European Gerontologic Activities

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This is a condensation of a paper presented at the Institute on Problems of Aging at Washington University, St. Louis, April 11-12, 1949, as part of the session on the Biology of Aging.

Dr. Korenchevsky presents an outline of gerontologic activities in Europe and concludes that while interest has only recently been awakened the nucleus for excellent research has been established and if sufficient funds can be obtained splendid results should be secured.

The gerontologic movement, as represented by the establishment of gerontologic societies, was started in 1939. At the beginning of that year a group of British scientists and professors of various branches of medicine decided to form an International Club for Research on Ageing and as a start to establish its British branch.

The British Branch delegated its honorary secretary to visit the United States and various countries in Europe in order to establish other branches of the club. In this way in 1939 branches were established in the United States (the present American Club for Research on Ageing), in France, Denmark, and Switzerland. The war stopped this organizing activity, but after the end of the war it was resumed and at present there are gerontologic societies and groups in the following countries: Great Britain, Australia, Canada, France, Denmark, Sweden, Switzerland, Holland, Belgium, Czechoslovakia, Spain, Finland, Argentina, and Italy.

The idea of establishing an international organization was prompted by the fact that the problems of aging are among the most difficult problems of biology and medicine. The biologic age of man is at least one, perhaps two, million years. During this period of hereditary development all human features, including the process of aging, have become firmly fixed. It is obvious that gerontologic research cannot alter in a few months or even years what hereditary development has fixed in a million years.

The second difficulty is that so far we do not know the standards of normal aging and normal old age, nor the normal span of life. At present old age is abnormal and premature, a disease and not a normal physiologic process. It is obvious that if there are no known normal standards of aging it is very difficult to do research toward these unknown standards.

The third difficulty is that research on aging, in a way, might become a dangerous procedure. Instead of producing a superman it might create a monstrosity. As an example, there are the results of experiments at the Oxford Gerontological Research Unit. With aging a relative decrease in size and weight of internal organs occurs. In our experiments on rats, by the combination of certain hormones we succeeded in returning this decrease to the weight level present at a very young age. In this way apparently an anti-aging effect was obtained; some might define it as a rejuvenation of the relative size and weight of the organs.

It is a question, however, whether a rat, with organs which are very large for its age, is a super-rat or a monstrosity. This question may be solved only by several
Dr. V. Korenchevsky, a Russian by birth, was formerly professor of experimental pathology at the Imperial Medical Academy in Petrograd. He received his M.D. degree from Moscow University. In 1920 he emigrated to England, becoming a naturalized British citizen. He was senior research worker at the Lister Institute of Preventive Medicine in London. He was an initiator and active in the foundation, in 1939, of the Club for Research on Ageing, with branches in Europe, the United States, and Argentina. Dr. Korenchevsky is now Hon. Secretary of the British Society. In 1945 he was appointed head of the Gerontological Research Unit at Oxford, establishment of which was made possible by a grant from Lord Nuffield. Hospitality has been extended to the Unit by Prof. A. C. Hardy and Prof. E. G. T. Liddell of the department of zoology and department of physiology at Oxford University. The subjects of research in which Dr. Korenchevsky is most interested include gerontology, endocrinology, and the study of vitamins.

morphological, biochemical, and physiologic experiments. Moreover, histologic investigation revealed not only these apparently anti-aging effects, but also some important lesions in various organs caused by overstimulation by the hormonal treatment used.

These difficulties discouraged several members of our gerontologic societies from embarking on research on aging. Although welcoming and encouraging research on aging, these members were forced by several reasons to continue research in other fields of science and medicine. The chief reason appears to be that both for their laboratories and for young research workers who come to be trained in these laboratories it is important to publish steadily a number of papers with positive results which can be obtained in a comparatively short period of time. The second reason is that gerontologic research is expensive and large funds are necessary to carry it out.

If, however, because of these difficulties, there is not a sufficient number of gerontologic research centers and research workers in any country, the obvious exit out of this difficulty is to pool all willing and available scientific manpower into a cooperative international organization. This is the chief aim in the organizing activities of the British Society for Research on Ageing.

RESEARCH ACTIVITIES OF THE BRITISH GERONTÓLOGICAL SOCIETY

In spite of the difficulties gerontologic research and geriatric work are proceeding in Great Britain. There are three gerontologic research units: the one in Cambridge is engaged in research on the psychologic problems in aging; and the ones in Edinburgh and Oxford are conducting experimental research on animals and pathologic-anatomical investigations. The subjects are the skin in old age and arteriosclerosis at the former and the effects of hormones and waste metabolic products on aging at the latter.

There are also eight geriatric units at present. The Biochemical Department of the Royal Infirmary and the Queensbury House Hospital in Edinburgh are cooperating in research on the kidney, liver, and metabolism diseases in old people and in Essex the Orsett Hospital's unit is investigating intestinal diseases in old people.

The geriatric units in London are the West Middlesex County Hospital and King’s College Hospital. In Nottingham, Leeds, and Liverpool the units are in the state of formation, but some of them are already engaged in the treatment of old patients. The Belmont Hospital in Liverpool is doing some research on cardiovascular diseases in the aged.

