

Program

March 15 (Wed), 2023

1F, Annex Hall 1, Kyoto International Conference Center

Opening Session 8:45-9:00

Oral Session 1-1 9:00-9:50

Genotype-phenotype correlations

Chairs: Dorothy Thompson (Great Ormond Street Hospital for Children, UK)

Mineo Kondo (Mie University, Japan)

O1-1-1 The electrophysiological and clinical features of *CERKL*-associated retinal dystrophy with genotype-phenotype associations

Anthony G. Robson^{1,2}, Malena Daich Varela^{1,2}, Samantha De Silva^{1,2}, Emma Duignan³, Rola Ba-Abbad⁴, Yu Fujinami-Yokokawa^{5,6}, Shaun Leo^{1,2}, Kaoru Fujinami^{1,2,5}, Omar Mahroo^{1,2}, Andrew Webster^{1,2}, Michel Michaelides^{1,2}

¹Moorfields Eye Hospital, London, UK, ²UCL Institute of Ophthalmology, London, UK, ³Royal Victoria Eye and Ear Hospital, Dublin, Ireland, ⁴Ocular Genetics Services, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia, ⁵Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ⁶Department of Health Policy and Management, School of Medicine, Keio University, Tokyo, Japan

O1-1-2 Genetic Characteristics of Korean inherited retinal disease patients: A multicenter study by the Korean Eye Gene Consortium

Se Joon Woo¹, Seok Hyun Bae¹, Jinu Han², Christopher Seungkyu Lee³, Suk Ho Byeon³, Jun Won Lee², Joo Yong Lee⁴, Min Sagong⁵, Areum Jeong⁵, Dong Ho Park⁶, Hyewon Chung⁷, Hyungwoo Lee⁷, Eun Kyoung Lee⁸, Chang Ki Yoon⁸, Seong Joon Ahn⁹

¹Seoul National University Bundang Hospital, South Korea, ²Gangnam Severance Hospital, Yonsei University College of Medicine, South Korea, ³Yonsei University College of Medicine, South Korea, ⁴Asan Medical Center, South Korea, ⁵Yeungnam University Hospital, South Korea, ⁶Kyungpook National University Hospital, South Korea, ⁷Konkuk University School of Medicine, South Korea, ⁸Seoul National University Hospital, South Korea, ⁹Hanyang University Seoul Hospital, South Korea

O1-1-3 Ocular characteristics of patients with Leber Congenital Amaurosis 6 caused by pathogenic *RPGRIP1* gene variation in a Chinese cohort

Shi Ying Li¹, Yumei Mao², Xiaohong Meng²

¹Xiang'an Hospital of Xiamen University(XMU), Eye Institute of XMU, Xiamen, China, ²Department of Ophthalmology, Southwest Hospital, Chongqing, China

O1-1-4 Retinal phenotype in *RNU4ATAC*-related Roifman syndrome

Ajoy Vincent^{1,2}, Brian Ballios², Amarilla Mandola³, Alaa Tayyib^{1,2}, Anupreet Tumber¹, Jenny Garkaby³, Linda Vong⁴, Chaim Roifman^{3,4}, Elise Heon^{1,2}

¹Ophthalmology and Vision Sciences, Hospital for Sick Children, Toronto, Canada, ²Ophthalmology and Vision Sciences, University of Toronto, Toronto, Canada, ³Division of Immunology and Allergy, The Hospital for Sick Children and the University of Toronto, Toronto, Canada, ⁴The Canadian Centre for Primary Immunodeficiency and The Jeffrey Modell Research Laboratory for the Diagnosis of Primary Immunodeficiency, The Hospital for Sick Children, Toronto, Canada

O1-1-5 Insights from modelling rod-driven ERG a-waves in *KCNV2*-retinopathy

Omar A Mahroo^{1,2,3,4}, Xiaofan Jiang^{1,3}, Shaun M Leo^{1,5}, Pirro G Hysi³, Thales Cabral De Guimaraes^{1,3}, Anthony G Robson^{1,5}, Christopher J Hammond³, Anthony T Moore^{1,2,6}, Michel Michaelides^{1,2}, Andrew R Webster^{1,2}, John G Robson^{4,7}

¹Institute of Ophthalmology, University College London, UK, ²Retinal Genetics Service, Moorfields Eye Hospital, London, UK, ³Department of Ophthalmology and Department of Twin Research and Genetic Epidemiology, King's College London, St Thomas' Hospital Campus, London, UK, ⁴Physiology, Development and Neuroscience, University of Cambridge, UK, ⁵Department of Electrophysiology, Moorfields Eye Hospital, London, UK, ⁶Department of Ophthalmology, University of California San Francisco, San Francisco, California, USA, ⁷Gonville & Caius College, Cambridge, UK

Oral Session 1-2 9:50-10:30**Genotype-phenotype correlations**

Chairs: Jason McAnany (University of Illinois at Chicago, USA)

Kazushige Tsunoda

(National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan)

O1-2-1 Long-term follow up of Slovene Stargardt patients determined by electrophysiology and fundus autofluorescence appearance

Martina Jarc Vidmar, Jana Sajovic, Jelka Brecelj, Maja Sustar, Andrej Meglic, Ana Fakin, Marko Hawlina
Eye Hospital, University Medical Centre Ljubljana, Slovenia

O1-2-2 Electroretinogram b:a ratio variability in the classical electronegative inherited retinal diseases

Haipha Ali¹, Chris Ovens¹, Vannessa Leung¹, Stephanie Retsas¹, Elise E Cornish^{1,2}, Dhimas H Sakti^{1,2}, Nonna Saakova¹, Peter McCluskey¹, Robyn V Jamieson^{1,2}, John R Grigg^{1,2}

¹Save Sight Institute, Faculty of Medicine and Health, The University of Sydney, Sydney, New South Wales, Australia, ²Eye Genetics Research Unit, Children's Medical Research Institute, The Children's Hospital at Westmead, Westmead, New South Wales, Australia

O1-2-3 S-cone ERG: A potential biomarker for monitoring progression of Stargardt disease in genotypes conferring residual ABCA4 function

Jana Sajovic, Andrej Meglic, Marko Hawlina, Ana Fakin

Eye Hospital, University Medical Centre Ljubljana, Slovenia

O1-2-4 Dark-adapted full-field stimulus threshold in ultra-low vision patients with retinitis pigmentosa

Kaoru Fujinami^{1,2,3,4}, Yu Fujinami-Yokokawa^{1,3,5,6}, Yasutaka Suzuki¹, Jeffrey Farmer⁷, Kazushige Tsunoda⁸

¹Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ²Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan, ³Institute of Ophthalmology, University College London, London, UK, ⁴Moorfields Eye Hospital, London, UK, ⁵Department of Health Policy and Management, Keio University School of Medicine, Tokyo, Japan, ⁶Department of Public Health Research, Yokokawa clinic, Osaka, Japan, ⁷Diagnosys LLC, MA, USA, ⁸Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan

Oral Session 2-1 10:50-11:30**Optic nerve diseases**

Chairs: Suresh Viswanathan (State University of New York College of Optometry, USA)

Kazuki Kuniyoshi (Kindai University Faculty of Medicine, Japan)

O2-1-1 Electrophysiological and clinical characteristics of patients with positive anti-optic nerve antibodies (AONA) and suspected optic nerve dysfunction

Graham E Holder, Hazel A Lin, Victor TC Koh, Wendy MH Wong, Clement CW Tan

National University Hospital and National University of Singapore, Singapore

O2-1-2 Electrophysiological biomarkers of visual acuity improvement in Leber hereditary optic neuropathy (LHON)

Marko Hawlina¹, Sanja Petrovic Pajic^{1,2}, Maja Sustar Habjan¹, Luka Lapajne¹, Ana Fakin¹, Martina Jarc Vidmar¹, Jelka Brecelj¹, Mirella Barboni³

¹University Eye Hospital Ljubljana, Slovenia, ²Clinical Center of Serbia, Clinic for Eye Diseases, Belgrade, Serbia, ³Dept. Ophthalmology, Semmelweis University, Budapest, Hungary

O2-1-3 Comparing ERG photopic negative response (PhNR) in AQ4+ and MOG+ optic neuritis

Andre Messias, Renata Moreto, Katharina Messias

University of Sao Paulo, Brazil

O2-1-4 Canceled

Oral Session 2-2 11:30-12:20

Optic nerve diseases

Chairs: Maja Sustar Habjan (University Medical Centre Ljubljana, Slovenia)

Shigeki Machida (Dokkyo Medical University Saitama Medical Center, Japan)

O2-2-1 Evaluation of ERG abnormality in ocular hypertension and different stages of glaucoma

Maja Sustar Habjan, Darko Perovsek, Andrej Meglic, Barbara Cvenkel

University Medical Centre Ljubljana, Slovenia

O2-2-2 New steps to the analysis of the photopic negative response (PhNR) in Leber hereditary optic neuropathy (LHON)

Qingqing K. Zhao^{1,2}, Hong-An Nguyen^{1,3}, Alexander Svoronos⁴, Laura P. Pardon⁵, Melanie R. Lalonde^{1,3}, Scott H. Greenwald⁵, Alex Huang⁴, Steven S. Laurie⁵, Brandon R. Macias⁶, Stuart G. Coupland^{1,3}, Rustum Karanjia^{1,3,7}

¹The Ottawa Hospital Research Institute, Ottawa, Canada, ²University of Toronto Dalla Lana School of Public Health, Toronto, Canada, ³University of Ottawa Eye Institute, Ottawa, Canada, ⁴Shiley Eye Institute, University of California San Diego, La Jolla, USA, ⁵KBR, Houston, USA, ⁶NASA Johnson Space Center, Houston, USA, ⁷Doheny Eye Institute, University of California Los Angeles, Los Angeles, USA

O2-2-3 Photopic negative response as an objective outcome measure in Leber hereditary optic neuropathy

Hong-An Nguyen^{1,2}, Melanie R. Lalonde^{1,2}, Qingqing Zhao^{1,2}, Ange-Lynca Kantungane^{1,2}, Stuart G. Coupland^{1,2}, Rustum Karanjia^{1,2,3}

¹University of Ottawa Eye Institute, Canada, ²Ottawa Hospital Research Institute, Ottawa, ON, Canada, ³Doheny Eye Institute, Los Angeles, CA, USA

O2-2-4 Evaluation of inner retinal function of primary open angle glaucoma in different stages using the photopic negative response measured by RETeval

Takako Hidaka, Hideki Chuman, Yasuhiro Ikeda

Miyazaki University, Japan

O2-2-5 Normal tension glaucoma or non-glaucomatous optic neuropathy: Electrophysiological evaluation of a diagnostically challenging entity

Wendy Meihua Wong^{1,2}, Hazel Anne Lin^{1,2}, Clement Woon Teck Tan^{1,2}, Victor Teck Chang Koh^{1,2}, Graham Edwin Holder^{1,2}

¹Department of Ophthalmology, National University Hospital, Singapore, ²Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

Luncheon Seminar 1 12:40-13:40

Clinical application of ERG using skin electrode

Chair: Masayuki Horiguchi

(Department of Ophthalmology, Fujita Health University Graduate School of Medicine, Japan)

How to record full-field ERG using HE-2000 ?

