

## Contents

Introduction: *Cronin-Golomb, A.; Hof, P.R.*

### **Structure and Function**

The Anterior Visual System and Circadian Function with Reference to Alzheimer's Disease: *Valenti, D.*

Neuropathological Changes in Visuospatial Systems in Alzheimer's Disease: *von Gunten, A.; Giannakopoulos, P.; Bouras, C.; Hof, P.R.*

Functional Imaging in Healthy Aging and Alzheimer's Disease: *Anderson, N.D.; Grady, C.L.*

### **Abnormalities in Visual Behavior in AD and Related Disorders**

Heterogeneity of Visual Presentation in Alzheimer's Disease: *Cronin-Golomb, A.*

Posterior Cortical Atrophy: A Visual Variant of Alzheimer's Disease: *Mendez, M.F.*

Visual Hallucinations in Alzheimer's Disease: *Holroyd, S.*

Similarities of Visual Deficits in Alzheimer's Disease and Down Syndrome: *Rocco, F.J.*

### **Visual Perception and Cognition**

Visuospatial Disorientation in Alzheimer's Disease: Impaired Spatiotemporal Integration in Visual Information Processing: *Duffy, C.J.; Cushman, L.; Kavcic, V.*

Magnocellular Deficit Hypothesis in Alzheimer's Disease: *Gilmore, G.C.; Morrison, S.R.; Groth, K.E.*

Perceptual Organization in Alzheimer's Disease: *Kurylo, D.D.*

From Segmentation to Imagination: Testing the Integrity of the Ventral Visual Processing Pathway in Alzheimer's Disease: *Tippett, L.J.*

Reading and Visual Processing in Alzheimer's Disease: *Glosser, G.; Grossman, M.*

### **Visual Attention and Daily Function**

Visual Attention and Visual Short-Term Memory in Alzheimer's Disease: *Vecera, S.P.; Rizzo, M.*

Visual Attention, Genetics, and Alzheimer's Disease: *Parasuraman, R.; Greenwood, P.*

Closing the Window of Spatial Attention: Effects on Navigational Cue Use in Alzheimer's Disease: *Mapstone, M.; Weintraub, S.*

Improved Performance on Activities of Daily Living in Alzheimer's Disease: Practical Applications of Vision Research: *Dunne, T.*

Author Index

Subject Index

*Fields of Interest: Gerontology; Neurology; Psychology; Geriatrics, Ophthalmology, Psychiatry, Neuropathology, Neurobiology*

[www.karger.com/itoge](http://www.karger.com/itoge)

### **Interdisciplinary Topics in Gerontology, Vol. 34**

Series Editors: Hof, P.R. (New York, N.Y.); Mobbs, C.V. (New York, N.Y.)  
ISSN 0074-1132

### **Vision in Alzheimer's Disease**

Editors: Cronin-Golomb, A. (Boston, Mass.); Hof, P.R. (New York, N.Y.)

XII + 334 p., 46 fig., 18 tab.,  
hard cover, 2004

CHF 198.- / EUR 141.50 / USD 180.00

Prices subject to change

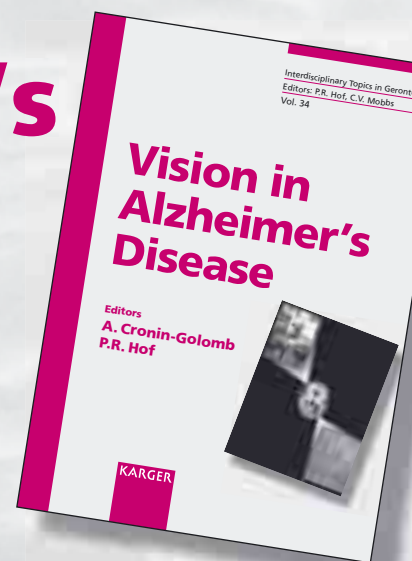
EUR price for Germany, USD price for USA only

ISBN 3-8055-7757-5

# Vision in Alzheimer's Disease

Editors:

**Alice Cronin-Golomb  
Patrick R. Hof**



Visual dysfunction is prevalent in Alzheimer's disease and in related disorders such as posterior cortical atrophy and Down syndrome. The neuropathology of these disorders affects brain areas that process low-level vision as well as higher-order cognition and attention.

This volume spans the range of topics on vision, from structure (retinal and cortical) to function (cortical activation) to behavior (perception, cognition, attention, hallucinations, and everyday activities). The chapters together indicate that lower-level visual deficits can contribute to, or masquerade as, higher-order cognitive impairments. As important, they suggest that vision-based interventions may improve patients' lives. An emerging theme is that the study of variations in visual-system pathology, behavior, and genetic risk will likely provide insights into typical Alzheimer's disease as well as related conditions. The visual disorders of Alzheimer's original case and its cousins of the 21st century have much to teach us about the changing visual system in aging and age-related neurodegenerative disease.

This book is essential reading for neurologists, neuropsychologists, ophthalmologists and optometrists, geriatricians and gerontologists, psychiatrists, occupational therapists and other health professionals who provide diagnosis and clinical care to individuals with Alzheimer's disease and related disorders.

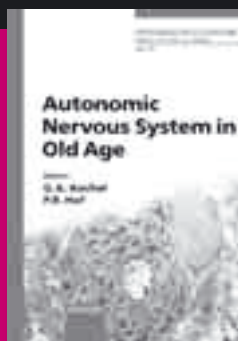
**KARGER**

*A comprehensive and integrated approach to the problems of aging*

## Interdisciplinary Topics in Gerontology

Editors: Patrick R. Hof, Charles V. Mobbs

At a time when interest in the process of aging is driving more and more research, 'Interdisciplinary Topics in Gerontology' offers investigators a way to stay at the forefront of developments. This series represents a comprehensive and integrated approach to the problems of aging and presents pertinent data from studies in animal and human gerontology. In order to provide a forum for a unified concept of gerontology, both the biological foundations and the clinical and sociological consequences of aging in humans are presented. Individual volumes are characterized by a synthetic view of the aging process, novel ideas, and original approaches to healthy aging as well as age-related functional decline.



