

CAMBRIDGE – The Future of Visual Neuroscience and Related Topics

New edition...

Photosensitive Epilepsy

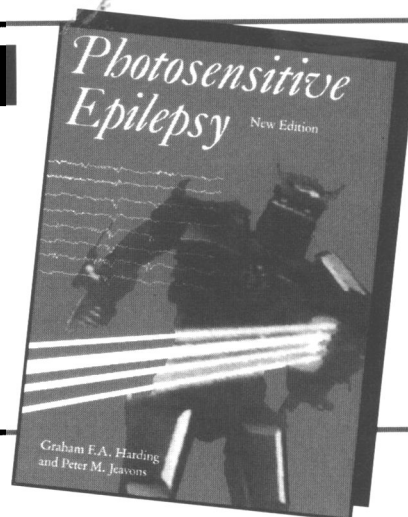
Second Edition

Graham F.A. Harding and Peter M. Jeavons

Thoroughly updated to form the most comprehensive review of knowledge on photosensitive epilepsy in humans. It includes details of many recent studies including drug therapy and the genetics of photosensitivity and also looks at the long term prognosis for the condition.

Clinics in Developmental Medicine 133

1995 192 pp. 1898-68302-6 Hardback \$59.95



Management of Visual Impairment in Childhood

Alistair Fielder, Anthony Best, and Martin Bax, Editors

A practical guide to the day-to-day management of children with the difficult problem of visual impairment. It includes the epidemiology of childhood blindness, prevention, and the effects of impairment on development and behavior.

Clinics in Developmental Medicine 128

1994 223 pp. 45150-7 Hardback \$64.95

Parallel Computing

Principles and Practice

T.J. Fountain

Sets out the principles of parallel computing, explaining why, where, and how parallel computing is used. It is unique in its coverage of both conventional and neural computing and also covers such topics as the fundamental paradigms employed in the field.

1995 360 pp. 45131-0 Hardback \$39.95

Neural Activity and the Growth of the Brain

Dale Purves

Explores the hypothesis that neural activity generated by experience modulates the ongoing growth of the brain during maturation, thus sculpting a unique brain anatomy in each of us according to experience in early life.

Lezioni Lincee Lectures

1994 116 pp. 45496-4 Hardback \$37.95
45570-7 Paperback \$15.95

Brain Control of Responses to Trauma

Nancy J. Rothwell and Frank Berkenbosch, Editors

Looks in depth at the way the brain responds to trauma and subsequently integrates and influences behavioral, metabolic, neurohumoral, cardiovascular, and immune functions.

1994 352 pp. 41939-5 Hardback \$79.95

Blindness and Children

An Individual Differences Approach

David H. Warren

Concludes that many aspects of delayed development are not the result of visual impairment itself, but rather of environmental variables that tend to accompany it.

1994 400 pp. 45109-4 Hardback \$59.95
45719-X Paperback \$22.95

Color and Color Perception

David Hilbert

Defends a form of objectivism that identifies color with a physical property of surfaces—their spectral reflectance. This analysis of color is shown to provide a more adequate account of human color vision than its subjectivist rivals.

CSLI Lecture Notes

1987 141 pp. 0-937073-16-4 Paperback \$11.95

New edition...

Scientific Style and Format

The CBE Manual for Authors, Editors, and Publishers

Sixth Edition

Edward J. Huth

"There is no other book like this for the scientific and technological community. It should be the major desk reference for anyone writing a scientific article or book....Highly recommended."

—Booklist/Reference Books Bulletin

1994 782 pp. 47154-0 Hardback \$34.95

Available in bookstores or from

CAMBRIDGE UNIVERSITY PRESS

40 West 20th Street, New York, NY 10011-4211

Call toll-free 800-872-7423.

MasterCard/VISA accepted. Prices subject to change.

V I S U A L N E U R O S C I E N C E

DETAILED INFORMATION FOR CONTRIBUTORS

AIMS AND SCOPE. *Visual Neuroscience* publishes papers based on original experimental or theoretical work concerned explicitly with the biological substrates of vision, including the neural mechanisms involved in visually guided behavior and perception. Studies based exclusively on clinical, psychophysical, or behavioral methods will be considered only if they speak directly to issues of neural mechanisms. The journal features full-length research reports and review articles as well as short communications.

