

These results were reproduced in a total of 144 experiments on 36 normal male and female adults and children employing the same criteria of the spreading effect of Evans blue with hyaluronidase reached by intravenous injections of 275 γ /cc. of sodium salicylate in plasma and then measuring the areas after 24 hours of the intradermal injection of the dye with the enzyme. Intradermal injections on individuals, either with active rheumatic fever or having suffered it gives unique reactions with enormous diffusion of the dye and local edema that sometimes occupies the arm injected with hyaluronidase. The salicylate also inhibits the enzyme in those cases and reduces its spreading effect on connective tissue. These types of

allergic reactions to hyaluronidase were also observed in one male who suffered exanthematic typhus.

The evidence found in normal rabbits and humans, as well as in individuals who have latent or active rheumatic fever, indicates the important role of hyaluronidase in its mechanism and the inhibitory effect of sodium salicylate as a typical antirheumatic drug.

References

1. BENSLEY, S. H. *Anat. Rec.*, 1934, **60**, 93.
2. CROWLEY, N. *J. Path. Bact.*, 1944, **56**, 27.
3. DURAN-REYNALS, F. *Bact. Rev.*, 1942, **6**, 197.
4. KENDALL, F. E., HEIDELBERGER, M., and DAWSON, M. H. *J. biol. Chem.*, 1937, **113**, 61.
5. McCLEAN, D. *J. Path. Bact.*, 1941, **53**, 156.
6. MEYER, K., and PALMER, J. W. *Amer. J. Ophthalm.*, 1936, **559**.

Science Legislation

H.R. 6448

Howard A. Meyerhoff

Executive Secretary, AAAS, Washington, D. C.

The passage of a national science foundation bill in this session of Congress was seriously jeopardized by the introduction of a bill in the House of Representatives by Rep. Wilbur D. Mills of Arkansas 15 May. The bill was referred to a subcommittee of the Interstate and Foreign Commerce Committee of the House, which has since held hurried hearings. Whether the subcommittee will refer the bill to another committee, whether it will report the bill out of committee in the near future, or whether it will let the bill die in committee is not known at the present time.

However, the whole procedure in this, the first introduction of the House of Representatives to national science foundation legislation, is so reminiscent of that which surrounded the introduction of the May-Johnson bill that readers of *Science* need to be informed about it.

The facts surrounding the introduction of the bill and the subsequent hearings bear the following relations to legislation which is pending in the Senate.

In the first place, the bill was handed to Representative Mills by an ardent and unreconstructed proponent of the old—and abandoned—Magnuson bill, S. 1285. This same proponent generously volunteered to arrange for witnesses of his selection to appear at hearings which were held without the knowledge of the departments of government ordinarily consulted in such matters, for example, Interior, Commerce and Agriculture.

Needless to say, none of the sponsors of S. 1297 (the Kilgore bill) were among the few who testified: None of those groups who merely sought sound legislation without favoring either the Kilgore bill or the Magnuson bill was represented. On the other hand, influential opponents of the Kilgore bill and the more recent Kilgore-Magnuson bill (S. 1850) were among those who testified.

The proponent of H.R. 6448-S. 1285 is not a scientist, nor is he qualified to speak for the great body of American scientists. Somehow, through Rep. Mills he obtained the introduction of a bill for which he was prepared to secure expert testimony in advance. In this high-minded and democratic manner the House has obtained its initial introduction to the National Science Foundation.

It is perhaps fortunate that the week which was scheduled to be "Science Week" in the Senate (See *Science*, 1946, **103**, 589) was lost to more pressing labor problems, for although the delay may mean that a national science foundation will not be created in 1946, at least scientists will have time to acquaint their congressmen with their views. If there has been any doubt that this must be done in the minds of any individual scientist, the introduction of H.R. 6448 should dispel it. Science legislation is "on the loose."

Do scientists want what the National Association of Manufacturers, or some few persons whether they are scientists or not, believe that they *should* have? The 232 members of the AAAS Council who favored action

to assure passage of S. 1850 don't believe so. The many members of the Association who have written and spoken to the writer don't believe so.

