

# Donald Heyneman, Ph.D.

February 18, 1925 - August 2, 2022



Donald Heyneman was born in San Francisco to Paul and Amy Jo Heyneman on February 18, 1925. He died on August 2, 2022 at his home in Novato, CA of an unusual non-smokers, slow-growing lung cancer diagnosed 14 years before. He was a fourth generation San Franciscan, a scientist, an environmentalist, and a beloved husband and father.

Don touched family, friends, colleagues, students and acquaintances with his kindness, warmth, humor, humility and commitment to making our world a better place. His gentle and self-effacing manner, usually with a slightly mischievous smile, put everyone at ease. His insatiable curiosity about and intense love of nature led him to pursue a career in the natural sciences, to seek adventures focused on natural history around the world, and to enjoy a lifelong passion for birding.

Don's passion for nature began early. The fire-escape outside his bedroom window was home for his porcupine skin, scoter duck's bill, raccoon skull, sea lion ribs, assorted feathers and other treasures. As a teenager he frequented the California Academy of Sciences in Golden Gate Park. He spent summers from Lowell High School mountaineering in the Sierra Nevada, and became part of the early conservation and wilderness preservation movements.

At Harvard he audited as many courses as he took for credit every semester. When he turned 18 he joined the Ski Troops in the US Army's 10th Mountain Division. Training at Camp Hale up to 12,500 feet was rigorous, carrying 90-pound packs on two-week cross-country maneuvers through the Colorado Rockies in winter, where blizzards were part of the training regimen and night temperatures dropped to 45° below zero. On weekend leaves he would climb in the magnificent Gore Range.

After WWII, 2nd Lieutenant Heyneman was stationed in the Philippines, where he learned that the entire bird and mammal collection at the National Museum of the Philippines had been destroyed. In response, with Dr. Harry Hoogstraal, he planned and led a two-year expedition in the Luzon, Mindanao and Palawan Islands, where little was known about the flora and fauna. Of the specimens collected, half went to the Philippine Museum's natural history collection, and half went to Chicago's Field Museum, which funded this work. A few live specimens, including two Monkey-eating Eagles (Great Philippine Eagle), went to the Chicago Zoo, and then to the Chicago Field Museum after their death.

Don returned to Harvard where he graduated Phi Beta Kappa in 1950. He then went to Rice Institute (now University) in Houston, where he received his Ph.D. in Parasitology in 1954, followed by five years on the faculty at UCLA.

He was granted a 3-year leave to become Co-Director, with Dr. Hoogstraal, of a research program on visceral leishmaniasis in Malakal, Sudan, where a virulent form of the disease was causing a serious epidemic among the Dinka, Nuer, and Shilluk tribes, Nilotic ethnic groups. Their research revealed which of 35 species of sand flies served as the specific vector, and showed the complete life cycle. They also identified local mammals that serve as reservoirs for human infection. Their research, considered a classic epidemiological study, resulted in more than 25 publications.

When war broke out in the Southern Sudan, Don went to Cairo, Egypt, where he spent the next six months at the US Navy Medical Research Unit Number 3 (NAMRU-3). He later spent several weeks annually for about 20 years at NAMRU-3 doing research.

Having spent 5 years at UCLA and 3 in Africa, Don welcomed an opportunity to return to San Francisco by accepting a position as Professor in the Dept. of Epidemiology and International Health in UCSF's School of Medicine, where he continued his research and teaching for nearly 40 years. He wore several hats including Professor of Parasitology and Scientific Director of the Tropical Diseases Laboratory. He also served as Research Faculty Member, Acting Chairman, Vice-Chairman, and Assistant Director of the G.W. Hooper Foundation at UCSF, under Dr. J. Ralph Audy.

Don's research interest in parasitic diseases in Third World countries led to extended work in more than a dozen countries on five continents. Leading Medical Travel Seminars, and personal travel took him to more than 20 other countries.

