

From the President

Dear friends and colleagues,

This year too, I have the pleasant task of introducing the yearly newsletter that offers a round-up of the activities of the Society over the past year.

The ISCEV would be nothing without its Secretary-General, Karen, who has taken on the role with great style and enthusiasm. You just cannot imagine how much a Secretary-General has to remember and follow-up and Karen has proved perfect for this.

The board has been revitalised by the addition of three new members at large: Josefin Nilsson, Shiyong Li and Jan Kremers. I am particularly happy about the arrival of these new members who will inject new energy and strength into our activities. All of the new entries are very active in their own areas of work and are particularly dedicated to the neurophysiology / neuropathology of vision. They will be a precious resource for the Society.

Thus, the Society is alive and well, and it is so good to have our younger members with us as we hope that their interest in our activities will help spread our work wider, throughout the World.

Our Commissions have been working hard this year and, thanks to the efforts and commitment of Anthony Robson and Scott Brodie, we have published the ISCEV Guide to Visual Electrodiagnostic Procedures. I am both proud and moved to have taken part in drawing up this document. The last one was published many years ago, there were no text then like the one we have today, and I felt that it was very important to have up-dated guidelines available for all. These new guidelines, completely rewritten in the light of new conceptions (thank you to all those who insisted on this), offer precious clinical and practical guidance to those who, just starting to work in this field, need and want to have practical information about the tests we use.

This past year, thanks to the commitment of many members, the Society has been represented in national and international congresses in countries all over the world: Hawaii (USA), Berlin (Germany), Nevada (USA), London (UK), Singapore, New York (USA), Wuhan (China), Siegburg (Germany), Nice (France), Paris (France), Bradford (UK). I hope I haven't forgotten anyone...

Keeping the Society running smoothly requires continuous legal and technical up-dates and Michael, as always, has been kept very busy managing our life on the web.

Last year our Annual Meeting was in Miami. Byron Lam did an enormous amount of work to offer us such a high level scientific programme. The meeting was held in the Bascom Palmer Institute, where everything was talking about intense scientific activity, where there was lively cultural exchange and, a youthful spirit in research. For a few days we lived the life of the Institute, hosted in the areas that are dedicated to cultural and professional sharing and exchange. After the work was over, we were soon immersed in the Latin-American atmosphere of the city where everything can become art, music and entertainment. In keeping with the traditions of our Society, Byron Lam also showed us the magical Fairchild Tropical Garden with local flora and fauna, and we also spent some elegant evenings enjoying romantic views of Miami skyline at sunset and by night.

Reims is expecting us, Carl Arndt, the local and scientific commissions, and the coordinators of the Symposium have all been working with dedication to make the meeting a success. There's no lack of things to worry about, so much has to be done to prepare, and it's not always easy coordinating people or even getting them to agree, indeed, sometimes it can be frustrating. All the organisers have my sincere support and esteem for their great work.

Patrizia Tormene, ISCEV President



Message from the Secretary-General

Message from the Secretary-General

Aloha! I recently returned from the ARVO meeting in beautiful Honolulu, Hawaii, where I had the opportunity to enjoy the science of many ISCEV colleagues. I started the week at the ISCEV@ARVO meeting, nicely organized by our Vice President for the Americas, Laura Frishman. This meeting always provides a great forum for ISCEV

colleagues to interact and share some electrophysiology before the ARVO meeting begins and the magnitude of ARVO takes over.

Although it was not that long ago that we all met in Miami to enjoy the 55th annual ISCEV Symposium, the 56th annual Symposium in Reims is rapidly approaching. This will provide yet another opportunity for interactions with ISCEV friends, sessions filled with interesting talks and posters, and invited lectures to attend. One relatively new forum for ISCEV is the formation and support of the YSCEV group (Young Society for the Clinical Elec. of Vision). This group includes relatively new ISCEV attendees, members in training or those early in their careers. This is the third year YSCEV will have stand-alone time during the Symposium. This year they will have a Colloquium on Thursday morning from 8-9:30. This is a great way to get to know people if you are new to ISCEV as well as a great way to strengthen our organization by increasing its appeal to younger members.



Another way that ISCEV is able to help support younger members is by offering travel grants. These can be for attendance to a course, for attendance to the Symposium, or for attendance to both. As Secretary-General, I have the privilege of overseeing the travel grant process. This year, our normal designation of funds was supplemented by some additional monies from the Dawson award, generously donated by Judyth Dawson. Therefore, we were able to fund additional grants for travel to Reims and a total of fifteen young scientists were awarded grants this year. This is truly fantastic to be able to help so many young individuals in training attend the annual meeting and/or the courses. They also receive free annual membership to ISCEV for this calendar year. These trainees are PhD students, fellows, medical students, optometrists, etc. Geographically, they reside in countries located across the globe but it is especially rewarding to have awarded grants to young trainees from some countries not represented as frequently at ISCEV, such as Indonesia, Nepal and Egypt. Congratulations and welcome to all!

The Facebook page, begun by the previous Secretary-General Ruth Hamilton and still maintained by her, continues to flourish! It has approximately 1300 followers and the posts are actively viewed and 'liked' by the followers. There are many followers who are not ISCEV members so this is a great forum for information about electrophysiology to spread among a wider audience of scientists and clinicians at a very fast rate. Who knew social media and science could be such a great match?

I hope to see everyone at the 56th ISCEV Symposium in Reims!