ORIGINALITY AND COPYRIGHT. To be considered for publication in *Visual Neuroscience* a manuscript cannot have been published previously, nor can it be under review for publication elsewhere. Papers with multiple authors are reviewed with the assumption that all authors have approved the submitted manuscript and concur in its submission to *Visual Neuroscience*. A Transfer of Copyright Agreement must be executed before an article can be published. Government authors whose articles were created in the course of their employment must so certify in lieu of copyright transfer. Authors are responsible for obtaining written permission from the copyright owners to reprint any previously published material included in their article.

MANUSCRIPT SUBMISSION AND REVIEW. An original and three high quality photocopies should be submitted to:

James T. McIlwain, Editor
Visual Neuroscience
Brown University, Box G-M416
Providence, RI 02912, USA

Subsequent correspondence should refer to the Manuscript Reference Number, which will appear on the Acknowledgment Card sent to the corresponding author. Each manuscript will normally be reviewed by at least two referees with relevant scientific experience. Authors may suggest appropriate reviewers, but final selection of referees will be made by the Editor. Reviewers are asked to evaluate manuscripts for their scientific merit and clarity of presentation and to voice any concerns related to the welfare of animal and human subjects. Every effort will be made to notify authors of the reviewers' recommendations within six weeks of receipt of a manuscript.

MANUSCRIPT LENGTH AND EXCESS PAGE CHARGES. Due to space limitations, concisely written papers are more likely to receive favorable review than those judged to be excessively long. Page charges are not levied for articles occupying fewer than 12 printed pages (i.e. double-spaced manuscripts of approximately 40 pages or less, using standard, uniformly spaced typefaces, and including figures), but authors will be asked to pay \$100 for each printed page beyond 12. Editorial review and publication of a paper are not contingent upon the payment of page charges.

Manuscripts submitted as Short Communications should normally occupy no more than 4 printed pages, figures included (approximately 13 manuscript pages).

MANUSCRIPT PREPARATION AND STYLE. Manuscripts must be in English and typed double-spaced on one side only of 8½ × 11" or A4 size good quality paper. Allow margins of at least 1" (20 mm); use a 5-space paragraph indent; do not hyphenate words at the end of lines and do not justify right margins. Minor corrections to the manuscript must be typed or neatly printed in ink; retyping is required for significant changes. Numbers should be spelled out when they occur at the beginning of a sentence; use Arabic numerals elsewhere. Abbreviations should be used sparingly and nonstandard abbreviations should be defined at their first occurrence. Metric system (SI) units should be used. Manu-

scripts that do not conform to the style of *Visual Neuroscience* will be returned without review. Authors of accepted manuscripts will be requested to provide the final text both as hard copy and on diskette.

MANUSCRIPT ELEMENTS AND ORDER. Unless there are obvious and compelling reasons for variation (e.g. review articles, short communications), manuscripts should be organized as follows:

Title page. This is page 1. The title should be concise, informative, and free of abbreviations, chemical formulae, technical jargon, and esoteric terms. This page should include (a) the article's full title, (b) names and affiliations of all authors, (c) the name, mailing address, and telephone number of the corresponding author, (d) the address for reprint requests if different from that of the corresponding author, (e) a short title of 50 characters or less, and (f) a list of the number of manuscript pages, number of tables, and number of figures.

Abstract and keywords page. This is page 2 and should include (a) the article's full title, (b) an abstract of no more than 300 words, and (c) up to 5 keywords or phrases that reflect the content and major thrust of the article. The abstract should give a succinct account of the objective, methods, results, and significance of the research.

Introduction. This section begins on page 3 and should clearly state the objective of the research in the context of previous work bearing directly on the subject. An extensive review of the literature is not usually appropriate.

Methods. This section should be brief but provide sufficient information to permit others to replicate the study. Pertinent details of species, apparatus and equipment, procedures and experimental design should be described.

