicine and science that consistently open new doors into increasingly specialised pathways; and the inevitable struggle for space, resources and money.

But the history of Peter Mac is also different from many public hospitals because of its dedication to only one disease, with all its complexities and manifestations, which has given those associated with the hospital a deep and abiding sense of purpose over the years. It was also founded with the dual purpose of caring for cancer patients 'by means other than surgery' and with scientific research at its core. This has enabled it to shape developments in cancer medicine, science and nursing in Australia and further afield, and created a culture whereby 'focusing on the needs of cancer patients is important... and the recognition of what we currently do — whilst it's as good as we can do, it's not good enough, we've got to do better.'

When Peter MacCallum opened the clinical section of the Cancer Institute in his name in 1950, he claimed that 'Nothing but the best is good enough for the treatment of cancer.'

The next few pages are a brief snapshot of the last sixty years to explore why he felt this way and whether or not his intentions have been fulfilled.

Emma Russell
History @ Work

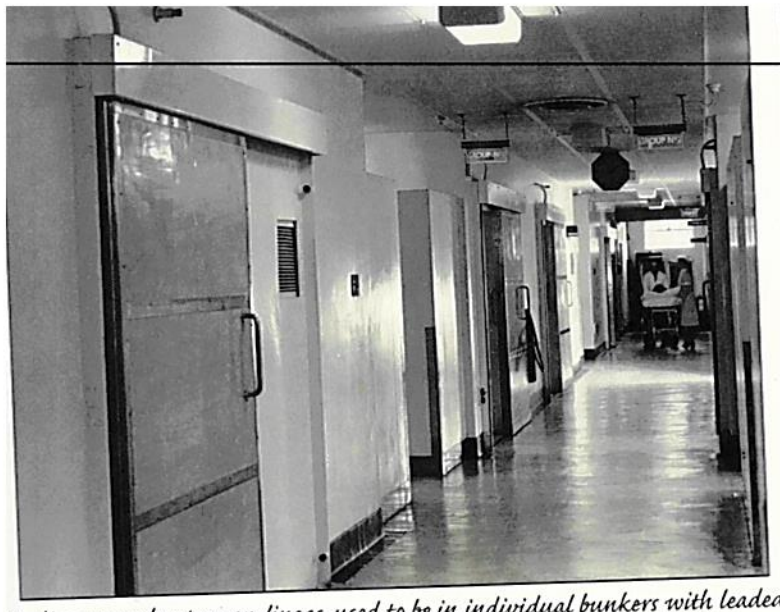
department, they can be "quite temperamental — like all X-ray machines."

Mr. Purssey explained that, in

window costs £250.

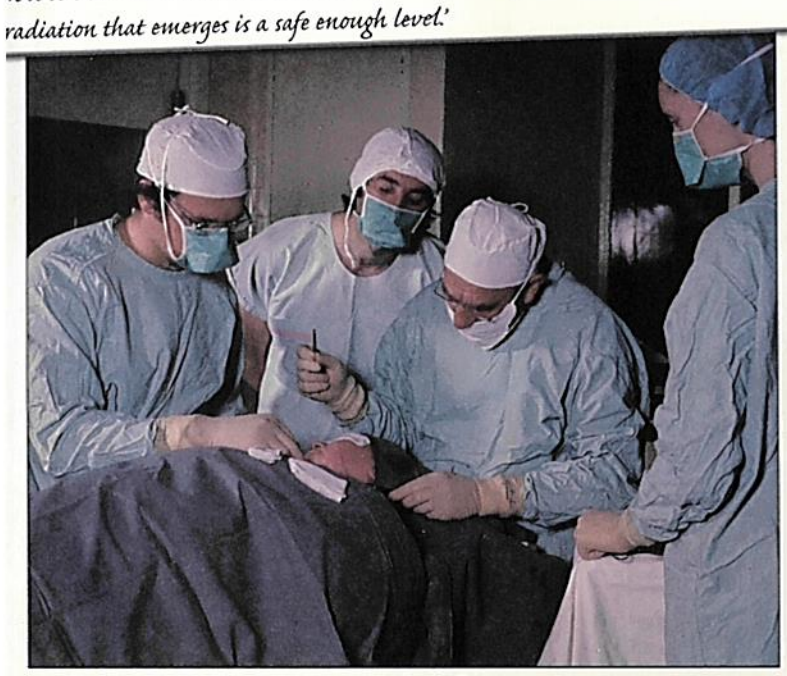
When the patient is roughly in position near the machine, the raised steel arm carrying the box

from the new Peter MacCallum in Little Lonsdale-st. The £630,000 clinic, opened a



The linear accelerators, or linacs, used to be in individual bunkers with leaded walls up to two metres thick to absorb the radiation and a thick door that would slam shut once the patient was secure to isolate them, 'which would really add to the trauma'. Nowadays the bunkers are designed as a 'maze with several bends in it so that radiation has to bounce several times before it could exit ... the radiation that emerges is a safe enough level.'

Jean Milne, radiotherapist for over twenty years at Peter Mac until 1980 and co-author of Nuclear Medicine. Clinical and Technological Bases in 1977, the first text book on nuclear medicine published by Australian authors



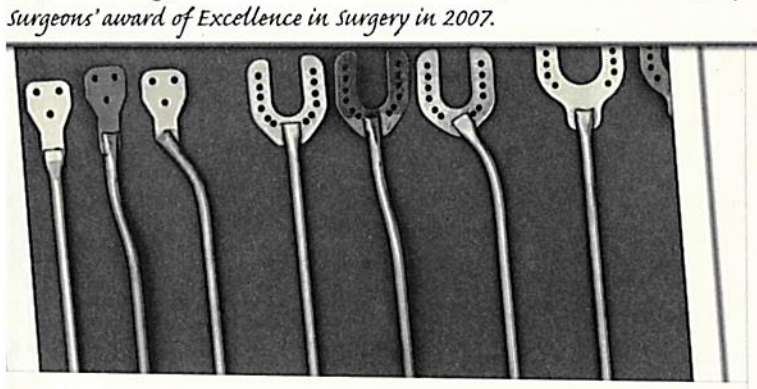
Consulting surgeon (Sir) Benjamin Rank performing reparative surgery on a patient. He and others of his era 'got most of their finetuning skills by patching up people in the war ... he was a marvellous man ... he'd walk back with the baby in his arms from surgery, put the baby in the cot – I saw him do it.'

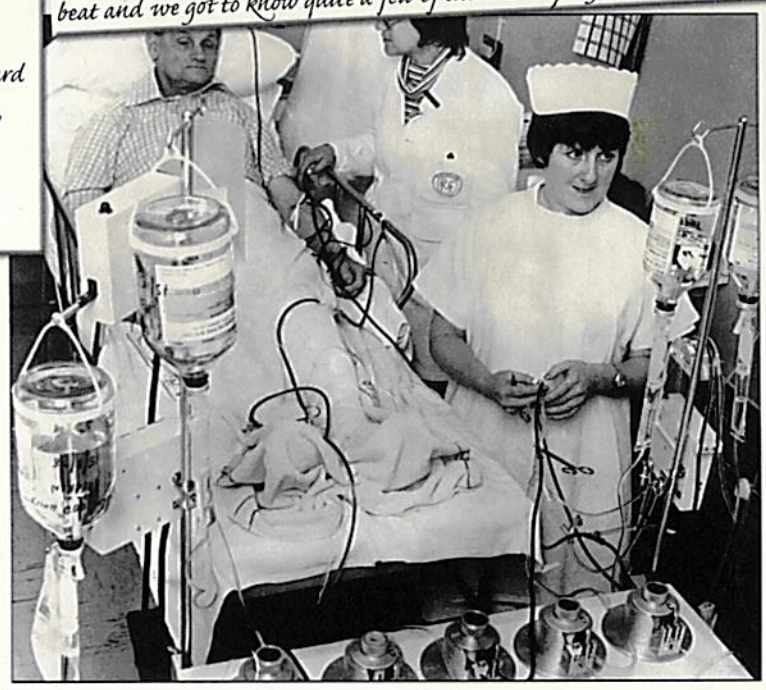
The line of illustrious surgeons has been strong at Peter Mac with (Sir) Edward Dunlop a consultant surgeon to the head and neck clinic and, more recently, Robert Thomas, the foundation (2000) and current Professor / Director of Surgical Oncology, who was honoured with the Royal Australian College of Surgeons' award of Excellence in Surgery in 2007.

As a Peter Mac nurse 'it was very pleasant living in Melbourne' in the 1950s and 1960s. The nurses home was on the 6th and 7th floor of one of the tallest building in Melbourne at the time with fabulous views over the Yarra River and the bay 'It was safe to walk around Melbourne at night ... there were policemen on the beat and we got to know quite a few of them ... they'd give us an escort home.'

Anna Cus joined the kitchen staff in 1971, her husband John joined two years later and in 1981 their daughter Anna joined as a cafeteria assistant.

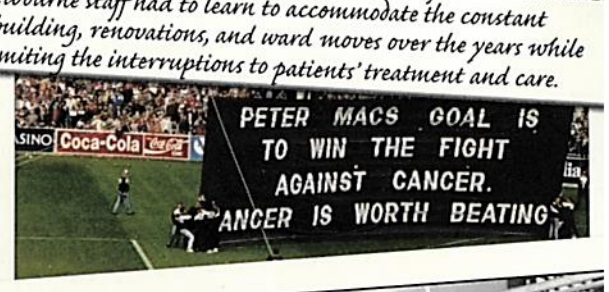
'Peter Mac has always, after modifications, additions and renovations, occupied "someone else's" building', until the Dougla Wright building, opened in 1978, which was 'the first and only new building we ever had It was brilliant!' Before the move to E Melbourne staff had to learn to accommodate the constant rebuilding, renovations, and ward moves over the years while limiting the interruptions to patients' treatment and care.



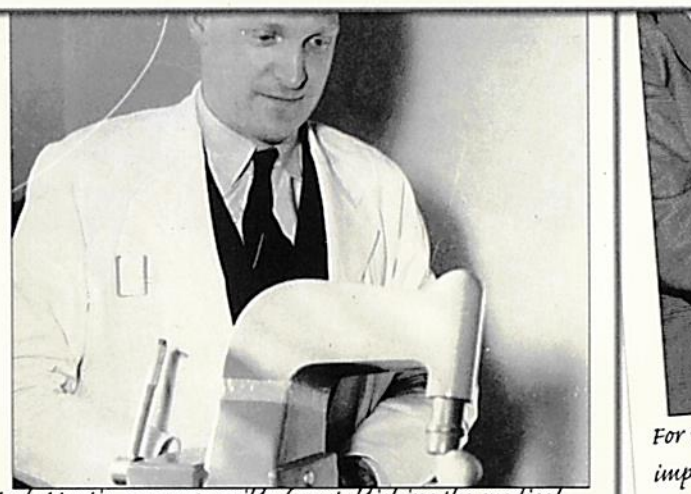


The cell separator, or centrifuge, separates blood components to remove an excess of one element, or draw off components from a donor that are dangerously low in a patient. The machine was purchased by Peter Mac in 1974 and was the only one in Melbourne. It was in constant demand by Peter Mac patients as well as those from other hospitals and by 1977 it had performed 1,000 treatments.

Here Andrew Nicoll is receiving his 100th treatment for lymphoma in 1978. He visited Peter Mac three times a fortnight, each time spending 3 ½ hours attached to the centrifuge having his blood removed, the plasma separated, and replaced with plasma. His new, healthy, plasma, comes from the Blood Bank, while his own which was of no value to him, was extremely valuable for Peter Mac researchers.

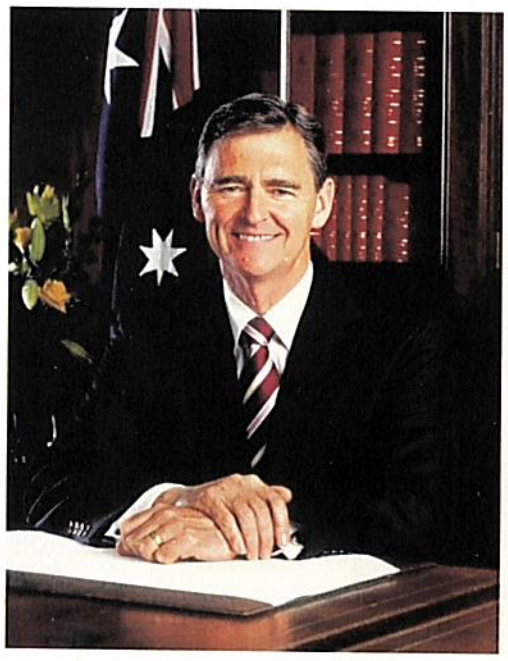


Animals are not welcome visitors to a hospital generally speaking, although their positive effect on patients is becoming increasingly recognised in some settings. But all rules are meant to be broken and in the days of very strict routines and visiting protocols one patient, 'she dearly wanted to see her dog ... we thought "this lady, she was dying, nothing would change that". So one weekend we got the hubbie to bring the dog in. We took a linen trolley down to the front door, we popped the dog in, ran it down the passage ... and this lady had a wonderful time with the dog ... I'm sure everybody knew what was happening, including the matron, but they never, ever – that's when you turned a blind eye.'



Jack Martin was responsible for establishing the medical physics department.

For many patients Peter Mac can become a second home and for staff it impossible to not get involved with them. Here Thomas Sandeman give patient a gift to acknowledge her 50th admission for treatment.



MESSAGE FROM THE PREMIER

Cancer has touched each of us at some point in our lives, whether as a patient, a carer, as family or as a friend. Peter MacCallum Cancer Centre plays a pivotal role in this state's cancer control response through its extensive research, treatment, care and education and training activities. The work of the Peter MacCallum Cancer Centre has made a positive difference to the lives of many Victorians and, because of this, is fondly known by the community as Peter Mac.

Since its humble beginnings in 1949, Peter Mac has achieved national and international recognition for its work across the cancer treatment and research spectrum, from diagnosis to palliative care. Peter Mac is widely known for its range of innovative programs that assist patients in achieving an optimal quality of life. Additionally, the integration of Australia's largest cancer research group within a specialist cancer hospital creates a favourable environment for the transfer of knowledge.

