Orthoptics Australia
73rd Annual Scientific Meeting
Melbourne Convention & Exhibition Centre

Instructions:
1. Click on any author or presentation title in the Program to go to their bio or abstract
2. Click on the ‘Speaker Program’ at the top of the abstract page to return to the program
# 73rd Orthoptics Australia Annual Scientific Conference Speaker program

**SUNDAY 20 NOVEMBER 2016**

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<tr>
<td>8:30</td>
<td>Registration</td>
<td>WELCOME</td>
</tr>
<tr>
<td>10:00</td>
<td>Ms Donna Corcoran and Ms Karen Mill</td>
<td>Official Opening and Welcome on behalf of Organising Committee</td>
</tr>
<tr>
<td>10:10</td>
<td>Ms Michelle Gallaher</td>
<td><strong>Keynote Speaker</strong> Take Two Apps and Tweet me in the Morning: Healthcare in a Digital World</td>
</tr>
<tr>
<td>10:50</td>
<td>Morning Tea</td>
<td>Pat Lance Lecture</td>
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<tr>
<td></td>
<td>Session chair: Mr Paul Cawood</td>
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<tr>
<td>11:20</td>
<td>Ms Linda Santamaria</td>
<td><strong>Pat Lance Lecture</strong> The Development of Research and Publication in the Australian Orthoptic Journal</td>
</tr>
<tr>
<td>12:00</td>
<td>Ms Sue Silveira</td>
<td>Presentation of Zoran Georgievski Medal</td>
</tr>
<tr>
<td>12:10</td>
<td>Lunch</td>
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<tr>
<td>13:10</td>
<td>Ms Louise Brennan</td>
<td><strong>Invited speaker</strong> Challenging our Thinking on Amblyopia: A Paradigm Shift</td>
</tr>
<tr>
<td>13:42</td>
<td>Dr Amanda French <strong>POA Nominee</strong></td>
<td>Risk Factors for Longitudinal Biometric and Refractive Change in Australian Schoolchildren</td>
</tr>
<tr>
<td>13:54</td>
<td>Dr Stuart Keel <strong>POA Nominee</strong></td>
<td>Prevalence and Risk Factors for Diabetic Retinopathy in a Hospital-Based Population of Australian Children and Adolescents with Type 1 Diabetes</td>
</tr>
<tr>
<td>14:06</td>
<td>Ms Sandra Staffieri</td>
<td>Familial Retinoblastoma and Genetic Testing: A Paradigm Shift in Clinical Care</td>
</tr>
<tr>
<td>14:18</td>
<td>Mr Nick Brislane</td>
<td>Investigating a Fear of the Dark - ERG Findings in Children with Nyctalopia</td>
</tr>
<tr>
<td>14:30</td>
<td>Ms Allanah Crameri <strong>POA Nominee ERP Nominee</strong></td>
<td>A Case of Foveal Hypoplasia</td>
</tr>
<tr>
<td>14:42</td>
<td>Ms Danielle Morgan <strong>POA Nominee ERP Nominee</strong></td>
<td>A Review of StEPS Outcomes</td>
</tr>
<tr>
<td>14:54</td>
<td>Ms Lindley Leonard <strong>POA Nominee</strong></td>
<td>Children Referred for Tertiary Care at the Children’s Hospital at Westmead from Community Based Surveillance with Complex Neurodevelopment and Additional Needs</td>
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<tr>
<td>15:06</td>
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<td>15:45</td>
<td>BOC Instruments</td>
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<tr>
<td>15:55</td>
<td>Dr Laurie Sullivan</td>
<td>Invited speaker The Development of Australian International Ophthalmology – from Aid to Development. A 25-year Review</td>
</tr>
<tr>
<td>16:27</td>
<td>Ms Maria Pritchard &amp; Mr Tony Wu</td>
<td>Bula! Orthoptists in Fiji 2015</td>
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<tr>
<td>16:39</td>
<td>Mr Greg Johnson</td>
<td>The Role of Orthoptists in Eliminating Poor Vision</td>
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<tr>
<td>16:46</td>
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<td>Question time</td>
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<td>17:30</td>
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<td>Opening Reception</td>
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**MONDAY 21 NOVEMBER 2016**

