

XLV ISCEV International Symposium—Scientific Programme

Hotel Taj Krishna, Banjara Hills, Hyderabad, India. 25–29 August 2007

Published online: 31 July 2007

Saturday 25th August

CLINICAL CASE SESSION:

Chairperson: Prof. Michael Marmor

Welcome Reception and Cultural Program

Sunday August 26, 2007

WELCOME AND INAUGURATION

Dr. Subhadra Jalali, Chair of the Scientific Programme Committee and Local Hostess,

Prof. Michael Bach, President of ISCEV

ORAL SESSION 1. The Role of Electrophysiology in Defining Genotype–Phenotype Correlations in Retinal Dystrophies

O1 Keynote Lecture: Support for science and technology in India today

Introduction of Speaker: Dr. Balasubramaniam

Keynote speaker: Dr. T. Ramasami, Secretary, Department of Science and Technology, Government of India

O2 Recent advances in Molecular Genetics and Phenotype Correlation of Primary Retinal Dystrophies

Chitra Kannabiran

O3: Retinal Morphology in Patients with X-linked Retinoschisis Evaluated by Fourier Domain Optical Coherence Tomography

Christina Gerth, Robert J Zawadzki, John S. Werner, Elise Heon

O4 Effects of prolonged dark adaptation in patients with retinitis pigmentosa of Bothnia type: an electrophysiological study

Marie S. I. Burstedt, Ola Sandgren, Irena Golovleva, Lillemor Wachtmeister

O5 Genotypic and Phenotypic correlation of Bietti's Crystalline dystrophy in Chinese patients with CYP4V2 mutation

Timothy Y.Y. Lai, Michael T.K. Ng, Jasmine S. Ngai, Pansy O. S. Tam, Dennis S. C. Lam, Chi-Pui Pang

O6 A previously un-described autosomal recessive retinal dystrophy

Graham E. Holder, R. Burgess, I. D. Millar, B. P. Leroy, J. E. Urquhart, I. M. Fearon, E. De Baere, P. D. Brown, A. G. Robson, G. A. Wright, P. Kestelyn, A. R. Webster, F. D. C. Manson, G. C. Black

ORAL SESSION 2. Electrophysiological Assessment in Human Retinal Diseases**O7 Role of the foveal pit: electrophysiology and functional anatomy of foveal hypoplasia**

Michael F. Marmor, Stacey S. Choi, Robert J. Zawadzki, John S. Werner

O8 Electrophysiological findings in Biette's crystalline dystrophy

Bijoy K. Nair, Priya R. Reddy, Divya N. Nair, Kiran Kumari Daswani, Parveen Sen

O9 Acute zonal occult outer retinopathy with central scotoma

Kazuki Kuniyoshi, Akira Nakao, Yoshikazu Shimomura, Yuzo Nakao

O10 The multifocal VEP (mfVEP) is able to distinguish between subjects with normal vision and those with wet or dry age-related macular degeneration

Suzanne M Petratchkov, Yanti Rosli, Andrew James, Ted L. Maddess

O11 Clinical and electrophysiologic criteria for phenotyping retinitis pigmentosa; agreement between two observers

Raja Narayanan, Subhadra Jalali, Hardeep Pal Singh, Anjali Hussain, Chitra Kannabiran

O12 Relationship between macular morphology and focal macular electroretinogram in patients with retinitis pigmentosa

Mineo Kondo, Tadasu Sugita, Yoshiharu Nakamura, Chang-Hua Piao, Hiroko Terasaki

POSTER SESSION 1. Group A. Clinical Applications of mfERG**A1 The role of electrophysiological testing in patients with acquired ocular syphilis**

Yaqin Wen, Colin Barber, Andrew Browning

A2 Multifocal electroretinography in X-linked retinoschisis

Parveen Sen, Sanjiv Maru, Priya R. Reddy, Bijoy K. Nair, Kiran K. Daswani

A3 Objective analysis of macular function in HIV-positive children without infectious retinitis: an OCT and multifocal ERG study

Marilita M. Moschos, Michael Apostolopoulos, Chronis Minogiannis, Spyridon Papadimitriou, Michael Moschos