Peter Mac is to be commended for the comprehensive treatment and care offered to patients through its central site in East Melbourne and four other satellite services in metropolitan and regional Victoria. The commitment and dedication of all staff to delivering best practice cancer care is one of its greatest assets.

Peter Mac will continue to play a key role in influencing advances in the treatment and care of cancer patients, and contribute to cancer care both nationally and internationally through its research, training and education programs. Victorians can be proud of the fact that the only specialist stand-alone cancer centre in Australia exists in this state.

Hon John Brumby MP
Premier of Victoria

MESSAGE FROM THE MINISTER FOR HEALTH

Cancer affects the lives of so many Victorians. The burden and anxiety of treatment and recovery impacts on both individuals and families. This was recognised 60 years ago, as it is today, when the Peter MacCallum Cancer Institute was established by an Act of Parliament to provide special care for cancer patients. Over this long period, Peter Mac, as it has become known, has grown enormously and has provided comprehensive and compassionate care for cancer patients from all over Victoria. Peter Mac is now recognised as Australia's foremost cancer centre, and leads in the provision of radiation therapy utilising the most modern techniques and equipment. It is also a major centre for the understanding of new drug treatments and in recent years has become an important centre for modern cancer surgery.

Integral to Peter Mac is the state-of-the-art multidisciplinary treatment offered to patients, together with a range of supportive care services aiming to provide the best outcomes for cancer sufferers. A world leader, Peter Mac introduced an innovative program onTrac@PeterMac in an attempt to address the relatively poor survival rates among adolescent and young adults living with cancer.

Peter Mac is home to a major cancer research program where more than 400 cancer researchers work to find the best ways to treat cancer and to understand this disease which in many ways is still not well understood. Through the vision of its past and present leaders, the skill of its clinicians, researchers and carers, the commitment of its staff and the unwavering support of its many volunteers, Peter Mac continues to play a pivotal role in the lives of so many cancer patients, and to deliver on its potential.

I would like to congratulate Peter Mac for its role in reducing the burden of cancer on our community and encourage it to continue its excellent work well into the future.

Hon Daniel Andrews MP
Minister for Health

MESSAGE FROM THE CHAIR

As we reflect and celebrate the 60th Anniversary of the Peter MacCallum Cancer Centre we are indeed proud that Peter Mac continues to provide the very best high quality research and care for people with cancer.

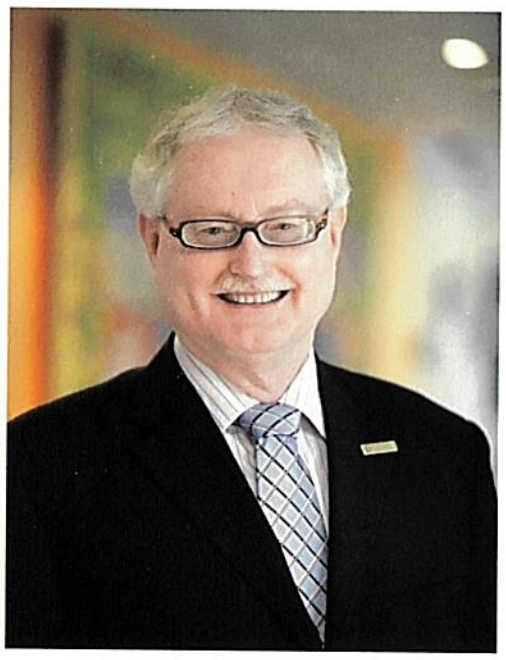
Guided by the principles of its founder, Professor Sir Peter MacCallum, Peter Mac exists to provide the best possible treatment and multi-disciplinary holistic care for cancer patients and their families. For Professor Sir Peter MacCallum the cancer patient was always his first priority as he affirmed on many occasions that: 'nothing but the best is good enough' for the treatment of cancer and the Peter MacCallum Cancer Centre is an affirmation of his belief.

Peter Mac is an iconic organisation within the Australian healthcare sector and through our clinical and research staff we strive to be recognised as Australia's foremost cancer centre providing opportunities for the next generation of clinicians, clinician-researchers and researchers to set national and international standards in therapy and treatment.

It can be said with confidence, 60 years after the inaugural meeting of the Cancer Institute Board on the 27th April 1949, at which it was stated that: "The Minister drew attention to the great value of research into the many problems connected with cancer which we hoped would develop under the guidance of the management of the Institute. The Act of Parliament was quite definite on this point", that Peter Mac is, to this very day, fulfilling those sentiments as it is recognised as a premier resource for cancer patients in the provision of integrated treatment, research and education.

We are confident of a bright future ahead; of the next 60 years full of promise and progress and wonderment at where excellence, innovation and compassion can take this iconic organisation that is Peter Mac.

Patricia Faulkner OA
Chair - Board of Directors



MESSAGE FROM THE CEO

Peter Mac has come a long way since the Cancer Institute Board met for the first time on Wednesday evening, 27 April 1949 at 295 Queen Street, Melbourne. Our 60th anniversary celebrations give us a wonderful opportunity to reflect on our various achievements since then and to thank our generous supporters.

Peter Mac does have a special place in the hearts and minds of many Victorians. We have been very generously supported over the past 60 years, but fully accept the need to continue earning such support in the future. Our commitment to: Excellence, Innovation & Compassion will endure.

Who knows what Peter Mac will look like in 2069? In the early 1950's, I'm told that we put aside the sum of £1,265 in a Cancer Research Fund. Today, the budget of our Research Division exceeds $30 million. I wonder what it will be in 60 years' time? And... will various types of cancer be cured by then, or will we have come to regard them as chronic diseases, capable of being managed effectively? I very much hope that Peter Mac will continue to be closely associated with such progress...

I am constantly being told that our generation has seen very rapid advances in our understanding of the causes and treatment options for cancer, so anything might be possible over the next 60 years.

What I do know is that we will continue to rely on the support of the Victorian public - in good times and in bad. Thank you from all of us at Peter Mac.

Craig Bennett
Chief Executive Officer

The origins of the Peter MacCallum Cancer Institute stretch back to Europe and the UK in the early 1920s. It was there and then that progress in medicine and concerns about the new scourge of cancer fostered the idea of a dedicated cancer institute.

Great strides had been made in the delivery of anaesthesia allowing the painless surgical removal of cancerous growths on easily accessible parts of the body. Where a cure was not achievable pain and distress from obstructive tumours was at least relieved. Surgery was unable to combat the development of secondary or deeper tumours but advances in bacteriology and immunology were paving the way for drugs to prevent or cure infections caused by a depleted immune system. Finally, the effect of radiation on living tissue was being studied in many institutes and universities. Treatment using high energy radiation could be directed to inaccessible tumours deep in the body without the complications associated with anaesthesia and surgery.

At the same time two observations were being made. The first was that the incidence and death rate from cancer was rising. It was not clear why this was but many thought the increasing life span that was a welcome outcome of the post industrial revolution period may be the answer. We were no longer dying from diseases of infection or malnutrition, instead our increasing age gave the cells in our bodies the opportunity to weaken, metastasise and become malignant. If this was the case then cancer was here to stay. Secondly, the success of the dedicated tuberculosis sanatoria across Europe presented a role model for specialised hospitals that some believed may be the answer for dealing with this new health scourge.

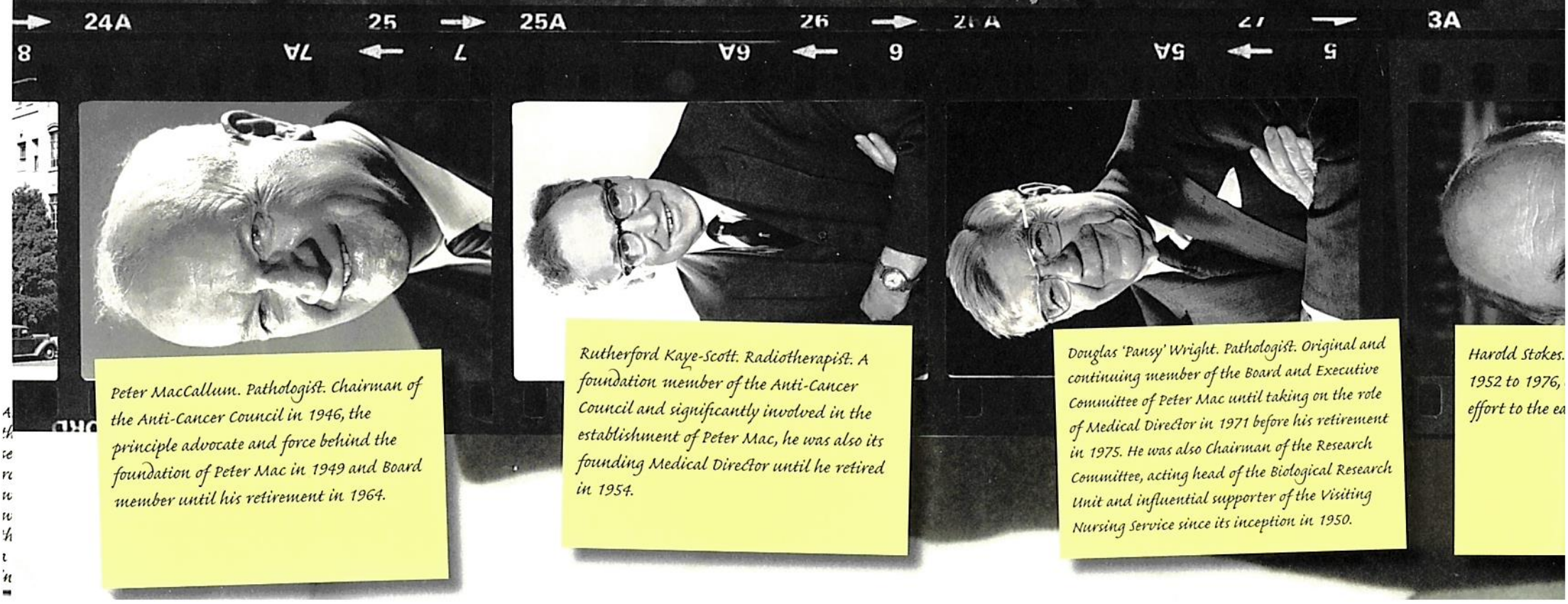
In 1923 the British Empire Cancer Campaign was established, a conglomeration of organisations engaged in cancer treatment, research and education. By the late 1920s it had reached the shores of Australia and was present in various forms across the states. A few private practitioners had secured very small amounts of radium and in 1928 the Commonwealth government spent £100,000 on 10 grams of radium to be used for radiation therapy, one of the first radium banks in the world, and established a Cancer Advisory Committee. A Cancer Conference, one of the outcomes of this Committee, met for the first of ten annual meetings in March 1930 to ask 'What has been done, what is now being done and what can be done to improve national activities against cancer'.

In Victoria at the time there was strong cancer research underway at the Baker Institute, the Walter and Eliza Hall Institute and the University of Melbourne. But this state lacked the coordinated efforts of a cancer organisation to promote education, research and fund raising that were by now found in most of the other Australian states. At the 5th National Cancer Conference in 1934 Victoria was encouraged to establish its own organisation.

Fortunately for the future of cancer patients in Victoria and around Australia there happened at the time to be a number of determined and influential men whose professional backgrounds, in medicine, science and in politics, lent themselves to the cancer cause. These included politicians such as Stanley Argyle, physicist Cecil Eddy at the Commonwealth X-Ray and Radium Laboratories, radiotherapist Rutherford Kaye-Scott, pathologists Roy Douglas (Pansy) Wright and Peter MacCallum, and the surgeon Hugh Devine.

Stanley Argyle, as Victorian Minister for Public Health, introduced a Cancer Research Bill into the Victorian Parliament in 1929. This lapsed following a change of government that same year. However by 1934, when the National Cancer Conference was urging Victoria to campaign more coherently, Argyle was Premier. He was able to pick up his cause again leading to the establishment of the Anti-Cancer Council of Victoria (ACC) in 1935. This was a statutory body 'formed in the interests of public health and in an endeavour to combat the growing menace of a baffling disease'. It had wider objectives than the Cancer Research Bill of five years earlier, including providing transportation for patients, investigating the need for special cancer clinics, and promoting and facilitating research. The delay in Victoria's response to the cancer 'baffle' had allowed time for practitioners and the general community to think more deeply about conditions in which cancer patients lived and the requirements for treating and finding cures.

Evolution of Peter Mac



Peter MacCallum. Pathologist. Chairman of the Anti-Cancer Council in 1946, the principle advocate and force behind the foundation of Peter Mac in 1949 and Board member until his retirement in 1964.

Rutherford Kaye-Scott. Radiotherapist. A foundation member of the Anti-Cancer Council and significantly involved in the establishment of Peter Mac, he was also its founding Medical Director until he retired in 1954.

Douglas 'Pansy' Wright. Pathologist. Original and continuing member of the Board and Executive Committee of Peter Mac until taking on the role of Medical Director in 1971 before his retirement in 1975. He was also Chairman of the Research Committee, acting head of the Biological Research Unit and influential supporter of the Visiting Nursing Service since its inception in 1950.

Harold Stokes. 1952 to 1976, effort to the ea

Over the next several years the ACC raised a considerable amount of money, despite the nation recovering from an economic depression, and was able to subsidise the purchase of radiotherapy equipment; assist the Commonwealth X-Ray and Radium Laboratories; establish a voluntary central cancer registry for data collection; and coordinate radiotherapy facilities at The Royal Melbourne Hospital and St Vincent's Hospital, Melbourne. A decision was made to decentralise diagnostic facilities across regional Victoria, but to centralise treatment in the metropolitan area. And finally they agreed with the findings of the first national conference regarding the need for liaison between all surgeons, radiotherapists and physicians working in the field of cancer, and that education of the public and of the profession was necessary.

World War II inevitably slowed progress for a while but in 1943 an opportunity arose which Victoria seized upon and that would set the ball rolling for the establishment of a dedicated cancer institute, as opposed to the dedicated cancer campaign focused on to date. Drs Ralston and Edith Paterson, two highly respected cancer research and medicine experts from the Holt Radium Institute and the Christie Hospital in Manchester, UK, were visiting Sydney. The Victorian government, on the ACC's advice, invited the Patersons to Melbourne in December that year to assess this State's situation.

