

Biography of James Blaine Kitzmiller

Dr. James B. Kitzmiller, mosquito geneticist, was born June 20, 1918 in Toledo, Ohio, the son of James Blaine Kitzmiller, a clerk in the purchasing department of the Ann Arbor Railroad. The Kitzmiller family originally came from Bavaria in the seventeen hundreds. One Jacob Kitzmiller, being the only person on board ship (crossing the ocean to America) who could read and write, kept the ship's log. Another ancestor, Adam Kitzmiller, keeper of the armory at Harper's Ferry testified in the trial of John Brown. The family founded Kitzmiller, Maryland. Professor Kitzmiller remembers that his father made little money, but during the depression of the thirties his father did not lose his job as so many did.

In his early years Kitzmiller was greatly influenced by his scoutmaster, Roger Conant, the eminent herpetologist and curator of herpetology at the Toledo Zoo. Through Conant he became interested in zoology. Kitzmiller was later awarded the rank of Eagle Scout.

Kitzmiller recalls riding the old interurban train to high school (the family did not have a car) all the way across town. He received a thorough classical education by the Jesuit Fathers at St. John's High School. He says his only elective was a choice between Greek and Latin in his Junior year. He managed to take both. He has always felt fortunate to have the advantage of such an education, and as a result he became fluent in seven languages. He graduated from St. John's High School in 1935. He proved to be an excellent student. He received his B. S. in Zoology from De Sales College, Toledo, Ohio, (Magna Cum Laude) in 1939; his M.S. in Zoology from the University of Michigan in 1948; and his PhD. in genetics from University of Michigan in 1948. At Michigan he studied under Alex Ruthven, Frank Blanchard and Helen T. Gaige, all important herpetologists. During the time he was in college, Kitzmiller supported himself and partially supported his mother and sister by working at a tool and dye plant in Toledo and also at the Toledo museum as entomologist and herpetologist. (His father died when he was 17.)

In 1943 he was drafted into the army and progressed from Private to Sergeant in the 871st Airborne Engineer Battalion. He received a field commission to 2nd Lieutenant. His tour of duty included Panama and New Guinea. Later he was Entomologist and Malarial Control Officer in Fort Knox, Kentucky. He was discharged in 1946.

In 1948, after graduation from Michigan, Dr. Kitzmiller accepted a position as instructor of Zoology at the University of Illinois (1948-1953). He was named assistant Professor (1953-1957); Associate Professor (1957-1959); Professor (1959-1974). He served as Chairman of the Department of Zoology from 1957 to 1964, when he stepped down due to a heavy load of research which was always his primary interest. During the years Kitzmiller spent at Illinois and continuing throughout his career, his field of research has been genetics and cytogenetics of mosquitoes, especially anophelines.

In 1953, Dr. Kitzmiller was awarded a Fulbright Scholarship to Italy. He did research and taught (in Italian) at the University of Pavia during his sabbatical year. In 1966, during his sabbatical year, he was visiting professor of genetics at the Johannes Gutenberg University in Mainz, Germany. Later the same year he was visiting professor of genetics at the University of Cagliari, Italy and visiting investigator, Institute of Genetics, University of Rome.

Throughout his career, Dr. Kitzmiller has spent many months engaged in field work, research and teaching in remote areas of the world. He was in Latin America in 1964; India and Thailand 1966; Panama 1967; Pakistan 1968; Amazon Basin 1971; Latin America for 9 months in 1972-73 (invited lecturer during that 9 months at University Federal De Rio De Janeiro; Genetics Society of the State of Guanabara; University De Brasilia, University Mayor De San Marcos, Lima, University Agraria De Vanezuela, Maracay) and he was in Peru and Columbia in 1974.

In 1974 Professor Kitzmiller retired from the University of Illinois and was named visiting professor at the Florida Medical Entomology Laboratory (now a branch of the University of Florida) Vero Beach, Florida. He continued to be actively engaged in research and he expanded his world travels. In 1975 he spent 3 months in Columbia and Peru, in the summers of 1976, 1977, 1978, 1979 he was in Central and South America. In between trips he had open heart surgery (1978) and a pacemaker (1979).

The American Mosquito Control Association honored Kitzmiller in April 1978 by awarding him the "Meritorious Service Award."

In 1980 Kitzmiller was putting together the final draft of his book "Anopheline Names, their derivations and histories" which was subsequently published in 1982. This book was conceived by Kitzmiller after a grad student asked him what the word "*Anopheles*" meant. Kitzmiller, being an avid Greek and Latin scholar began to accumulate material for the book which later expanded to include biographies of people for whom mosquitoes were named as well as the Latin and Greek derivations.

The Rockefeller Foundation sponsored a symposium in April 1981 at their conference center in Bellagio, Italy, which was attended by the scientists most actively engaged in the genetics of insect disease vectors. This symposium resulted in a volume entitled "Recent Developments in the Genetics of Insect Disease Vectors." This volume was dedicated to "G. Frizzi, G. B. Craig, and J. B. Kitzmiller." Kitzmiller is considered to be one of the pioneers in the field of mosquito genetics.

Professor Kitzmiller suffered a devastating stroke in December 1983 from which he made a good recovery and remains active. He continues to work and to travel doing research for his book.

