

# August 2008



50 years of clinical electrophysiology of vision



from the Secretary-General

2008 is the final year of my first 4-year term of office as Secretary-General of ISCEV. Thank you ISCEV! It. has been an eventful four years and I have gained so much from. the generous support. and friendship of so many of our members. I look forward to continuing for a second term with thanks to our President, Board and Membership, which have ratified my nomination for a second term.

The 50<sup>th</sup> anniversary of ISCEV was celebrated in style in Morgantown, West Virginia at our annual International Symposium (9–14 July). As well as offering wonderful West Virginian hospitality, our hosts J Vernon Odom and Monique Leys brought our founders, mentors and teachers to life through the photos and memories presented by them and by and all of those who supported their challenges. Now we look forward to launching the next 50 years of ISCEV with information for the current elections and highlights of our plans from the Board of Directors and Membership Meetings.

# THE 2008 ISCEV ELECTIONS

The ISCEV members present at the annual Membership meeting have unanimously reelected Prof Colin Barber, ISCEV Vice-President for Europe and Africa, to serve a 2<sup>nd</sup> four-year term of office. Members also accepted nominations and voted to reduce the slate of nominees to a maximum of two candidates for four positions on the ISCEV Board: Director of Standards, Director of International Communications and Memberat-Large (two positions open for election or reelection) This NewsExtra contains the candidates' statements and information for voting members (pages 2–8). The membership meeting also enjoyed three excellent invitations to host our 2011 Symposium in the Americas. We will vote to select one venue from the two finalist (see pages 9-10). Numbered ballots have been sent by airmail to be returned by post or fax to the Secretary-General. For details see the ISCEV bye-laws <<u>ISCEV.org/varia/bylaws.html</u>>.

# Voting Deadline: 12 September, 2008. Please use your vote!

#### HIGHLIGHTS OF THE 2008 MEETINGS

The 2008 Symposium included meetings of the ISCEV Board of Directors, the Annual

Membership meeting, the Editorial Board (Documenta Ophthalmologica) and several active Standards Committees.

The ISCEV Standard for Electroretinography (2008 revison) as posted on the ISCEV website was approved in principal subject to minor changes. The ERG Standards Committee will post a final draft ahead of publication.

Plans for ISCEV approved extended protocols are advancing; the committee will request input from the membership in the near future.

This year, the first two ISCEV small grants were awarded for laboratory visits (see pg 9)

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NewsExtra updates the annual Newsletter of the International Society for Clinical Electrophysiology of Vision



I am honored to be nominated as Director of Standards. ISCEV has been a major part of my life since 1974, and I was privileged to help initiate the original ERG Standard as well as some others that followed. These Standards have had enormous impact world-wide, in making clinical electrophysiology both accessible and uniform, and they have brought ISCEV recognition as the arbiter of quality. It is important both to our society, and to our discipline, that these basic Standards be maintained as accessible and practical documents, as well as documents that keep up with expanding knowledge of visual physiology. ISCEV also needs test protocols beyond the Standards, to serve more specialized applications. We are presently developing (with Prof. Zrenner) a set of protocols for procedures such as a-wave analysis, S-cone testing, etc. that are critical for specific diseases, and for drug testing and therapeutic monitoring. The combination of a fundamental Standard, and guidance for more sophisticated testing, can serve both the clinical lab which works under practical constraints and the research lab which seeks to delve

more deeply into pathophysiology. I am sensitive to both needs, as a neurophysiologist and a practicing retina specialist. I will work to insure that all of our Standards and protocols remain effective and current.

## **Current Position:**

Professor of Ophthalmology (past Chair), Stanford University School of Medicine

## **Training and Experience:**

Harvard College AB 1962; Harvard Medical School MD 1966; Mass Eye & Ear Infirmary (ophthalmology)

Research training at NIH (neurophysiology) 1967-1970

ISCEV: Vice President for Americas; Editorial Board of Doc Ophthal; first Director of Standards

Other memberships: ARVO, AAO, Macula Society, Retina Society, Cogan Ophthalmic History Society

# Selected books and articles (roughly 250 peer-reviewed):

Marmor and Ravin: The Eye of the Artist. Mosby-Year Book, 1997

Marmor and Wolfensberger: The Retinal Pigment Epithlium: Function and Disease. Oxford, 1998

Marmor and Gorman: Membrane potential as the sum of ionic and metabolic components. Science (1970) 67: 65-67