A4 Role of multifocal ERG in Stargardt's macular dystrophy

Ramakanth R. Kankara, Parveen Sen, Priya R. Reddy

A5 The recording sensitivity of multifocal electroretinograms in patients with retinitis pigmentosa

Yong Liu, Zheng Qin Yin, Yangji Yu, Xiao Hong Meng

A6 The use of multifocal electroretinography in occult macular dystrophy

Jasmine W. S. Ngai, Timothy Y. Y. Lai, Carmen K. M. Chan, Dennis S. C. Lam

A7 To analyse nasotemporal disparity of multifocal ERG in advanced glaucomatous field defects

Ajoy Vincent, Rohit Shetty, A. V. Sathidevi, S. Anitha

A8 Evaluation of retinal function of retinitis pigmentosa and occult macular dystrophy using reading acuity, contrast sensitivity and multifocal electroretinogram

Manami Kuze, Hisashi Matsubara, Yukitaka Uji

GROUP B. Frontiers in Electrophysiology Techniques**B1 Retinoschisin gene transfer therapy alters natural history of retinal degeneration in Rs1h-KO mouse and gives long term rescue**

Sten Kjellstrom, Ronald A. Bush, Yuichiro Takada, Yong Zeng, Paul A. Sieving

B2 Electrophysiological evidence for heterogeneity of lesions in optic neuritis

A. Klistorner, S. Graham, C. Fraser, R. Garrick, T. Nguyen, M. Paine, J. O'Day, J. Grigg, H. Arvind, F. C. Billson

B3 The techniques and the system for the retina scan

Aram H. Arakelyan, Mineo Kondo

B4 Objective evaluation of the difference in blur sensitivity by the pattern VEP between myopes and emmetropes

Xiao-Ling Liu

B5 Retinitis pigmentosa is a dual genetic and autoimmune disease. A hypothesis with therapeutic implications

Alfred T. Sapse

B6 Vision in depressive disorder—assessing contrast vision with pattern ERG and VEP

Elena Kern, Emanuel Bubl, Michael Bach

B7 Can event related potentials (ERPs) be used as an objective measure of stereopsis?

Uma Shahani, N. Prescott, L. Watson, V. Manahilov, P. Mihaylov, W. Simpson

B8 Changes of pattern electroretinograms after transcorneal electrical stimulation

Kazuha Ogata

B9 Visual behaviour evaluation in a live animal model for surgical training

Sarbani Hazra, Dipak Kumar De, Arup K. Bose, Biswarup Roy, Aditya Konar

B10 Diurnal and inter-test variation in pattern electroretinogram

Subhadra Jalali, P. Bhanu Rakesh Varma, L. S. Mohan Ram, Sannapaneni Krishnaiah

B11 Longitudinal assessment of vision in prematurely born children with cerebral visual impairment (CVI) over the ages during which vision typically matures

Anne Moskowitz, Janet S. Soul, D. Luisa Mayer, Jacqueline M. LeMoine, Ronald M. Hansen, Anne B. Fulton

ORAL SESSION 3. Foundations of Visual Electrophysiology: Human and Animal Models

O13 Progressive changes in the photopic negative response of the cat ERG following retrograde degeneration of retinal ganglion cells

Suresh Viswanathan, J. Arthur Weber, E. Victor Malinovsky, D. Christine Harmen

O14 The photopic negative response of the flash electroretinogram to broadband and monochromatic stimuli in glaucoma and controls

Maja Sustar, Barbara Cvenkel, Jelka Breclj

O15 Light independent ERG-like responses resembling acoustically-evoked potentials in mice

Naoyuki Tanimoto, Peter Humphries, Martin Biel, Mathias W. Seeliger

O16 Electrophysiological changes of retinal ganglion cells in RCS rats during retinal degeneration

Zheng Qin Yin, Zhong Shan Chen

O17 Optimising the detection of transient evoked potentials using a bootstrap re-sampling technique to provide an objective measure of signal recovery

Anthony C. Fisher, David M. Simpson, Richard P. Hagan, Malcolm C. Brown

O18 Objective measurement of macular pigment optical density and spatial distribution using steady-state chromatic VEPs

Anthony G. Robson, Neil R. A. Parry

Monday August 27, 2007

ORAL SESSION 4. SYMPOSIUM: ERG in Drug Development: Translation from Animal Models to Human—Part I**O19 Overview: The use of the ERG in pre-clinical and clinical drug development**

