# ISCEV Newsletter 2015

Edited by Hamilton & Bach

## Contents


| | |
|---|---|
| From the President | 1–2 |
| Message from the Secretary-General | 2 |
| Report of the Director of Education | 3 |
| Report of the Director of Standards | 3–4 |
| Report of the Editor-in-Chief, *Doc Ophthalmol* | 4–5 |
| Report of the Treasurer | 5–6 |
| Report of the Director of Communications | 7 |
| Reports of the Regional Vice-Presidents | 7–8 |
| Recollections of a Symposium: | 9–10 |
| Emiko Adachi Lecture | 11 |
| Eberhard Dodt Memorial Award 2015 | 12 |
| Dawson Memorial Lecturer 2015 | 13 |
| 54th ISCEV Symposium:- Singapore | 14 |
| 55th ISCEV Symposium:- Key Largo | 15 |
| Caption competition | 15 |
| Minutes of the 2014 membership meeting | 16–17 |


## From the President

**Dear friends and colleagues,**

When the time for the annual newsletter approaches and I review the events of the past year, I'm always amazed by how many things have been done and have changed in our Society.

On the Board we have three new members at large: Karen Holopigian, Tony Robson and Suresh Viswanathan. They are people we know well, already active members, who have contributed in various ways to ISCEV life. We thank them for having offered to help with and work for the Society in the future .

The Board is working hard and, as is well known, some positions are particularly complex and require specific technical skills. With the help of those who have previously held the same roles, of those who have some personal know-how and by working hard, we have dealt with any situations arising.

2014–2015 was an important year for our Society with the publication of our new and updated ERG standard. The survey circulated by Daphne McCulloch has made all members active and made it possible to see how this test is perceived by all of us. The efforts of the Committee, and in particular of Daphne, have enabled the development of the critical and constructive development of this, our new pillar.

In the coming year, at our congress in Ljubljana, as well as the coveted awards provided by Professor Adachi and Frau Dodt, we will also hopefully have the winner of the second part of the Marmor Award, the new award that Professor Mike Marmor has so generously offered. This is an award given to an original project in methodological / clinical research that has shown continuity and been validated over time. It is a prize divided into two parts: a first instalment awarded to two or more projects demonstrating better methods or clinical applications of our examination techniques, and a more substantial prize given one year later to the one project demonstrating the most progress in the intervening year.

In 2014, Mitch Brigell and colleagues welcomed us to Boston. The Symposium was excellent both at the organizational and the scientific level. The city is really lovely and one breathes an atmosphere of positive vivacity in the way values and traditions are nurtured within this forward looking community. It was a profound experience for me and I have to confess that I felt almost overawed when I visited Harvard University. I perceived the scientific and cultural atmosphere that is breathed there and I admired our colleagues who work in that city.

Now we are ready for our meeting in Ljubljana, an ancient city founded 2000 years before Christ, which has long played an active role in European life. Marko, Jelka and their team

have been able to coordinate our meeting with the EUNOS (European Neuroophthalmological Society) meeting, allowing us to share our experiences and our work with other colleagues working in parallel with us.

Our presence in the world is growing and in 2015, as well as our symposium which includes human and animal courses, several other meetings have taken place or are scheduled: in Denver, Colorado USA (ISCEV @ ARVO); in Paris (France) (SEVE); in Vienna, Austria (SOE); in Xia Men, China (14th Chinese Clinical Visual Physiology Conference); in Oxford, UK (BriSCEV); in Brno, Czech Republic (15th European Congress on Clinical Neurophysiology, ECCN); in Berlin, Germany (ISCEV@DOG); in Siegburg, Germany (Elektrophysiologie Kurs für Augenärzte); in Seoul, Korea (Joint meeting of the Japanese and Korean Societies for Clinical Electrophysiology of Vision); in Guangzhou, China (ISCEV at the 30th Asia-Pacific Academy of Ophthalmology Congress); in London, UK (Moorfields Clinical Electrophysiology of Vision Course); and in Las Vegas, USA (OcuScience Lecture & Wet Lab: Ophthalmic Imaging and ERG in Animal Research). More details can be found on our website. We thank all those who endeavor to spread our culture and our passion by organizing these meetings.

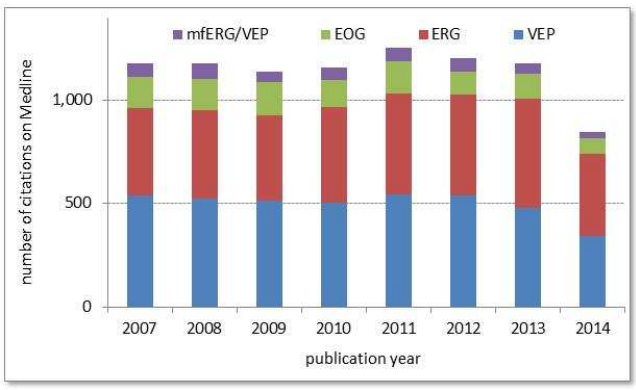
Our site is richer and even more full of news and activities. I urge you to look through it to keep up to date about everything that concerns us. We see that members are interacting more and more and we'd like to highlight the page of multifocal monuments: travel guides.... everyone's contribution will be appreciated! I would also like to take advantage of this newsletter to welcome the twelve new members who have joined us this year from Japan, the USA, Australia, France, New Zealand and Korea.

Before closing, I would like to leave a message of closeness to all those who, in different countries, are affected by the political and social climate of insecurity that is spreading. Our society is made up of people from all areas of the world, but among ISCEV members, the values of exchange and respect prevail over any other possible diversity. I wish to say how proud I am to be a part of and a representative of ISCEV.

With friendship,
Patrizia Tormene

# Message from the Secretary-General

Visual electrophysiology is thriving according to the number of citations on Medline using our keywords (see graph: 2014 dip is due to delayed updating from various sources). As well as the clinical applications which we know, our tests are used as outcome measures for clinical trials—for example, the effect of antibody therapy for optic neuritis, presented recently at the American Academy of Neurology Annual meeting. They are used to understand animal models of human disease and the consequences of pre-clinical treatments—for example, in bovine spongiform encephalomyelitis, the ERG starts changing 5–11 months before clinical signs (DOI: 10.1371/journal.pone.0119431). There are other uses too: brain-computer interface work is increasingly using steady-state VEPs, and developing fast and elegant ways to extract the relevant data, techniques which could feed back to clinical services to help our patients.

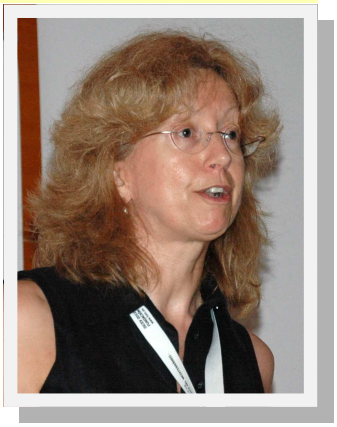



There is no room for complacency. Our partner techniques in imaging are flourishing with huge and exciting technological advances. The boundary between investigation of function and structure is blurring as functional OCT and functional MRI become more widely available. Visual electrophysiology requires innovative ideas—techniques and applications, areas targeted by the Marmor Award—to ensure its unique offering of truly functional assessment is more widely available to patients across the world. Simplification of recording coupled with smarter extraction of information from the data are key areas for improvement. Our membership includes scientists, technologists, ophthalmologists and so on, based in universities, clinics and commercial enterprises: collectively, we have the skills and knowledge to drive these changes, supported by this Society, its Standards, its teaching, its journal and its meetings.

