

2014 ISCEV Symposium Program Listing

MONDAY, JULY 21

Welcome

8:30 – 9:00

Paper Session 1 – Acquired Retinal Disease

Monday 9:00 – 10:30

(9:00) Flash ERG in ocular ischemic syndrome

S Jalali, J Myneni, C Sahu, D Reddy

(9:15) Assessment of visual functions in Behçet’s disease patients with electroretinogram

B Lei, X Xiao, P Yang

(9:30) Diabetic Retinopathy Screening Using RETeval, a Non-Mydriatic 30 Hz Flicker ERG Device Utilizing Skin Electrodes

Q Davis, A Maa, E Pillow, W Feuer, T Brown, R Caywood, S Fransen

(9:45) Abnormal full-field electroretinogram after vitrectomy in eyes with idiopathic epiretinal membranes

A Tanikawa, I Ueda, R Sakurai, T Mizutani, T Mizuguchi, A Nakamura, Y Shimada, M Horiguchi

(10:00) Systemic indicators for complications of diabetes affect the mfERG

T Wright, R Dragas, W Tan, C Westall

(10:15) Predicting Progressive Visual Loss in Early AMD by Multifocal Electroretinogram

L. Ambrosio, G Nicoletti, G de Crecchio, B Falsini, G Ambrosio

Paper Session 2 – Methods 1

Monday 11:00 – 12:30

(11:00) De-noising the ISCEV standard VEP using wavelet transforms

RC Caruso, RQ Quiroga, M Ahmadi, S Kastner

(11:15) The steady-state VEP as a superposition of single-stimulus responses

SP Heinrich, M Groten, M Bach

(11:30) Weighing ON-OFF pathway contribution to the photopic ERG with the discrete wavelet transform (DWT)

M Gauvin, J-M Lina, RK Koenekoop, J-M Little, P Lachapelle

(11:45) Generating a non-naive ERG reference library using deterministic and stochastic models

AC Fisher, R Teymouri, A Eleuteri, RP Hagan

(12:00) Normal values of VEP amplitude, which measure: N75 to P100, or P100 to N170, or else?

M Bach

(12:15) Normative sample size for reference intervals of visual electrophysiology parameters
R Hamilton

Poster Session 1

Monday 13:30 – 15:00

Acquired Retinal Diseases

1 - Unilateral cone-rod dysfunction associated with electronegative bright flash electroretinography
T Hirakata, K Fujinami, Y Kato, S N Nakamura, T Noda, A Hirakata, S Ueno, H Ohguro, Y Miyake, K Tsunoda

2 - Electrophysiological examination of the patients following refractive surgery
SMM Shustarian

3 - Cataract surgery, a novel approach to readjust circadian clock in elderly?
M Wang, X Dong, M Liu, W Wang

4 - Macular structure affecting recovery of its function in patients with age-related macular degeneration after intravitreal ranibizumab
T Nishimura, S Machida, K Hashizume, D Kurosaka

5 - Simultaneous recording of flash visual evoked potential and photopic electroretinogram in patients with vitreous hemorrhage
Y-H Ohn, S H Lee, H D Kim

6 - The changes of the multifocal electroretinogram after retinal detachment surgery
G Zhang, H Cheng, R Gao, D Wu

Methods

7 - A smart ERG signal generator for calibration of instruments and alignment of recording regimes across clinical laboratories
M Elm, AC Fisher, R Laflin, R Teymouri, A Eleuteri, RP Hagan

8 - Characterization of exponential power spectral density decay of 30 Hz flicker in patients with retinitis pigmentosa
R Tzekov

9 - Backyard electroretinography: a preliminary feasibility study
SE Brodie

10 - Scotopic red response: rod and cone components
A Chia, R Png, LY Chen, R Mathur

11 - The use of PERG in conjunction with mfERG in clinical cases
R Hagan, C Jones, D Jayakrishnan, AC Fisher, MC Brown

