

## The President's Page

It has been a privilege to serve as president of the ANZSHM over the past two years, and as my second term draws to a close (my first was 2009-11), it is opportune to reflect upon the state of our discipline in Australia and New Zealand. The interest of the international historical community in our neck of the woods was evident in 2019 when Derek Dow and I were asked to edit a special issue of the Oxford journal *Social History of Medicine* on articles from Australia and New Zealand, to coincide with the ANZSHM conference in Auckland. When we surveyed the journal since its founding in 1988 we found that Australasia punched well above its weight, contributing significantly to the international historiography. This was something to be rightly proud of.

It was not the first time I had been invited to reflect upon developments in Australian and New Zealand medical history; in 2012, I was asked by British historian Professor Mark Jackson to pen one of 30 contributions to the *Oxford Handbook of the History of Medicine*, which was compiled to 'celebrate the richness and variety of medical history around the world'. In 2018 my chapter was one of ten selected for Jackson's new collection, *A Global History of Medicine* (OUP).

In this chapter I highlighted the role of the ANZSHM and its journal *Health & History* in the evolution of the discipline locally. Founded in 1984, the Australian Society of the History of Medicine held its first national conference (which I attended) in 1989. The conference was small by today's standards, with the conference proceedings revealing 36 presenters, 17 of whom had a medical background with 19 from a humanities/history background. This proportion was to change over time;

when we held the Society's conference in Auckland for the first time in 2005 (when the name of the Society was extended to include New Zealand), we calculated that 61 presenters had a history background and 20 a medical or allied science background. Some now have training in both and of course 'good history' can be written regardless of formal training, so this is perhaps not a helpful calculation for current trends.

For many, however, there was a perception of tension internationally between these two groups since the rise of the social history of medicine in the 1980s. This was perhaps better managed locally than in many other places. Certainly, in 2005 the new editor of *Health and History*, Hans Pols, who had come from the United States to take up a post at the University of Sydney in 2002, was impressed by the interdisciplinarity he encountered, commenting in his first editorial that the Society's conferences 'proved to be an inspiring meeting place of health care professionals and historians engaged in an enduring dialogue'. A founder member of the ANZSHM Randall Albury, Professor of History and Philosophy of Science at UNSW, similarly applauded what he called cross-cultural collaboration between health professionals and historians. This is core to the Society and remains something to celebrate.

I look forward to seeing you all at the biennial conference in Sydney in July.

Linda Bryder

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The Australian and New Zealand Society of the History of Medicine acknowledges the Traditional Owners and Custodians of Country throughout Australia and the Torres Strait, and their continuing connection to land, waters and community, and we pay our respects to Elders past, present and emerging. In respect to Aotearoa New Zealand, we acknowledge and respect the principles of the Treaty of Waitangi.

# All About Ourselves

*Members of the ANZSHM describe their life, work and interests.*

## Edward Moxon

It is said that if you want to go forward, you should walk backward. The inference is that the past will help you navigate the future. Unfortunately, in terms of mental health administration, this truism does not apply in NSW.

My name is Ted. I cannot claim any mind-changing, life-saving or world-shattering discovery. I left school at 15 to enter a trade. It was a momentous occasion, having come from a low socio-economic, single-parent family.

My trade proved beneficial when I worked in a psychiatric hospital, first as an activities nurse and then supervising a patient-run industry.

Outside the work confines, my time was spent running youth programs. This again put me in good stead to become one of the first Recreation Officers employed by the Health Department.

During this time, I became interested in the effectiveness of the many systems in selecting suitable employees. Together with a psychologist, we gave a battery of psychometric tests and recorded personal data to correlate after 5 years who were successful employees. No test was a predictable measure. Age and sex were the only reliable indicators.

I got the bug for research that had a practical application. I became aware that female patients were more prone to be admitted during the late luteal phase of their menstrual cycle. Despite objections from female doctors, I tested my hypothesis, supported by the Royal North Shore Hospital. The conclusion was affirmative, and much time was spent exploring what could be done to minimise the problem.

This research opened up further questions regarding whether we can predict which patients would likely to be re-admitted. Data were collected on discharge and compared to when a patient was readmitted.

My journey took me to Callan Park, where I progressed through several positions ending up as Principal Nurse Educator for Mental Retardation Nursing for a group school. The position opened up great opportunities for creating a well-educated practical nurse when unprecedented changes were happening. The government, in their wisdom, closed the school and the registration of psychiatric and mental retardation nurses.

It was apparent that one needed to improve one's education to have a broader picture of nursing and contribute to nursing education and standards. As a late starter, I consequently achieved three certificates in nursing: a DNA, DNE, BA Edu, MNA, and Post-Graduate Degree in Special Education.

My journey took me behind the scenes in Trade Union administration, Health Department negotiations, member representation, and support. These were essential training experiences as an administrator and a senior university lecturer.

Research was still a part of how I was able to contribute to patient care. My committee was the first in Australia to publish Patient's Rights and Hospital Standards documents.

Leaving nursing, I joined the Education Department and taught in a special school for emotionally disturbed children. Later, I became a behaviour consultant. After retirement for a few years, I worked as a mental health community nurse.

It is no accident that my journey was built on previous skills learnt and applied. The culmination of years of research has been the publication of the *History of*



*Callan Park Hospital* in three volumes. The story of visions: destroyed, modified, and frustrated, of governments with their economic agenda, ego-centric narcissistic bureaucracies, and patients, an afterthought and neglected.

## ANZSHM 2025 conference



The 19<sup>th</sup> Biennial ANZSHM conference will be held from Tuesday 8<sup>th</sup> July to Friday 11<sup>th</sup> July 2025 at Sydney University.

[See page 4 of this newsletter for the conference flyer.](#)



## Members' news

### New members

*A warm welcome to our new members*

Janet Quartermaine ACT	Emily Blackwell SA
Sam Baker NSW	Kelley Swain TAS
Emily Rose QLD	Roger Allen VIC
	Roberta Deam VIC

## Elections

### Upcoming Council Election

#### 2025 ANZSHM Annual General Meeting

At the upcoming ANZSHM AGM, held at the Sydney Conference in July 2025, a number of official committee positions will become vacant and need to be elected.