Karen Holopigian, ISCEV Secretary-General

Report of the Director of Education

The ISCEV courses Miami 2017 were lively and interactive thanks to an energetic faculty and great audience. Byron Lam and Vittorio Porciatti were our hosts who found time also to give expert contributions. My role is to organise the human clinical electrophysiology course. For the fourth year we successfully partnered the human course with a concurrent animal course, which aims to support participants wanting to use animal electrophysiology for clinical research. This was co-ordinated by Suresh Viswanathan, with excellent faculty contributions from Xiangrun Huang, Mitch Brigell and Mathias Seeliger. We shared some outstanding key lectures delivered by Laura Frishman, Michael Bach, Dorothy Thompson, Mineo Kondo, Ruth Hamilton and Tony Robson and the wider faculty expertise spanned the gamut of visual electrophysiology. Each year there



are challenges to even the best-laid plans, but as ever the faculty faced these together with ingenuity and flexibility – thank you! This included human course demonstrations on a sky bridge – who knew there were so many cone responses! Please see pictures. I'm very grateful for the participation and support of the equipment manufacturers who allow us to use their equipment for these demos. The 2017 course received excellent feedback and some great suggestions, which will be incorporated in this year's human course programme.

ISCEV wants to support courses that promote visual electrophys-

iology and ISCEV standards. An 'ISCEV approved' course requires participation of an ISCEV member and recommendations to follow ISCEV standards. Please e-mail DoE details of your course content and faculty for this. We can help publicise your meeting using the ISCEV website, newsletter, facebook and twitter. The event listing on the ISCEV website grows and the number of new contributors to ISCEV education increases each year, which is marvellous news. Please let me know when you contribute to clinical visual electrophysiology education and if there is any specific aspect of visual electrophysiology the ISCEV symposium courses may include in the future. I will do my best to keep ISCEV education relevant, accessible and responsive



Dorothy Thompson, ISCEV Director of Education

Report of the Director of Standards

Following discussions at the last two ISCEV symposia the "[ISCEV Guide to Visual Electrodiagnostic Procedures](#)" was published early in 2018 and I am grateful to the committee and for many comments and contributions from ISCEV members. I hope most would agree this is a worthwhile achievement for our Society and that this guide should be updated on a periodic basis, to maintain clinical relevance and to address evolving changes in our field and in clinical practice.

More than a decade ago it was suggested that ISCEV should formulate extended protocols for additional electrophysiological techniques, used increasingly in the clinic or for research purposes. In a dedicated session at the ISCEV symposium in Miami last October, several proposed extended protocols were presented and three of these will be published this year, including those for the [Dark-adapted red flash ERG](#), and the [Photopic On-Off ERG and Photopic Negative Response \(PhNR\)](#). The ISCEV Board recently approved "Open Access" publication of all extended protocols, likely to further promote and improve the use of these techniques worldwide. Other extended protocols are planned to be posted for consultation later in 2018 and your feedback would again be greatly appreciated.



The forthcoming 2018 symposium in Reims will include an ISCEV standards session with the focus on the "ISCEV guideline for calibration of stimulus and recording parameters", last updated 15 years ago. A committee was convened after the last symposium and will include Michael Bach (committee chair), Hoover Chan, Chris Hogg, Ruth Hamilton, Vernon Odom and the Director of Standards. The possible role of ISCEV in visual electrophysiology laboratory/clinic self-accreditation has been discussed by the ISCEV Board over the last few years and a committee recently convened and chaired by Ruth Hamilton will explore this further. Finally, plans to translate and publish the ISCEV standards in Chinese have progressed with the help of Shiyong Li and Zheng Qin Yin and colleagues. These developments will be discussed further in Reims and I look forward to hearing your views. If you are unable to attend please feel free to contact the committee chairs or myself regarding any of these matters.

Anthony Robson, ISCEV Director of Standards

Report of the Editor-in-Chief, Documenta Ophthalmologica

Dear ISCEV members,

Given that our Journal has been benefitting of an impact factor of 1.92 for the last year or so, I was hoping that this would translate into a flurry of high quality submissions, leaving me with the gratifying task of having to select only the best of the best for our journal. Unfortunately, this Editor's dream scenario did not materialize. The Editorial team still had to struggle, almost daily, in order to deliver issues as complete as possible that included not only high-quality papers but also in the right amount so that we could meet our commitment vis-à-vis our publisher. Therefore, I hereby urge you again to seriously consider Doc-



umenta more than ever as your first-choice journal for publication of your work on visual electrophysiology. After all, Documenta remains the best Journal to publish the science that we do.

To further encourage submissions to our Journal, Springer continues to request that I select two articles per issue that are granted a free temporary access of two months. The selected articles are also featured in tweets from Springer in order to optimize their promotion, as well as that of our Journal. Furthermore, in order to maximize the visibility of our Journal, we started the year with the publication of our ISCEV Guide to Visual Electrodiagnostic Procedures which, we hope, will generate a lot of citations. Similarly, the June issue of Documenta will include manuscripts detailing the first three extended protocols that were approved, namely, the dark-adapted red flash ERG, the photopic On–Off ERG and the photopic negative response (PhNR) of the full-field electroretinogram.

Since my last report, the Editorial team has handled 62 manuscripts out of which 15 were accepted, 28 were rejected and 19 are currently under review. Of the 28 papers that were rejected, 11 were on topics incompatible with the mission of our Journal and 9 were rejected on the basis of plagiarism, a plague that continues to be a great challenge to the Editorial team.

Last November, Michael Bach officially stepped down from his position as Associate Editor, a position that he has held for close to 15 years. Thank you Michael you for the great work you did for our Journal. We will miss your wisdom as well as your detailed, critical and fair assessments of the manuscripts that were assigned to you.

Finally, I would like to take this opportunity to offer my most heartfelt appreciation to the Associate Editors (Carol Westall, Suresh Viswanathan, Mineo Kondo and Jan Kremers), our Managing Editor (Diana Epstein) as well as to all those who volunteered their time to the review process. Without your continued support, our Journal would not be what it is today.

Lastly, to all the ISCEV members, please continue to read our Journal, submit your work to it and, when appropriate, cite the manuscripts that we have published as this will also significantly increase the visibility of our Journal.

