# ISCEV News Extra 2014

September 2014

From the Secretary-General

This issue:



## Symposium and Elections

It was a pleasure to meet with friends and colleagues this year in Boston, where Mitch Brigell and his team organized a very professional and enjoyable 52nd Symposium, close to the campus of MIT and other prestigious institutions. A full review of the meeting will appear in the next Newsletter, and abstracts are available via Springer's *Documenta Ophthalmologica* website.

The News Extra is my opportunity to remind members of their right to vote in the forthcoming e-ballot. Please note you will only be sent a ballot if you have paid your membership fee for 2014.

The e-ballot will run for two months from mid-September and will be arranged by Mi-Voice who will send eligible voters their unique voting code.

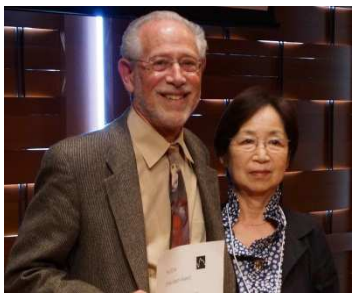
This year we have two elections. One will elect three members-at-large (no geographical restriction) from a slate of six candidates using a single transferrable vote procedure. The other will elect a host location for the 2017 Symposium in the Americas.

Candidate and host statements are overleaf, and will also be available to browse online when voting.

Members will also be invited to endorse the draft ERG Standard, which is currently available on the ISCEV website.

## The ISCEV Awards 2014

Professor Mike Marmor (below left, with Professor Adachi) gave the Emiko Adachi Lecture entitled "High Standards in retina and art", introduced by Colin Baber, in the beautiful Shalin Liu Performance Centre.



The Adachi lecture in 2015 will be given by Dr Richard Weleber.

The fourth William Dawson Memorial Lecture, introduced by Judyth Dawson was given by Dr Artur Cideciyan (above right) on gene therapy consequences in patients with *RPE65*-LCA and in animal models.


Congratulations to Mathieu Gauvin, (below left with Frau Dodt) for winning the 19th Eberhard Dodt Memorial Award, for his paper describing the use of discrete wavelet transforms for more fully extracting information from the light-adapted ERG.

***A NEW AWARD***

2014 saw the inauguration of a new award: the **Marmor Award for Clinical Innovation** in visual electrophysiology, generously endowed by Prof. Mike Marmor. Two projects won the initial stage of the Award ($500 each) and these projects will now compete for the follow-up stage of the Award, worth $2500.

For more information, please see page 10: News from the Board.

# Candidate statement [Member at Large]

## Karen Holopigian

**Personal Statement**

I attended my first ISCEV meeting in Sarasota Florida in 1987, as a Postdoctoral Fellow with Dr Ron Carr. At that meeting, I presented my first electro-physiology paper, on the PERG, and thus began my relationship with ISCEV. Since then, I have attended 14 ISCEV meetings. Through these meetings, I've visited many wonderful places, made many wonderful friends and learned a tremendous amount from the dedicated scientists and clinicians in ISCEV.

I believe that ISCEV is a tremendously important organization in that it bridges the gap between using electrophysiology as a clinical diagnostic tool and ensuring that our measurement techniques are rigorous and clearly defined. By providing standards for our key electrophysiological measures, we provide guidelines for others to follow, so they can collect the best possible data for analysis.

I have already served ISCEV in a number of roles. I'm one of the two auditors, and have been a member of the Program Planning Committee for several recent ISCEV symposiums. I was a member of the Symposium Planning Committee and the Chair of the Program Committee for the most recent ISCEV, the 2014 meeting in Boston. I have also greatly enjoyed my time helping with the ISCEV Olympics, which I believe serve an important function in allowing all members of the society to interact in a fun venue. If elected to serve as a Member-at-Large, I would continue to foster the key functions of ISCEV. In addition, I would strive to encourage young electrophysiologists and those new to the field to join our society, since they are crucial to the future of ISCEV. I would be truly honored to serve ISCEV further in a new role as a Member-at-Large.

**Current Position**

Clinical Trial Leader, Novartis Institute for Biomedical Research, East Hanover, NJ USA

**Training and Experience**

BA 1980 Franklin & Marshall College, Lancaster, PA (Psychology);

MA 1983; PhD 1988; Northwestern University, Evanston, IL (Visual Perception and Neurobiology);

Postdoctoral Fellowship 1986; New York University School of Medicine, NY, NY Ophthalmology;

Research Assistant Professor 1988-1996; New York University School of Medicine, NY, NY Ophthalmology

Research Associate Professor 1996-2007, New York University School of Medicine, NY, NY Ophthalmology

Research Professor 2007-2012, New York University School of Medicine, NY, NY Ophthalmology

Adjunct Professor 2006-2012, SUNY School of Optometry, NY, NY

**Committees & Memberships:**

I am a member of ISCEV and have been an ARVO fellow since 2010. I have served as a reviewer on eight ophthalmology journals and as a guest editor for IOVS. I have been a grant reviewer for the City University of New York, the State University of New York, Foundation Fighting Blindness and Canadian Institutes of Health.

