



PRESENTED TO
J. ILIFFE ESQ.
from the
Melbourne Dental Students' Society
1912

INTRODUCTION

In 1912, the Melbourne Dental Students' Society presented to John Iliffe a photograph of the final-year class (see opposite). It was a fitting gesture to one of the founding figures of dental education in Victoria, which originated with a professional body seeking to secure a respected program of training for dentists. This exhibition and accompanying publication celebrate the 135th anniversary of the establishment in 1884 of the Odontological Society of Victoria, which brought about the development of the first dental school in the colony. The society consisted of a group of trained dentists and was modelled on the Odontological Society of Great Britain, established in 1856. To mark the anniversary, *Dentistry: Innovation and education* explores the development of dental practice, education and public health in Victoria.

The beginning of the collection of the Henry Forman Atkinson Dental Museum is intrinsically linked with the Odontological Society of Victoria. At an early meeting the society decided to create a library and museum, for which 'Mr Blix, a member, gave a cedar wood cabinet'. The museum was further nurtured by Iliffe (1847–1914), a member and later president of the society, and it formed the basis of our collection today. Objects and documents from the collections of the Henry Forman Atkinson Dental Museum, the Australian Dental Association Victorian Branch, University of Melbourne Archives, and the Medical History Museum document this history of innovation and education in Victoria.

In this book, important aspects of the story of dental innovation and education are discussed in a series of essays. James Robertson describes the emergence of the architects of dental education in Victoria as a dynamic trio: dentist John Iliffe, lawyer Ernest Joske and physician John Springthorpe. The Australian College of Dentistry, which opened in 1897, became affiliated with University of Melbourne in 1904. Dr Robertson traces the phases that have led to the current situation, 135 years later.

Many of our early dental practitioners came from Europe, bringing with them various practices and learning traditions. Reina de Raat, curator of the most prestigious dental collection in Europe, at Utrecht University, writes about the emergence of the educated dentist in Europe. The Utrecht University items displayed here reveal the early technologies of 18th- and 19th-century dental care as the province of the wealthy. A remarkable inclusion is the personal dental kit of Empress Marie-Louise of France (1791–1847), the second wife of Napoleon Bonaparte (Cat. 276). This item relates to another in the

Cat. 96 *Presented to J. Iliffe Esq. from the Melbourne Dental Students' Society*, 1912, photograph, 45.5 × 57.5 cm. HFADM 3128, Henry Forman Atkinson Dental Museum, University of Melbourne.

exhibition, a medical kit used by Dr Emanuel Greene at the battle of Waterloo, which included a dental claw for extraction (page 83). The kit came to Australia through his son and was donated to the museum by his grandson.

War is often a time of change for medical practices. At the outbreak of World War I dentists were not included in the Australian Army Medical Corps. Only after the evacuation of soldiers from Gallipoli due to dental problems was the need to rectify this situation acknowledged. Jeremy Graham, Robert Adams and Rowan Story relate the events leading to the recognition of the valuable role of dentistry in Australia's armed forces. Illustrative collection items include teaching models demonstrating treatments for fractured jaws and teeth (page 113), made by Major Kenneth Russell (1885–1945) who during World War I worked alongside surgeons in facial reconstruction in England. Another contribution of extraordinary ingenuity was made by Captain Gordon Carlyle Marshall while imprisoned on the island of Ambon during World War II. He used aluminium salvaged from army water bottles and scrap from planes to create dentures for fellow Australian prisoners (see page 129).

Dentistry has often been at the forefront of major innovations in scientific and medical treatments. Rod Westhorpe writes of the development of anaesthetics pioneered by dentists, such as Americans Horace Wells and William Morton, who discovered the anaesthetic potential of nitrous oxide and ether. The crucial role of dentistry in forensic science is covered by an extract from an article by the late John Clement, a major contributor to this field. More recently, calculus microbiome has revealed information about the lives of people from earlier times, as Rita Hardiman explains.

One of the major changes in dentistry was the shift from the extraction of teeth to conservative dentistry. Mike Morgan, Martin Tyas and Margaret Stacey map this significant change in dental philosophy, practice and education. Also fundamental to the importance of dental care has been its contribution to public health movements. Turning points include the introduction of dental technicians and oral hygienists, and the provision of outreach dental services to schools from the 1960s. Julie Satur and Rachel Martin consider these crucial health services. The major public health movement in the 1960s–70s was the fluoridation of Victoria's water supply. The debate split the dental profession and the wider community, though the benefits are now proven by the dramatic drop in tooth decay in children. Gavan Oakley gives us insights into the political process and John Rogers traces fluoridation's practical implementation.