Pierre Lachapelle, Editor-In-Chief Documenta Ophthalmologica

Director of International Communications

As your friendly Director of International Communications, I frequently need to hug your inbox, though I try to not overcrowd. The last year was full of diverse ISCEV stuff for me, small and large, as frequently I am the go-to target if any issues with and around ISCEV arise. That is totally fine, and sometimes I can solve the problem directly, or point to pertinent information on our website, or channel the issue to our appropriate officer. So do not hesitate to keep on contacting me whenever need arises.

One major effort was compliance with the GDPR (General Data Protection Regulation). In principle I find this law valuable, but it's such a hassle, and just to think that litigious lawyers will love to find victims. We now have a Policy in place

http://iscev.org/varia/ISCEV_Data_Protection_and_Privacy_Policy-2018-05-20.pdf

A second major issue was the migration of our website to our new membership management provider “Wild Apricot”, a plan I announced last year. The advantages are easier management, since it's a CMS (content management system). Thus also non-IT specialists among us can maintain our site. Much of the content has indeed been moved, and I welcome feedback on still missing parts or erroneous links: <https://iscev.wildapricot.org/>. After all concerns have been dealt with, I will transfer the domain, so everything will then be available again under <ISCEV.org>.

A very enjoyable encounter with a number of you was this year's ISCEV@ARVO, again efficiently organised by Laura Frishman, our VC Americas.

Wrapping up, I would like to thank all contributors to this Newsletter, especially their unusual timeliness, and also acknowledge advice and proofreading help by Ruth Hamilton and Karen Holopigian.

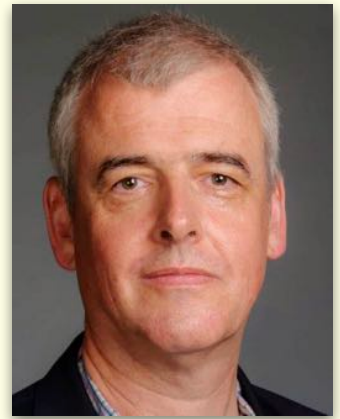
Looking forward to meet you in Reims!

Michael Bach, ISCEV Director of International Communications



Treasurer's Report

As every year, the spreadsheet summarizing ISCEV's finances is the central piece of information in the treasurer's report. It displays the financial data for 2017 and retrospectively for a period of 10 years (this year for 2007–2017). A few minor adaptations of the format were introduced due to the limitations in the number of lines. As we started a test run to allow membership dues payments via PayPal for those who did not succeed the traditional way via a credit card, there is now a separate line in the income section for each source. In addition, support for local symposia (2017 in India) was grouped together with the lab visit program terminated in 2013 and the YSCEV support that started in 2016. Generally, amounts in EUR (right aligned) and USD (left aligned and marked with a '\$' sign) are listed separately to enhance transparency of the monetary transactions of our international society. At the end of each section, EUR and USD totals are calculated separately. Where appropriate, a conversion of the USD amount in EUR (based on the official (Deutsche Bundesbank) rate on the 31.12. of the respective year) and a grand total is provided, as the accounting and tax records must be reported in that currency. The financial outcome in 2017 was again balanced and well within the margin of fluctuation over the past years. Major factors for these yearly fluctuations in ISCEV's accounts are the payments to and from Springer and symposium-related fund transfers. As two prepayments (for the 2017 and the present 2018 meeting) fell into 2016 and the 2017 annual payment to Springer took place in January 2018, the annual expenditure in 2017 was comparably low. Regarding our assets, the deposit in USD had to be terminated by the end of 2017 due to novel EU administrative barriers for juridical entities like our society. The returns had to be remitted to the USD account to avoid any currency-related loss. As an outlook on 2018, there is a novel, separate Dawson Award account that will, due to the generous support of Mrs. Dawson, allow to utilize the remaining funds from Dawson Award lectures specifically to award travel grants for future annual meetings. Please do not hesitate to contact me with any questions regarding the treasurer's report. I look forward to seeing you in Reims.



