A comprehensive and in-depth review
by leading experts

Medical Retina

Editors
Francesco Bandello
Giuseppe Querques

Contents

Foreword: Guarnaccia, G.
Preface: Bandello, F.; Querques, G.

Embryology and Anatomy of the Baby's Posterior Segment: Trese, M.T.

Blood-Retinal Barrier and Its Relevance in Retinal Disease: Cunha-Vaz, J.

Imaging the Retina: Cunha-Vaz, J.

Do We Need Fluorescein Angiography? Noninvasive Imaging of the Eye Fundus: Cunha-Vaz, J.

Treatment of Retinopathy of Prematurity: Capone, A., Jr.

Retinal Development and the Pathogenesis of Retinopathy of Prematurity: Capone, A., Jr.

Retinopathy of Prematurity: Cases and Diagnosis: Trese, M.T.

Retinopathy of Prematurity: Laser Treatment and Intravitreal Injections: Trese, M.T.

Vitreoretinal Surgery for Retinopathy of Prematurity: Trese, M.T.

Proliferative Vitreoretinopathy: Mateo, C.; Burés-Jelstrup, A.

Inherited Retinal Pigmentary Degenerations and Inherited Macular Dystrophies: Navarro, R.; Burés-Jelstrup, A.

Pediatric Vitreoretinal Diseases Not Associated with Prematurity: Capone, A., Jr.

Other Vitreoretinal Pathologies in Infants: Trese, M.T.

Vascular Anomalies of the Fundus Oculi: Diagnosis and Treatment: Lanzetta, P.; Veritti, D.

Retinal Artery Occlusion: Bandello, F.; Battaglia Parodi, M.

Retinal Artery Occlusion and Acute Choroidal Ischemia: Gaudric, A.

Ocular Ischemic Syndrome: Bandello, F.; Battaglia Parodi, M.

Diabetic Retinopathy: Williams, G.A.

Diabetic Macular Edema: Williams, G.A.

Proliferative Diabetic Retinopathy: Surgical Treatment and Handling of Intraoperative and Postoperative Complications: García-Arumí, J.; Boixadera, A.; Martínez-Castillo, V.; Zapata, M.A.

Retinal Venous Occlusions: Diagnosis and Choice of Treatments: García-Arumí, J.; Badal, J.; Zapata, M.; Boixadera, A.; Martínez-Castillo, V.

Vitreectomy for Macular Hole: Gaudric, A.; Todayoni, R.

Pathogenesis of Age-Related Macular Degeneration: Zarbin, M.A.

Treatment of Dry Age-Related Macular Degeneration: Zarbin, M.A.; Rosenfeld, P.J.

Myopic Macula: Mateo, C.; Burés-Jelstrup, A.

Fine-Needle Aspiration Biopsy in Intraocular Tumors: Pelayes, D.E.

Subject Index
Ophthalmic Research

Journal for Translational and Clinical Research


Editors
Borja Corcóstegui, Barcelona
David E. Pelayes, Buenos Aires
Uwe Pleyer, Berlin

Editorial Board
J. Alio, Alicante
A.J. Augustin, Karlsruhe
D. Balasubramanian, Hyderabad
F. Bandello, Milano
A. Bialasiewicz, Doha
D. Borchman, Louisville, Ky.
A. Bringmann, Leipzig
T. Das, Hyderabad
D. Goldblum, Basel
G. Guarnaccia, Lugano
K. Hegde, Baltimore, Md.
J. Hua, Boston, Mass.
N. Ibaraki, Shimotsuke-City
T. Ishibashi, Fukuoka
J. Jonas, Mannheim
D. Lam, Guangzhou
C. Meyer, Olten
G.A. Moviglia, Buenos Aires
N. Osborne, Oxford
Y. Ozawa, Tokyo
M. Rehak, Leipzig
G. Richard, Hamburg
K. Sasaki, Uchinada
L. Schmetterer, Vienna
J. Smith, Adelaide, S.A.
P. Söderberg, Uppsala
J. Trevithick, London, Ont.
K. Tsubota, Tokyo
A. Wegener, Bonn
J.O. Zárate, Buenos Aires
Guidelines for Authors