This includes positions of: Treasurer, Vice-President, and Memberships Officer.

If you are interested in joining the Council, please email the Secretary ([anzshm@anzshm.org.au](mailto:anzshm@anzshm.org.au)) with an indication of what roles you would be interested in filling, and a short biography.

## ANZSHM Book Prize

The results of the 2025 ANZSHM Book Prize will be announced at the ANZSHM conference dinner held on the evening of Thursday 10<sup>th</sup> July, at the Refectory, University of Sydney.



## Mystery object



Can anyone identify this mystery object submitted by Cate Storey? See page 15 to find out what it is!

## In this issue....

Page	Item
1	The President's page
2	All About Ourselves
3	Members' news; Elections, ANZSHM Book prize; Mystery object; Book review
4	ANZSHM 2025 conference flyer
5	Letter to the Editor; From the editorial team NSW Branch news From the Wellcome collection
6	South Australian Medical Heritage news Medical History Society of Victoria news
7	Artefactual news - The Willows Hospital
8-9	What is Medical History?
10	Medical science history
12	News from the Historical Society of the Northern Territory
13	Ex libris Invitation to host next ANZSHM conference Call for papers
14-15	Book notes; Mystery object revealed

## Book review

ANZSHM (Vic) member Dr Caitlin Mahar has written a lovely review for *Inside Story*.

<https://insidestory.org.au/how-little-one-knows-really-of-ones-parents/>

### Inside Story







AUSTRALIAN AND  
NEW ZEALAND SOCIETY  
OF THE HISTORY OF  
MEDICINE

The 19th  
Biennial  
Conference  
of the ANZSHM

8-11  
JULY  
2025

University  
of Sydney

# HEALTH HISTORY IN THE MAKING

**REGISTRATIONS OPEN**

Register via

[anzshm2025.com/  
registration](https://anzshm2025.com/registration)

## JOIN US at the 2025 ANZSHM conference!

The 2025 conference theme invites us to reflect on how contemporary events—such as pandemics, innovations in medical technology, policy shifts, and health movements—reshape the narratives of medical and health history and what the implications of these transformations will be for the future.

Through keynote lectures, panel discussions, and abstract presentations we will explore 'Health History in the Making'.

Social highlights include a Welcome Function on Tuesday night to be held amongst a carefully curated exhibition in the Rare Books space at the Fisher Library. The Conference Dinner on the Thursday night, in the historical Sydney University Refectory is also not to be missed!

For more information and to view the conference program visit [anzshm2025.com](https://anzshm2025.com)

Please direct your enquiries to  
NC Events [ncosta@ncevents.com.au](mailto:ncosta@ncevents.com.au)

**"Today, the only thing that is permanent, is change" - Dr Charles Mayo, Mayo Clinic, 1931**

## Letter to the Editor

### Maggot therapy and non-healing wounds...

I am writing with regard to the Animalia article in the recent February newsletter on maggot therapy and its re-emergence as a treatment for non-healing wounds. As noted, the growing challenge of antimicrobial resistance and the prevalence of chronic conditions - particularly those that impair circulation and immune function - have driven renewed interest in this once-overlooked method.

This topic was echoed in a presentation recently delivered to the South Australian Medical Heritage Society by Professor Robert Fitridge, focusing on diabetic non-healing wounds. He highlighted some sobering national statistics: more than 5,200 diabetes-related amputations occur in Australia each year, and there are over 10,000 annual hospital admissions due to diabetes-related foot ulcers. The estimated cost of these complications exceeds \$1.6 billion annually.

Even more concerning are the disparities affecting Aboriginal and Torres Strait Islander populations, who experience diabetes at three times the rate of the general population. Their rates of foot complications are 3 to 6 times higher, and lower limb amputations can be up to 30 times more frequent.

We evidently do need more innovative solutions—whether through bio-surgical interventions like maggot debridement therapy or systemic improvements in diabetes care—such data should guide our priorities. The need for culturally appropriate, equitable care has clearly never been greater.

**Maggi Boulton**

## From the editorial team

We would love to hear from you! Please think about writing for *All About Ourselves* or submitting your thoughts about *What is Medical History?* If you have photos of museums, collections etc, or an interesting object you have seen, we would be keen to include them in the newsletter.

We are also interested in receiving reports of conferences attended by members. A short (or long!) report about interesting presentations or discussions from a conference would be valuable for those unable to attend or those interested in attending in the future.

All correspondence and submissions should be emailed to: [anzshm@anzshm.org.au](mailto:anzshm@anzshm.org.au).

## NSW Branch news

The NSW Branch held its Annual General Meeting on 2<sup>nd</sup> April this year at Thai Pothong Restaurant in Newtown. The speaker was Hans Pols. A new Executive committee was elected as follows:

President: Ms Samantha Baker

Vice President: Prof. Hans Pols

Secretary: Dr Diana Jefferies

Public Officer: Mr John Sinclair

Treasurer: Ms Philippa Barr

Committee members: A/Prof. Alison Downham-Moore, Prof. Warwick Anderson, Mr Somerset Wu, Mr Tsung-Jen Hung

Immediate Past President: Ms Shayne Brown AM

## From the Wellcome collection



"Take it on sugar" : Faulding's "Emu" brand eucalyptus oil : "The spirit of the tree" / distilled by F.H. Faulding & Co. Ltd. Source: Wellcome Collection. Licence: Attribution-NonCommercial 4.0 International (CC BY-NC 4.0)



Medical room with supplies, 1912. Location: far north of South Australia. Photograph by Rev. Robert Mitchell. State Library of South Australia. No known copyright restrictions.

# South Australian Medical Heritage Society

## 2025 Highlights

SAMHS launched 2025 with a series of compelling talks, each shedding light on different aspects of medical history and practice:

- February: Professor Robert Fitridge addressed the persistent challenges in managing diabetic foot complications, offering insights into this complex medical issue.
- March: Emeritus Professor Ian Roberts-Thomson presented 'Showcasing the History of Medicine,' emphasizing the vital role of museums and collections in preserving and promoting medical heritage.
- April: In a heartfelt tribute, Professor John Slavotinek reflected on the life and contributions of his father, Tony Slavotinek, a much loved surgeon. David Buob followed by describing Tony's pivotal role in revitalizing SAMHS.
- May: Professor Ian Gibbins delivered an intriguing talk titled 'Neuroanatomy, Art and the (Re-)construction of Conscious Experience'.