All experiments involving human subjects must be conducted in accordance with principles embodied in the Declaration of Helsinki (Code of Ethics of the World Medical Association). Experiments involving animal subjects must conform to the principles regarding the care and use of animals adopted by the American Physiological Society and the Society for Neuroscience. The editor may refuse papers that provide insufficient evidence of adherence to these principles.

Results. The results should be presented clearly and concisely, using figures and tables to summarize or illustrate the important findings. Quantitative observations are often more effectively displayed in graphs than in tables.

Discussion. The discussion should summarize the major findings and explain their significance in terms of the study's objectives and relationship to previous, relevant work. This section should present compact, clearly developed arguments rather than wide-ranging speculation or uncritical collation of earlier reports.

Acknowledgments. Use a separate page to recognize the contributions of individuals and supporting institutions.

References. *Visual Neuroscience* uses the author-date reference style of the *Journal of Physiology*. In the text, references should be cited as follows:

as shown by Herrick (1948)
(Gordon et al., 1973)
(Buhl & Peichl, 1986; Gordon et al., 1987)

The alphabetical list of references begins a new page, and must be typed double-spaced. Each in-text citation must have a corresponding reference and vice versa. List works by different authors who are cited within the same parentheses in chronological order, beginning with the earlier work. Journal titles should not be abbreviated. Only published articles and articles in press should appear in this list. Responsibility for the accuracy of references cited lies with the authors. Brief examples:

Journal article

Buhl, E.H. & Peichl, L. (1986). Morphology of rabbit retinal ganglion cells projecting to the medial terminal nucleus of the accessory optic system. *Journal of Comparative Neurology*, 253, 163-174.

Book

Herrick, C.J. (1948). *The Brain of the Tiger Salamander*. Chicago: University of Chicago Press.

Chapter in an edited book

Bonds, A.B. & DeBruyn, E.J. (1986). Inhibition and spatial selectivity in the visual cortex: The cooperative neuronal network revisited. In *Models of Visual Cortex*, ed. Rose, D. & Dobson, V.G., pp. 292-300. Chichester, England: John Wiley & Sons.

For more than one work by the same author(s) published in the same year, use (Jones, 1986a, 1986b) in text and likewise in the reference section.

Tables. Tables should be numbered consecutively with Arabic numerals and each should be typed double-spaced on a separate sheet. All tables are to be grouped together after the references. A short explanatory title and column headings should make the table intelligible without reference to the text. All tables must be cited and their approximate positions indicated in the text.

Figures and legends. The number of figures should be the minimum necessary to make the essential points of the paper. Figures should be supplied no larger than 8 × 10" (approx. 200 × 250 mm) and must be camera-ready. Photographs for halftone reproduction must be on white glossy paper. Figures should be composed to occupy a single column (8.3 cm) or two columns (17 cm) after reduction. Diagrams and illustrations must have a professional appearance and be typed or drawn with sharp, black lettering to permit reduction. To assure legibility, letters, numbers, and symbols on figures should have a minimum height of 1 mm when reduced. Photomicrographs must include a calibration bar; if symbols are used on micrographs, they must contrast sufficiently with the background to be clearly visible when printed. Photocopies of micrographs are not acceptable for review purposes.

Artwork should normally be in black and white; if authors have color figures, the publisher will provide a price quotation for the additional production costs. All figures must be identified on the back with the short title of the paper, figure number, and figure orientation (top or bottom). Preferably, figures should be mounted on heavy sheets of the same size as the manuscript. Four complete sets of figures should be carefully packaged in protective envelopes, one to accompany each copy of the manuscript. Each figure must be cited and its approximate position clearly indicated within the text.

Figures must be numbered consecutively with Arabic numerals and be accompanied by a descriptive caption typed double-spaced on a separate sheet. The captions, collected at the end of the manuscript, should concisely describe the figure and identify any symbols and/or calibration bars.

COPYEDITING AND PAGE PROOFS. The publisher reserves the right to copyedit manuscripts to conform to the style of *Visual Neuroscience*. The corresponding author will receive page proofs for final proofreading. No rewriting of the final accepted manuscript is permitted at the proof stage, and substantial changes may be charged to the authors.