The Patersons made several recommendations to the government and the ACC. These included: 1) 'the creation of a single central institute' with as much radiotherapy treatment and surgery as was possible; 2) 'a department given over to research'; 3) diagnostic clinics in cooperating hospitals and country areas; and 4) that Tasmania be a sub-centre of the Victorian cancer institute, providing training for Tasmanian professionals and the best available treatment for Tasmanian patients. This last arose because they believed only experienced medical personnel should treat cancer patients. Tasmania had been building a cancer campaign for several years and raising funds, but it did not have the critical mass of patients to sustain professional expertise as Victoria did. The Patersons also advised on organising and equipping a radiotherapy institute. The ACC and the Victorian government accepted their recommendations but the instability of Victorian politics at the time, distractions provided by the closing years of WWII, and the vested interests of other metropolitan hospitals and the medical profession delayed action.

The Royal Melbourne Hospital at the time had only one deep X-Ray unit at the Central Hospital in Lonsdale Street and none at Parkville, and the Austin Hospital's cancer ward was only functioning at fifty per cent capacity due to a shortage of specialist nurses. There was an urgent need for cancer services in Victoria. In 1946 the Queen Victoria Memorial Hospital was granted the use of the Central Hospital buildings in Lonsdale Street and their Mint Place buildings on the corner of William Street and Little Lonsdale Street were made available to establish a cancer institute. In 1948 the government introduced a Cancer Institute Bill proposing 'to establish eventually one of the best and most modern institutions in the southern hemisphere, if not the world'. Those charged with overseeing the establishment of this ambitious new project included Peter MacCallum (Chair), Archibald Cameron, manager of the Austin Hospital; John Campbell, financial expert and ACC member; Rutherford Kaye-Scott, radiotherapist; Cecil Eddy, Director of the Commonwealth X-Ray and Radium Laboratories; and Charles Mackay, the ACC's former Executive Medical Officer.

A bill proposing the institute was debated in parliament later that year, becoming an Act in December 1948. Their charter under the Act was to provide treatment broader than just that of radiotherapy and to place great importance on research. After much debate about the sensitivities of the word 'cancer' it was retained in the name. The following April, in 1949, the new Board of the Cancer Institute met for the first time in their new building on William Street.

Although named the Cancer Institute, the hospital component was called the Peter MacCallum Clinic. In 1986 the whole was renamed the Peter MacCallum Cancer Institute, 'Institute' later becoming 'Centre'. In sixty years 'Peter Mac', the only name it has ever really had, has outgrown its original home in Melbourne's centre and moved to the site of St Andrew's Hospital just east of the city next to the peaceful Fitzroy Gardens. This was the first time it had all facilities on the one site. Here it has flourished, developing satellite centres across Melbourne and Victoria and outgrowing itself again with ever increasing research, treatment and para-medical services.

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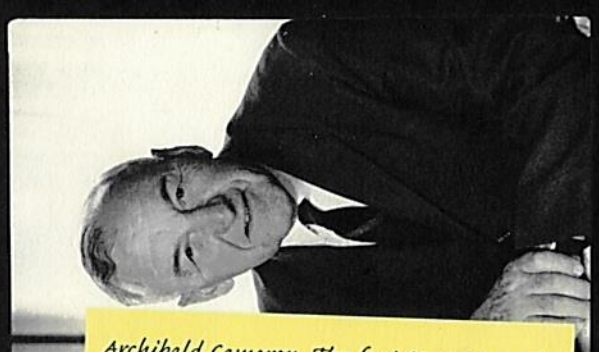


Archibald Cameron. The first Manager and Secretary of the Cancer Institute and responsible for the early planning and development of the hospital. He retired in 1958.

Ralston and Edith Paterson visited the Institute in 1957 and expressed 'profound admiration' for the way in which it had so quickly developed facilities 'equalled by few other centres in the world'. Ralston Paterson, Cyril Minty (Consultant Radiotherapist), Edith Paterson, Henry van den Brenk (Radiobiological Research Officer), Ken Biggs (Physics Department), Neva Johnson (Surgery), Peter Leckie (Senior Radiotherapist)

The Fire Services Museum of Victoria used their collection of heritage fire trucks to transport the staff from William Street to the new site in East Melbourne on opening day in September 1994.

Background Image: George Hodgson was inaugural chairman of the Biological Research Laboratories, established in 1969 to coordinate and facilitate the growing diversity of Peter Mac research.

Science of cancer at Peter Mac

Physical Sciences - 'String and Sealing Wax'

Jack Martin was in charge of the Medical Physics department, established in 1952 to construct and calibrate equipment, ensure the safety and protection of staff working with radioactive materials, and develop prescriptions into suitable X-ray fields or radioactive sources. Medical physics – the diagnostic and therapeutic use of X-rays and other forms of radiation such as radioisotopes – was the dominant cancer science at the time. Radioisotopes, such as iodine 131 for thyroid cancer, chromium 51 and iron 59 for haematological conditions, phosphorus 32 and gold 198, were produced in the Peter Mac isotope laboratory established in 1955 for therapeutic treatment or tracer studies to detect malignancies or changes in the characteristics of blood and organs. Nowadays artificial isotopes and the radiation and imaging equipment for cancer research, diagnosis and treatment are provided by commercial enterprises.

The role of medical physics used to be one of 'strings and sealing wax' whereby working with first principles was the key to providing innovative, in-house devices for dosimetry studies, measuring radiation output and providing radiotherapy support. The department's physicists and technicians were innovative and adept at using whatever tools were available, such as watchmakers' lathes or band saw welders, to make special precision equipment. Today Peter Mac medical physicists are responsible for research, support and treatment protocols required for the clinical implementation of increasingly sophisticated commercial imaging, diagnostic and therapeutic technology. In 1952 Jack Martin wrote that 'pure physics has outrun clinical practice' and predicted the next cancer advance will be in applying physical methods to study the biology of tumours.

Biological Sciences - 'Tissue is the Issue'

Pathology was established at Peter Mac in 1952 under Reginald Motteram and has been partially guided by evolutions in clinical procedures and research. While an average of 3,000 biopsy specimens a year were taken during the 1950s to enable sectioning and study of tumours, the advent of chemotherapeutic drugs towards the late 1950s required closer biochemical and haematological checks, and cytological smears more than doubled in the early 1960s largely due to an increase in screening for gynaecological cancer. Peter Mac's significant concentration of cancer patients has enabled its pathologists to study the rarer cancers that present in larger numbers at this hospital.

In 1956 a Radiobiological Research Unit was established to study the effects of radiation on living tissue under the 'maverick' Henry van den Brenk, remembered for his many passions and achievements but also for dissecting a rat with a cigarette in his mouth. This Unit was the first of its kind in Australia and grew rapidly, developing new interests and activities so that a Laboratory Research Complex was established in 1964. Research in endocrinology (1967), haematology (1972), immunobiology (1974), clinical immunology and immunogenetics (1976), experimental chemotherapy (1980), and molecular sciences (1988) was established. Within twenty years the extent of the biological sciences at Peter Mac, and the expertise of its researchers had grown well beyond the radiotherapy modality, so that 'tissue is the issue' rather than whole tumours.

Chemical Sciences - Target Science

A chance discovery that victims of mustard gas in the battleground of Ypres during the First World War had a very low white blood cell count led to developments in the chemical sciences for cancer medicine. The gas was used clinically with some short term benefits but soon abandoned due to the difficulties in handling it. Research continued however, so that by the mid 1950s Peter Mac's Basil Stoll wrote in the Medical Journal of Australia that temporary control of tumours by some chemical agents had been well and truly established and, with an insight into the 21st century, the 'vista [for drug therapy] appeared boundless'. Problems remained with the drugs being applied in a blanket fashion – they were designed to kill cells that proliferated rapidly (a principle characteristic of cancer cells) but this had the side effect of killing normal cells that behaved the same way, such as those in bone marrow, the lining of the digestive tract and hair follicles.

In 1978 a Solid Tumour Chemotherapy Unit was established at Peter Mac providing clinical and research services. It participated in clinical trials such as the Australian and New Zealand breast cancer trial and the Australian ovarian cancer trial, and research focused on the actions and interactions of different drugs. In 1993 Peter Mac was selected as the Australian centre for collaborations with the Cancer Research Campaign in the UK (the same campaign that assisted the initial cancer campaign in the 1920s in Australia) and was the only Australian member and one of only two outside Europe. However it was in the early 1980s that researchers began to design antibodies or proteins that would target cancer cells at a molecular level, hoping to avoid the 'blanket' approach. This was the beginning of what is known as 'targeted therapy'. Today Peter Mac nurses, clinicians and scientists run clinical trials of new drugs, and studies of drug dosage, adverse drug reactions, symptom control and pain assessment, and new therapies.

A nuclear medicine technician loading a radon needle, 1956.

Anne Evans and Raie Opie, the head technician of the Physics Department, working with a phantom' of the human thorax for a dosimetry study in 1954. Phantoms were made of pressboard, wax and water by physicists to explore radiation distribution and dosage at given points throughout the body. 'This step produced the excellent development that attention was transferred from skin to tumour dose'.

The Mould Room, opened in 1954, is where science and art come together to create perfect moulds of a patient's body. These protect tissue surrounding the tumour from radiation or help stabilise the body and prevent movement, assisting patients who have to lie still 'because what happens is you've got to scratch your nose or you get an itch somewhere.' Tiny holes are made to direct the beam onto the tumour.

Genetic Science -
Understanding Maverick Behaviours

Cancer genomics holds the 21st century hope of personalised targeted therapy in the palm of its hand. We now know 'the stage is set for the appearance of a tumour' when our genetic ability to control prolific cell division goes awry through environmental or genetic damage, or when our normal cells are unable to sense and respond appropriately to changes in their environment. We also know that our biochemical circuits – the regulations by which normal cells are born, live and die – can be manipulated or disregarded by maverick tumour cells. So the science of cancer today has moved beyond the cellular to the molecular level and is all about understanding the origins, mechanisms and behaviours of maverick cells, then devising ways to predict, prevent and control them.

At Peter Mac the last fifteen years has seen some incredible efforts towards this understanding in a range of cancer types. Today the Cancer Genomics and Genetics Program researches inherited susceptibility to cancers, changes in gene expression, predictions of adverse responses to therapy, using gene expression profiling for accurate diagnosis, and much else besides. It is the home for the kConFab Familial Cancer Centre which provides one of the largest comprehensive data and biospecimen resources for studies of familial breast cancer in the world; the Peter Mac Tissue Bank which stores specimens from all tumour streams to facilitate current and future research projects; a DNA-chip facility, the first in Australia enabling researchers to search for cancer causing genes; the Victorian Centre for Functional Genomics; and a platform of highly sophisticated cancer research technologies.

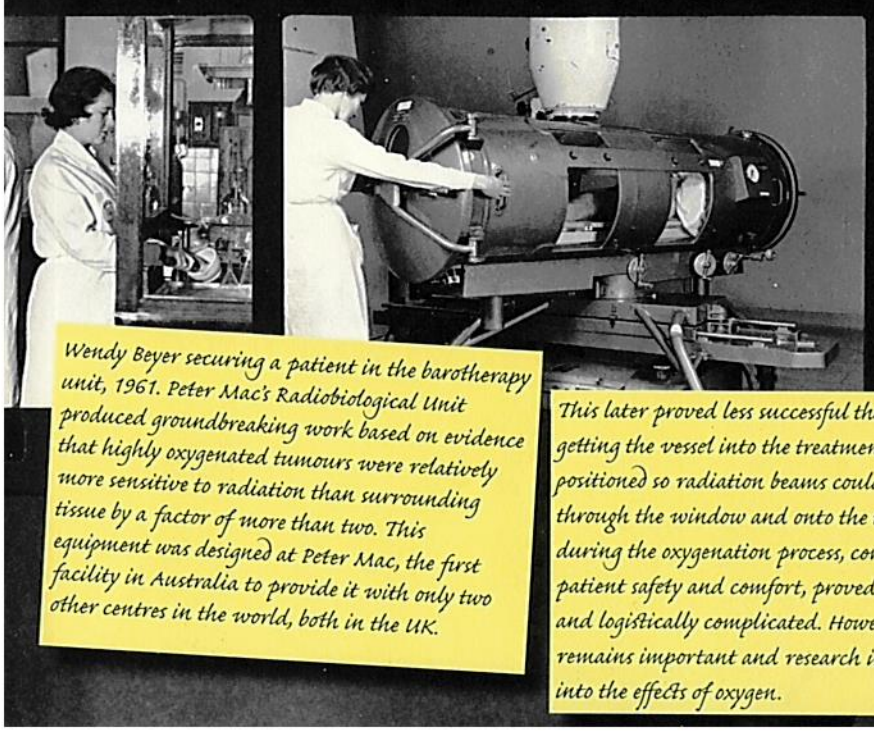
Enabling Science -
The 'Wild Duck' Syndrome

At the Little Lonsdale site Peter Mac's reputation for cancer research had been well established for years and many prominent scientists and important publications had come out of its research laboratories. In 1967 an affiliation agreement was signed with the University of Melbourne for Peter Mac to be a teaching hospital. Immediately the Biological, Endocrine, Pathology and Physics laboratories all had students enrolled and in 1971 Roger Martin and Ruth Moore became the first staff to obtain PhDs, Martin's on 'Estimation of Deoxyribonucleic Acid' and Moore's on 'Cell Kinetics in vivo and in vitra'. The introduction of high level formalised research training was a boon for the hospital's research profile and by 1975 Peter Mac was affiliated with Monash University's School of Medicine and recognised by the Colleges of Physicians, Surgeons, Radiologists and Pathologists for specialist postgraduate training. In 1971 Jane Matthews became the first full time statistician at Peter Mac 'a highly unusual procedure in a hospital', but extremely beneficial for the design and analysis of the many clinical trials, epidemiological studies and patient and data surveys. However scientists were nonetheless hindered in their full potential by 'dickensian' laboratories and workshops that were spread around different buildings. It was the vision of CEO John Morris, appointed in 1989 on the cusp of the decision to relocate Peter Mac to a redeveloped St Andrew's Hospital site, that turned the hospital around from an essentially service oriented institute to one with a strong academic base that complemented the service role.