Lurie and Marmor: Analysis of the response properties and light integrating characteristics of the c-wave in the rabbit eye. *Exp Eye Res* (1980): 31: 335-349

Marmor: Large rod-like photopic signals in a possible new form of congenital night blindness. *Doc Ophthalmol.* (1989) 71: 265-269 [original description of enhanced S-cone syndrome]

Luu et al: Acute effects of sildenafil on the electroretinogram and multifocal electroretinogram. *Am J Ophthalmol* (2001)132:388-94

Chappelow and Marmor: Effects of pre-adaptation conditions and ambient room lighting on the multifocal ERG. *Doc Ophthalmol* (2002) 105:23-31

Marmor et al (for the Amer. Acad. of Ophthalmol.) Recommendations on screening for chloroquine and hydroxychloroquine retinopathy. *Ophthalmology* (2002) 109:1377-82

Marmor, Serrato and Tzekov: Comparison of conventional ERG parameters and high-intensity a-wave analysis in a clinical setting. *Doc Ophthalmol* 2003) 106:281-87

Hochstein, Molnar, Marmor: Intrasession Variability of the ERG. Doc Ophthalmol (2007) 115: 77-83

\*\*Marmor et al (for ISCEV): original ERG standard (1989), later revisions, and standards for VEP, mfERG and EOG.



I am not a clinical electrophysiologist but a basic vision scientist whose active involvement with experimental visual neurophysiology goes back to 1964. However it was not until I started recording ERGs in collaboration with Laura Frishman in 1990 that I began to pay much attention to the gross potentials that can be recorded from the visual pathway. I had previously doubted that recordings of the ERG could add much of scientific significance to the study of normal retinal function although I now believe that when they are interpreted in the light of the enormous amount of detailed information about the retina that has become available, they can. But I have always believed that visual electrophysiology can make a significant contribution in the clinical context of diagnosis, prognosis and treatment of retinal disorders in individuals as well as in furthering our understanding of the aetiology of such disorders. In fact, I believe that with the development of suitably simplified procedures, the role of visual electrophysiology could be substantially extended into major disease areas for which it is not currently considered relevant. It is also abundantly clear that visual electrophysiology is rapidly becoming an important tool in the development of drugs and other therapies with potential to alleviate visual disorders as well as in the assessment of drug toxicity. In all these areas of application it is vitally important that electrophysiological studies should not only be carried out according to best scientific principles but also that they should as far as practicable make good use of all the improvements in stimulation, recording and analysis that can result from modern technological developments.

In this context, I am convinced that ISCEV has an important role to play not only in defining minimum standards to be adopted in the most basic clinical investigations of visual function but also in providing paradigms for the many more specific investigations that deserve to be part of the clinical electrophysiologists armamentarium. I am delighted that Eberhart

Zrenner has taken the initiative in proposing a series of ganzfeld ERG "protocols" that can serve as an excellent start to providing what is needed. But the definition of protocols must be accompanied by careful consideration of their use in clinical or routine testing situations and scientific niceties must always be balanced against the practicalities of real life outside the research laboratory. Robustness and efficiency of testing can be as important as theoretical exactitude in what is, after all, an area in which empirical demonstration of utility is what really counts.

If elected Director of Standards I would hope to collaborate with the officers of the society, as well as many ISCEV members with knowledge and experience that complement my own, to further the formulation of a comprehensive and coherent set of standards, protocols, guidelines and related educational materials that could serve to facilitate the cooperative efforts of all those engaged in the clinical electrophysiology of vision and to enhance the credibility of this endeavour. At the same time I would hope to be able to promote and steer the continued development of the techniques and equipment that will enable the clinical electrophysiology of vision to flourish and progress in future.

Current position: Senior Research Professor in Vision Science at University of Houston College of Optometry (since 1996)

Education and Experience: PhD 1962 (Neurophysiology, Cambridge), ScD 2004; Demonstrator, lecturer and then reader in Physiology, University of Cambridge (1962–1995).

**Member** of ARVO (Friedenwald award 1983), Physiological Society; Fellow of the Optical Society of America (Tillyer medal, 1996), Fellow of the Royal Society.

Membership of editorial boards: Journal of Physiology, Vision Research, Visual Neuroscience, Royal Society Proceedings B(iology), Documenta Ophthalmologica.

