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MEET DR. BOB!

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Dr. G(eorge) Robert Coatney was known to many as “Mr. Malaria” because of the leadership he provided for the malaria research and chemotherapy programs during World War II and the Korean War. He is known to many of us affectionately as “Dr. Bob.” I first met Dr. Bob early in my parasitological career when he would come to Lincoln to visit his mother and other family members. He often visited Harold W. Manter, too. Although they only brushed shoulders in 1926 as Coatney was leaving and Manter was arriving at the University of Nebraska, the two developed a firm and lasting friendship when Coatney taught in Nebraska. Later, Dr. Bob became a major donor of the Harold W. Manter Laboratory. In addition to journals, nearly a thousand reprints, and copies of his authoritative books on malaria, he entrusted to the Laboratory a six-drawer wooden case specially made by a Chinese carpenter in Malaya to contain Dr. Bob’s personal set of malaria slides, “probably the *only* collection of *all* the exoerythrocytic (E.E.) bodies ever described.”

Dr. Bob was described (Janovy, 1978) as “a decidedly dapper and vibrant gentleman.” He is. He is also an outstanding scientist who is uncompromising in experimental design, who is never at a loss for words but can be relied upon to keep every last one of them, and who has a determination to do the best job possible. He was a superb administrator who inspired staff and volunteers to contribute their scientific and human best. Dr. Bob has written his own story. I can only add a few details that will allow you to know him better.

Coatney (Fig. 1) was born in Falls City, Nebraska, on 3 May 1902, the eldest of four children. He grew up in southeastern Nebraska, swimming in the Nemaha River, fishing in the Missouri, hunting rabbits in the winters, collecting bird eggs in the summers, and doing all the other things boys do. He was graduated from Falls City High School in 1921 and

entered Grand Island [Nebraska] Baptist College the same year.

He was a journalism major, but to fill his second semester schedule, he enrolled in a two-hour elective course on evolution because it had no laboratory. He had not reckoned on the teacher, Frank G. Meserve, professor and head of the Department of Biology, another Nebraskan (from Firth), young (scarcely six years older than Coatney), and a parasitologist directly from the University of Nebraska (A.B. 1921). Nor had he reckoned on fellow students such as Joseph E. Alicata (later parasitologist at the University of Hawaii), E. E. Dickerman (later parasitologist at Bowling Green [Ohio] State University), and G. L. Graham (later parasitologist at the University of Pennsylvania) who contributed a degree of friendly competition. Meserve was a master teacher, one who stimulated his students, encouraged them, disciplined them, and dared them to do their best. He would lead his students just so far and then say, “I don’t know anything about this. Why don’t you take a look at it?” In short, journalist Coatney became biologist Coatney.

Upon graduation in 1925, Coatney attended graduate school at the University of Nebraska where Meserve had arranged an assistantship with Franklin D. Barker (a parasitologist, a student of Henry Baldwin Ward, and Ward’s handpicked successor when Ward moved to the University of Illinois in 1909). Coatney completed the master’s program in one year, wrote a thesis on “Protozoa of the Oral Cavity,” and received his M.A. degree in 1926. At the same-time, Barker accepted the position of professor and head of the Department of Zoology at Northwestern University. Meserve also moved to Northwestern, but not before arranging to have Coatney return to Grand Island Baptist College as professor of biology. During the next four years, Coatney taught at Grand Island and took

work at the University of Chicago where he decided to become a protozoologist. He wanted to work on *Haemoproteus* infections in birds, but the faculty at the University of Chicago wanted to convert him to an immunologist. When it became clear that he was not interested, he was advised to visit with Elery R. Becker at Iowa State College (now Iowa State University). There, during his doctoral program, he narrowed his interest to malariology, especially the search for true malaria in birds larger than sparrows and canaries because they would yield more blood and further experimentation that could apply to human malaria. In 1932, armed with a Ph.D. degree, he returned to Lincoln where he had a teaching position at Nebraska Wesleyan University in a Department of Biology that encouraged research. At this point Dr. Coatney picks up the story of his work on malaria.

He tells us that he described and named some 15 new species of protozoan blood parasites during the five years at Peru State Teachers College. He does not indicate the degree to which such studies were discouraged. One night he and two student assistants climbed to the cupola of the observatory where a flock of pigeons was nesting. They collected half a gunny sack full of birds and took them to his laboratory. It was about 11 o'clock at night, and they were making blood smears at a great rate when the telephone rang. "The President says you *must* turn out the lights up there. You are wasting too much electricity." Remember that this was in the depths of the depression and that research was not an objective at a teachers college. The next morning they finished the pigeons in the sack and began to stain the smears. It was in that lot of smears that the true malaria was found! The parasite was transmitted from pigeons to chickens and back to pigeons, and Coatney (1938) published a paper in the *American Journal of Hygiene*. That is the paper that led to Coatney's career in the National Institutes of Health.

One must also realize that these birds were not the neatest experimental animals. A professor at the University of Winnipeg, Canada, once recalled (personal communication), "When I was a freshman at Nebraska Wesleyan, Coatney was a young Ph.D. on his second teaching job. And a bang-up good teacher he was! He also researched bird malaria and I—as a student janitor—had to sweep from an old, splintered wood floor the feathers those darned birds shivered off. Coatney changed my career goal from medicine to biology!"

