

A new edition of

GENETICS

IRWIN H. HERSKOWITZ

Irwin H. Herskowitz has thoroughly revised and updated one of the most widely accepted undergraduate texts in the field. Completely rewritten for clarity and perused by experts, this second edition provides substantive additions in both the classical and modern sections including information on the recent advances in human, corn, and *Drosophila* genetics and in our understanding of the genetic code and the regulation of gene synthesis and action.

Suggestions from users all over the country as well as changes in the literature up to 1965 are reflected in the additional statistical material, new illustrations and several additions to various sections such as the complete story of hemoglobin genetics and molecular evolution; linkage maps of man, maize, mouse, *Neurospora*; the life cycles of *Drosophila*, maize, *Neurospora*; and much more. A new appendix on Elementary Biometrical Inferences and expanded and revised Question-Problem sections have also been added.

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- (a) **Biochemistry Physiology Ph.D.**, aerospace physiology, cancer and cardiac research experience; prefers clinical or academic appointment.
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763 North 18th Street
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- American Society for Microbiology, Atlantic City, April 24-29;
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Personnel Department
McNeil Laboratories, Incorporated
Camp Hill Road
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Requires for September, experimental embryologist-physiologist, Ph.D., with thesis direction experience. Salary open. Teaching and research opportunities in expanding department. New building in construction. Write Department Head.

Applicant for Department Chairmanship in Pharmacology, University of Oregon Dental School, Portland, Oregon, for appointment 1 July but no later than 1 September. The preferred academic qualifications are dental degrees and Ph.D. in pharmacology, although those without the dental degree may apply. State minimum salary acceptable. Please contact Dr. Louis G. Terkla, 611 S.W. Campus Drive, Portland, Oregon 97201. X

(a) Ph.D. Biochemist, administer, conduct myocardial proteins, enzymes, research; midwestern university; to \$15,000. (b) B.S. Clinical Research Assistant, hospital training; Central; to \$7500. (c) Fisheries Biologist; ecology, experimental biology training; research; Northeast, to \$12,000. Faculty Appointments: (d) Ph.D. Botanist, fundamental courses; Central. (e) M.S. Zoologist, Central university. (f) Ph.D. Anatomist/Embryologist, midwestern professional college. (g) Ph.D. Radiation Chemist, physical chemistry training; Southwest. Please write Science Service, The Medical Bureau, Inc., 900 North Michigan Avenue, Chicago, Illinois, 60611. X

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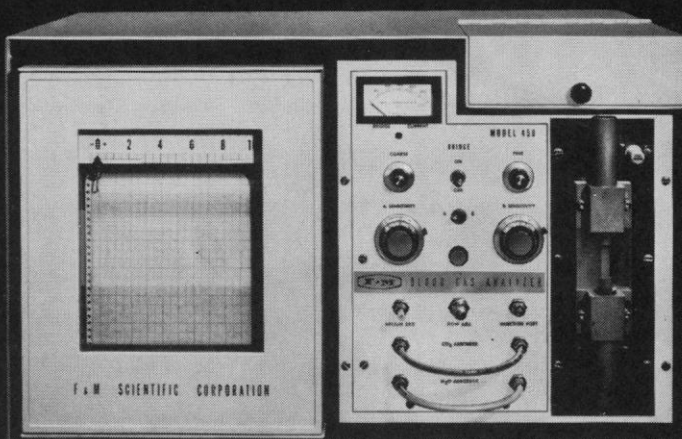


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OUR BLOOD GAS ANALYZERS AREN'T WHAT THEY USED TO BE

THEY'RE

BETTER



Since we introduced it back in 1963, our designers have quietly made some important changes in the Model 450 Blood Gas Analyzer. Recently our applications chemists verified these changes in a series of practical clinical tests that prove we spent our time and money wisely.