#### **Some Publications:**

Robson, J.G., Maeda, H., Saszik, S., and Frishman LJ. In vivo studies of signaling in rod pathways of the mouse using the electroretinogram. *Vision Res* 44: 3253-3268, 2004.

Robson JG, Frishman LJ. Sampling and interpolation of the a-wave of the electroretinogram. Doc Ophthalmol 108: 3253-3268, 2004

Robson JG, Saszik SM, Ahmed J, Frishman LJ. Rod and cone contributions to the a-wave of the electroretinogram of the macaque. *J Physiol* 547:509-530, 2003.

Saszik, S, Robson, JG and Frishman, L. The scotopic threshold response of the dark-adapted electroretinogram of the mouse. J. Physiol. 543.3: 899-916, 2002.

Viswanathan, S, Frishman, LJ, Robson, JG, Walters, JW. The photopic negative response of the flash electroretinogram in primary open angle glaucoma Invest. Ophthalmol. & Vis. Sci. 42: 514-522, 2001.

Robson, JG & Frishman, L. Dissecting the dark-adapted electroretinogram. Doc. Ophthalmol., 95: 187-215, 1998-99.

Robson, JG (1998) Vision Research: a Practical Guide to Laboratory Methods. Chapter 2 Light sources (pp 50-80) Edited by: RHS.Carpenter and JGRobson. Oxford University Press.

Frishman LJ, Reddy MG, Robson JG. Effects of background light on the human dark-adapted ERG and psychophysical threshold. J. Opt. Soc. Am. A, 13: 601-612, 1996.

Robson JG, Frishman, LJ. (1995) Response linearity and dynamics of the cat retina: the bipolar cell component of the dark-adapted ERG, Vis. Neurosci., 12: 837-850.

Pelli DG, Robson JG & Wilkins A. (1988) The design of a new letter chart for measuring contrast sensitivity. Clinical Vision Science 2:187-199.

Cooper GF and Robson JG (1970) Using cortical evoked potentials to locate the centre of the visual field. J Physiol. 210:90-92P

Campbell FW & Robson JG (1968) Application of Fourier analysis to the visibility of gratings. J. Physiol. 197:551-566.

Enroth-Cugell C & Robson JG (1966) The contrast sensitivity of retinal ganglion cells of the cat. J. Physiol. 187:517-552.





It is my great pleasure to be considered for the ISCEV Board position of Director of International Communications (DoIC). I have over 30 years experience in Medical Physics which has included electronics, the development of communication aids for disabled people and cardiology signal processing. Using this varied experience, I moved to visual electrophysiology in 1990. I have been a member of ISCEV for 18 years and served as DoIC since 2005. I helped in the organisation of ISCEV 2005 in Glasgow and was a founding member of the British Chapter of ISCEV for which I am currently Secretary. I believe this is a challenging time for our society but also a time of opportunity. My own research interests are in the topical area of combining retinal structure and function. Communication has a key role to play in promoting our society. I will work to improve the interaction between our members on the key issues that affect our society. I will also promote further support of younger members who after all are the future of the society.

# **Current Position**

Consultant Medical Physicist – Tennent Institute of Ophthalmology, Gartnavel General Hospital, Glasgow. UK

## **Training and Experience**

1973 – 1984 Employed as MTO through to Senior Physicist in a range of Medical Physics positions
1984 - 1988- PhD – The development of synthetic speech aids for patients with acquired disability
1988- 1990 – Senior Physicist, Cardiology, University of Glasgow
1990 – 2008 – Consultant Medical Physicist and Head of ElectroDiagnostic Imaging at GGH, Glasgow.

Fellow of The Institute of Physics (1998)

Fellow of The Institute of Physics and Engineering in Medicine (1998)

Chartered Physicist (1995), Chartered Engineer(1998), Chartered Scientist (2003) Honorary Reader, University of Glasgow (2001)

## **Committees and Society Membership**

IPEM (1984), IOP (1984) ISCEV (1990), ARVO (1992), BriSCEV (2003), BMVA (1998)