Mitchell Brigell, Michigan, USA

O20 Keynote address: Pre-clinical retinal toxicity testing with ERG

Keynote speaker: Dr. Ido Perlman, Haifa, Israel

O21 MfERG in hydroxychloroquine toxicity

Jonathan S. Lyons, Matthew L. Severns, Silver Springs, MD, USA

O22 Treatment of retinal degeneration: ERG in animal models

Mathias W. Seeliger, R. Regine E. Bauer, Edda Fahl, Eberhart Zrenner, Naoyuki Tanimoto, Tübingen, Germany

O23 Animal models of oxidative retinopathies: clinical findings and possible therapeutic avenues

Pierre Lachapelle, Alison L. Dorfman, Sandrine Jolly, Ewelina Zimak, Adriana Di Polo, Sylvian Chemtob, Montréal Canada

ORAL SESSION 5. SYMPOSIUM: ERG in Drug Development: Translation from Animal Models to Human—Part II**O24 Degenerative and ischemic diseases of the retina**

Anne B. Fulton, Boston, MA, USA

O25 AMD treatment and prevention—the role of the ERG

Christina Gerth, Toronto, Canada

O26 Treatment of glaucoma - ERG in animal models

Laura Frishman, Houston, TX, USA

O27 The PERG as a tool to assess glaucomatous optic nerve

Michael Bach, Freiburg, Germany

O28 Selecting end-points and ensuring quality in multi-center trials

Eberhart Zenner, Tübingen, Germany

Tuesday August 28, 2007

ORAL SESSION 6. Vision and Brain Plasticity**O29 Keynote Address: The Changing Brain: How visual and other behavioral experiences influence the brain**

Introduction of Speaker: Dr. Taraprasad Das

Keynote speaker: Dr. Sumantra Chattarji, Tata Institute of Fundamental Research, Bangalore, India

O30 GABAA-IPSC's of layer IV neurons in rat visual cortex after exogenous regulation of tpa on PNNs during termination of critical period of visual plasticity

Sha Zheng, Zheng Qin Yin

O31 Visual evoked potentials in successfully treated amblyopic children are impaired

Dave Saint-Armour, Judith Hotte-Benard, Marie-Lyne Boir, Jean-Louis Jacob, Marie-Sylvie Roy

O32 Study of pattern VEP in highly hyperopic amblyopia in children after LASIK

Hui Wang, Zheng Qin Yin, Qian Ren

ISCEV QUIZ**ORAL SESSION 7. Evolving Role of Visual Evoked Potentials in Neuro-Ophthalmology****O33 Overview of the evolving role of visual evoked potentials in neuro-ophthalmology**

Colin Barber

O34 VEP in diagnosing visual pathway maldevelopment in children

Jelka Brecej, Branka Stirn-Kranjc, Nuska Pečarič-Meglič

O35 Pattern and flash VEPs in children with optic pathway glioma

Dorothy A. Thompson, Arun Dev-Borman, Darren Hargrave, Samantha M Hayton, Alki Liasis, R Jane Leitch

O36 Structural and functional evaluation of retina and optic nerve in patients with multiple sclerosis without optic neuritis attack

Fatih C. Gundogan, Şeref Demirkaya, Gungor Sobaci

O37 Visual electrophysiological markers of drug toxicity in children

Carol A. Westall, Aphrodite Dracopoulos, Fil Cortese, Thomas Wright, Raymond Buncic, Rita Nobile

O38 Flash and flicker VEPs in newborn term infants of drug-misusing mothers

Daphne L. McCulloch, L. McGlone, M.S. Bradnam, M. Hepburn, R. Hamilton, W. Borland, R. Boulton, C. Pieh, M. Bach, H. Mactier

POSTER SESSION 2. Group C. Clinical Cases and Case Series**C1 An adCSNB Chinese family and its electroretinogram characteristics**