In 1964 Don headed the UCSF Hooper Foundation program in Kuala Lumpur, Malaysia, where he initiated an epidemiology and parasitology research program focused on schistosomiasis (bilharzia), the second greatest scourge after malaria in the Third World. In Malaysia, pre-dawn often found Don atop a tall Dipterocarpus tree, overlooking the tropical rainforest canopy. From that perch he watched monkey groups awaken, and the great assemblage of birds start their day, with an early morning chorus of gibbons in the distance. He explored, photographed, and collected widely. And he climbed 13,500 ft Mt. Kinabalu, the highest mountain in Borneo.

With his interest in biological control of disease, Don also worked with Dr. Aklilu Lemma in Ethiopia. Dr. Lemma had observed that the disease schistosomiasis was much less common near streams where women used soapberry to wash clothes. Their research showed that soapberry, from the fruit of the common African plant endod, killed the snail host of schistosomiasis. They then focused on how endod could be used as an inexpensive, locally available molluscicide to control the disease.

Don's research findings opened whole new fields of inquiry in immunology. His early work demonstrated that multi-celled organisms (in this case, tapeworms) can induce an immune response in mammals. Before this, it was believed that only viruses or bacteria could cause such a response. His later research revealed that internal parasites can also induce an immune response in invertebrates, such as snails, not just in warm-blooded animals, like birds or mammals.

As well as authoring more than 300 research papers, abstracts, reviews, book chapters and definitions for two encyclopedias, Don wrote three books and co-authored five others. He was active in professional societies, including serving as President of the American Society of Parasitologists. He was a consultant to the National Science Foundation, World Health Organization, and to the United Nations Development Program. He was a National Institutes of Health grantee for 20 years and also served on its Study Section on Tropical Diseases.

In addition to his research, Don loved teaching. His lectures to some 7,000 medical and pharmacy students drew from a wealth of experiences around the world. Who else could report how fast a tsetse fly flies, because he had raced one across the African savannah in a jeep? He was likely the only professor in the entire medical school teaching program who continued to give and grade hand-written essay-exams throughout his entire tenure.

His teaching was frequently honored with awards for teaching excellence, including many Teacher of the Year Awards. A student wrote, "Absolutely the best lecture series of the first two years of medical school. Dr. Heyneman's clarity, fund of knowledge, enthusiasm, balance of presentations, sense of humor, compassion and dedication to medicine were all awesome." Another student commented, "I've been lucky to have been able to take a course with such an ingenious, inspiring, gifted teacher. Love the social and political aspects of diseases."

Don's influence reached beyond the students in his classes. When asked by a NY Times reporter, "When did parasites become your passion?", Dr. James McKerrow, cancer-researcher-turned-parasitologist responded, "One night I attended a lecture where I heard parasitologist Donald Heyneman speak about schistosomiasis...Heyneman was this Indiana Jones-type figure. He traveled to remote parts of the world where people still lived as hunter-gatherers and studied how parasitic diseases affected them." Like Don, Jim McKerrow realized that, "With parasites, I can merge my scientific curiosity with the desire to do good".

A writer for Time Magazine observed that Don's passion for learning about parasites never waned. "The thing the curious doctor was busy disentangling and studying last week looked like an endless skein of rubber band. Actually, he explained happily, it was 100 feet of rare tapeworm which he found in the intestine of a whale he found off of Catalina Island. ...Dr Donald Heyneman... finds all tapeworms fascinating. He hates to pass up a chance to find a new species, for the surface of tape-wormology has hardly been scratched."

And a fellow Explorers Club member wrote, "Don Heyneman is our chapter's expert parasitologist and has traveled to more disease-ridden Third World countries than anybody I know. Always the optimist, always encouraging, his advice was always practical."

Don's final position at UCSF was as Director of the five-year UCB-UCSF Joint Medical Program. Each year a small cohort of interesting and highly-motivated students enrolled, earning an M.S. from UC Berkeley and an M.D. from UCSF. Although Don retired in 1991 as Professor of Parasitology Emeritus, UCSF; Chairman Emeritus of the UCB-UCSF Joint Medical Program; and Associate Dean Emeritus, School of Public Health, UC Berkeley, he continued teaching Parasitology and Epidemiology to medical and pharmacy students at UCSF for a number of years.