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<td>Registration</td>
<td>EDUCATION AND PROFESSIONAL DEVELOPMENT</td>
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<td>Session chair: Ms Catherine Mancuso</td>
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<tr>
<td>9:00</td>
<td>Alcon</td>
<td>Gold Sponsor Presentation</td>
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<tr>
<td>9:12</td>
<td>Assoc. Prof. Kerry Fitzmaurice</td>
<td>The Australian Orthoptic Board and You</td>
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<tr>
<td>9:28</td>
<td>Ms Lin Oke</td>
<td>AHPA: Sharing, Collaborating and Advocating for Allied Health</td>
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<tr>
<td>9:44</td>
<td>Ms Linda Santamaria</td>
<td>How to Write a Case Report for the AOJ</td>
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<tr>
<td>10:00</td>
<td>Dr Sam Lerts</td>
<td>RANZCO Clinical Audit Tool (RCAT) update</td>
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<tr>
<td>10:16</td>
<td>Dr Amanda French</td>
<td>The Use of Blended Learning to Increase Orthoptic Students’ Acceptance and Success in Evidence-Based Practice Learning</td>
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<tr>
<td>10:28</td>
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<td>Question time</td>
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<tr>
<td>10:40</td>
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<td>Morning Tea</td>
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<tr>
<td>11:10</td>
<td>Latrobe University SOS</td>
<td>What is Orthoptics?</td>
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<td>11:20</td>
<td>UTS Staff and Students</td>
<td>The Orthoptist Awakens</td>
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<td>11:30</td>
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<td>ORTHOPTICS AUSTRALIA 2016 ANNUAL GENERAL MEETING</td>
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<tr>
<td>12:30</td>
<td>Lunch</td>
<td>CORNEA</td>
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<td>Session chair: Dr Linda Malesic</td>
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<tr>
<td>13:30</td>
<td>Dr Dermot Cassidy</td>
<td>Invited speaker The Future of Corneal Transplantation</td>
</tr>
<tr>
<td>14:02</td>
<td>Mr Mitchell Bagley</td>
<td>The Safety and Efficacy of Corneal Collagen Cross Linking Combined with Orthokeratology Lenses for Keratoconus</td>
</tr>
<tr>
<td>14:14</td>
<td>Dr Graeme Pollock</td>
<td>Invited speaker: Australian and New Zealand Eye Banking: Towards 2020</td>
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<td>14:46</td>
<td>Ms Amanda Dinh</td>
<td>Orthoptists Driving Clinical Improvements via the Save Sight Registries (SSR)</td>
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<td>ORTHOPTIC HISTORY</td>
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<td>Session chair: Ms Neryla Jolly</td>
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<td>15:40</td>
<td>Quantum Reading Learning Vision</td>
<td>Session Sponsor Presentation</td>
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<td>15:50</td>
<td>Ms Shayne Brown</td>
<td><strong>Invited speaker</strong> Orthoptists and Orthoptics in The War Years, 1939-1945</td>
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<tr>
<td>16:22</td>
<td>Ms. Kirsten Campbell</td>
<td>Before I was Born</td>
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<tr>
<td>16:34</td>
<td>Ms Michelle Courtney-Harris</td>
<td>NEURO OPHTHALMOLOGY</td>
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<td></td>
<td>Session chair: Ms Neryla Jolly</td>
</tr>
<tr>
<td>16:43</td>
<td>Ms Natalie Ainscough</td>
<td>The Use of a Tool to Detect the Presence of Vision Defects in Patients Diagnosed with Stroke – Vision Screening Tool Validation Results</td>
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<tr>
<td>16:58</td>
<td>Ms Melanie Lloyd</td>
<td>Understanding the Relationship Between Incomitant Strabismus and the Radiological Findings.</td>
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<tr>
<td>17:10</td>
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<td><strong>Question time</strong></td>
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**TUESDAY 22 NOVEMBER 2016**