Mineo Kondo

Department of Ophthalmology, Mie University Graduate School of Medicine, Japan

Clinical research of ERG using skin electrode

Shinji Ueno

Department of Ophthalmology, Hirosaki University Graduate School of Medicine, Japan

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Oral Session 3-1 14:30-15:20

Visual pathway

Chairs: Anthony Robson (Moorfields Eye Hospital and UCL Inst. of Ophthalmology, UK)

Kaoru Fujinami (National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan)

O3-1-1 ISCEV standard transient pattern reversal VEPs and visual acuity

Dorothy A Thompson^{1,3}, John Booth², Sian E Handley^{1,3}, Lisanne A Horvat-Gitsels^{3,4}, Oliver R Marmoy^{1,3,5}

¹The Tony Kriss Visual Electrophysiology Unit, Great Ormond Street Hospital for Children NHS Trust, Clinical and Academic Department of Ophthalmology, London, UK, ²DRIVE, Data Research, Innovation and Virtual Environment Unit, Great Ormond Street Hospital for Children, London, UK, ³Great Ormond Street Institute for Child Health, University College London, London, UK, ⁴UKMoody's RMS, London, UK, ⁵Manchester Metropolitan University, Manchester, UK

O3-1-2 A search for the binocular VEP

James Vernon Odom

West Virginia University Eye Institute, USA

O3-1-3 The effect of eye movements on the pattern reversal VEP

Herman Talsma, Frank Hoeben, Gerard de Wit, Wim van Damme, Maria van Genderen

Bartimeus, Diagnostic Centre for complex visual disorders, Zeist, Netherlands

O3-1-4 Pulfrich and the P100: Manifestation of partial conduction delays in the VEP

Enyam Komla Amewuho Morny^{1,2}, Julia Haldina¹, Sven P Heinrich¹

¹Eye Center, Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Germany, ²Department of Optometry and Vision Science, University of Cape Coast, Ghana

O3-1-5 Correlation between oscillatory potential magnitude and the photopic negative response under different stimulus conditions

Sara Safari¹, Katherine Tsay¹, Jan Kremers², Radouil Tzekov^{3,4}

¹University of South Florida, Morsani College of Medicine, Tampa, USA, ²University Hospital Erlangen, Section for Retinal Physiology, Erlangen, Germany, ³University of South Florida, Department of Medical Engineering, Tampa, USA, ⁴University of South Florida, Department of Ophthalmology, Tampa, USA

Oral Session 3-2 15:20-16:10

Visual pathway

Chairs: Jan Kremers (University Hospital Erlangen, Germany)

Kei Shinoda (Saitama Medical University, Japan)

O3-2-1 Exploration of oscillatory potentials and their polarity in the dark-adapted ERG elicited by strong flashes

Xiaofan Jiang^{1,2}, Andrew R Webster^{1,3}, Pirro G Hysi², Christopher J Hammond², John G Robson^{4,5}, Omar A Mahroo^{1,2,3,4}

¹UCL Institute of Ophthalmology, University College London, London, UK, ²Department of Ophthalmology and Department of Twin Research and Genetic Epidemiology, King's College London, St Thomas' Hospital Campus, London, UK, ³Retinal Service, Moorfields Eye Hospital, London, UK, ⁴Physiology, Development and Neuroscience, University of Cambridge, UK, ⁵Gonville & Caius College, Cambridge, UK

O3-2-2 Electrically evoked responses elicited by transcorneal electrical stimulation in patients with retinitis pigmentosa

Yu Fujinami-Yokokawa^{1,2,3,4}, Oscar Onyango⁵, Yasutaka Suzuki¹, Motoshi Yamamoto^{1,6}, Kayoko Komatsu^{1,6}, Natsuki Maetani^{1,6}, Hisateru Tachimori⁷, Hiroaki Miyata², Jeffrey Farmer⁸, Kei Shinoda⁹, Kazushige Tsunoda¹⁰, Yozo Miyake¹¹, Kaoru Fujinami^{1,4,12}

¹National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan, ²Department of Health Policy and Management, Keio University School of Medicine, Tokyo, Japan, ³Division of Public Health, Yokokawa Clinic, Suita, Japan, ⁴UCL Institute of Ophthalmology, London, UK, ⁵Department of Ophthalmology, Kenyatta National and Teaching hospital, Nairobi, Kenya, ⁶Office Eye, Kyoto, Japan, ⁷Endowed Course for Health System Innovation, Keio University School of Medicine, Tokyo, Japan, ⁸Diagnosys LLC, MA, USA, ⁹Department of Ophthalmology, Saitama Medical University Faculty of Medicine, Iruma-gun, Saitama, Japan, ¹⁰Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ¹¹Next Vision, Kobe Eye Center, Hyogo, Japan, ¹²Moorfields Eye Hospital, London, UK

O3-2-3 Assessment of visual function for retinal categorized medicine

Tadao Maeda^{1,2}, Akiko Maeda¹, Satoshi Yokota¹, Yasuhiko Hirami¹, Masayo Takahashi^{1,2}, Yasuo Kurimoto¹

¹Kobe City Eye Hospital, Japan, ²Vision Care Cell Therapy Inc., Japan

O3-2-4 The electrically inducible visual field in retinitis pigmentosa

Marten Erik Brelen

The Chinese University of Hong Kong, Hong Kong, China

O3-2-5 Fundamental and second harmonic of the photopic flicker ERG exhibit stimulus frequency-dependent attenuation in retinitis pigmentosa

Robert Alexander Hyde, Jason C Park, J Jason McAnany

University of Illinois-Chicago, USA

Coffee Break 16:10-16:30

Asian Clinics 1 16:30-17:10**Chairs: Graham Holder (National University of Singapore, Singapore)****Hoon Dong Kim (Soonchunhyang University, South Korea)****AC1-1 Expanding the *FDXR*-associated disease retinal phenotype and genetic spectrum in a Chinese cohort**

Ruifang Sui, Xing Wei, Hui Li, Tian Zhu

Peking Union Medical College Hospital, China

AC1-2 Clinical characteristics and genotyping of macular dystrophy patients in a Southeast Asian setting

Choi Mun Chan

Singapore National Eye Centre, Singapore

AC1-3 Clinical and genetic features of Korean patients with achromatopsiaYong Je Choi¹, Kwangsic Joo¹, Hyun Taek Lim^{2,3}, Sung Soo Kim⁴, Jinu Han⁵, Se Joon Woo¹¹Department of Ophthalmology, Seoul National University College of Medicine, Seoul National University Bundang Hospital, Seongnam, South Korea, ²Department of Ophthalmology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, South Korea, ³Orthopia Eye Clinic, Seoul, South Korea, ⁴Institute of Vision Research, Department of Ophthalmology, Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea, ⁵Institute of Vision Research, Department of Ophthalmology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea**AC1-4 Experience of enhanced S cone syndrome in South India: A multicenter case series analysis**Deepika Chennapura Parameswarappa¹, Srishti Ramamurthy^{1,2}, Saarang Hansraj^{1,2},Srikanta Kumar Padhy³, Kiruthika Kannan¹, Munispriyan Raviselvan⁴, Dhanashree Ratra⁴, Subrat Dhal³,Isha Acharya⁵, B Poornachandra⁵, Tapas Ranjan Padhi³, Subhadra Jalali¹¹Srimati Kanuri Santhamma Center for Vitreoretinal Diseases, Anant Bajaj Retina Institute, Kallam Anji Reddy Campus, L V Prasad Eye Institute, Hyderabad, Telangana, India, ²Standard Chartered – LVPEI Academy for Eye Care Education, L V Prasad Eye Institute, Hyderabad, Telangana, India, ³Vitreoretina and Uveitis Services, Anant Bajaj Retina Institute, Mithu Tulasi Chanrai Campus, L V Prasad Eye Institute, Bhubaneswar, India, ⁴Department of Vitreoretinal Diseases, Medical Research Foundation, Sankara Nethralaya, Chennai Tamil Nadu, India, ⁵Department of Retina, Narayana Nethralaya, Bangalore, India**Asian Clinics 2 17:10-17:50****Chairs: Bo Lei (Henan Eye Hospital, Henan Provincial People's Hospital, Zhengzhou University, China)****Hiroyuki Kondo (University of Occupational and Environmental Health, Japan)****AC2-1 A report of clinical features and genetic test results of Korean choroideremia patients**Woo Gyeong Jo¹, Christopher Seungkyu Lee¹, Jinu Han²¹The Institute of Vision Research, Department of Ophthalmology, Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea, ²The Institute of Vision Research, Department of Ophthalmology, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea**AC2-2 Visual, clinical, and electro-physiological features of gyrate atrophy patients in Indian population**

Srikanta Kumar Padhy, Deepika C Parameswarrapa, Tapas Ranjan Padhi

LV Prasad eye institute, India

AC2-3 Clinical and genetic findings of autosomal recessive bestrophinopathyChristopher Seungkyu Lee¹, Yong Kim¹, Hae Kim²¹Yonsei University College of Medicine, South Korea, ²CHA University College of Medicine, South Korea**AC2-4 Autosomal dominant optic atrophy caused by novel pathogenic *OPA1* variants and genotype-phenotype correlation analysis**Jinfeng Han^{1,2}, Ya Li², Ya You², Lei Bo^{1,2}¹Zhengzhou University, China, ²Zhengzhou University People's Hospital, China

1F, Annex Hall 2, Kyoto International Conference Center

Poster Session 1 13:40-14:30

Acquired retinal diseases

Chairs: Andre Messias (University of Sao Paulo, Brazil)

Manami Kuze (Matsusaka Central General Hospital, Japan)