For details on upcoming meetings and membership, visit <https://www.samhs.org.au/>

## SAMHS 2025 Program

### 26 June

**Professor John Svigos AM** – *The First Recorded Successful Caesarean Section in the Southern Hemisphere – with an Intriguing Twist!*

### 24 July

**Dr Peter Sutherland OAM** – *Robotic Surgery*

### 28 August

**Professor Bob Goldney** – *A History of Psychiatry in South Australia and Its Relevance Today*

### 25 September

**Dr Nick Rieger** – *Liver Transplantation and Transplants in General*

### 27 November

**John Crompton AM** – *Lessons Learnt Teaching in the Asia-Pacific Region for 40+ Years*

### 12 December

**Professor John Turnidge AO** – *Antibiotic Resistance and Stewardship*

New members and guests are always welcome. Meetings are held at 6:00 pm at the Dulwich Community Centre, 14 Union Street, Dulwich, SA 5065.

Maggi Boulton, SAMHS Committee Member  
sa-mhs@outlook.com

## Medical History Society of Victoria news

At our meeting held on 21<sup>st</sup> May at Kooyong Lawn Tennis Club, we were entertained by Professor Tim Parkin, Deputy Head of the School of Historical & Philosophical Studies at the University of Melbourne. His topic was "The Scars of Venus (*de morbis Venereis*): Did the Greeks and Romans practise safe sex?"

Unfortunately, Tim was unable to give his presentation on the day; however, he had recently video-recorded the talk which he had given to history fellows at the University, and we were able to see and hear it in full!

Sexual health is a topic of global concern for both specialists and the general public in the twenty-first century. Such open awareness and debate around topics, such as contraception and sexually transmitted diseases, are usually seen as relatively recent phenomena. However, attitudes towards sexual health have a much longer history, and much of it is grounded in the classical world. Following the (alleged) arrival of

syphilis from the 'new world', for example, medical writers and doctors of Europe were heavily influenced by much earlier Greek and Latin texts. The Greeks and the Romans were certainly aware of venereal disease, and some of the descriptions of symptoms are particularly vivid, but the concept of contagion was not fully understood. Nevertheless, restricting one's sexual activity, or to use one's slaves as sexual partners was advised. Medieval writers drew on Greco-Roman texts to emphasise the view that venereal disease was a punishment for lust or sexual adventure, although there is little evidence that such an attitude existed in ancient times.

Tim also explored the notion that venereal syphilis, as we know it, may not have been present in ancient Greece and Rome, and was indeed "imported" by Columbus to the New World. Although other treponemal diseases did exist, the precise evidence for the syphilis spirochaete may depend on finding evidence of congenital syphilis in foetal skeletons, confirming vertical transmission.

Rod Westhorpe  
Hon. Secretary



# Artefactual news

## The Willows Hospital: A Family Legacy of Healing in the Barossa Valley

Many ANZSHM members belong to the galleries, libraries, archives, and museums (GLAM) sector and are responsible for the interpretation of significant historical medical and health collections in Australia and New Zealand. Without professional assessment, how can we understand the significance of uncatalogued items held in private hands? Such is the case with the Willows Hospital at Light Pass in South Australia's Barossa Valley, which has remained privately owned since its closure in the 1950s. I was lucky enough to be shown around parts of the building recently.

The history of German settlement in South Australia is rich and significant. The Willows Hospital offers a rare (at least in South Australia) glimpse into an intergenerational story of medical practice by the Scholz family. Johann Gottfried Scholz (1805–1891) arrived in 1845 from what is now Poland, having served as a medical practitioner in the Prussian Army. There, he developed skills in bone setting and massage—skills that were greatly valued in the Barossa Valley, particularly as Adelaide lay more than 70 km away.

Johann's son, Wilhelm Gottfried Scholz (1828–1912), learned medicine from books and his father. In the 1850s, the Scholz family received £500 from the pastoralist John H. Angas after Wilhelm successfully reset Angas' fractured femur. This sum enabled the family to construct dedicated medical rooms adjacent to their cottage, where they could treat patients more effectively.

Wilhelm's son, Julius Heinrich Scholz (1859–1928), continued the family practice, followed by two of his sons: Carl Wilhelm Albert Scholz (1884–1969) and Herbert Bernhard Scholz (1895–1968). Carl trained as a pharmacist and continued to develop the hospital's well-known ointments and liniments, some of which were patented and widely distributed by pharmaceutical companies such as F.H. Faulding & Co and A. M. Bickford & Sons.

The growing success of the family's medical practice led to the opening of a larger facility in 1883. This hospital could accommodate up to 30 inpatients and had a substantial outpatient department. While it primarily served patients of German descent, people travelled from as far afield as Tasmania and New Zealand for treatment of fractures, sprains, and rheumatic conditions. At its peak, the hospital employed five nurses and five domestic staff.

In addition to the more conventional treatment of musculoskeletal injuries, Herbert Bernhard Scholz - who had trained in massage, hygiene, and medical electricity in Chicago during WWI—introduced new therapies on his return in 1919. These included hydrotherapy and electric treatments using galvanic and faradic stimulation.

The Willows had always embraced a holistic approach to medicine. Treatments emphasised nourishing homegrown food, "bracing country air," and attentive personal care. The Scholz family integrated physiotherapy (before the term gained wide usage), therapeutic massage, structured exercise regimens, and custom-built equipment - all aimed at healing the spirit as well as the body.



The image above is a photograph of a painting depicting The Willows Hospital on display at the original site. Photograph: M Boulton

Inpatient services ceased in 1954, and outpatient care followed shortly thereafter. However, the legacy of the Willows Hospital lives on as a testament to one family's commitment to healing through kindness, fresh air, and hands-on care.

Today, the building is a private residence, but many hospital-related items remain on site. The uncatalogued archives of documents, instruments, and medicinal preparations offer rich insights into regional and family-based medical practices. Fortunately, the family is committed to preserving both the heritage-listed property and the hospital artefacts. The legacy of the dedication of the Scholz family to healthcare also lives on through The Willows Vineyard, where wines such as The Doctor and Bonesetter pay tribute to the medical history of the site.