Joseph Sambrook was recruited as Director of Research from Cold Spring Harbour Laboratories in New York with a 'fantastic reputation' for academic science. He moved into the newly built, single floor, open plan Trescowthick Research Laboratories and served as a magnet for bright young researchers to join the established scientists who had moved from Little Lonsdale Street. In the years since the research division has outgrown its spacious laboratories with over 350 researchers; and led and substantially contributed to large scale cohort studies and collaborative studies at a national and international level.

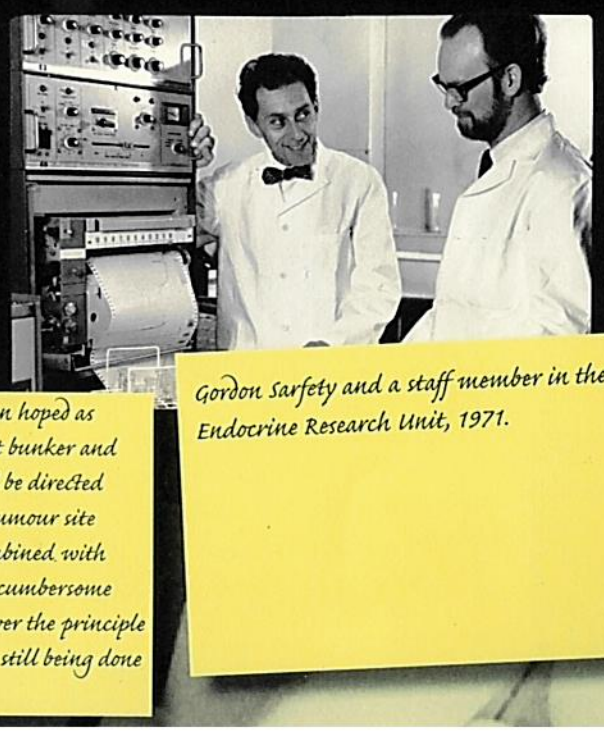
The breadth and depth of research at Peter Mac has seen a change in the nature of basic research over the last twenty years so that interaction and cross fertilisation of ideas is deeply embedded in the culture. Translational (taking laboratory findings to the bedside) research has become very important at Peter Mac and 'people who in the past would have described themselves as fundamental biologists, now see themselves as having a very active role in research translation'. They have established facilities such as the Haematology and Immunology Translational Research Laboratory and the Translational Oncology Research Collaborative Hub. The sharing of skill and knowledge is often expressed in an informal way, through conversations between scientists and clinicians in lifts and corridors, but also formally through large scale co-operative groups focusing on clinical trials such as the Australian Gastrointestinal Trials Group and the Trans Tasman Radiation Oncology Group. Sometimes the informal leads to the formal, such as the Tissue Architecture Group, an inhouse collaborative group of three cell biology and immunology laboratories that began life as a 'self-assembled' group of like-minded researchers self styled 'The Young Ones'.

Opinions differ as to whether the people or the place are important in facilitating good research, but the last twenty years has shown an enabling environment makes a huge difference to research strength and output because scientists are 'a bit like wild ducks, they'll up and go to where they can do what they need to do.'

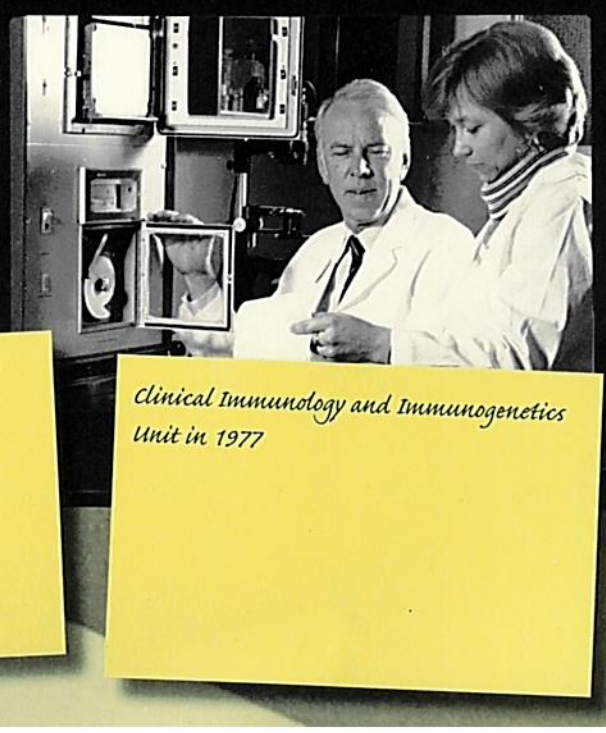


Wendy Beyer securing a patient in the barotherapy unit, 1961. Peter Mac's Radiobiological Unit produced groundbreaking work based on evidence that highly oxygenated tumours were relatively more sensitive to radiation than surrounding tissue by a factor of more than two. This equipment was designed at Peter Mac, the first facility in Australia to provide it with only two other centres in the world, both in the UK.

This later proved less successful than hoped as getting the vessel into the treatment bunker and positioned so radiation beams could be directed through the window and onto the tumour site during the oxygenation process, combined with patient safety and comfort, proved cumbersome and logistically complicated. However the principle remains important and research is still being done into the effects of oxygen.



Gordon Sarfety and a staff member in the Endocrine Research Unit, 1971.



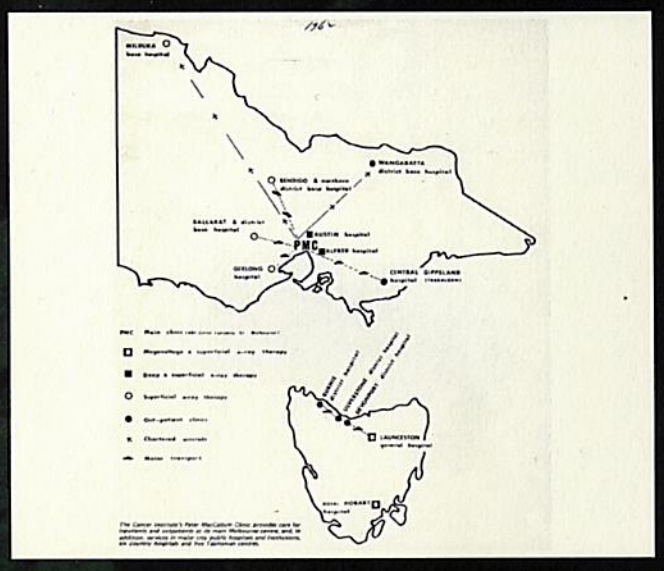
Clinical Immunology and Immunogenetics Unit in 1977

Background Image: Peter Mac's 21st century laparoscopic theatre sheds a green light throughout. This considerably enhances the visual details of the patients' internal body produced by internal cameras.

Medicine of cancer at Peter Mac

Away from home

From the beginning Peter Mac was conscious of its status as the only dedicated cancer institute in the state and of the need to deliver services and expertise far afield. Radiotherapy consulting services were provided to hospitals across Melbourne with commitments to outpatients clinics, ward rounds, teaching medical students, theatre and special follow-up clinics. The affiliation with Tasmania that was part of the original charter meant Peter Mac facilities and services were available to Tasmanian cancer patients and clinics were soon established at the Royal Hobart Hospital and the Launceston General Hospital. Peter Mac radiotherapy clinics were also established in regional hospitals across Victoria. These provided a service to patients living outside Melbourne and kept local doctors informed of contemporary treatments. Today Peter Mac has satellite centres providing treatment at East Melbourne, Box Hill (Epworth), Moorabbin (Monash Medical Centre), Bendigo and Richmond (Epworth), with consulting clinics at hospitals in Frankston, Traralgon, Epping, Malvern, Parkville and Fitzroy.



Surgery

Surgery was the primary treatment for years and is still extremely important for many types of cancer such as gastrointestinal, breast and skin cancers. Curative surgery was important for the removal of tumours, while reparative, or plastic surgery enabled skin grafts and provided relief and improvements in the physical appearance of surface lesions. A Peter Mac lip and neck cancer patient in the early 1950s remembers 'one of the skills of Alan Wakefield was that he didn't leave a raw line, if you look closely (all you see is) little wedges that blend the graft with surrounding skin.'

Surgery and radiation therapy came together when brachytherapy was required – hollow needles, 'more like nails' remembers the same patient, encasing a dose of radon were inserted into the tumour site for seven days to slowly emit their destructive force. More recently surgically implanted gold seeds filled with radioactive iodine have been successful for prostate cancer. Today, fabulous advances in endoscopic techniques have led to minimally invasive, or laparoscopic, surgery. High dose rate brachytherapy – a flexible cable with an isotope on the end moving in and out of several catheters implanted into the site for short periods of computer controlled time – is now available at Peter Mac for prostate and endovascular surgery.

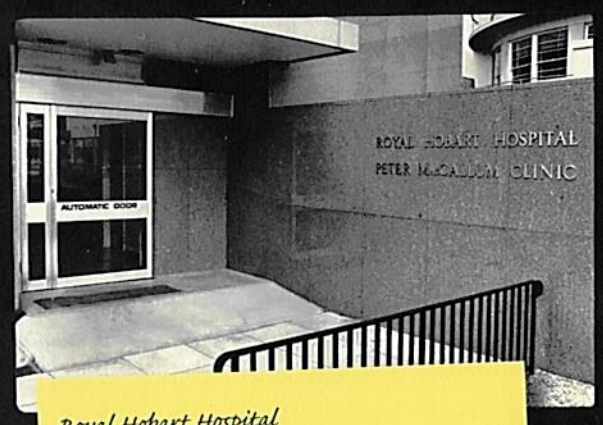
In 2008 Peter Mac opened the most advanced laparoscopic theatre in Australia. Cameras, external and miniatures for insertion into the patient, together with moveable high definition screens hanging from the ceiling enable a hugely improved vision of the patient's tumour and surrounding anatomy. Touch screen computers mean the surgeon can control the laparoscopic equipment, lighting, cameras and operating bed, while bringing up the patient's medical history and real time 3D images. Surgical time, recovery time, pain and outcomes are all vastly improved and procedures can be performed and beamed live to other centres around the world for teaching purposes.

Therapeutic architecture

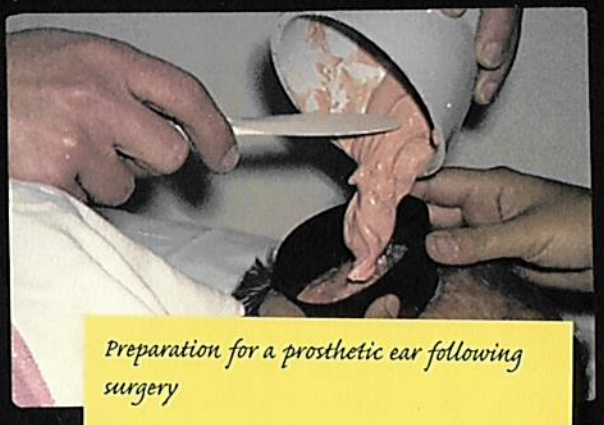
Peter Mac was initially a radiation therapy institute, and this modality has been a mainstay of cancer treatment, palliative care and diagnosis ever since. Given the potential danger of radiation to healthy cells in both patients and staff, precision and accuracy have been paramount in positioning the beams and calculating the radiation dose – known as dosimetry. This was a manual procedure that is now a highly skilled art lost to the supremacy of the computer.

After X-ray or palpation to locate the tumour blue chinograph pencils and flexible wire traced the contour and shape of the patient's body. This was carefully transcribed to paper and the outline drawn. A number of 'tricks', gadgets and anatomical markers were used to check and recheck accuracy, then with a matrix of drawn points, a slide rule, and knowledge of the radiation strength at different depths and angles, a dose could be calculated. 'All the radiation therapists were very, very adept at using a slide rule – they could multiply and divide several numbers together to work out what setting to put on the treatment machine to give the right dose.'

Today the pencils, flexible wire and slide rules have given way to highly sophisticated computers and equipment, reducing the planning of an individual patient's treatment from two days to half an hour in what is known as image guided radiotherapy. It is now possible to see 3D electronic images of the affected and surrounding areas, manipulate the patient's couch by millimetres to facilitate precise positioning for consecutive treatments, and even accommodate changes in the shape and size of the bladder for example. 'We don't want to hit [the tumour] one day over there and one day over there, we want to get it in the same spot because the doses are cumulative'. Radiotherapeutic planning then and now has been described as akin to architecture as the technical knowledge required for optimum arrangement and performance is married with the sensitivity and understanding required in an ongoing relationship with the patient.



Royal Hobart Hospital
Peter MacCallum Clinic



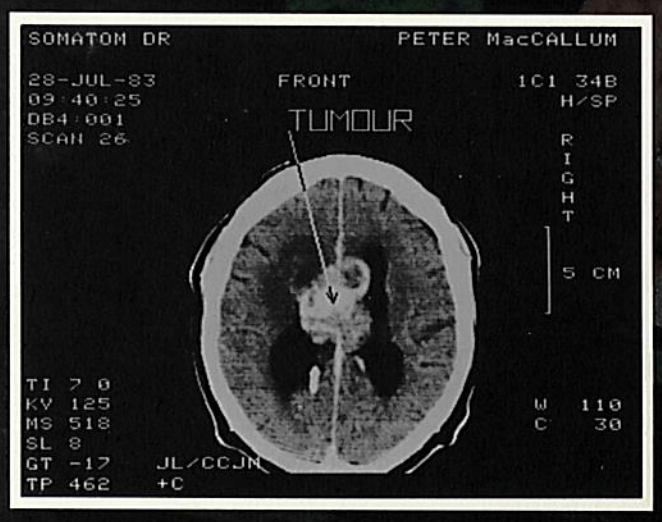
Preparation for a prosthetic ear following surgery

Julie Weight planning the treatment on a perspex cast of a patient's neck to treat a cancer of the larynx

Pam Harvey and a ruler t of a strontiu lesion.