Join us in moving visual electrophysiology on to its next stage. I hope you enjoy this Newsletter, and that you can also join us in Ljubljana: if so, I look forward to meeting you there.

Ruth Hamilton

# Report of the Director of Education



The Boston 2014 ISCEV symposium linked the human clinical visual electrophysiology course with the animal course, organised by Seeliger, to share topics of common interest for the first time. This provided a broad mix of faculty teachers and additional time for more comprehensive clinical demonstrations. Participant feedback was excellent and I would like to thank the ISCEV faculty of Michael Bach, Scott Brodie, Paul Constable, Anne Fulton, Laura Frishman, Ruth Hamilton, Chris Hogg, Graham Holder, Mineo Kondo, Dorothy Thompson, Suresh Viswanathan, Mathias Seeliger, Bo Lei, and Naoyuki Tanimoto very much for their time and energy delivering 23 excellent lectures and eight tutorial demonstrations over two full days. All this was made possible through the careful organisation of Anne Moscowitz and the Boston team. I am grateful also to the manufacturers who helped us to use their equipment for clinical discussions and demonstrations, and I am especially grateful to the course participants for their enthusiasm and engagement which brought the courses to life!

We will share key lectures again during the Ljubljana 2015 ISCEV course, which will be delivered by an international faculty that includes Michael Bach, Jelka Brecelj, Christoph Friedburg, Ruth Hamilton, Chris Hogg, Graham Holder, Mineo Kondo, Tony Robson, Dorothy Thompson, Suresh Viswanathan, Mathias Seeliger and Bo Lei with the local support of Marko Hawlina's team, Maja Šuštar, Manca Tekavčič-Pompe and their colleagues.

I'd ask any ISCEV members who would like to run ISCEV approved courses to forward details of course content and faculty to me. We can support and publicise your meeting using the ISCEV website, newsletter, facebook and LinkedIn.

The content of the ISCEV symposium visual electrophysiology course maps to the requirements of most international ophthalmology and scientist training programmes, and each year ISCEV participates in special interest sessions at other meetings, for example in retinal and paediatric visual electrophysiology at SOE, June 2015 and EVER, October 2015. The 2015 Moorfields Clinical Electrophysiology Course took place in March in London, UK and in September, the BriSCEV 2015 course theme will be 21st century retinal genetics and electrophysiology. Please do let me know if you contribute to any clinical visual electrophysiology teaching either as a keynote or part of an education programme. I am keen to build an international faculty of ISCEV educators and, with your help, to promote visual electrophysiology worldwide and ensure that friendly, accessible, relevant interchange continues to characterise ISCEV courses.

Dorothy Thompson

# Report of the Director of Standards

ISCEV passed another milestone in January 2015 with the publication of an update to the ISCEV Standard for full-field clinical electroretinography, the fifth update of our oldest international standard. The original international standard for electroretinography (1989) was not exclusively ISCEV's; the authors represented the National Retinitis Pigmentosa Foundation (of the USA) and the International Council for Ophthalmology as well as ISCEV. However, all five of the updates to this standard have been undertaken by ISCEV Standards committees and verified by our members.

Looking back to the 1989 ERG standard, I find it remarkable that the original authors were able to forge a consensus of which specific ERG protocols would comprise a standardised clinical ERG test. At the time, many labs, including my own, used coloured flashes to distinguish between the rod and cone systems. Of course, a variety of stimulus protocols could be used to provide the information about retinal function required for clinical assessment. That first international Standard showed us that it was possible to gain wide acceptance of a protocol and to achieve comparable ERG recordings across the globe.

Even more remarkable is how little Standard ERGs have changed. In an era when virtually everything in our labs is unrecognizable, ERGs recorded using the 1989 Standard are quite similar to those recorded using the Standard defined in our 2015 update. So why is there a need for these regular updates to the ISCEV Standards? Of course, updates give us an opportunity to improve precision and clarity. But in addition, each update has a few essential changes. In my mind,

the important change in the 2015 ERG update is the acknowledgement that the LED flash has superseded gas discharge lamps or halogen bulbs and shutters as the light source for most ERG instruments. Earlier updates allowed LEDs as 'other flash sources', requiring users to demonstrate that ERGs obtained were similar to those from broad-spectrum white flashes with a colour temperature of 7000 degrees Kelvin. However, it is not simple to 'acknowledge' LED flash; the definition needs to be changed. With broad-spectrum white light, it was reasonable to assume that the relative stimulation of the rod and cone systems was similar for all sources with similar colour temperatures. Thus, all earlier ISCEV Standard flash stimuli could be defined using only photopic luminance levels. However, 'white' LED sources, which comprise several narrow band sources, may have wide variations in their relative effectiveness for the rod and the cone systems. The updated ISCEV Standard for full-field ERGs gives both photopic and scotopic specifications for the Standard flash stimuli and removes colour temperature from the definition. This will reduce inter-laboratory variability, particularly for the dark-adapted ERGs.

Other substantive changes in the updated ISCEV Standard for full field ERGs include:

Skin electrodes on the lower eyelid are no longer completely excluded from the Standard; they are acceptable with the caveats, "…signal averaging may be required to obtain reliable responses in typical eyes" and "Skin electrodes on the lower eyelid may not be suitable to evaluate attenuated pathological ERGs".

The dark-adapted strong flash 10 ERG is now defined as a Standard ERG. To address concerns about efficiency, this update allows flexibility for clinicians; "Standard ERG tests can be selected as indicated for specific patients", as well as a caution; "In the absence of sufficient clinical information or expertise to guide selective testing, it is recommended that all six Standard ERGs be recorded".

Finally on the topic of the ISCEV Standard for full-field clinical electroretinography—2015 update, please note that there is an ERRATUM. An unwanted decimal point found its way into Table 1 (Stimulus and recording parameters for ISCEV standard full-field ERGs) and the corrected table has been published online and linked to the manuscript. This will soon be published in print. Thank you to ISCEV member Heather Mack for spotting the error and bringing it to our attention.

Active projects in 2015 include updating the ISCEV clinical guideline to procedures. Scott Brodie is chairing the guideline committee with members Patrizia Tormene, Graham Holder, Genie Hartmann, Tony Robson, Josefin Nilsson Subhadra Jalali and Anne Fulton. This guideline aims primarily to educate those who refer patients for clinical electrophysiologic testing of the visual system. Vernon Odom has accepted the task of chairing an ISCEV Standards committee to consider the next update to the ISCEV Standard for clinical visual evoked potentials. We will announce the full committee and launch the work on this update at the ISCEV Symposium in Ljubjana. Suresh Vishwanathan has agreed to co-ordinate the ISCEV project to define a range of extended protocols. This important project aims to provide specifications for specialized procedures that have broad acceptance by experts in the field. These will not only provide guidance to those new to our field but will help to harmonise non-standard diagnostic testing and clinical trials.

I look forward to seeing many of you in Ljubljana and working with the Standards throughout the year.