**Selected publications**


- Holopigian K, Greenstein VC, Seiple W, Hood DC and Carr, RE. (1997). Evidence for photoreceptor changes in patients with diabetic retinopathy. Investigative Ophthalmology and Visual Science 38, 2355-2365.
- Hood DC, Holopigian K, Greenstein V, Seiple W, Li J, Sutter EE and Carr RE. (1998). Assessment of local retinal function in patients with retinitis pigmentosa using the multi-focal ERG technique. Vision Research 38, 163-179.
- Holopigian K, Greenstein VC, Seiple W, Hood DC and Ritch R. (2000). Electrophysiologic assessmentof photoreceptor function in patients with primary open-angle glaucoma. Journal of Glaucoma, 9, 163-168.
- Greenstein VC, Holopigian K, Hood DC, Seiple W, and Carr RE. (2000). The nature and extent of retinal dysfunction associated with diabetic macular edema. Investigative Ophthalmology and Visual Science, 41, 3643-3654.
- Holopigian K, Seiple W, Greenstein VC, Hood DC and Carr RE. (2001). Local rod and cone system function in patients with retinitis pigmentosa. Investigative Ophthalmology and Visual Science, 42, 779-788.
- Holopigian K and Hood DC. (2003). Electrophysiology. In Ophthalmology Clinics of North America, 16, 237-251.
- Holopigian K, Greenstein VC, Seiple W, Hood DC and Carr RE. (2004). Rod and cone photoreceptor function in patients with cone dystrophy. Investigative Ophthalmology and Visual Science, 45, 275-281.
- Holopigian K, Shuwari, S, Greenstein VC, Winn BJ, Zhang X and Hood DC. (2005). Multifocal visual evoked potentials to cone specific stimuli in patients with retinitis pigmentosa (RP). Vision Research, 45, 3244-3252.
- Holopigian K and Bach M (2010). A primer on common statistical errors in clinical ophthalmology. Doc Ophthalmol, 121, 215-222.

# Candidate statement [Member at Large]

## Bo Lei

**Personal Statement**

The 28th ISCEV in Guangzhou was the first international meeting at which I presented. I enjoyed its scientific and friendly atmosphere so much, and have become a loyal member. For more than 25 years I have been focused on visual electrophysiology. Since 2009 when I joined the Chongqing Medical University and became the supervisor of the visual electrophysiology diagnosis lab, I have gradually realized that there are many challenges for local ophthalmologists in understanding and using the ISCEV standards and guidelines. I have written articles in several journals and textbooks to introduce this knowledge. I hosted two ISCEV-approved training courses and have given more than 35 lectures with a total audience of more than 3000. I am pleased that many young talents are becoming interested in visual electrophysiology. As the vice-chair of the local organizing committee of the 51st ISCEV symposium, I organized the ISCEV courses and Olympics and served as a faculty of the 2014 ISCEV Boston course. With many years experience in oriental and western countries, I am enthusiastic about serving ISCEV.

**Current Position and Services**

Professor of Ophthalmology, the First Affiliated Hospital of Chongqing Medical University, Chongqing, China

Deputy Director, Chongqing Key Laboratory of Ophthalmology/Chongqing Eye Institute

General Secretary, Chongqing Ophthalmic Society

Vice Chair, Chinese Society for Clinical Electrophysiology of Vision

Member of ISCEV, ARVO, ASGT, ISOPT

Editorial board and Secretary of Chinese Ophthalmology Textbooks for medical and graduate students

**Editorial boards**: The Open Ophthalmology Journal, The Scientific World Journal (Ophthalmology), Hans Journal of Ophthalmology, and five major Chinese Ophthalmology Journals

**Training and Experience**

2009-: Prof., Dept of Ophthalmology, First Affiliated Hospital of Chongqing Medical University

2001-2009: Assistant Prof., Ophthalmology and Vision Science, Univ. of Missouri, Columbia, MO, USA

1997-2001: Post-doctoral fellow, Kellogg Eye Ctr, Univ. of Michigan, Ann Arbor, MI, USA (Prof. Paul Sieving)

1993-1997: PhD, Technion-Israel Institute of Technology, Haifa, Israel (Prof. Ido Perlman)