The cadaver and the ghost

Imaging machines used to diagnose and locate the tumour have been around for decades, capturing two-dimensional views of the patient's body and revealing their anatomy in a black and white image. In 1996 Peter Mac installed a PET (Positron Emission Tomography) scanner which enables an imaging capability that is ghostlike – a 3D anatomical picture that also shows up any metabolic activity taking place. This means the 'real time' proliferation rate of cells and their response to radiation can be monitored for treatment and used as a source of data for wide scale clinical studies. These technologies can now be combined and Peter Mac installed Australia's first PET/CT scanner in 2002.



Targeted therapy

By the 1950s the potential of chemotherapy was looking promising as clinicians and scientists sought to understand the characteristics of different cancer cells and find a drug that inhibits or destroys these without damaging the normal, healthy cells of the body. In 1956 a reticuloses (abnormal increase in cells often related to leukemia) clinic was established to take advantage of the huge advances in chemotherapy. In 1978 Peter Mac established a Solid Tumour Chemotherapy Unit as a rapidly growing third area of cancer treatment.

Chemotherapy was and still is often used in combination with radiotherapy or surgery. In the early 1970s for example recent outstanding progress in the treatment of Hodgkin's disease was being made. Previously a diagnosis that held little hope for its generally young patients, radiotherapy and combination chemotherapy was resulting in many complete remissions and such prolongation of life for Peter Mac patients 'that use of the word "cure" is starting to be contemplated'. Today the five year relative survival rate for young people with this disease is heading towards 100%.

The challenge with chemotherapy is that each patient's biology and genetic makeup is different and some metabolise drugs differently which may mean it won't work for them. At Peter Mac in the last five years or so targeted therapy with drugs or a combination of drugs and radiation, while once a theory, is fast becoming reality so that tests will reveal the unique characteristics of each patient's own biology as well as of their cancer, and a treatment planned that will target this special combination of disease characteristics.

The osmosis of ideas

'Multi-disciplinary treatment' is the buzz word of today but this is the way treatment has been delivered throughout Peter Mac's history, whether officially described or not. Largely this is because it is possible to deliver collaborative treatment in a single dedicated centre, where clinicians inevitably engage with researchers and cancer service providers in their day to day work. An osmotic exchange of ideas and knowledge exists so that ideas are sparked in corridor or lift well conversations and collaborations pursued. This is enhanced and formalised through the formal and weekly joint meetings of all those who work with a particular group of patients. Screening and follow up procedures can predict the likelihood of some cancers, or consistently check the patient remains in remission. The lip and neck patient of 1952 has been returning for check ups every twelve months for fifty-seven years 'and if I failed to turn up for an appointment I'd get a letter reminding me.'

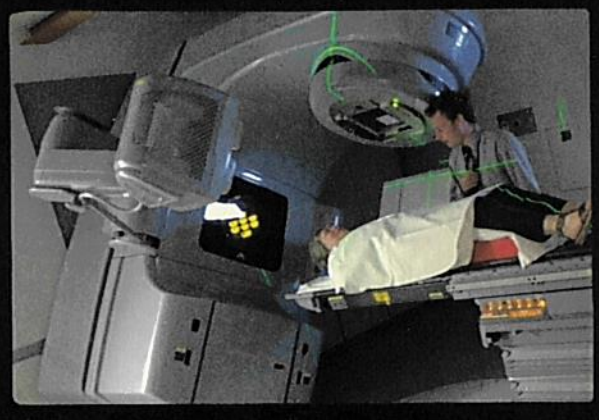
The sheer number of patients attending Peter Mac creates a critical mass that has served clinical trials well for nearly thirty years, expanding the knowledge field and treatment possibilities. They have also enabled the organisation of medicine at the Peter Mac to centre on cancer types. Over the decades units have been established in gastrointestinal, lung, head and neck, etc, and teams of surgeons, oncologists, radiologists and nurses have taken their particular area of interest down the path of specialisation and super-specialisation. Following the move to East Melbourne in 1994 significant appointments were made enabling the academic base to expand and compliment the medical services, just as with Research. Lester Peters was made Director of Radiation Oncology, John Zalcberg of Medical Oncology, and Robert Thomas of Surgical Oncology so that resources were continually finetuned in the search for the best available treatment and service.

While research was a principle objective of the Cancer Institute the words spoken by Peter MacCallum at the opening of the clinic were 'Nothing but the best is good enough for the treatment of cancer'. Treatment has been developed and delivered in myriad ways over the last sixty years, constantly bringing the realms of science fiction into the reality of the present. Some have been discarded over the years as ineffective or inefficient, but a dedicated, almost dogmatic persistence has provided two significant outcomes for cancer patients in the last sixty years.

Firstly, vastly improved methods of treatment have meant more and more patients are able to continue their ordinary day to day lives attending work or school during a treatment program, and even receiving some of their treatment in the home. Secondly, and most importantly, the medical evolution over the last sixty years across a wide range of cancer types has increasingly cured or prolonged patients' lives significantly and provided a meaningful degree of pain control and of palliative care.

chinograph pencil he precise placement for a superficial

Peter Mac's first 4 mega-voltage linear accelerator was bought in 1956 and enabled a far stronger and more penetrating beam. It is shown here when decommissioned in 1977, having treated some 17,000 patients, and some of the radiotherapists associated with it during its lifetime.



Nursing of cancer at Peter Mac

Treatment in the Home

In the days when an inpatient service required a nurses' home to provide round the clock care Peter Mac had to be inventive in caring for patients. Their nurses' home was not constructed for several years and in the meantime, arrangements were made with some of the small private hospitals to accommodate severely ill patients, and a Visiting Nursing Service (VNS) was established in 1950 enabling patients to remain at home but be cared for on a daily basis by a nurse.

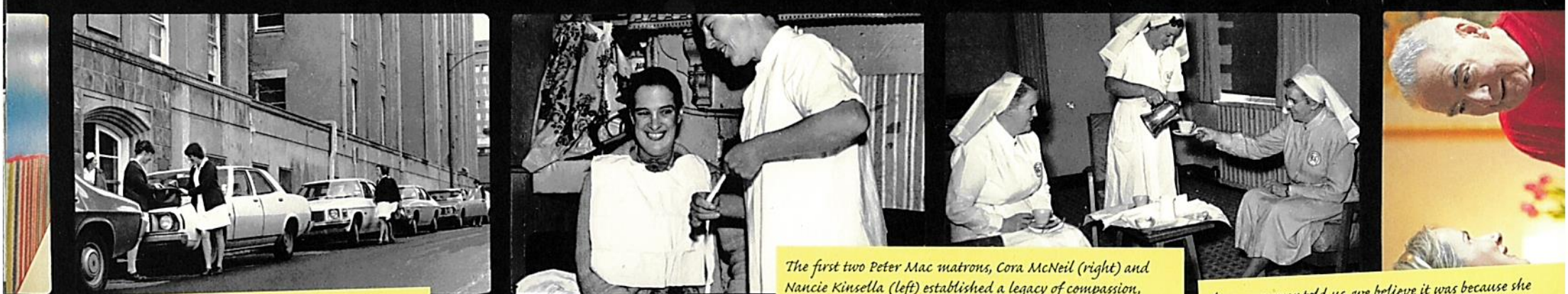
A community based domiciliary service such as the VNS has been effective and beneficial for the patient in many ways. Peter Mac still provides home based care and chemotherapy treatment, now called Peter Mac @ Home, and is also a member of the Victorian Government's 'Hospital In The Home' program.

The VNS became more and more in demand as word spread and by the early 1970s there were nearly 800 visits each week. The nurses collaborated with the Endocrine Research Unit and obtained blood and urine samples for testing, and they also worked in unison with local community services and the patient's general practitioner. The benefit of such a service could be seen in the case of a patient who was diagnosed with carcinoma of the cervix in 1958. Her treatment involved considerable surgery – hysterectomy, transplant of ureters, an ileostomy and amputation of the left leg. She recuperated at home with daily visits and general nursing care, provision of a hospital bed and linen service, a housekeeping service provided by the local council, and regular consultations with her local doctor. She had occasional stays in hospital but otherwise received 4,000 visits from the visiting nurses and was able to remain independent within her own community and manage her own home from a wheelchair until she died thirteen years later.

Domiciliary nurses provide support that allows 'the family to take the lead' in providing treatment and care. This gives the patient and their family a level of control and knowledge that can be extremely empowering and important. For those patients receiving treatment in the hospital 'the role of the professional dominates'.

But whether working in the home or in the wards and treatment rooms Peter Mac nurses have tended to defy conventional training mantras to not get involved with their patients because they knew the future for cancer patients often involved repeated visits or stays at the hospital. When patients were able to go home and be treated as outpatients Peter Mac nurses continued to care for them through the Visiting Nursing Service, so 'it was a continuing sort of a situation which sometimes went on for years, this association with one patient'. Still today, despite the higher professional status of the nurse, 'nurses that I talk to ... want to be able to bath the patient because in the moments of time that you do that, in that intimate space, is for them the way that they can learn about the patient ... and it influences their approach to everything else' to do with their care.

The world of nursing has changed as much in the last sixty years as that of science and medicine. In days gone by patients were more commonly treated as inpatients living in the wards for periods of time, the lucky ones 'able to go home for weekend leave.' Today the vast majority of patients spend most, if not all of their time at home only visiting the hospital for consultations and treatment.



All visiting nurses were equipped with a car and complete set of medical supplies, as is still the case today.

The first two Peter Mac matrons, Cora McNeil (right) and Nancie Kinsella (left) established a legacy of compassion, excellence and innovation that has been carried through in the nursing department to today.

Kinsella herself was like many of the senior nurses and doctors in Peter Mac's earlier years who had served in the war. 'They were fine people and I guess they'd seen things that people shouldn't have to see. But from it they developed this huge compassion for people' which was well suited to a cancer hospital. Kinsella herself had been in the D-Day landing at the end of the European war, was awarded an OBE, and 'although she never, ever told us, we believe it was because she was one of the first people that went into the concentration camps immediately post liberation ... from that experience she had developed this desire for patients to be comfortable with their illness, comfortable with their surroundings.' This is remembered in the oft told story of when a Peter Mac engineer told her she couldn't upgrade the dreary lamps in the wards because they were not broken. When he turned to leave the ward there was a crash and he heard her say 'Mr McMahon, the lights are broken, can we have some new ones please.'

The Nursing Evolution

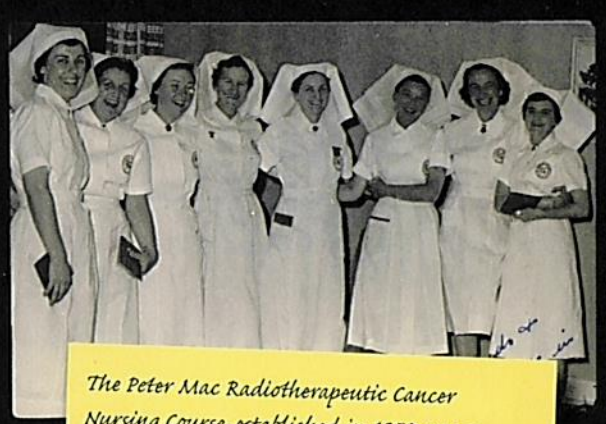
When Peter Mac opened sixty years ago 'nobody talked about having cancer ... and it had to be treated very delicately.' The hospital only employed Registered Nurses, not trainees, on the assumption that the trained nurses could cope with difficult emotional as well as medical situations. So 'if a patient looked up and said "I'm dying aren't I?" being that little bit older, a little bit more experienced, you coped with it.'

Because of this policy the Matrons were very particular in who they employed. There have been the inevitable occasional lapses in policy, mainly due to a shortage of nurses, as in 1958 when the Radiotherapeutic Nursing Course began and seven nurses were taken out of the wards to do the specialty training. Dorothy Willshire applied to join Peter Mac at the time and remembers the hospital must 'have been short of nurses because we got in without an interview, and I think we might be the only three people that ever did that.'

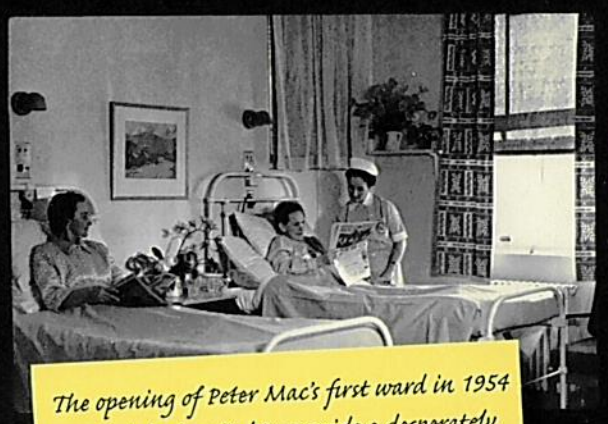
The lack of basic training at Peter Mac has not only made some elements of the hospital stay easier for patients, but also more relaxed for the other nurses in the days when the relative standing of a nurse created a strong sense of hierarchy in the general hospitals. 'The regimentation wasn't there [like] in a training hospital. So not having the basic training meant you didn't have nurses walking around with one stripe the first year, two stripes the second'. However training and education was always very high on the agenda for those who wanted to specialise in cancer nursing. With the largest number of cancer patients and cancer experts in Australia, the country's first Radiotherapeutic Cancer Nursing Course was established by Matron Kinsella in 1958 to develop nursing expertise in this specialty that would complement the medical expertise. This was the only post-graduate course of its type for nurses for many years. It was later called the Oncological Nursing Course and then the Cancer Nursing Course as the 'big C' became a more acceptable terminology. In 1978, as chemotherapy was either on its own or in combination with radiotherapy or surgery, a Chemotherapy Nursing training course was established to prepare for the opening of the Chemotherapy Day Ward in 1980, enabling nurses to administer cytotoxic drugs.

In the early 1990s nurse training began to move into the universities and Peter Mac offered several short courses instead, making them available to nurses and allied health people from other institutions. In 1997 they redeveloped the original program, offering a Graduate Diploma in Cancer Nursing and in 2001 Sanchia Aranda was recruited as Director of Cancer Nursing Research to complete the high academic standard set in train after the hospital moved to East Melbourne when similar appointments were made in research, radiation oncology, medical oncology and surgical oncology.