Coatney knew what challenged his scientific curiosity and exactly what he wanted to do. He sought and found a true malaria in pigeons. Some of his first experiments and publications (1933 and 1935) dealt with chemotherapy and the phenomenon of relapse in malarial infections. He was later Chief of the Laboratory of Parasite Chemotherapy (NIH); he discussed the still challenging problem of relapse in his presidential address to the American Society of Parasitologists



FIGURE 1. G. Robert Coatney at retirement in 1966.

(1976). Because he had followed his own areas of interest he was ready to accept the big opportunity and challenge when it appeared.

To understand just how meteoric his career at the National Institutes of Health really was, consider this summary: Assistant Protozoologist, 1938–1939; Associate Protozoologist, 1939–1941; Protozoologist, 1941–1942; Senior Protozoologist, 1942–1945; Commissioned Scientist (Lieutenant Commander), regular corps, United States Public Health Service, 1945–1947; Senior Scientist (Commander), Section on Chemotherapy, Laboratory of Tropical Diseases, 1947–1949; Scientist Director (Captain), Section on Chemotherapy,

LTD, 1949–1955; Assistant Chief, LTD, 1955–1959; Acting Chief, LTD, 1959–1960; Chief, Laboratory of Parasite Chemotherapy, 1960–1966; compulsory retirement, 1966.

Concurrently, because of his expertness, he served on many intergovernmental committees and as consultant to foreign governments and international organizations: Lecturer, Tropical Medicine, Georgetown University Medical School, 1949–1958; Lecturer on Malaria, U.S. Naval Medical School, 1951–1958; Member, Board for Coordination of Malaria Studies, National Research Council, 1942–1946; Subcommittee on Malaria, Committee on Medicine, National Research Council, 1950–1956; Senior Consultant on Malaria, Office of the Surgeon General, Department of the Army, 1951–1956; Member, Expert Committee on Malaria, World Health Organization, 1948, 1949, 1960, and 1965; World Health Organization List of Experts on Malaria, 1949–date; Deputy Director, Commission on Malaria Armed Forces Epidemiological Board, 1965–1968; Member, Panel on Anti-Parasitic Drugs, National Research Council, 1966–1970; Member, World Health Organization Scientific Group on Resistance of Malaria Parasites to Drugs, Geneva, Switzerland, 1964. He is the co-author of three authoritative books on malaria, and his research has produced some 200 papers.

Retirement was by no means the end of his scientific career! To on-going appointments, he added others: Visiting Lecturer, Tropical Public Health, Harvard School of Public Health, 1955–1970; Visiting Professor, Preventive Medicine and Public Health, Howard University Medical School, 1955–1970; Professor of Pharmacology, Louisiana State University Medical School, 1966–1969; Visiting Professor, Faculty of Medicine, National University, Mexico City, 1966; Visiting Professor of Pharmacology, Tulane University School of Medicine, 1968–1971; Consultant on Malaria, Centers for Disease Control, 1969–1975.

He has held membership and various important offices in leading professional societies: American Society of Parasitologists (Council 1945–1948, Editorial Board 1949–1952, President 1975); American Society of Tropical Medicine and Hygiene (Chairman of the Editorial Board, 1950–1958, Council 1950–1954, Vice President 1957 and 1959, President 1962); Tropical Medicine Association of Washington, D.C. (President 1962); Southwestern Association of Parasitologists (President 1968); Royal Society of Tropical Medicine and Hygiene (Fellow); American Academy of Tropical Medicine; Association of Military Surgeons of the United States; and the Royal Society of Health.

G. Robert Coatney is one of the world's outstanding malariologists. He has contributed in a major way to the development of knowledge in various fields of malaria, such as host-parasite relationships, insect transmission, and especially in the development of new drugs and methods of treatment. In recognition of his accomplishments, he was the Nebraska Academy of Sciences' Maiben Memorial Lecturer in 1966 and has received the Army-Navy Certificate of Appreciation, 1947; the Department of the Army Certificate of Appreciation, 1953; the Darling Foundation Medal and Prize, 1954; the Gorgas Medal and Prize, 1954; the Alumni Merit Award, Iowa State University, 1956; D.Sc. in Public Health (Hon.), Bowling Green State University; Sc.D. (Hon.), University of Nebraska (1962); Fellow, New York Academy of Science, 1964; Public Health Service Distinguished Service Medal, 1966; the La Prince Award from the American Society of Tropical Medicine, 1970; and last, but not least on his list, Admiral (Hon.), the Great Navy of the State of Nebraska, 1963.

Dr. Bob and his wife, Eva Mae, celebrated their 50th wedding anniversary in 1979. They live in Atlanta, Georgia, and pursue an active interest in early American clocks. Coatney has already published five scholarly papers on this relatively new interest. He writes, "I had the idea, once, that with retirement I could take it easy, breakfast at 10 in the a.m., and all that stuff, but Lady it ain't so! The happy part about the whole business is that I am having fun!"

Of course he is!

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