

**THE ANCESTRY OF
THE LONG-LIVED**

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TO BEGIN WITH

(Revised Edition, 1930)

THE PRESENT STATUS OF EUGENICS

THE RATE OF LIVING

CONSTITUTION AND HEALTH



10 TRULY LONGEVOUS PERSON

THIS PHOTOGRAPH OF MRS. EMILY SHAW GRIFFITH WAS MADE WHEN SHE WAS 100 YEARS OLD. SHE LIVED TO BE OVER 102 YEARS OLD. WHILE HER PORTRAIT EXHIBITS THE WRINKLING CHARACTERISTIC OF OLD AGE, IT SHOWS AT THE SAME TIME A TRULY REFRESHING GENERAL ALIVENESS AND SPRIGHTLY PARTICIPATION IN THE SITUATION. IT IS AN EXCELLENT EXAMPLE OF THE FACT THAT NOT ALL CENTENARIANS ARE TOTTERING COMATOSE TO THE GRAVE. MRS. GRIFFITH WAS THE MOTHER OF SIX CHILDREN, AND GRANDMOTHER OF FOUR. WHEN WE LAST HEARD FROM HER SHE WAS KEENLY INTERESTED IN ALL THAT WAS GOING ON IN THE WORLD ABOUT HER, OF WHICH SHE HAD BEEN A RESIDENT FOR SUCH A VERY LONG TIME.

THE ANCESTRY OF THE LONG-LIVED

BY

RAYMOND PEARL and RUTH DeWITT PEARL

The Johns Hopkins University



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PREFACE

This book represents one stage in the development of the general program of investigation of human life duration in the Department of Biology of the School of Hygiene and Public Health of The Johns Hopkins University. The results of this particular phase of the work have already appeared in part as No. VI of the series of *Studies on Human Longevity* in the journal *Human Biology*. Owing to limitations of space it was impossible to present all our data and results in journal publication.

In particular we have added two chapters (IV and IX). The first of these deals in some detail with a discussion of the effects upon the age distributions of the progeny of certain types of selection of the ancestry. The increasing use by biostatisticians of family data for the study of various problems makes such an investigation as that reported in Chapter IV highly desirable at this time, quite apart from its relation to the present study. Chapter IX presents a detailed analysis of the relation between the ages of groups of living individuals and the summed ages at death of their six immediate ancestors, for the purpose of making possible a better judgment of the significance of the results presented relative to the inheritance factor in longevity.

We are conscious of the fact and regret it, that this book cannot be looked upon as easy reading. It is a report of an extensive and extremely laborious piece of research upon an involved and difficult problem in human biology, and the story of the results necessarily has to be told mainly in figures and charts. But, on the other hand, we believe that any reader who is really interested in the problems of human longevity will have no difficulty in following the reasoning and understanding the results if he will take the trouble to read the book carefully.

It may be a convenience to the reader to have assembled in one place the bibliographic references to the earlier studies in this series. They are as follows:

Studies on Human Longevity

- I. A note on the inheritance of duration of life in man. By R. P. *Amer. Jour. Hyg.*, Vol. 2, pp. 229-233, 1922.

- II. Preliminary account of an investigation of factors influencing longevity. By R. P. *Jour. Amer. Med. Assoc.*, Vol. 82, pp. 259-264, 1924.
- III. Longevity: a pedigree. By R. P. *Human Biology*, Vol. 3, pp. 133-137, 1931.
- IV. The inheritance of longevity. By R. P. *Human Biology*, Vol. 3, pp. 245-269, 1931.
- V. Constitutional factors in mortality at advanced ages. By R. P. and T. Raenkhram. *Human Biology*, Vol. 4, pp. 80-118, 1932.
- VI. The distribution and correlation of variation in the total immediate ancestral longevity of nonagenarians and centenarians, in relation to the inheritance factor in duration of life. By R. P. and Ruth DeWitt Pearl. *Human Biology*, Vol. 6, pp. 98-223, 1934.

In the preparation of this book we are indebted to Dr. John Rice Miner and Miss Marjorie E. Gooch, for aid in a variety of ways; to Prof. Lowell J. Reed for critically reading the major part of the manuscript; and to the late Mrs. Emily Shaw Griffith for permitting us to use her charming portrait as a frontispiece to this volume.

Good Friday
1934

R. P. and R. D. P.

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