As the hospital grew and the treatment modalities broadened the nursing department adjusted to suit. The deputy matron role was split into two, one to manage the wards, the other to manage the units (VNS, outpatients, radiotherapy, pathology, X-Ray, etc) and over the years nursing 'models' have fluctuated to find the most accommodating role that suits patients, medical staff and the nurses themselves. The development of multi-disciplinary treatment in the last ten years or more has resulted in clinical services focused on each of the eleven tumour streams (breast; gastrointestinal; gynae-oncology; haematology; head and neck; lung; melanoma and skin; neuro-oncology; paediatrics, adolescents, young adults and late effects; sarcoma; and uro-oncology), each one led by a clinician and a nurse coordinator. 'A nurse coordinator is someone who can steer the patient through what is a very complex series of interactions, the appointments for different investigations and treatments, over a long period of time and has been I think a fantastic development here.' Apart from care coordination they also provide patient education, professional leadership, quality control, and work closely alongside the clinicians, therapists and researchers. Similar adjustments have been made in the management of the wards. While once fulfilling partially a guardian role, with strict visiting hours to protect the patient and allow them rest, now 'there are times we may put in real controls and strategies, and there are other times it's just left up to the patient. A lot more fluid, more flexible than ever before.'



The Peter Mac Radiotherapeutic Cancer Nursing Course, established in 1958, was a national first and the beginning of a long tradition of nurse education at this hospital. The first group of graduates were Sisters Ruth Ryan, Betty Birss, Freda Grey, Peg Hanily, Bess Deakin (tutor), Dulcie Soulie, Edith Cutts and Phyllis Breen.

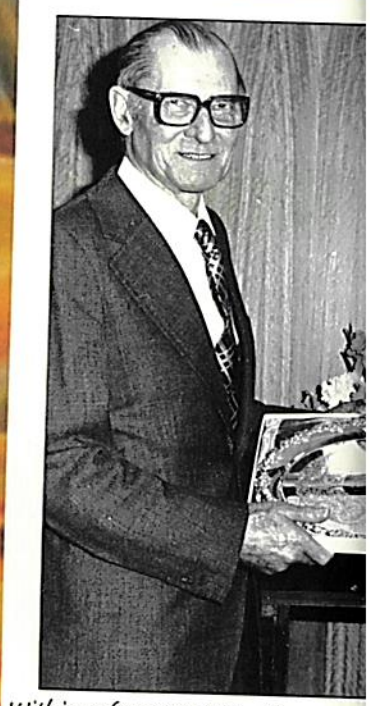


The opening of Peter Mac's first ward in 1954 enabled the hospital to provide a desperately needed inpatient service.

The Chemotherapy Day Unit at Peter Mac in 2009.

Lucy Yapp (left) and Max Wolf test a new piece of physiotherapy equipment. The physiotherapy department was established in 1962 and is one of many paramedical services to help patients recovering from operations or adverse reactions to treatment. Other allied health departments that have developed at Peter Mac over the years include occupational therapy, nutrition, social work, clinical psychology, and pain and palliative care units.

Peter Mac Volunteer Service has been visiting and assisting patients in as many ways as possible for decades. They offer help with shopping, sew toiletry bags, X-Ray bags, head scarves and turbans, maintain a wig library which is an important part of the Look Good Feel Better program, operate a convenience trolley in the wards and outpatients areas and many other services besides.



Within a few years Peter Mac was a
by staff through annual badge presen
recognise the 'sense of purpose' that
not long before the five year award w
so on. In 1976 a 25 year award was g
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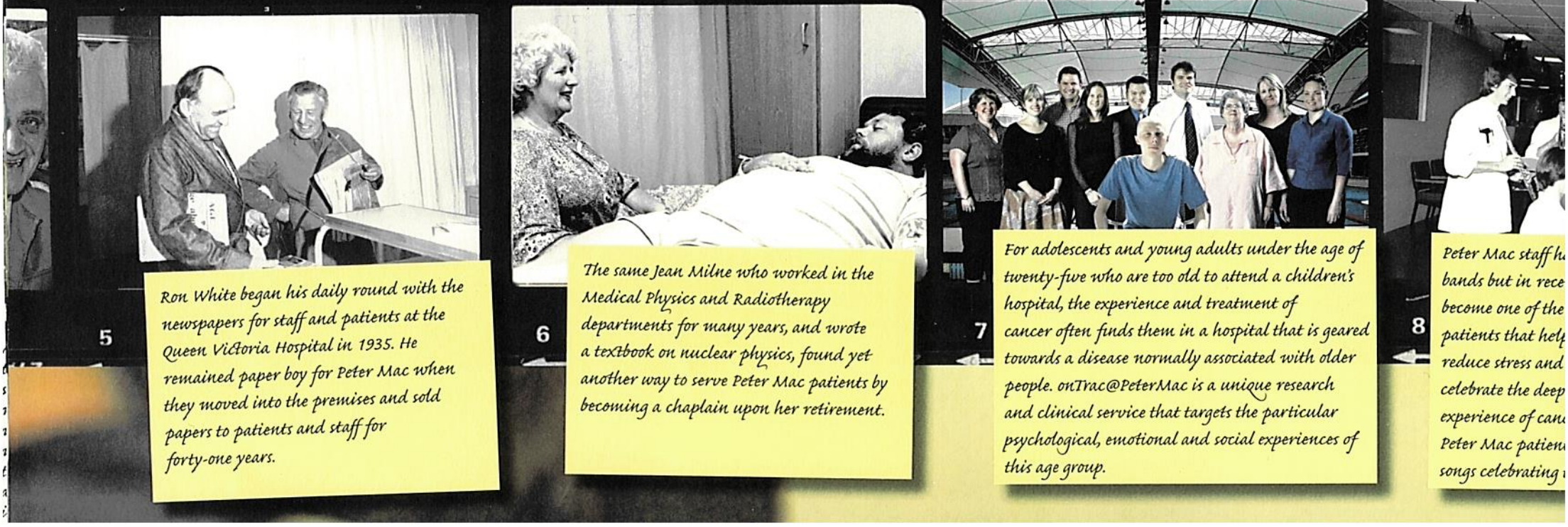
35 year award was made in 1987 to
but none for longer than that.

In the 1950s a transport service was provided for patients who lived in the metropolitan area and had difficulties using public transport to get to Peter Mac for their radiotherapy treatment. By 1974 the service was transporting over 21,000 patients, an average of 82 per day.

Porter Robert Straub and driver Scott Pretty transfer a patient to a wheelchair on arrival at Peter Mac

Background Image: Wisdom 2003 by Marianne Perrot Hey on display in the Outpatients Clinic.

Community of cancer at Peter Mac



Ron White began his daily round with the newspapers for staff and patients at the Queen Victoria Hospital in 1935. He remained paper boy for Peter Mac when they moved into the premises and sold papers to patients and staff for forty-one years.

The same Jean Milne who worked in the Medical Physics and Radiotherapy departments for many years, and wrote a textbook on nuclear physics, found yet another way to serve Peter Mac patients by becoming a chaplain upon her retirement.

For adolescents and young adults under the age of twenty-five who are too old to attend a children's hospital, the experience and treatment of cancer often finds them in a hospital that is geared towards a disease normally associated with older people. onTrac@PeterMac is a unique research and clinical service that targets the particular psychological, emotional and social experiences of this age group.

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Celebrating 60 Years

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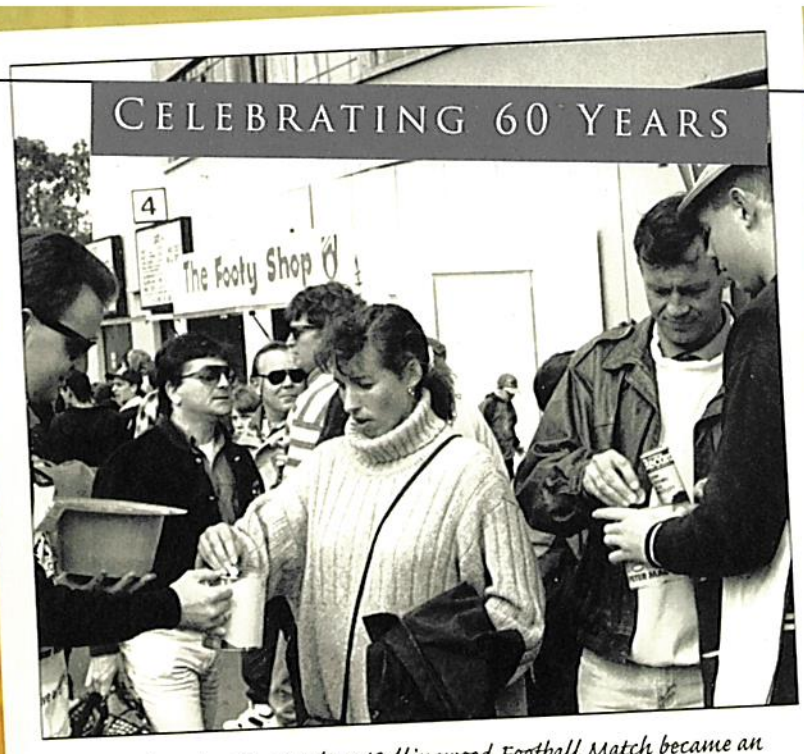
The Central Cancer Library, available in house since Peter Mac was established, was extended in 1955 to provide a service to the Anti Cancer Council and to doctors across Victoria. Today it holds over 200 journal titles, 3,500 books, newsletters, databases and private study areas to support the research and study needs of nursing, clinical and research staff. The library also holds a remarkable 'institutional memory' and understanding of cancer research as Elizabeth Giddy (pictured) was appointed in that year, only resigning in 1977 when she was replaced by Aina Zalitis who still runs the library today, thirty-nine years later.



In 1993 the Peter Mac Carlton/Collingwood Football Match became an annual 'opportunity to shake some tins'.

Chaplains have always served Peter Mac and provided spiritual and emotional care to the patients but in 1976 the Reverend John Paver (second from left) was appointed Peter Mac's first full time Chaplain. In 1979 Peter Mac's first Clinical Pastoral Education Course was begun with eight graduates (left) and the Chaplaincy Unit was renamed the Pastoral Care Unit. That year The Unit offered an outpatient visiting service for patients in their homes and has since established support groups for bereaved relatives. For over thirty years the Unit has helped a vast number of patients, families and staff deal with the emotional roller coaster of cancer, as well as conduct weddings and other important moments in the lives of the Peter Mac community. In 2008 it was renamed the Place of Peace.

The Nancie Kinsella Patient Library was established in 1968 as a memorial to the retired Matron. Her successor Sister Jennings is pictured here helping a patient choose something to read. The collection was originally new and second hand books donated by staff and catalogued and distributed by the nurses in their 'off-duty' time.

Philanthropy comes to the fore in a hospital setting and for sixty years staff and community have contributed money, time, effort and ideas to Peter Mac's development. In 1978 the Arthur and Caroline Howard Bequest of fifty-one prints and drawings was presented, becoming the unofficial start of Peter Mac's art collection.

Twenty years later, in 1998 the arrival of John Zalcberg on staff saw Peter Mac become the first public hospital in Australia to be designated an official art gallery. Deciding that the grey walls were too depressing for the patients he convinced the authorities in Canberra that the hospital was open to members of the public who could not get to the public art galleries, so art should come to them. The official stamp was granted enabling tax deductable donations and Peter Mac now has a collection of over 500 original prints, sculptures, paintings and indigenous art by contemporary Australian artists, including some by Clifton Pugh, Charles Blackman and Fred Williams and other well known artists. The Peter Mac art collection tells everyone 'that this is a place we're proud of ... you can't love a cancer hospital if you're a cancer patient, but at least understand that we understand.' It is also a backdrop for the creativity and exploration of new ways to care for cancer patients, and to understand, treat and cure cancer. This creativity is celebrated in the annual Peter Mac Awards for Excellence, Innovation and Compassion presented to individuals or teams on staff and in the Peter Mac Community.

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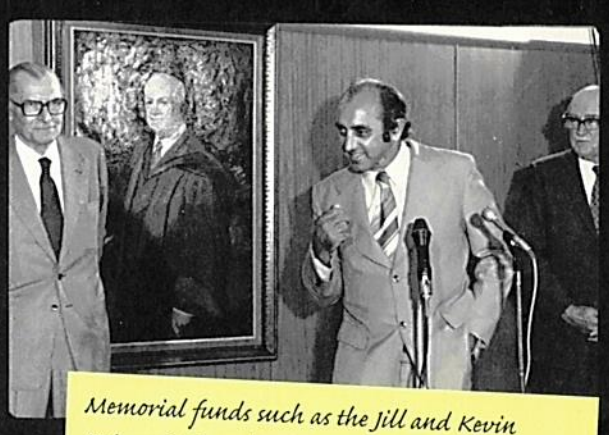
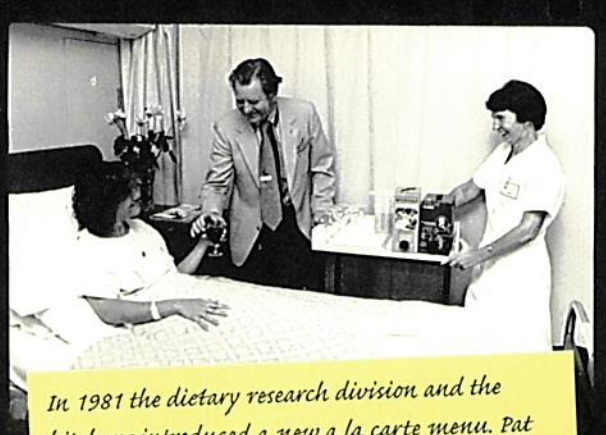
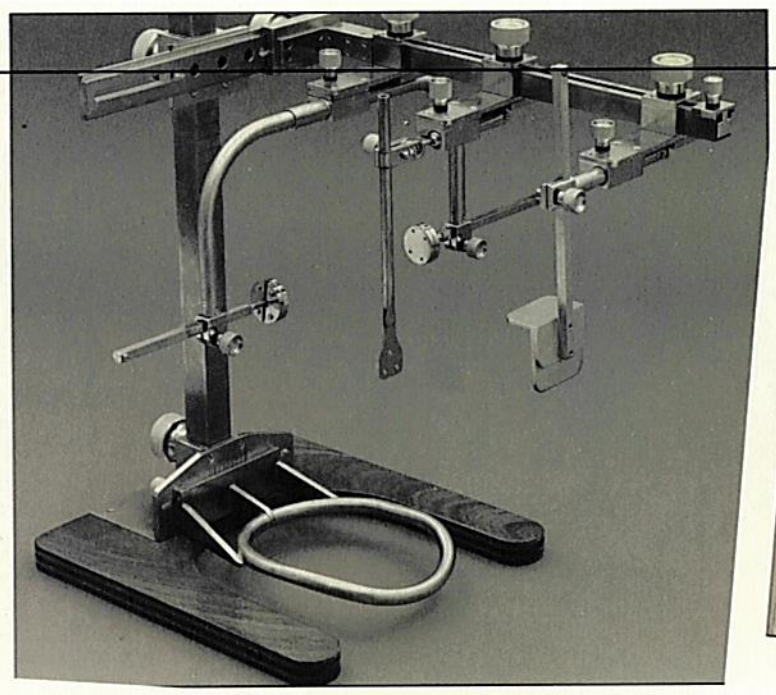


