BY the will of Mrs. James T. Pardee, of Midland, Mich., securities worth $1,000,000 are set aside for research on the control and cure of cancer. The value of the estate is estimated at $6,000,000.

DR. HARRY L. HOLLINGSWORTH, professor of psychology at Columbia University, has given $51,000 to establish a fellowship at the university in memory of his wife, Leta Stetter Hollingsworth, professor of education at Teachers College, who died in 1939. The fellowship will be awarded annually to a woman graduate of the University of Nebraska who "is most likely to emulate the character and career of the late Mrs. Hollingsworth."

THE herbarium of the late Dr. Oliver Atkins Farwell, containing some forty thousand Michigan plants, has been bequeathed to the Cranbrook Institute of Science at Bloomfield Hills, Mich.

THE Army Ordnance Distinguished Service Award was presented on October 12 to the American Society for Testing Materials, in recognition of "its contributions toward the development, manufacture and maintenance of ordnance materiel."

DISCUSSION

FUNDAMENTAL BIOLOGICAL RESEARCH IN WARTIME

"SCIENCE" often takes a long time to reach New Guinea. I recently received the April 7 issue, and was happy to read the results of Dr. Curt Stern's inquiry concerning the advisability of continuing fundamental biological research in wartime. Here is yet another "yes" for unqualified continuation.

I do not think any of us who favor continuation of fundamental research in wartime mean to imply that the relatively non-productive research worker, old or young, should be kept at his job when he could probably find himself a more suitable and more useful occupation in the armed services or in war work. We also do not mean to imply that a research worker of proved ability should stick to his fundamental, long-range research, if a very definite need exists for the solution of a practical problem for which he is exceptionally well suited by training and talent.

Many capable research workers will not find such an opportunity, and it is hard to see how they can do better than to continue with fundamental research. People capable of doing original, imaginative research are none too numerous. For individuals who have demonstrated such ability to do essentially laboratory technician's work in the Army or in some war research project is as much a waste as to use a six-wheeled truck to transport 20 pounds of equipment. Jeeps are usually available, and so are people who can do routine work but not original research.

Too many biologists have tended to worry too much about the "usefulness" of their research projects. The best research is generally done when the worker is doing it because he enjoys it and wants to find an answer to some question of interest to him. No one knows what findings in fundamental research will ultimately prove useful in one way or another. It is a fine thing when some discovery in fundamental research leads to an improvement in the health or general welfare of the community, or even merely to some handy gadget. But ultimate usefulness should not be held out as the sole reason for the carrying out of fundamental scientific research. Man wants to understand his environment for the sake of the mental satisfaction such understanding brings, as well as for the sake of the material benefit which often follows such understanding.

The discovery and description of natural phenomena and their interrelationships is a cultural activity of the highest order. There is in an understanding of natural science, a sense of beauty as definite and distinct as in the appreciation of a work of art. This value of science has been too long neglected. The popularizers of science harp upon its usefulness. Behold, they say, science gives us a better toothbrush! (and, say the opponents of science, also bigger and better bombs). A better toothbrush is nice to have, and the better bombs are coming in very handy, but science involves so much more than this. The general public should be made more thoroughly aware of these other values to be derived from scientific knowledge and education. Then workers in fundamental lines of research, which do not seem to be leading to better toothbrushes, will no longer need to feel apologetic about their activities.

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COMMENTS ON COMPARATIVE STUDIES IN HUMAN BIOLOGY

IN his comments on Professor Herskovits's criticism[1] of Professor Dice's remarks[2] Professor Strandskov writes: "If primary human stocks (Mongoloid, Negroid and Caucasoid) and if subdivisions of these major groups ('races') have any validity at all, and the author believes that Professor Herskovits will admit that they do have some, it seems almost inevitable that both physiological and inherent response differences must exist."[3]

[1] SCIENCE, n.s., 100: 50–51, 1944.
[2] *Ibid.*, n.s., 99: 457–461.

