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A Study of the Carcinogenicity of a Series of Structurally Related 4-Dimethylaminoazobenzenes. Girgis M. Bebawi, Yoon S. Kim, and J. P. Lambooy.

COVER LEGEND

Many animal species have yet to be investigated in the continuing search for information relating to cancer biology. Least explored of all are the invertebrate and cold-blooded vertebrate metazoans. Much of the information now available on neoplasia in these widely diversified groups is recorded in National Cancer Institute Monograph, Vol. 31, July 1969 (“Neoplasms and Related Disorders in Invertebrate and Lower Vertebrate Animals”).

Three examples of poikilothermic animals bearing anomalous growths are pictured here (top to bottom): (1) a coral colony (Madrepora kauaiensis) in which one corallite manifests anomalous growth reflected in the skeletal remains; (2) a Sydney rock oyster (Crassostrea commercialis) with an epithelioma of the mantle; and (3) a sea lamprey (Petromyzon marinus) with a melanoma with multiple subcutaneous, renal, and branchial metastases.

Hans Georg Schlumberger (1913-1967) was an outstanding comparative pathologist with an unbounded enthusiasm for studying neoplasia wherever they could be found in the animal kingdom. He was particularly interested in neoplasms in fish, amphibians, and reptiles (cf. Cancer Res., 8: 657-754, 1948 and Cancer Res., 17: 823-832, 1957), and bent his abilities with equal zest to studies of the response to methylcholanthrene in the cockroach Periplaneta americana (Arch. Pathol., 54: 98-113, 1952). Schlumberger was born in Germany, educated at the Universities of North Carolina and Pennsylvania, and was professor and head of the Department of Pathology at the Arkansas University School of Medicine (Obituary, see Arch. Pathol., 84: 102, 1967).

We are indebted to Dr. J. C. Harshbarger of the Registry of Tumors of Lower Animals, The Smithsonian Institution, and Dr. C. J. Dawe of the National Cancer Institute, NIH, for the photographs of the specimens. Specimen 1 is Accession 107, submitted by Peter H. Wolf, Fisheries Branch, Chief Secretary’s Department, Sydney, New South Wales, Australia. Specimen 2 is Accession 54, submitted by Donald F. Squires, Division of Marine Invertebrates, The Smithsonian Institution (present address: State University of New York at Stony Brook, Long Island, New York). Specimen 3 is the Registry’s Accession 89, submitted by John H. Howell, U. S. Department of the Interior, Fish and Wildlife Service, Bureau of Commerical Fisheries, Hammond Bay Biological Station, Millersburg, Michigan.

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Virus Particles in Rat Leukemias.
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