In 2017 Professor Eric Reynolds received the Prime Minister's Prize for Innovation, an internationally significant achievement. James McCluskey writes about the protein that Eric discovered in dairy milk, which repairs and strengthens teeth, now sold worldwide as Recaldent™. These initiatives, many led by academics at the University of Melbourne, have battled oral disease and collectively improved the general public's health.

The next section of the publication focuses on individuals, places and objects spanning 135 years. More than 50 authors—dentists, doctors, other health practitioners and historians—have written about items from the collections. Themes covered include Australian Indigenous culture, early dentistry, women in dentistry, war, education, and public health, all reflecting turning points in the history of dental practice, innovation and education. Some of the examples are as follows.

For more than a decade, the Melbourne Dental School has offered outreach services to the Yolngu people in Arnhem land. Two recently commissioned artworks by Yolngu artist Mulkuṅ Wirrpanda—a bark painting (see page 73) and a pole (Cat. 230)—depict the Dhudi-Djapu clan's tradition of throwing a child's newly lost baby teeth onto the roots of the pandanus tree. These roots are equated with the reversed teeth of a shark; throwing the baby teeth into the tree is understood to encourage new teeth to quickly grow strong and sharp. These artworks recognise the strong basis of Indigenous knowledge in Australia, but before the Melbourne Dental School commissioned them, this cultural story had not been shared outside the local community. Mulkuṅ's works will be permanently installed in the Dental School. In 1981 Chris Bourke was the first Australian Indigenous graduate of the Melbourne Dental School (page 140). Throughout his career he has been a leading advocate for equitable health services, including as a member of parliament in the ACT. Today, our Reconciliation Action Plan states that the university aims to 'ensure that our campuses are places where Indigenous peoples feel culturally safe and are treated with dignity and respect'.¹ People like Dr Bourke have paved the way for today's Indigenous students.

The history of dental education in Victoria has various phases. Many early dentists received their training as apprentices. Pamela Craig examines an 1884 apprenticeship indenture between Andrew Balsillie and surgeon dentist David Watson, for Balsillie's son Francis (see page 91). Mr Joseph William Brownbill was 'recorded by the Dental Board of Victoria' following passage of the *Dental Act* 1910. Though not possessing a university degree, he could practise on an equal footing. In the late 1920s Brownbill designed

his own surgery in Mildura (depicted on page 123). His son John Brownbill, also a dentist, tells his story.

Artists have often portrayed or satirised the most unpleasant aspects of visiting the dentist, as seen in renowned Australian artist Nicholas Chevalier's cartoon of a young boy's visit to Melbourne dentist-surgeon Bamford in 1856 (see page 81). This is described by Neville Regan, who has generously loaned this work to the exhibition. Many dentists are also creative in the arts: Horace Stevens (1876–1950) was known as 'the singing dentist', being a respected opera singer who provided dental services to his fellow musicians. David Hibbard relates his remarkable career (page 124).

Many prominent contributors to dental education and the profession are celebrated in this exhibition. These include talented administrators, deans, researchers and lecturers. A few are mentioned here.

It was almost 30 years after Chevalier's cartoon that the Odontological Society was formed. Gerard Condon, past president of the Australian Dental Association Victorian Branch, writes about the passing of the *Dentists' Act* in 1887 which set new standards for training and registration. The exhibition includes a copy of the Act signed by Ernest Joske (1858–1939), the first registrar of the Dental Board, who served for a half-century, from 1888 to 1938 (page 93). Joske's portrait by Charles Wheeler was presented to him by the dentists of Victoria in 1938 as a token of gratitude for his remarkable service (page 151). Dhana Gorasia, the 2017 winner of the Ernst Joske Research Award, describes Joske's achievements as the inaugural and longest-serving registrar of the Dental Board.

John Iliffe (1846–1914), known as 'the father of Australian dentistry', is pictured in the extraction room at the Dental Hospital in around 1907–08 (page 147). Mr Tredenick, dressed in a white coat, looks on while Iliffe, in his suit, is instructing, and student Oscar Behrend (1889–1958) operates. Historian Susie Ehrmann outlines Iliffe's extraordinary achievements, which included the introduction of systematic education and regulation of dentists. In 1904 the Australian College of Dentistry affiliated with the University of Melbourne. Iliffe and Dr John Springthorpe (1855–1933) were instrumental in the founding of the Australian College of Dentistry in Melbourne, and Springthorpe served as the first dean of dentistry. His biographer, Allan Mawdsley, recounts Springthorpe's achievements (page 148). Professor Sir Arthur Amies (1902–1976), dean of the faculty 1934–67, must be credited with planning the move of the Dental School and hospital to new facilities in Elizabeth Street. Two portraits of Amies—one by John Heath (1943, see page 159) and the

other by Paul Fitzgerald (1967, Cat. 254)—commemorate his war service and his rise to dean respectively. Amies was a powerful personality and extremely influential in the debate on fluoridation, who delayed its introduction. Arun Chandu ponders his contribution on page 158.