**Maggi Boulton**



# What is Medical History?

Stephen C. Due

My first inklings of medical history came from my Australian grandfather, Dr. H. C. Colville, who graduated at Melbourne University in 1914. He introduced me in a casual way to some of the great names of scientific medicine: Harvey, Gray, Lister and William Osler, author of the epoch-making textbook *Principles and Practice of Medicine* (1892).

My own active interest in medical history began after I started working at the Geelong Hospital Library, where I became interested in tracing old publications by local doctors. Later, I had an unexpected opportunity to digitise the card file of colonial medical emigrants from Britain to Australia compiled by the late Noel David Richards, an English social historian well-known to ANZSHM members. That project was the genesis of the *Australian Medical Pioneers Index*.

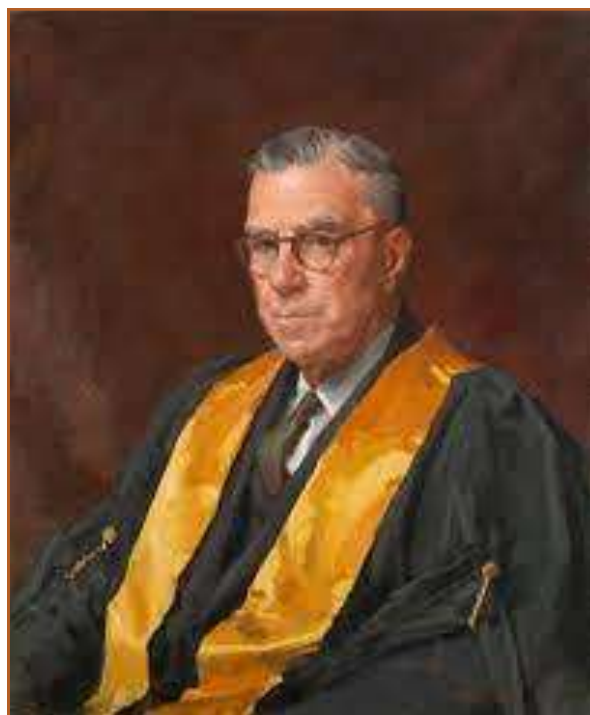
Although I had no particular interest or expertise in social history, I was very interested in the hundreds of life stories that gradually emerged during the long-running *AMPI* research process. Some were explored in more depth in my occasional ANZSHM conference papers and regular contributions to the society's *Newsletter*. A handful were featured in longer journal articles. As an untrained medical historian – really an amateur researcher and occasional writer in the field – I am most grateful for the opportunities that ANZSHM gave me over many years to showcase my work, and for friendships formed at the convivial biennial conferences.

To me, interesting history needs its heroes and perhaps even its villains. Historical narrative without those central characters is like a house with no inhabitants. Favorite medical histories on my bookshelves include *Doctors Past and Present* by the British neurologist Walter Russell Brain (1964) and *Doctors: The Biography of Medicine*, by the American surgeon Sherwin B. Nuland (1988). A similar but more contemporary approach can be found in *Great Discoveries in Medicine*, a multi-author work edited by William and Helen Bynum (2011).

In 1913, the year before my grandfather's graduation, Osler gave a series of lectures at Yale on the *Evolution of Modern Medicine*. He depicted medical history as a Darwinian contest of hypotheses and evidence, ethics and practice – a struggle in which the fittest ideas survive, and the noblest and best minds succeed. In the final lecture he noted: "It is one of the values of the history of medicine to keep alive the good influences of great men." Medical history was not just to inform, but to exert influence, to shape the mind and even the character of its readers.

The catastrophe of the First World War was imminent. My grandfather would enlist and serve with the British Army in France, returning home to establish in 1918 his long career as a solo GP in Hawthorn. Osler died at Oxford the following year, having changed not only the course of medical history, but also the way medicine and its history were understood and taught.

"All these were honored in their generations, and were the glory of their times" *Ecclesiasticus 44:7 KJV*



Dr H. C. Colville, honoured in his generation (courtesy National Portrait Gallery).

## What is 'medical history'?

### *An invitation to hear your perspective....*

*We continue our exploration of the idea: "What is Medical History?", inviting contributions from members with different professional backgrounds and experiences, including historians, healthcare practitioners, researchers, educators, and students. Your unique viewpoint will add depth and richness to our exploration of this topic.*

*The newsletter provides a platform to explore the knowledge and expertise of the diverse voices within our society, fostering collaboration and knowledge exchange among our members. Your contribution will help to promote discourse surrounding our understanding of medical history and/or the history of medicine.*

*The articles to date have been varied, thought-provoking and extremely interesting. We would love to hear from as many members as possible. Please send your article to [anzshm@anzshm.org.au](mailto:anzshm@anzshm.org.au). We encourage submissions of 250-500 words, accompanied by any relevant images or references.*



# What is Medical History?

Margaret Horsburgh

## What is Health History – Auckland Medical Museum Trust?

“Our Health Journeys” the digital museum developed and managed by the Auckland Medical Museum approaches the question ‘what is health history’ from the position of who are the audiences of [www.ourhealthmuseum.org.nz](http://www.ourhealthmuseum.org.nz)

In 2025 having a digital presence for a museum is essential and for many people the first point of connection with a museum. “Our Health Journeys”, a unique vibrant and living digital museum with a national presence across Aotearoa New Zealand, provides a window of discovery into the world of health and Aotearoa’s proud history of ground-breaking innovation providing a gateway to the many interesting international innovations in health. We do this by showcasing stories rather than collecting objects and through partnerships and collaborations across Aotearoa and Pasifika and beyond linking the past, present and future.

We are a charitable trust led by a small group of volunteers with contracted professionals for curatorial and website expertise. All our funding is from philanthropic sources. To be sustainable, being outward looking and understanding our audience is critical; unless we post stories that are of interest to people and our supporters we question our purpose. Our audiences drive our approach to what health history is.