Daphne L McCulloch

# Report of the Editor-in-Chief, *Documenta Ophthalmologica*

In 2014, 112 manuscripts were submitted to *Documenta Ophthalmologica*, of which 105 were sent for review. The remaining seven were returned to authors due to non-compliance with journal instructions, authors submitting their paper to the wrong journal (as per cover letter stating different journal name!) or authors not resubmitting. Of the 105 manuscripts reviewed, 42 were accepted, four were rejected with a possibility of resubmission, 14 were rejected without a possibility of resubmission and 30 were rejected due to inappropriateness (i.e. papers must include some visual electrophysiology). Fifteen manuscripts are currently under review. Of the 105 papers reviewed, 60% received a final decision after the second round while the rest took three rounds or more (five rounds being the maximum) to reach a decision. This approach clearly imposes a significant burden on reviewers and I sincerely thank them for devoting their time so that more papers of higher quality are accepted in our journal. Similarly, I also extend my gratitude to the Associate Editors who are now responsible for overseeing the review process, a change that was implemented this year. In order to reach

an editorial decision in a timely fashion, Associate Editors solicited the help of more than 313 external reviewers, of whom 64 declined to review and 31 were uninvited due to a lack of response despite agreeing to review. On average, it took nine days to find adequate reviewers and they took 14 days to return their report, a delay which is certainly well within our wildest expectations and I sincerely thank them all for helping us to keep the time to first decision under 30 days.

As you are aware, our journal's impact factor (IF) dropped and now stands at 1.108. As I indicated last year, there are several avenues open to an Editor to increase the IF of a journal, some less acceptable than others. We owe most of *Documenta's* IF to our Standards which remain its most cited papers. Our Standards are cited not only in *Documenta* publications but in visual electrophysiology papers published in other journals. However, a survey of the 2014 publications indicates that there is still room for improvement. For example, the 23 most recent papers published in *Documenta* contained a total of 562 references out of which only 61 (11%) were *Documenta* papers. Of these 61 references, 20 were citations of an ISCEV Standard, 17 were self-citations and 34 were citations of others' work. A similar survey of papers published by ISCEV members in another journal found a total of 476 references, of which 19 were from *Documenta* (four Standards, five self-citations and ten others). Visual electrophysiology publications seldom cite *Documenta* publications despite the fact that, due to its mission, *Documenta* publishes so many of all the visual electrophysiology papers each year (close to 10% since 1975 compared to *IOVS* which ranks first with 11.5%). More importantly, although our Standards are the most frequently cited *Documenta* papers, they are sadly not always cited in visual electrophysiology papers. Clearly, to strengthen the IF of our journal, an effort can be made here: always cite our Standards, even if to say they were not followed exactly, and try to cite at least one other *Documenta* publication aside from your own work. I find it hard to believe that few of *Documenta's* papers are cited in other studies on the same topic, given that our journal specializes in visual electrophysiology (human and animal, clinical and basic). ISCEV members are therefore urged to review their citation strategy to include pertinent *Documenta* papers on their list. This will improve our IF and also attract non-ISCEV readers to our journal.

Finally, as of 2014, manuscripts submitted to *Documenta* are now scanned with plagiarism detection software, Ithenticate, prior to review. The scanning is performed at the Editorial Office and the results are forwarded to me for interpretation and decision. It is important to note that it is not the software that decides, but the Editor-in-Chief in consultation with the Associate Editors. In cases where we find that the overlap with previously published manuscripts is too important, the author will receive the following decision: ''*Dear author, All manuscripts submitted to Documenta are scanned for plagiarism prior to external review. Unfortunately, the results suggest that several portions of your manuscript appear to reproduce sections of previously published work. While we understand that some parts of a manuscript (the method for example) might contain unavoidable redundancies with previously published work of ourselves or others, readers are expected to find original materials in other (more personal) sections of a manuscript (introduction, results and discussion). Consequently, based on the above, I have no other option but to advise that the paper contains insufficient new information suitable for publication in* Documenta Ophthalmologica''. I hope that I will not have to send too many of those responses.

Respectfully submitted
Pierre Lachapelle, PhD

# Treasurer's Report

The current treasurer's report was again compiled by Ulrich Kellner and myself. This gives me the chance to thank Ulrich again for his past work to set up ISCEV's legal and financial structure and his ongoing support. Eventually, the transition of the financial parts of the Treasurer's office to me is, with Ulrich's help, now approaching completion. The accompanying spreadsheet displays financial data retrospectively for 10 years (2005–2014) and an estimate for 2015. The figures are in Euros as this reflects the majority of funds, and accounting and tax records must also be reported in Euros. The financial outcome of 2014 can be considered balanced and was well within fluctuations of past years. A major cause of fluctuation is Springer payments, in particular the timing of DOOP billing and the amount of editorial remuneration. Specific factors in 2014 were high travel grant activity and credit card handling fees; variable membership numbers, the USD/Euro exchange rate, and low interest for deposits. The Boston symposium saw substantial cash flow through ISCEV's accounts, and came out well balanced. Payments for the 2015 symposium are collected locally, so the budget for 2015 shows only the overall settlement. Please contact me or Ulrich with any questions. I look forward to seeing you in Ljubljana.