12 - Pattern visually evoked potentials elicited by organic electro-luminescence screen

CS Matsumoto, K Shinoda, H Matsumoto, H Funada, K Sasaki, H Minoda, T Iwata, A Mizota

13 - Organic light-emitting diode screens as visual stimulators to elicit multifocal ERGs

K Shinoda, CS Matsumoto, H Matsumoto, K Seki, E Nagasaka, T Iwata, J Inoue, A Mizota

Retinal Ganglion Cells, Optic Nerve & CNS

14 - Structure-function analysis in the follow-up of glaucoma: 2-flash mfERG (2F-mfERG), automated perimetry (AP) and Optical Coherence Tomography (OCT)

AM Palmowski-Wolfe, AA Ledolter, M Monhart, A Schötzau, LM Brandao

15 - The functional change of twelve patients with leber's hereditary optic neuropathy

S Li, M Wang, G Wang, Y Liu, Y Wang, Z Yin

16 - The left fusiform face area may play a role in dealing with information from the right one

E Wu, J Chen, F Lu

Animal Models

17 - A unique pattern of flicker ERGs distinguish cone- and abnormal rod-driven responses in rd12 mice

X Dai, J Pang

18 - Evidence suggesting that audition is relatively more impaired than vision following postnatal hyperoxia in rats

X Yang, AS Lachapelle, HM Al-Aamri, YL Ahn, S Chaychi, S Jung, S Chemtob, P Lachapelle

19 - An hypoglycemic Sulfonylurea shows novel retinal neuroprotective properties: pre clinical data

M Berdugo, M Polak, E Kermorvant-Duchemin, K Delaunay, MC Naud, Z Djerada, C Gozalo, J-C Jeanny, C Klein, F Behar-Cohen, P Lassiaz

20 - Cone-rich rodent Nile rats optimally model ON and OFF oscillatory potential properties in humans

J Gotzmann, IS Dimopoulos, Y Sauvé

21 - Females age better than males, especially when stressed!

S Chaychi, X Yang, S Chemtob, P Lachapelle

Exhibitor Update

Monday 15:30 – 16:15

Paper Session 3 – Glaucoma, Retinal Ganglion Cells

Monday 16:15 – 18:00

(16:15) Assessing local retinal ganglion cell function in glaucoma using the multifocal electroretinogram

L Frishman, L Rajagopalan, S Viswanathan, N Patel, R Harwerth

(16:30) Multifocal electroretinography and regional choroidal blood flow in experimental glaucoma in rhesus macaques

TM Nork, CBY Kim, KM Munsey, RJ Dashek, JN Ver Hoeve

(16:45) High frequency components of kernel 2 slice 1 (K2.1) mfERG following consecutive hemi-retinal axotomy and experimental glaucoma

JN Ver Hoeve, CBY Kim, TM Nork

(17:00) The relationship among N2 amplitudes of multifocal ERGs, retinal sensitivity and retinal nerve fiber layer in glaucomatous eyes and normal eyes

F Kato, G Miura, S Shirato, S Yamamoto

(17:15) Impact of different OCT brands on structure-function analysis: a pilot study

L Brandao, AA Ledolter, A Schötzau, AM Palmowski-Wolfe

(17:30) Differences in functional loss associated with ganglion cell complex thinning between patients with glaucoma and patients with postoperative macular hole

S Machida, K Tamada, T Ohzeki, Y Gotoh, D Kurosaka

(17:45) Biphasic PERG decrements correlate with time-dependent changes in spontaneous and light-evoked retinal ganglion cell activity in a mouse model of blast-induced traumatic brain injury

M Harper, LM Dutca, FR Blodi, M Shankar, M Anderson, A Hedberg-Buenz, RH Kardon, SF Stasheff

TUESDAY, JULY 22

Paper Session 4 – Animal Models

Tuesday 9:00 – 10:30

(9:00) Retinal dysfunction in the GPR179 form of complete congenital stationary night blindness

