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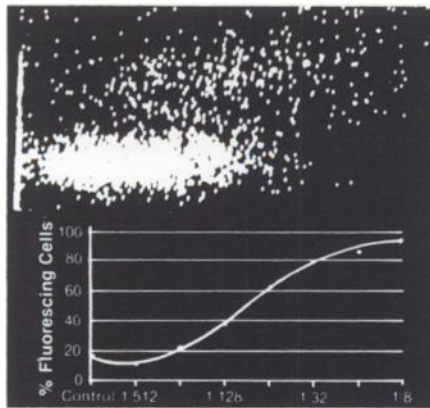
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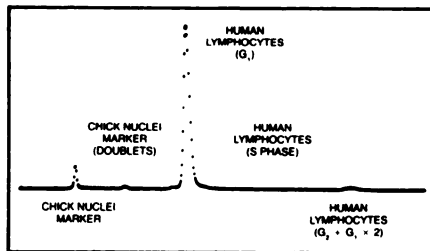
No other commercially available cell sorter and analyzer approaches the power, precision and versatility of the Ortho Systems 30/50. The instrument is offered in two basic configurations: System 30—a high resolution, 21 parameter analytical flow cytometer, and System 50—which adds cell sorting capabilities to the System 30 flow cytometer. Both feature dual lasers as standard equipment for increased analytical power.

#### System Components

To appreciate the far-reaching capabilities of these Ortho instruments, consider that the System 50 combines: two lasers—a .8 milliwatt helium-neon for ultra high precision scatter measurements and a 5 watt argon type for fluorescence measurements (optional argon-ion, and krypton-ion lasers with U.V. capability are available); four detectors—two of the photo-multiplier type for right angle scatter, and fluorescent emission detection (S-20 response, 185 nm–850 nm), and two solid state sensors for axial light loss and narrow angle forward scatter: a sophisticated optical system incorporating fiber optics: a multiplexed multichannel analyzer, with C.R.T. display: the signal processor unit: and an advanced cell sorter module. Additionally, the Model 2150 computerized 8 parameter data handler/sorter controller is available as an option\* The 2150 System features



1. Upper: Direct immunofluorescence test (cytogram). Lymphocytes from CLL patient incubated with FITC labelled anti-human IgG. Lower: Titration of V-25 Leukemia cells from C-57 black mice different dilutions of FITC conjugated rat radiation leukemia virus antibody.



2. Histogram of human lymphocytes utilizing a chick nuclei marker for standardization and stained for D.N.A. with Propidium Iodide. C.V. = 1.65% (Human Lymphocytes)

simultaneous data acquisition, and real time processing while sorting is in progress.

#### System Capabilities

Together, these modules allow the System 50 to provide and analyze morphological information—a significant first for a flow cytometric instrument. With four detectors and the ability to display pulse height, pulse area or pulse width analysis for each—a total of 21 distinct measurement parameters can be studied.