Xiao-Ling Liu

C2 Cystoid macular edema during pregnancy in patients with retinitis pigmentosa

Alma Patrizia Tormene, Elisabetta Pillotto, Chiara Riva

C3 A case of acute blindness after taking quinine

Alma Patrizia Tormene, Chiara Riva

C4 Electrophysiologic findings in dominant drusen: a case study

Priya R. Reddy, Parveen Sen, Bijoy K. Nair, Kiran K. Daswani, Divya N. Nair

C5 Ganzfeld 30 Hz flicker ERG in diabetics

Gloria Wu, Matthew Severns, Jennifer Ha, Radhika Sreeraman, Catherine Wang

C6 A case of Oguchi's disease without night blindness

Kaoru Fujinami, Kazushige Tsunoda, Kei Shinoda, Makoto Nakamura, Yoshihisa Oguchi, Yozo Miyake

C7 Clinical and electrophysiological findings in a Wagner syndrome like hereditary vitreoretinal degeneration with no detectable pathogenic mutations in the Versican gene

Christoph A. Amstutz, Elmar P. Messmer, Barbara Kloeckener-Gruissem, Wolfgang Berger, Klara Landau

C8 Early changes in flash ERG in retinitis pigmentosa caused by a frame-shift mutation of the PRPF8 gene

Yujin Mochizuki, Atsushi Mizota, Minoru Tanaka, Akira Murakami, Hiroyuki Kondo

C9 Functional changes of the retina in Diabetes mellitus depending on the level of glycosylated haemoglobin

Mariam Arakelian, Yulia Bordeeva, Alla Ryabtseva, Angelika Shamshinova

C10 Electrophysiological and psychophysical measures of pattern and motion sensitivity in patients with cone dystrophy

Karen Holopigian, Jenny M. Gallardo, Steven M. Hornik, Randolph Blake, Ronald E. Carr, William Seiple

C11 Study of PERG before and after resolution of central serous retinopathy

Jawahar Lal Goyal, Vishram A. Sangit, Basudev Ghosh, Sushil Kumar

C12 ERG and VEP changes in sporadic Creutzfeldt-Jakob Disease

Kazuhiko Tanabe, Atsushi Mizota, Minoru Tanaka, Toshihiko Oota, Reona Shimada, Akira Murakami

C13 Predictive value of VEP in traumatic optic neuropathy

Ramesh Murthy

POSTER SESSION 2. Group D. Foundations of Electrophysiology**D1 Establishment of normal ranges for the ISCEV standard electroretinogram**

Enid Chelva, Doug Candy, John De Roach, Terri McLaren, Maribel Nosce, Roger Price

D2 Pilot study on Asian-Indian normative ERG database using light emitting diodes

Vardaan Sood, Subhadra Jalali, Stuart Coupland

D3 Effect of inter-flash intervals on the response characteristics of human oscillatory potentials

Yoko Kazato, Kazushige Tsunoda, Hanazono Gen, Mitsuko Yuzawa, Manabu Tanifuji, Yozo Miyake

D4 Regional retinal asymmetry of multifocal electroretinogram responses

Bijoy K. Nair, Divya N.Nair, Priya R. Reddy, Kiran K.Daswani, Parveen Sen

D5 Electrophysiological findings in children

Li Yu Chen, Audrey Chia

D6 Assessment of the effect of myopia on the macular function waveforms using multifocal ERG

Harikrishna Vodapalli, Swathi Lakshmi, Nazimul Hussain, Bhanu Rakesh Varma, Rishita Nutheti, Subhadra Jalali

D7 Pilot study on normative data map using multifocal electroretinography in an Indian population

Swathi Lakshmi, Vodapalli Harikrishna, Nazimul Hussain, Bhanu Rakesh Varma, Rishita Nutheti, Subhadra Jalali

D8 Comparison of S Cones ERG responses obtained with blue and violet LED stimulation

Jacques R. Charlier, S. Veramandel, J.P. Huges

D9 Results obtained in our electrophysiological test laboratory in patients with retinal pathology

C. Vilela, E. Gonzalez, A. Navea, J. Romero, V. Martin, S. Soler

ORAL SESSION 8. Clinical Electrophysiology: Standards and Variations**O39 Review of the ISCEV Calibration guidelines**

Malcolm C. Brown, Anthony C. Fisher, Richard P. Hagan

O40 A study of the ISCEV standard normal electro-oculogram with dilated and with natural pupils

John De Roach, Doug Candy, Enid Chelva, S Laurin, T McLaren, Maribel Nosce, Roger Price