Submission

Only original papers written in English are considered and should be submitted using the online submission website:

www.karger.com/ore

or as an e-mail attachment (the preferred word-processing package is MS-Word) to the Editorial Office:

Editorial Office Ophthalmic Research
S. Karger AG
P.O. Box
CH-4009 Basel (Switzerland)
Tel +41 61 306 1356
Fax +41 61 306 1434
E-Mail ore@karger.com

Types of Papers

(1) The main body of papers to be published will be ‘Original Papers’ on experimental research. (2) ‘Review Papers’ of up to 30 manuscript pages will be published from invited authors and by direct submission. In both cases the manuscripts will be subject to peer reviewing. Review papers will be published free of charge. (3) ‘Mini Reviews’ of up to 10 manuscript pages (double-spaced, including an abstract of max. 200 words and references) should contain an easy-to-read literature overview on a specific topic. Papers are either invited or may be submitted for consideration. Please submit your mini review online. (4) ‘Short Communications’ of up to 3–4 pages dealing with new original concepts or technical approaches will be published at short notice. (5) Ophthalmic Research has a tradition in publishing ‘Supplements’ which can be published under the responsibility of guest editors. Requests for such supplements should be addressed to the Editor-in-Chief.

Conditions

All manuscripts are subject to editorial review. Manuscripts are received with the explicit understanding that they are not under simultaneous consideration by any other publication except in abstract form. Submission of an article for publication implies transfer of the copyright from the author to the publisher upon acceptance. Accepted papers become the permanent property of Ophthalmic Research and may not be reproduced by any means, in whole or in part, without the written consent of the publisher. It is the author’s responsibility to obtain permission to reproduce illustrations, tables, etc. from other publications. Research involving live human and animal subjects must have been approved by the author’s institutional review board. Ophthalmic Research requires that in the Methods section of their manuscript the authors state that they adhered to the tenets of the Declaration of Helsinki or the NIH statement for the use of animals in Research.

Conflicts of Interest

Authors are required to disclose any sponsorship or funding arrangements relating to their research and all authors should disclose any possible conflicts of interest. Conflict of interest statements will be published at the end of the article.

Arrangement

Title page: The first page of each paper should indicate the title, the authors’ names, the institute where the work was conducted, and a short title for use as running head. Full address: The exact postal address of the corresponding author complete with postal code must be given at the bottom of the title page. Please also supply phone and fax numbers, as well as e-mail address.

Key words: Please supply 3–10 key words in English that reflect the content of the paper.

Abstract: Each paper needs an abstract of up to 10 lines.

Footnotes: Avoid footnotes.

Tables and illustrations: Tables and illustrations (both numbered in Arabic numerals) should be sent in separate files. Tables require a heading and figures a legend, also in a separate file. Due to technical reasons, figures with a screen background should not be submitted. When possible, group several illustrations in one block for reproduction (max. size 180 × 225 mm). Black and white half-tone and color illustrations must have a final resolution of 300 dpi after scaling, line drawings one of 800–1200 dpi.

Color Illustrations

Online edition: Color illustrations are reproduced free of charge. In the print version, the illustrations are reproduced in black and white. Please avoid referring to the colors in the text and figure legends.

Print edition: Up to 6 color illustrations per page can be integrated within the text at CHF 800.00 per page.

References: In the text identify references by Arabic numerals [in square brackets]. Material submitted for publication but not yet accepted should be noted as [unpublished data] and not be included in the reference list. The list of references should include only those publications which are cited in the text. Do not alphabetize; number references in the order in which they are first mentioned in the text. The surnames of the authors followed by initials should be given. There should be no punctuation other than a comma to separate the authors. Preferably, please cite all authors. Abbreviate journal names according to the Index Medicus system. Also see International Committee of Medical Journal Editors: Uniform requirements for manuscripts submitted to biomedical journals. (www.icmje.org).

Examples


(b) Papers published only with DOI numbers: Theoharis TC, Boucher W, Spear K: Serum interleukin-6 reflects disease severity and osteoporosis in mastocytosis patients. Int Arch Allergy Immunol DOI: 10.1159/000063858.