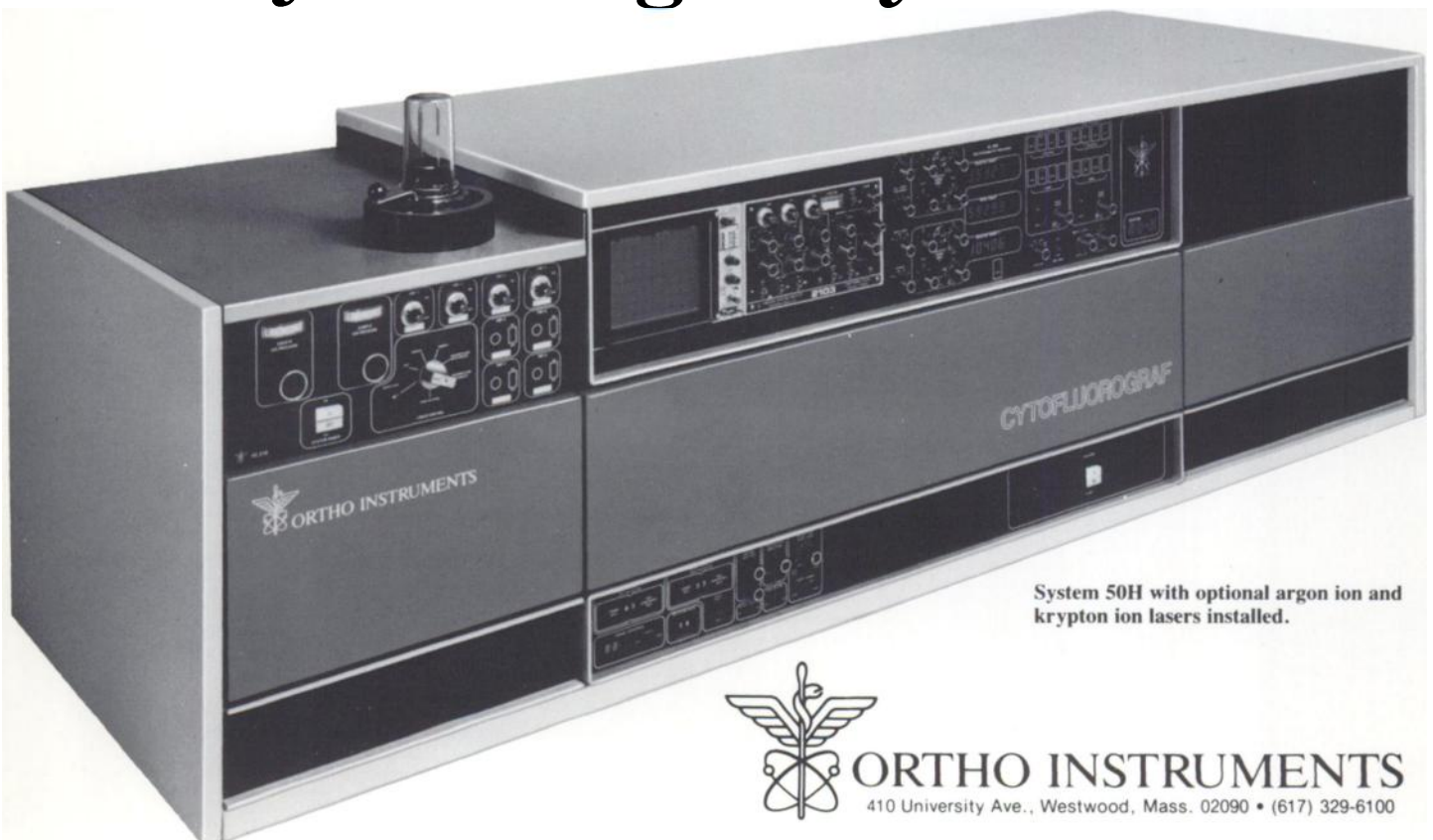
The System 50 also features: two bi-dimensional regions of interest, dual histogram multi-channel analyzer with cytogram mode, super-sil quartz optics with which the cells are analyzed and easy sample entry.

In order to provide customers with complete support, Ortho maintains an Applications Laboratory that is available for confirmation and consultation services. Additionally, an international network of service technicians is ready to aid customers should calibration or repairs ever be required.

#### Remarkable Results

The histograms and cytograms displayed were produced by the System 50. Evaluate them. And consider the difficulty of deriving this data by any other means. The capabilities of this unique Ortho instrument will speak for themselves.

## State-of-the-art cell sorting and analysis from Ortho The Cytofluorograf® Systems 30/50



System 50H with optional argon ion and krypton ion lasers installed.



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**Michael B. Shimkin**

**SCIENCE AND CANCER  
Fourth Edition**

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Dr. Michael B. Shimkin has recently published a fourth edition of his seminal work, **Science and Cancer**. As he espouses in the "Preface," keeping people informed about cancer research is essential to maintain public confidence in the work being done to eradicate the disease. Thus, this report is addressed primarily to those outside the scientific community in an attempt to synthesize the salient facts about cancer for the general reader.

The nature of the disease is chronicled in both animals and humans, with emphasis on the latter. A basic knowledge of biology is assumed as various topics are covered, including the relationship of environmental and hereditary factors to the onset of the disease, the effect of cancer on the organism in which it is, and the efforts of scientists and physicians to learn more about and treat cancer more effectively. The final chapter concludes with the optimistic assessment that victory over cancer is a "reasonable expectation."

Over 200,000 copies of **Science and Cancer** have been distributed since its first publication in 1964. Paperback editions are available free of charge from the **Office of Cancer Communications, National Cancer Institute, Bethesda, Maryland 20205**.

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