Vol. 33

### The Autonomic Nervous System in Old Age

Editors: Kuchel, G.A. (Farmington, CT); Hof, P.R. (New York, N.Y.)

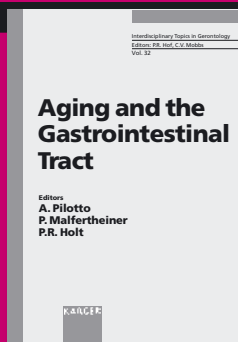
X + 138 p., 11 fig., 9 tab., hard cover, 2004

CHF 148.- / EUR 105.50 / USD 134.75

Prices subject to change

EUR price for Germany, USD price for USA only

ISBN 3-8055-7685-4



Vol. 32

### Aging and the Gastrointestinal Tract

Editors: Pilotto, A. (San Giovanni Rotondo); Malfetheriner, P. (Magdeburg); Holt, P.R. (New York, N.Y.)

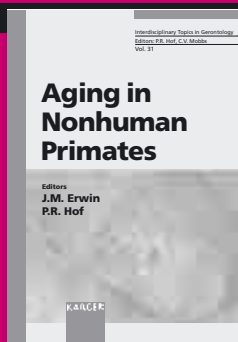
VIII + 218 p., 20 fig., 20 tab., hard cover, 2003

CHF 149.- / EUR 106.50 / USD 129.75

Prices subject to change

EUR price for Germany, USD price for USA only

ISBN 3-8055-7555-6



Vol. 31

### Aging in Nonhuman Primates

Editors: Erwin, J.M. (Rockville, Md.); Hof, P.R. (New York, N.Y.)

VIII + 240 p., 29 fig., 1 in color, 18 tab., hardcover, 2002

CHF 198.- / EUR 141.50 / USD 172.25

Prices subject to change

EUR price for Germany, USD price for USA only

ISBN 3-8055-7312-X

**KARGER**

[www.karger.com/itoge](http://www.karger.com/itoge)

Vol. 1-30 are available  
Please ask for details

## Order Form

### Interdisciplinary Topics in Gerontology

Please send:

\_\_ copy/ies: Vol. 34

**Vision in Alzheimer's Disease**

CHF 198.- / EUR 141.50 / USD 180.00

ISBN 3-8055-7757-5

\_\_ copy/ies: Vol. 33

**The Autonomic Nervous System in Old Age**

CHF 148.- / EUR 105.50 / USD 134.75

ISBN 3-8055-7685-4

\_\_ copy/ies: Vol. 32

**Aging and the Gastrointestinal Tract**

CHF 149.- / EUR 106.50 / USD 129.75

ISBN 3-8055-7555-6

\_\_ copy/ies: Vol. 31

**Aging in Nonhuman Primates**

CHF 198.- / EUR 141.50 / USD 172.25

ISBN 3-8055-7312-X

the book series **Interdisciplinary Topics in Gerontology** on continuation beginning with vol. \_\_\_\_\_

All Karger series are available on continuation. Each new title will be sent upon publication until order is countermanded.

Postage and handling free with prepayment

**For easy ordering or information on other Karger publications see:**

[www.karger.com](http://www.karger.com)

**Payment:**

Check enclosed  Please bill me

Please charge to my credit card

American Express  Diners  Eurocard

MasterCard  Visa

Card No.:

Exp. date:

Name/Address:

Date:

Signature:

Orders can be placed at agencies, bookstores, directly with the publisher, or with any Karger distributor.

**S. Karger AG**, P.O. Box, 4009 Basel (Switzerland)

Fax +41 61 306 12 34, E-Mail [orders@karger.ch](mailto:orders@karger.ch)

**USA:** S. Karger Publishers, Inc., 26 West Avon Road, P.O. Box 529,

Farmington, CT 06085 (USA). Toll free: 1-800-828-5479

**Germany:** S. Karger GmbH, Lörracher Str. 16A, 79115 Freiburg

(Germany)

**France:** Librairie Lugnbühl, 36, bd de Latour-Maubourg,

75007 Paris (France)

**United Kingdom, Ireland:** S. Karger AG, 4 Rickett Street,

London SW6 1RU (United Kingdom)

**Baltic States:** Discripta OÜ, Viru St. 6, 10140 Tallinn (Estonia)

**Gulf Council Countries, Iran, Middle East, North Africa,**

**Turkey:** Trans Middle East Internat. Distribution Co. Ltd., KaSha,

P.O. Box 2376 Telaa' Al-Ali, Amman 11953 (Jordan)

**ASEAN countries, Hong Kong, Taiwan, South Korea:**

APAC Publishers Services Pte. Ltd., 70, Bendemeer Road,

#05-03 Hiap Huat House, Singapore 339 940 (Singapore)

**India, Bangladesh, Sri Lanka:** Panther Publishers Private Ltd.,

33, First Main, Koramangala First Block, Bangalore 560 034 (India)

**Japan:** Karger Japan, Inc., Yushima 5 Bld. 3F, 4-2-3 Yushima,

Bunkyo-ku, Tokyo 113-0034 (Japan)

**Australia:** DA Information Services, 648 Whitehorse Road,

Mitcham, Vic. 3132 (Australia)