Mathias Seeliger, ISCEV Treasurer

Treasurers Report (Euro)	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	closed	closed	closed	closed	closed	closed	closed	closed	closed	closed	closed
Income											
Membership dues via CC	28,090.23	23,855.55	23,521.15	25,518.88	29,472.77	28,903.42	29,400.00	29,000.00	30,322.31	29,805.49	23,338.47
Membership dues via PP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,887.15
Symposium income through treasurers office	0.00	0.00	0.00	0.00	0.00	0.00	44,069.97	120,532.52	0.00	0.00	0.00
Bank account interests EUR	3,252.53	2,887.38	1,785.54	1,536.14	1,067.59	111.99	1,289.84	728.72	534.85	43.04	150.26
Bank account interests USD									\$3.95	\$0.14	
Publisher editorial payment	10,829.44	5,775.25	6,738.15	6,158.80	25,041.46	13,409.00	15,549.58	7,108.81	6,448.87	22,927.89	16,505.53
Symposium return (income & returned pre-financ)	0.00	0.00	1,919.79	0.00	14,823.25	5,000.00	0.00	0.00	6,504.45	0.00	0.00
Dawson Lecture USD (2016 via Symposium organ.)								\$4,800.00	\$4,785.00	\$0.00	\$4,800.00
Income EUR								157,370.05	43,810.48	52,776.42	41,881.41
Income USD								\$4,800.00	\$4,785.00	\$3.95	\$4,800.14
Income USD in EUR (31.12.XX)								3,531.80	4,395.15	3.75	4,002.45
Total Income (EUR)	42,172.20	32,518.18	33,964.63	33,213.82	70,405.07	47,424.41	90,309.39	160,901.85	48,205.63	52,780.17	45,883.86
Marmor Award \$							\$5,980.00	\$0.00	\$0.82	\$0.03	
Expenditure											
Treasurers office	1,039.31	0.00	0.00	30.00	96.75	121.26	1,213.90	0.00	194.25	0.00	0.00
Check handling fees, bank charges	221.99	119.35	132.60	207.54	340.94	153.41	516.84	193.19	65.15	75.52	
Credit card handling fees	1,540.32	1,404.16	1,190.20	1,443.39	1,617.38	1,564.51	3,686.65	6,504.08	354.56	353.31	334.99
Internet services	213.54	569.96	212.96	212.96	598.79	1,605.26	2,961.71	2,765.46	96.35	691.25	989.14
Lawyer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Accounting	714.00	357.00	0.00	0.00	0.00	2,501.98	0.00	0.00	0.00	0.00	0.00
Secretary general office / ISCEV board	2,587.20	9,295.54	4,203.40	0.00	0.00	6,951.50	0.00	0.00	0.00	2,000.00	2,752.48
Secretary general office / ISCEV board USD									\$1,706.68	\$0.00	\$0.00
Editors office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ISCEV Subscriptions DOOP	26,250.00	26,250.00	26,250.00	26,248.71	28,569.00	0.00	52,483.50	31,779.00	28,087.50	19,340.25	3,570.00
Symposium financing	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	47,372.92	0.00
Travel grants	3,499.28	4,870.38	6,990.00	8,000.00	4,300.00	5,000.00	4,685.00	8,962.99	5,790.00	5,590.00	5,080.64
Dawson Lecture					3,600.00	3,500.00	3,600.00	3,531.80	0.00	0.00	0.00
Dawson Lecture USD											
Lab visits, YSCEV support, local symposia	0.00	1,463.19	6,343.81	0.00	4,500.00	3,500.00	2,500.00	0.00	0.00	300.00	1,090.00
Expenditure EUR	43,428.87	46,309.84	54,410.00	55,073.45	49,821.88	25,469.71	92,020.92	174,400.37	36,422.53	75,712.88	13,892.77
Expenditure USD							\$0.00	\$1,706.68	\$0.00	\$0.00	\$0.00
Expenditure USD in EUR (31.12.XX)								0.00	1,567.63	0.00	0.00
Total Expenditure	43,428.87	46,309.84	54,410.00	55,073.45	49,821.88	25,469.71	92,020.92	174,400.37	37,990.16	75,712.88	13,892.77
Marmor Award \$							\$500.00	\$1,000.00	\$0.00	\$0.00	
Balance											
Total Income - Total Expenditure EUR	-1,256.67	-13,791.66	-20,445.37	-21,859.63	20,583.19	21,954.70	-1,711.53	-13,498.52	10,215.47	-22,932.71	31,991.09
Total Income - Total Expenditure USD							\$4,800.00	\$3,078.32	\$3.95	\$4,800.14	
Income - Expenditure Marmor Award USD							\$5,480.00	-\$1,000.00	\$0.82	\$0.03	
Assets (as of 31.12.XX)									1,0887	1,0541	1,1993
USD Account							\$18,416.46	\$21,494.78	\$21,498.73	\$21,810.90	\$72,810.90
USD Account in EUR	6,266.13	3,958.97	837.38	492.95	4,342.99	7,871.62	11,101.87	15,220.89	19,743.53	20,395.34	60,711.16
EURO Account	35,278.37	28,940.95	9,544.35	6,784.39	75,735.72	23,127.03	33,393.44	38,693.08	98,057.71	75,121.25	103,109.89
Deposit (terminated 2017 due to EU law change; USD value \$ 46,512.03)	99,701.48	101,425.24	101,385.41	84,771.43	35,166.30	109,917.72	102,507.97	87,700.00	41,787.70	43,551.04	0.00
Total Assets	141,245.98	134,325.16	111,767.14	92,048.77	115,245.01	140,916.37	147,003.28	141,613.97	159,588.94	139,067.63	163,821.05
Marmor Award USD Account \$							\$5,480.00	\$4,480.00	\$4,480.82	\$4,480.85	
Members (paid, honorary & emeritus)	290	272	275	283	262	306	305	264	249		

Vice-President Americas

The 55th ISCEV Symposium, organized by Byron Lam and his conference team, was held in the Americas at the Bascom Palmer Eye Institute in the vibrant city of Miami Florida in October 2017. The meeting was well attended, despite the recent ravages of Hurricane Irma, and the program was both excellent and enjoyable, as documented in another section of this newsletter. ISCEV@ARVO was held in Honolulu, Hawaii on April 28, the day before the ARVO meeting. The talks covered a range of interesting topics, from the effects of reducing dark adaptation time on the normal ERG, to the role of the ERG in assessing retinal status after therapeutic interventions for a range of diseases affecting the retina. ISCEV's event on the day before ARVO 2019 in Vancouver Canada is in the planning stages, with more information after the 56th ISCEV meeting in Reims France. I look forward to seeing you in Reims and Vancouver.



Best wishes, Laura Frishman, ISCEV Vice President Americas

Vice-President Asia & Australasia

The 5th Korea-Japan Joint Meeting of Clinical Electrophysiology was held on November 18, 2017 in Osaka, in conjunction with the 65th Annual Meeting of Japanese Society for Clinical Electrophysiology of Vision. Both meetings were organized by Professor Kazuki Kuniyoshi of Kinki University. The joint meeting consisted of two seminars entitled "Recent research on clinical electrophysiology of vision in our countries" and "Clinical case conference", and the special lecture "A role of neurotransmission from photoreceptor cells to ON bipolar cells in retinal circuit formation" by Professor Takahisa Furukawa of Osaka University. The highlight of this joint meeting was the invited lecture of Professor Tatsuo Hirose, entitled "Congenital retinoschisis - fundus appearance and retinal functions".