## Publications

- Hood DC, Bach M, Brigell M, Keating D, Kondo M, Lyons JS, Palmowski-Wolfe AM. ISCEV guidelines for clinical multifocal electroretinography (2007 edition) Doc Ophthalmol, 2008, Jan; 116(1), 1-11
- Keating D and Parks S. Sight Measurement, Chapter 2 in Electrical support Technology for the Vision Impaired. Springer Verlag . 2008, ISBN 978-1-84628-867-8
- Dudgeon, S.M., **Keating, D.**, Parks, S. Simultaneous structural and functional imaging of the macula using combined OCT ophthalmoscope and multifocal ERG. J Opt Soc Am. 2007 May;24(5):1394-401
- Keating D and Parks S. Multifocal Techniques: In Principles and Practice of Clinical Electrophysiology of Vision. Mosby. 2<sup>nd</sup> Edition, MIT Press, 2006, ISBN-13: 978-0-262-08346-1
- Parks S and **Keating D**, The Multifocal ERG: In Clinical Neurophysiology Handbook: Disorders of Visual Processing. Elsevier. NY ISBN: 0444512330, 2006
- Dolan F, Sandhina T, Keating D, Parks S. Do rods have a significant influence on the multifocal ERG? Documenta Ophthalmologica 2006 Jan;112(1):31-4.
- Chisholm JA, Williams G, Spence E, Parks S, **Keating D**, Gavin M, Mills PR. Retinal toxicity during pegylated alpha-interferon therapy for chronic hepatitis C: a multifocal electroretinogram investigation. Aliment Pharmacol Ther. 2005 Mar 15;21(6):723-32
- Keating D, Parks S, Evans AL and Smith DC. The Multifocal ERG: Unmasked by Selective Cross-Correlation, Vision Research, 42/27, 2959-2968, 2002
- Dolan FM, Parks S, **Keating D**, Dutton GN. Multifocal ERG in hemi retinal vein occlusion. Documenta Ophthalmologica 2006 Jan;112(1):43-52.



I feel deeply honored to be nominated for the position of Director of International Communications. Since my first ISCEV Symposium, I have appreciated the friendly and cooperative communication within ISCEV. While the ISCEV spirit at these symposia has always been inspiring, the need for an ongoing exchange of ideas is most palpable for me between these symposia. Electrophysiology is a compelling technique to feel the pulse of the visual system, but there are many pitfalls to be considered. Thus, we all benefit from fast and reliable communication channels within ISCEV. I am very grateful for the help that I received in this way from many ISCEV members when I started the lab in Würzburg.

The previous Directors of International Communications have established an excellent communication network. If elected as Director of International Communications I would concentrate on developing this network into a more integrated web-based platform to facilitate and intensify discussions within ISCEV. Such a platform might include a forum to allow more transparent discussions on specific topics (e. g., ISCEV standards), a wiki-type repository of our collected wisdom on electrophysiol-

ogy, and finally on the home-page we all know and like to get up to date on meetings, standards and other *ISCEV* related information.

# **Current Position**

Head of the Electrophysiological Laboratory, Department of Ophthalmology, Univ. Würzburg (Germany).

# **Training and Experience**

1990 Degree in Physics (Univ. of Freiburg, Germany)

1995 PhD, Thesis on "Electrophysiological correlates of texture segregation in the human visual system" (in Michael Bach's Lab, Univ. Freiburg, Germany)

# Society and Committee Activities

ISCEV member since 1998. Member of the PERG standard committees in 2000 and 2006

# **Selected Publications**

- 1. Meigen T, Krämer M (2007) Optimizing electrode positions and analysis strategies for multifocal VEP recordings by ROC analysis. Vision Res 47:1445-1454
- 2. Holder GE, Brigell MG, Hawlina M, Meigen T, Vaegan, Bach M (2007) ISCEV standard for clinical pattern electroretinography—2007 update. Documenta Ophthalmologica 114:111-116
- 3. Keilhauer CN, Meigen T, Weber BHF (2006) Clinical findings in a multigeneration familly with autosomal dominant central areolar choroidal dystrophy associated with an Arg195Leu mutation in the peripherin/RDS gene. Archives of Ophthalmology 124:1020-1027
- 4. Meigen T, Prüfer R, Reime S, Friedrich A (2005) Contributions from lateral interaction mechanisms to the human ERG can be studied with a two frequency method. Vision Res 45:2862-76
- Meigen T & Bach M (2000) On the statistical significance of electrophysiological steady-state responses. Doc Ophthalmol 98:207–232
- 6. Bach M & Meigen T (1999) Do's and don'ts in Fourier analysis of steady-state potentials. Doc Ophthalmol 99:69-82



Professor Masayuki Horiguchi is a candidate for reelection to the ISCEV Board of Directors. He has served one term (2005 to 2008) as Member-at-Large.