We have four key audience groups and plan for each audience. Our website can be easily viewed on a range of devices and is developed to meet our audience’s expectations. Young people are a key audience, and we have partnered with a large secondary school where the young people research and write stories for the website, increasing their interest in health sciences and the importance of health heritage. Increasingly we are offered stories from health professionals and researchers and after careful checking of accuracy and any copyright issues we post these stories. For example, in 2025 we are progressively adding stories of Aotearoa New Zealand’s plastic surgery. Our most successful audience has been with small regional or local museums. Many of these museums hold medical and health objects and stories of local health initiatives, however, do not have the resources for digitising and displaying on websites. Through local connections we can showcase local lived experiences. For example, the Whanganui Regional Museum holds an iron lung used in the 1950s polio epidemic, and the Bulls Museum a cholera belt. Our fourth audience is the public where we are able to promote information which can educate and combat any spread of misinformation. Additionally, the entire population has either directly or indirectly experienced

health care and has a personal interest in understanding health related issues and the evolution of their particular experience. In 2024 our participation in the Auckland Heritage Festival demonstrated how significant public interest in health heritage can be.

We have a very active program of promotion on social media, which is frequently the gateway to our website. If we don’t have a good online and social media presence and good design elements allowing our audiences to scope whether “Our Health Journeys” is worth visiting many wouldn’t make the next step.

We receive regular positive feedback from a range of visitors across our audience groups, from fascination with our stories through to memories and anecdotes shared or offers to provide new content. We have detailed google analytics and social media reports to guide our content design and target our activity to our key audiences.

We invite participation in “Our Health Journeys” and welcome hearing from potential guest contributors. Contact us for more information:

[www.ourhealthmuseum.org.nz](http://www.ourhealthmuseum.org.nz)



Knitting instructions for a cholera belt. A portion of the finished belt can be seen at the top of the image. (Collection of Bulls Museum, used with permission).

Editor’s note: A ‘cholera belt’ was a wide cloth waistband made of flannel or wool worn around the stomach. The ‘belt’ was supposed to protect the person from the cold and damp, as it was thought that a cold abdomen would lead to cholera or diarrhea, and other stomach ailments.<sup>1</sup> It was standard British Army issue, and used for many years even after the link between drinking contaminated water and cholera had been established.<sup>2</sup>

<sup>1</sup><https://www.nationalarchives.gov.uk/education/resources/coping-with-cholera/a-cholera-belt/>

<sup>2</sup>Renbourn, E.T. (1957). "The history of the flannel binder and cholera belt". *Medical History*. 1 (3): 211–225.

# Medical science history

## Thomas D. Brock - the other hero in the discovery of Polymerase Chain Reaction

The SARS-CoV-2 (COVID-19) virus pandemic had many impacts on human society. One was the familiarisation among the general public of various medical and diagnostic terms previously restricted to the medical profession, laboratory technicians and scientists. One such term that entered our common lexicon was 'PCR'.

It was 40 years ago, in 1985, that the new technique of Polymerase Chain Reaction (PCR), was developed<sup>1</sup>, a discovery that led to the award of a Nobel Prize in Chemistry to US scientist, Kary B. Mullis, in 1993.<sup>2</sup>

PCR allows a segment of nuclear material (e.g. DNA) to be amplified to a level that can be detected in the laboratory. The key to amplifying the DNA is a specific enzyme called *DNA polymerase*. A small human sample, such as from a swab, contains enough starting material for amplification of nuclear material and identification of a disease agent, such as SARS-CoV-2, with a high level of specificity. PCR is also used in forensic science, archaeology, genetic medicine and myriad other purposes.

In the laboratory, the process of PCR is now automated. It involves cycles of repeated heating and cooling of the sample. When the sample is heated to about 94°C, the nuclear material (e.g. DNA), normally coiled tightly in a helix, becomes unfurled. The sample is then cooled to a temperature of 50 to 60°C, and the DNA polymerase enzyme is added. It is this enzyme that causes replication of the target stretch of DNA, creating billions of copies within a few hours. These copies are then analysed to detect the agent of disease etc.

During the early development of PCR, there was a difficulty in being able to get the DNA polymerase to work. Human or mammalian enzymes do not work well much above body temperature (about 37°C), but the test needed the enzyme to work when the DNA was uncoiled, at a temperature of 50 to 60°C. If the temperature drops back to 37°C, the DNA reforms into a helix, making it inaccessible to the enzyme. This is where Professor Brock (pictured) enters the story. He was a microbiologist who had been studying thermophilic bacteria in the hot springs in Yellowstone National Park in the US. About 20 years earlier, Brock and his colleague, Hudson Freeze, had isolated a sample which they named *Thermus aquaticus*. In 1967, they published their findings.<sup>3</sup>

When the PCR scientists were trying to work out how to get the DNA polymerase to work, they looked back through the scientific literature and realised that *Thermus aquaticus* might be the answer. All living things replicate their nuclear material, and organisms that thrive at high temperatures must contain enzymes that work well in such harsh conditions.

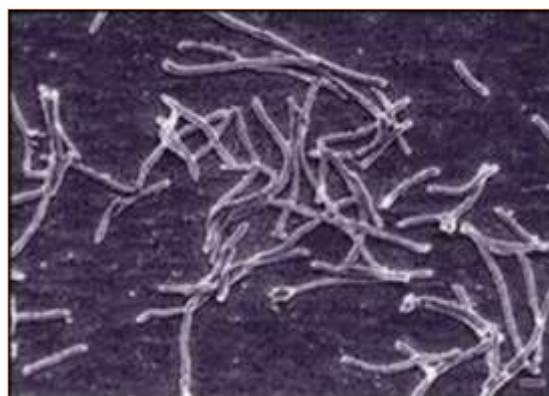
*Thermus aquaticus* and research into the science of microbiology undertaken by Brock and his colleagues was the answer to the conundrum facing the PCR scientists – thermophilic bacteria became a crucial piece of the puzzle and profoundly advanced medical science. This is a great story about the enormous value of undertaking what might seem, to some, mundane or insignificant research. All research and its subsequent publication is important. It's also a cautionary tale about finding time to complete and submit all those research papers that we have not quite finished yet .....

Kath Weston

<sup>1</sup>Saiki RK, Scharf S, Faloona, Mullis KB, Horn GT, Ehrlich HA, Arnheim Enzymatic amplification of  $\beta$ -globin genomic sequences and restriction site analysis for diagnosis of sickle-cell anemia. *Science*. 1985;230:1350-4.