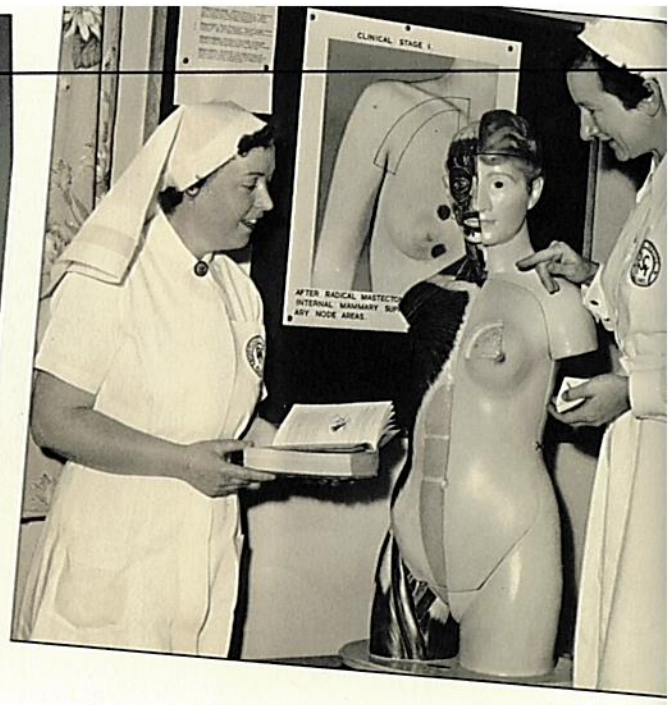
Memorial funds such as the Jill and Kevin Heinze (pictured) Research Fund (1976) for brain tumours in children, in memory of their daughter Kim; the Peter Crimmins Cancer Research Fund (1977) for testicular cancer; and the Claire Oliver Melanoma Fund (2007) have enabled important inroads in the understanding and treatment of these diseases.

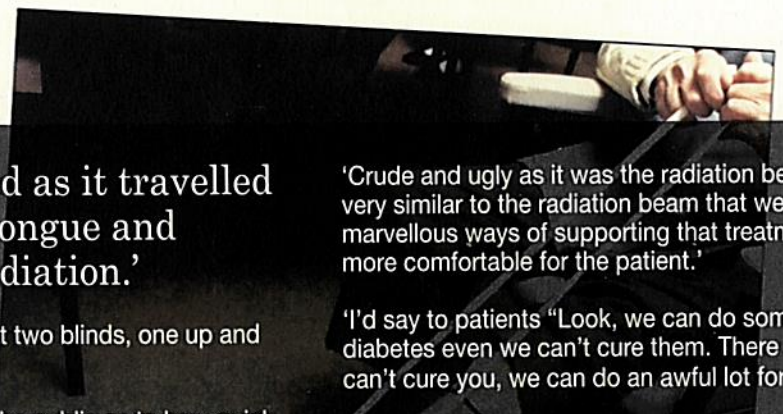


In 1981 the dietary research division and the kitchens introduced a new a la carte menu. Pat Sheehan and Margaret O'Connor are offering the first wine service to a patient. The service provided a choice of sixty dishes at each meal. A follow-up evaluation that year showed a marked increase in the stimulation of patient's appetites, food consumption, energy and protein intake.

'That's my girl!' – Janine Sheahan (left) joined Peter Mac nursing service in 1975, and her mother Kathleen Mullen who had been working part time since 1970. Sister B Hogg (right) was made the Diet Sister in Ward 4 in 1973 and a couple of years later her daughter Carolyn also joined Peter Mac.







‘I went home and then the burning started as it travelled through the inside of my mouth and my tongue and everything, obviously the effects of the radiation.’

When you’re stuck in hospital ‘and you’re lying there and looking at two blinds, one up and one down ... it’s the little things that annoy you.’

‘It depends a little bit on whether you’re a patient or a member of the public as to how quickly [new treatments are developed]. If you’re a patient whose got six months to live today, it’s not fast enough.’

‘Sometimes patients actually feel very empty once they’ve finished radiotherapy – they’ve had their treatment [every day for several weeks], they’re being monitored and watched, and they feel secure I think. Then they finish their treatment and they don’t have that coming in to see us each day ... It’s not everybody, there are a lot of people who can’t wait to get away from this ... it’s a reminder when they have to come and have their treatment that they’ve got something wrong.’

‘Emotional support of the patient has become important. Before they had treatment and off they went ... now they also have a program of survivorship.’

‘The [Department of Education fellow] saw me and said “Yes, you can [return to teaching] but you’ll have to go to the correspondence school because children would be upset and afraid at your appearance.’

‘I can remember a nurse ... sat all night sponging my forehead ... I always thought that if that hadn’t happened I wouldn’t have survived.’

‘It was like the double-whammy – it was the disease and then it was everything that went with it, everyone else’s concerns, everyone else’s fear, everyone else’s anxiety.’

‘As a patient you tend to become very sensitive to the reactions of people around you ... it can in fact be quite tiring because you’re trying to reassure them all the time. You know they’re there plugging for you, but you don’t want them to be upset about it because you feel ‘I’m OK, just let me be, let’s get on with it.” And really, all you can do is get on with it.’

‘I was never sick. Never. The days when I had surgery and radiation – that was the only time, but I never had any feelings of being sick ... like if you get the flu.’

‘Crude and ugly as it was the radiation beam that [the linear accelerator] produced then is very similar to the radiation beam that we have now [but] we’ve got all these other marvellous ways of supporting that treatment and making it better and more accurate and more comfortable for the patient.’

‘I’d say to patients “Look, we can do something for you”, if you have multiple sclerosis or diabetes even we can’t cure them. There are a lot more things worse than cancer ... if we can’t cure you, we can do an awful lot for you.’

The real question when it comes to treatment of patients is ‘Do you take a biopsy?’ or ‘Do you take a biopsy from a patient?’

‘But in those days there were no computer controlled systems, so the doctors loading the [radon] needles would be getting exposed ... there was significant exposure to staff and also to nursing staff while they were tending the patient.’

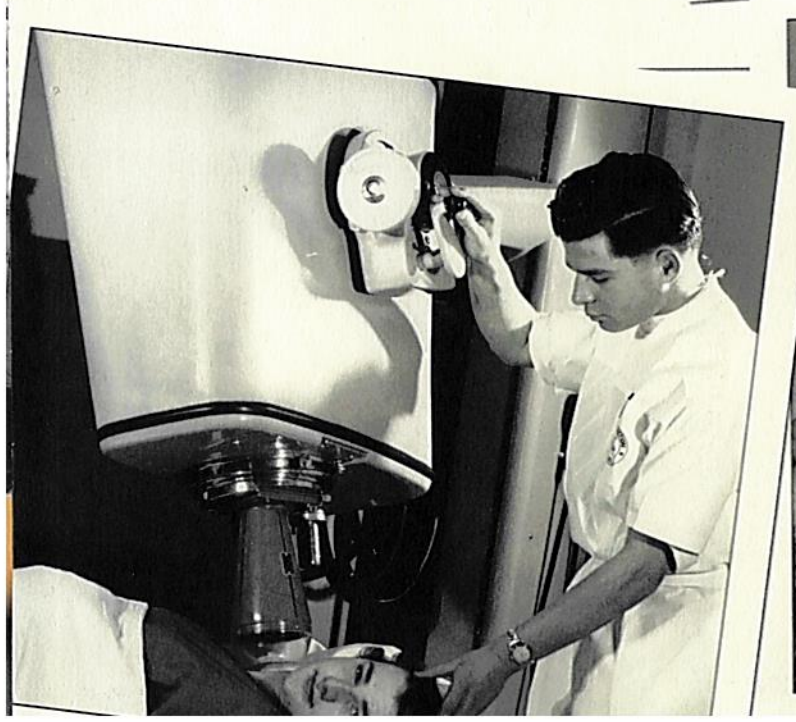
In the days before linear accelerators several deep therapy x-ray machines were used to provide a penetrating beam ‘but much more of the radiation was absorbed in the patient’s skin, so ladies [with breast cancer] would go very, very red and very, very sore trying to treat a tumour that was at a depth ... so basically you’d treat them until they looked too red to get any more ... now patients very seldom get any sort of skin reaction from radiotherapy treatment.’

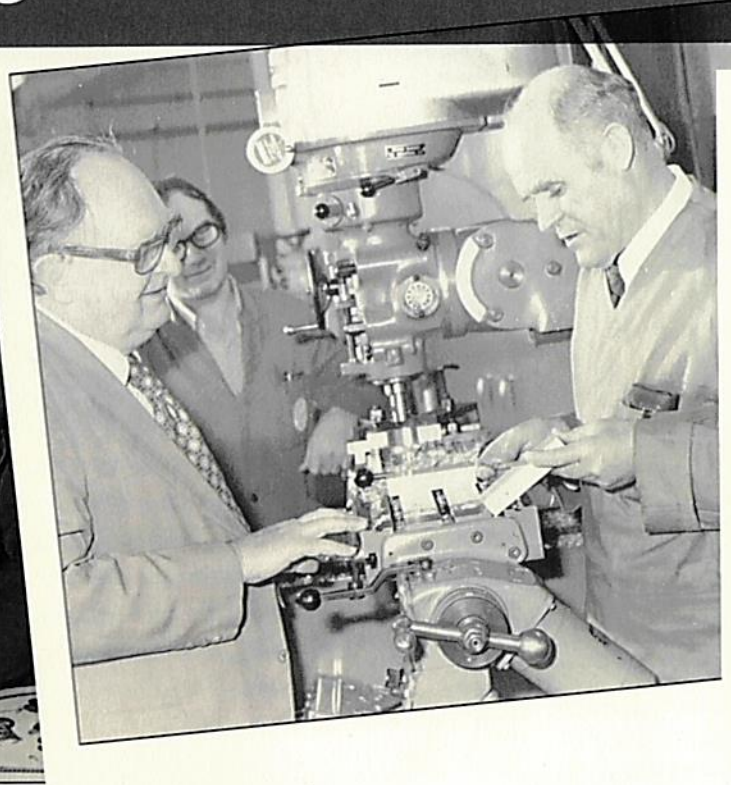
‘When I started in 1972 I don’t think any of us could have predicted what we’ve got at our fingertips now to deliver treatment. But now I think in the next five years I can see even greater things happening.’

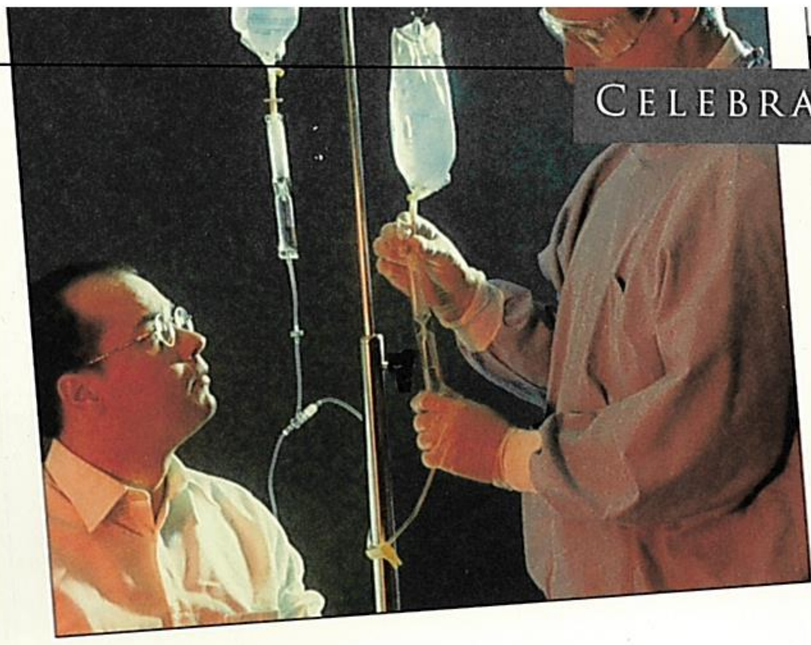
‘I worked on night duty and a lot of patients couldn’t sleep, they had a lot on their mind ... we sat around with patients, we spent time with them. And we had the opportunity to do it. These days you might be at full run, you still engage in moments of time, but I think we had something more available to us [then] ... when people were feeling vulnerable.’

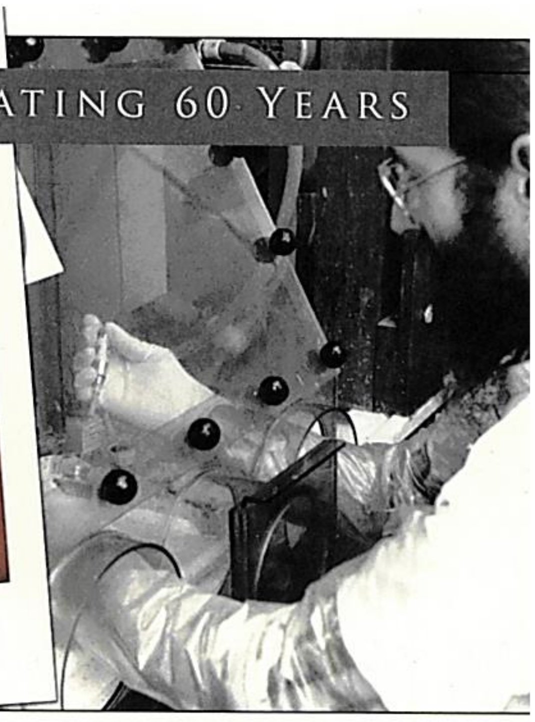
‘The best part were the patients. You learned so much from the patients ... they’re given a diagnosis – sure they go into shock and “why me?” and “what am I going to do?” ... then they’d get on with their living ... they do things that they’ve always wanted to do.’