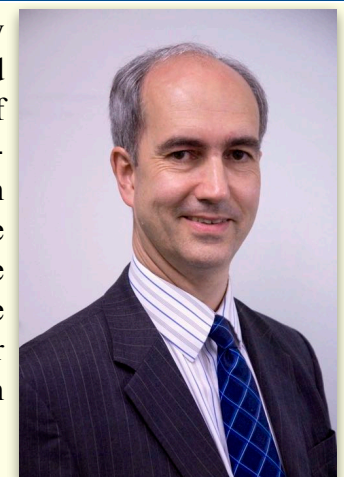


During the Asia-Pacific Academy of Ophthalmology (APAO) meeting, which was held in Hongkong on February 8-11, 2018, the ISCEV symposium "New Topics in Electrophysiology of Vision" was organized and chaired by Mineo Kondo and Graham Holder. Speakers in this symposium were Ranjana Mathur, Hoon Dong Kim, Shinji Ueno, Bo Lei, Serena Zhechuang Li, and Teddy Maddess. This ISCEV symposium has been organized at every APAO meeting during these years, and I hope this symposium will continuously enhance the academic activity of electrophysiology in Asian countries.

Shuichi Yamamoto, ISCEV Vice President Asia & Australasia

Vice-President Europe & Africa

As this report was being prepared, news came through of the death of Professor Geoffrey Arden (1930-2018), who had been an ISCEV honorary member since 1994 and the head of the Visual Electrophysiology service at Moorfields Eye Hospital, London for much of his career. A truly great scientist, Geoffrey's many contributions to vision science, including visual electrophysiology spanned an astonishing 65 years from his first publication in the Journal of Physiology in 1953 to the publication in The Lancet in 2018 of the CLEOPATRA trial of nocturnal light mask-wear in diabetic maculopathy, for which he was the inspiration. His scientific longevity exceeds even that of Ragnar Granit, and the number of clinicians and scientists he has taught and inspired will be hard to count. Our sympathies will be with Geoffrey's family, and a fuller tribute to him will be published in the near future.



In France, SEVE held its Autumn meeting in Paris and returned to Paris in May for a two-day meeting at the Société Française d'Ophtalmologie congress. Martine Crochet also co-chaired two electrophysiology seminars with Graham Holder at the Lebanese Ophthalmological Society in Beirut.

Ulrich Kellner has regretfully decided that the Siegburg visual electrophysiology course, which he has led for 21 years will not run this year due to falling demand amongst German-speaking ophthalmologists and vision scientists.

In the UK, BriSCEV held its 15th meeting in September at the University of Bradford, hosted by Professor Declan McKeefry. The techniques of silent substitution for isolating individual photoreceptor classes formed a prominent part of the meeting, reflecting Declan's research interests, but the programme also covered dark adaptation, the melanopsin system, adaptive optics and retinal genetics. The social programme included a fascinating visit to the National Science and Media Museum. In March, the Moorfields Electrophysiology Course in March attracted 46 delegates and received very positive feedback. For several years, the UK has been in the process of developing formal training and accreditation programmes and professional registration for clinical scientists. BriSCEV board members (particularly Dorothy Thompson and Ruth Hamilton) have been actively engaged in that process, ensuring that visual electrophysiology continues to be recognized in the new regulatory framework.

We are delighted that the ISCEV congress is returning to Europe this year. Carl Arndt and the conference committee have been working very hard and we look forward to seeing you in Reims.

Richard Smith, ISCEV Vice President Europe and Africa

Geoffrey Bernard Arden Obituary

In 1948 the Institute of Ophthalmology was opened under the guidance of Sir Stewart Duke Elder in Judd Street in London. Formal research into the science of Ophthalmology was born in the UK and a number of bright young research scientists were gathered under this one roof but with the benefit of close communication with the surrounding clinical eye departments in London. Geoffrey Arden came to the Institute as a PhD student at this time obtaining his PhD in photochemistry and then went on to complete a medical degree. Geoffrey had an exceptionally enquiring mind and an enormous knowledge even of matters far removed from Ophthalmology. He spent some time studying under Ragnar Granit in Stockholm and KT Brown in San Francisco. After returning from the United States he returned to the Institute in London to become what was colloquially known as an "elderberry", that is to say one of Sir Stewart Duke Elder's prodigies. His background knowledge of electronics and his research experience in Stockholm and San Francisco no doubt concentrated his interest in the electrical changes in the eye and building on the work of Jules Francois in Belgium he developed the Electro-oculogram as a clinical test. His research facility at the institute became the first clinical electrophysiological department in the UK and he was appointed Professor and honorary consultant at Moorfields Eye Hospital. Those attending ISCEV and other international meetings will remember his pioneering work on cortical evoked potentials and the pattern ERG and during informal evening discussions at the meetings he seemed just as at home discussing the wavelets of the ERG as Proust or Pepys diary. He will be remembered for his ability to put his finger on the answer to a research problem when all around were scratching their heads. His other research interest included the clinical testing of Achromatic and Colour Contrast Sensitivity, Diabetic Retinopathy and Macular Degeneration.



Geoffrey was invited to give several named lectures both in the UK and abroad. He was awarded the Doyme medal at the Oxford Ophthalmological congress in 1984 and the Mackenzie Medal in 1989. Even after retiring as Professor at the University of London he kept an active interest in his research and in an emeritus capacity he continued to collaborate with research workers in the US and Europe. He was appointed an honorary fellow of the Royal College of Ophthalmologists in 2008 and in 2010 an honorary research fellow at City University London. A recent paper published in Eye in 2010 developed the theory that impending Diabetic Retinopathy might be prevented by reducing the oxygen consumption of rods when asleep and preliminary results conformed this. The reduction in oxygen consumption was achieved by the subjects wearing an illuminated mask when asleep.

In 2011 he delivered the Adachi Lecture at the Quebec meeting of ISCEV which turned out to be a tour de force, achieving a higher audience approval rating than any of the previous Adachi lectures.