N Peachey

(9:15) Correction of the dark adaptation defect in RLBP1^{-/-} mice is a model to assess viral vectors for RLBP1-associated retinal dystrophy gene therapy

C Bigelow, SM Hanks, J Vrovljanis, O Turner, G Argentieri, C Hayden, G Bounoutas, VW Choi, TL McGee, A Gujar, J Aranda, H Li, TP Dryja, SR Police, BD Jaffee

(9:30) mGluR5 is an important molecule mediating Müller cell contribution to the rat's flash electroretinogram

ZQ Yin, J Dai, Z Tao, Y Chen, Y Li

(9:45) Delayed photoreceptor degeneration in neonatal hypoxic-ischemic retinopathy (NHIR)

S Jung, P Wintermark, Pierre Lachapelle

(10:00) Origin of intrinsic optical signals in the retina

A Naderian, L Bussieres, S Thomas, F Lesage, C Casanova

(10:15) Short and long exposures: Same consequences in juvenile Light-Induced Retinopathy (LIR)?

A Polosa, WA Igrine, L-A Chevrolat, H Bessaklia, P Lachapelle

Paper Session 5 – Inherited Retinal Diseases

Tuesday 11:00 – 12:30

(11:00) Atypical RPE65 related retinal dystrophy

G Holder, S Hull, AG Robson, R Mukherjee, AT Moore, AR Webster

(11:15) Phenotypic variability in RDH12 retinopathy

R Sui, X Zhou, H Li, X Wang, X Liang, R Chen, F Dong

(11:30) Clinical and genetic characteristics of childhood-onset Stargardt disease

K Fujinami, J Zernant, AG Robson, K Tsunoda, Y Ozawa, K Tsubota, R Allikmets, M Michaelides, AT Moore, GE Holder

(11:45) Abnormal post-photoreceptor connectivity and thickening of the outer nuclear layer in enhanced S-cone syndrome

M Sustar, D Perovsek, I Cima, B Stirn, M Hawlina, J Brecej

(12:00) FHONDA syndrome: foveal hypoplasia and optic nerve misrouting without albinism caused by recessive mutations in SLC38A8

M van Genderen, J Poulter, M Al-Araimi, I Conte, CF Ingleheam, C Toomes

(12:15) The first reported two Egyptian families with posterior microphthalmos, retinitis pigmentosa and foveoscesis (MFRP syndrome)

A Shehab, S Turk

William Dawson Memorial Lecture

Tuesday 13:30 – 14:30

Gene therapy consequences in patients with *RPE65*-LCA and in animal models

Artur V. Cideciyan

Clinical Case Session

Tuesday 14:30 – 16:00

WEDNESDAY, JULY 23

Paper Session 6 – Pediatrics

Wednesday 9:00 – 10:30

(9:00) The Electro-oculogram in Danon disease

DA Thompson, P Constable, A Liasis, B Walters, MT Esteban

(9:15) Screening and treatment for retinopathy of prematurity: an evaluation in the Hunan province of China over an 8-year period

P Wang, C. Bohua

(9:30) ERG characteristics in children with congenital nystagmus and early onset retinal dystrophies

J Breceelj, A Kurent, B Stirn-Kranjc

(9:45) Full field ERGs in individuals with autism spectrum disorder

PA Constable, SB Gaigg, DM Bowler, DA Thompson

(10:00) A simple method to obtain retinal responses from young children

VLN Fu, A Johnson, KK Nischal

(10:15) Evaluating the effect of distance from the stimulator on the full field light adapted ERG OP responses

J Racine, R Noles, Z Peters

Paper Session 7 - Methods 2

Wednesday 11:00 – 12:30

(11:00) Cone opponent and cone additive processing in incremental and decremental ERG responses

J Kremers, NRA Parry, D McKeefry, K Focke, MM Jacob, T Tsai

(11:15) Effect of pupil size on flicker ERGs recorded by new mydriasis-free ERG system (RETeval)