- P1-1 Post-COVID-19 paracentral acute middle maculopathy with impending central retinal vein occlusion in a young child**
Marwa Abdelshafy Tabl, Ahmed Abdelshafy Tabl
Associate Professor of ophthalmology, Benha University, Egypt
- P1-2 Retinal toxicity developed after use of hydroxychloroquine for 5.5 months without any risk factors detected at baseline screening**
Soo Chang Cho, Ji Eun Lee, Kyung Eun Han
Ewha Womans University Mokdong Hospital, South Korea
- P1-3 Digoxin retinopathy that mimics *KCNV2* retinopathy**
Yuki Nagae¹, Kazuki Kuniyoshi¹, Junji Kato², Marika Ishibashi¹, Fumi Tanabe¹, Naoyuki Okamoto³, Shunji Kusaka¹
¹Kindai University, Japan, ²Kato Cardiovascular Clinic, Japan, ³Okamoto Eye Clinic, Japan
- P1-4 Electroretinographic evaluation of eyes with bleb-associated endophthalmitis that underwent successful vitrectomy with 0.025% povidone iodine irrigation**
Koki Sakata, Takeshi Katsumoto, Yuro Igawa, Hirokazu Ishii, Tomoyuki Kumagai, Yu Sakaki, Yuji Yoshikawa, Masayuki Shibuya, Jun Makita, Kei Shinoda
Departments of Ophthalmology, Saitama Medical University, Faculty of Medicine, Saitama, Japan
- P1-5 Correlation between electroretinography findings using skin electrodes for endophthalmitis and visual acuity after treatment**
Shunichiro Takano^{1,2}, Yuro Igawa¹, Takahumi Maruyama¹, Jun Makita¹, Yuji Yoshikawa¹, Takuhei Shoji^{1,3}, Kei Shinoda¹, Soichi Matsumoto⁴, Yoza Miyake⁵
¹Department of Ophthalmology, Saitama Medical University School of Medicine, Japan, ²Department of Ophthalmology, Teikyo University School of Medicine, Mizonokuchi Hospital, Japan, ³Koedo Eye Institute, Japan, ⁴Matsumoto Eye Clinic, Japan, ⁵Kobe City Eye Hospital, Japan
- P1-6 Early changes in photopic negative response in eyes with glaucoma with and without choroidal detachment after filtration surgery**
Yuro Igawa¹, Takuhei Shoji², Jun Makita¹, Yuji Yoshikawa¹, Shunichiro Takano³, Satomi Konno¹, Kei Shinoda¹, Yoza Miyake⁴
¹Saitama Medical University, Japan, ²Koedo Eye Institute, Japan, ³Teikyo University School of Medicine, Mizonokuchi Hospital, Japan, ⁴Kobe City Eye Hospital, Japan
- P1-7 The effect of subretinal fluid reduction on macular function in age-related macular degeneration treated with anti-VEGF therapy**
Tomoharu Nishimura, Shigeki Machida
Dokkyo Medical University Saitama Medical Center, Japan
- P1-8 Changes in retinal function using the multifocal electroretinogram after intravitreal anti-vascular endothelial growth factor injection in chronic central serous chorioretinopathy patients**
Hoon Dong Kim¹, Young-Hoon Ohn¹, Jee Yun Ahn², In Hwan Cho¹
¹Department of Ophthalmology, College of Medicine, Soonchunhyang University, Cheonan, South Korea, ²Department of Ophthalmology, Seoul Metropolitan Government Seoul National University Boramae Medical Center, Seoul, South Korea

- P1-9 A case of AZOOR in a patient with multiple sclerosis: The importance of ERG for diagnosis**
Fumihito Hara, Toshiaki Hirakata, Shintaro Nakao
Department of Ophthalmology, Juntendo University Faculty of Medicine, Japan
- P1-10 Two cases of acute zonal occult outer retinopathy (AZOOR) with selectively impaired cone function**
Junya Ota¹, Yoshito Koyanagi¹, Taro Kominami¹, Koji Nishiguchi¹, Shinji Ueno²
¹Nagoya University Graduate School of Medicine, Japan, ²Hirosaki University Graduate School of Medicine, Japan
- P1-11 Evaluation of the macular microcirculation and function using optical coherence tomography angiography and mfERG in branch retinal artery occlusion**
Haruna Amaki¹, Yuro Igawa¹, Junji Kanno¹, Yuji Yoshikawa¹, Satomi Konno¹, Ayana Hatori¹, Midori Tachibana¹, Takuhei Shoji^{1,2}, Kei Shinoda¹
¹Department of Ophthalmology, Saitama Medical University Faculty of Medicine, Japan, ²Koedo Eye Institute, Japan
- P1-12 Impaired ERG responses in eyes with acute primary angle closure**
Atsuhito Tanikawa^{1,2}, Masayuki Horiguchi², Ryoko Nomura², Tadashi Mizuguchi², Yoshiaki Shimada², Yasuki Ito²
¹Fujita Health University Bantane Hospital, Japan, ²Fujita Health University, Japan
- P1-13 Relationship between deep retinal macular vessel density and bipolar cell function in glaucomatous eyes**
Yuji Yoshikawa¹, Takuhei Shoji^{1,2}, Junji Kanno¹, Yuro Igawa¹, Minami Chino¹, Hirokazu Ishii¹, Kei Shinoda¹, Yozo Miyake³
¹Saitama Medical University, Japan, ²Koedo Eye Institute, Japan, ³Kobe City Eye Hospital, Japan
- P1-14 Correlation between the visual field test and multifocal electroretinography in early glaucoma patients**
Juno Kim, Sang Eun Im, Seung Joo Ha, Kyung Seek Choi
Department of Ophthalmology, Soonchunhyang University Hospital, Seoul, South Korea
- P1-15 Case of autoimmune retinopathy with negative full-field ERGs similar to melanoma-associated retinopathy**
Gaku Terauchi, Yoshinobu Mizuno, Yuji Inoue, Atsushi Mizota
Teikyo University School of Medicine, Japan
- P1-16 Ketamine induced retinopathy with electronegative waveform on full field electroretinogram: A case report**
Wing Yung, Chun Yue Mak, Ching Yan Noel Chan, Wai Kuen Yip, Alvin Lerrmann Young
Prince of Wales Hospital, Hong Kong, China
- P1-17 Electroretinography guides investigations leading to diagnosis of cutaneous melanoma; subsequent course following systemic and local treatments**
Jit Kai Tan^{1,2}, Edward Bloch^{1,2,3,4}, Anthony G. Robson^{3,5}, Isabelle Chow^{1,2}, Gordon T. Plant⁶, Jonathan Virgo^{1,2}, Moin D. Mohamed^{1,2}, Omar A. Mahroo^{1,2,3,4}
¹Section of Ophthalmology, King's College London, St Thomas' Hospital Campus, London, UK, ²Department of Ophthalmology, St Thomas' Hospital, London, UK, ³UCL Institute of Ophthalmology, University College London, UK, ⁴Retinal Service, Moorfields Eye Hospital, London, UK, ⁵Department of Electrophysiology, Moorfields Eye Hospital, London, UK, ⁶UCL Queen Square Institute of Neurology, University College London, UK
- P1-18 Multifocal electroretinography changes following L-shaped macular buckle implantation**
Yolanda W.Y. Yip, Marten Erik Brelen
Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong, Hong Kong, China

- P1-19 Relationships between vascular structure and neural function of the macula in patients with diabetes mellitus**
Satoshi Ebihara, Shigeki Machida, Yuji Hara, Atsushi Tada, Masahiko Ishizuka, Mana Gonmori, Tomoharu Nishimura
Dokkyo Medical University Saitama Medical Center, Japan
- P1-20 Comparison of the ability of the 30-Hz flicker response and oscillatory potentials of electroretinograms in discriminating eyes with diabetic retinopathy**
Mana Gonmori, Shigeki Machida, Satoshi Ebihara, Atsushi Tada, Masahiko Ishizuka, Shinya Inoue
Dokkyo Medical University Saitama Medical Center, Japan
- P1-21 Predicting post-operative visual acuity of diabetic vitreous hemorrhage patients by using portable ERG**
SangEun Im, Juno Kim, Kyung Seek Choi
Soonchunhyang University Hospital, Seoul, South Korea
- P1-22 A case of acquired night blindness with a negative type ERG**
Hiromichi Kobori, Tomohiro Narumi, Shinji Ueno
Hirosaki University, Japan
- P1-23 Electrophysiological evaluations of eyes with reticular pseudodrusen by multifocal electroretinogram**
Hisashi Matsubara¹, Ryunosuke Nagashima¹, Kumiko Kato¹, Shinichiro Chujo¹, Yoshitsugu Matsui¹, Taku Sasaki¹, Masahiko Sugimoto¹, Manami Kuze^{1,2}, Mineo Kondo¹
¹Mie University, Japan, ²Matsusaka Central General Hospital, Japan

Poster Session 2 13:40-14:30

Animal and Human experiments

Chairs: Pierre Lachapelle (McGill University, Canada)
Mary A Johnson (University of Maryland, USA)

- P2-1 Longitudinal evaluation of retinal electrophysiology in C57BLKsJ-db/db (db/db) mice**
Christie Hang-I Lam^{1,2}, Henry Ho-Lung Chan^{1,2}, Dennis Yan-Yin Tse^{1,2,3}
¹School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China, ²Centre for Eye and Vision Research Limited, Hong Kong, China, ³Research Centre for SHARP Vision (RCSV), The Hong Kong Polytechnic University, Hong Kong, China
- P2-2 Drinking hydrogen water improves photoreceptor structure and function in retinal degeneration 6 mice**
Shuhei Kameya^{1,2}, Tsutomu Igarashi^{2,3,4}, Ikuroh Ohsawa⁵, Maika Kobayashi³, Kai Miyazaki⁶, Toru Igarashi⁷, Asaka Lee Shiozawa⁴, Yasuhiro Ikeda⁸, Yoshitaka Miyagawa⁴, Mashito Sakai⁴, Takashi Okada⁹, Iwao Sakane¹⁰, Hiroshi Takahashi³
¹Kameya Eye Clinic, Japan, ²Department of Ophthalmology, Nippon Medical School Chiba Hokusoh Hospital, Japan, ³Department of Ophthalmology, Nippon Medical School, Japan, ⁴Department of Biochemistry and Molecular Biology, Nippon Medical School, Japan, ⁵Biological Process of Aging, Tokyo Metropolitan Institute of Gerontology, Japan, ⁶Faculty of Medicine, Nippon Medical School, Japan, ⁷Department of Pediatrics, Nippon Medical School, Japan, ⁸Department of Ophthalmology, Miyazaki University School of Medicine, Japan, ⁹Division of Molecular and Medical Genetics, Center for Gene and Cell Therapy, Institute of Medical Science, Japan, ¹⁰Central Research Institute, ITO EN, LTD., Japan

