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COVER LEGEND

Leonell Clarence Strong (b. 1894 in Renova, Pennsylvania), for-
er Research Professor at Yale University School of Medicine, and
Director of The Springville Laboratories of Roswell Park Memorial
Institute, was the originator of many inbred strains of mice used in
cancer research. The now famous A and C or High Tumor Family
(HTF) of inbred mice were started in July 1921 at St. Stephen’s
College (now Bard College), Annandale, New York. The original
unpedigreed mice and their descendants were housed from 1921 to
1925 in a tar-paper shack. This building, shown with Strong and his
two sons, was heated by a potbelly stove. Tar paper was added for
warmth in the winter and removed during the summer. The mice
were maintained in wooden boxes and fed a diet of bread, milk, and
mixed seed.

The original matings of unpedigreed mice, obtained from various
sources, were represented by a letter of the alphabet. From the
original letters, only the F, I, and N strains exist today. The A and
B lines, both albino, were mated and from this cross arose the A
strain. The A line was crossed also to the D line, a dilute brown; the
offspring were selected for high rates of spontaneous tumors. As
shown in the pedigree, the descendants of this cross produced the C,
C3H, CHI, and CBA strains. The letters on the bottom left side of
the pedigree squares represent the line; the numbers on the right,
the age when a spontaneous tumor first appeared in the mouse. The
pedigree represents the direct descent of the first few generations of
the C Family. Hundreds of collateral lines were not maintained or
shown in the pedigree.

With the exception of a few father-to-daughter matings in the
early pedigrees, all matings were strictly brother to sister, for over
100 generations. In terms of human generations, a comparable
genealogy would span over 3500 years.

The strains, once developed, were disseminated among many
investigators. Today there are hundreds of subslines scattered
throughout the world. In a 17-month period, from December 1966
to April 1967, approximately 840 publications appeared in the
world literature, using mice as a research tool. Of these papers, 43%
depended on the use of one or more strains of mice first developed
in the old tar-paper shack.

The pedigree is reproduced from Cancer Res., 2: 531, 1942. We
are indebted to Dr. Stanley J. Mann for his assistance in the prepara-
tion of the material.

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