M Kondo, K Kato, R Nagashima, Y Matsui, M Sugimoto, and H Matsubara

(11:30) Comparisons of VEPs elicited by an organic LED (OLED) vs. a cathode-ray tube (CRT) display

V Zemon, JG Zweifach, SE Sheldon, KB Rothkopf, M Willoughby, G Hu, C Stewart, J Gordon

(11:45) Comparative analysis of the irradiance distribution in the rodent eye using either the Ganzfeld bowl or the Maxwellian view illumination technique

NA Massie, J Rha, N Nestorovic

(12:00) Mobile device for long-term monitoring of CNS function via VEP testing

M Kuba, J Kremlacek, F Vit, Z Kubova, J Langrova, J Szanyi, M Chutna

(12:15) Full-field chromatic pupillometry in the assessment of the post-illumination pupil response driven by melanopsin-containing retinal ganglion cells

S Lei, HC Goltz, M Chandrakumar, AMF Wong

Poster Session 2

Wednesday 13:30 – 15:00

Pediatrics

1 - Melanoma and Cancer Associated Retinopathy (MAR and CAR syndrom): two physiopathological and electrophysiological distinct entities to be aware of – Report of two cases.

L Abouaf, R Sallit, L Adelaïde, AM Nguyen, P Sève, J Honnorat, D Biotti, A Vighetto

2 - Electrophysiological, genetic and ophthalmological findings in children with Leigh Syndrome
S Andersson, R Åkebrand, K Sofou, AK Seyedi Honarvar , N Darin, M Tulinius, M Andersson Grönlund

3 - Electroretinogram changes of retinopathy of prematurity after photocoagulation
H Cheng, G Zhang, F Wen, S Huang, D Wu

4 - Visual evoked potential study in premature and term infants
HS Chin, SJ Han

5 - Two types of acute zonal occult outer retinopathy differentiated by dark- and light-adapted perimetry
K Kazuki, H Sakuramoto, Y Nakao, C Matsumoto, Y Shimomura

6 - Flicker ERG recording in premature babies
H Sakai, H Minoda, M Yoshikawa, E Watanabe, T Tsuboi, CS Matsumoto, K Shinoda, A Mizota

7 - A case of optic atrophy with negative ERGs
H Yamazaki, Y Chai

Toxicology, Treatment

8 - Effect of sodium valproate on the retina measured by electroretinography
M Naser, SM Shushtarian

9 - Multifocal electroretinography (mfERG) findings in patients with long-term hydroxychloroquine
N Agange, G Abedi, JM Harrison

10 - Snapshot of a hydroxychloroquine mfERG clinic
M Dolliver, E Chelva, J De Roach, S Laurin, T McLaren

11 - A case of ophthalmic artery occlusion following injection of hyaluronic acid into the glabellar area
Y Kitamura, T Oshitari, S Nonomura, G Miura, A Chiba, S Yamamoto

12 - Assessment of retinal function just after intravitreal injection of an anti-VEGF agent
G Terauchi, H Minoda, K Sasaki, M Yoshikawa, CS Matsumoto, K Shinoda, A Mizota

Inherited Retinal Disease

13 - A cone dystrophy patient with a homozygous RP1L1 mutation
S Kameya, S Kikuchi, K Gocho, S El Shamieh, K Akeo, Y Sugawara, K Yamaki, C Zeitz, I Audo, H Takahashi

14 - Long-term follow-up of a large pedigree with a Phe211Leu mutation of the peripherin/RDS gene
M Andersson Grönlund^{1,2}, L Holmegaard², L Tranebjærg^{3,4}, J Nilsson⁵

15 - A phenotype-genotype correlation study in sib-ships with ABCA4-retinopathy
M Cotesta, J Locke, R Klatt, C Westall, E Heon, A Vincent

16 - Survival of the fittest in end-stage retinitis pigmentosa (RP): are OPs the last to die?