- P2-3 Glibenclamide/glyburide retinal neuroprotection: Importance of electroretinographical assessment**
 Marianne Berdugo¹, Kimberley Delaunay¹, Lolita Radet¹, Cecile Lebon¹, Marie-Christine Naud¹, Gabrielle Polak¹, Emilie Picard¹, Alejandra Daruich¹, Michel Polak², Patricia Crisanti¹, Francine Behar-Cohen^{1,3}
¹Physiopathology of Ocular Diseases: Therapeutic Innovations, Centre de Recherche des Cordeliers, Sorbonne Universite, Inserm, Universite Paris Cite, F-75006 Paris, France, ²AP-HP, Hopital Necker-Enfants Malades, 75015 Paris, France, Universite Paris Cite, 75006 Paris, Institut Imagine, 75015 Paris France, ³Assistance Publique, Hopitaux de Paris, Hopital Cochin, OphtalmoPole, 75014 Paris France
- P2-4 Effects on the electrically evoked cortical potentials by one-month suprachoroidal transretinal stimulation using anodic-first current pulses**
 Yasuo Terasawa¹, Yukari Nakano¹, Hiroyuki Tashiro²
¹NIDEK CO., LTD., Japan, ²Kyushu University, Japan
- P2-5 Inter-pulse interval of paired-pulse stimulation in suprachoroidal-transretinal stimulation in retinal prosthesis**
 Yukari Nakano¹, Yasuo Terasawa¹, Hajime Sawai²
¹Artificial Vision Institute, R&D Div., Nidek Co., Ltd., Japan, ²Department of Health Sciences, School of Nursing, Osaka Metropolitan University, Japan
- P2-6 Circadian rhythms of the electroretinogram of ipRGC and the chronotype in humans**
 Manami Kuze^{1,2}, Moto Kataoka¹, Hisashi Matsubara², Yumi Fukuda³, Takeshi Morita⁴
¹Matsusaka Central General Hospital, Japan, ²Mie University School of Medicine, Department of Ophthalmology, Japan, ³University of Kitakyusyu, Faculty of environmental engineering, Japan, ⁴Fukuoka Women's University, Japan
- P2-7 The influence of attention on the pattern electroretinogram and visual evoked potentials**
 Maja Sustar Habjan¹, Ziga Korent²
¹University Medical Centre Ljubljana, Eye Hospital, Ljubljana, Slovenia, ²University of Ljubljana, MEi:CogSci, Ljubljana, Slovenia
- P2-8 The consequence of modulating background on the luminance-response function of the human photopic electroretinogram**
 Avinash J. Aher, Jan Kremers, Cord Huchzermeyer
 University Hospital Erlangen, Germany
- P2-9 A comparison of alternative methods for the clinical assessment of oscillatory potentials**
 Laura Milner, Lawrence Brown, Katherine Pearson
 Sheffield Teaching Hospitals NHS Foundation Trust, UK
- P2-10 Age-dependencies of the ERG**
 Ronja Jung¹, Melanie Kempf^{1,2}, Krunoslav Stingl^{1,2}, Katarina Stingl^{1,2}
¹University Eye Hospital, Center for Ophthalmology, University of Tuebingen, 72076 Tuebingen, Germany, ²Center for Rare Eye Diseases, University of Tuebingen, 72076 Tuebingen, Germany
- P2-11 Effect of short-term exposures to near work environments on photopic electroretinography**
 Natalie Yu Yan Chan, Kai Yip Choi, Henry Ho-lung Chan
 The Hong Kong Polytechnic University, Hong Kong, China
- P2-12 Evaluation of retinal function in advanced RP patients using a combination of transcorneal electrical stimulation (TES) test and localization test**
 Takeshi Morimoto¹, Takao Endo², Masakazu Hirota³, Hiroyuki Kanda⁴, Takashi Fujikado⁵
¹Department of Advanced Visual Neuroscience, Graduate School of Medicine, Osaka University, Japan, ²Department of Ophthalmology, Graduate School of Medicine, Osaka University, Japan, ³Department of Orthoptics, Faculty of Medical Technology, Teikyo University, Japan, ⁴Department of Applied visual science, Graduate School of Medicine, Osaka University, Japan, ⁵Graduate School of Frontier Biosciences, Osaka University, Japan

P2-13 Full-field pupillary light responses in patients with retinitis pigmentosa and healthy subjects

Natsuki Maetani^{1,2}, Yu Fujinami-Yokokawa^{1,3,4,5}, Oscar Onyango^{6,7}, Yasutaka Suzuki¹,
Motoshi Yamamoto^{1,2}, Kayoko Komatsu^{1,2}, Jeffrey Farmer⁸, Kazushige Tsunoda^{9,10}, Kaoru Fujinami^{1,3,6,10,11}

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P2-14 Detection of subtle retinal function with full-field stimulus testing in inherited retinal degenerations: A case report

Qingge Guo, Changgeng Liu, Ya Li, Ya You, Bo Lei

Henan Eye Hospital, Henan Eye Institute, Henan Provincial People's Hospital, China

Poster Session 3 13:40-14:30

Electrophysiological technique

Chairs: Enid Chelva (Sir Charles Gairdner Hospital, Australia)

Ted Maddess (Australian National University, Australia)

P3-1 Evaluation of the Diagnosys ColorFlash device

Hong-An Nguyen^{1,2}, Jeffrey Matthew Mah^{1,2}, Rustum Karanjia^{1,2,3}, Stuart G. Coupland^{1,2}

¹University of Ottawa Eye Institute, Canada, ²Ottawa Hospital Research Institute, Ottawa, ON, Canada, ³Doheny Eye Institute, Los Angeles, CA, USA

P3-2 Effect of transcranial alternating current stimulation (tACS) electrode montage on visually evoked occipital responses: A pilot study

Kai Yip Choi¹, Jingying Wang¹, Benjamin Thompson^{2,3}, Henry HL Chan^{1,3}, Allen MY Cheong^{1,3}

¹School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China, ²School of Optometry and Vision Science, University of Waterloo, Canada, ³Centre for Eye and Vision Research, Hong Kong, China

P3-3 Assessment of factors affecting flicker ERGs recorded with RETeval from data obtained from health checkup screening

Taiga Inooka¹, Taro Kominami¹, Shunsuke Yasuda¹, Yoshito Koyanagi^{1,2}, Junya Ota¹, Satoshi Okado¹,
Ryo Tomita¹, Yasuki Ito³, Takeshi Iwase⁴, Hiroko Terasaki¹, Koji M. Nishiguchi¹, Shinji Ueno⁵

¹Nagoya University Graduate School of Medicine, Japan, ²Kyushu University Graduate School of Medical Sciences, Japan, ³Fujita Health University School of Medicine, Japan, ⁴Akita University Graduate School of Medicine, Japan, ⁵Hirosaki University Graduate School of Medicine, Japan

P3-4 Reproducibility of ERGs recorded with Sensor Strip electrodes and electrocardiography skin electrodes

Ryunosuke Nagashima, Kumiko Kato, Daisuke Kurose, Iroha Fujimoto, Hisashi Matsubara,
Kengo Ikesugi, Mineo Kondo

Mie University Hospital, Japan

P3-5 Investigation of the effect of posture on the electroretinogram in half-gas-filled eyes

Saori Yamaguchi¹, Minami Chino¹, Jun Makita¹, Yuro Igawa¹, Satomi Konno¹, Takashi Matsushima²,
Yuji Yoshikawa¹, Yu Sakaki¹, Takeshi Katsumoto¹, Masayuki Shibuya¹, Kei Shinoda¹, Soiti Matsumoto^{1,3}

¹Departments of Ophthalmology, Saitama Medical University, Faculty of Medicine, Saitama, Japan, ²Departments of Ophthalmology, Tokai University, Japan, ³Matsumoto Eye Clinic, Japan

P3-6 Effect of 50 Hz filters on pattern electroretinogram

Ungsoo Samuel Kim^{1,2}

¹College of Medicine, Chung-Ang University, South Korea, ²Department of Ophthalmology, Chung-Ang University Gangmyeong Hospital, South Korea

March 16 (Thu), 2023

1F, Annex Hall 1, Kyoto International Conference Center

Morning Seminar 1 8:00-9:00 <Japanese Only>

Treatment of Comorbidities in Retinal Dystrophies

網膜ジストロフィーにおける併発疾患の治療

Chairs: Masayuki Horiguchi

(Department of Ophthalmology, Fujita Health University Graduate School of Medicine, Japan)

Shuichi Yamamoto (Japan Community Health care Organization, Japan)

座長: 堀口 正之 (藤田医科大学 眼科学教室)

山本 修一 (独立行政法人地域医療機能推進機構)

Cataract and vitreous surgery in patients with retinitis pigmentosa

網膜色素変性症患者に対する内眼手術について

Gen Miura

三浦 玄

Department of Ophthalmology, Chiba University Hospital, Japan

千葉大学大学院医学研究院 眼科学

Cataract and vitreous surgery in patients with other retinal dystrophies

その他の網膜ジストロフィー症例に対する内眼手術について

Hiroyuki Kondo

近藤 寛之

Department of Ophthalmology, University of Occupational and Environmental Health, Kitakyushu, Japan

産業医科大学 眼科学教室

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Oral Session 4 9:00-9:50

Syndromic dystrophies

Chairs: Ajoy Vincent (Hospital for Sick Children, Canada)

Se Joon Woo (Seoul National University Bundang Hospital, South Korea)

O4-1 Retinal function in HARS syndrome: A 3-year clinical trial of oral histidine supplementation in an extended Amish kindred

Daphne L McCulloch¹, H Albuhayzah¹, J Andrews², R Chakrabarti², A Chowdhury², N Hutchings¹, SJ Leat¹, R McCaughey¹, C Parker², E Reesor², CA Rupa^{2,3}, VM Siu^{2,3}

¹School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada, ²London Health Sciences Centre, London, ON, Canada, ³Children's Health Research Institute and Division of Medical Genetics, Department of Pediatrics, Western University, London, ON, Canada

O4-2 Retinal dystrophins and the retinopathy of Duchenne muscular dystrophy

Mirella Barboni^{1,5}, Anneka Joachimsthaler^{2,3}, Michel Roux⁴, Zoltan Zsolt Nagy¹, Dora Fix Ventura⁵, Alvaro Rendon⁶, Jan Kremers^{2,3}, Cyrille Vailland⁷

¹Department of Ophthalmology, Semmelweis University, Budapest, Hungary, ²Section for Retinal Physiology, University Hospital Erlangen, Erlangen, Germany, ³Animal Physiology, Department of Biology, FAU Erlangen-Nurnberg, Erlangen, Germany, ⁴Department of Translational Medicine and Neurogenetics, IGBMC-ICS Phenomin, University of Strasbourg, Illkirch, France, ⁵Department of Experimental Psychology, University of Sao Paulo, Sao Paulo, Brazil, ⁶Sorbonne Universite, INSERM, CNRS, Institut de la Vision, Paris, France, ⁷Universite Paris-Saclay, CNRS, Institut des Neurosciences Paris-Saclay, 91400, Saclay, France

O4-3 Clinical and electrophysiological characteristics of patients with adult-onset neuronal intranuclear inclusion disease related retinopathy

Natsuko Nakamura^{1,2}, Kazushige Tsunoda², Akihiko Mitsutake^{3,4}, Shota Shibata³, Hiroyuki Ishiura^{3,5}, Meiko Maeda³, Masashi Hamada³, Wataru Satake³, Shoji Tsuji^{3,6}, Tatsushi Toda³, Hiromasa Sawamura¹

¹Department of Ophthalmology, The University of Tokyo, Tokyo, Japan, ²Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ³Department of Neurology, The University of Tokyo, Tokyo, Japan, ⁴International University of Health and Welfare Mita Hospital, Department of Neurology, Japan, ⁵Department of Neurology, Okayama University, Okayama, Japan, ⁶Institute of Medical Genomics, International University of Health and Welfare, Chiba, Japan

O4-4 Congenital posterior polar chorioretinal hypoplasia: A new disease entity or expansion of the clinical spectrum?