Best regards, Mathias Seeliger

## Treasurers Report

| (Euro) | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | closed | closed | closed | closed | closed | closed | closed | closed | closed | closed | estimated |
| **Income** | | | | | | | | | | | |
| Membership dues | 27,138.00 | 33,943.97 | 28,090.23 | 23,855.55 | 23,521.15 | 25,518.88 | 29,472.77 | 28,903.42 | 29,400.00 | 29,000.00 | 27,000.00 |
| Symposium income through treasurers office | 28,638.16 | 5,440.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 44,069.97 | 120,532.52 | 0.00 |
| Bank account interests | 1,102.97 | 2,172.38 | 3,252.53 | 2,887.38 | 1,785.54 | 1,536.14 | 1,067.59 | 111.99 | 1,289.84 | 728.72 | 300.00 |
| Publisher editorial payment | 3,975.00 | 6,846.85 | 10,829.44 | 5,775.25 | 6,738.15 | 6,158.80 | 25,041.46 | 13,409.00 | 15,549.58 | 7,108.81 | 14,000.00 |
| Symposium return (income & returned pre-financing) | 19,128.63 | 22,343.00 | 0.00 | 0.00 | 1,919.79 | 0.00 | 14,823.25 | 5,000.00 | 0.00 | 0.00 | 0.00 |
| Dawson Lecture | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3,600.00 | 3,570.00 | 3,600.00 | 3,531.80 | 3,600.00 |
| Marmor Award | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4,831.36 | 4,800.00 |
| Other income | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| *Total Income* | **80,482.76** | **70,747.09** | **42,172.20** | **32,518.18** | **33,964.63** | **33,213.82** | **74,005.07** | **50,994.41** | **93,909.39** | **160,901.85** | **44,900.00** |
| **Expenditure** | | | | | | | | | | | |
| Treasurers office | 540.62 | 735.49 | 1,039.31 | 0.00 | 0.00 | 30.00 | 96.75 | 121.26 | 1,213.90 | 0.00 | 1,000.00 |
| Check handling fees, bank charges | 532.17 | 413.83 | 221.99 | 119.35 | 132.60 | 207.54 | 340.94 | 153.41 | 327.34 | 516.84 | 600.00 |
| Credit card handling fees | 2,558.88 | 1,992.41 | 1,540.32 | 1,404.16 | 1,190.20 | 1,443.39 | 1,617.38 | 1,564.51 | 3,686.65 | 6,504.08 | 2,000.00 |
| Internet services | 162.58 | 569.55 | 213.54 | 569.96 | 212.96 | 212.96 | 598.79 | 1,605.26 | 2,961.71 | 2,765.46 | 0.00 |
| Lawyer | 131.10 | 139.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Accounting | 1,044.00 | 696.00 | 714.00 | 357.00 | 0.00 | 0.00 | 0.00 | 2,501.98 | 0.00 | 0.00 | 3,000.00 |
| Secretary general office | 4,227.60 | 14,828.00 | 2,587.20 | 9,295.54 | 4,203.40 | 0.00 | 0.00 | 6,951.50 | 0.00 | 0.00 | 0.00 |
| Editors office | 1,062.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ISCEV Subscriptions DOOP | 31,561.50 | 26,999.50 | 26,250.00 | 26,250.00 | 26,250.00 | 26,248.71 | 28,569.00 | 0.00 | 52,483.50 | 31,779.00 | 31,000.00 |
| Symposium financing | 46,302.48 | 12,776.57 | 7,363.23 | 1,980.26 | 9,087.03 | 18,930.85 | 6,199.02 | 571.79 | 20,562.82 | 120,340.20 | 0.00 |
| Travel grants | 2,457.20 | 2,893.12 | 3,499.28 | 4,870.38 | 6,990.00 | 8,000.00 | 4,300.00 | 5,000.00 | 4,685.00 | 8,962.99 | 7,000.00 |
| Dawson Lecture | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3,600.00 | 3,500.00 | 3,600.00 | 3,531.80 | 3,600.00 |
| Marmor Award | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 403.96 | 1,500.00 |
| Lab visits | 0.00 | 0.00 | 0.00 | 1,463.19 | 6,343.81 | 0.00 | 4,500.00 | 3,500.00 | 2,500.00 | 0.00 | 0.00 |
| *Total Expenditure* | **90,040.01** | **61,308.18** | **42,389.56** | **46,309.84** | **54,410.00** | **55,043.45** | **49,725.13** | **25,348.45** | **90,807.02** | **174,804.33** | **48,700.00** |
| **Balance** | | | | | | | | | | | |
| Total Income - Total Expenditure | -9,557.25 | 9,438.91 | -217.36 | -13,791.66 | -20,445.37 | -21,829.63 | 24,279.94 | 25,645.96 | 3,102.37 | -13,902.48 | -3,800.00 |
| **Assets (as of 31.12.200x)** | | | | | | | | | | | |
| USD Account | 12,591.99 | 12,888.32 | 6,266.13 | 3,958.97 | 837.38 | 492.95 | 4,342.99 | 7,871.62 | 11,101.87 | 15,220.89 | 15,000.00 |
| EURO Account | 12,765.81 | 22,492.33 | 35,278.37 | 28,940.95 | 9,544.35 | 6,784.39 | 75,735.72 | 23,127.03 | 33,393.44 | 38,693.08 | 34,000.00 |
| Deposit | 108,624.58 | 107,122.08 | 99,701.48 | 101,425.24 | 101,385.41 | 84,771.43 | 35,166.30 | 109,917.72 | 102,507.97 | 87,700.00 | 90,000.00 |
| *Total Assets* | **133,982.38** | **142,502.73** | **141,245.98** | **134,325.16** | **111,767.14** | **92,048.77** | **115,245.01** | **140,916.37** | **147,003.28** | **141,613.97** | **139,000.00** |
| | | | | | | | | | | | |
| Members (paid, honorary & emeritus) | 264 | 283 | 290 | 272 | 275 | 283 | 262 | 306 | 305 | 264 | 225 |

# Report of the Director of International Communications

I will keep my report very brief because I already have to clutter your inbox too much. So what differs from last year? For one: the ISCEV Symposium 2015 website was not produced in our domain, and it looks different :). This was a substantial time saver for me.

But we also had problems: Last year I reported that I had migrated our site from our free university server to a commercial provider (already prepared by my predecessor), and that email aliases can be set up, like president@iscev.org etc. This worked fine initially, but then the problems arose: emails thus forwarded were rejected by some institutions some of the time (with little information as to why). Our provider was of little help in resolving this issue. Our current hypothesis is that some other domains at this provider have been compromised and are being used for massive spam distribution, consequently being blacklisted. Since our IP address is (invisibly) being shared (leaving out boring details here) with other domains, the blacklisting hits us as well. After prolonged deliberation, we decided to transfer our webspace to yet another provider, which provides a unique IP address at very little cost. I do hope that this will resolve the intermittent email forwarding issues, and it might even unblock our domain for our Chinese colleagues. As an interim solution, I have replaced the email aliases by the veridical addresses.

You thus see that there are some goings-on behind the scenes, ensuring I'm busy even when the Symposium website is not produced by me. A pity, nothing of this has to do with beloved clinical electrophysiology *per se*. As always: if you have complaints or suggestions, don't hesitate to contact me. If you are satisfied, you can also demonstrate that.

Michael Bach

# Regional Vice-Presidents' Reports

## Europe & Africa

Writing close to the UK general election reminds me that politics is never far away from science. We may wish to be left in peace to research and develop excellent clinical services for our patients, but often we must engage with politics to ensure that visual electrophysiology continues to thrive in our health services. One of ISCEV's great strengths is that it is the guardian of Standards for visual electrophysiology. Our Standards are authoritative and accepted across the world. Commissioning of UK health care services and research and training of clinicians and scientists is ever more tightly regulated which offers both threats and opportunities for visual electrophysiology. Over 2014 and 2015, BriSCEV board members, strengthened by our Standards, have worked to ensure that visual electrophysiology has a strong voice in the regulation of training and standards of practice in the physiological sciences. Although this stretches BriSCEV's resources, I believe that it is an important investment because our ability to recruit and train clinical scientists in visual electrophysiology in the future will depend on it. I would be interested to hear of the successes and frustrations of ISCEV members in other countries as they "fly the flag" for visual electrophysiology amongst those who commission and regulate health care.

Fortunately, politics has not displaced science completely, and there has been plenty of scientific activity in this part of the world. In September 2014, BriSCEV had its 12th Conference & Course at the Museum of Science and Industry in Manchester, organised by Professor Neil Parry and attended by about 70 delegates. The meeting was preceded by an excellent course on the physiology, measurement and pathology of colour vision by Professors Declan McKeefry, Neil Parry and Tony Morland. This included an exposition of Declan and Neil's elegant technique of silent substitution for separating the L- and M-cone contributions to the photopic ERG. SEVE held its Autumn meeting the same month in the more generously illuminated city of Porto, Portugal (see photo overleaf), coincidentally (or maybe not) during the grape harvest. The auditorium of the new university hospital of Gondomar, Fernando Pessoa Hospital Escola welcomed more than one hundred attendees—ophthalmologists, technicians, and researchers—from Portugal, Spain and France to a multi-language congress. It was organized by Jose Guilherme Monteiro, ophthalmologist at the Hospital Escola; Jose

Salgado Borges, director of the department of ophthalmology in the Hospital Escola and Rufino Silva, chief of the Medical and Neuro-ophthalmology department of the famous university of Coimbra. The academic programme was supplemented with an opportunity to sample Porto's cuisine and famous wines.

Training courses remain an important part of ISCEV's work in Europe. Ulrich Kellner held his 18th Electrophysiology Course for Ophthalmologists in Siegburg in November 2014, whilst in London in March 2015, Graham Holder and Chris Hogg led the Moorfields Electrophysiology course which was attended by a record number of 42 delegates—25 from the UK and 17 from other parts of the world including Africa.

We continue to extend a warm welcome to colleagues providing visual electrophysiology services in Africa and the Middle East, sometimes in very difficult circumstances. ISCEV will continue to strive to make visual electrophysiology testing accessible to as much of the world as possible. A talk at the BriSCEV meeting by Iain Livingstone of the Peek Vision project demonstrated how the smart phone is revolutionising ophthalmology care in rural Africa through its camera and GPS functions. Could the next step be an electrophysiology app for diagnosis and research in this setting?

