Correspondence

Monto Ho, In Memoriam

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Monto Ho, a leader in the field of infectious diseases during the past 50 years and world-renowned expert in interferon and human herpesvirus infections of immunocompromised hosts, died 16 December 2013, after complications from a fall.

Monto had the special ability to adopt the best qualities of Chinese and Western cultures to his everyday life and profession. Born in Yiyang, Hunan, China, in 1927, he moved with his family in 1937 to Vienna, Austria, where his father Fengshan Ho had been appointed to the Nationalist Chinese consulate. During 1938–1940, as the Chinese Consul-General in Vienna, his father issued, against Chinese governmental orders, more than a thousand visas for Shanghai to Jews, thereby saving them from the Holocaust. For this extraordinary deed, he was awarded posthumously the “Righteous Among the Nations” award of Yad Vashem in 2001. In honor of his father’s illustrious life and career, Dr Ho recently translated his father’s biography into English [1].

While Monto was a sophomore at Tsing Hua University in Beijing in 1947, his father was appointed Chinese Ambassador to Egypt. Monto took the opportunity to transfer to Harvard College, where he was accepted as a junior. After graduating with high honors, Monto entered Harvard Medical School in 1950, where he received his MD in 1954. Following an internship and residency on the Harvard Medical Service at the Boston City Hospital, Dr Ho became a research fellow in infectious diseases under Edward H. Kass and Maxwell Finland, legendary leaders in clinical infectious diseases and founders of the American Society for Infectious Diseases. Monto then studied for 2 years in the Harvard laboratory of John F. Enders, Nobel Laureate, where he specialized in virology. It was in Enders’s laboratory that Dr Ho was introduced to the newly discovered antiviral protein interferon, which was to be central to his early career in research.

In 1959 Monto accepted dual appointments at the University of Pittsburgh as assistant professor, Department of Epidemiology, at the Graduate School of Public Health offered by Dr Enders’s close colleague, Dr William McDowell Hammon, a world leader in poliovirus and arbovirus research, and in the Department of Medicine in the School of Medicine. In contrast to his peripatetic youth, Dr Ho remained in Pittsburgh for his entire career. After the retirement of Dr Hammon, Monto became chairman of what is now the Department of Infectious Diseases and Microbiology, one of only 6 departments focused solely on infectious diseases in schools of public health. Dr Ho’s dedication to his work,
combined with skill at interpersonal relationships, led to him being appointed Chief of the Division of Infectious Diseases in the Department of Medicine and Director of Clinical Microbiology in the Department of Pathology in 1972.

Dr Ho was among the earliest investigators of interferon. He pioneered investigation of the mechanism of action of interferon, the inducers of interferon including endotoxins, and the mechanism of its induction [2, 3]. He and his colleagues conducted the earliest clinical trials of type 1 interferons in viral diseases, which delineated its antiviral effects as well as its limitations. The foremost among these was a trial to prevent herpes labialis after operation for trigeminal neuralgia [4]. For more than 20 years, Dr Ho and his colleagues studied the serious problem of herpesvirus infection after transplant. The initial challenge was cytomegalovirus (CMV), and then their studies extended to Epstein-Barr virus (EBV) and herpes simplex and varicella zoster viruses. CMV can cause life-endangering pneumonias, and EBV can cause life-threatening posttransplant lymphoproliferative disorders, especially in children. A hallmark study led by Dr Ho showed that primary CMV infections were transmitted by the transplanted organ [5]. Dr Ho was one of the first to point out that it is possible to diagnose the risk of primary infections before transplant by determining the CMV serology of the organ donor and organ recipient, which has become a standard of care in these patients. Following this, Monto was the key force in establishing the Pittsburgh sites of the Multicenter AIDS Cohort Study in 1983, an AIDS Clinical Trials Unit in 1986, and the Pennsylvania AIDS Educational and Training Center in 1988, which are still ongoing and highly productive.

After retirement in 1997, Dr Ho did not leave his profession. Indeed, as a member of Academia Sinica, he was invited to the National Health Research Institutes (NHRI) in Taiwan for 5 years. There he initiated a national surveillance of antibiotic resistance and advocated measures to reduce antibiotic resistance in humans and food animals [6]. This work led to a 43% reduction in antibiotic consumption, and the reduction of some types of resistance. He was awarded a “Medal of Public Health, First Class” by the Taiwan Department of Health, and an “Excellence in Research” award by the NHRI.

Dr Ho used research and clinical responsibilities to train a cadre of students and fellows in the Graduate School of Public Health and in the Departments of Medicine and Pathology in the Pitt Medical School as well as in Taiwan. He and his colleagues and students published more than 280 scientific papers and 4 books, including 2 editions of what was for many years the major resource on CMV [7]. In 2005, Dr Ho published a remembrance of his extraordinary life [8].

Monto shared with his esteemed mentors Kass, Finland, and Enders the exceptional human traits of intellectual excellence and refined gentility of true scholars. Most of all, Monto knew that the essence of his unique, 3-way academic linkage in the schools of medicine and public health was that he could visualize and address the whole field of his profession—from disease prevention, to disease diagnosis, and finally to treating patients’ infectious diseases in the clinic.

Monto truly embodied the Confucius virtue of jen, wherein he practiced “5 constant virtues” with all people: courtesy, generosity, honesty, persistence, and kindness. It is quite fitting that the last act for his beloved profession was his most generous. In 2006, Monto and his wife and dear partner in life, Carol, endowed the Monto and Carol Ho Chair in Infectious Diseases and Microbiology at the University of Pittsburgh.

Monto and Carol, who survives her husband, have 2 children, Bettie Carlson and John Ho, and 3 grandchildren, Caroline, Margaret, and Gregory.

It is only after a friend has left us that we can measure his greatness and fully appreciate him. We cherish Monto’s memory as a devotion to family, friends, and country, as well as important scientific discoveries that strengthened the foundations of the field of infectious diseases.

Notes

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