

## *Revised Nomenclature: Pro and Con\**

### EDITORIAL

#### WHAT'S IN A NAME

SEVERAL statements have appeared recently<sup>1, 2, 3</sup> concerning standardization of hematologic nomenclature. Their purpose is to bring clarity where there is confusion, uniformity where there is variety and order out of chaos. It is proposed that no new ideas be introduced but that terms be accepted which everyone will use in an agreed-upon sense, and that tables be made available in which a list of corresponding terms which are to be outmoded will be presented.

These statements reflect the considered views and sincere efforts of a number of individuals, to whom due credit must be given. The devotion of the chairman of the committee on nomenclature, which is the source of these reports, certainly deserves respect. It must be pointed out, however, that, although the published material gives the impression that the proposed nomenclature is desirable and widely supported, the contrary opinion is substantial and significant but has mainly found expression in informal conversations of persons interested in the field.

It can be admitted that hematologic terminology is confusing. However, there is reasonable doubt that the new proposals will improve matters. What is to be achieved by naming the stage of leukocyte preceding the myelocyte a "progranulocyte" when most people understand quite clearly what is meant by the term, "promyelocyte"? Will an official stamp have value by affixing an erroneous interpretation to the "stab cell"? Does a student gain a better understanding of physiology by being forced to call something a cell which is not one, such as the red corpuscle and the platelet, for which the terms "erythrocyte" and "thrombocyte," respectively, are proposed? True, these terms are in current, though erroneous, use. But why endorse errors with a stamp of approval?

These, however, are comparatively minor criticisms of the proposed nomenclature. The recommended terminology for the red cell series impresses one as being artificial to an extreme. In an attempt to use corresponding classifications for the leukocytic and erythrocytic series of cells, differentiation is centered about nuclear rather than cytoplasmic features. As a consequence, a "prorubricyte" stage is introduced which can scarcely be differentiated, if at all, from the "rubriblast." The concept of distinguishing cells of the normal erythrocytic series chiefly on the basis of cytoplasmic maturation, though simple and generally accepted, is replaced by a proposed differentiation which would be most difficult to follow. Thus, an attempt at orderliness is likely to bring confusion instead.

It is difficult to escape the conclusion that the recommended terminology would only add to the terms that the student must learn and would increase verbiage where there is sufficient already. No one will be better off in reading literature

\* For another editorial on "Names for Blood Cells," see *Lancet* 1: 486 (March 19), 1949.

published hitherto and there will still be debate as to whether a given cell is one thing or another.

Differences in terminology have arisen mainly because of differences in interpretation of observations made under a variety of conditions. It is reasonable to expect that as new knowledge is gained, agreement will come naturally as there is better understanding. Terms may then be modified by the normal process of evolutionary selection rather than through arbitrary definition. Emphasis, in short, should be placed on advancing knowledge rather than in too much concern about names.

Since the new terminology is not readily and wholly acceptable, nothing can be gained by its introduction at this time. Haste will but make more difficult the acceptance of terms which time and repeated discussions of all those concerned, including interested individuals in all English-speaking countries, might make possible in the future.

MAXWELL M. WINTROBE, M.D.

#### REFERENCES

- <sup>1</sup> Am. J. Clin. Path. 18: 443, 1948.
- <sup>2</sup> Am. J. Clin. Path. 19: 56, 1949.
- <sup>3</sup> Blood 4: 89, 1949.

#### LETTERS TO THE EDITOR

##### TO THE EDITOR:

In the January issue of *Blood*, a condensation of the first two Reports of the Committee for Clarification of the Nomenclature of Cells and Diseases of the Blood and Blood-Forming organs was published. Since I am not convinced of the soundness with which this unilateral approach has been conducted, I would like to bring certain things to your attention.

Hematology is international in its scope and, as a consequence, its terminology is not the property of any one country. As in other scientific disciplines, the ultimate goal of uniformity in nomenclature is certainly one which is desired by all. It is for this very reason that the constitution of the International Society of Hematology lists one of its purposes—"to attempt to standardize on an international scale hematologic methods and nomenclature."

Such an undertaking would undoubtedly enlist not only the services of clinical pathologists, but also those of embryologists, histologists, physiologists, zoologists, tissue culturists, immunohematologists and others whose work might be influenced by an alteration in hematologic terminology. The approach must be multilateral from the start. Groups serving on this committee should be provided with extremely accurate illustrations of cells under discussion. Furthermore, these illustrations should include the range of variability of cell types.

This is not the first attempt by Americans to alter terminology. As a matter of fact, some of the confusion which is disturbing at the present time is the primary fault of American hematologists. In 1925, Doan, Cunningham and Sabin with very good intentions wrote, "The terminology in hematological literature has become so confused, different investigators using the same designation for wholly different histological entities or the same histological entity being designated by a variety of terms, that it becomes necessary to define the limited sense in which certain names already in the literature will be used in this paper." Then, in the case of erythropoiesis, they disregarded this by using the term megaloblast in a manner quite different from its accepted usage by such leading hematologists of that period as Downey, Ferrata, Maximow and Naegeli. Additional confusion in American hematology was created by Peabody's unequivocal acceptance of Doan, Cunningham and Sabin's theory and by Isaacs and Osgood propounding theories of a similar nature. It is unfortunate that Doan, Cunningham and Sabin advanced