Digital Object Identifier (DOI)

S. Karger Publishers supports DOIs as unique identifiers for articles. A DOI number will be printed on the title page of each article. DOIs can be used in the future for identifying and citing articles published online without volume or issue information. More information can be found at www.doi.org.

Supplementary Material

Supplementary material is restricted to additional data that are not necessary for the scientific integrity and conclusions of the paper. Please note that all supplementary files will undergo editorial review and should be submitted together with the original manuscript. The Editors reserve the right to limit the scope and length of the supplementary material. Supplementary material must meet production quality standards for Web publication with out the need for any modification or editing. In general, supplementary files should not exceed 10 Mb in size. All figures and tables should have titles and legends and all files should be supplied separately and named clearly. Acceptable files and formats are: Word or PDF files, Excel spreadsheets (only if the data cannot be converted properly to a PDF file), and video files (.mov, .avi, .mpeg).

Author’s Choice

Karger’s Author’s Choice™ service broadens the reach of your article and gives all users worldwide free and full access for reading, downloading and printing at www.karger.com. The option is available for a one-time fee of CHF 3,000.00, which is a permissible cost in grant allocation. More information can be found at www.karger.com/authors_choice.

NIH-Funded Research

The U.S. National Institutes of Health (NIH) mandates under the NIH Public Access Policy that final, peer-reviewed manuscripts appear in its digital database within 12 months of the official publication date. As a service to authors, Karger submits the final version of your article on your behalf to PubMed Central. For those selecting our premium Author’s Choice™ service, we will send your article immediately upon publishing, accelerating the accessibility of your work without the usual embargo. More details on NIH’s Public Access Policy is available at http://publicaccess.nih.gov/policy.htm

Self-Archiving

Karger permits authors to archive their pre-prints (i.e. pre-refereeing) or post-prints (i.e. final draft post-refereeing) on their personal or institution’s servers, provided the following conditions are met: Articles may not be used for commercial purposes, must be linked to the publisher’s version, and must acknowledge the publisher’s copyright. Authors selecting Karger’s Author’s Choice feature, however, are also permitted to archive the final, published version of their article, which includes copyediting and design improvements as well as citation links.

Page Charges

There are no page charges for papers of 3 or fewer print pages (including tables, illustrations and references). Each additional complete or partial page is charged to the author at CHF 325.00. The allotted size of a page is equal to approx. 8 double-spaced manuscript pages (including abstract, tables, illustrations and references).

Proofs

Unless indicated otherwise, proofs are sent to the corresponding author and should be returned with the least possible delay. Alterations other than the correction of printer’s errors are charged to the author.

Reprints

Order forms and a price list are sent with the proofs. Orders submitted after the issue is printed are subject to considerably higher prices.
DOG 2014

112th DOG Congress
September 25-28, 2014, CCL, Leipzig

Dates:
Deadline for early bird registration: 7 July 2014
Final Scientific Program available at dog-kongress.de: August 2014

Information and congress registration: dog-kongress.de

DOG-Update
– State of the Art 2014
Proven experts will present the most important publications of the past year in the various subspecialties of ophthalmology on Saturday and Sunday in 12 forty-five-minute sessions (in German language).

Excellence needs Education and Examination
Key players in national and international ophthalmological education and examination will inform residents and young ophthalmologists on the German, European and International options of extending education and examination beyond the local training programs and the German face-to-face exam.

"Qualification: Our Commitment!"
Opening Ceremony

Outstanding Experts
– Current Topics
The Keynote Lectures

Thursday, 25.9.2014
Professor Franz Grehn, Würzburg

Friday, 26.9.2014
Professor Mark Blumenkranz, Stanford, USA

Saturday, 27.9.2014
Professor Rupert Menapace, Vienna

Opening Lecture: Jens Gerhardt (BMW Group)
Head of the BMW Training Academy
Jens Gerhardt will show, using the qualification requirements at BMW as an example, how the global leader in premium car production ensures that quality and competitive advantage are maintained as well as further sharpened by the continual development of knowledge.