Richard Smith

# Americas

This is my final year as VP of the Americas and it is with mixed feelings that I write my last newsletter message in this role. I have enjoyed my role in the ISCEV community and have attempted to do my part to keep clinical electrophysiology vital in the Americas. With the advent of new treatment paradigms for inherited and acquired diseases of the retina and optic nerve, as well as the need for monitoring of potential drug toxicities on the visual pathways, the role of electrophysiological techniques is of increasing importance. ISCEV has lead the way in standardization of these techniques, and, through the society's education courses, is training a new generation of visual electrophysiologists to apply these techniques to address clinical and basic research issues in ophthalmology and visual science.

This past year, we had the pleasure of hosting the ISCEV Symposium in Boston. The high quality of the presentations and the attendance at the pre-meeting courses speaks to the vitality of clinical electrophysiology and ISCEV. Of course, the quality of the social interactions at ISCEV Symposia is incomparable. I look forward to seeing many of you at the North Americas meeting ISCEV@ARVO in Denver in May and at the Annual Symposium in Ljubljana.

Mitch Brigell

# Asia & Australasia

This year has been also an active one for ISCEV members in Asia and Oceania. The 62nd Annual Meeting of the Japanese Society for Clinical Electrophysiology of Vision was held in Tokyo on 3–4 October 2014, organized by Professor Kei Shinoda of Teikyo University. There was an invited lecture by Professor Yoshihisa Oguchi, and two symposia on inherited retinal dystrophy and on AO-SLO.

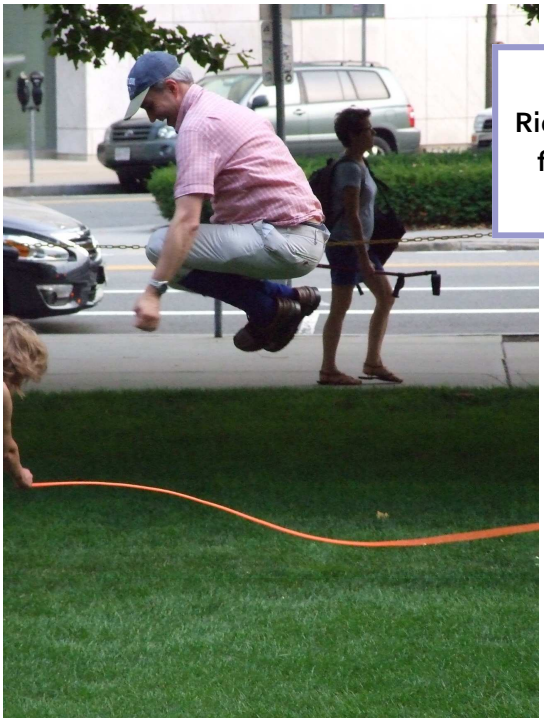
The Asia-Pacific Academy of Ophthalmology (APAO) meeting is also an important event for ISCEV members from Asia and Oceania. The meeting was held in Guangzhou, China during 1–3 April 2015. The ISCEV symposium "*Progress in Electrophysiology of Vision*" was organized and chaired by Zheng Qin Yin (China), Ted Maddess (Australia), and Shuichi Yamamoto (Japan) and gave important clinical and new perspectives on the role of electrophysiology through lectures by Mineo Kondo (Japan), Kaoru Fujinami (Japan), Bo Lei (China), Ruifang Sui (China), Henry Chan (Hong Kong), Ted Maddess (Australia), Audrey Chia (Singapore), and Young-Hoon Ohn (Korea).

Professor Shuichi Yamamoto, MD, PhD

# Recollections of a Symposium: Boston 2014

The 52nd ISCEV Symposium was held at the Boston Marriott Hotel in Cambridge Massachusetts, USA during July 20-24, 2014. The meeting had many highlights. Dorothy Thompson organized well-attended courses in human clinical electrophysiology and, led by Matthias Seeliger, animal visual electrophysiology. The welcome reception was held at the Museum of Science in an outdoor pavilion overlooking the Charles River and Downtown Boston. The weather was perfect for the event. The quality of the presentations at the Symposium was high. Artur Cideciyan presented the Dawson Memorial Lecture "*Gene therapy consequences in patients with RPE65-LCA and in animal models*" with an introduction by Judyth Dawson [see page 13–eds]. Michael Marmor presented the Adachi Lecture "*High standards in retina and art*" at the strikingly beautiful Shalin Lui Theater in Rockport, Massachusetts, introduced by Colin Barber [see page 11–eds]. We were honored to have Professor Emiko Adachi in attendance. The Dodt Award was received by Mathew Gauvin of Montreal for his presentation "*Weighing ON–OFF pathway contribution to the photopic ERG with the discrete wavelet transform (DWT)*". Frau Elke Dodt presented the Award [see page 12–eds]. Social events included an Olympic whiffle ball tournament followed by a New England Lobster Boil, a bus tour of Boston, and a closing Banquet at the Davensport Yacht Club. It was our great honor to host the ISCEV family in Boston.

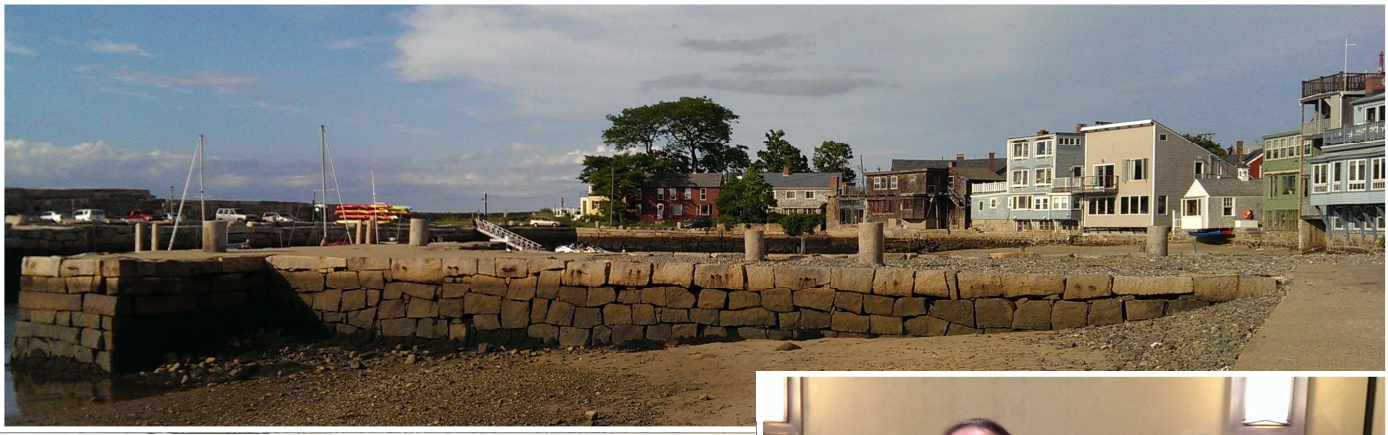
Mitch Brigell on behalf of the Organizing committee.