Proof One: Accuracy

The Model 450 is as accurate as the Van Slyke method. To prove this, we ran O_2 and CO_2 on a series of blood samples, by Van Slyke and by 450. We made duplicate determinations by Van Slyke, triplicate by 450. Observe, the two sets of results agree well within 2 percent relative (and the precision of the 450 values is better than that of the Van Slyke results).

Sample No.	Carbon Dioxide				Oxygen			
	Van Slyke		450 Analyzer		Van Slyke		450 Analyzer	
	Test Value (Vol.%)	Precision (%Rel.)	Test Value (Vol.%)	Precision (%Rel.)	Test Value (Vol.%)	Precision (%Rel.)	Test Value (Vol.%)	Precision (%Rel.)
1	40.73	1.1	41.00	0.75	17.85	2.2	17.35	1.50
2	52.65	1.0	55.00	.75	20.01	2.1	19.95	0.75
3	51.10	1.2	51.35	.75	17.55	2.1	17.35	.75
4	47.50	*	47.10	.75	13.10	*	13.13	.75
5	49.80	*	50.40	.75	18.00	*	17.61	.80
6	53.55	*	53.35	.79	13.16	*	12.54	.80
7	48.15	*	45.50	.75	21.58	*	20.85	.75

*Single determination

Proof Two: Reproducibility

This is where our design changes in the new 450 really paid off, resulting in a reproducibility much better than the accepted $\pm 2\%$ of the Van Slyke method. To prove this, we made sextuplet O_2 and CO_2 determinations on the same blood sample; results are shown in the table at right.

Why not call your F & M Technical Representative for a full discussion of these new proofs of performance, write us for Bulletin 4500, or visit our exhibit in Booth P18-P19 at the Federation Meeting in Atlantic City. F & M Scientific Corporation, Route 41 & Starr Road, Avondale, Pennsylvania 19311; phone (215) 268-2281. In Europe: F & M Scientific Europa N.V., Basisweg, (Sloterdijk) Amsterdam, The Netherlands.

Run No.	Carbon Dioxide		Oxygen	
	Peak Height (cm)	Test Value (Vol.%)	Peak Height (cm)	Test Value (Vol.%)
1	90.0	45.00	50.0	25.00
2	88.5	44.25	50.5	25.25
3	89.0	44.15	50.5	25.25
4	88.5	44.25	50.5	25.25
5	88.0	44.0	50.0	25.00
6	88.0	44.00	50.5	25.25
Average (X)	88.7	44.11	50.3	25.17
Range (R)	2.0	0.25	0.5	0.25

NOTE: Range, difference between the high and low value, is an estimate of the reproducibility of the data.



In the final analysis, it's F & M

If you need a simple, reliable, high-performance H^3 and C^{14} counter that gives you the most accurate information in the least time, select Nuclear-Chicago's new Model 6860.

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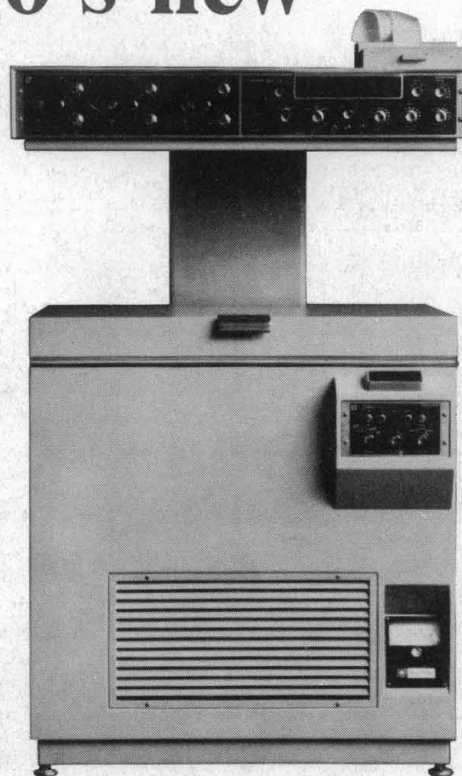
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