Geoffrey was an accomplished pianist and this was his favourite relaxation after a busy day. He died after a short illness on 19th March 2018 and leaves behind his wife Sheila whom he married in 1955 and his two children.

Nick Galloway

Patricia Apkarian Obituary

Sadly, I have to report that Patricia Apkarian passed away after a long illness, aged 69. Since she had retired from science a while ago, not that many people will remember her, but I certainly do. She contributed in many ways to our field, I here will highlight only those well known to me:

She first came to my attention by her work in the Smith Kettlewell Institute, San Francisco, on the Sweep VEP to assess visual acuity. Her most long-lasting contribution was on Albinism, where she demonstrated that the visual pathway misrouting (too many fibres cross) is the pathognomonic sign of both ocular and oculocutaneous Albinism. That work was so important, that the then head of my department, Prof. Guntram Kommerell, sent me in 1984 to Amsterdam to learn from her. And learn indeed I did! It was quite a lively experience, starting with me blurting “but you can’t link the hemispheres” when she mentioned the linked ear reference. Little did I know then that the ears are not actually linked but connected to impedance followers on your EEG head. [BTW: You can create a working poor person’s version by linking the ear electrodes via two 2.2 k Ω resistors in series and connecting the middle juncture to your amplifier’s reference input.] I also learned from her about optics, namely spurious resolution: She had demonstrated that the spatial-frequency specific losses reported in multiple sclerosis were an optical artifact. Finally, her suggestion to fix DTL-like electrodes nasally became my preferred method ever since.

Besides science, I knew her as a sharp mind with a great sense of humor. I remember many ISCEV Symposia Dinners where we agreed “let’s get together on a table and invite the right people”; invariably a good time was had by all with lively spirits, lively science, and more lively spirits.

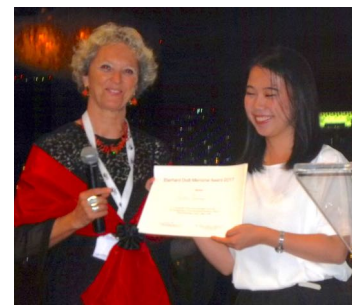
The picture shows her with husband Albert at the 2000 Australian Symposium.



Michael Bach

The Eberhard Dodt Memorial Award

The 22nd Annual Eberhard Dodt Award went to Lizhu Yang, Laboratory of Visual Physiology, Tokyo, Japan for her oral presentation “Functional characteristics of East Asian patients with occult macular dystrophy (Miyake’s disease); EAOMD Report No. 2”. Since Frau Elke Dodt could not attend herself this Symposium, her speech was read by Michael Bach (with the same English accent).



The Dawson Memorial Lecture

Prof Rong Wen, Bascom Palmer Eye Institute, Miami, USA gave a splendid Dawson Memorial Lecture entitled “Hereditary Retinal Degenerations – What We Have Learned So Far”. Prof Rong is well known for his work in retinal physiology and in neurotrophic factors, to understand the molecular mechanisms of retinal degeneration and retinal vascular disorders and to improve the care for patients with retinal disorders. The neighbouring image shows Bill Dawson looming (appropriately) over Judyth Dawson, the Lecturer and our President, Patrizia Tormene while handing over the certificate after the presentation.



The Emiko Adachi Award & Lecture

Prof Laura Frishman, University of Houston, USA received the highly earned Emiko Adachi Award in 2016 for her lifelong contributions to ISCEV. Her seminal work in the area of identifying inner-retinal contributions to the ERG has not only advanced our understanding of the ERG but also extended its use in clinical and research applications. She was a two-term Editor-in-Chief of Documenta Ophthalmologica and currently serves as the vice president of the Americas. During the 2017 Miami Symposium she presented her award lecture “Electrodiagnostic Testing in the Age of Imaging”, introduced by her long-time collaborator Suresh Viswanathan.



The Marmor Award

This award aims to (1) improve the practicality of electrophysiology procedures: e.g. speed, reliability, ease, cost; and (2) widen the clinical applicability of our procedures to individual patients: e.g. to clarify common diseases or to evaluate diseases not previously amenable to testing. Detailed guidelines can be found here

<http://www.iscev.org/varia/ISCEV-MarmorAward2015v1.pdf>.

In 2017, the winning project was “Evaluation of a soft, disposable ERG electrode prototype” by JR Hetling, S Patangay, JC Park, S Rahmani, T Ban and JJ McAnany, University of Illinois at Chicago, USA; RetMap Inc, Grayslake, USA; Eye and Ear Infirmary, Boston, USA. Winning project of the Follow-up Award (two years later) was “The SHERG (shorter ERGs) study: Design and rationale for an investigation of the effect of shorter dark-adaptation on ERGs in a large patient cohort” by K Graham, R Hagan, S Walker, H Murray, L Steele and R Hamilton, NHS Greater Glasgow & Clyde and University of Glasgow, UK and Royal Liverpool University Hospital, Liverpool, UK.

YSCEV @ ISCEV 2017

The YSCEV (Young Society for Clinical Electrophysiology of Vision) is promoting collaborations between young researchers and physicians involved in electrophysiology procedures with the hopes of connecting with more senior colleagues. We last met in Miami for the ISCEV 2017 annual meeting.

We currently have 99 members on our Facebook page, 20 of whom are ISCEV members. On the Facebook page we share thoughts, ideas, techniques, and job opportunities in the field of clinical electrophysiology of vision.

In Reims during the ISCEV 2018 annual meeting, we will have a session called “YSCEV Colloquium” to discuss a few typical scenarios (case series, technical issue, interpretation/reporting issue) and ask an invited panel and the attendees to comment and advice.

I’m looking forward to seeing all of you in France!

