

nied; fatherhood may be not only denied, but may well be unknown. Setting the number of children a woman may bear at three will come as close as possible to balancing, on the one hand, women who have none or but one (through choice or otherwise) and, on the other hand, those whose final permissible pregnancy results in multiple births.

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### Brighter Future for Latin American Science Education

In response to Schwartz's letter (14 Nov.) concerning Latin American science education, I am pleased to report that in spite of "current budget cut-backs in Washington," financial support for the science and technology programs of the Organization of American States (OAS) has been increased during the past year about 20 times above the previous level. This increase has been approved by all of the member countries in spite of the well-known economic difficulties of the majority of these countries and of a less enthusiastic atmosphere for U.S. support of foreign assistance.

Beginning with meetings of chiefs of state at Punta del Este, Uruguay, in 1967, the OAS has given concrete evidence of increasing appreciation of the basic role of science and technology in the cultural and economic development of the Latin American countries. Among the programs which have been initiated with better financial support are those for the improvement of primary and secondary science education. The major thrust, however, is toward the training of larger numbers of high-level specialists who are receiving their graduate education at Latin American institutions.

Another very encouraging aspect of the Latin American science picture is the creation, or strengthening, of national research councils or their equivalents by several Latin American countries during the past few years. Some of these councils are now being asked to contribute to the formulation of national development plans.

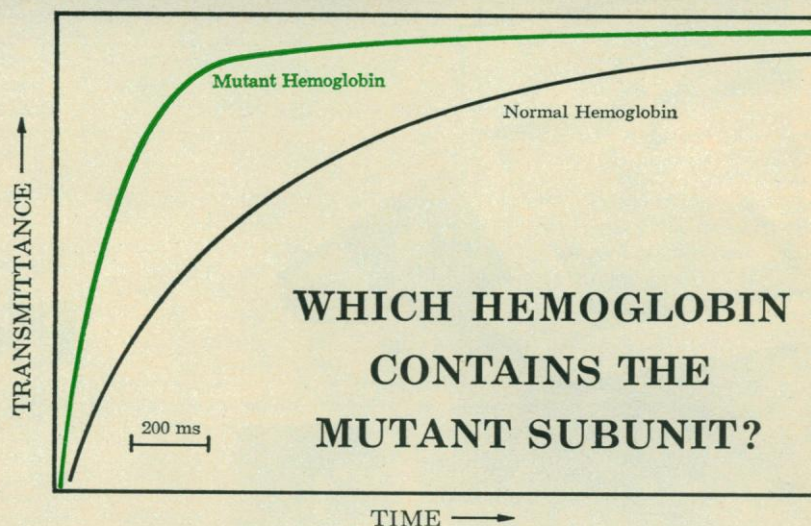
JESSE D. PERKINSON

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NW, Washington, D.C. 20006*

23 JANUARY 1970

## CHEMICAL PROFILES

... drawn by Durrum

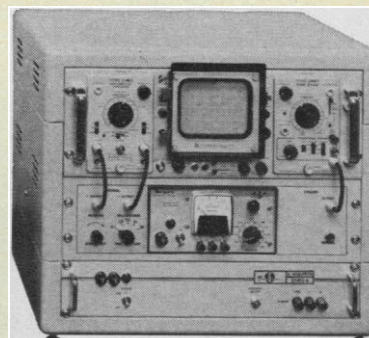
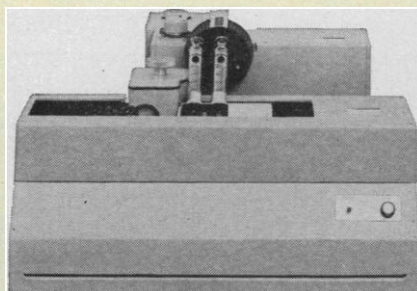


Even a minor molecular rearrangement can have a dramatic effect on chemical activity. These profiles\* recorded by a Durrum-Gibson Stopped-Flow Spectrophotometer reveal a 40-fold difference in azide-hemoglobin reaction rates. One reaction is with normal hemoglobin, the other with a mutant containing alpha-chain tyrosine residues in place of the usual proximal histidines.

Equilibrium constants would not have hinted at this difference; only kinetic tests with the Durrum-Gibson instrument permit the use of this new technique for classifying mutant types.

The Stopped-Flow Spectrophotometer is a versatile, general-purpose system that is widely used to determine the kinetic characteristics of reactions with half-times in the 5-millisecond to 50-second range. A temperature-jump accessory is available for studies involving even faster reactions, down to 10 microseconds or less. The accessory is uniquely designed to allow combination T-Jump/stopped-flow studies of pseudo-equilibrium reactions.

For complete information on the D-100 Series Stopped-Flow Spectrophotometer and its applications, contact . . . **Durrum Instrument Corporation, 3950 Fabian Way, Palo Alto, California 94303, Phone (415) 321-6302.**



\*AS REPORTED BY HENRY F. EPSTEIN AND LUBERT STRYER IN VOLUME 32 (1968) OF THE JOURNAL OF MOLECULAR BIOLOGY.



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