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<td>7:30</td>
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<td>Bayer Breakfast Symposium</td>
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<tr>
<td>8:00</td>
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<td>Registration</td>
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<td>8:30</td>
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<td>STRABISMUS</td>
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<td>Session chair: Ms Julie Barbour</td>
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<tr>
<td>9:00</td>
<td>Ms Lindsay Horan</td>
<td><strong>Invited speaker</strong> The TED Talk: An Overview and Case Presentations</td>
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<tr>
<td>9:32</td>
<td>Mr Gareth Lingham</td>
<td>Early Life Risk Factors of Amblyopia, Strabismus and Anisometropia in a Young Adult Population</td>
</tr>
<tr>
<td>9:44</td>
<td>Ms Felicia Adinanto</td>
<td>Risk Factors for Esotropia and Exotropia</td>
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<tr>
<td>9:56</td>
<td>Ms Nicole Carter</td>
<td>Not your Average Squint...</td>
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<tr>
<td>10:08</td>
<td>Ms Angela Serna</td>
<td>Ocular Torsion in Strabismic Patients and how it Affects their Binocular Potential</td>
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<tr>
<td>10:20</td>
<td>Mr Cem Oztan</td>
<td>A Novel Method for Measuring Nystagmus</td>
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<td>10:32</td>
<td></td>
<td><strong>Question time</strong></td>
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<tr>
<td>10:45</td>
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<td>Morning Tea</td>
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<tr>
<td>11:15</td>
<td>Prof Jonathan G Crowston</td>
<td><strong>Invited speaker</strong> Targeting the Coma in Glaucoma. Neurorecovery in Retinal Ganglion Cells</td>
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<td>11:47</td>
<td>Ms Debra Gleeson</td>
<td>Goldmann Applanation Tonometry Audits (RVEEH)</td>
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<tr>
<td>11:59</td>
<td>Dr Linda Malesic</td>
<td>Eye &amp; Ear Hospital and ACO Collaborative Clinic - A New Model of Care for Low Risk Glaucoma Patients</td>
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<td>12:11</td>
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<td><strong>Question time</strong></td>
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<td>Time</td>
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<tr>
<td>12:20</td>
<td>Lunch</td>
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<td>13:20</td>
<td>Bayer</td>
<td>Gold Sponsor Presentation</td>
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<tr>
<td>13:32</td>
<td>Ms Julie Heraghty</td>
<td>Invited speaker Macular Disease Foundation Australia: New publications, Research Grants Programs, Low Vision Aids, Professional Friends</td>
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<tr>
<td>13:49</td>
<td>Ms Jessica Boyle</td>
<td>ERP Nominee The Evaluation of Patient Education and the Provision of Information Regarding Patient Support Groups and Low Vision Services to Patients Receiving Treatment for Neovascular AMD</td>
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<tr>
<td>14:01</td>
<td>Ms. Pyrawy Sharangan</td>
<td>New OCT Signs in Intermediate AMD</td>
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<tr>
<td>14:13</td>
<td>Ms Sutha Sanmugasundram</td>
<td>Geographic Atrophy in the Clinical Trial World</td>
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<td>14:25</td>
<td>Ms Monique Rose</td>
<td>A Retrospective Study- To Identify Factors That Influence Clinical Adherence Rates in Patients with Diabetic Macular Oedema Undergoing Intravitreal Injection Treatment</td>
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<tr>
<td>14:37</td>
<td>Ms Julie Morrison</td>
<td>Diabetic Retinopathy in Pregnancy: A Review</td>
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<tr>
<td>14:49</td>
<td>Ms Jo Lynch</td>
<td>The Role of Ocular Electrophysiology in Autoimmune Retinopathies</td>
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<tr>
<td>15:01</td>
<td>Ms Sally Steenbeek</td>
<td>Plaquenil Toxicity - a Dramatic Case</td>
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<tr>
<td>15:20</td>
<td>Afternoon Tea</td>
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<tr>
<td>15:50</td>
<td>Ms Catherine Mancuso</td>
<td>Specialist Clinic Redesign at the Eye and Ear Hospital</td>
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<tr>
<td>16:02</td>
<td>Ms Mercy Nguyen</td>
<td>The Orthoptic Lead Diabetic Screening Clinic at The Alfred Hospital</td>
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<tr>
<td>16:14</td>
<td>Ms Alannah Price</td>
<td>Fingolimod (Gilenya) Screening at the Alfred Hospital</td>
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<td>16:26</td>
<td>Ms Becc Page</td>
<td>Orthoptics in an Ophthalmic Clinic</td>
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<td>16:38</td>
<td>Ms Catherine Devereux</td>
<td>How Do We Communicate with Our Patients?</td>
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<td>Question time</td>
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<tr>
<td>17:00</td>
<td>Ms Sue Silveira</td>
<td>OA Awards and Presentation Ceremony</td>
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<td>19:00</td>
<td>Conference Dinner</td>
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Keynote Speaker