Lucia Ambrosio

Reflections of a Symposium, Miami



As I closed my final administrative duties last week for the 55th Annual ISCEV Symposium that was held at the Bascom Palmer Eye Institute in Miami in October 2017, I remember the fond memories we had together. I particularly enjoyed participating in putting the scientific program together as well as the interactions and time spent with friends and colleagues as part of the ISCEV family. To me, the unique strengths of ISCEV has always been the passion for academic excellence and the continued collaborations that have been forged for years.



In reflecting the first ISCEV symposium I attended more than 20 years ago and the ISCEV symposium in 2017 I hosted, I realized how far we have come with respect to approved gene therapy treatment for inherited retinal disease and the ever increasing number of clinical treatment trials and retinal imaging modalities. In light of these

rapid new developments, this is an exciting opportune time for visual electrophysiology in how best to incorporate and re-invent itself in studies and patient care.

My thanks to all of the presenters, attendees, and program committee members for ISCEV 2017 as well as the ISCEV leadership whose guidance was indispensable. Indeed, it has been my pleasure to have been given the opportunity to host an ISCEV symposium.

With best wishes,

Byron L. Lam, ISCEV 2017 Symposium Local Host

57th ISCEV Symposium: Invitation to Seoul, Korea, 7–10 Oct 2019

The Korean Society for Electrophysiology of Vision (KSCEV) is very pleased to host the 57th ISCEV Symposium in Seoul, Korea. Seoul is the capital of South Korea and one of the fascinating cities that have both ancient and modern cultures. Main venue is Grand Ambassador Hotel associated with Pullman and there are two international airports near the venue. One is Incheon airport and the other is Gimpo airport, the latter being closer to the main venue. It takes 1½ hours from Incheon airport to the main venue and 1 hour from Gimpo airport.



The welcome reception will be held at the Grand ballroom in the hotel on Monday evening and promises the delegates a pleasant and friendly event. In addition, ISCEV Olympics will leave you time to enjoy the marvelous nature of Seoul. Finally, fantastic and elegant Gala dinner will take place at the Samcheonggak, a most beautiful Korean traditional house on Thursday evening. For accompanying persons, they will enjoy exciting and refreshing programs including DMZ tour and Temple stay. Estimated cost of registration is around 600 US\$.

Looking forward to see you in Seoul,

온영훈 Young-Hoon Ohn and Team



2017 ISCEV Membership Meeting
14:45, Thursday 26 October 2017
Main Auditorium, Level 2
Bascom Palmer Eye Institute

DRAFT MINUTES

1. Opening of the Membership meeting and President's Welcome

Professor Patrizia Tormene, President, opened the meeting. She thanked the organizers for their hospitality and organization. She reminded everyone that only ISCEV members can vote at the meeting; non-members cannot vote.

Dr. Karen Holopigian, Secretary General, reminded everyone of the tasks of the Membership Meeting, extracted from the By-Laws (Article XV):

- To hear the reports of the board members, take questions and accept these reports
- To exonerate the board
- As the need arises, to hold any elections.

2. The minutes of the 2016 Membership Meeting

The minutes, as printed and shown in the 2017 Newsletter, were reviewed. There were no changes or corrections from the floor and they were accepted as an accurate record of the 2016 Membership Meeting.

3. Report from the 2017 Symposium Organizer

Dr. Byron Lam, the Symposium organizer, gave his report. He expressed his gratitude to Bascom Palmer Institute for their support of this event and to the event planners for all of their help. Dr. Lam noted that there were 38 human course registrations and 10 animal course registrations. For the Symposium, there were 157 registrations, 19 exhibitors, 12 accompanying persons from 24 countries. He said that 57% were past attendees. Of the attendees, 54% were ISCEV members, 27% were ISCEV non-members and 19% were students/fellows or emeritus members. Dr. Lam then thanked everyone for their support and the success of the meeting. The audience acknowledged all of his hard work with applause.

4. ISCEV Officer's Reports:

Secretary-General report: Karen Holopigian presented her report as in the Newsletter, and added that she is excited about her new role and hopes she is able to make improvements and progress for the office. Also she wanted to note that Springer has given free access of the Abstract Book until November 21st. Also, during the Symposium, Springer planned to open some articles with free temporary access in Documenta Ophthalmologica. These would be featured in a special tab on the Springer.com page of the journal, where Springer listed the article titles and the links.

Editor-in-Chief Documenta Ophthalmologica report: Pierre Lachapelle added to his report in the Newsletter that he encourages everyone to submit to Documenta Ophthalmologica and also to review manuscripts for the journal.

Director of Education report: Dorothy Thompson thanked everyone who helped with the courses this year, especially Suresh Viswanathan, who had a major role in the animal course. They received good feedback on the courses.

Director of Standards report: Tony Robson noted that this has been a period of transition for the role and he thanked Daphne McCulloch for her help in this transition. They have recently revised the EOG standard and it was published in the February (2017) issue of Documenta Ophthalmologica.

There are currently 8 committees for extended protocols and there are 5 draft protocols written. They hope to have 3 or 4 published in the February issue of Documenta. They have to be posted for 2 months, and then comments need to be posted for 3-4 weeks. Also, Dr. Shiyong Li and Dr. Zheng Qin Yin have offered to translate these into Chinese. Also, Tony noted that the calibration guideline is due to be updated.

Director of International Communications report: Michael Bach had nothing to add to his report in the Newsletter.

Regional Vice President Reports:

Vice President for the Americas report: Laura Frishman had nothing to add to her report in the Newsletter.

Vice President for Asia and Oceania report: Shuichi Yamamoto was not in attendance so there was no report.

Vice President for Europe and Africa report: Richard Smith had no update from what was printed in the Newsletter.

There was a call to exonerate the work of the board and the membership exonerated the board by a show of hands.

Treasurer's Report: Mathias Seeliger did not have anything to add to the report as presented in the Newsletter.