1989-1993: Resident, Ophthalmology, the First Affiliated Hospital of Henan Medical University

1989: MSc, Ophthalmology, Henan Medical University School of Medicine, Zhengzhou, Henan, China

1986: MD, Henan Medical University School of Medicine, Zhengzhou, Henan, China

**Awards**

1995 Athens ISCEV travel grant; 2012 Chinese Ophthalmology Society Award

**Representative publications (from 52 peer reviewed publications)**


- Hou S, Du L, Lei B, Pang CP, et al 2014. Genome-wide association analysis of Vogt-Koyanagi-Harada syndrome identifies two new susceptibility loci at 1p31.2 and 10q21.3. Nature Genetics.
- Lei B 2012. Rod-driven OFF Pathway Responses in the Distal Retina: Dark-adapted Flicker Electroretinogram in Mouse. PLoS One. 7(8): e43856. Lei B, Yao G, Zhang K, Hofeldt KJ. Chang B 2006. Study of rod- and cone-driven oscillatory potentials (OPs) in mouse. IOVS. 47(6): 2732-2738.
- Lei B 2003. Scotopic and photopic electroretinogram of weak I-type guinea pig (Cavis porcellus): comparison with monkey and rat. Doc. Ophthal. 106(3):243-9.
- Lei B, Bush RA, Milam AH and Sieving PA 2000. Human melanoma-associated retinopathy antibodies alter the retinal ON-response of the monkey ERG in vivo. IOVS. 41: 262-266.
- Lei B and Perlman I 1999. The contributions of voltage- and time-dependent potassium conductance to the electroretinogram in rabbits. Visual Neuroscience 16:743-754.

# Candidate statement [Member at Large]

## Shigeki Machida

**Personal Statement**

It is my great pleasure and honor to be considered for a position as a member at-large of ISCEV board. I am very proud to be a member of ISCEV, a leading society with a 52-year history of promoting visual science. I have been a member for over 20 years, and have attended annual meetings since 1993. The first talk I delivered at ISCEV was at Chiba in 1993 — an unforgettable experience for me. I have also been a board member of the Japanese Society of Electrophysiology for Vision since 2005, and as president of that society I held its 58th annual meeting in 2010.

My special interest in the research field is the clinical use of the photopic negative response in diagnosing diseases involving the retina and optic nerve. I have also immersed myself into basic research using animal models of photoreceptor degeneration to develop new treatments and advance the understanding of the pathophysiology of photoreceptor disease. I have been using electrophysiological techniques extensively in clinical and animal research.

If elected as a member at-large of the ISCEV board, I would encourage younger scientists and clinicians to join ISCEV. Through lectures and publications, I also would like to disseminate accurate information regarding visual electrophysiology to scientists worldwide who are not familiar with this field. I believe that ISCEV must keep pace with new techniques in fields such as genetics and imaging, and expand our horizons involving people from these research fields. I believe that such efforts would lead to growth in membership and further development of ISCEV.

**Current Position**

Professor of Ophthalmology, Dokkyo Medical University Koshigaya Hospital

**Training and Experience**

MD, Iwate Medical University School of Medicine (1989); PhD (medical science), Iwate Medical University School of Medicine (1990-1994); Assistant Professor, Ophthalmology, Iwate Medical University School of Medicine (1997); Research fellow, Kellogg Eye Center, University of Michigan (Prof. Sieving, 1998-2000); Associate Professor, Ophthalmology, Iwate Medical University School of Medicine (2005-2014); Professor, Ophthalmology, Dokkyo Medical University Koshigaya Hospital (2014-present)

**Committees and Memberships**

Board member of Japanese Society for Clinical Electrophysiology of Vision

Scientific board member of Japanese Retinitis Pigmentosa Society

Program organizing committee of Japanese Ophthalmological Society

Editorial board of Case Report in Ophthalmological Medicine

Editorial board of World Journal of Ophthalmology

ARVO (since 1991), ISCEV (since 1992)

**Selected Publications**


- Machida S, et al. Comparisons of cone electroretinograms after indocyanine green-, brilliant blue G-, or triamcinolone acetonide-assisted macular hole surgery. Graefes Arch Clin Exp Ophthalmol. 2014, Epub.
- Machida S, et al. Macular function evaluated by focal macular electroretinogram after reduced fluence photodynamic therapy in eyes with polypoidal choroidal vasculopathy. DOOP 2012; 124: 91-98.
- Machida S, et al. Sensitivity and specificity of photopic negative response of focal electroretinograms in detecting glaucomatous eyes. BJO 2010; 94: 202-208.
- Machida S, et al. Photopic negative response of focal electroretinogram in glaucomatous eyes. IOVS 2008; 49:5636-5644.
- Machida S, et al. Correlation between photopic negative response and retinal nerve fiber layer thickness and optic disc topography in glaucomatous eyes. IOVS 2008; 49: 2201-2207.
- Machida S, et al. Photopic ERG negative response from amacrine cell signaling in RCS rat retinal degeneration. IOVS 2008; 49: 442-452.
- Machida S, et al. Neuroprotective effect of hepatocyte growth factor against photoreceptor degeneration in rats. IOVS 2004; 45: 4174-4182.