**Take Two Apps and Tweet me in the Morning: Healthcare in a Digital World**

Ms Michelle Gallaher  
*Co-founder and Creative Director at The Social Science*

**Biography:**

Michelle Gallaher is a recognised champion of the Victorian lifesciences industry and a global leader in understanding and shaping the role of social media in the science, medical research and Australian biotechnology and medtech sector. Michelle is the co-founder and Creative Director of The Social Science, a company established by her in 2014. Michelle helps science, health and technology organisations, university institutes and departments, governments and industry bodies unlock the value in social media and effective communication strategies with investors, government, industry and patient populations. Michelle recently resigned as CEO of BioMelbourne Network, Victoria’s peak body for the $50bn Victorian biotechnology industry after six years in the role as an opinion leader and industry advocate. Michelle’s career spans teaching hospitals, medical research institutions, pharmaceutical companies, listed and private biotech companies and clinical trial organisations and now the professional services sector in clinical and executive management roles. Supporting gender equity initiatives and providing leadership for women in Australian STEM industries is important to Michelle and she crystallised her commitment by co-founding Women in Science Australia, an online national initiative of approximately 10,000 members in June 2014. Michelle has an undergraduate science qualification in allied health (Orthoptics) from La Trobe University and postgraduate qualifications in business and marketing from RMIT and the Mt Eliza Business School. She is a graduate member of the Australian Institute of Company Directors (GAICD) as well as a Fellow of the Australian Institute of Management (FAIM). Michelle is on the board of Cancer Trials Australia, ARC Biodevices Training Centre, Swinburne University Innovation Precinct, Avatar Insurance and Women in Science Australia.  
Twitter: @startupshelley

**Abstract:**

Social media and the internet of things is playing an increasing role in healthcare delivery, and practitioners and providers can no longer afford to ignore its value. Initially seen as a detrimental distraction and a source of misinformation by many healthcare providers, social media is fast becoming a primary tool for many clinical researchers, medical technology developers, healthcare providers and patients. Digital health and the opportunity these platforms offer to orthoptics and ophthalmology is being transformed, literally before our eyes. Vision technologies and patient engagement opportunities are emerging in the market, built upon smartphone platforms. Social media platforms, particularly Facebook and Twitter, are seeking to serve clinical researchers and patients who are vision impaired and clinical researchers looking for engagement and data. The rise of digital health is transforming the sector with technologies that are disrupting the major players in the medtech market with cheaper, easier and more sympathetic approaches improving compliance, access and outcomes. Michelle Gallaher will introduce examples of high value social media and IoT technologies such as Research Kit and IBM Watson, and discuss ways in which regulation, legislation, quality clinical evidence, market access and reimbursement need to keep pace with the way patients and practitioners are engaging online, specifically in vision sciences.
Pat Lance Lecture