Congress Organization and Organizer of the Industrial Exhibition
INTERPLAN AG
Office Hamburg
Kaiser-Wilhelm-Straße 93, 20355 Hamburg
Tel. +49 40 32 50 92 59
Fax +49 40 32 50 92 44
dog@interplan.de

DOG
Platenstraße 1, 80336 Munich
Tel. +49 89 55 05 76 80
Fax +49 89 55 05 76 811
geschaftsstelle@dog.org
www.dog.org
Contents

See the journal website for contents
14th EURETINA Congress
LONDON
11-14 September 2014
The biomedical themes of the Karger Gazette are topical, urgent, exciting. Its articles, written by experts from all over the world, provide a wide audience with the basic issues, new findings and controversies in a lively and readable style. Alongside invited contributions, each number carries attractively presented support material, such as informative graphics, historical summaries, interviews, or portraits of individuals and institutions. The Karger Gazette is published in newspaper format and appears once a year.

And what’s more – it’s free!

To see behind the cover, please write or e-mail us, and we’ll start your subscription with the latest issue.

www.karger.com/gazette

Current issue:

Anatomy and Art through the Ages

with articles on

– Andreas Vesalius, his times and his ground-breaking atlas 'De humani corporis fabrica'
– Why history of medicine matters
– Art and the science of appearance
– Medical art and illustration
An attractive selection of key topics on anterior segment surgery

Cataract

Editor
José L. Güell

In the ‘ESASO Course Series’, the essentials of the courses of the European School for Advanced Studies in Ophthalmology (ESASO) are made available in print.

The topics of this volume on cataract surgery range from prevention to state-of-the-art diagnostic techniques and the latest surgical treatment options for many eye conditions such as diabetic retinopathy or rhegmatogenous retinal detachment.

Useful basics, surgical principles, challenging cases, as well as the most advanced femtosecond assisted cataract surgeries are discussed. Different styles of intraocular lenses (IOL) such as phakic IOL in standard and special situations, or ‘iris claw’ IOLs are further presented.

Renowned eye surgeons have contributed their knowledge to make this volume a device to give practical support to specialists as well as trainees in cataract and refractive surgery.

Contents

• Preface: Güell, J.L.
• Cataract Surgery: An Update on Basics and Surgical Tips: Tjia, K.
• Multifocal and Accommodative Intraocular Lenses: Bellucci, R.
• An Introduction to Intraocular Lenses: Material, Optics, Haptics, Design and Aberration: Bellucci, R.
• Femtolaser Cataract Surgery: Nagy, Z.Z.
• Laser-Assisted Cataract Surgery with LenSx: Buratto, L.
• Phakic Intraocular Lenses: Malecaxe, F.; Portiere, M.; Cassagne, M.
• Phakic Intraocular Lenses in Keratoconus: Güell, J.L.; Elies, D.; Verdaguer, P.; Gris, O.; Manero, F.; Morral, M.
• Laser Corneal Refractive Surgery: An Update: Elies, D.; Güell, J.L.; Verdaguer, P.; Gris, O.; Manero, F.
• Intracorneal Refractive Surgery: Lenses and Ring Segments: Pallikaris, I.G.

Author Index/Subject Index
Current Concepts in Uveal Melanoma

Editors
Martine J. Jager
Laurence Desjardins
Tero Kivelä
Bertil E. Damato

Uveal melanoma is an aggressive form of cancer that can involve the iris, the ciliary body, and/or the choroid, which is the main location of this tumor. Patients often wish to be informed about treatment choices and the results of different approaches. Important current clinical questions are whether a biopsy should be taken of choroidal melanomas, what should be done with this biopsy, and whether high-risk patients should be screened regularly.

This volume describes the clinical characteristics of uveal melanoma along with the different current techniques available for treatment, such as radioactive plaque treatment, proton beam therapy, and local tumor resection. Furthermore, techniques for taking biopsies and characterizing biopsy material are demonstrated. Future therapies such as anti-VEGF treatment and options for the treatment of metastases are also discussed.

Residents with an interest in ocular oncology, ophthalmologists or physicians dealing with uveal melanoma, as well as patients wishing to know more about this malignancy will find a topical update on uveal melanoma in this publication.

Contents

Diagnosis of Uveal Melanoma: Kivelä, T.
Treatment Selection for Uveal Melanoma: Damato, B.E.
Ruthenium-106 Brachytherapy: Pêes, J.
Stereotactic Photon Beam Irradiation of Uveal Melanoma: Zehetmayer, M.
Local Resection of Uveal Melanoma: Damato, B.E.
Biopsies in Uveal Melanoma: Midena, E.; Parrozzani, R.