Caroline Atef Tawfik^{1,2}, Kent W. Small^{3,4}, Fadi S. Shaya^{3,4}, Nitin Udar^{3,4}, Uma Udar^{3,4}, Jessica Avetisjan^{3,4}, Lamia A. El-Aidy⁵

¹Ain Shams University, Egypt, ²Watany Eye Hospital, Egypt, ³Macula and Retina Institute, Glendale and Los Angeles, USA, ⁴Molecular Insight Research Foundation, Glendale and Los Angeles, USA, ⁵Zagazig University, Egypt

O4-5 Associations between ERG flicker peak times and parameters of cognitive function in a large adult cohort

Abdus Samad Ansari^{1,2}, Xiaofan Jiang^{1,2,3}, Zihe Xu^{1,2}, Zakariya Jarrar^{1,2}, Chris J Hammond^{1,2}, Pirro Hysi^{1,2}, Omar Mahroo^{1,2,3,4}

¹Section of Academic Ophthalmology, School of Life Course Sciences, FoLSM, King's College London, London, UK, ²Department of Twin Research & Genetic Epidemiology, School of Life Course Sciences, FoLSM, King's College London, London, UK, ³Institute of Ophthalmology, University College London, London, UK, ⁴Moorfields Eye Hospital NHS Foundation Trust, London, London, UK

Oral Session 5 10:00-11:00

Acquired diseases

Chairs: Omar A Mahroo (University College London and Moorfields Eye Hospital, UK)

Masayuki Horiguchi (Fujita Health University Graduate School of Medicine, Japan)

O5-1 Percentage of testing performed and sensitivity of electrophysiological tests in the diagnosis of MEWDS: A multicenter study in Japan

Mineo Kondo¹, Wataru Saito², Yoshitsugu Matsui¹, Takayuki Tanaka³, Susumu Ishida³, Kazuki Kuniyoshi⁴, Shinji Ueno⁵, Takaaki Hayashi⁶, Tadashi Nakano⁶, Takuhiro Hayakawa⁷, Kazushige Tsunoda⁷, Hiroshi Keino⁸, Annabelle A. Okada⁸, Kosuke Nakamura⁹, Hideo Akiyama⁹

¹Department of Ophthalmology, Mie University, Japan, ²Department of Ophthalmology, Kaimeidou Eye and Dental Clinic, Japan, ³Department of Ophthalmology, Hokkaido University, Japan, ⁴Department of Ophthalmology, Kindai University, Japan, ⁵Department of Ophthalmology, Hirosaki University, Japan, ⁶Department of Ophthalmology, Jikei University School of Medicine, Japan, ⁷National Institute of Sensory Organs, Japan, ⁸Department of Ophthalmology, Kyorin University, Japan, ⁹Department of Ophthalmology, Gunma University, Japan

O5-2 Severity of ERG abnormality is associated with visual prognosis in AZOOR patients

Toshiaki Hirakata, Fumihito Hara, Yoshimune Hiratsuka, Akira Murakami, Shintaro Nakao
Juntendo University Faculty of Medicine, Japan

O5-3 Antigenic regions for anti-TRPM1 autoantibodies in paraneoplastic retinopathy with retinal ON bipolar cell dysfunction

Shinji Ueno¹, Daichi Gyoten², Takahisa Furukawa²

¹Hirosaki University, Department of Ophthalmology, Japan, ²Osaka University Laboratory for Molecular and Developmental Biology, Institute for Protein Research, Japan

O5-4 Electoretinogram in a leukemia patient developing bilateral progressive blindness: A case report

Cheng-Yung Lee, Chao-Wen Lin, Chang-Hao Yang, Yi-Ting Hsieh
National Taiwan University Hospital, Taiwan

O5-5 Evaluation of changes due to hydroxychloroquine on retinal electrical activity using multifocal ERG: A retrospective study

Savitha Arun¹, Sri Ganesh¹, Rahul Roy², Kamal Thakur², J.Sachin Singh², Deepa G.K¹, Noor Zainab²
¹Nethradhama Super Speciality Eye Hospital, Bangalore, India, ²Nethradhama School of Optometry, Rguhs, Bangalore, India

O5-6 Transient increase of flicker electroretinography amplitudes after cataract surgery: Association with postoperative inflammation

Kumiko Kato, Ryunosuke Nagashima, Hisashi Matsubara, Kengo Ikesugi, Hideyuki Tsukitome, Yoshitsugu Matsui, Takayasu Nunome, Masahiko Sugimoto, Daphne McCulloch, Mineo Kondo
Mie University, Japan

Coffee Break 11:00-11:20

Dawson Award Lecture 11:20-12:30

Chair: Masayuki Horiguchi (Fujita Health University Graduate School of Medicine, Japan)

Introducer: Masayuki Horiguchi (Fujita Health University Graduate School of Medicine, Japan)

Retinal Cell Therapy - now and future

Masayo Takahashi

Senior advisor of Research Center, Kobe City Ety Hospital / President, Vision Care Inc., Japan

Luncheon Seminar 2 12:50-13:50

Electrophysiology in Glaucoma Research and Clinic

Chair: Makoto Nakamura

(Department of Ophthalmology, Kobe University Graduate School of Medicine, Japan)

Intrinsically photosensitive retinal ganglion cells and glaucoma

Tadanobu Yoshikawa

Yoshikawa Eye Clinic/Nara Medical University, Japan

ERG and Glaucoma

Kengo Ikesugi

Department of Ophthalmology, Mie University Graduate School of Medicine, Japan

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Case Reports 1 14:40-15:04

Chairs: Marko Hawlina (University Eye Hospital Ljubljana, Slovenia)

Ruifang Sui (Peking Union Medical College Hospital, China)

CR1-1 Pathogenicity and functional analysis of *CFAP410* mutations causing axial spondylometaphyseal dysplasia with cone-rod dystrophy

Bo Lei, Shaoqing Yang, Qingge Guo, Ya Li

Henan Provincial People's Hospital, People's Hospital of Henan University, Henan Eye Institute, Henan Eye Institute, Zhengzhou, Henan, China

CR1-2 Electroretinography guides re-analysis of whole genome data to find undetected variant in *CACNA1F*

Mohammad Anas^{1,2}, Elena Schiff^{2,3}, Gavin Arno^{2,3,4}, Andrew R. Webster^{2,3}, Michel Michaelides^{2,3}, Anthony G. Robson^{3,5}, Omar A. Mahroo^{1,2,3}

¹Section of Ophthalmology, King's College London, St Thomas' Hospital Campus, London, UK, ²Retinal Genetics Service, Moorfields Eye Hospital, London, UK, ³UCL Institute of Ophthalmology, University College London, UK, ⁴Great Ormond Street Hospital, London, UK, ⁵Department of Electrophysiology, Moorfields Eye Hospital, London, UK

CR1-3 Biallelic neural retina leucine zipper (*NRL*) gene mutations expanding the enhanced S cone syndrome (ESCS) phenotype

Stephanie Retsas¹, Elisa Cornish^{1,2}, Gerard Reid¹, Haipha Ali¹, Nonna Saakova¹, Peter McCluskey¹, Marium Raza¹, Jonathan Nguyen¹, Anagha Vaze^{1,2}, Clare L Fraser¹, Christina Petersen¹, Benjamin Nash^{2,3}, Julie McGaughran⁴, Robyn V. Jamieson^{1,2}, John R. Grigg^{1,2}

¹Save Sight Institute, Faculty of Medicine and Health, The University of Sydney, Sydney, New South Wales, Australia, ²Eye Genetics Research Unit, Children's Medical Research Institute, The Children's Hospital at Westmead, Westmead, New South Wales, Australia, ³Sydney Genome Diagnostics, Western Sydney Genetics Program, Sydney Children's Hospitals Network, Sydney NSW Australia, ⁴Genetic Health Queensland Royal Brisbane and Women's Hospital Metro North health Service District Herston Queensland 4029 Australia

CR1-4 Canceled

Case Reports 2 15:04-15:22

Chairs: Shi Ying Li (Xiang'an Hospital of Xiamen University; Eye institute of Xiamen University, China)

Atsuhiko Tanikawa (Fujita Health University Bantane Hospital, Japan)

CR2-1 Electrically evoked phosphenes in a patient with *EYS* (p.Gly843Glu)-associated retinitis pigmentosa

Akiko Maeda^{1,2}, Tadao Maeda^{1,3}, Satoshi Yokota^{1,2}, Yasuhiko Hirami^{1,2}, Masayo Takahashi^{1,4}, Yasuo Kurimoto^{1,2}

¹Kobe City Eye Hospital, Japan, ²Kobe City Medical Center General Hospital, Japan, ³Vision Care Cell Therapy, Japan, ⁴Vision Care Inc, Japan

CR2-2 A mysterious case with persistent serous detachment and vitelliform lesion

Mei-Chi Tsui^{1,2}, Yi-Ting Hsieh²

¹Tainan Municipal An-Nan Hospital-China Medical University, Taiwan, ²National Taiwan University Hospital, Taipei, Taiwan

CR2-3 Visual recovery in abusive head trauma measured by VEP

Nuria Fluriach Dominguez¹, Susann Andersson^{1,2}, Sara Arvidsson¹, Jenny Gyllen^{1,2}, Gunilla Magnusson^{1,2}, Anders Sjöström^{1,2}

¹The Queen's Silvia Children's Hospital. Department of Ophthalmology. Sahlgrenska University Hospital, Region Västergötland, Sweden, ²Department of Neuroscience, Institute of Neuroscience and Physiology. Sahlgrenska Academy, University of Gothenburg, Sweden

Poster Session 4 13:50-14:40

Inherited retinal diseases

Chairs: Takaaki Hayashi (The Jikei University School of Medicine, Japan)

Choi Mun Chan (Singapore National Eye Centre, Singapore)