The Development of Research and Publication in the Australian Orthoptic Journal

Ms Linda Santamaria
MAppSc, DipAppSc(Orth)

Biography:

After many years lecturing at La Trobe University, Linda Santamaria is currently the Senior Orthoptist and Manager of the Ophthalmology Department at Monash Health, the largest metropolitan health network in Victoria. She is also Adjunct Research Fellow at Monash University and is presently Co-Editor of the Australian Orthoptic Journal, a position she has held for several years. This long-term involvement in education, research and clinical practice has demonstrated her passion for mentoring, with a particular focus on helping enthusiastic new graduates and early writers, encouraging them to achieve their professional goals.

Abstract:

This lecture is presented in honour and memory of Patricia Mary Lance in recognition of her contribution to orthoptics in the fields of research, education, and the association both in Australia and internationally. After seven years of publishing the transactions of the annual scientific meetings, the first titled edition of the Australian Orthoptic Journal was published in 1966 as Volume 8, which means that this year marks 50 years of our journal with its current name. This anniversary provides an opportune time to look back over the journal and its development over the decades, from the very first Orthoptic paper in the Transactions of the 1959 meeting, which was actually by Patricia Lance, to the latest research publications in 2015. Over this time the changes in society, culture, education and technology have all affected the development of research and this has been reflected in our journal.
Paediatrics

Challenging our Thinking on Amblyopia: A Paradigm Shift

Ms Louise Brennan
BAppSc(Orth) Hons

Other Authors:
Dr Jane Lock, Ophthalmology Fellow, MBBS, MMed(OphthSc)

Affiliation:
Orthoptic and Ophthalmology Departments, The Children’s Hospital at Westmead NSW

Biography:
Louise graduated from the University of Sydney with a Bachelor of Applied Science in Orthoptics with Honours in 1994. She is a member of Orthoptics Australia and was part of the Scientific Committee for the OA Annual Scientific Conference in 2014. She is a Senior Clinical Orthoptist at The Children’s Hospital at Westmead where she has enjoyed working in Paediatric Orthoptics and Ophthalmology since graduation. During her time at CHW she has also undertaken other roles involving herself in vision surveillance, paediatric low vision, private practice and the clinical education of Orthoptic Students, Nurses and Junior Medical Officers. Louise is a Clinical Associate lecturer for Sydney Medical School at the University of Sydney. She has published research in journals and has presented at various scientific meetings nationally. Louise was awarded the Paediatric Orthoptic Award at the OA 70th Annual Scientific conference in 2013.

Abstract:
Amblyopia is fundamentally a neurological disorder resulting in subnormal vision that arises from disruption of visual development during early childhood. Amblyopia, which is more commonly referred to as “lazy eye” affects about 2% of the Australian population. The current mainstay of treatment is occlusion therapy, which involves patching or penalisation of the non-amblyopic eye. Some scientists and clinicians purport that whilst patching improves monocular vision, it neglects binocular visual development. The latter is important for depth perception, and appreciation of form and motion. Recent experimental evidence supports the role of binocular methods of treating amblyopia, referred to as dichoptic therapy. This treatment method forces both eyes to function together by presenting different images to each eye, either in a movie or as an interactive game. The amblyopic eye sees images of higher contrast, while the fellow eye sees images of lower contrast. In order for the game to be played successfully both images must be seen. Multiple small studies have already demonstrated the efficacy of dichoptic tablet games for visual improvement in amblyopes. Our current thinking on amblyopia and how this is being challenged will be discussed along with an outline of a prospective study being conducted at The Children’s Hospital.

