



# A life of distinction

MICROBIOLOGY MARVEL PROFESSOR FRANK FENNER IS ONE OF AUSTRALIA'S MOST VENERATED SCIENTISTS – AND A VERY HUMBLE MAN, FINDS MELISSA SWEET.

After a stellar career spanning seven decades, Professor Frank Fenner has begun the difficult task of packing up his office – almost 30 years after his official retirement.

When Professor Fenner finally vacates his room at The John Curtin School of Medical Research in Canberra, as he intends to later this year, it will be the end of an era for Australian science and for one of its most revered figures.

“I really have to go home and get things in order,” Professor Fenner explains.

After all, he will be 93 in December and doesn't expect to be able to continue his current routine – rising at 5am, reading the latest journals until 8am and then driving to the Australian National University – for too much longer.

Professor Fenner is widely admired, not only because of the longevity of his career and the breadth of his achievements, but also because of his humility and decency.

His name may be up in lights on the main avenue as you drive into Canberra – just outside Fenner Hall, in fact – but none of the usual marks of celebrity are apparent when you meet the man himself.

When I buzz the security phone to gain entrance to his office building one chilly Canberra morning, his response is typically low key, without a hint of any airs

or graces. Just a quiet and simple: “Fenner.”

If you didn't know his pedigree, you would swear that the blue-eyed, white-haired gent shuffling down the corridor could be anyone's grandfather. What gives him away is the affection and respect that is so evident in the greetings from colleagues.

When awarded an honorary fellowship of the Royal College of Pathologists of Australasia (RCPA) earlier this year, the citation noted that the award recognised not only Professor Fenner's scientific and medical contributions, but also the tenacity and humble nature of the man behind the work.

When he arrived at the newly established John Curtin School of Medical Research in 1949, aged 34, Professor Fenner already had quite a reputation.

His work in controlling malaria among World War II troops had earned him the recognition of a Member of the Order of the British Empire.

A Captain and then a Major in the Australian Army Medical Corps between 1940 and 1946, he developed an interest in infectious diseases during service in Australia, Palestine, Egypt, New Guinea and Borneo.

## Poxes – small, rodent and rabbit

After the war, he worked alongside Sir Macfarlane Burnet at the Walter and Eliza Hall Institute of Medical Research in Melbourne, where he studied mousepox, a close relative of the smallpox virus. It was the beginning of a lifelong interest in pox viruses.

Much of his first 15 years at the ANU were absorbed by research into another pox virus – myxomatosis.

This work, which contributed to the control of the rabbit plague that had decimated the Australian countryside, is widely judged as one of his key achievements.

However, it was a single unorthodox experiment in 1951 which really caught the general public's attention.

In an effort to reassure those anxious about the safety of releasing myxomatosis, Professor Fenner and two other scientists injected themselves with the virus.

All they suffered was a slight reddening at the injection site.

Professor Fenner's work on myxomatosis also led him into the study of the vaccinia virus, which was to prove such a useful background for the work on smallpox that later brought such international acclaim.





“I am temperamentally unable to do research without being personally involved, hands-on at the bench”

“Everybody that lectures on climate change has to end up on a hopeful note, so I try to avoid giving lectures on it because I find it very gloomy”

After becoming director of The John Curtin School in 1967, Professor Fenner made a conscious decision to cease scientific research because he didn't want to do it through assistants or students.

“I am temperamentally unable to do research without being personally involved, hands-on at the bench,” he once told a radio interviewer.

Instead, he concentrated on writing and other work. Serendipitously, this

allowed him to answer the critical call of his career – to assist the World Health Organization with ridding the world of smallpox transmission, a task requiring a grinding schedule of constant travel.

In a career noted for many awards and prizes, Professor Fenner says his proudest moment came on 8 May, 1980, when he stood before the World Health Assembly in Geneva, as chair of the Global Commission for the Certification of Smallpox Eradication, and declared its mission accomplished.

“Everybody was delighted about it,” he recalls. “That was the great moment.”

## Not so quiet convictions

In latter decades, Professor Fenner's focus turned to environmental issues, inspired by one of his great mentors, René Jules Dubos, a French-born

American scientist and environmentalist credited with coining the maxim “think globally, act locally”.

Professor Fenner is known among colleagues as a cautious scientist, but he has no hesitation in sharing his alarm about global warming and the failure of the United States and Australian governments to respond appropriately.

“You couldn't but be very concerned,” he says. “Everybody that lectures on climate change has to end up on a hopeful note, so I try to avoid giving lectures on it because I find it very gloomy.”