P4-1 Clinico-electrophysiological and genetic correlation in a case of autosomal recessive Bestrophinopathy

Srikanta Kumar Padhy, Deepika C Parameswarrappa, Tapas Ranjan Padhi, Anand Singh Brar

LV Prasad eye institute, India

P4-2 BEST1 gene associated bestrophinopathies and angle closure glaucoma with risk of postoperative malignant glaucoma

Deepika Chennapura Parameswarappa¹, Sirisha Senthil², Saarang Hansraj¹, Ramya Natarajan³, Jeyapoorani Balasubramnian⁴, Srikanta Kumar Padhy⁵, Venkatesh Pachaboina⁴, Brijesh Takkar¹, Tapas Ranjan Padhi⁵, Subhadra Jalali¹

¹Srimati Kanuri Santhamma Center for Vitreoretinal Diseases, Anant Bajaj Retina Institute, Kallam Anji Reddy Campus, L V Prasad Eye Institute, Hyderabad, Telangana, India, ²VST Center for Glaucoma Care, Kallam Anji Reddy Campus, L V Prasad Eye Institute, Hyderabad, Telangana, India, ³Department of Ophthalmic Biophysics, L V Prasad Eye Institute, Hyderabad, Telangana, India, ⁴Department of Ocular Genetics, L V Prasad Eye Institute, Hyderabad, Telangana, India, ⁵Vitreoretina and Uveitis Services, Anant Bajaj Retina Institute, Mithu Tulasi Chanrai Campus, L V Prasad Eye Institute, Bhubaneswar, India

P4-3 Bacillary layer detachment in Best vitelliform macular dystrophy

Srikanta Kumar Padhy

LV Prasad eye institute, India

P4-4 Harel Yoon syndrome: A novel mutation in the ATAD3A gene and expansion of the clinical spectrum

Caroline Atef Tawfik¹, Aliaa Farag², Raghda Zaitoun³

¹Watany Eye Hospital, Ain Shams University, Egypt, ²Department of Ophthalmology, Cairo University, Egypt, ³Department of Neurology, Ain Shams University, Egypt

P4-5 Can electrophysiological and clinical findings confirm ESCS in an 11 year old girl?

Jelka Breclj, Andrej Meglic, Martina Jarc-Vidmar

Eye Hospital, University Medical Centre Ljubljana, Slovenia

P4-6 Deep phenotyping of NR2E3 G56R-retinopathy in a Japanese patient

Kayoko Komatsu^{1,2}, Yu Fujinami-Yokokawa^{1,3,4,5}, Oscar Onyango^{6,7}, Yasutaka Suzuki¹, Gavin Arno^{1,3,8,9}, Nikolas Pontikos^{1,3,8,10}, Motoshi Yamamoto^{1,2}, Natsuki Maetani^{1,2}, Kazushige Tsunoda^{11,12}, Kaoru Fujinami^{1,3,6,8,12}

¹Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ²Office Eye, Kyoto, Japan, ³Institute of Ophthalmology, University College London, London, UK, ⁴Department of Health Policy and Management, Keio University School of Medicine, Tokyo, Japan, ⁵Department of Public Health Research, Yokokawa clinic, Osaka, Japan, ⁶Department of Ophthalmology, Nairobi University, Nairobi, Kenya, ⁷Department of Ophthalmology, Kenyatta National and Teaching hospital, Nairobi, Kenya, ⁸Moorfields Eye Hospital, London, UK, ⁹Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK, ¹⁰Phenopolis, London, UK, ¹¹Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ¹²Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan

P4-7 Long-term ERG changes in Bietti's crystalline dystrophy

Masakazu Takayama, Kaoruko Torii, Kentaro Kurata, Yoshihiro Hotta

Hamamatsu University School of medicine, Japan

- P4-8 Phenotypic spectrum of the founder deletion-insertion variant in *CYP4V2* patients with inherited retinal dystrophy**
 Kensuke Goto¹, Yoshito Koyanagi^{1,2}, Taro Kominami¹, Hanae Iijima³, Mikiko Endo³, Shinji Ueno^{1,4}, Chikashi Terao², Yukihide Momozawa³, Koji M. Nishiguchi¹
¹Department of Ophthalmology, Nagoya University Graduate School of Medicine, Japan, ²Laboratory for Statistical and Translational Genetics, RIKEN Center for Integrative Medical Sciences, Japan, ³Laboratory for Genotyping Development, RIKEN Center for Integrative Medical Sciences, Japan, ⁴Department of Ophthalmology, Hirosaki University Graduate School of Medicine, Japan
- P4-9 Recovery of ERG in patients with *RPE65*-related Leber congenital amaurosis following gene replacement therapy**
 Wayne Tschetter¹, Alessia Amato¹, Paul Yang¹, Lesley Everett¹, Andreas Lauer¹, Steven Bailey¹, Timothy Stout², Mark Pennesi¹
¹Oregon Health and Science University Casey Eye Institute, USA, ²Baylor College of Medicine Cullen Eye Institute, USA
- P4-10 Bilateral macular edema associated with Fahr's disease**
 Yoshiaki Shimada, Masayuki Horiguchi, Atsushi Tanikawa, Yasuki Ito
 Fujita Health University, Japan
- P4-11 The role of S-cones in oscillatory potentials: Analysis of achromats and S-cone monochromats**
 Giulia Righetti¹, Katarina Stingl^{1,2}, Bernd Wissinger³, Krunoslav Stingl^{1,2}
¹Center for Ophthalmology, University Eye Hospital, University of Tuebingen, 72076 Tuebingen, Germany, ²Center for Rare Eye Diseases, University of Tuebingen, 72076 Tuebingen, Germany, ³Molecular Genetics Laboratory, Center for Ophthalmology, Institute for Ophthalmic Research, University of Tuebingen, 72076 Tuebingen, Germany
- P4-12 Longitudinal clinical course of two siblings with *KCNV2*-associated retinopathy**
 Tomoko Sato¹, Kazuki Kuniyoshi¹, Takaaki Hayashi², Hirokazu Nishiwaki³, Yoshikazu Hatsukawa⁴, Kei Mizobuchi², Ryota Tomemori⁵, Takao Endo⁴, Tadashi Nakano², Shunji Kusaka¹
¹Department of Ophthalmology, Kindai University Faculty of Medicine, Japan, ²Department of Ophthalmology, The Jikei University School of Medicine, Japan, ³Department of Ophthalmology, Tenri Hospital, Japan, ⁴Department of Ophthalmology, Osaka Women's and Children's Hospital, Japan, ⁵Department of Ophthalmology, Tomemori Eye Clinic, Japan
- P4-13 Electrophysiological features of occult macular dystrophy in 10 patients heterozygous for the prevalent *RP11* (p.Arg45Trp) variant**
 Shaun M Leo¹, Antonio P Calcagni^{1,2}, Magella M Neveu^{1,2}, Omar A Mahroo^{1,2,3,4}, Michel Michaelides^{1,2}, Andrew R Webster^{1,2}, Anthony G Robson^{1,2}
¹Moorfields Eye Hospital, London, UK, ²UCL Institute of Ophthalmology, London, UK, ³Section of Ophthalmology, King's College London, St Thomas' Hospital Campus, London, UK, ⁴Department of Twin Research and Genetic Epidemiology, King's College London, St Thomas' Hospital Campus, London, UK
- P4-14 An elderly case of butterfly-shaped pattern dystrophy**
 Rina Shikura¹, Takaaki Hayashi², Kei Mizobuchi¹, Ryo Taguchi³, Toshikatsu Kaburaki³, Tadashi Nakano⁴
¹The Jikei University Kashiwa hospital, Japan, ²The Jikei University Katsushika hospital, Japan, ³Saitama Medical Center, Jichi Medical University, Japan, ⁴The Jikei University, Japan
- P4-15 Deep phenotyping of *RBP3*-retinopathy; inherited pathological myopia and retinal dystrophy**
 Motoshi Yamamoto¹, Yu Fujinami-Yokokawa^{1,3,4,5}, Oscar Onyango^{6,7}, Yasutaka Suzuki¹, Gavin Arno^{1,3,8,9}, Nikolas Pontikos^{1,3,8,10}, Kayoko Komatsu^{1,2}, Natsuki Maetani^{1,2}, Kazushige Tsunoda^{11,12}, Michel Michaelides^{1,3,8}, Kaoru Fujinami^{1,3,6,8,12}
¹Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan, ²Office Eye, Kyoto, Japan, ³UCL Institute of Ophthalmology, University College London, London, UK, ⁴Department of Health Policy and Management, Keio University School of Medicine, Tokyo, Japan, ⁵Department of Public Health Research, Yokokawa clinic, Osaka, Japan, ⁶Department of Ophthalmology, Nairobi University, Nairobi, Kenya, ⁷Department of Ophthalmology, Kenyatta National and Teaching hospital, Nairobi, Kenya, ⁸Moorfields Eye Hospital, London, UK, ⁹Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK, ¹⁰Phenopolis, London, UK, ¹¹Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan, ¹²Department of Ophthalmology, Keio University School of Medicine, Tokyo, Japan

