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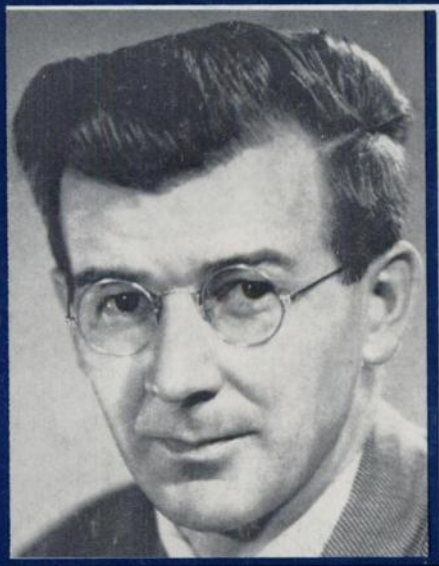

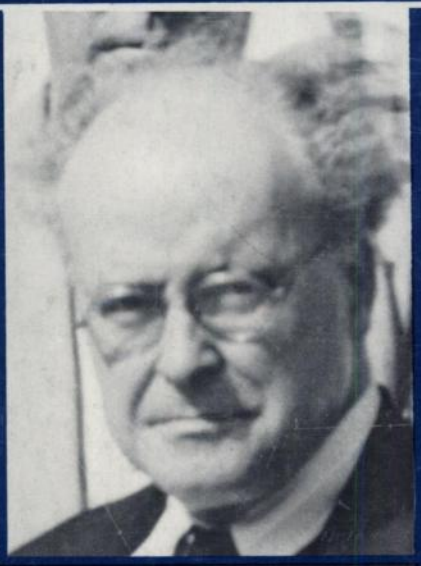

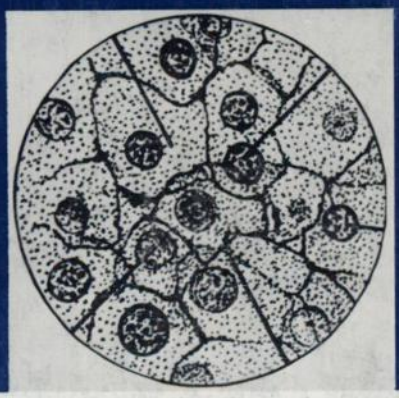

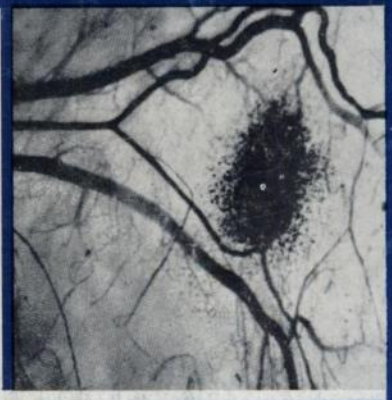

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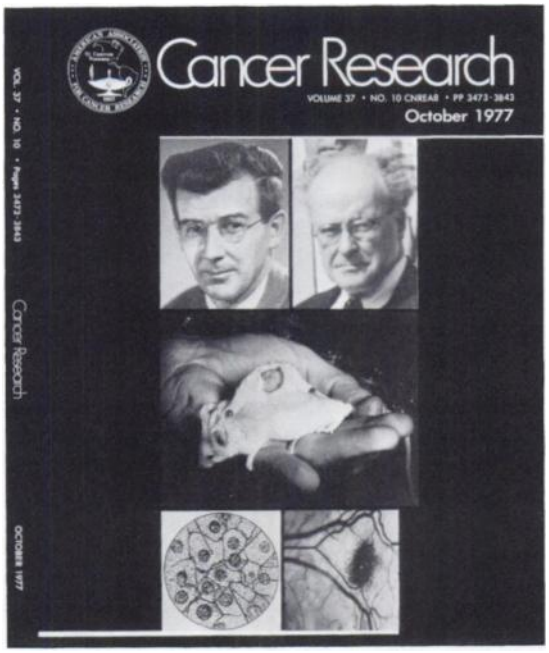

Research on transplanted tumors in mice established by 1910 that tumors grew by cell division and that their blood supply was acquired from the host (*e.g.*, E. F. Bashford in Sci. Rept. Invest. Imp. Cancer Res. Fund, *4:* 131, 1911). Thirty years later G. H. Algire and H. W. Chalkley (J. Natl. Cancer Inst., *6:* 73, 1945) revived interest in the role of vascularization in the growth of tumors by their elegant studies. Their work combined the development of the transparent chamber technique for microscopic observations of tumors *in vivo*, a method introduced by J. C. Sandison in 1924 (Anat. Record, *28:* 281, 1924) and applied to mice by Algire (J. Natl. Cancer Inst., *4:* 1, 1943), and the quantitative measurement of microscopic morphology by Chalkley (J. Natl. Cancer Inst., *4:* 47, 1943 and Science, *110:* 295, 1949). After another span of three decades, attention is being refocused by Judah Folkman and his group (Advan. Cancer Res., *19:* 331, 1974) on what Algire and Chalkley in 1945 reported as "an outstanding characteristic of the tumor cell, its capacity to elicit continued growth of new capillary endothelium from the host."

Glenn Horner Algire (1907–1958) was born in Baltimore, Maryland, and received his M.D. degree from the University of Maryland in 1940. He joined the National Cancer Institute in 1943 and remained on its staff until his untimely death.

Harold William Chalkley (1887–1976) was born in London, England, and received his Ph.D. degree in physiology from Johns Hopkins University, Baltimore, Maryland, in 1927. He joined the division of pharmacology of the United States Public Health Service in 1928 and transferred to the then-created National Cancer Institute in 1938. In 1947 he joined the Division of Research Grants of the National Institutes of Health, where he remained until his retirement in 1952. His scientific interests were in cell division and regeneration and in the quantitative morphological analysis of tissues.

The portrait of Algire (*left*) is from his obituary in J. Natl. Cancer Inst., *21:* iii, 1958; the portrait of Chalkley (*right*) appears by courtesy of his son, Dr. Donald Chalkley. The photograph of a mouse with a transparent chamber is from the National Library of Medicine. The photograph of a transplanted melanoma in the transparent chamber in a mouse is from J. Natl. Cancer Inst., *4:* 1, 1943, and the diagram of the Chalkley method for quantitative tissue analysis is from J. Natl. Cancer Inst., *4:* 47, 1943.

M.B.S.