<sup>2</sup><https://www.nobelprize.org/prizes/chemistry/1993/press-release/>

<sup>3</sup>Brock, Thomas D. (November 24, 1967). "Life at high temperatures." *Science*. 158: 1012-1019



Top:

Thomas D Brock. By Tdb-at-yellowstone-2002.jpg: Steepconederivative work: Viriditas. Image derived from: Tdb-at-yellowstone-2002.jpg, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=25002018>  
Bottom: Bacterium *Thermus aquaticus*  
<https://www.usgs.gov/media/images/bacterium-thermus-aquaticus>



## 100 years ago

The response to a public health outbreak often relies on rapid distribution of medication, vaccine or an intervention to try and pause the spread of infection. We are fortunate that it is now relatively easy to transport medicines and supplies rapidly by air to serve the needs to a remote community. One hundred years ago in 1925, the groundwork for establishing the Royal Flying Doctor Service in Australia was being laid. This included experiments in radio communication.<sup>1</sup>

<sup>1</sup><https://www.dubbophotonews.com.au/news/time-warp-pioneering-australian-established-worlds-first-air-ambulance>



## Animalia

In Nome, Alaska, a century ago, the importance of rapid delivery of medicine to manage a disease outbreak was highlighted by the use of a dog sled team to save a community experiencing a diphtheria outbreak. This famous event, known as the 1925 Serum Run, saw 20 drivers and approximately 150 sled dogs travel in relay for 127.5 hours over 1,000 km, experiencing whiteout conditions, gale force winds and sub-zero temperatures to reach the community. Not a single vial of precious antitoxin was broken during the trip.<sup>2</sup>

<sup>2</sup><https://archives.alaska.gov/education/serum.html>

Sled driver, Leonhard Seppala with his dogs after the 1925 Serum Run. Lead dog, Togo, is on far left.

(Copyright © Carrie McLain Museum. AlaskaStock - [https://snl.no/Leonhard\\_Seppala](https://snl.no/Leonhard_Seppala)).



## Conference

### **Between Marginal and Mainstream: Negotiating Experimental Practices and Medical Knowledge, 1600–1900**

University of Helsinki, 11–13 March 2026.

Subject Fields: History of Science, Medicine, and Technology, Disability Studies, Early Modern History and Period Studies, Modern European History / Studies, Intellectual History.

The question of experiment is at the core of knowledge and practices of healing. This conference explores how different forms of experimental practices have been used to gain knowledge around healing and the human body at large in different historical societies both within and outside scholarly medicine. Our goal is to access and examine how experimentation has taken place and shaped knowledge around questions of health and healing roughly between the years 1600 and 1900.

<https://networks.h-net.org/group/announcements/20063757/cfp-between-marginal-and-mainstream-negotiating-experimental-practices>



Published in the Medical Journal of Australia, 1925. <https://www.mja.com.au/journal/2014/200/10/highlights-our-1925-archives>



# News from the Historical Society of the Northern Territory



[HSNT Website](#)

[HSNT Facebook page](#)

In 2024, the Historical Society of the Northern Territory (HSNT) reached a landmark that seems unlikely to have been bettered by any other Australian historical society - the launch of the 100<sup>th</sup> book in its publishing program.

Like other larger historical societies around Australia, HSNT publishes books on local history. However, there is 'a difference'; when the program began in earnest in the mid-1980s, little had been published on Northern Territory history. Perhaps Alan Powell's ground-breaking general outline of Territory history (*Far Country: A short history of the Northern Territory*, MUP, 1982) was the catalyst, as manuscripts on particular aspects of Territory history soon began to be submitted for publication.

The publishing program was formally set up by the HSNT Council. An Editor was officially appointed by Council, manuscripts of relevance to Northern Territory history that were unlikely to be published by the larger publishing houses were to be considered, and publishing costs were as far as possible to be met by book sales.

An arrangement was entered into with the then Northern Territory University (NTU) to print the edited manuscripts, and this continues today with NTU's successor, Charles Darwin University. The first HSNT book in the program was published in 1988, with several local historians filling the position of Editor over the years; Baiba Berzins and Peter Loveday, Suzanne Parry, David Carment, Alan Powell and Brian Reid. Only occasionally have manuscripts been rejected.

A significant step took place in 2023 with the re-development of the Society's website: [www.historicalsocietynnt.org.au](http://www.historicalsocietynnt.org.au), enabling a more streamlined purchase of books online. The Society has also

## A Remarkable Achievement: Historical Society of the Northern Territory Publishes its 100<sup>th</sup> Book



Author of the 100th HSNT publication, Richard Head, addresses the Alice Springs launch of the book, 2024. Image Brian Reid

entered into an arrangement with the Northern Territory Library for out-of-print or 'no longer selling' books to be uploaded to the Library's digital library, *Territory Stories*, where they are freely available to anyone, globally. So far, the first twenty of the Society's publications have been included.

The Society's one hundredth book on Northern Territory history was printed in early 2024. It is a social history of early Alice Springs by Charles Darwin University Alice Springs Campus sociologist Richard Head. The book was launched in Alice Springs and kindly hosted by the Alice Springs Council library. The event was well attended, mainly by the many senior Alice Springs residents who contributed to the work. The Society was very pleased to publish this book because manuscripts from Alice Springs are only occasionally submitted.

With the publication of the 100<sup>th</sup> book in 2024, the opportunity was taken to publish a short report on the publishing program in the Society's Journal (*Northern Territory*

*Historical Studies*, issue number 35, 2024, pp 71-80). The report included as an appendix a full list of the 100 publications. It also included a brief examination of the publication genres. In about one-third of books, 'biography' was the main theme. About one-quarter of books were review works of local history. The next most-numerous category was specific studies, usually by established historians. There were then books dealing primarily with place, World Wars I and II, and Aboriginal history. The report concluded with an outline of two issues the Society will need to consider: the need to look at publishing in digital format as well as hard copy; and, the need to make the Society's publishing program of more relevance to Aboriginal authors.

It would seem that books continue to be of interest despite the plethora of digital entertainments now available. The book publishing program of the HSNT will continue as long as manuscripts continue to be submitted.

