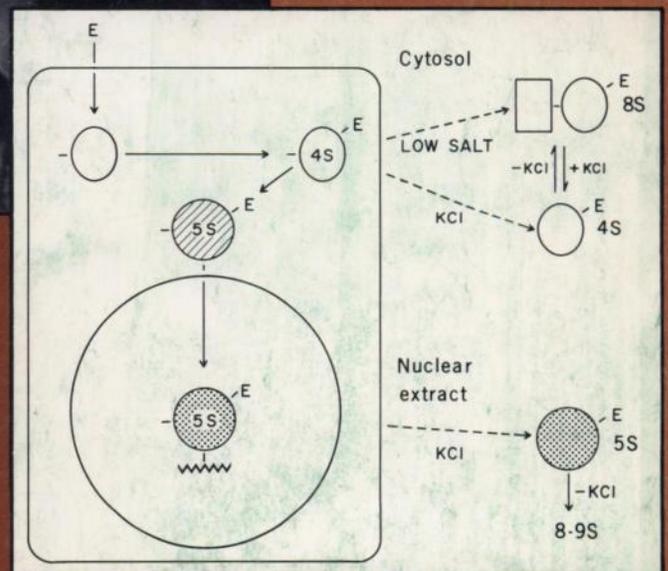
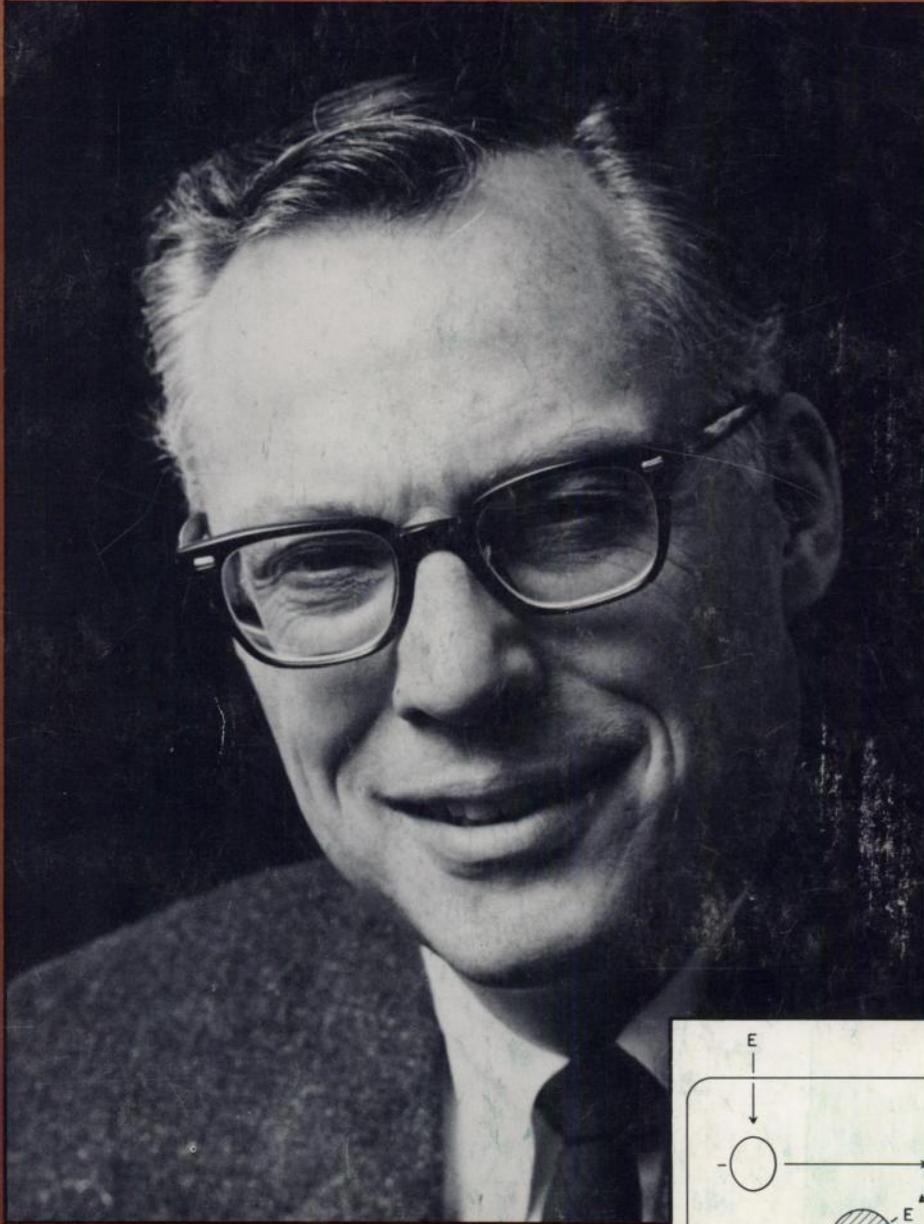


Cancer Research

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A page of information on flow cytometry from Ortho.

