

In Memoriam: Dr. Frank John Fenner

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[Peter Drotman] Good day. I am Dr. Peter Drotman, editor-in-chief of EID and I'm talking with Dr. Frederick Murphy, a member of EID's editorial board and the Institute of Medicine. He is also professor of Pathology at the University of Texas Medical Branch in Galveston.

The world of virology and public health lost one its great pioneers last year with the death of Dr. Frank John Fenner, at the age of 95.

[Peter Drotman] Welcome Fred.

[Frederick Murphy] Peter, good to talk to you, old Friend.

[Peter Drotman] Now I never met Dr. Fenner, but I became familiar with his name and his work when I was in the W-H-O Smallpox Eradication Programme. He was one of the world's most distinguished virologists when W-H-O named him to Chair the Global Commission on Certification of Smallpox Eradication. Fred, tell us a little about Dr. Fenner's accomplishments as a pioneering virologist.

[Frederick Murphy] Well Frank Fenner, my dear friend, led many lives, and I think all with incredible distinction. But among his lives, he said, and as I wrote in the In Memoriam piece, that as Chair of the Global Commission, his greatest honor was to announce to the World Health Assembly in 1980 that smallpox had been eradicated from the earth. I think that says a lot about him as a man, also. As a virologist, I tend to think about him first from the days of his benchwork when he was young. His work on the pathogenesis of *ectromelia* virus (that is, mousepox virus) was the first modern viral pathogenesis study ever done. It became the scholarly base for that opened the whole field of viral pathogenesis research. So many of my friends have followed Fenner, Frank Fenner, down that path; solving many viral disease problems along the way. He also did practical, or applied bench virology. For example, he did all the work that was needed to prove that myxoma virus, which was about to be used as a rabbit biocontrol agent in Australia, whether that virus was environmentally safe. He showed that it was, and myxoma virus became the main tool for dealing with what we call Rabbit Plagues in Australia. So, in each case he was ahead of his time.

[Peter Drotman] Dr. Fenner was director of *The John Curtin School of Medical Research* for many years where he made many of these and other significant contributions. What are some of the changes he made there?

[Frederick Murphy] Well Peter, when he was director he totally reorganized the school, but administrators are always doing such things. But by the 1970s onward, *The John Curtin School* became one of the leading medical research institutions in the world. Most important in my view, was Frank's success in recruiting – he recognized outstanding talent and somehow he got awesome virologists and others to come to Canberra. So that by the time I spent 1970 there and my boss Walter Dowdle spent the year 1972 there, the faculty, especially in virology, was absolutely world-class. As an example, seven of the faculty members of the department I was in

served as the chairs of sessions at the International Congress for Virology held at that time. I think that's proof positive of the world-class faculty that he had recruited.

[Peter Drotman] Many virology students today recognize Dr. Fenner because of the large body of work that he produced, including some landmark books and texts. Tell us about a few of them.

[Frederick Murphy] Well Frank wrote or edited 32 books, incredible. At least five of these became benchmarks in virology, the books that I used along the way and I'm sure all my colleagues as well. I might mention a few.

First, the great "Red Book" entitled, *Smallpox and its Eradication*, which Frank did with D.A. Henderson and others, published by WHO 1988. It is the landmark reference on smallpox and its eradication and a great reminder of this great success; one of the greatest achievements of humankind in eradicating this terrible disease.

Secondly, from my personal viewpoint, I think Frank's two textbooks, one entitled *Medical Virology* and the other entitled *Veterinary Virology*, each with several editions, are very important. So many virologists, pathologists, and other infectious disease scientists got their first taste of virology from either one of these two books. They are beautifully written, like all of Frank's work. A lesson in how to write, although since I have read so much of his work I still think it's very mysterious, and that maybe I never did learn the secret of his fantastic writing style.

[Peter Drotman] Dr. Fenner was a charter member of what was later named the International Committee on Taxonomy of Viruses, as it is known today. Tell us about some of his work on the ICTV?

[Frederick Murphy] I think I have to cast yourself back to the time. The ICTV was founded at a very exciting time in the evolution of virology; just at the time the field of virology was breaking away from the mothership, the world of microbiology especially bacteriology, and the insistence of virologists that the field should become a separate discipline. Frank and just a few others led this revolution. It was the same people who founded the ICTV that founded the International Congresses for Virology, the other major evidence of the arrival of virology as a separate discipline.

There were a lot of personal animosities in the battles that virologists fought with the bacteriologists at that time, but with leaders like Frank, the great personal warmth and professional coolness and smoothness put everyone's feathers in place. I think he deserves credit with just a few others for the fact that today everybody gets along very well and that virology stands an equal member of the global microbial world and its research community. I think Frank's legacy as a scientific diplomat still seems very palpable to me.

[Peter Drotman] Now you were a good friend as well as a professional colleague of Dr. Fenner's. Is there a particular personal memory you have of him that you would like to share?

[Frederick Murphy] There is one that he cites in his autobiography that means a lot to me. In 1997, when he was 83 years old, Frank joined my family on a camping trip into Yellowstone and Grand Teton Parks. Besides the joy of seeing someone like Frank visit Yellowstone for the first time, which I always enjoy, I think the things I remember with most fondness is Frank's interplay with my family members. I can still see Frank walking down a trail with two of my

daughters-in-law, one on each arm, and they were chatting away. I still don't know what they were chatting about. Someone had given me a bottle of Chivas scotch whiskey and it ended up in the cupboard of the camper, so every evening Frank and I would pour a drink and then sit in our, we had these gosh awful garden chairs picked up at yard sales but with the scotch in hand, they all seemed very comfortable and we would chat away, often on virologic topics. So eventually the bottle was empty, and I warned Frank that our medicine was gone; that it was going to be rough to sit through the next evening. But, by the next evening I saw a new bottle in the cupboard. Frank, who at age of 83 who we had put up in a motel in West Yellowstone, without a word, had seen to it that our evening ritual continued. A gentle man, great friend; little things like that, memories that last forever. All that still seems to go together nicely with his incredible leadership qualities. I think he would have been a great director for CDC. He is going to be missed very much by those of us who knew him well, and by everyone else who honored him and his achievements.

[Peter Drotman] Thank you very much for sharing that set of stories. I've been talking with Dr. Fred Murphy about an In Memoriam article that appears in the April 2011 issue of CDC's Journal, Emerging Infectious Diseases. You can see the entire article online at www.cdc.gov/eid. If you'd like to comment on this podcast, send an email to eideditor@cdc.gov. That's e-i-d editor – one word - at-c-d-c dot gov. I'm Dr. Peter Drotman, for Emerging Infectious Diseases.

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