Gerry Neuffer (1922-2019) was a founding member and continuous participant in the Maize Genetics Conference. He exemplified community leadership; in 1994 he was honored with a commemorative issue of Maydica introduced by W.F. Sheridan and M.T. Chang, and in March, 2019 was recognized with the R.A. Emerson Maize Genetics Lifetime Award. Gerry was a prolific contributor and supporter of the Maize Genetics Cooperation Newsletter. His graduate studies on mutability at the A1 locus, where transposition is controlled by Dt1 and other dotted genes, were very much part of the then-developing fascination with mechanisms by which gene mutation was controlled by systems inherent in the genome. In 1955 Gerry accepted a position as Assistant Professor at the University of Missouri and initiated his lifelong studies of mutation induced by internal and external agents. Most notably, ethyl methane sulfonate, applied to pollen suspensions, was found to generate mutations at high rates. The resulting thousands of mutants were characterized across a wide range of expressions and were mapped to chromosome locations. He set in motion major advances in genetic maps and promoted application of molecular markers and increased map precision. Because of his compiling and summarizing of data, and making stocks freely available, the products of his remarkable observational and documentation skills are applied to gene expression, development, and evolution by students of maize and many other species. His eager distribution of his mutant collection spawned several bursts of genetic investigation, notably in the areas of photosynthesis, metabolism and maize development. He had a fascination with dominant mutations and studied disease lesion mimic mutants independently and in collaboration with

The compendium, *Mutants of Maize*, published in 1997, is a monument of his work, with maps, characterizations, and superb color photographs of the full range of phenotypes and variants in maize. For the images in this publication, Neuffer personally selected from his vast collection, and personally applied insistent quality requirements for the fidelity of the photographs (this despite his color-blindness). These and additional images are accessible online, forming the major part of the MaizeGDB mutant image collection (<a href="The Phenotype/Mutant Data center">The Phenotype/Mutant Data center</a>). Stocks maintained by the Maize Genetics Cooperation Stock Center may be found by query on the Stock data center at <a href="https://www.maizegdb.org/data center/stock">https://www.maizegdb.org/data center/stock</a>, selecting Neuffer, MG as the developer.

Ming-Tang Chang, Rodney Higgins, William Rafaill, Lino Cortes, Gyula Ficsor and K. S. Hsu completed the Ph.D. under his guidance. Allen Wright, Craig Echt, David Hoisington, Ming-Tang Chang, Robert Bird, Om Sehgal and Gary Kikudome were postdoctoral fellows.

Gerry was born Myron Gerald Nuffer (later changed to Neuffer) March 4, 1922, in Preston, Idaho. He and Margaret were married March 17, 1943; they had seven children, 27 grandchildren, 61 great-grandchildren and a number of great-great and great-great-great grandchildren. After graduating from the University of Idaho (B.S. in Agronomy, 1947) he entered graduate studies with L. J. Stadler at the University of Missouri and completed an M.A. (1948) and Ph.D. in Genetics (1952). He retired from the University in 1992 as Professor of Agronomy. After Margaret's death he married Rosemary Lee Healy on Aug 11, 2008.

Neuffer's influence in Genetics goes far beyond just what he generated and organized. Always generous, always enthusiastic, always optimistic, he directly and indirectly encouraged creative planning, exacting research, and openness to fresh reasoning.

--Ed Coe, Jim Birchler, Mary Schaeffer and Jack Gardiner (with thanks to Sarah Hake and Bill Sheridan)

## See also:

- (1) J. Birchler (2014) Maize Genetics Cooperation Newsletter vol 88 2014 ) "An Interview with M. Gerald Neuffer"
- (2) Full Text Search MNL archives
- (3) MG Neuffer (2015) Guide to Mutant Phenotypes