

Age-Related Changes of the Human Eye

Aging Medicine

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Cover illustration: Figure 1, Chapter 2, by Janos Feher and Zsolt Olah, "Electron microscopy of aged orbicular muscle fibers." Figure 3a, Chapter 12, by Susanne Binder and Christiane I. Falkner-Radler, "Early face angiogram of a classic CNV."

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Preface

Research on the aging of the human eye crosses all areas of ophthalmology and relies on biological, morphological, physiological, and biochemical tools for its study. Putting together a volume that attempts to cover all the aspects of the aging of the human eye was a daunting task. In fact, some areas may have been invariably overlooked and not every viewpoint may have been included.

Despite its shortcomings, we hope *Age-Related Changes of the Human Eye* will serve as a useful broad-based overview for all the people involved in research and/or disease on the aging of the human eye.

The authors of each chapter were selected for their expertise and prominence in the specific field. Therefore, this book is appropriate for students and graduate students, as well as for postdoctoral and/or professional ophthalmologists. Readers will benefit greatly from the significant revision of material related to the aging of the human eye.

The highlights of *Age-Related Changes of the Human Eye* are its:

1. Ease of use,
2. Inclusion of numerous personal experiments and data,
3. Versatility, and
4. Bibliography.

The key elements of this volume are the descriptions of age-related changes in almost all the structures of the human eye. The contributors are researchers, physicians, clinicians, technicians, engineers, and members of famous and leading research groups.

It should be understood that the eye represents a functional unit, and any modification of one of the structures considered will lead to changes and/or dysfunction of the whole ocular globe. Moreover, we would like to stress that visual function is not only related to the eye, but is a complex activity that is strongly and intimately connected to the brain. Any anomaly, dysfunction, or disease of the ocular globe determines relevant changes in the structure and thus, the function of the brain. Our hope

is that *Age-Related Changes of the Human Eye* will give an exhaustive panorama of what happens during the aging process of the eye, thus contributing to the understanding of the physiology and pathology of eye diseases.

Carlo A. P. Cavallotti
Luciano Cerulli
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