If individual scientists are to get what they *do* want, they must become articulate. They must become more

vocal with their congressmen than the willful individuals or the reactionary organizations who may yet lobby objectionable and obstructive legislation onto the statute books,—and who are evidently determined to do it!

The following people testified on 28 May in connection with the bill before the Subcommittee on Public Health of the Interstate and Foreign Commerce Committee: Rep. Thomas A. Jenkins, of Ohio; Dr. Isaiah Bowman, president of Johns Hopkins University; Rep. Wilbur Mills, of Arkansas; Mr. Robert T. Patterson, Secretary of War; Dean C. D. MacQuigg, of Ohio State University; Dr. Homer Smith, of New York University College of Medicine; Dr. R. E. Dyer, of the National Institute of Health; Dr. Vannevar Bush, director of the Office of Scientific Research and Development; Mr. W. J. Kenney, Assistant Secretary of the Navy, and Mr. John Victory, executive secretary of the National Advisory Committee for Aeronautics.

The hearings continued on 29 May, when the following testified: Mr. George E. Folk, of the National Association of Manufacturers; Dr. Detlev Bronk, director of the Johnson Research Foundation of the University of Pennsylvania, and Dr. A. N. Richards, vice-president of the University of Pennsylvania and chairman of the Committee on Medical Research of the Office of Scientific Research and Development. Dr. Bronk and Dr. Richards spoke in broad terms which would apply equally to H. R. 6448 or S. 1850.

Dr. E. U. Condon, director of the National Bureau of Standards, also testified on 29 May, but opposed the Mills bill, pointing out that it was practically identical with the Magnuson Bill, which contained features unsatisfactory to the majority of American scientists. Dr. Condon spoke both for himself and for Secretary Wallace, whose written statement he read. Secretary Wallace pointed out in his statement why the compromise Senate bill S. 1850 was a better bill than the proposed legislation in the House, based as it is on the older discarded Magnuson bill.

As the situation now stands, all of these people are subject to recall to testify before the committee again at its pleasure. It is hoped that *Science* can print excerpts from the testimony referred to above in the issue of 14 June.

Scientists Divided

Watson Davis

Director, Science Service, Washington, D. C.

*Another science foundation bill to provide federal funds for scientific research is making a bid for Congressional action, although a compromise bill, S. 1850, worked out by months of Senate hearings to reconcile viewpoints among scientists has already been reported out of committee (19 March) and awaits a place on the Senate calendar (*Science*, 1946, 103, 382; 589).*

This new bill, H.R. 6448, introduced by Rep. Wilbur D. Mills of Arkansas 15 May, has had two days of hurriedly called hearings, at which Dr. Vannevar Bush, director of the OSRD gave it his blessing as "fulfilling the needs of the country better than any other piece of legislation I have seen for the purpose."

A statement from Secretary of Commerce Wallace, presented by Dr. E. U. Condon, Bureau of Standards director, declared the new bill "will not foster the progress of free scientific inquiry" and "will lead to an increasing monopolization of science by a small clique and operate to the detriment of small and independent business in this country."

The Mills bill puts the control of the proposed national science foundation in the hands of a part-time board, whereas the Senate bill (1850), compromising earlier Magnuson and Kilgore bills, provided a full-time Presidentially-appointed administrator with a part-time advisory board.

The new bill continues the present general practice under which commercial patent rights go to the inventor, meaning generally the institution where the research is done, with the government getting only the right to use the results for its own purposes. The Senate bill (1850) provides generally that federally-supported research shall be freely available to the public.

The new bill does not distribute funds geographically or to non-profit organizations, and it does not provide for support of social science research.

A National Association of Manufacturers representative, George E. Folk, testified for the new bill, and so did Prof. Homer W. Smith, New York University physiologist, who has acted as secretary of the Committee Supporting the Bush Report.

Last November this Committee, headed by President Isaiah Bowman of Johns Hopkins University, attacked the Kilgore bill and supported the Magnuson bill. After the compromise S. 1850 bill had been developed, this group as recently as 23 April on behalf of 5,000 scientists, appealed to Congress for its enactment.

The stand of Dr. Bush, Prof. Smith and others upon the Mills bill seems to again divide those who favor some sort of National Science Foundation.