Amies was succeeded as dean by Henry Forman Atkinson (1912–2016). The photograph on page 167 shows him in the new Dental Hospital, which opened in 1963. Originally from Manchester, Atkinson came to the Dental School in 1953 as professor of dental prosthetics. John Harcourt acknowledges his remarkable contribution, which continued after his retirement when he served as honorary curator of the museum that today bears his name. Professor Emeritus Atkinson was instrumental in ensuring that the dental collection and museum would continue to play an active role in the life of the school.

The collection would not be what it is without gifts from alumni and their families. A recent donation by the Williams family is the program to the opening of the new Dental Hospital and Australian College of Dentistry building in Spring Street in 1907—a rare item not held in any other public collection (page 107). Related ephemera include an illustration of the first purpose-built dental hospital and school in Victoria, which was on that site for 56 years, followed by successors on Elizabeth Street (1963–2003, see page 137) and then Swanston Street (page 143). James Robertson, Louise Brearley Messer (the Dental School's first woman professor) and former head of school Eric Reynolds recount the significance of these sites. The Williams family has a significant connection to Melbourne Dental School: their forebear Fanny Gray was the first woman to receive the Bachelor of Dental Surgery degree, in 1907. The family has kindly lent to the exhibition significant photographs of Fanny, including her graduation photograph (page vi). Susannah Britt writes about this pioneering woman dentist, who also contributed to the broader women's movement.

Eve Weiss (pictured on page 133) graduated from dentistry in Melbourne in 1946 after her family had fled Nazi Germany in the 1930s. Her children have given photographs, her microscope and her student notes to the collection, and describe her achievements and character. Jean Cannon also graduated in the 1940s. Her family has donated the cabinet used in the practice established by Jean and her husband, who met as students at the University of Melbourne (pages 134–5).

Pranks have always been a part of student life. Looking closely at the conservative laboratory pictured on page 115 you will see a 'smoking prohibited' sign at the back, but many of the students—and even some of the dentures—sport pipes or cigarettes. This

photograph also shows Martha Burns, an early female student, sitting next to Fanny Gray in the front row. It is hard to imagine it happening today, but in 1927 the Duke of York was kidnapped by the Student Society on an official visit to the University of Melbourne. The future King George VI was returned unscathed and seemed to enjoy the antics, though he politely refused the invitation to become a member (see pages 116–17). Student humour continues with the 1974 cover of *The Mouth Mirror*, illustrated by a student of the time, Neil Hewson, who portrays the university as a factory: ‘The Dental Graduate Machine’ (page 139).

Technology has always influenced dentistry. From the development of toothbrushes, to changes in materials used to make dentures, and increasingly sophisticated equipment such as drills and chairs, a few highlights are included.

The McConnell chair (page 105) was a gift of the family of the late Henry Forman Atkinson in 2017. Restored by Professor Atkinson, it represents a significant step in chair technology. The chair could easily be folded and carried. Similarly, illustrations to Maw & Son’s quarterly catalogue reveal the range of bristle styles in toothbrushes available in 1869 (page 89). Matthew Hopcraft, chief executive of the Australian Dental Association Victorian Branch, comments on the role of advertising. Many dental products are still purchased from overseas, but in the late 19th and early 20th centuries Australian dentists relied heavily on mail-order catalogues to equip their practices. It is hard to ignore the optimism of the velvet teething necklet from the 1950s (page 85), which offered immediate relief from the pain of emerging teeth by placing it around the infant’s neck. Professor Rodrigo Mariño casts doubt on its effectiveness.

The last 135 years have seen a transformation of the practice of clinical dentistry: from tooth-pullers to dental surgeons. This has been achieved through the development of educational institutions and the application of technical innovation and scientific research to dental practice. In Victoria, the catalyst was the formation of the Odontological Society in 1884. The legacy of its dedicated members lives on.

Dr Jacqueline Healy

1 *University of Melbourne reconciliation action plan, April 2018 – December 2022*, University of Melbourne, 2018, p. 5.