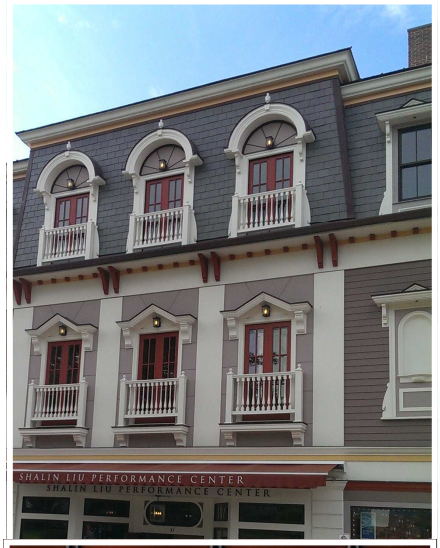


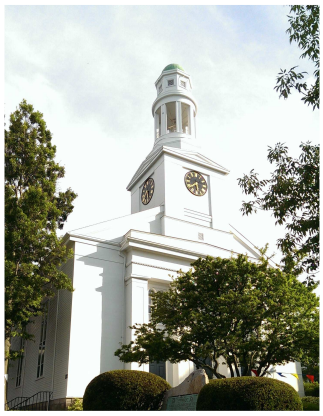
**Richard Smith flying high**

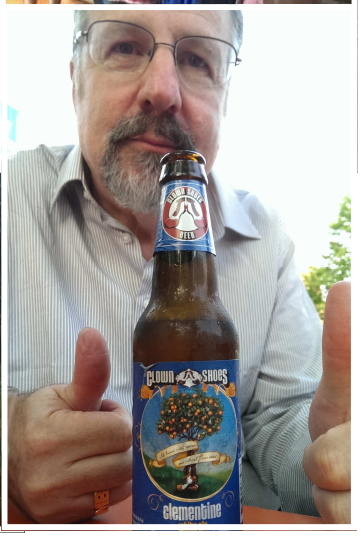
**Professor Adachi and Professor Marmor following the Adachi Lecture**

**trolley bus tour**




SHALIN LIU PERFORMANCE CENTER




CLOWN SHOES
clementine

# The Emiko Adachi Award & Lecture: Professor Mike Marmor

The Emiko Adachi Lecture *High Standards in Retina and Art* was given by Professor Mike Marmor, introduced by Professor Colin Barber:


With its artfully chosen title and an abstract designed less to inform than to pique the interest, expectations were high for this year's Adachi Lecture. They were not disappointed! Mike Marmor has, in the words of his wife Jane, been active in ISCEV "since the dawn of time". And the word active is key here. He has been a prolific contributor to *Documenta Ophthalmologica* over many years. He introduced the very popular Clinical Cases Session as an add-on to the Symposium and has nurtured and guided it to the stage that it is now an unmissable feature within the Symposium. But he has probably been best known for his work on establishing the ISCEV Standards. The well-known quotation: "Standards are great – everyone should have one" might well have been written for ISCEV in its early days. Well, perhaps not every individual, but certainly every lab. Mike saw that the key to establishing viable Standards was to use available technology, be true to the science but cover only the basic core for evaluation. In practice, guidelines had to be concise, simple and do-able. Through his persistence, energy and tenacity, the ISCEV Standards have become probably the best-known feature of ISCEV in the wider world of clinical electrophysiology. Mike is something of a renaissance man and he went on to philosophise, inform and entertain on the theme that another reason for high standards is broader, in that what we test is what we see. And physiology tells us about art while art can teach us about physiology. In his own words:

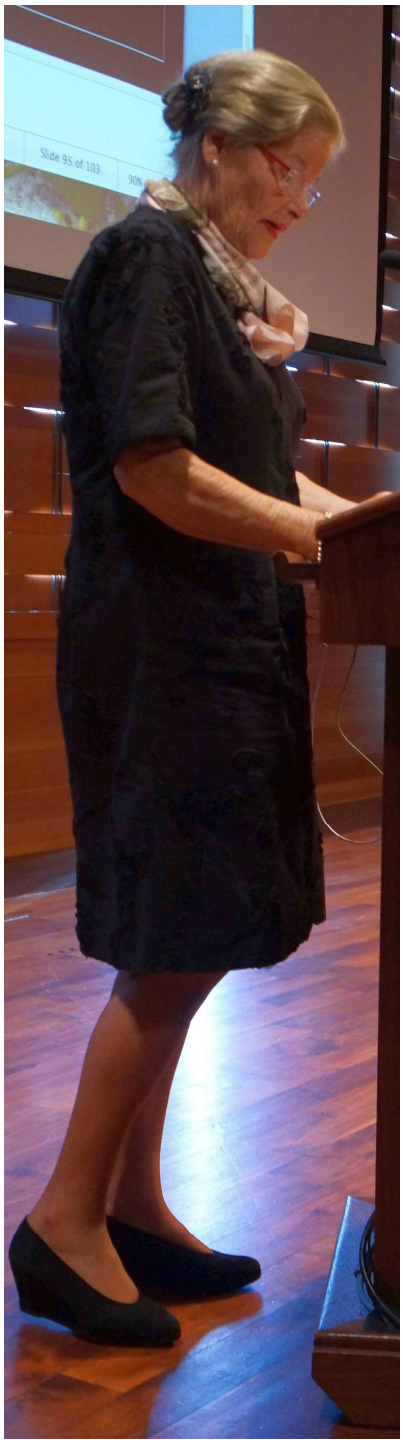
*Art is not science. We can't explain it. But it depends on vision. And retina is brain! Retina has more photoreceptors than optic nerve fibers, so images must be analyzed and coded. Retinal organisation recognizes contrast and color, and that becomes a part of art. Contrast recognition governs the delicate shading of Asian brush paintings and those of Georgia O'Keeffe. Cone adaptation that shifts the stimulus response curve and adjusts our grey scale explains how we can see both indoor scenes and sunny landscapes in art, despite vastly different lighting on the canvas than in the scene. Color is contrast too, and is added on to our brightness-sensitive recognition of form and depth—but when colors are equiluminant in a painting, we lose such recognition and there may be shimmer (as in some OpArt) or odd appearances (some Warhols).*

*One should never diagnose eye disease from art! It's almost always wrong. Impressionism was not from myopia, and El Greco probably did not have astigmatism. But color-blindness is real, and some artists became etchers, or others used limited palettes of amber and blue or black. Degas had known macular disease and failing vision late in life. But he kept drawing! His late pastels are rough or coarse to our eyes, but his own blurred vision may have smoothed the rough edges and encouraged him to keep working. Monet had dense brownish cataracts late in life, and he complained as his vision got worse, even choosing paint by the names on the tubes. Simulations of his vision show that color discrimination became very poor—a disaster for a painter who differentiated between the light at 10 and 11 in the morning. His paintings of the lily pond showed flatter strong blue, as he tried to see colors. In last years before cataract surgery the works were very rough, and often garish in orange or blue. To him, there was little difference, which perhaps explains the strong colors. But after surgery, he returned to former style and finished the great paintings in the Orangerie. So understanding the eye won't explain the complexity of art, but it can help us to understand art . . . and vice versa.*

The lecture was given in the beautiful and scenic venue of the Shalin Liu Performance Centre. There could not have been a more appropriate venue!

Professor Colin Barber

# The Eberhard Dodt Memorial Award: Mathieu Gauvin



The Eberhard Dodt Memorial Award—now in its 20th year—was awarded by Frau Dodt to Mathieu Gauvin, for his paper "*Weighing ON-OFF pathway contribution to the photopic ERG with the discrete wavelet transform*".