- P4-16 The clinical and genetic features of Korean patients with rhodopsin-associated retinitis pigmentosa (*RHO*-associated RP)**
 Younghoon Jung¹, Jiyong Kwak², Kwangsic Joo¹, Minseok Kim¹, Eunkyong Lee¹, Kyuhyung Park¹, Suk Ho Byeon³, Jinu Han⁴, Junwon Lee⁵, Sejoon Woo¹
¹Department of Ophthalmology, Seoul National University College of Medicine, South Korea, ²Department of Ophthalmology, The Institute of Vision Research, Yonsei University College of Medicine, South Korea, ³Department of Ophthalmology, The Institute of Vision Research, Severance Eye Hospital, Yonsei University College of Medicine, South Korea, ⁴Department of Ophthalmology, The Institute of Vision Research, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, South Korea, ⁵Department of Ophthalmology, The Institute of Human Barrier Research, Gangnam Severance Hospital, Yonsei University College of Medicine, South Korea
- P4-17 Unilateral pigmentary retinopathy: A 36-year follow-up**
 Marita Andersson Gronlund^{1,2}, Fahad Razooqi², Ebtisam Yaseen², Alexandra Lind², Susann Andersson²
¹Department of Ophthalmology, Faculty of Medicine and Health, Orebro University, Orebro, Sweden, ²Department of Clinical Neuroscience, Institute of Neuroscience and Physiology, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden
- P4-18 Analysis using the microperimeter MP-3 for a case with suspected unilateral retinitis pigmentosa**
 Yoshito Koyanagi, Hideki Kawai, Taiga Inooka, Junya Ota, Kensuke Goto, Taro Kominami, Koji M. Nishiguchi
 Nagoya University, Japan
- P4-19 The role of history-taking in assessment of inherited retinal diseases**
 Susann Andersson¹, Sara Arvidsson¹, Nuria Fluriach Dominguez¹, Marita Andersson Gronlund^{1,2}
¹Dep of Clinical Neuroscience, Institute of Neuroscience and Physiology, University of Gothenburg, Gothenburg, Sweden, ²Dep of Ophthalmology, Faculty of Medicine and Health, Orebro University, Orebro, Sweden
- P4-20 Assessments of macular function by focal macular ERG and static perimetry in eyes with retinitis pigmentosa**
 Satoshi Okado¹, Yoshito Koyanagi¹, Taiga Inooka¹, Taro Kominami¹, Hiroko Terasaki¹, Koji M Nishiguchi¹, Shinji Ueno²
¹Nagoya University, Japan, ²Hirosaki University, Japan
- P4-21 Pigmented paravenous retinochoroidal atrophy with confusing electrophysiological findings**
 Randa Abdelgawad^{1,2}
¹Ain Shams University, Egypt, ²Electrophysiology consultant Watany Eye Hospital, Egypt
- P4-22 Characterization of *POMGNI* retinopathy with late onset and intrafamilial phenotypic heterogeneity**
 Monique Leys, Lingo Lai, Brian Ellis, Grace Levy-Clarke, Cassidy Pinion, J. Vernon Odom
 WVU Eye Institute, USA
- P4-23 How much retinal loss causes an ERG to become flat?**
 Jasleen Kaur Jolly^{1,2}, Archith Kamath³, Rafee Ahmed², Deepika Kommanapalli¹, Saoud Al-Khuzaei², Susan M Downes^{2,3}
¹Vision and Eye Research Institute, Anglia Ruskin University, Cambridge, UK, ²Nuffield Department of Clinical Neurosciences, University of Oxford, Oxford, UK, ³Oxford Eye Hospital, Oxford University Hospitals NHS Foundation Trust, Oxford, UK
- P4-24 Dark-adapted oscillatory potentials in retinal and optic nerve disease**
 Enid Chelva, Monika Dolliver, Sarina Laurin, Jessica Munster, Jonathan Stafford, Chee Cheng
 Sir Charles Gairdner Hospital, Australia

P4-25 Bardet-Biedl syndrome caused by a novel homozygous variant in the *ARL6* gene, initially diagnosed with retinitis punctata albescens

Keitaro Mizumoto^{1,2}, Kumiko Kato², Kaoru Fujinami^{3,4}, Tadasu Sugita⁵, Ichiro Sugita⁴, Ayako Hattori⁶, Shinji Saitoh⁶, Shinji Ueno⁷, Kazushige Tsunoda⁸, Takeshi Iwata⁹, Mineo Kondo²

¹Department of Ophthalmology, Okanami General Hospital, Japan, ²Department of Ophthalmology, Mie University Graduate School of Medicine, Japan, ³Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan, ⁴UCL Institute of Ophthalmology, University College London, London, UK, ⁵Department of Ophthalmology, Sugita Eye Hospital, Japan, ⁶Department of Pediatrics and Neonatology, Graduate School of Medical Sciences, Nagoya City University, Japan, ⁷Department of Ophthalmology, Hirosaki University Graduate School of Medicine, Japan, ⁸Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan, ⁹Division of Molecular and Cellular Biology, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan

P4-26 Electroretinographic abnormalities in X-linked Alport syndrome with a novel *COL4A5* variant

Kei Mizobuchi¹, Takaaki Hayashi^{1,2}, Ryo Ohira¹, Tadashi Nakano¹

¹The Jikei University School of Medicine, Japan, ²Katsushika Medical Center, The Jikei University School of Medicine, Japan

P4-27 A case of X-linked retinoschisis mimicking “idiopathic” cystoid macular edema

Sophia Ling Li, Noel Chan, Andrew Mak

The Prince of Wales Hospital, Hong Kong, China

P4-28 Photoreceptor malfunction in a cohort of X-linked juvenile retinoschisis patients

Qingge Guo, Bo Lei, Ya Li

Henan Provincial People's Hospital, China

P4-29 ERG changes in eyes with familial exudative vitreoretinopathy with or without Wnt signaling gene mutations

Takuma Futami, Sho Naruse, Itsuka Matsushita, Tatsu Nagata, Hiroyuki Kondo

University of Occupational and Environmental Health, Japan

P4-30 Electroretinograms of eyes with Stickler syndrome

Sadamitsu Nishimura, Hiroyuki Kondo, Kazushi Fujimoto, Mamika Imagawa, Kazuma Oku, Itsuka Matsushita, Tatsu Nagata, Takaaki Hayashi

University of Occupational Environmental Health, Japan

Poster Session 5 13:50-14:40

Optic nerve & central nervous diseases

Chairs: Makoto Nakamura (Kobe University, Japan)

James Vernon Odom (WVU Eye Institute, USA)

P5-1 Pattern VEP and retinal nerve fiber thickness in a Japanese girl with anti-myelin oligodendrocyte glycoprotein (MOG) antibody seropositive optic neuritis

Midori Tachibana¹, Shunichirou Takano^{1,2}, Aya Hanabusa³, Yuri Ohta¹, Yuji Yoshikawa¹, Kaori Sassa⁴, Takuhei Shoji^{1,3}, Kei Shinoda¹, Hideo Yamanouchi⁴

¹Departments of Ophthalmology, Saitama Medical University, Faculty of Medicine, Saitama, Japan, ²Department of Ophthalmology, Teikyo University School of Medicine, Mizonokuchi Hospital, Japan, ³Koedo Eye Institute, Japan, ⁴Departments of Pediatrics, Comprehensive Epilepsy Center, Saitama Medical University, Faculty of Medicine, Japan

P5-2 Visual evoked potentials in cases of acute optic neuritis in AQP4-IgG positive NMOSD, MOGAD, double seronegative disease and MS

Ayano Enomoto^{1,2,3}, Namie Kobayashi^{2,3}, Kazuo Fujihara⁴, Kentaro Kobayashi², Yuji Inoue¹, Yutaka Isono^{1,2,3}, Atsushi Mizota¹

¹The university of Teikyo, Japan, ²Southern TOHOKU Eye Clinic, Japan, ³Southern TOHOKU General Hospital, Japan, ⁴Department of Multiple Sclerosis Therapeutics, Fukushima Medical University, Japan

P5-3 Photopic ERG waveforms of patients with Werner syndrome

Gen Miura¹, Hirotaka Yokouchi¹, Masaya Koshizaka², Yoshiro Maezawa², Koutaro Yokote², Takayuki Baba¹

¹Department of Ophthalmology and visual science, Chiba University Graduate School of Medicine, Japan, ²Department of Endocrinology, Hematology and Gerontology, Chiba University Graduate School of Medicine, Japan

P5-4 Meridional anisotropy of visual-evoked potentials and contrast sensitivity in young adults with high astigmatism

Siu Sang Anthony Wu, Tsz Wing Leung

The Hong Kong Polytechnic University, Hong Kong, China

Poster Session 6 13:50-14:40**Pediatric visual electrophysiology**

Chairs: Jelka Brecelj (Eye Clinic Ljubljana, Slovenia)

Takeshi Morimoto (Osaka University, Japan)

P6-1 Follow-up of disease process with visual electrophysiology in a pediatric age group

Azza Abdelfattah Shehab^{1,2}, Randa elmofty^{2,3}

¹Minia University, Egypt, ²AlWatany Eye Hospital, Egypt, ³Cairo University, Egypt

P6-2 Pediatric visual electrophysiology in Slovenia: Early and recent approaches and diagnostics

Jelka Brecelj, Branka Stirn-Kranjc, Manca Tekavcic-Pompe, Martina Jarc-Vidmar, Maja Sustar-Habjan, Eva Lenassi, Katarina Likar, Alma Kurent

Eye Hospital, University Medical Centre Ljubljana, Slovenia

P6-3 Optimal age for flash VEP investigation of chiasmal crossing in infants and young children

Ruth Hamilton, Manaim Shah, Fadi R Ghazala

Royal Hospital for Children, Glasgow, UK

P6-4 Normative photopic electroretinogram data in Hong Kong preschool children

Sonia SH Chan¹, Kai Yip Choi^{1,2}, Henry HL Chan^{1,2,3}

¹Centre for Myopia Research, School of Optometry, the Hong Kong Polytechnic University, Kowloon, Hong Kong, China, ²Laboratory of Experimental Optometry (Neuroscience), School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China, ³Centre for Eye and Vision Research, Hong Kong, China

P6-5 Initial retinal electrophysiological responses and subsequent myopia progression in children wearing Defocus Incorporated Multiple Segments (DIMS) lenses (myopia control intervention)

Vivian Wai Ying Lo, Kai Yip Choi, Henry Ho Lung Chan

The Hong Kong Polytechnic University, Hong Kong, China

P6-6 Hand-held electroretinography in infants treated with vigabatrin

Sota Mitsui¹, Toshiaki Hirakata¹, Mitsuru Ikeno², Shinpei Abe², Takashi Negishi¹

¹Department of Ophthalmology, Juntendo University Faculty of medicine, Japan, ²Department of Ophthalmology, Juntendo University Faculty of medicine, Japan

P6-7 Flicker electroretinogram recorded with a portable ERG device in pediatric patients with retinal disease and amblyopia

Hyuna Kim¹, Song-hee Park²

¹Soonchunhyang University, South Korea, ²Nune Eye Hospital, South Korea

P6-8 ERG flicker responses in retinopathy of prematurity

Christina Gerth-Kahlert, Aylin Taner, James VM Hanson

University Hospital Zurich, Switzerland

ISCEV Olympic 16:00-18:00

March 17 (Fri), 2023

1F, Annex Hall 1, Kyoto International Conference Center

Morning Seminar 2 8:00-9:00 <Japanese Only>

Clinical tests and diagnosis of inherited retinal dystrophies

遺伝性網膜疾患診療の検査と診断

Chairs: Masayo Takahashi (Research Center, Kobe City Eye Hospital, Japan)

Hiroyuki Kondo (Department of Ophthalmology, University of Occupational and Environmental Health, Japan)

座長: 高橋 政代 (神戸アイセンター病院 研究センター)

近藤 寛之 (産業医科大学 眼科学教室)

Genetic testing for IRD

IRD の遺伝学的検査

Akio Oishi

大石 明生

Department of Ophthalmology and Visual Sciences, Nagasaki University, Japan

長崎大学生命医科学域

Clinical practice and genetic counseling for IRD

IRD の実臨床下での診療体制とカウンセリング

Kaoru Fujinami

藤波 芳

Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory Organs, National Hospital Organization Tokyo Medical Center, Japan