# Candidate statement [Member at Large]

## Josefin Nilsson

**Personal Statement**

I have always been fascinated by the brain and the nervous system, but my road into visual electrophysiology has been a bit winding. I started my PhD-project during medical school (on amblyopia and pre-school vision screening) and defended my PhD-thesis 11 days after finishing my MD degree. I then entered ophthalmology training, but I was not sure if it was right for me, and after 14 months I decided to try clinical neurophysiology. I instantly felt at home with the "wiggly lines" and became a clinical neurophysiologist instead of an ophthalmologist. My interest for vision, however, continued and I wanted to find ways to learn more about visual electrophysiology. I was admitted to a post doctoral fellowship at the Visual Electrophysiology Unit at Sick Kids in Toronto, Canada and have since set up a full clinical visual electrophysiology lab at my home department in Göteborg, Sweden. I worked for a short period in Ethiopia, where I taught basic clinical neurophysiology to the neurologists at Addis Ababa's Neurology Department (the only one in the country). I managed to help them record the first (?) sensory evoked potential in East Africa, but unfortunately failed to get their very old and defect stimulator for VEPs working. I am still, however, in regular contact with the doctors I worked with and plan to return and continue this project. Clinical neurophysiology is an autonomous medical specialty in a number of countries and deals with all types of electrophysiological diagnostic methods such as EEG (electroencephalography), EMG (electromyography), NCS (nerve conduction studies), different types of EPs (evoked potentials), cortical stimulation (direct and transcranial magnetic), sleep studies and intraoperative monitoring. In my view, visual electrophysiology naturally complements this group of methods and I would like to expand the ISCEV audience to include more clinical neurophysiologists. My publications spread from amblyopia and vision screening, development of visual function, to evaluation of new methods and techniques in visual electrophysiology. I cannot brag about an impressive number of years as an ISCEV member, but I have quickly grown very fond of this little community. I think ISCEV has a very important role to play and the symposia are a fantastic opportunity to learn and to make friends with other people in the field. In summary I hope that my somewhat unusual background is an asset rather than a disadvantage for ISCEV. I hope to be able to connect ISCEV to the community of Clinical Neurophysiology and I also hope to be able to spread visual electrophysiology testing into Ethiopia.

### Current Position

Consultant/senior physician ("överläkare") in Clinical Neurophysiology at Sahlgrenska University Hospital, Göteborg, Sweden

"Docent" (senior lecturer/associate professor), Department of Clinical Neuroscience, University of Gothenburg, Sweden

### Training and Experience

2003 MD, University of Gothenburg, Sweden; 2003 PhD (Dr Med), University of Gothenburg, Sweden; 2007 Post-doctoral fellow at Visual Electrophysiology Unit, Sick Kids, Toronto, Canada; 2008 Specialist doctor in Clinical Neurophysiology; 2008- "Docent", Department of Clinical Neuroscience; 2013 - Consultant in Clinical Neurophysiology

### Committees and Memberships

Member, ISCEV "Guide to Procedures" revision commitee; Editorial Board Member for Strabismus; Member of ARVO, ISCEV and the Swedish Society for Clinical Neurophysiology (European Chapter of International Federation of Clinical Neurophysiology); Member, organising committee for bi-annual Child Vision Research Society meeting in Göteborg, Sweden 2003.