# **Current Position:**

Professor and Chairman of Department of Ophthalmology, Fujita Health University School of Medicine.

# **Training and Experience:**

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1981 MD,	Nagoya University School of Medicine	
1981-1988	Resident, Fellow and PhD student in Nagoya University Hospital	
1988	PhD, Nagoya University School of Medicine	
1988-1989	Fellow in Institute of Ophthalmology in London	
1988-1998	Assistant lecturer, Lecturer, Nagoya University School of Medicine	
1998-Date	Professor and Chairman, Department of Ophthalmology, Fujita Health University School of	
	Medicine	

# **Specialty Boards:**

- International Society of Clinical Electrophysiology for Vision (ISCEV)
- The Retina Vitreous Society of Japan
- Japanese Ophthalmological Society,
- Neuro-ophthalmology Japan
- Japanese Society of Clinical Electrophysiology for Vision

# Awards:

- Chibret International Awards (1992)
- Japanese Ophthalmological Society Young Investigator Award (1993)
- European Society of Cataract and Refractive Surgery Video Award (1997)
- Industry Design Award (Japan) (2004)

# **Publications (partially listed)**

- 1. Kawai F, Horiguchi M et al: Na+ action potentials in human photoreceptors. Neuron, 30;451-458,2001
- 2. Shimada Y, Horiguchi M: Stray light-induced multifocal electroretinograms IOVS 44;1245-1251,2003
- 3. Horiguchi M et al: New visual acuity chart for patients with macular hole. IOVS 42: 2765, 2001.
- 4. Horiguchi M et al: Blue light-emitting diode built-in contact lens electrode can record human S-c-ne electroretingram. IOVS 36;1730-1732,1995.



The consideration as a candidate for Member-at-Large is both a pleasure and a honor for me. Upon completion of my degrees in Electrical Engineering and Medicine, I have worked in ophthalmic research since 1994. Due to my initial clinical work complemented by the more recent research on animal models, I have a long-standing experience in interdisciplinary research on retinal diseases, in particular neurodegenerative processes, their genetic and pathophysiological basis, and strategies to prevent such degenerations. In 2007, I have been awarded a Heisenberg professorship for Ocular Neurodegeneration by the German Research Council (DFG). My current research focuses on the use of electrophysiological and imaging techniques to investigate the causes of and the disease mechanisms in retinal degenerations in human patients and animal models, and to develop and test therapeutic strategies.

I was introduced to the ISCEV society at the symposium in Tuebingen 1996, and have been actively participating in every meeting since. It was also a pleasure to contribute both to the first multifocal ERG guidelines and the Ganzfeld ERG standard (2004 update), and to help compile the recent DOOP special issue on the electrophysiology of the mouse visual system. Together with Ulrich Kellner, I am organizing the annual "ISCEV@DOG" symposium at the meeting of the German Society of Ophthalmology (DOG).

If elected, my goal is to bridge the gap between clinical ophthalmology and basic science, and to promote the exchange of concepts and results to the benefit of the *ISCEV* membership, both on a scientific and an educational level. The translation in both directions will help to prepare ISCEV for future challenges like the evaluation and the follow-up of patients treated with gene therapy as these longawaited molecular therapies become reality. Further, I feel that one of the great-

est assets of ISCEV is its truly international character. It will be another goal to encourage electrophysiologists from less represented geographic regions to participate in our society, which will be beneficial for both sides and of course for the patients.

#### **Current Position**

Heisenberg-Professor, Head of Division of Ocular Neurodegeneration, Institute for Ophthalmic Research, Centre for Ophthalmology, Eberhard-Karls-Universitaet, Tuebingen, Germany.

#### Training and Experience

"Dipl.-Ing." degree in Electrical Engineering, Ruhr-Universitaet, Bochum, 1988

- MD degree, Medical School, Ruhr-Universitaet, Bochum, 1994
- PhD (Dr. med.), Medical Faculty, Ruhr-Universitaet, Bochum, 1996
- "Privatdozent" degree in Experimental Ophthalmology, Medical Faculty, Eberhard-Karls-Universitaet, Tuebingen, 2003
- 1994-1997 Resident, Dept. of Ophthalmology, Eberhard-Karls-Universitaet, Tuebingen, Germany
- 1997-2001 Research fellow 2001-2008 Assisstant professor 2008-Full professor

#### **Society and Committee Activities**

mfERG and ERG guideline/standard committee work Guest editor, DOOP special issue "Electrophysiologic assessment of the mouse visual system"