Risk Factors for Longitudinal Biometric and Refractive Change in Australian Schoolchildren

Dr Amanda French
PhD

Other Authors:
Prof. Kathryn Rose, PhD

Affiliation:
University of Technology Sydney

Biography:
Amanda French is a lecturer and researcher in the Discipline of Orthoptics at UTS. She graduated from orthoptics in 2007 with class 1 honours and the university medal and completed her PhD in 2013. She has published papers in peer-reviewed international journals and presented at a number of national and international meetings.
Abstract:
Purpose: To investigate longitudinal change in biometry and refraction and examine the impact of risk factors in Australian schoolchildren. Methods: The Sydney Adolescent Vascular and Eye Study followed up participants (6 years; n=1765 and 12 years, n=2353) from the Sydney Myopia Study, 5-6 years after initial examination. Children underwent a comprehensive ocular examination including cycloplegic autorefraction (cyclopentolate 1%, Canon RK-F1). Change in spherical equivalent refraction (SER) and biometry for the right eye were analysed and the impact of risk factors examined. Results: There was a significant negative shift in mean refraction between baseline and follow-up (both cohorts \( p < .0001 \)) associated with increases in axial length (AL), anterior chamber depth (ACD) and axial length/corneal radius ratio (AL/CR). Children of East Asian ethnicity and those with myopic parents had greater changes in refraction and biometry (all \( p < .0001 \)). Children who spent more time in near work also had larger increases in AL and AL/CR although, this was significant only in the older cohort (AL, \( p = 0.02 \) and AL/CR, \( p = 0.03 \)). Conversely, spending greater time outdoors reduced AL growth in the younger (high=0.71 mm, moderate=0.77 mm and low=0.86 mm, \( p < .0001 \)) and older cohort (high=0.22 mm, moderate=0.26 mm and low=0.28 mm, \( p = 0.008 \)), as well as AL/CR (both \( p < .0001 \)). Conclusion: Greater time spent in near work increased refractive and biometric change but, this was significant for the older cohort only. More time spent outdoors slowed AL/CR change and AL elongation in both cohort, although, the impact appeared greater at a younger age.

Prevalence and Risk Factors for Diabetic Retinopathy in a Hospital-Based Population of Australian Children and Adolescents with Type 1 Diabetes

Dr Stuart Keel
PhD

Other Authors:
Assoc. Prof Catherine Itsiopoulos, PhD
Dr Konstandina Koklanis, BO Orth, PhD
Dr Meri Vukicevic, BO Orth, PhD
Prof Fergus Cameron, MD
Dr Laima Brazionis, PhD

Affiliation:
Centre for Eye Research Australia

Biography:
Stuart is a post-doctoral research fellow at the Centre for Eye Research Australia. He completed his PhD in retinal microvascular biomarkers in type 1 diabetes. Stuart’s most recent role involved project management of the National Eye Health Survey, a study that set out to determine the prevalence of vision impairment and blindness in non-Indigenous and Indigenous adults in Australia.

Abstract:
Aim: To investigate the prevalence of, and traditional and emerging risk factors associated with, retinopathy in a hospital-based population of Australian children and adolescents with type 1 diabetes. Methods: This was a cross-sectional study of 483 children and adolescents with type 1 diabetes. The medical files of participants who had retinal images taken were audited to collect all relevant clinical data. Diabetic retinopathy was assessed from colour retinal images by an ophthalmologist according to the Modified Airlie House classification system. Results: Diabetic retinopathy was observed in 11 (2.3%) participants. Univariate analysis revealed a higher mean HbA1c (M = 9.2±1.6 vs. 8.3±1.3; \( p = 0.008 \)) and BMI (M = 27.4±5.2 vs. 23.1±4.6; \( p = 0.009 \)), and lower serum HDL cholesterol (M = 1.2±0.3 vs. 1.1±0.3; \( p = 0.006 \)) in participants with diabetic retinopathy. Logistic regression revealed that the principal components analysis derived risk profile of: higher serum creatinine, older age, higher SBP, higher BMI, abnormal eGFR (<59 ml/min), lower HDL cholesterol, higher serum sodium, longer duration of diabetes and narrower retinal arteriolar calibre was associated with diabetic retinopathy (ExpB = 2.60, 95% CI 1.36/4.96, \( p = 0.004 \)). Conclusions: These results support the concept that the pathogenesis of diabetic retinopathy is likely due to the combined influence of various risk factors, many already identified. Furthermore, the results of univariate and multivariate analysis provide novel evidence for the possible benefit of more intense management of diabetic retinopathy for persons with a low HDL level.
Familial Retinoblastoma and Genetic Testing: A Paradigm Shift in Clinical Care