### Selected Publications (née Ohlsson)


- McMacfarlane M, Wright T, Stephens D, Nilsson J, Westall A. Blue Flash ERG PhNR Changes Associated with Poor Long-Term Glycemic Control in Adolescents with Type 1 Diabetes. Invest Ophthalmol Vis Sci. 2012:53(2):741-748.
- Andersson L, Sjölund J, Nilsson J. Flash visual evoked potentials are unreliable as markers of ICP due to high variability in normal subjects. Acta Neurochir. 2012:154(1):121-127.
- Nilsson J, Dahlgren J, Karlsson AK, Grönlund MA. Normal visual evoked potentials in preschool children born small for gestational age. Acta Paediatr. 2011:100(8):1092-6.
- Nilsson J, Wright T, Westall CA. Rod a-wave analysis using high intensity flashes adds information on rod system function in 25% of clinical ERG recordings. Vision Res. 2008:48(18):1920-5.
- Wright T, Nilsson J, Gerth C, Westall C. A comparison of signal detection techniques in the multifocal electroretinogram. Doc Ophthalmol. 2008:117(2):163-70.
- Ohlsson J, Sjöstrand J. Preschool vision screening. Is it worthwhile? Essentials in Ophthalmology; volume: Paediatric Ophthalmology, Neuro-Ophthalmology, Genetics; Chapter 2. Springer-Verlag, Heidelberg, 2006.
- Ohlsson J, Villarreal G. Normal visual acuity in 17--18 year olds. Acta Ophthalmol Scand. 2005:83(4):487-91.

# Candidate statement [Member at Large]

## Anthony Robson

**Personal Statement**

I have worked in clinical neurophysiology and clinical visual electrophysiology for more than 25 years, including the last 9 years as a Consultant Electrophysiologist at Moorfields Eye Hospital. I have given presentations and supported junior colleagues at numerous meetings of ISCEV, ISCEV@ARVO and BriSCEV and have enjoyed the opportunity ISCEV provides for informal and insightful discussions with those who share a passion for our field. Over the years I have taught and promoted clinical electrophysiology through many lectures and invited talks at regional, national and international meetings and on regular courses organised by University College London and Moorfields Eye Hospital including the annual Clinical Electrophysiology course since 2000. I have written or co-authored more than 100 publications mainly on clinical electrophysiology, genotype-phenotype correlations and fundus autofluorescence imaging in retinal disease and am currently involved in updating the ISCEV guide to procedures. It would be an honour to serve ISCEV, to represent the views of the membership and to support the organisation as a member-at-large.

**Current Position**

Consultant Electrophysiologist, Electrophysiology, Moorfields Eye Hospital

Honorary Senior Lecturer, Institute of Ophthalmology, University College London

**Committees and Memberships:** Elected to Macula Society (2010); ISCEV (2001); ARVO (2000); British Society for Clinical Neurophysiology (BSCN; 1996); Colour Group (GB) (2004)

**Miscellaneous:** Foundation Fighting Blindness: sponsored Scientist 2000-2010 & co-investigator (2010-present); BSCN young investigator award (1996, 1999); Colour group (GB) David Palmer Award (2005).

**Editorial board member:** Ophthalmic Genetics.

**Reviewer** for Documenta Ophthalmologica; Retina; IOVS; Archives of Ophthalmology; American Journal of Ophthalmology; British Journal of Ophthalmology; Ophthalmic and Physiological Optics; Eye; Graefe's Archive for Clinical and Experimental Ophthalmology; Visual Neuroscience; Current Eye Research; Perception; Retinal Physician; PLoS ONE; The Wellcome Trust

**Recent peer-reviewed publications:**


- Ba-Abbad R, Robson AG, Yap YC, Moore AT, Webster AR, Holder GE. PRPH2 mutations as a cause of electronegative ERG. Retina. 2014; 34:1235-43
- Mukherjee R, Robson AG, Holder GE, Stockman A, Egan CA, Moore AT, Webster AR. A detailed phenotypic description of autosomal dominant cone dystrophy due to a de novo mutation in the GUCY2D gene. Eye 2014; 28: 481-7.
- Vezzola D, Kisma N, Robson AG, Holder GE, Pavesio C. Structural and functional retinal changes in eyes with DUSN. Retina. 2014; 34: 1675-82.
- Vincent A, Robson AG, Neveu MM, Wright GA, Moore AT, Webster AR, Holder GE. A phenotype-genotype correlation study of X-linked retinoschisis. Ophthalmology. 2013. 120: 1454-64.
- Vincent A, Robson AG, Holder GE. Pathognomonic ERGs: a review and update. Retina. 2013; 33: 5-12.
- Fujinami K, Sergouniotis PI, Davidson AE, Mackay DS, Tsunoda K, Tsubota K, Robson AG, Holder GE, Moore AT, Michaelides M, Webster AR. Clinical effect of homozygous ABCA4 alleles in 18 patients. Ophthalmology.2013;120:2324-31
- Sergeev YV, Vitale S, Sieving PA, Vincent A, Robson AG, Moore AT, Webster AR, Holder GE. Molecular modelling indicates distinct classes of missense variants with mild and severe XLRS phenotypes. Hum Mol Genet. 2013; 22:4756-67.
- Lee RM, Robson AG, Hughes EH. Electrooculogram (EOG) findings in a case of acute exudative polymorphous vitelliform maculopathy (AEPVM) detected following trauma. Doc Ophthalmol. 2013; 127: 255-9.
- Parry NRA and Robson AG. Optimisation of large field tritan stimuli using concentric isoluminant annuli. Journal of Vision. 2012. 12: 11. doi: 10.1167/12.12.11.
- Robson AG, Lenassi E, Saihan Z, Luong V, Fitzke F, Holder GE, Webster AR. Comparison of fundus autofluorescence with photopic and scotopic fine matrix mapping in patients with RP: 4- to 8-year follow-up. IOVS. 2012; 53: 6187-95.
- Robson AG and Kulikowski JJ. Objective assessment of chromatic and achromatic pattern adaptation reveals the temporal response properties of different visual pathways. Vis Neurosci. 2012; 29: 301-13.
- Lenassi E, Robson AG, Hawlina M, Holder GE. The value of two field PERG in routine clinical electrophysiological practice. Retina. 2012; 32: 588-99.
- Robson AG, Tufail A, Fitzke F, Bird AC, Moore AT, Holder GE, Webster AR. Serial imaging and structure-function correlates of high-density rings of fundus autofluorescence in retinitis pigmentosa. Retina. 2011; 31:1670-9.
- Robson AG, Webster AR, Michaelides M, Downes SM, Cowing JA, Hunt DM, Moore AT, Holder GE. "Cone dystrophy with supernormal rod electroretinogram": a comprehensive genotype/phenotype study including fundus autofluorescence and extensive electrophysiology. Retina. 2010; 30:51-62