Besides these gerontologic and geriatric units there are fourteen members of the Society, chiefly professors of various universities, who are studying changes in organs, tissues, and functions of old people or old animals.

Financial condition of research centers.— Actually one man only, Lord Nuffield, made possible the start of research on aging in Great Britain. By personal grants to the
British Society for Research on Ageing and by establishing the Nuffield Foundation, he provided financial assistance necessary for the beginning of gerontologic and geriatric work in Great Britain. The Nuffield Foundation also generously supports the social research on aging. It has further established and still supports psychologic research in the psychologic unit at Cambridge University.

The geriatric units which are part of nationalized hospitals are apparently in no need of financial help. On the contrary, the experimental units at Edinburgh and Oxford and the clinical unit at Edinburgh might have to be closed unless the funds necessary for their maintenance and development are provided. The heads of the university laboratories and clinics can use only a small part of their time and the budget of their respective establishments for gerontologic research.

Therefore, in spite of the fact that in Great Britain gerontologic research is proceeding in eighteen centers, its progress is slow. In spite of this, I believe that the prospects are good because great interest in the problems of aging has been awakened in various official and unofficial circles and a number of distinguished men of science and medicine have joined to support the movement.

**Other European Gerontological Societies**

**Denmark**.—It is noteworthy that out of all the other societies there was only one, the Danish Gerontological Society, which during the war and first years of the post-war period was able to perform gerontologic research. There are four Danish research centers in Copenhagen—De Gamles By (Old People's Town), the Polytechnic High School, the Institute of Genetics, and the Serum Institute. These centers published fourteen papers altogether, a report on which was given by Jacobsen at the second British Gerontological Conference in London. The report was published in the *Journal of Gerontology* (3: 294–300, 1948). The institution for old people in Copenhagen, De Gamles By, directed by Dr. Geill, has excellent hospital and research laboratories besides the home for the aged.

**France**.—In the French Society so far there are four laboratories which are active in gerontologic research: Paris Radium Institute, Collège de France and the laboratories of Physiology and Medical Biology of Paris University, in which Professors Lacassagne, Courrier, Bourlière, and Verne are conducting research. The greatest handicap of the members of the French Society is the lack of funds. If this problem is solved the nine laboratories in French universities are ready to start research on aging. They have already worked out interesting schemes of research. As in other countries, great interest in official and public circles in gerontologic problems was awakened in France only recently. As an indicator of this interest is the fact that during 1948 three conferences on the problems of aging were held.

**Sweden**.—In the Swedish Society a team of scientists from the Royal Cell Institute and the University Psychiatric Clinic of Stockholm under the direction of Professor Sjögren are experimenting on changes in the nervous system, chiefly the brain, in aging. There are other research centers in the Vitamin Institute, in the Department of Gynecology, and in the Pathological Institute of Stockholm University. The financial problem is also a handicap, but it is not as acute as in France.

**Switzerland**.—In the Swiss Society there are seven university and one hospital research centers; half are already working and the other half are handicapped by lack of funds.

**Holland**.—The Dutch Society with eight research centers in Amsterdam, Utrecht, and Leyden Universities is very promising. All except one, however, are in need of financial help. The Dutch schemes of research
are very important. Professor Jongbloed has devised an artificial heart apparatus which can be connected with the large blood vessels of the heart. The blood can be washed or otherwise treated and then the natural heart, after the wounds in its blood vessels are sutured, will replace the artificial heart and restart the natural blood circulation. This technique will be used for the study of the effects of waste metabolic products on the process of aging. President of the Society, Professor Sleeswijk, is a very active organizer of the general gerontologic movement and, in particular, of research in Holland.

Belgium.—In the Belgian Society there are six research centers in the universities of Brussels, Liège, Louvain, and Ghent. All except one, the medical clinic in Liège University which is supported by its Director, Professor Brull, are in need of financial assistance.

Spain, Finland, and Italy.—The Gerontological Societies in these countries have been established only recently, but interest in the problem of aging has attracted many distinguished physicians. It should be emphasized that in Spain there is the chair of gerontology in Valencia University. Professor Beltrán Báguena, who is the head of the Department of Gerontology, is also the chairman of the Spanish Gerontological Society.

Czechoslovakia.—Czechoslovakia also has a chair of gerontology, in Prague University, headed by Professor Eiselt. In his and Professor Steffl’s departments interesting research on aging is being conducted.

SUMMARY

There is no doubt but that the European Gerontological Societies will be instrumental in making important contributions to the solution of the problems of gerontology. At present the most urgent task is to find financial support for their activities.

The establishment of a special Foundation for Research on Ageing would seem to be the only proper solution of this main difficulty. The justification in forming such a foundation is in the fact that the problem of aging and old age is the tragic problem of every human being while even such diseases as cancer or tuberculosis affect only a part of humanity. The aged too should be allowed to enjoy their share of happiness in life and present-day science and medicine consider that this can and should be accomplished.

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