Frau Dodt said:

*'Most honoured prizewinner, ladies and gentlemen, dear friends,*

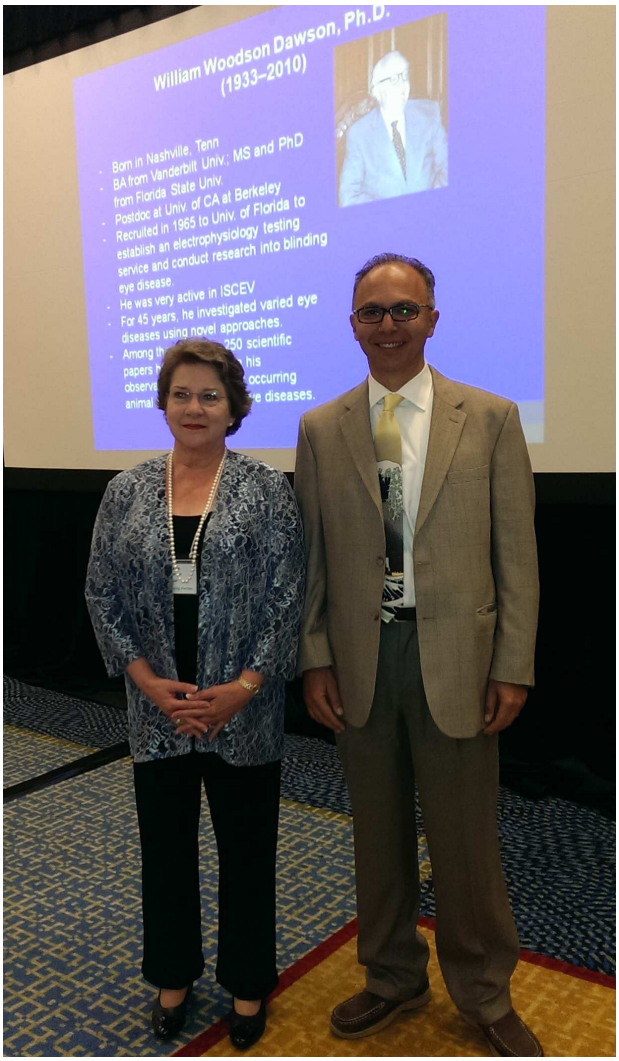
*'My husband would have very much enjoyed today's prizegiving because he and I were once together here in Boston and I still have very happy memories of that journey. As you all know, it is thanks to friends and colleagues, to my family, to benefit concerts and to my loyal helpers that this prize, with its motto "**More research—see better**", has become a reality. The engagement of young scientists in research in the sphere of clinical electrophysiology of vision, and their preparedness to compete with other colleagues, are recognized today with the award of the Eberhard Dodt prize. It is with great pleasure that I carry out this task, for I see it as a legacy from my late husband. Furthering the research of young scientists was always close to his heart and through the prize, this continues to be associated with his name.*

*'Whether the eye is a window into the soul, as romantically inclined people believe, remains uncertain. But it is at all events a window into the brain, and indeed a window that stays open and can be used a passageway. Fundamental research always has to overcome great difficulties but then there are often great successes. Out of several very good pieces of work, this year's jury has judged your contribution to research, Mr Mathieu Gauvin, to be the one that deserves the prize.*

*'But before I hand you the prize, with my heartiest congratulations, I would like to quote to you a piece of Shakespeare, whose 450th birthday we celebrate this year:* "No profit grows where is no pleasure taken. In brief, sir, study what you most affect." *This text from The Taming of the Shrew always helps one to locate the motivation in what one is doing. So it is also very useful to motivate one, if one's enjoyment in research is threatening to fade away. Early success is best of all and that has made you the prizewinner. I congratulate you.'*

# The Dawson Memorial Lecture: Dr Artur Cideciyan

The 4th William Dawson Memorial Lecture was given by Artur Cideciyan: "*Gene therapy consequences in patients with RPE65-LCA and in animal models*", a fascinating exposition delivered with confidence and authority. Dr Cideciyan's degree (Mechanical Engineering) and PhD were gained at the University of Miami, Florida and subsequently he worked at the Bascom Palmer Eye Institute faculty and then at the University of Pennsylvania in Philadelphia, where he now holds the post of Research Professor of Ophthalmology. His love of electrophysiology began with ocular imaging and led to development of one of the first bright flash ERG photoresponse systems. He researches human hereditary retinal degenerations, evaluating experimental treatment outcomes, and animal–human phenotype comparisons, evaluating pre-clinical therapeutic strategies.




Dr Cideciyan has been honoured by several bodies, including both the William & Mary Greve Special Scholar Award and the Senior Scientific Investigator Award from Research to Prevent Blindness, and the Board of Directors Award from Foundation Fighting Blindness. As far back as 1997, ISCEV recognised his talents and awarded him the 2nd Eberhard Dodt Memorial Award in Asilomar, California.

Judyth Dawson introduced Art as follows:

*'I would like to thank Mitch Brigell and his committee for inviting me to ISCEV to introduce the 2014 Dawson Memorial Lecturer. My late husband, Bill Dawson, was a member of ISCEV from its earliest days when it was ISCERG until his death in 2000. His closest academic friends were members of the ISCEV family and he cherished the group and his relationships. Bill contributed a great deal to the science of ophthalmology and electrophysiology. He always said his greatest love was mentoring and teaching young scientists. He was passionate about research and problem solving. He, along with Dr Gary Trick who was a fellow post-doc at that time, and his lab technician, Mr Carl Litz, invented the DTL electrode which is in widespread use both clinically and for research. DTL is a trademarked entity and the exclusive right to use the trademark are held by the Diagnosys firm at this time. I donate the royalties from DTL to ISCEV for this lecture series.*

*'This year's chosen lecturer is Dr Artur Cideciyan, an outstanding scientist who has been a longstanding member of ISCEV. I know that Bill Dawson would heartily approve of Dr Cideciyan being chosen as the Dawson Memorial Lecturer for 2014.'*

# 54th ISCEV Symposium: Singapore

**Proposed dates:**

**13th – 18th August 2016**

On behalf of Singapore National Eye Centre, Dr Audrey Chia & Dr Ranjana Mathur would like to extend a warm welcome to all to attend the 54th ISCEV Symposium 2016 in Singapore. The Symposium will be held at the Academia, an iconic landmark within Singapore General Hospital campus, home to several education centers of excellence.

Singapore, with its diverse & vibrant multi-cultural society, offers a perfect mix of the past and present; skyscrapers, architectural icons, streets adorned with building designs from the Victorian era as well as adventure sports, varied cultural heritages, and many spectacular tourist spots like the Night Safari, Universal Studios & Gardens by the Bay.

From the conference site, attendees can easily gain access to Sentosa, touted as Asia's favourite playground. From Adventure cove, Universal Studios Singapore, SEA aquarium to the newly opened Madame Tussauds and Trick Eye Museum, fun awaits both young and old. Along the Singapore River, restaurants and bars are aplenty, offering attendees the opportunity to dine and admire Singapore's major landscapes. In addition, award winning Changi Airport is the ideal gateway to explore neighbouring SEA countries, each unique in their own way.


# 55th ISCEV Symposium: Key Largo, Florida, USA

On behalf of the Bascom Palmer Eye Institute and my Florida electrophysiology colleagues, we look forward to welcoming you to Key Largo, USA, for ISCEV in October 2017. Key Largo is the first island of the island chain located at the southern tip of Florida and offers a relaxed atmosphere with myriad available activities including the beach, nature walks, canoeing, golf, fishing, and coral reef. The Symposium is planned at the Ocean Reef Club with 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. A Symposium program with a full range of clinical and basic science is being developed as well as social programs including beach receptions and the ISCEV Olympics.