Dr Brian Reid FFAHS  
HSNT President

## Ex libris

### ROZELLE HOSPITAL

THE HISTORY OF CALLAN PARK MENTAL HOSPITAL  
AND ESTATE, THE JEWEL OF THE WEST

Volume 2  
1948–2008



Edward H. Moxon

This is Volume 2 of a 3-book series about Callan Park written by Edward Moxon.

## Ex libris

### Frontier Medicine

Stories of illness  
and survival in  
South Australia  
1836–1856

MARGARET BOULT

This book explores how early South Australian settlers managed illness and survival in a land that was new and often challenging. Through letters and diaries, it reveals their health struggles in unfamiliar surroundings and makeshift living conditions.

Set against a backdrop of isolation, climate extremes, and adaptation, these personal accounts offer a vivid glimpse into the medical realities of colonial life.



#### Frontier Medicine

Available in paperback and eBook

ISBN: 978-1-923386-41-9 (paperback)

ISBN: 978-1-923443-24-2 (eBook)



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Booktopia

Maggi Boulton's book, *Frontier Medicine*, will be launched at the upcoming ANZSHM conference. Some copies will be available for sale. See the conference program for details of the launch.

## Invitation

Would you like to host the  
**2027 ANZSHM conference**  
in your city/region?

The ANZSHM Council is calling for expressions of interest for the 20<sup>th</sup> Biennial conference in 2027. This is a great opportunity to bring the Australian and New Zealand medical history communities to your neck of the woods, and for you and your local colleagues to lead and shape the Society's main activity.

The Society offers every assistance to conference organisers. If you have any questions, or would like to register your interest, please contact the ANZSHM Secretary, Paige Donaghy at [anzshm@anzshm.org.au](mailto:anzshm@anzshm.org.au).

## Call for papers

Canadian Science & Technology  
Historical Association (CSTHA)  
L'association pour l'histoire  
de la science et de la technologie  
au Canada (AHSTC)

### Nations and Nationalism in Science and Technology

York University, Toronto, Canada | 7–9 November  
2025

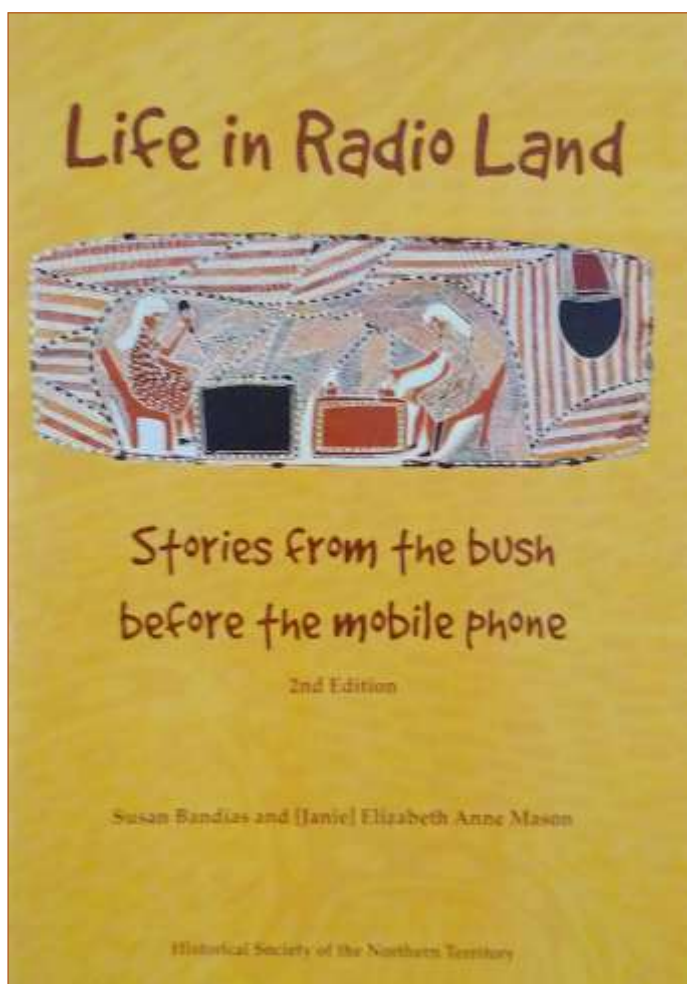
Deadline for proposals: 30 June 2025

Submit proposals here: <https://cstha-ahstc.ca/biennial-conference/cstha-ahstc-2025-conference-submission/>

The Canadian Science and Technology Historical Association (CSTHA-AHSTC) invites proposals for its biennial meeting, to be held at York University, 7–9 November 2025.



## Book notes



**Susan Bandias and Janie Mason [Authors/Editors],**  
**Life in Radio Land – Stories from the bush before**  
**the mobile phone, Historical Society of the Northern**  
**Territory, 2025, ISBN: 978-0-646-70834-8**

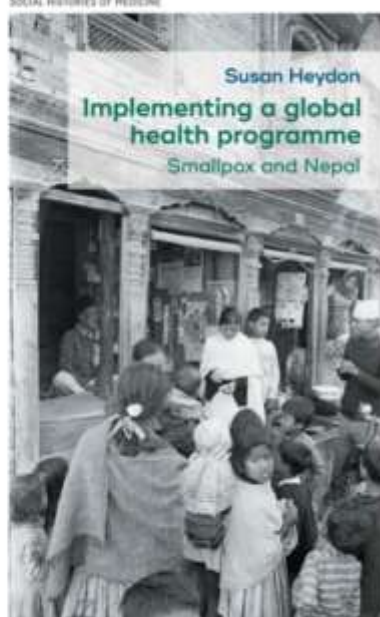
The first edition to the book “Life in Radio Land” was published in 2017. It contained stories which gave an insight into life in the Territory prior to the wide-spread use and ready availability of telephones and shed light on the community of the outback that was reliant on the High Frequency radio. There was considerable interest in this little-known aspect of Northern Territory history.

This second edition cover once again has the wonderful painting of “VJY Telephone Operators” by Brian Nyinawanga [Maningrida, Central Arnhem Land]. The new content with additional photographs and illustrations reiterates the themes which emerged in the first edition. The high regard everyone had for the VJY operators, the lack of privacy, the sharing of life’s events with a supportive community and the vital role VJY played in keeping the inhabitants of the outback safe and well.