# Candidate statement [Member at Large]

## Suresh Viswanathan

**Personal Statement**

It is an honor to be nominated for election to the position of member-at-large on the ISCEV board of directors. I have been a member of ISCEV since 2001 and greatly cherish the camaraderie and flow of knowledge among members of this society who come from diverse professional backgrounds and cultures. My experience with clinical electrophysiology started when I was an Optometry student in India and was then carried over to my graduate work and later in my professional career. I was instrumental in establishing the visual electrodiagnosis clinic at the Indiana University School of Optometry and ran that service for 13 years before moving to the State University of New York College of Optometry where I continue to serve as a consultant in the visual electrodiagnosis service. My research focuses on application of visual electrodiagnostic techniques for studying retinal ganglion cell and optic nerve dysfunction in animal models and humans. I serve on the editorial board of Documenta Ophthalmologica, the official journal of ISCEV, since 2008 and have given multiple lectures in ISCEV sponsored courses on animal visual electrophysiology. If elected to the board of directors I look forward to serve the ISCEV membership in any meaningful way I can to further the objectives of the society. Specifically I would like to explore ways in which we can bring new members into the fold and increase the number and quality of presentations at the annual meeting.

**Current Position**

Associate Professor of Optometry and Vision Science and Chair of the Department of Biological and Vision Science, State University of New York College of Optometry, New York, NY.

**Training and previous experience**

BS (Optometry), Elite School of Optometry, Chennai, India (1990); MS (Clinical Optometry), Pacific University College of Optometry, Forest Grove, OR (1992); PhD (Vision Science), University of Houston College of Optometry, Houston, TX (2000); Assistant Professor of Optometry and Vision Science, Indiana University School of Optometry, Bloomington, IN (2000-2006); Associate Professor of Optometry and Vision Science, Indiana University School of Optometry, Bloomington, IN (2006-2012).

**Committees and Memberships:** Fellow of American Academy of Optometry (2001); Fellow of Optometric Glaucoma Society (2007); Editorial Board Member of Documenta Ophthalmologica (2008-); Member of the ISCEV standards committee for PERG (2012 update); Member of Association for Research in Vision and Ophthalmology (1993-); Member, Society for Neuroscience (2000-); Member, International Society of Clinical Electrophysiology of Vision (2001-); Member, International Society for Eye Research (2014-)