Professor Fenner is similarly upfront about sharing his political convictions. He has never voted for the conservative parties, he says, preferring to support the “underdog”.

Nor has he been reticent about digging into his pockets to support the causes close to his heart. After winning the prestigious Japan Prize in 1988 – sharing the ¥500 million bounty with two others involved in smallpox eradication – he established two endowment foundations, to help fund conferences on the environment and medical research.

Writing is another passion.

He has published more than 300 scientific papers and written or contributed to 14 books, including a best-selling textbook, *Medical Virology*.

He refers often to the role of both chance and his father in his successes, so it is no surprise that both feature in the title of one of his most personally revealing books, *Nature, Nurture and Chance: The Lives of Frank and Charles Fenner*. It examines the similarities and differences between the lives and opportunities of the father and son.

## Abiding passions

When the young Frank, an enthusiastic collector of fossils, was contemplating a career as a geologist, his father suggested medicine would offer more opportunities.

Charles Fenner, a teacher who became a senior education administrator in South Australia, was also a keen scientist and writer. And clearly an influential role model for his son.

Another central figure in Professor Fenner's life and work was his wife Bobbie, a nurse.

## CV in brief

**PROFESSOR FRANK FENNER, AC, CMG, MBE, FAA, FRS, FRACP, FRCP**

- 1983–present** Visiting Fellow, John Curtin School of Medical Research
- 1977–80** Chairman, Global Commission for the Certification of Smallpox Eradication, World Health Organization
- 1973–79** Director, Centre for Resource & Environmental Studies, ANU
- 1967–73** Director, John Curtin School of Medical Research
- 1949–67** Professor of Microbiology, and Head of the Department of Microbiology, John Curtin School of Medical Research
  
- 2002** Prime Minister's Prize for Science
- 2000** Albert Einstein World Award for Science
- 1995** Copley Medal of The Royal Society
- 1989** Companion of the Order of Australia (AC) for service to medical science, public health and the environment
- 1988** Japan Prize for Preventive Medicine
- 1976** Companion of the Order of St Michael and St George (CMG), for medical research
- 1945** Member of the Order of the British Empire (MBE, Military) for work in malaria control



*Family snap: Professor Fenner (second from right) with his parents and siblings*

They met at work at a hospital in Hughenden in central Queensland and married in 1943, although much of the first two years of their marriage were spent apart while Fenner was posted to New Guinea.

He wrote to her at least once a day during their separation and was moved, many decades later, to discover she had kept all these notes, which he once described as “pretty torrid love letters”. He found her reading them as she lay sick with inoperable cancer.

Professor Fenner has many times paid public tribute to his wife, both for her support of his career, and for her community work, which was recognised with a Medal of the Order of Australia.

He was devastated by her death in 1995, and has talked of the bleak years which followed.

But he picked himself up, helped by the friendships cemented over many decades at regular tennis matches (he gave the game away only last year because of an injury).

Professor Jane Dahlstrom, Professor of Anatomical Pathology at the Australian National University, recalls that she first came to know Professor Fenner because he was part of a group of scientists who regularly played tennis next door to her home.

As she grew to know him more, bumping into him at various functions and meetings, she came to appreciate him, both as a person and a scientist, and resolved to surprise him by nominating him as an Honorary Fellow of the RCPA.

“He genuinely seemed really pleased,” she says. “The day after the function he wrote me a lovely email, thanking me.”

For Dr Peter McCullagh, a developmental immunologist who retired from The John Curtin School in 1991, three things stand out about the man who has been a colleague and friend for more than 40 years. These are his enormous work ethic, his remarkable knowledge of virology, and his example of healthy, active ageing.

“Frank is an incredible example of what one can do, post-65, by staying active,” he says.

Professor Fenner has no plans to hang up his hat when he moves his office back to the home shared with his daughter Marilyn. He hopes to devote more time to his beloved vegetable garden, whose produce is regularly shared with friends.

But he has no ambitions to fight against the inevitable. After seeing his good friend ‘Nugget’ Coombs debilitated and lingering on for many months after a stroke, Professor Fenner wrote an advanced care directive which he carries in his wallet.

“It says, ‘If I am found unconscious on the road, don’t do anything to revive me’,” he says. “I don’t want to live for a long time. I want a quick death.”

Whenever and however his last moment comes, one thing is certain. Frank Fenner’s memory will be writ large in the history of Australian science and medicine. 🔥