Experience of cancer at Peter Mac









'I used to teach students that it was often possible to gauge how patients wanted to be told by listening to how they phrased their question ... the difficult one is the patient whose apparent calm makes the simple question – "Is it cancer?" – a tactical minefield.'

'I think one of the most difficult things is to tell a patient not that they have cancer – because many of them know by the time they're referred here ... but telling them they've got cancer but we can't treat you for six weeks, or we can't get this test done ... I hate having to tell patients that ... you don't feel so troubled when you're competing with breast cancer patients, because you know anyone with cancer is needy, but when you might be competing [for the PET scanner] with someone [from another hospital] who's got something much more chronic than this life threatening disease ... it's very frustrating.'

'You can spend virtually the whole of your career just treating the one disease. People may think it's boring, but when you start off with a disease with such poor outcomes as lung cancer, and you've seen the developments and opportunities that have come along the way ...'

'Little Lonsdale Street was ... really a shambles in many ways, and things shoehorned into wherever there was space. It was the first time I realised that physical space was not so important as the intellectual capital that was inside the physical space.'

'It's a specialist cancer hospital with a very large laboratory complex, so that creates all sorts of opportunities ... some [are] practical in terms of access to material and so on, most [are] actually intellectual ... so the clinical-research interface is fantastic.'

'Figuring out this software [genetic] system and how it gets damaged is way more complex than anything I think people have ever tried to do before. That's why it's been such a tough disease to sort out.'

'We were always putting lots of hours in, but we pursued things at a pace that worked for us. Now we still put the hours in but it's to survive and keep up with the workplace.'

'When Peter Mac was much smaller Christmas parties would go forever. You'd go from one department's to the other's. The sterilising oven for glass ware in Research was used to barbecue whole sides of lamb.'

'The thrill of discovery, I think, is what motivates people into research more than anything else. It's what keeps places like this going.'

In the 1970s as the Institute expanded 'there were many departments that couldn't quite fit into the hospital proper that were sort of scattered around, using rental accommodation, and often the lease would expire or the rent would go up, and departments would be moved. It was all pretty unsatisfactory for the support departments.'

'The way we think socially is so much about choice, "I have a right to choose the job, and go here, go there, study, not study", but when this disease comes there's this whole point of wavering.'

For families of cancer sufferers 'often the frustration comes from being an observer and not being a doer.'

'In my parents' day if you heard someone had cancer it was like a death sentence, and that's not true any more.'

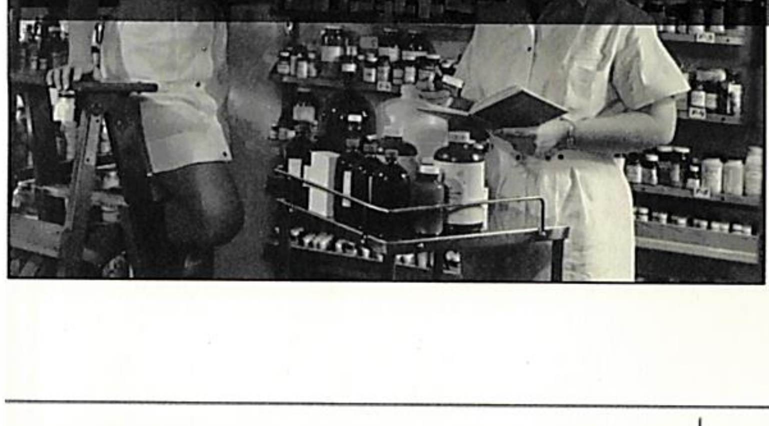
'There was a period of time before everyone really took the bull by the horns and used the word. [Before that] they referred to it as 'the big C' and all those other statements.'

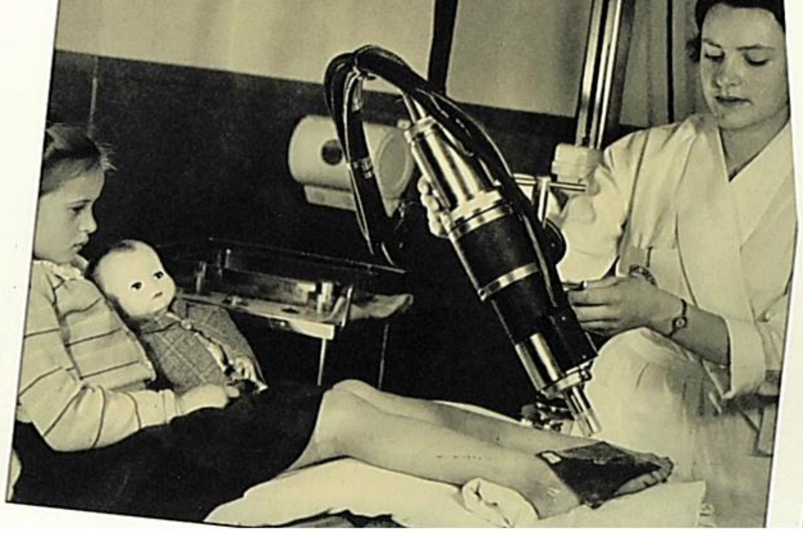
'I think the attitude of the general public has changed [towards cancer]. In my middle years I could boast that Peter MacCallum was the most cheerful hospital in Melbourne.'

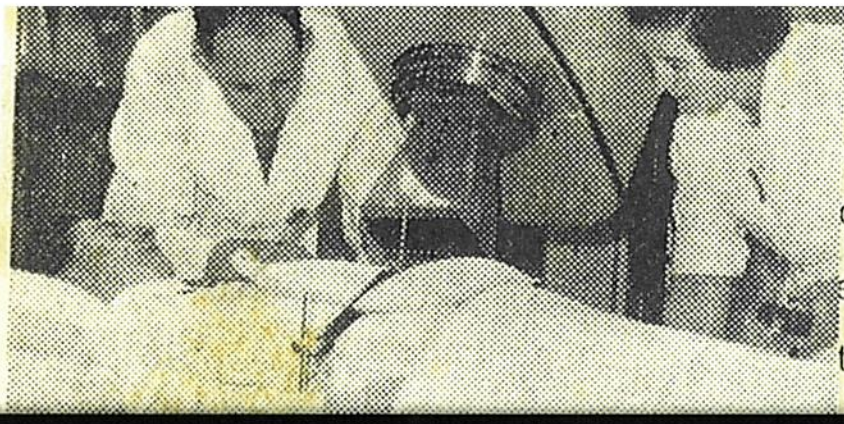
Peter Mac is 'a slightly smaller ship ... this is 100 beds so it's a smaller organisation and budget. But if you turned the wheel on this ship, the ship turned.'

'Well wishers often ask whether anybody is ever cured by the work at the Clinic. Last year (1970) approximately 5,500 new patients came here. From these and other earlier admissions we discharged 5,100 of whom at least half are in the clear ... a large number of (the others) will also eventually be discharged.'

'Cancer in general affects everybody so it's important to support it.'







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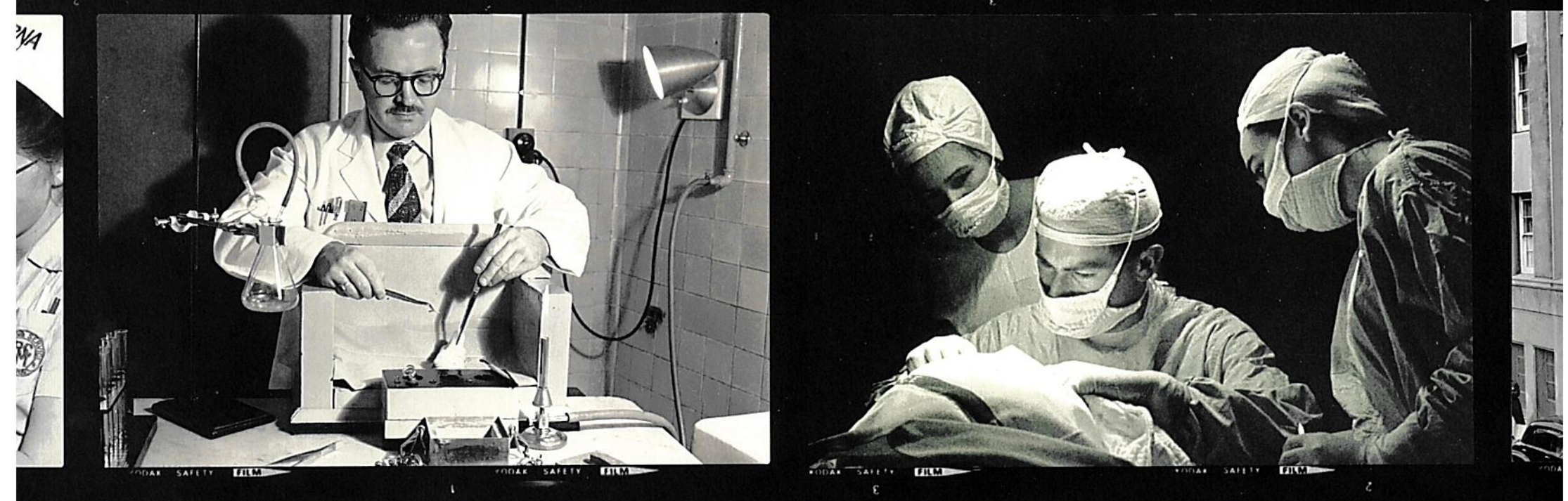


Future of cancer at Peter Mac

'Part of our job is to make ourselves obsolete and no-one would be more delighted than us if that could happen.'

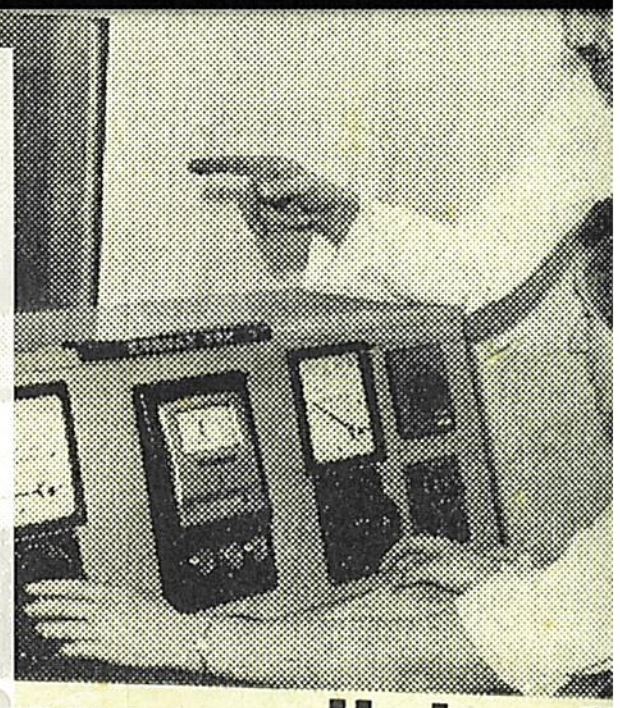
A future for all those touched by cancer in the past and still to come began in 1943 with the decision to establish a dedicated centre for the research and treatment of cancer in Victoria, and this future has continued since.

Although the face of Peter Mac is its science, medicine, nursing and community, its very existence has been maintained by the various Boards and Executives over the past sixty years. These people have been responsible for keeping their fingers on the pulse of health politics and health economics, and ensuring Peter Mac's viability within the constraints and conditions of the times and into the future. In 1965 a Study Group reported on their two year long assessment of the immediate and anticipated requirements of cancer treatment, introducing several changes and reviews. In the early 1970s planning was underway sparked partially by a population increase in Victoria and the anticipation of a correlation in cancer patients. This led to a four stage planning program to assess Victoria's and Australia's cancer needs as far ahead as the year 2000, the purchase of land, buildings and equipment, and the establishment of decentralised and satellite centres across the metropolitan and regional areas. This work of prediction and anticipation continues in the 21st century as the complexity and evolution of cancer science and medicine provides amazing opportunities for comprehensive, integrated and individualised treatment for cancer sufferers.

The Peter Mac Foundation was established in 2002 to look to the future by building a corpus of funds for perpetuity tied not to a particular project, but rather to future innovation and excellence in cancer research. A tissue bank stores samples provided by patients to be available for analysis and research in future studies and by future techniques that 'we don't even know about today'. Targeted therapy, understanding the unique genetic and disease characteristics of each patient and of their tumour, has been moving from the hypothetical to the practical in recent years and is a future certainty that can only improve outcomes for all patients.

Cancer is no longer the 'baffling' disease it was in 1936 and is no longer shrouded in the public's imagination by a curse with an almost inevitable death sentence. Amazing leaps in technology, science and treatment have been embraced and enabled by this dedicated cancer centre. This has spawned a legacy allowing staff to know that 'we're not just going to sit still'. In the spirit of Peter MacCallum's claim that 'nothing but the best is good enough for cancer' the future can only look brighter for all those confronted with this disease. Progress has been, and will continue to be, an evolution rather than a revolution. However, what was not even in the realm of science fiction thirty years ago is a certainty today and the future holds the same prospect.

In short Peter Mac has fulfilled all the ambitions hoped for by the cancer campaigns, the Patterson Report and the Institute's many political, scientific and medical advocates of the 1930s and 1940s. It has shown there is always something to be done to overcome cancer and the best way to facilitate this has been by unifying research, treatment, allied health and cancer services in a single dedicated institute.



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Acknowledgements & References

Oral history interviews and personal communication with: David Ball; David Bowtell; Jim Cramb; James Farrell; Roger Martin; Lester Peters AM; Paula Pitt OAM; Anne Rahilly; Sarah Russell; Denise Spencer; Julie Wills; Dorothy Willshire; John Zalcberg OAM.

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