Analysis of Intraocular Biopsies: Coupland, S.E.
Immunotherapy of Uveal Melanoma: Bosch, J.J.
Genetic Determinants of Uveal Melanoma: Couturier, J.; Saule, S.
Therapeutic Options in Metastatic Uveal Melanoma: Mariani, P.; Servois, V.; Piperno-Neumann, S.
This publication, a conjoint effort by ocular oncologists and radiation oncologists, comprises ten chapters covering basic and advanced radiation therapy techniques followed by specific indications by location (uveal, retinal, orbital tumors, eyelid and conjunctival tumors) and complications of radiation therapy. A chapter on investigational use of radiation therapy for age-related macular degeneration is also included. The contributions are illustrated by photographs, imaging studies, and detailed treatment plans to clearly convey the fundamental concepts. Additional tables, flow diagrams, graphs or charts support the understanding of the subject.

To ocular oncologists, radiation physicists, radiation therapists, and radiation oncologists this volume is a comprehensive source of authoritative information on the subject of ocular and adnexal radiation therapy.

Contents

Foreword: Lommatzsch, P.K.

- Teletherapy: Advanced Techniques: Balagamwala, E.H.; Singh, A.D.; Macklis, R.
- Brachytherapy: Marwaha, G.; Macklis, R.; Singh, A.D.; Wilkinson, A.
- Radiation Therapy: Retinal Tumors: Sethi, R.V.; MacDonald, S.M.; Kim, D.Y.; Mukai, S.
- Radiation Therapy: Age-Related Macular Degeneration: Medina Mendez, C.A.; Ehlers, J.P.
- Radiation Therapy: Conjunctival and Eyelid Tumors: Aronow, M.E.; Singh, A.D.
- Radiation Therapy: Orbital Tumors: Marwaha, G.; Macklis, R.; Singh, A.D.
- Radiation Therapy: Anterior Segment Complications: Medina Mendez, C.A.; Singh, A.D.

Subject Index

The easiest way to order: www.karger.com/deoph
Original Papers

1 Meta-Analysis of Association between the –2578C/A Polymorphism of the Vascular Endothelial Growth Factor and Retinopathy in Type 2 Diabetes in Asians and Caucasians
   Wang, H.; Cheng, J.-W.; Zhu, L.-S.; Wei, R.-L.; Cai, J.-P.; Li, Y.; Ma, X.-Y. (Shanghai)

9 Influence of Primary Diagnosis and Complications on Visual Outcome in Patients Receiving a Boston Type 1 Keratoprosthesis
   de Rezende Couto Nascimento, V. (Barcelona/Belo Horizonte); de la Paz, M.F.; Rosandic, J. (Barcelona); Stoiber, J.; Seyeddain, O.; Grabner, G. (Salzburg); Alvarez de Toledo, J.; Barraquer, R.I.; Michael, R. (Barcelona)

17 The Effect of TC14012 on Alkali Burn-Induced Corneal Neovascularization in Mice
   Shen, M.; Yuan, F.; Jin, J.; Yuan, Y. (Shanghai)

25 Fluorescein Angiography and Spectral-Domain Optical Coherence Tomography for Monitoring Anti-VEGF Therapy in Myopic Choroidal Neovascularization
   Iacono, P. (Rome); Battaglia Parodi, M. (Milan); Papayannis, A. (Conegliano); Kontadakis, S.; Da Pozzo, S.; Cascavilla, M.L.; La Spina, C. (Milan); Varano, M. (Rome); Bandello, F. (Milan)

32 Cytokines in Tears during the Secondary Keratoconjunctival Responses Induced by Allergic Reaction in the Nasal Mucosa
   Pelikan, Z. (Breda)

43 Effects of Multiple Doses of Voriconazole on the Vision of Healthy Volunteers: A Double-Blind, Placebo-Controlled Study
   Zrenner, E. (Tübingen); Tomaszewski, K.; Hamlin, J.; Layton, G.; Wood, N. (Sandwich)

52 Erratum