Ortho Instruments, manufacturer of the Cytofluorograf,[™] and originator of the technique, offers some useful literature.



Ortho publishes a growing collection of practical dissertations on materials, methods, and applications in flow cytometry, using the Cytofluorograf flow cytometer. We call them *Protocols*. In more relaxed moments, they may be described as "cookbooks for flow cytometry." Clear, concise text. Simple, informative diagrams and charts.

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A new issue of Ortho Protocols: "Measurement of DNA in Yeast Cells."

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Until now, flow cytometry has been used mainly for measurement of mammalian cells. The study of micro-organisms by flow cytometry calls for much more sensitive instruments since they contain much smaller amounts of material than the more thoroughly explored mammalian cells.

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For a copy of the new issue of *Protocols*, "Measurement of DNA in Yeast Cells with the Cytofluorograf," write or telephone Ortho Instruments.

Why nobody answers the phone anymore at Bio/Physics Systems.

If you have had the baffling experience of failing to reach Bio/Physics Systems, Inc., in Mahopac, New York, here's why. Bio/Physics was acquired by Ortho Instruments in 1977 and moved to Westwood, Mass.

Ortho Instruments' telephone number is (617) 329-6100; the address is 410 University Avenue, Westwood, Mass. 02090.

Whatever you wanted from Bio/Physics you will get from Ortho Instruments: the complete line of Cytofluorograf instruments and their accessories, the technical assistance of our staff, and *Protocols*. Our name has changed, our leadership has not.

For any of the information offered on this page, or for additional data about Ortho Cytofluorograf instruments, accessories, and technology, write or phone the Research Instruments Division.



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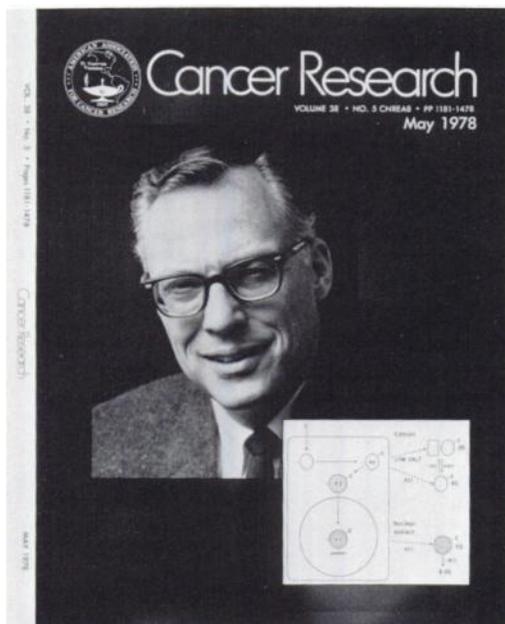
Cancer: A Comprehensive Treatise, Volume 6

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COVER LEGEND



Elwood V. Jensen presented a paper at the 1961 Laurentian Hormone Conference that aroused widespread interest. It dealt with specific estrogen receptors in the rat uterus (E. V. Jensen and H. I. Jacobson, *Recent Progr. Hormone Res.*, 18: 387-414, 1962). Jensen summarized the investigations with poesy:

To a tissue that's trying to grow
We hope these experiments show:
With steroids phenolic
Don't get metabolic
Just grab on, and never let go!

Development of the intracellular interaction pathway served as a model for all classes of steroid hormones in their respective target tissues (E. V. Jensen and E. R. DeSombre, *Science*, 182: 126-134, 1973). The target tissues include breast can-

cer, and the presence or absence of estrogen receptors has served as a guide to treatment of women with advanced breast cancer. Patients with estrogen receptor-rich tumors respond to endocrine therapy in two-thirds of the cases; patients with receptor-poor cancers do not respond and are best placed on chemotherapy (E. V. Jensen, S. Smith, and E. R. DeSombre, *J. Steroid Biochem.*, 7: 911-917, 1976).

Jensen's elegant demonstration of estrogen receptors attracted world-wide interest and extensions. In his research, his senior scientific companions have included Herbert I. Jacobson, Peter W. Jungblut, and Eugene R. DeSombre.

Elwood Vernon Jensen was born in Fargo, North Dakota, in 1920. He was educated at Wittenberg University and the University of Chicago, where he obtained a Ph.D. degree in organic chemistry in 1944 and where he has remained for his entire career. He joined the Ben May Laboratory when it was founded in 1951, and in 1969 he became its second director, succeeding Charles Huggins. He was an American Cancer Society Research Professor, 1963-1969; is a recipient of many prizes, including the G. H. A. Clowes Award; and was elected to the United States National Academy of Sciences.

The diagram, taken from the *Science* article, is a schematic representation of interaction pathway of estradiol (*E*) in uterine cell. The diagram at *left* indicates uterine cell with extranuclear estradiol-receptor complex undergoing transformation to activated form and entering nucleus to bind to chromatin. Diagrams at *right* indicate sedimentation properties of complexes extracted from the cell.

We are indebted to Dr. Jensen for the portrait and diagrams.

M. B. S.