ARVO SIG organizer (mouse ERG) in 2003 and 2006 "ISCEV@DOG" German symposium organizer since 2004

Member of 9 professional societies, reviewer for 18 scientific journals and 6 grant agencies

#### Selected Publications

- Seeliger MW, Kretschmann UH, Rüther KW, Apfelstedt-Sylla E, Zrenner E. Multifocal electroretinography in Retinitis Pigmentosa. Am J Ophthalmol 1998; 125: 214-226.
   Seeliger MW, Kretschmann UH, Apfelstedt-Sylla E, Zrenner E. Implicit Time Topography of Multifocal Electroretinograms. Invest Ophthalmol Vis
- Sci 1998; 39: 718-723.
- Biel M, Seeliger MW, Pfeifer A, Kohler K, Gerstner A, Ludwig A, Jaissle G, Fauser S, Zrenner E, Hofmann F. Selective loss of cone function in mice lacking the cyclic nucleotide-gated channel CNG3. Proc Natl Acad Sci USA 1999; 96: 7553-57.
- Seeliger MW, Grimm C, Ståhlberg F, Friedburg C, Jaissle G, Zrenner E, Guo H, Remé ChE, Humphries P, Hofmann F, Biel M, Fariss RN, Redmond TM, Wenzel A. New views on RPE65 deficiency: the rod system is the source of vision in a mouse model of Leber congenital amaurosis. Nat Genet 2001; 29: 70-74.
- Seeliger MW, Zrenner E, Apfelstedt-Sylla E, Jaissle G. Identification of Usher Syndrome Subtypes by ERG Implicit Time. Invest Ophthalmol Vis Sci 2001; 42: 3066-3071.
- Grimm C, Wenzel A, Groszer M, Mayser H, Seeliger MW, Bauer C, Gassmann M, Reme CE. HIF-1-induced erythropoietin in the hypoxic retina protects against light-induced retinal degeneration. Nat Med 2002; 8: 718-24.
- Seeliger MW, Beck SC, Pereyra-Muñoz N, Dangel S, Tsai JY, Luhmann UF, van de Pavert S, Wijnholds J, Samardzija M, Wenzel A, Zrenner E, Narfström K, Fahl E, Tanimoto N, Acar N, Tonagel F. In vivo confocal imaging of the retina in animal models using scanning laser ophthalmoscopy. Vision Res 2005; 45: 3512-3519.
- Bemelmans AP, Kostic C, Crippa SV, Hauswirth WW, Lem J, Seeliger MW, Wenzel A, Arsenijevic Y. Lentiviral-mediated transfer of the RPE65 cDNA rescues both survival and function of cone photoreceptors in a mouse model of Leber congenital amaurosis. PLoS Med 2006; 3: 1892-1903
- Fulton AB, Akula JD, Mocko JA, Hansen RM, Benador IY, Beck SC, Fahl E, Seeliger MW, Moskowitz A, Harris ME. Retinal degenerative and hypoxic ischemic disease. Doc Ophthalmol 2008; in press.
- Langrová H, Zrenner E, Kurtenbach A, Seeliger MW. Age-related changes of retinal functional topography. Invest Ophthalmol Vis Sci 2008; in press.



I started training as an ophthalmologist in 1984 and developed an interest in visual electrophysiology when I worked with Colin Barber and Nick Galloway in Nottingham. My first ISCEV meeting was in Dresden in 1989 when I presented a paper on Pattern ERG changes in patients with macular holes. I worked with Geoffrey Arden at Moorfields Eye Hospital in the early 1990s. Since 1993, I have worked as a consultant ophthalmologist at Stoke Mandeville Hospital in Aylesbury, UK. I started a visual electrophysiology service in the hospital with David Sculfor in 1996 which continues to the present time.

My clinical practice covers general ophthalmology as well as electrophysiology and I am actively involved in the training of young ophthalmologists. We hosted the 2006 BriS-CEV meeting at Stoke Mandeville. I have attended most IS-CEV meetings since 1996 and I always find it a very rich learning environment. ISCEV has a varied mix of members from ophthalmologists to mathematicians and veterinary scientists and its great strength lies in this diversity. I am constantly impressed by the talent of its members and its commitment to high scientific standards, but it is also a friendly

organisation where young scientists can present their research in an encouraging atmosphere.