O41 A multi-channel field specific pattern onset VEP method using interleaved central, peripheral and wide-field peripheral dartboard stimuli: initial clinical experience

Paul F. Weston

O42 Clinical applications of the sweep VEP: role for principal component analysis

James Ver Hoeve

O43 Monocular and Binocular multifocal electroretinograms: reproducibility, interocular variability and reliability

Marta Janaky, Imre Fejes, Gar Tuboly, Par Kocsis, Gyot Benedek

O44 Optical Coherence Tomography: A friend or foe for ISCEV? the science (D Keating) and the clinicians' perspective (P Gonzalez)

David Keating, Pedro Gonzalez, Stuart Parks, Sinead M. Dudgeon, Angela McCall, Ann McQuinston, Alison Foulis

Wednesday August 29, 2007**ORAL SESSION 9. Advanced Techniques: The Way Forwards****O45 Computational methods in focal macular ERG**

John Robson

O46 An expert system for automatic cursoring of the clinical PERG trained on normal and pathological data

Anthony C. Fisher, Maryke Fox, Colin Barber, Richard P. Hagan, Malcolm C. Brown

O47 Optimising steady-state sweep VEPs to stimuli like the central FDT target: comparison to psychophysical thresholds in early glaucoma detection

Vaegan, Mark A. Elia, Jacqueline Zheng

O48 Objective evaluation of the focal Rod ERG

Tom H. Margrain, Alison M. Binns

O49 The frequency response of the short-wavelength cones (S-Cones) and its application to clinical cases

Chris Hogg, Magella M. Neveu, Amy March

O50 A universal decimator for binary sequences for multifocal recording

Malcolm C. Brown, Anthony C. Fisher, Richard Hagan

O51 Evaluation of Retinal dysfunction using multifocal electroretinography in patients with AZOOR

Vasumathy Vedantam, Magella M. Neveu, A.G. Robson, A.C. Bird, A.R. Webster, G.E. Holder

O52 Seasonal change in cone and rod ERGs in patients with seasonal affective disorder treated with light therapy

Marc Hebert, M.-P. Lavoie, G. Bouchard, A. Sasseville, M.-C. Charron, A.-M. Gagne, P. Tremblay

ORAL SESSION 10. Scope of Electrophysiological Evaluation in Retinal Vascular Diseases**O53 The experimental model of retinal ischemia in rabbits**

Marina Zueva, Irina V. Tsapenko, Valdimir E. Tankovsky, Andrey N. Ivanov, Nadezhda E. Shvetsova, Olga V. Mizerova

O54 Effects of different doses of taurine on oxygen-induced retinopathy in developing rats

Luz Marina Rojas, Maury Palma, Yaurinis Rodriguez, Menfis Romero, Pierre Lachapelle, Lucimey Lima

O55 The role of electroretinographic responses in assessing the progress of diabetic retinopathy

Young-Hoon Ohn, Su-Eun Park, Tae-Kwann Park, Jin-Kyun Oh

O56 The photopic negative response of flash electroretinography in non-proliferative diabetic retinopathy

Dezheng Wu, Hongling Chen

O57 Visual function evaluation in retinopathy of prematurity

Rulong Gao, Dezheng Wu, Tianqin Guan

O58 Electrophysiological and anatomical studies after intravitreal injection of bevacizumab (Avastin) for macular edema due to retinal vein occlusions

Rohit Shetty, A. Sivakami, Ajoy Vincent

The 2007 EMIKO ADACHI AWARD LECTURE

Restoring Neuro-retinal Function: New Potentials

Introduction of Speaker: Prof. Colin Barber

Award Lecturer: Prof. Eberhart Zrenner, Institute for Ophthalmic Research,
University of Tübingen, Germany

Presentation of the 2007 Emiko Adachi Award

ISCEV Membership Meeting

XLV ISCEV SYMPOSIUM BANQUET AND AWARDS

Presentation of the 2007 Eberhart Dodt Memorial Award

Announcement of the 2008 Emiko Adachi Award Lecturer

Closing of the 2007 ISCEV SYMPOSIUM

FORTHCOMING

The XLVI international Symposium will mark the 50th anniversary of ISCEV—Morgantown, West Virginia, USA