Obituary



David Francis Clyde

Leading expert on malaria whose varied career spanned three continents.

Born Jan 13, 1925, in Meruit, India; died of pancreatic cancer aged 77 years in Baltimore, Maryland, USA, on Nov 12, 2002.

avid Francis Clyde was "one of the great contributors to our understanding of malaria", having spent 17 years in Africa studying the ravages of the disease first-hand, according to colleague Clive Shiff, associate professor of molecular microbiology at the Johns Hopkins University Bloomberg School of Public Health.

Clyde was born in Meruit, India, in 1925 while his father was stationed there as an officer in the Indian Medical Service. He was sent to England for schooling at the age of 7, and then, in 1940, was sent to Kansas City, USA, where he lived with relatives and completed high school and college at the University of Kansas in 1946. He received his medical degree from McGill University in Montreal in 1948, then served his internship at Vancouver General Hospital.

From 1949 he served in the British Colonial Medical Service and then with the government of postindependence Tanganyika (now Tanzania), holding positions from medical officer to specialist malariologist to senior consultant in epidemiology until 1966. During that time, he also received a diploma in tropical medicine and hygiene (in 1952) and a PhD (in 1963) from London University. While in Tanzania, Clyde "became convinced that a vaccine against the scourge would be a key to controlling the disease", Shiff said.

In 1966, he became an associate professor at the University of Maryland at Baltimore, where he became professor and director of the International Health Program in 1967, During his time there he completed hallmark studies showing "that immunity to infection could be conferred following the bite of irradiated, infected Anopheles mosquitoes", observed Shiff; Clyde even served "as a volunteer in the study . . a fact of which he was proud". Indeed, Clyde's studies on himself are one subject of Lawrence Altman's Who Goes First? The Story of Self-Experimentation in Medicine—Clyde "received more than two thousand seven hundred mosquito bites", Altman wrote. The vaccination strategy only worked for a maximum of 6 months for Plasmodium vivax—and only 3 months for *P falciparum*—and would have been impractical. Nevertheless, "it was a key experiment that spurred interest in developing a malaria vaccine", Altman wrote.

In 1975, Clyde left Baltimore for New Orleans, where he became professor and head of the department of tropical medicine and medical parasitology at Louisiana State University. He joined the World Health Organization in 1979 as senior public-health administrator and malaria adviser, serving as head of WHO's southeast Asia division in Delhi, India. Finally, he rejoined the faculty of the University of Maryland at Baltimore as research professor of medicine in 1985, the same year he joined the Johns Hopkins University Bloomberg School of Public Health, where he served as senior associate and then adjunct professor. He held positions at both institutions until 2002.

Until 1992, Clyde was also chief of malaria studies in the Center for Vaccine Development at the University of Maryland, which has since named its malaria research laboratories in his honour. There, he collaborated on the establishment of a malaria challenge model and on several malaria vaccine trials.

"It was at Johns Hopkins that his prowess as a teacher blossomed", Shiff said. "His encyclopaedic knowledge based on years of hard work and varied experience from East Africa gave him a breadth of understanding which was greatly appreciated by his students. His classes would extend well past the closing time as students probed him to relate experiences ranging from encounters with poisonous snakes, wild animals, and bushveld experiences." For his teaching, Clyde twice received the Johns Hopkins Golden Apple award in 1988 and 1994.

Clyde was the recipient of many research and service awards, including the Darling Foundation Medical from WHO in 1986, the LePrince Medal from the American Society of Tropical Medicine and Hygiene in 1988, and the Manson Medal from the Royal Society of Tropical Medicine and Hygiene in 1989. He was author of four books on malaria and health services in Tanzania, Grenada, and other locales, co-author of the textbook *Tropical Medicine*, author of many book chapters in American medical textbooks, and author or co-author of more than 130 papers in medical journals.

Clyde, who is survived by his wife of 53 years, Kathleen, two daughters—Frances Ahern and Victoria Clyde—and a granddaughter, "left a long shadow", according to Shiff, and "will be sorely missed by all who were touched by it".

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