My other interests in medicine lie in the areas of medical education and continuing professional development. I was the postgraduate clinical tutor for Stoke Mandeville Hospital from 1997-2002. Since 2006, I have been a Vice President of the Royal College of Ophthalmologists with responsibility for professional standards. Following a number of high-profile failures of medical care in the UK, there is intense public pressure to ensure that doctors and other health care professionals practise to a consistently high standard and maintain their professional skills. I am currently leading the development of a framework for periodic revalidation of ophthalmologists in the UK.

I believe that it is very important that visual electrophysiology remains part of the core curriculum for ophthalmologists in training. Clinical research is under great pressure at the moment, but visual electrophysiology is at last receiving the recognition it deserves as a powerful tool for understanding the functional correlates of retinal molecular genetics in health and disease. It is scientifically exciting but also immediately relevant to the care of patients and we should be encouraging the brightest and the best of the next generation of clinicians and visual scientists to take an interest in it.

My perspective is that of a clinician and an educator rather than a scientist and I believe that it is important that the word "clinical" remains in ISCEV's name. I admire and respect the many scientists of great stature who are ISCEV members and it is important that electrophysiological standards are based on the best available scientific evidence, but it is also important that the standards are practical, humane and designed with the best interests of our patients and their families in mind. I hope that my perspective will assist ISCEV in its future direction if I am elected to the board.

*Oh yes, I also have some interests outside medicine – travelling with my family, making music and gardening.* 

# **Selected publications:**

- 1. Spileers W, Falcao-Reis F, Smith R, Hogg C, Arden GB. The human ERG evoked by a ganzfeld stimulator powered by red and green light emitting diodes. Clin Vision Sci (1993); 8:21-29.
- 2. Meagher T, Smith R, Bodley R et al. Consultant Assessment and Appraisal: An outline in practice. Clinical Radiology (2002) 57:37-40.
- 3. Chapter on Clinical Visual Electrophysiology in: Ophthalmology: Investigation and Examination Techniques. Ed: Benjamin L, James CB. Elsevier 2006.
- 4. Chapters on Commissioning Cataract Surgery and Ophthalmic Primary Care in: "Ophthalmic Services" (2005), the Royal College of Ophthalmologists.

## Proposed dates: Late July - Early August 2011

## You're invited!!!! ISCEV 2011 in Berkeley

On behalf of the Vision Sciences Program and School of Optometry (UCBSO) at the University of California, Berkeley and Dean Dr. Dennis Levi, I invite you to Berkeley for ISCEV in 2011 in late July – early August, 2011. Berkeley is a city of 100,000 residents who are highly ethnically diverse, so that there is a wide variety of excellent restaurants and ongoing cultural events. Berkeley is situated on the San Francisco Bay across the Bay Bridge from San Francisco, as shown in the photo below.



The San Francisco Bay area is a Mecca for Vision Research including clinical electrophysiology. Other nearby institutions with researchers in clinical electrophysiology include Stanford University, UC San Francisco, the Smith-Kettlewell Eye Research Institute, and the Helen Wills Institute. The multifocal ERG was invented by Erich Sutter nearby.

The venue, the Doubletree Hotel at the Berkeley Marina, on the water, has 378 guest rooms and has been the venue for many UCB SO meetings, including last year's OSA Fall Vision Meeting, for which I was one of the local organizers. The facilities, including lecture hall and

poster room, are excellent. The hotel serves attendees wonderful buffet lunches. Accommodations at the venue will be \$150 single/double. Less expensive accommodations, including very nice residence hall facilities (\$60/ night single or double) are nearby at UCB. Bed and breakfasts and other nice hotels are also nearby. The conference hotel/venue is a 5-minute public bus ride to downtown Berkeley and Campus, and a 25-minute train ride to San Francisco. The projected cost of registration for attendees is \$600 to \$700.

**Symposium Excursion**: a trip to wine country for tours, wine tasting, a picnic and dinner (perhaps by the Wine Train). The gala (dinner, dancing, Olympics outcomes): a chartered yacht on the beautiful San Francisco Bay at sunset. There are myriad things to do in the area. Trips for accompanying persons may include: the beautiful Golden Gate Park (San Francisco; conservatory of flowers, Japanese garden, museum and aquarium among its attractions; Muir woods (giant redwoods, Pacific coast); a ferry trip to Alcatraz Island and San Francisco art museums; the UCB botanical garden and environs (campus, science museum).