AL Dorfman*, M Gauvin*, JM Little, RK Koenekoop, J-M Lina, P Lachapelle

* These authors equally contributed to this work

17 - Novel funduscopy features in Oguchi's disease; relationship between retinal arteries and golden metallic reflex

Y Kato, K Tsunoda, K Fujinami, T Noda, Y Oguchi

18 - Analysis of electroretinogram phenotype in congenital stationary night blindness

J Locke, M Cotesta, R Klatt, C Westall, E Heon, A Vincent

19 - Clinical and electrophysiological phenotype in autosomal dominant pattern dystrophy

A Vincent, C Westall, E Heon

20 - Wagner vitreoretinopathy mimicking retinitis pigmentosa

H Li, H Wang, R Chen, H Li, R Su

Paper Session 8 – Toxicity and Treatment

Wednesday 15:30 – 17:15

(15:30) Use of the mfERG in hydroxychloroquine retinal toxicity: defining earliest detectable onset and determining critical cumulative dose levels

JS Lyons

(15:45) Sensitivity and specificity of SD-OCT outer retina changes in patients referred for possible hydroxychloroquine toxicity

R Katira, J Lyons

(16:00) ERG monitoring of retinal function up to five years after completion of intra-arterial chemotherapy for retinoblastoma

SE Brodie, VJ Mehta, JH Francis, BP Marr, Y-P Gobin, IJ Dunke⁵, DH Abramson

(16:15) How does ciliary neurotrophic factor affect the full-field ERG of normal human retina?

BL Lam, M Liu, WJ Feuer, W Shi, JL Goldberg, AM Herro, W Tao, R Wen

(16:30) Electrically elicited ERGs and VEPs in Argus II recipients: a window into signal processing in the degenerated RP retina

G Dagnelie, HC Stronks

(16:45) Visual outcome in 26 blind retinitis pigmentosa patients after receiving electronic subretinal implant Alpha-IMS

E Zrenner, KU Bartz-Schmidt, C Chee, F Gekeler, T Jackson, R MacLaren, J Nemeth, H Sachs, K Sting, D Wong and the SUBRET Study Group

(17:00) 16 - Detecting early signs of hydroxychloroquine and chloroquine retinopathy: a systematic review evaluating the multifocal electroretinogram as a screening test under the 2011 revised American Academy of Ophthalmology recommendations

S Coupland, S Ahmadi, A Tsang, C Gottlieb

THURSDAY, JULY 24

Paper Session 9 – Optic Nerve and CNS

Thursday 9:00 – 10:30

(9:00) Electrophysiological characteristics in Leber hereditary optic neuropathy

M Hawlina, M Jarc-Vidmar, J Brecelj, M Šuštar, A Fakin, BS Kranjc, D Glavač

(9:15) Electrophysiological characteristics of nonarteritic anterior ischemic optic neuropathy in a Chinese population

S Li, M Wang, G Wang, Y Liu, Y Wang, ZQ Yin

(9:30) The photopic negative response in patients with idiopathic intracranial hypertension

JC Park, HE Moss, JJ McAnany

(9:45) Chromatic VEP gives additional information in young patients with demyelinating disease

M Tekavcic Pompe, BS Kranjc, J Brecelj

(10:00) Occult optic neuropathy

J Heckenlively, KW Khan, KR Branham, C Strong, K Tozer, T Jayasundera, T Steffins

(10:15) Evaluation of motion-onset VEPs in school-age children – comparison of normal readers and dyslexics

Z Kubova, M Kuba, J Kremlacek, J Langrova, J Szanyi, F Vit, M Chutna

Membership Meeting

Thursday, July 24 11:00 – 12:30

Adachi Award Lecture & Dodt Award (in Rockport)

Thursday, July 24 16:30 – 18:00

(16:30) High standards in retina and art

Michael Marmor

(17:30) Dodt Award