独立行政法人国立病院機構東京医療センター 臨床研究センター 視覚研究部 視覚生理学研究室

Genetic counseling in clinical practice

IRD の実臨床下での遺伝カウンセリング

Haruka Murakami

村上 遥香

Department of Medical Genetics, National Hospital Organization Tokyo Medical Center, Japan

独立行政法人国立病院機構東京医療センター 遺伝診療科

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Oral Session 6 9:00-9:50

Animal studies

Chairs: Ido Perlman (Technion-Israel Institute of Technology, Israel)

Laura Frishman (University of Houston, USA)

O6-1 Studying the origins of the supernormal b-wave in cone dystrophy with supernormal rod response

Yashvi Bhatt^{1,2}, Livia Carvalho^{1,2}, David Hunt^{1,2}

¹University of Western Australia, Australia, ²Lions Eye Institute, Australia

O6-2 Novel methods for the study of cone pathophysiology in the Mongolian gerbil model

Alexander Guenter, Regine L. Muehlfriedel, Mathias W. Seeliger

Institute for Ophthalmic Research, Universitaetsklinikum Tuebingen (UKT), Germany

O6-3 Effect of flicker-induced retinal stimulation on full-field electroretinography in miceMilan Rai^{1,2}, Yamunadevi Lakshmanan³, Henry Ho-Lung Chan^{1,2,3,4}¹School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China, ²Laboratory of Experimental Optometry (Neuroscience), School of Optometry, The Hong Kong Polytechnic University, Hong Kong, China, ³Centre for Eye and Vision Research (CEVR), 17W Hong Kong Science Park, Hong Kong, China, ⁴Research Centre for SHARP Vision (RCSV), The Hong Kong Polytechnic University, Hong Kong, China**O6-4 Developmental changes in visual electrophysiologic correlates of intra-uterine exposure to Zika virus in a non-human primate model**James N Ver Hoeve¹, Charlene BY Kim¹, Nick Krabbe², Elaina Razo², T Michael Nork¹, Carol Rasmussen¹, Alex Katz¹, Karla Ausderau³, Emma Mohr²¹University of Wisconsin-Madison Dept Ophthalmology and Visual Sciences, USA, ²University of Wisconsin-Madison Dept of Pediatrics, USA, ³University of Wisconsin-Madison Dept Kinesiology, USA**O6-5 Impulse response functions obtained from white noise ERGs in mice**

Jan Kremers, Nina Stallwitz, Anneka Joachimsthaler

University Hospital Erlangen, Germany

Oral Session 7 10:00-11:00**Clinical applications****Chairs: Carl Arndt (Hôpital Robert Debré, France)****Yoshiaki Shimada (Fujita Health University, Japan)****O7-1 Retinal horizontal cell dysfunction in patients**Mary A. Johnson¹, Amanda Henderson², Arthur Shapiro³¹University of Maryland, Baltimore, USA, ²Johns Hopkins University, USA, ³American University, USA**O7-2 Scotopic retinal function assessed by electroretinography and pupillometry in individuals with mild or no diabetic retinopathy**

Jason Park, J. Jason McAnany

University of Illinois at Chicago, USA

O7-3 Assessing functional damage with rapid and objective macular multifocal perimetry in type 1 diabetesTed Maddess¹, Emilie M F Rohan¹, Corinne F Carle¹, Joshua P van Kleef¹, Faran Sabeti^{1,3}, Christopher J Nolan^{1,2}, Bhim Rai^{1,2}¹Australian National University, Australia, ²The Canberra Hospital, ACT Health, Australia, ³University of Canberra, School of Optometry, Australia**O7-4 Correlation between OCT-angiography and multifocal electroretinogram in patients with poor visual acuity after resolution of diabetic macular edema**

Marwa Abdelshafy Tabl, Mohamed Abdelzاهر Awaad, Mohamed Nagy, Ahmed Abdelshafy Tabl

Associate Professor of ophthalmology, Benha University, Egypt

O7-5 Flash electroretinogram as a potential biomarker of GABAergic dysfunction in adults with autism spectrum disorderQiyun Huang^{1,2}, Claire L. Ellis^{1,2}, Shaun Leo³, Hester Velthuis^{1,2}, Andreia C. Pereira^{1,2,4}, Mihail Dimitrov^{1,2}, Francesca M. Ponteduro^{1,2}, Nichol M. L. Wong^{1,2,5}, Eileen Daly^{1,2}, Declan G. M. Murphy^{1,2,6}, Omar Mahroo^{3,7}, Grainne M. McAlonan^{1,2,6}¹Department of Forensic and Neurodevelopmental Sciences, Institute of Psychiatry, Psychology & Neuroscience, King's College London, UK, ²Sackler Institute for Translational Neurodevelopment, Institute of Psychiatry, Psychology & Neuroscience, King's College London, UK, ³Moorfields Eye Hospital NHS Foundation Trust, UK, ⁴Institute for Nuclear Sciences Applied to Health (ICNAS), Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), University of Coimbra, Portugal, ⁵Department of Psychology, University of Hong Kong, Hong Kong, China, ⁶MRC Centre for Neurodevelopmental Disorders, King's College London, UK, ⁷Institute of Ophthalmology, University College London, UK

O7-6 Predictive Value of the Flicker ERG in Patients with Diabetes

Quentin Davis, Mitchell G. Brigell

LKC Technologies, Inc., USA

Oral Session 8-1 11:20-12:10

Evolution and innovation

Chairs: Ruth Hamilton (Royal Hospital for Children, UK)

Karen Holopigian (Novartis Pharmaceuticals, USA)

O8-1-1 ISCEV and the evolution of Standards

Michael F Marmor

Stanford University School of Medicine, Byers Eye Institute, USA

O8-1-2 Differences in multifocal ERG recordings between DTL and Burien-Allen (BA) corneal electrodes

Ido Perlman^{1,2}, Hadas Newman²

¹Technion-Israel Institute of Technology, Israel, ²Department of Ophthalmology, Sourasky Tel Aviv Medical Center, Israel

O8-1-3 Wireless electroretinogram recording module

Tony Man

The Chinese University of Hong Kong, Hong Kong, China

O8-1-4 Investigating ERGs recorded at high altitude

Sarah Lewis¹, Isla Petrie¹, Denisa Stroncekova¹, Oliver Vick¹, Sophie Hattersley¹, Alastair Woodhead¹, Erin Bennet¹, Suzanne Green¹, Shaun Leo^{2,3}, Omar A Mahroo^{2,3}, Ian MacCormick¹

¹University of Edinburgh, UK, ²Institute of Ophthalmology, University College London, UK, ³Moorfields Eye Hospital, London, UK

O8-1-5 Deep learning neural networks for the classification of retinal disorders using full-field electroretinography (ffERG)

Rustum Karanjia^{1,2,3}, Henry Liu^{1,2}, Hong-An Nguyen^{1,2}, Tara Gholamian^{1,2}, Daniela AbouAssali^{1,2}, Muhammed Anwar^{1,2}, Stuart G. Coupland^{1,2}

¹University of Ottawa Eye Institute, Canada, ²Ottawa Hospital Research Institute, Ottawa, ON, Canada, ³Doheny Eye Institute, Los Angeles, CA, USA

Oral Session 8-2 12:10-12:50

Evolution and innovation

Chairs: Daphne McCulloch (University of Waterloo, Canada)

Shinji Ueno (Hirosaki University, Japan)

O8-2-1 Effects of smoothing and adaptive filtering on amplitude and latency in mfERG

Hossein Ameri, Christopher Long

USC Roski Eye Institute, Keck School of Medicine, University of Southern California, USA

O8-2-2 Mesopic and photopic PERGs

Lisa Tucker¹, Oliver Marmoy^{1,2,3}, Sian Handley^{1,2}, Dorothy Thompson^{1,2}

¹The Tony Kriss Visual Electrophysiology Unit, Great Ormond Street Hospital for Children NHS Trust, Clinical and Academic Department of Ophthalmology, London, UK, ²UCL GOS Institute of Child Health, London, UK, ³Manchester Metropolitan University, Manchester, UK

O8-2-3 Recording PERG responses from superior and inferior peripheral fields while stimulating both fields simultaneously

Shresta Patangay, Priyanka Roy, John R Hetling

University of Illinois at Chicago, USA

O8-2-4 Denoising the ERG with the empirical wavelet transform to improve repeatability of the photopic negative response

Marc George Sarossy^{1,2,3}, Kristyna Stepnicka⁴, Alexander Sarossy⁴, Zhichao Wu¹

¹University of Melbourne, Victoria, Australia, ²Centre for Eye Research Australia, Australia, ³Royal Victorian Eye and Ear Hospital, Australia, ⁴Monash University, Australia

Luncheon Seminar 3 13:10-14:10

Seeking the Possibility of Ophthalmic Surgery with 3D Visualization System

Chair: Masayuki Horiguchi

(Department of Ophthalmology, Fujita Health University Graduate School of Medicine, Japan)

3D Glaucoma Surgery

Takashi Fujishiro

The University of Tokyo, Japan

NGENUITY Vitreoretinal Surgery

Shinji Ueno

Hirosaki University Department of Ophthalmology, Japan

3D Surgery and ERG

Masayuki Horiguchi

Department of Ophthalmology, Fujita Health University Graduate School of Medicine, Japan

Sponsored by: ALCON JAPAN LTD.

March 18 (Sat), 2023

1F, Annex Hall 1, Kyoto International Conference Center

YSCEV 8:30-9:00

Reference Data Taskforce 9:00-9:30

Chair: Ruth Hamilton (Royal Hospital for Children, UK)

Clinical Cases Session 9:30-10:40

**Chair: Mineo Kondo (Mie University, Japan)
Anthony Robson (Moorfields Eye Hospital, UK)**

Group Photo 10:40-11:20

ISCEV Standard Session 11:20-12:30

Chair: Anthony Robson (Moorfields Eye Hospital, UK)

Luncheon Seminar 4 12:50-13:50

Some mysteries in hereditary retinal disorders

Chair: Kaoru Fujinami

**(Laboratory of Visual Physiology, Division of Vision Research, National Institute of Sensory
Organs, National Hospital Organization Tokyo Medical Center, Tokyo, Japan)**

Some mysteries in hereditary retinal disorders

Yozo Miyake

Next Vision, Japan/Kobe Eye Center

Sponsored by: ritz medical

ISCEV Membership Meeting 13:50-15:20

Adachi Award Lecture 15:20-16:20

Chair: Atsushi Mizota (Teikyo University, Japan)

Introducer: Allison L Dorfman (CHU Sainte-Justine and Research Center, Canada)

Is there a future for clinical electroretinography

Pierre Lachapelle

McGill University, Canada

Time to change clothes for Gala Dinner 16:20-18:20

***The Gala dinner will start at 18:30.**