The surrounding area is so lovely, it is highly recommended that extra time be allotted for trips before or after the meeting.



**Invitation:** Marilyn Schneck and School of Optometry (UCB SO) at the University of California, Berkeley.



# An invitation to cruise: Canada/New England USA for the XLIX ISCEV International Symposium – 2011

Proposed dates: Sunday, September 25th to Sunday, October 2, 2011



We would like to invite ISCEV to hold the 2011 annual meeting aboard a cruise ship. The ship would depart from New York City, allowing all attendees the opportunity to begin and finish their trip in the fabulous Big Apple. The ISCEV course will be held in New York City prior to the cruise departure. As the ship sails out of New York Harbor, you will pass by the Statue of Liberty, our gift of friendship. The cruise will last for 7 days. This will allow delegates to enjoy many of the destinations in addition to attending the scientific sessions. For those arriving late or leaving early, travel arrangements can be made to or from any of the ports.

**Venue and Accommodations:** The conference will be held aboard the cruise ship, in a private meeting room. Attendees will be able to enjoy the multitude of amenities the cruise ship has to offer, including fine dining, pools, spas, exercise rooms, shopping, entertainment for adults and children, and the pleasure of sailing aboard a large ship. All attendees will sleep on the ship, so all of ISCEV will be housed together. Costs will be comparable to previous meetings, since all meals and many amenities are included in the price of the cruise. Options to upgrade rooms are available.





**Destinations:** The cruise ship will stop at a number of destinations, where delegates and accompanying persons can disembark, enjoy the local scenery and go on area tours. These destinations include: Newport, Rhode Island; Boston, Massachusetts; Bar Harbor, Maine; Saint John, New Brunswick and Halifax, Nova Scotia.



More information: http://www.ecruises.com/ http://www.fodors.com/cruise/ http://www.expedia.com/daily/cruise/

**Organizers: Karen Holopigian and Mitch Brigell** 

# International Society for Clinical Electrophysiology of Vision



# UPCOMING ISCEV INTERNATIONAL SYMPOSIA

## 6-10 July, 2009: XLVII Symposium, Padova, Italy.

Scientific topics: Non-standard stimuli – their contributions to modern electrophysiology

New therapies – from photoreceptors to glaucoma

# 7-11 Nov, 2010:

# XLVIII Symposium Perth, Australia.

*Scientific Topics:* Electrophysiology, genetics and imaging in retinal disease

Stimulus paradigms in multifocal electrophysiology

ISCEV information and events:

www.ISCEV.org

# THE 2007 ISCEV AWARDS AND HONOURS

The 2008 **Eberhard Dodt Memorial Award** for an outstanding presentation at the ISCEV Symposium by a young scientist was awarded to **Dr Xunda Luo** (Houston, Texas USA) for his presentation, "Retinal pathway origins of the pattern ERG (PERG)". The Awards panel also recognised Drs Charlotte Poloschek (Freiburg, Germany) and James D Akula (Boston, USA) for highly commended presentations.

Professor William Dawson delivered the third Emiko Adachi Award Lecture "Maculas, Monkeys, Metabolism, Aging and AMD" taking us along with him on his epic journey towards greater understanding of age-related macular degeneration.

Congratulations Prof Günter Niemeyer winner of the 2008 Emiko Adachi Award for contributions to science and for years of dedicated service to our Society. We look forward to the Award Lecture next year at our Symposium in Italy.

Small grants for ISCEV Sponsored Laboratory Visits were awarded to Dr Giallard of France to visit Dr Yves Suavé in Edmonton, Canada and to Dr Ling Wang to visit Prof Lillemore Wachmeister in Umeå, Sweden. Both visitors will undertake experimental studies with their hosts using animal models of retinal disease.

2009 ELECTIONS/REELECTIONS FOR ISCEV BOARD OF DIRECTORS Treasurer: open position (Prof Ulrich Kellner is ineligible having served 2 terms). Editor-in-Chief (Documenta Ophthalmologica): Prof Laura Frishman has served 1 term Director of Education: Prof Graham Holder has served one term. Member-at-Large: Prof Marko Hawlina has served one term.

#### 2008 EMIKO ADACHI AWARD NOMINATION

Nominations are open for this award to an ISCEV Member for long service and outstanding contributions to science. Regular or honorary members may nominate or be nominated for the award and Board positions. (Please send nominations and pertinent communication to the Secretary-General.)

## **ISCEV BOARD OF DIRECTORS**

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