At first blush this seems a reasonable enough statement, but when one inquires why it appears to be so it will be found that it is because it is suspected that physical characters are probably linked with functional ones, that there is a genetic linkage between the genes for the two different orders of phenonena. If such is the ground upon which this assumption is usually made then it ceases to be a reasonable one, for the good reason that it is based on no more than a suspicion or a "hunch" and not upon facts which are known to exist or have been demonstrated. I personally have a "hunch" that genes play an enormous part in the determination of behavior, but though I have much sympathy for Professor Strandskov's view, I see no ground for believing that there is any necessary connection between statistically aggregated physical characters and particular types of functional response.

Genetic linkage between particular physical traits and particular psychological traits is a phenomenon unknown outside folk belief.

The results of forty years of psychological testing and study of the major groups of mankind has pretty consistently followed the pattern of the results obtained by the first anthropological expedition ever to go into the field for the purpose of studying the psychological and physiological responses of such a group of mankind, the Cambridge Anthropological Expedition to the Torres Straits.[4] This expedition, under the leadership of Professor A. C. Haddon, and comprising, among others, the following members, Wm. McDougall, W. H. R. Rivers, C. S. Myers and C. G. Seligman, contrary to general expectation found no inherent psychological or physiological differences which would serve to distinguish the natives of Torres Straits from their investigators or from any other people with whom they were acquainted. Since then whenever the investigations have been conducted by unprejudiced workers (and fortunately they have been in the majority) the results have been uniformly the same. Summarizing these results for the psychological tests, Professor Otto Klineberg, after considering the evidence from every standpoint, writes, "We may state with some degree of assurance that in all probability the range of inherited capacities in two different ethnic groups is just about identical."[5]

As for the physiological differences which are said to be "inevitable" I am not aware that there is any ground for believing that these are either "many" or significant. Professor Strandskov speaks of "variations which have a physiological basis." This statement is unclear. Are these variations of a functional or are they of a structural or physical kind? Since Professor Strandskov writes that "many of these variations have been shown to be represented by different gene frequencies within different primary stocks and even within groups recognized as races" I can only take him to mean that these variations refer to structural or physical characters. If this is what Professor Strandskov means, then he is saying something very different from Professor Dice when the latter wrote that "it is recognized by anthropologists that many races also exhibit clearly marked peculiarities of physiology and psychology." As Professor Herskovits pointed out, practically all anthropologists not committed to the racist dogma hold exactly the opposite. Professor Dice's statement is therefore incorrect. He wishes upon anthropologists views which they do not hold.

Since the matter is one of the first importance it would be interesting to know what the "variations" which Professor Strandskov has in mind are. Professor Strandskov's *obiter dictum,* that if there do exist stock or group differences among mankind there is no reason for considering one group as inherently superior to the other, will strike a sympathetic chord. But to the present writer, at any rate, the evidence does not suggest, as it does to Professor Strandskov, that these differences "will in all probability be found to be numerous." My own view is the exact opposite of that.

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[3] *Ibid.,* n.s., 100: 146–147.

[4] A. C. Haddon (editor), "Reports of the Cambridge Anthropological Expedition to the Torres Straits," Cambridge, 6 vols., 1901–1935.

[5] O. Klineberg, "Mental Testing of Racial and National Groups," in "Scientific Aspects of the Race Problem," p. 284, Longmans, New York, 1942.

THE CORRECT NAMES OF PARASITES IN HUMAN MALARIA

SABROSKY and Usinger[1] contributed an interesting article on the nomenclatorial status of human malaria parasites. After reviewing the present situation they propose, in order to regularize it, to bring the whole matter to the attention of the International Commission on Zoological Nomenclature, asking for a suspension of the rules and the official acceptation of the *de facto* names used by most parasitologists. The same action, although in slightly different grounds, was recently proposed by the writer.[2]

I almost entirely agree with the opinions held by Sabrosky and Usinger, but I don't completely support the names they propose as most adequate for the three common species of human malaria parasites; at least in the exact way they write them.

[1] W. C. Sabrosky and R. L. Usinger, SCIENCE, 100: 190–192, 1944.

[2] E. Beltrán, *Gaceta Médica de México,* 74: 61–74, 1944.