After retiring, Don spent eight years by himself clearing several hundred acres in the San Francisco Presidio of invasive non-native plants. The National Park Service recognized him as "the man responsible for creating the only piles of ice plant visible from outer space!" Don's primary motivation was to enhance the habitat for birds, especially quail. He also volunteered as a docent in every section of the California Academy of Sciences during retirement.

For a decade, Don taught physicians in tropical locales through Medical Travel Seminars, founded by Dr. Phil Rasori, a former student. He also visited Village HopeCore in Kenya, where Dr. Rasori is founder and Medical Director.

At age 74 Don climbed Mt. Langley in the Sierra Nevada, and signed the summit register, "I last climbed this mountain 60 years ago, with Norman Clyde" (one of the early pioneers of Sierra climbing). And the next year he hiked the sacred pilgrimage around Mt. Kailash in Tibet, which involves 50 km of hiking over passes as high as 18,500 ft. Well into his 90's, Don walked 2 miles daily from his home on Lake Street in San Francisco admiring gardens, birding, and chatting with neighbors along the way.

Among many other things, Don and Louise shared a love of music, art, ideas and extensive travel, most often in underdeveloped countries, during their 51 treasured years of marriage. Art collections exceeded walls at home and most of their Peter Milton etchings were donated to the San Francisco Fine Arts Museums and to the Cantor Arts Center at Stanford University. Geological specimens were donated to the California Academy of Sciences.

Don is survived by his wife Louise Davidson Ross Heyneman and children Amy Jo Heyneman (Bernard Hallet), Lucy Arnold (Michael), Edith Ross Parker (Robert), Caleb Denman Ross, Andrew Paul Heyneman, Jennifer Heyneman Sousae (William) and Claudia Grace Heyneman Wells; grandchildren Amber Dawn Hallet (Benjamin Smith), Emily Heyneman Hallet (Gregory Smith), Jonathan Marc Hallet (Neil Davis), Jeffrey Arnold (Jillian Johnson), Julie Arnold (Kyle Lazzarevich), Danielle Ross Parker, Elizabeth Treat Parker, Sebastian Heyneman, and Jacob Denman Ross; great grandchildren, Isla Rose, Margot Skye, Sylvia and Alden. Also, William Sousae's children, Rebekah Sousae (Nicholas Furnal), John Sousae (Sissy) and Matthew Sousae (Taylor) and grandchildren Luka and Ava.

A member of a large family, Don was predeceased by siblings Alan, Nancy, Jack and Laurie. He is survived by Elizabeth Simmons and Stephen Heyneman, and many cousins. There are an equal number of dearly loved relatives on the East Coast and abroad.

Dr. Donald Heyneman had a talent for making possible the fulfillment of dreams for many lives that he touched as teacher, advisor, mentor and father. He always said his greatest adventures were with his family. We are grateful that he was part of our lives and we carry our memories of him forward.

In lieu of flowers, please consider donations to:

Amazon Conservation Team, [www.amazonteam.org](http://www.amazonteam.org)

Earth Justice, [www.earthjustice.org](http://www.earthjustice.org)

National Audubon Society, [www.audubon.org](http://www.audubon.org)

The First Unitarian Universalist Society of San Francisco, [www.uusf.org](http://www.uusf.org)

A Memorial Service will take place at 10:30am PST on Saturday, February 18, 2023 at the First Unitarian Universalist Society of San Francisco, 1187 Franklin Street, San Francisco, 94109. A reception will follow.

You can also attend the Memorial Service at 10:30am PST by "LIVE STREAM" at: <https://youtu.be/PO4bS5kh5W4>. Afterwards, a video will remain available at <https://bit.ly/UUSFservices>.

For more information contact [thedonaldheynemans@gmail.com](mailto:thedonaldheynemans@gmail.com).

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