American Association for the Advancement of Science

BOARD OF DIRECTORS
Paul M. Gross, Retiring President. Chairman
Alan T. Waterman, President
Laurence M. Gould, President Elect
Henry Eyring
John W. Gardner
H. Bentley Glass
Don K. Price
Paul E. Klopcet
Treasurer

VICE PRESIDENTS AND SECRETARIES OF SECTIONS

Mathematics (A)
Magnus R. Hestenes

Physics (B)
Elmer Hutchison

Chemistry (C)
Milton Orchin

Astronomy (D)
Paul Herget

Geology and Geography (E)
John C. Reed

Zoological Sciences (F)
Dietrich Bodenstein

Botanical Sciences (G)
Aaron J. Sharp

Anthropology (H)
David A. Baeckes

Psychology (I)
Lloyd G. Humphreys

Social and Economic Sciences (K)
Kingsley Davis

History and Philosophy of Science (L)
Adolph Grünbaum

Engineering (M)
Clarence E. Davies

Medical Sciences (N)
Francis D. Moore

Dentistry (Nd)
Paul E. Boyle

Pharmacetical Sciences (Nd)
Don E. Francke

Agriculture (O)
A. H. Moseman

Industrial Science (P)
Alfred T. Waideich

Education (Q)
H. E. Wise

Information and Communication (T)
Foster E. Mohrhardt

Statistics (U)
Harold Hotelling

PACIFIC DIVISION
Phil E. Church

SOUTHWESTERN AND ROCKY MOUNTAIN DIVISION
Edwin R. Helwig

ALASKA DIVISION
Allan H. Mick

Changing Attitudes toward Research

After years of repeated votes of confidence in the value of research and development, the House of Representatives has now indicated a changing attitude. Formally this was expressed by action in approving H.R. 504, which authorizes appointment of a Select Committee to Investigate Research Programs. The committee is to investigate "(1) the overall total amount of annual expenditures on research programs; (2) what departments and agencies of the Government are conducting research and at what costs; (3) the amounts being expended by the various agencies and departments in grants and contracts for research to colleges, private industry, and every form of student scholarships; (4) what facilities, if any, exist for coordinating the various and sundry research programs, including grants to colleges and universities as well as scholarship grants."

This mandate seems fairly innocuous. Items 1 to 3 represent inventory-taking. Item 4 appears to imply that the tens of thousands of government research projects might or should be coordinated.

One measure of the new attitude is the majority by which the resolution passed—336 to 0, with 47 pairs. More significant is the fact that the budget which preceded the authorization in the Rules Committee hearing and on the floor of the House. The comments of the legislators showed limited perception of the values and modes of conducting research and indicated conviction that money is being wasted on it.

The most alarming aspect of the congressional discussion is that it was the small research fraction of the total research and development budget which drew almost all the adverse comment. In hearings before the Rules Committee, Chairman Howard W. Smith ridiculed the titles of some National Science Foundation grants. One of the items which he found worthy of comment had a budget of $1300. A perusal of other congressional comments concerning the resolution shows that Smith's remarks reflect a considerable body of opinion.

A change from the congressional attitudes of the past 20 years was certain to come. In 1940 the federal government spent $74 million on research and development programs. This fiscal year the figure will be about $14.9 billion. Over the 24 years, expenditures have increased with a doubling time of between 3 and 4 years. Few would insist that the increase in expenditures led to commensurate increase in rate of progress. In the end, some kind of brake will be applied, since such growth cannot go on indefinitely. The problem will be to insure that the braking process is guided by intelligence—not by ignorance and worse.

The Select Committee has before it an almost impossible task. In order to appear effective, it will feel under pressure to create newsworthy releases. The obvious and easy way will be to engage in anti-intellectualism. No one can predict what course of action the Select Committee will take. The new investigation could have profound effects; it could come to nothing. The potentials, however, are so important that all scientists should be seriously concerned. During the next year the scientific community may find itself appearing before a hostile court. We can, if we will, present a strong case. Prudence indicates that we should prepare, and prepare well.—P.H.A.