OFFPRINTS. The corresponding author will receive 25 free article offprints. A form will accompany the page proofs allowing orders for complete copies of the issue and for the purchase of additional offprints. Offprint requirements of all coauthors should be included on this form. Orders received after issue printing will be subject to a 50% reprint surcharge.

V I S U A L N E U R O S C I E N C E

Volume 12

May/June 1995

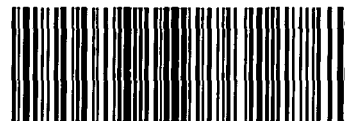
Number 3

CONTENTS

Research Articles

- JOSEF AMMERMÜLLER,
RETO WEILER, AND
IDO PERLMAN 403 Short-term effects of dopamine on photoreceptors, luminosity- and chromaticity-horizontal cells in the turtle retina
- YVONNE SCHMITZ,
KONRAD KOHLER, AND
EBERHART ZRENNER 413 Evidence for calcium/calmodulin dependence of spherule retraction in retinal horizontal cells
- DOM MICELI,
JACQUES REPÉRANT,
JEAN-PAUL RIO, AND
MONIQUE MEDINA 425 GABA immunoreactivity in the nucleus isthmo-opticus of the centrifugal visual system in the pigeon: A light and electron microscopic study
- WILLIAM A. HARE AND
W. GEOFFREY OWEN 443 Similar effects of carbachol and dopamine on neurons in the distal retina of the tiger salamander
- ANDREAS F. MACK,
STEVEN L. BALT, AND
RUSSELL D. FERNALD 457 Localization and expression of insulin-like growth factor in the teleost retina
- JACK B. CALDERONE AND
GERALD H. JACOBS 463 Regional variations in the relative sensitivity to UV light in the mouse retina
- FLORENTIN WÖRGÖTTER AND
KLAUS FUNKE 469 Fine structure analysis of temporal patterns in the light response of cells in the lateral geniculate nucleus of cat
- MICHAEL J. SHIH,
WILLIAM W. WEINER,
KATHLEEN KIER WHEATLEY,
JENNIFER L. DEPONCEAU,
MARY ANNE SYDLIK, AND
STEVEN C. CHAMBERLAIN 485 Development of the lateral eye of American horseshoe crabs: Visual field and dioptric array
- AKIKO YOSHIDA,
NIKOLAY POZDNYAKOV,
LOAN DANG, STEPHEN M. ORSELLI,
VENKAT N. REDDY, AND
ARI SITARAMAYYA 493 Nitric oxide synthesis in retinal photoreceptor cells
- RALF ENZ AND JOACHIM BORMANN 501 Expression of glycine receptor subunits and gephyrin in single bipolar cells of the rat retina
- RONALD M. HANSEN AND
ANNE B. FULTON 509 Dark-adapted thresholds at 10- and 30-deg eccentricities in 10-week-old infants
- NEAL S. PEACHEY, YOSHINOBU GOTO,
ALEXANDER B. QUIAMBAO, AND
MUAYYAD R. AL-UBAIDI 513 Functional consequences of oncogene-induced photoreceptor degeneration in transgenic mice
- LOUIS A. BENEVENTO AND
JOHN D. PORT 523 Single neurons with both form/color differential responses and saccade-related responses in the nonretinotopic pulvinar of the behaving macaque monkey
- ROBERT G. SMITH 545 Simulation of an anatomically defined local circuit: The cone-horizontal cell network in cat retina
- K.E. BINNS AND T.E. SALT 563 Excitatory amino-acid receptors modulate habituation of the response to visual stimulation in the cat superior colliculus
- PSYCHE LEE AND WILLIAM C. HALL 573 Interlaminar connections of the superior colliculus in the tree shrew, II: Projections from the superficial gray to the optic layer
- GARY BLASDEL,
KLAUS OBERMAYER, AND
LYNNE KIORPES 589 Organization of ocular dominance and orientation columns in the striate cortex of neonatal macaque monkeys

CAMBRIDGE
UNIVERSITY PRESS



0952-5238(199505)12:3;1-E