In 1984 Kitzmiller was invited by the Rockefeller foundation to spend a month at their villa in Bellagio, Italy to begin drafting the sequel to his book "Anopheline Names." The foundation honors only 80 scholars and artists with

similar invitations each year. The new book will cover all the culicine names. Also in 1984, Kitzmiller was awarded a Burroughs-Wellcome Grant for study at the London School of Hygiene and Tropical Medicine; two months were spent at various libraries in and around London, including a trip to the Liverpool School of Tropical Medicine.

Professor Kitzmiller has served as consultant for NIH and WHO for many years at various times. He has been a member of several scientific groups, study panels and commissions.

A number of graduate students were trained by Kitzmiller and they have gone on to become college deans, directors of laboratories, professors and researchers. Kitzmiller has always been supportive and enthusiastic about the progress and accomplishments of his students, even long after their graduation, and has maintained a lifelong relationship with them.

Quite apart from his profession, Kitzmiller has been an entrepreneur of sorts, having purchased in 1955, 10 acres of prime lake front property on Deer Lake near Grand Rapids, Minnesota. There he bulldozed the clearing, designed the buildings and assisted in constructing a lodge and six cottages. Summers, when he was not traveling, were spent managing the resort which he named "Pineridge." Many friends traveled from Urbana Illinois to spend a fishing vacation at Pineridge and swap fish yarns. The same clientele has been returning for years. The resort is still a going concern and Kitzmiller returns each year though he no longer owns it.

Jim Kitzmiller and his wife Dorothy reside in Vero Beach, Florida, the mountains of North Carolina and Minnesota with time out for writing and traveling to various libraries around the U.S. and Europe doing research for the current book. They are both actively engaged in this project at this writing.

Dr. Kitzmiller has four children, James of Champaign, Illinois; John of Vista, California; Kathleen and Christine who are both presently teaching in Germany.

Dr. Kitzmiller has written over 160 publications, primarily dealing with mosquito genetics. The exceptions are the Anopheline Book and the one in progress on Culicines which deal more with the history of the derivations of names of mosquitoes and historical/biographical data about those persons for whom mosquitoes were named. A list of professor Kitzmiller's publications follows.

PUBLICATIONS

- 1945 *Orthopodomyia alba* in Kentucky. Journal of Economic Entomology. 38: 409.
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- 1948 b Time relationships in the development of aphid wings. Records of the Genetics Society of America. 17:45.
- 1948 c Notes on the life cycle of the chrysanthemum aphid *Macrosiphum sanborni* (Gillette). Annals of the Entomological Society of America. XLI:393-396.
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- 1950 b Fertility in species crosses in mosquitoes. Entomological News. LXI:130-131.
- 1951 Genetics of the fowl (Review). Auk: 68:386.
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- 1952 c Salivary gland chromosomes in *Culex* mosquitoes. Genetics 37:596.
- 1953 a Mosquito Genetics and Cytogenetics. Revista Brasileira de Malariologia e Doengas tropicais. 5:285-359.
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- 1954 h Hybridization experiments with *Culex molestus*, *Culex pipiens* and *Culex fatigans*. Proceedings of the IX International Congress of Genetics. *Caryologia* VI:767-771.
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- 1958 c X-Ray induced mutation in the mosquito *Culex fatigans*. *Experimental Parasitology*. 7:439-462.
- 1958 d Laboratory Exercises in General Zoology. vi + 227 pp. W. B. Saunders and Company.
- 1959 a The genetics of mosquitoes, particularly of certain members of the genus *Culex*. Report, Seminar on the susceptibility of insects to insecticides. Pan American Sanitary Bureau, World Health Organization.
- 1959 b Race formation and speciation in mosquitoes. Cold Spring Harbor Symposium on Quantitative Biology. XXIV:161-165.
- 1959 c Parthenogenesis in *Culex fatigans*. *Science*, 129:837-838.
- 1959 d Current concepts of evolutionary mechanisms in mosquitoes. Cold Spring Harbor Symposium on Quantitative Biology. XXIV:173-175.
- 1959 e The salivary gland chromosomes of *Anopheles punctipennis* compared with those of the *Anopheles maculipennis* complex (Diptera: Culicidae). *Entomological News*. LXX:33-39.
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- 1961 b Chromosomes of *Anopheles quadrimaculatus*. *American Zoologist*. 1:229.
- 1961 c Salivary gland chromosome maps in *Culex pipiens*. *Genetics*. 46: 875-876.
- 1961 c Induced copulation and chromosomal heterozygosity in *Anopheles*. *American Zoologist*. 1:435.
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- 1965 d Standard strains of mosquitoes. Working Paper 2.2/65. World Health Organization Scientific Group on Standard Strains of Insects of Public Health Importance.
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- 1965 n The salivary gland chromosomes of *Anopheles pseudopunctipennis pseudopunctipennis*. Bulletin of the World Health Organization 33: 837-841.
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- 1966 c The salivary gland chromosomes of *Anopheles algeriensis*. Revista di Malariologia. 45:51-59.
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- 1969 c The salivary gland chromosomes of *Anopheles atropos*. Mosquito News. 29:223-230.
- 1969 d Reciprocal fertility among five populations of *Anopheles albimanus*. Genetics. 61:531.
- 1969 e Chromosomal aberrations induced by the Chemosterilant "Tepa" in *Culex pipiens quinquefasciatus* Say. Pakistan Journal of Zoology. 1:93-96.
- 1969 f Colonization of *Anopheles earlei* Vargas. Mosquito News. 29:589-590.
- 1969 g The salivary chromosomes of *Anopheles punctimacula*. Revista Brasileira de Malarologia e Doencas Tropicales. 21:559-570.

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