**Byron Lam on behalf of Bascom Palmer Eye Institute and Organizing Committee**

# Caption competition

**What witty caption could you add to the picture on the left?**

**There may even be a prize for the best caption!**

# Minutes of the 2014 ISCEV Membership Meeting

## *2014 ISCEV Membership Meeting*

Thursday 24th July 2014, 11:00
Boston Marriott Cambridge, Boston, USA

## Minutes

65 Members were in attendance.

**1. Opening & welcome by the President**

Patrizia Tormene convened the meeting and welcomed those attending. She thanked the local organisers, Dr Mitch Brigell, Dr Scott Brodie, Dr Anne Fulton, Dr Karen Holopigian, Dr Mary Johnson, Dr Jonathan Lyons and Dr Anne Moscowitz, and the Symposium Co-ordinator, Prof Colin Barber for their hard and fruitful work in hosting a successful meeting. Prof Tormene outlined the membership's duties as listed in the bye-laws Article XV, 1–4.

**2. Minutes of the 2013 ISCEV Membership Meeting**

The minutes of the 2013 ISCEV Membership Meeting, as in the 2014 Newsletter, were adopted as a true record. There were no matters arising.

**3. Report from the 2013 Symposium Organiser**

Mitch Brigell thanked the delegates for attending the meeting. 91 abstracts were presented; 55 in nine oral sessions, and 36 in two poster sessions. The Adachi Lecture was shortly to be given by Prof. Mike Marmor, and the Dawson Memorial lecturer was Dr Artur V. Cideciyan. 167 people had registered for the Symposium, including 116 ISCEV members and 5 exhibitors. In addition, there were 27 accompanying persons. There were 41 and 13 participants for the human and animal courses respectively. Dr Brigell particularly thanked Dr Dorothy Thompson, Education Director, for running the courses, and the exhibitors and sponsors for their contribution. Those present acknowledged Dr Brigell and his team's work with a round of applause.

**4. Elections**

4.1 VP of Asia & Australasia: Patrizia Tormene noted that Prof Shuichi Yamamoto would complete his first term in office at the end of 2014, and noted that he was willing to stand for a second term. No further nominations were received from the floor. The membership approved his election to a second term of office (2015–2018 inclusive) with a show of hands.

4.2 Members-at-large (no geographical restriction): Patrizia Tormene thanked Carol Westall and Mineo Kondo, both of whom have served two terms as Members-at-Large. Ruth Hamilton informed the membership that one Member-at-large position was left vacant during 2014 because of already extensive changes to the Board at the start of that year. Therefore 3 Member-at-large posts required to be filled. Nominations for Dr Anthony Robson, Dr Shigeki Machida and Dr Jan Kremers had been received; nominators noted their support for these candidates and their willingness to stand was confirmed. Further nominations from the floor were received: Dr Bo Lei, Dr Suresh Viswanathan, Dr Josefin Nilsson and Dr Karen Holopigian. Following an anonymous vote, six candidates went forward to the e-ballot of the entire membership: Karen Holopigian, Bo Lei, Shigeki Machida, Josefin Nilsson, Anthony Robson, Suresh Viswanathan.

*(Note added later: Karen Holopigian, Anthony Robson and Suresh Viswanathan were elected)*

All outgoing officers were thanked again for their work for the Board.

**5. ISCEV Officer's Reports and matters arising**

5.1 The treasurer's report was presented as in the 2014 Newsletter. Prof Mathias Seeliger conveyed his best wishes to Ulrich Kellner. He noted that some figures in the 2014 report looked unusual because costs had been split across years. He noted that the 2014 Symposium had broken approximately even. The audit was still to be undertaken. The membership exonerated the Treasurer by a show of hands, based on his and Prof Kellner's report in the Newsletter.

5.2 Prof Daphne McCulloch, Director of Standards, was not present, but an update on her work was given by Prof Michael Bach. It was noted that she had done a great job with the ERG Standard renewal, with many responses received to a draft distributed prior to the

meeting and more at a well-attended breakfast meeting during the Symposium. Compromises had been found on difficult issues, and January 2015 publication was still anticipated despite the tight deadline. One further draft would be circulated for final feedback.

5.3 Dr Dorothy Thompson, Director of Education, noted with pleasure the 53 course registrants, and outlined the structure, with 23 lectures and demonstrations provided. She thanked the manufacturers for their support and noted the feedback scores were a mean of 4.6 (Likert scale where 5 = "excellent").

5.4 Other reports were as in the 2014 newsletter without addition.

5.5 The membership exonerated the Board.

5.6 Scott Brodie provided the membership with an update of activity on CEVnet, reminding them that it is a resource offered to all members. CEVnet is a 'closed list' i.e. posting is only possible from e-mail addresses on Prof Brodie's master list. Those who do not wish to participate should contact Prof Brodie on scott.brodie@mssm.edu. All CEVnet messages to Prof Brodie should include the term "CEVnet" in the subject line.

**6. Highlights from the 2014 Board meeting**

6.1 EyeWiki

ISCEV is a partnership society of Eye Wiki http://eyewiki.aao.org and is still seeking ophthalmologist volunteer members to add electrophysiological content. The content of the Guidelines on Procedures was identified as suitable content, once reviewed.

6.2 The Marmor Award

Prof Mike Marmor has generously established a prize fund for innovation. Several small prizes of $500 will be awarded each year to winning presentations, and of these, the group which has shown most progress will receive a $2500 prize the following year. The prize has been inaugurated in 2014 to test its feasibility.

6.3 Electronic Documenta Ophthalmologica

The membership were informed that Springer, publisher of Documenta Ophthalmologica, have indicated that, in the relatively near future, print copies will cease and access will be electronic only.

6.4 LinkedIn and facebook

Members were reminded about ISCEV's presence on social media sites LinkedIn (www.linkedin.com/groups/ISCEV-4811521) and facebook (www.facebook.com/ISCEV.org) and encouraged to join if they used these sites.

**7. ISCEV Standards**

Michael Bach, in the absence of Daphne McCulloch, Director of Standards, noted that the majority of work had been in the area of the ERG Standard revision. The Procedures and Technical Guidelines were currently at committee.

**8. Future ISCEV Symposia**

8.1 2015: Ljubljana (SC: Colin Barber): Prof Marko Hawlina and Dr Jelka Brecelj presented details of the planned meeting in Ljubljana on 23–27 June, 2015. The meeting will overlap one day with the European Neuro-ophthalmology Society.

8.2 2016: Singapore (SC: Suichi Yamamoto): Audrey Chia presented some details of the planned meeting on 13–18 August 2016.

8.3 2017: The Americas: 3 invitations were received. Byron Lam and Sandeep Grover invited members to Key Largo, Florida, USA. Andre Messias (presented by Karen Holopigian) invited members to Ribeirão Preto, Braxil. Jim Ver Hoeve and Michal Nork invited members to Madison Wisconsin, USA. A paper ballot reduced the candidate hosts to two (Key Largo and Madison Wisconsin) to go forward to the e-ballot of the whole membership.

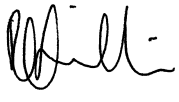
*(Note added later: Key Largo was selected)*

**9. Any other business**

No further business had been notified to the Secretary-General.

**10. Close**

The meeting closed at 12:45



Dr Ruth Hamilton

This Newsletter is available to download as a pdf from www.iscev.org