As telecommunications access continues to evolve in the Northern Territory, it is important to document the significant role High Frequency radio and VJY, had in shaping the social and economic viability of the outback. Thank you also to the people who so willingly shared their experiences of High Frequency radio in the Territory.

**Susan Bandias PhD and Janie Mason AM DLitt**

SOCIAL HISTORIES OF MEDICINE



Hardcover, 9781526176660,  
£85.00

eBook, 9781526176653, £85.00

Date: February 2025  
Pages: 320



## Implementing a global health programme

Smallpox and Nepal

by Susan Heydon

### DESCRIPTION

Worldwide eradication of the devastating viral disease of smallpox was devised as a distant global policy, but success depended on implementing a global vaccination programme within nation states. How this was achieved remains relevant and topical for responding to today's global communicable disease challenges. The small and poor Himalayan kingdom of Nepal faced enormous geographical and infrastructure challenges if it was going to succeed in a nationwide vaccination programme. This book acknowledges the key role of the WHO but disrupts the top-down, centre-led standard narrative. Against a background of widespread internal political and social change, Nepal's programme was expanded, effectively decentralised and a vaccination strategy introduced that aligned with people's beliefs. Few foreign personnel were involved.

### AUTHOR/EDITOR BIOGRAPHY

Susan Heydon is an Associate Professor in Social Pharmacy at the University of Otago

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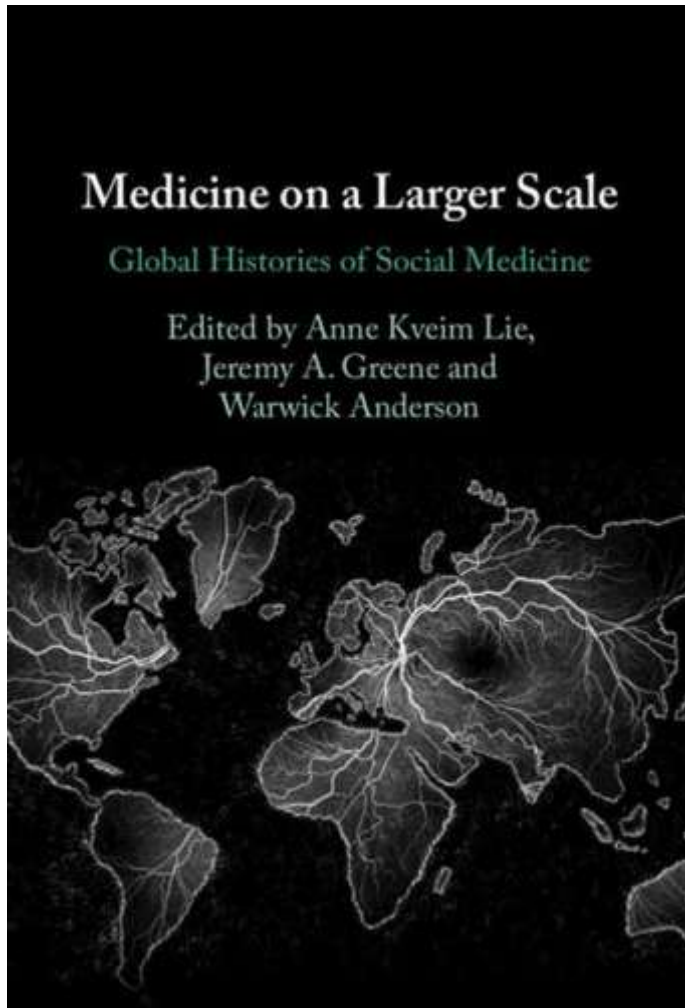
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## Book notes



Warwick Anderson has edited with Anne Kveim Lie (Oslo) and Jeremy A. Greene (Johns Hopkins) *Medicine on a Larger Scale: Global Histories of Social Medicine* (Cambridge UP, May 2025), available in print and open access: <https://www.cambridge.org/core/books/medicine-on-a-larger-scale/485A6E3F404D880D286AC72A55E3B35B#fdtn-information>

The book includes separate chapters by himself, James Dunk, and Hans Pols – all ANZSHM members. This groundbreaking collection draws together case studies of social medicine in the Global South, radically shifting our understanding of social science in healthcare. Looking beyond a narrative originating in nineteenth-century Europe, a team of expert contributors explores a far broader set of roots and branches, with nodes in Sub-Saharan Africa, South America, Oceania, the Middle East, and Asia. This plural approach reframes and decolonizes the study of social medicine, highlighting connections to social justice and health equity, social science and state formation, bottom-up community initiatives, grassroots movements, and an array of revolutionary sensibilities.

As a truly global history, this book offers a more usable past to imagine a new and urgent politics of social medicine. According to Arthur Kleinman (Harvard): 'A step forward in imagining a counter-biomedicine that can better connect social suffering and healing with interpretive social science, post-colonial imaginings, and some of the more serious problems of the world. Impressive!'

## Mystery object revealed

The object is a Doyen Myoma Screw - it was used in removal of benign tumours (fibroids or myopia) of the uterus.

Eugene Doyen (pictured) (1859-1916) was a French surgeon who invented quite a few surgical instruments, which bear his name.



*Medical History Newsletter* is the news bulletin of the Australian and New Zealand Society of the History of Medicine Incorporated. It is published quarterly, in the months of February, May, August and November. The opinions of the authors of articles in this *Newsletter* are their own, and are not necessarily the views of the editor or the publisher, Australian and New Zealand Society of the History of Medicine Inc. Every care is taken in the preparation of the *Newsletter*, but the publisher can accept no responsibility for any errors or omissions. The Newsletter is currently edited and compiled in Australia.

All correspondence and submissions should be emailed to: [anzshm@anzshm.org.au](mailto:anzshm@anzshm.org.au).

Please include the word 'newsletter' in the subject line of any submissions.

LETTERS, PHOTOGRAPHS AND ARTICLES ARE WELCOME IN ELECTRONIC FORMAT.

DEADLINE FOR THE NEXT ISSUE IS **1 AUGUST 2025**

For the latest information, visit the ANZSHM website: [www.anzshm.org.au](http://www.anzshm.org.au)