

EDITORIAL**What's In A Name?**

WITH THE PRESIDENT'S SIGNATURE of Public Law 94-278 (The National Biomedical, Heart, Blood Vessel, Lung, Blood and Research Training Act of 1975, subsequently renamed Health Research and Health Services Act of 1976), the National Heart and Lung Institute (NHLI) has received a new name: The National Heart, Lung and Blood Institute (NHLBI). Hematologists, blood bankers, and other members of the scientific community interested in blood-related research have cause for satisfaction. In adding "Blood" to the name of the Institute, the Congress and the Administration have recognized the importance of a field that hitherto has lacked representation on the roster of categorical institutes at NIH. Though unaccompanied by a specific increase in appropriations for blood, the name change clearly signifies an expansion of the Institute's mandate.

Not that the assumption of this mandate amounts to a radically new departure. Blood research has constituted an integral part of NHLI's program for some time. More specifically, in 1966 the National Blood Resource Program was established in the Institute to foster research related to blood banking. In 1972, following passage of the National Heart, Blood Vessel, Lung and Blood Act of 1972, the Division of Blood Diseases and Resources (DBDR) was established as the formal vehicle for the Institute's blood programs, on a par with the other two categorical divisions, the Division of Heart and Vascular Diseases and the Division of Lung Diseases. DBDR was charged with implementation of the National Sickle Cell Disease Program, which had previously been created by presidential action in the spring of 1971. It has responsibility for the support of extensive research in the area of thrombosis and hemostasis, in hemolytic and other red cell disorders, in transfusion-related hepatitis, in platelet preservation, in blood substitutes, plasma expanders, and other hematologic and blood banking problems. It has played a leading role in sponsoring and organizing hemophilia-related investigations. It has assumed much of the responsibility for research training of hematologists and blood bankers. DBDR's budget for the Fiscal Year 1976—including training grants—amounted to \$53.2 million. The number of grant applications directed to the Division has been increasing steadily and currently accounts for 57% of the requests reviewed by

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the Hematology Study Section and 20% of approved requests processed by the Institute. The policy and the programs of NHLBI and DBDR are guided by an advisory committee composed of leading hematologists, blood bankers, and experts in related fields from outside the government.

What then does the incorporation of the word "Blood" into the name of the Institute add? Clearly, it does not mean that all research pertaining to blood should become the exclusive province of the Institute. Other Institutes at NIH, notably the National Cancer Institute (NCI) and the National Institute of Arthritis, Metabolism, and Digestive Diseases (NIAMDD), are traditional centers of support, expected and indeed required to maintain their activities in these areas. Research approaches to blood have come to encompass an enormous range of problems, ranging from the submolecular to the molecular and cellular components, from humoral to formed elements, from basic physiology to clinical medicine, and from pure science to resource management and logistics. The time is long since past when "hematology" was a single, essentially morphological discipline concerned with blood and bone marrow cells. Today immunohematology, hemostasis, hemoglobinopathies, red cell enzymology, leukokinetics, and oncology have become sub-specialties in their own right. Such diversity calls for diversified support.

But a discipline which crosses so many boundaries needs special attention, and here the Institute will have a special role to play. Of necessity, the guidelines for assigning hematologic research projects to one or the other of the categorical Institutes at NIH are imperfect. There may be overlapping and duplication of effort, on one hand, and the danger of the need for support in some areas being unrecognized, on the other. The mandate now given to the Institute is the coordination of blood research throughout the NIH and beyond, as well as the development of a strong program of its own. Thus DBDR will become the focal point for the research interests of investigators in hematology and blood resources. It will attempt to evaluate the totality of these interests, to preserve the cohesive nature of blood research, and to give the greatest possible impact to the needs of the scientists working in this field. To this end we intend to maintain close liaison with the scientific societies and editorial boards representing them, as well as with individual investigators, and to work toward stronger representation of this segment on the NHLB Advisory Council. Similarly, we accept a special responsibility in the area of research training and general manpower needs for hematology and blood banking.

In contrast to the broad institutional basis for hematologic research in the traditional sense, the needs for research support in the area of blood resources are uniquely centered in NHLBI. The new legislation recognizes and emphasizes this obligation: "The National Heart, Lung and Blood Institute—in addition to its coordinating role—should be the locus for studies and research into the science and management of the Nation's blood resources."* The charge entails a departure from the support of strictly biomedical research into such fields as behavioral science (e.g., studies of donor motivation), organizational

*Heart, Lung and Blood Research, Research Training, and Genetic Diseases Amendments of 1975. Report by the Committee on Interstate and Foreign Commerce. Report No. 94-498.

aspects of blood banking and logistics (e.g., utilization and distribution of blood and its components and fractions). Such tasks are at variance with the traditional concept of the role of NIH, but they cannot be shirked. To do so would be to ignore the express intent of the Congress and to jeopardize the whole of research support.

Having said this, we wish to reaffirm our commitment to investigator-initiated basic and clinical research as the primary mission of the Institute and all of its divisions. Our philosophy in the controversial area of "free" versus "mission-oriented" or "targeted" research is reflected in the budget: the bulk of the funds available to DBDR as in the other divisions is allocated to traditional research grants. These, as always, undergo Study Section review and are funded according to priority scores reflecting scientific merit. The initiation of research in areas where needs are perceived or where special mechanisms of support have been mandated by Congress—Sickle Cell Centers and so-called National Research and Demonstration Centers are cases in point—is subject to peer review no less stringent than that of regular grant applications. In addition, the Centers are under constant review of their ongoing programs by Institute staff with the assistance of advisory committees. Where the contract mechanism is used, outside advice and opinions are always solicited. Finally, the Institute's Advisory Council is now required to advise on both the kinds of contracts awarded by the Institute and the percentage of funds allocated to such contracts.

Institute-initiated programs, thus, are subject to intense scrutiny at several levels and must in any case meet certain objective criteria. They must be designed to carry out the statutory purposes of the Institute; they must fill gaps in research not filled or likely to be filled by individual research initiatives; and they must address themselves to finite goals in areas where sufficient basic knowledge already exists to permit or for that matter require further development. Recent examples of such programs sponsored by DBDR are contracts dealing with the production and testing of synthetic perfluorocarbons as blood substitutes; the perfection of a sterile docking device for transfer of frozen blood after thawing; a multi-institutional prospective study of transfusion-related hepatitis; a long-term collaborative study of inhibitors in hemophiliacs; and preservation and storage of granulocytes. The contract mechanism is not suited to the stimulation of new ideas and cannot be allowed to threaten free research. The means for keeping its use within proper bounds are at hand.

The placing of the major responsibility for blood research in an Institute that historically was dedicated to cardiovascular and pulmonary problems requires a final comment. The alternative would have been the creation of a new categorical Institute with all the problems of overlapping spheres of interest that this would have entailed. The proliferation of categorical institutes reflects both practical considerations and the trend toward the fragmentation of biomedical science. We believe, on the contrary, that the unitary nature of research should be preserved wherever possible, and, on that basis, we welcome the solution arrived at by Congress. There are many points of convergence of research interests between the three divisions of the Institute, such as oxygen transport, thrombosis, and the interaction between platelets and endothelium, atherosclerosis, rheology, and the pathophysiology of the microcirculation, to name

only a few. We intend to develop such mutual interests in a spirit of cooperation and coordination, rather than to strengthen one program at the expense of another. Our commitment to blood research in no way lessens the Institute's commitment to the programs of the Heart and Lung Divisions.

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