**Selected publications:**


- Bach M, Brigell MG,·Hawlina M, Holder GE,·Johnson M, McCulloch DL,·Meigen T,·Viswanathan S. ISCEV standard for clinical pattern electroretinography (PERG) – 2012 update. (2013) Documenta Ophthalmologica,126;1-7.
- Simpson MC, Viswanathan S. Comparison of uniform field and pattern electroretinograms of humans. Journal of Modern Optics. 2007: 54:1281-1288.
- Harrison WW, Viswanathan S, Malinovsky VE. Multifocal Pattern Electroretinogram: Cellular Origins and Clinical Implications. Optometry and Vision Science. 2006:83; 473-485.
- Viswanathan S, Frishman LJ, Robson JG. Inner-retinal contributions to the photopic sinusoidal flicker electroretinogram of macaques. Documenta Ophthalmologica. 2002,105:223-242.
- Hood DC, Frishman LJ, Saszik SM, Viswanathan S. Retinal origins of the primate multifocal ERG: Implications for the human response. Investigative Ophthalmology and Vision Science. Investigative Ophthalmology Vision Science 2002;43:1673-1685.
- Viswanathan S, Frishman LJ, Robson JG, Walters JW. The photopic negative response of the flash electroretinogram in primary open angle glaucoma. Investigative Ophthalmology and Vision Science. 2001; 42: 514-522.
- Frishman LJ, Saszik S, Harwerth RS, Viswanathan S, Li Y, Smith EL III, Robson JG, Barnes G. Effects of experimental glaucoma in macaques on the multifocal ERG. Documenta Ophthalmologica. 2000;100:231-251.
- Viswanathan S, Frishman LJ, Robson JG. The uniform field and pattern electroretinogram in macaques with experimental glaucoma: removal of spiking activity. Investigative Ophthalmology and Vision Science. 2000;41:2797-2810.
- Viswanathan S, Frishman LJ, Robson JG, Harwerth RS, Smith EL III. The photopic negative response of the macaque electroretinogram: reduction by experimental glaucoma. Investigative Ophthalmology and Vision Science. 1999;40:1124-1136.

# 2017 Symposium Invitation

## Key Largo, USA

**22-26 October 2017**

On behalf of the Bascom Palmer Eye Institute and my Florida electrophysiology colleagues, we extend an invitation for ISCEV 2017 to Key Largo, Florida. Key Largo is the first island of the Florida Keys, an island chain connected by bridges located at the southern tip of Florida. The Florida Keys is a well-known vacation destination for locals and tourists alike. The Keys offer a relaxed atmosphere with myriad available activities including beaches, nature walks, canoeing, golf, fishing, and coral reefs. The proposed location in Key Largo is bound by Key Biscayne National Park to the north and John Pennenkamp Coral Reef Park to the south. Unique cultural and metropolitan experiences are in the vicinity to the North in Miami and to the west in Key West.

**Access:** Key Largo is located 87 km south of the Miami International Airport, one of the best-connected major international airport hubs in the world. The airport has numerous easy connecting flights often with non-stop or one-stop flights to Europe, Asia, and South America. Key Shuttle Service provides door-to-door transportation from the airport to the Symposium location in Key Largo with an affordable fare of USD $60 round trip.

**Venue:** The symposium will be held at the Ocean Reef Club located near the northern tip of Key Largo. The waterfront complex has a conference center with a capacity of 450 classroom seats. The hotel on the premises has 300 guest rooms with nice views. The complex has a golf course, a spa, and ample space for receptions and ISCEV activities. The daily conference hotel rate is at $225. Many budget accommodations are located in Key Largo ranging from $80 to $150 per day, or the rooms at the Ocean Reef Club can be shared.

**Hospitality & Social Program:** Numerous excursion options for attendees and accompanying persons are available including a visit to the John Pennenkamp Coral Reef Park with opportunities for canoeing, snorkeling, and glass bottom boat trips for coral reef viewing. Other options include a visit to the Fairchild Tropical Botanical Gardens located south of Miami, well known for its world-class collection of palm trees in an idyllic setting. Two hours away is Key West, a unique island city frequented by writers and artists with Victorian architecture, shipwreck treasures, savory restaurants, and waterfront sunset magic shows. Another option is a visit to the Everglades where wildlife abounds.

The Continuing Medical Education office at the Bascom Palmer Eye Institute has extensive experience hosting international meetings and will assist with the ISCEV symposium. We extend our welcome and appreciate your consideration of this invitation.

Estimated cost of registration: USD $650–700

**Organizers: Byron Lam & Sandeep Grover**

**Bascom Palmer Eye Institute, University of Miami, & University of Florida**

# 2017 Symposium Invitation

## Madison Wisconsin, USA

**15-20 July 2017**

We are very pleased to invite you to Madison, Wisconsin USA for the ISCEV Symposium in 2017. The city of Madison, population 243,000, is located on an isthmus between two large glacial lakes, about 120 miles northwest of Chicago. Madison is the capital of the state of Wisconsin and the home of the University of Wisconsin. The university, several colleges, state and local government and numerous medical and biomedical technology firms support a vibrant progressive cultural scene with an abundance of restaurants, music and theater, and recreational opportunities.