There was a call to exonerate the work of the treasurer and the membership exonerated the treasurer by a show of hands.

5. Highlights from the ISCEV Board Meeting: Secretary General Karen Holopigian summarized the highlights of the ISCEV board meeting.

There were 10 travel grants awarded this year; 7 were for the Symposium and 3 were combined Course/Symposium awards. All geographical regions were represented.

There is extra money remaining in the Dawson Award fund (beyond what is needed for the annual award), and Judyth Dawson graciously dedicated these funds to future travel awards.

There were 10 eligible Dotd candidates. The Dotd award will be given at the evening banquet.

There were 7 candidates for an initial Marmor Award and 1 candidate for a follow-up Marmor award. These will be awarded at the evening banquet.

The board discussed the need for new auditors this year and a plan of action.

The board discussed plans for how to publish the extended protocols.

A representative from YSCEV updated the board on their progress; they had a lunch meeting at this conference; their Facebook page is doing very well.

Commercial society management software has been implemented; additional plans for this software were discussed.

6. Standards Update: Director of Standards

Draft of Guide to Procedures on the ISCEV Website – The guide to clinical procedures is posted on the website for review. This document development was led by Scott Brodie. This work is trying to take in everyone's practice patterns. It covers the full-field ERG, the pattern ERG, the multifocal ERG, the VER and also referral sources. As well, different indications are discussed. There is also a table with symptoms. There is also information regarding complementary testing. Final comments were welcomed and comments to Scott were due within the following month.

7. Director of Education: PayPal for Dues and Meeting Registration

Using PayPal would make things run more smoothly and make it easier for us. Michael Bach asked: Can we go to 100% PayPal with no credit card accounts associated with this? It would save a lot of time for those board members working with the finances.

It was noted that this was not thought to be convenient in China, but that members would check on this.

8. Elections:

8.1. **Auditors:** It was noted that two new auditors were needed from among the regular members. This is a volunteer position and the membership is required to ratify the volunteers. Two members agreed to be auditors: Allison Dorfman and Sven Heinrich. The membership unanimously ratified both for the positions of auditor.

8.2. **Treasurer:** The current treasurer, Mathias Seeliger had completed 1 term, and was eligible and willing to stand for a 2nd term. There were no further nominations from the floor. The membership unanimously approved Mathias's re-election for his second term.

8.3. **Editor-in-Chief, DOOP:** The current editor-in-chief, Pierre Lachapelle, had completed 1 term, and was eligible and willing to stand for a 2nd term. There were no further nominations from the floor. The membership unanimously approved Pierre's re-election for his second term.

8.4. **Director of Education:** Dorothy Thompson had completed 1 term as Director of Education, and was eligible and willing to stand for a 2nd term. There were no further nominations from the floor. The membership unanimously approved Dorothy's re-election for her second term.

8.5. **Member-at-large:** Mary Johnson had completed 1 term, and was eligible and willing to stand for a 2nd term. There were no further nominations from the floor. The membership unanimously approved Mary's re-election for her second term.

8.6. **Member-at-large:** Charlotte Reiff had completed 1 term, and was not able to stand for another term. We were very grateful to Charlotte for her time and efforts to the society. This member-at-large position was therefore open for election as a geographically restricted member-at-large position (Europe/Africa).

- *From the by-laws: There should be six members-at-large, at least one from each of ISCEV's three geographical areas (Asia & Oceania, Europe & Africa, The Americas).*

8.7. There were two additional member-at-large positions, created by the vacancies of Karen Holopigian (moved to Secretary General) and Tony Robson (moved to Director of Standards). These were not geographically restricted member-at-large positions.

Therefore there were three open member-at-large positions to be elected.

The Secretary-General had received prior nominations for the member-at-large position. All of the nominated candidates agreed to stand for member-at-large.

The five candidates with prior nominations were:

- a. Jan Kremers, who was endorsed at the membership meeting by Michael Bach.
- b. Josefin Nilsson, who was endorsed at the membership meeting by Michael Bach.
- c. Jason McAnany, who was endorsed at the membership meeting by Mitch Brigell.
- d. Shiyong Li, who was endorsed at the membership meeting by Tony Robson.
- e. Kazushige Tsunoda, who had been nominated by Dr. Yozo Miyake. Dr. Miyake's letter was read by Kaoru Fujinami at the membership meeting.

Two of the nominees (Jan Kremers and Josefin Nilsson) are from Europe and therefore satisfy the geographic restriction. But they also qualify for the non-restricted member-at-large position. Therefore, to make the election fair, all the candidates will be pooled together. For the voting, 1 of the 3 elected member-at-large candidates must be from EU/AF.

There were no additional nominations from the floor, so the vote was closed and the five nominated candidates for the three member-at-large positions will go forward to a membership vote.

9. Future ISCEV Symposium

9.1. 2018: Reims, France (Co-Symposium Coordinators Colin Barber and Ruth Hamilton). The host Carl Amdt (with support from SEVE) confirmed the dates of 18-19 of June for the courses and 20-23 of June for the Symposium. The location is close to the Paris airport and can be reached via train (30-60 minutes). They are happy to welcome us.

9.2. 2019: Seoul, Republic of Korea (Symposium Coordinator Shuichi Yamamoto). The host Young Hoon Ohn & team will welcome everyone in 2019. The courses will be 5-6 of October and the meeting will be the 7-10 of October. The meeting will be in the Grand Ambassador Hotel. There are many hotels in the area for different types of accommodations.

9.3. 2020: Two invitations were presented for the Americas: André Messias presented Ribeirão Preto, Brazil and Pierre Lachapelle presented the Magdalen Islands, Quebec. Both venues will go forward to a membership vote.

10. Other business

The Secretary-General had not been notified of any other business.

11. Close

The meeting was closed with no further business.



Dr. Karen Holopigian
Secretary-General