Joint Event on

allied academies

19th International Conference on

OCULAR PHARMACOLOGY AND EYE CARE

&

World Congress on

PUBLIC HEALTH, EPIDEMIOLOGY AND NUTRITION

September 03-04, 2018 | Lisbon, Portugal

DAY 1

Keynote Forum

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September 03-04, 2018 | Lisbon, Portugal
Ingrid Kreissig, Arch Gen Intern Med 2018, Volume 2 | DOI: 10.4066/2591-7951-C4-010

Ingrid Kreissig
University of Heidelberg, Germany

Biography

Ingrid Kreissig is currently a Professor at Department of Ophthalmology Univ. Mannheim-Heidelberg, Mannheim, Germany. She is also serving as Adjunct Professor at New York Hospital-Cornell Medical Center, New York. Her specialization includes, posterior segment of the eye: St. Gall/Switzerland, Bonn/Germany, and New York Hospital-Cornell Medical Center/USA. During 1979-2000, she has been the Chairman of Univ. Tuebingen/Germany. She has published more than 404 papers, those are been published in national and international journals of ophthalmology, basically on topics such as surgery of retinal detachment with long-term follow-up of anatomic and functional results, cryopexy histology, tumors, AMD, diabetic retinopathy, and intravitreal pharmacotherapy. She has also published many books.

Ingrid.Kreissig@medma.uni-heidelberg.de

RETINAL DETACHMENT SURGERY: STARING WITH GONIN AND ITS SUBSEQUENT CHANGES

The evolution of the surgical techniques for reattaching a primary retinal detachment will be analysed from Gonin in 1930 up to present. Publications about the various options for repair are reviewed. There had been a change from a surgery of the entire retinal detachment to a surgery limited to the area of the break and a change from extraocular to an intraocular approach. In the beginning of the 21st century four major surgical techniques for repair of a primary retinal detachment have evolved. But all of them have still one nominator in common: to find and close the retinal break which caused the detachment, and which would cause a redetachment, if not sealed off sufficiently. To find and close sufficiently the break(s) in a primary retinal detachment has been accompanied the efforts of retinal detachment surgeons during the past 85 years. However, today four postulates must be fulfilled for an adequate and optimal retinal detachment surgery: the retinal reattachment should be obtained with the first operation, the procedure should have a minimum of morbidity, not harbour secondary complications jeopardizing regained visual acuity and be performed on a small budget in local anaesthesia.

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John L Barbur, Arch Gen Intern Med 2018, Volume 2 | DOI: 10.4066/2591-7951-C4-010

John L Barbur
University of London, UK

Biography

John Barbur is Professor of Optics & Visual Science and Director of the Applied Vision Research Centre at City University London. John trained at Imperial College where he studied Physics, Applied Optics and Vision Science. John's research interests cover both fundamental studies of visual mechanisms as well as applied and clinical research. He has pursued the development of research instrumentation and new measurement techniques and this has resulted in new methods and instrumentation for analysis of pupil response components, spatial vision and chromatic sensitivity and the measurement of scattered light in the eye. Prof Barbur has been closely involved with the activities of the Applied Vision Association, the Colour Group of Great Britain, the International Colour Vision Society. Studies carried out over several years by Prof Barbur and his colleagues at City University London formed the basis for the formation of the Applied Vision Research Centre in 1986. Several students, with both clinical and basic science backgrounds have been trained in Prof Barbur's laboratory over 30 years and have found employment in industry, hospitals and universities. Professor Barbur is a Fulbright Scholar and spent time as Visiting Professor at the Center for Visual Science at the University of Rochester, N.Y. where he worked on colour vision, visual performance in the mesopic range and adaptive optics.

j.l.barbur@city.ac.uk

COLOUR VISION IN NORMAL AGING, CONGENITAL DEFICIENCY AND RETINAL DISEASE

Significant advances in our understanding of the genetics of colour vision make it possible to account for a great deal of the observed variability in both 'normal' trichromatic colour vision and in congenital colour deficiency. Recent developments in colour assessment techniques yield reduced within subject variability and hence more accurate assessment of both red/green (RG) and yellow/blue (YB) loss of chromatic sensitivity with reliable classification of the subject's class of colour vision (i.e., normal trichromatic colour vision, deutan-, protan- or tritan-like and acquired deficiency). Colour assessment is now easier to carry out and the severity of colour deficiency can also be quantified more accurately with reliable separation of RG and YB loss leading to clear distinction between congenital and acquired loss. A third element that has contributed to the recent flurry of interest in colour vision is the availability of reliable data that describe the effect of normal aging on RG and YB chromatic sensitivity. Such advances have made colour vision assessment more attractive as a diagnostic tool for early detection of diseases of the retina such as age-related macular degeneration (AMD) and glaucoma and systemic diseases that can also affect visual function such as diabetes. In this lecture I propose to review the outcome of conventional tests of colour vision and to present data obtained on the CAD test that describe the variability observed within normal trichromats and in subjects with congenital deficiency. This improved understanding has had significant effects on colour assessment and the establishment of minimum colour vision requirements within visually-demanding occupational environments. Studies that led to colour vision changes as a result of normal ageing and the application of these to early detection of acquired loss of chromatic sensitivity will be discussed. Finally, results of extensive, clinical studies designed to detect the earliest changes in colour vision in diabetes, glaucoma and AMD will also be presented.

Recent publications:

1. Neitz J and Neitz M The genetics of normal and defective color vision. Vision Res. 2011. 51(7):633-651.
2. Neitz M and Neitz J (2000) Molecular genetics of color vision and color vision defects. Arch. Ophthalmol. 118(5):691- 700.
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4. Paramei G V and Oakley B (2014) Variation of color discrimination across the life span. J. Opt. Soc. Am. A Opt. Image Sci. Vis. 31(4):A375-A384.
5. Barbur J L and Rodriguez Carmona M (2015) Color vision changes in normal aging, in Handbook of Color Psychology. Cambridge University Press: Cambridge. 180-196. ISBN 9781107043237.