**Access:** Proximity to Chicago's O'Hare International airport makes getting to Madison convenient. Madison's newly renovated regional airport (MSN) is a 30 min connecting flight from Chicago. There are also direct flights from New York, Denver, and Dallas. Madison may be reached from Chicago by bus (30 USD one-way) and train (Columbus Station). The cab fare from Madison airport to the venue is approximately 20 USD, with hotel shuttles available.

**Venue:** The symposium will be held at the Monona Terrace Convention Center. The architect, Frank Lloyd Wright, proposed the design in 1938, as 'a curvilinear gathering place that would link the shore of Lake Monona to the State Capitol.' Monona Terrace was finally built in 1997 and spans ninety feet out over shimmering waters, incorporating thoroughly modern technology and amenities with the architect´s signature organic design.

There are numerous hotels within easy walking distance of the Convention Center including the attached Hilton (range 156-299 USD); reasonable accommodations are also available on campus and prices will vary depending on the number of guests. The venue is one block from the Capitol Square, containing the landmark structure, the site of one of the nation's largest farmer's markets, symphony concerts, and political gatherings. The greater Madison area features 200 miles of off-road and multi-use paths , 260 parks, and 6,000 acres of parkland. With 15,000 acres of lake, there's plenty of room for stand-up paddle boarding, canoeing, kayaking, sailing, motor boating, fishing, and swimming.

**Social Program:** Tours of the state capital building, including a dome-top view of the isthmus, numerous historical and art museums downtown and on Campus. Architectural tours of Frank Lloyd Wright's buildings and his school's studio, Taliesin, 45 min outside of Madison. Boat tours of the lakes are also available. Estimated registration: 625 USD. http://www.visitmadison.com/ http://www.mononaterrace.com/

**Organizers: Jim Ver Hoeve & Mike Nork**

**University of Wisconsin-Madison**

# News from the Board of Directors

## New Board Officers for 2014:

The following election result was obtained at the Membership Business Meeting, held during the 52nd ISCEV Annual Symposium, 2014:

Congratulations to Prof. Shuichi Yamamoto elected for a second term as Vice-President for Asia & Australasia.

Three further Board positions, all Members-at-large without geographical restriction, will be decided by e-ballot. Our thanks are extended to all those ISCEV members who stood for election for these positions.

At the end of 2014, the Board bids farewell to two long-standing Members-at-Large, Profs Carol Westall and Mineo Kondo, both of whom have served eight years on the Board. Grateful thanks are extended to both for their dedication and work for ISCEV.

## Committee Updates

The ERG Standard revision committee has produced a draft revised Standard, with helpful guidance from the findings of the ERG Survey completed by the Membership. The draft revision was posted on the website in early July, and was discussed during the 2014 Symposium in sessions led by Professor Daphne McCulloch, Director of Standards.

A modified draft has now been posted on the ISCEV website, and all members who wish to make further comments should do so via the Director of Standards at DoS@iscev.org.

The Guideline to Procedures revision committee, chaired by Professor Scott Brodie, have also completed a draft revision which will be made available for comment during 2014/2015.

## Marmor Award for Clinical Innovation

This new award is designed to serve ISCEV and clinical electrophysiology by encouraging new work that will enhance the practicality of tests or widen their application. The award is for a project, not an individual, and aims to encourage continuation of innovative work into translation. Eligible projects will either improve the practicality of electrophysiology procedures, or widen their applicability.

Initial Awards: Monetary prizes of $500 will be made to a small set (typically 2-4) of presentations at each ISCEV Symposium, selected from all eligible projects identified from their abstracts.

Follow-up Award: One of the initial awardees will receive a larger award of $2500 1-2 years later. This will go to the best of the initial projects that continued the work and demonstrated value or validity, or brought tests into the clinic.

The first awards were made in Boston as a kind of “beta test” of the process. The winners were:

A smart ERG signal generator for calibration of instruments and alignment of recording regimes across clinical laboratories, M Elm, AC Fisher, R Laflin, R Teymouri, A Eleuteri, RP Hagan. This paper described a device that could be used for to enhance quality and reproducibility of signals across laboratories.

Full field ERGs in individuals with autism spectrum disorder, PA Constable, SB Gaigg, DM Bowler, DA Thompson. This paper considered whether some autistic patients, thought to have specific neurotransmitter aberrations, might be identified with retinal electrophysiology. The authors confirmed the statistical correlation of certain ERG signals, and began consideration of responses that might be specific enough to aid individuals.

If the Marmor Award for Clinical Innovation proves successful in stimulating clinical innovation, it might be expanded to separate awards for “practicality” and “application.” We welcome suggestions about how to construct this award most effectively to stimulate work that expands our clinical goals in ISCEV. And we invite ISCEV members and Symposium attendees to begin thinking of projects for Slovenia!

Mike Marmor