# METHODS IN CANCER RESEARCH Volume XVIII ONCODEVELOPMENTAL ANTIGENS

Edited by

WILLIAM H. FISHMAN

and

HARRIS BUSCH



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# WILLIAM H. FISHMAN

THE LA JOLLA CANCER RESEARCH FOUNDATION
LA JOLLA, CALIFORNIA

and

# HARRIS BUSCH

DEPARTMENT OF MARMARIAN BAYLOR COLLEGE OF MEDICINE HOUSTON DEXAS



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ACADEMIC PRESS, INC. 111 Pitth Avenue, New York, New York 10003

United Kingdom Edition published by ACADEMIC PRESS, INC. (LONDON) LTD. 24/28 Oval Road, London NW1 7DX

LIBRARY OF CONGRESS CATALOG CARD NUMBER: 66-29495

ISBN 0-12-147678-2

PRINTED IN THE UNITED STATES OF AMERICA

79 80 81 82 9 8 7 6 5 4 3 2 1

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# **Preface**

Volume XVIII of this treatise is designed to deal with methods specifically related to studies on "oncofetal" or "oncoembryonic" antigens. There is increasing evidence that in neoplastic cells there is an activation of fetal gene readouts for production of special products, some of which may be critically important to the neoplastic process. Inasmuch as the ultramicromethods and biological techniques utilized to demonstrate these antigens will be increasingly important in oncology, it seemed appropriate to treat this subject in a special volume. It was particularly fortunate that Dr. William H. Fishman generously agreed to coedit it.

Abelev et al. deal with microimmunochemical and immunohistochemical methods for studies on tumor-associated embryonic antigens. Hirai presents models of AFP and CEA expression and Rees et al. discuss on-codevelopmental antigens in chemical carcinogenesis. Stillman and Sell expand on this subject with respect to hepatocarcinogenesis. Singer reviews changes in fetal isoenzymes in xenografts of human tumors. Kahan et al. report on molecular approaches to human colon cancer, and expression of onpodevelopmental genes in teratocarcinomas is reviewed by Solter and Damjanov. Levine reports on a permanent teratocarcinoma stabilized by SV40 transformation. Vaage and Agarwal report on an improved ODC assay, and Coggin and Ambrose report on embryonic and fetal determinants in virally and chemically induced tumors.

As in the earlier volumes of this treatise, each of the topics represents the "state of the art" which can only improve as our information on neoplasia continues to grow.

HARRIS BUSCH

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