Ms Sandra Staffieri
BAppSc(Orth)

Other Authors:
Ms Lisa Kearns BOrthOphthSc (Hons)
A/Prof. James Elder, FRANZCO
Dr John McKenzie, FRANZCO
Ms Lisette Curnow, MHSc
Prof. David Amor, PhD
A/Prof. Alex Hewitt, PhD FRANZCO
Prof. David Mackey, MD FRANZCO

Affiliation:
Retinoblastoma Care Co-Ordinator, Dept. of Ophthalmology, RCH

Biography:
Sandra has developed the role of RB Care Co-ordinator at the RCH over 23 years. As a Clinical and Research Orthoptist at the Centre for Eye Research Australia (CERA) she is active in retinoblastoma research through CERA and the RCH, with a focus on raising awareness of the disease and translation of genetic screening to clinical care.

Abstract:
Background: Retinoblastoma (RB), is the most common intraocular malignancy occurring in children. The RB1gene was first identified in 1986 with genetic testing for RB translating to clinical care by the end of the 1990’s. This heralded a paradigm shift in the clinical management of affected individuals by informing their clinical care and that of their siblings and offspring. Aim: To report on the frequency and outcomes of the use of pre- and post-natal genetic testing for familial retinoblastoma using the Victorian Retinoblastoma Database cohort since 1998. Methods: Retrospective audit of the Victorian Retinoblastoma Database. Results: Twenty-six infants were born of 13 individuals with a personal or family history of RB. Only 4 of the 13 parents elected to undergo pre-natal testing for 7 pregnancies. Pre- or postnatal genetic testing was completed in 19 pregnancies. Of these, 12 (63%) infants were found to carry their familial RB1 mutation, 6 of whom remain unaffected carriers. Five of the unaffected carriers are from 2 known low-penetrant families. The gestational age at which the first lesions developed in all the affected infants ranged from 35 to 43 weeks (mean 40 weeks). One pregnancy was induced due to the identification of lesions prenatally with intrauterine MRI. With treatment, 21 eyes of 12 affected children have been retained. Conclusion: Timely genetic counselling and testing for individuals with a personal or family history of RB is an integral part of optimal clinical care. This multi-disciplinary approach to care and surveillance is vital to ensure the earliest diagnosis and treatment for optimal outcomes.

Investigating a Fear of the Dark - ERG Findings in Children with Nyctalopia

Mr Nick Brislane
BOrth

Affiliation:
Royal Children's Hospital Melbourne

Biography:
Nick Brislane is an orthoptist at the Royal Children's Hospital here in Melbourne. He has worked almost exclusively in paediatrics since graduating from La Trobe in 2001, initially in Neurology at the Women's & Children's Hospital in Adelaide and then RCH and Melbourne Children's Eye Clinic since 2007.

Abstract:
Objective: To report on the clinical phenotypes in a series of children who presented with complaints of night blindness.
Discussion: During the commissioning of the visual electrophysiology testing service at The Royal Children's Hospital, 10 patients
underwent standard and extended electroretinogram (ERG) testing to investigate their common complaints of night blindness. Under scotopic test conditions, 6 patient’s ERG showed an absence of rod-derived b-waves, a negative response to a bright white stimulus. The use of photopic, cone-derived ERG to short and long duration flash stimuli assisted in differentiating between genetically distinct conditions which are indistinguishable on the basis of a negative ERG alone. ERG testing beyond the standard ISCEV protocols was informative in making distinctions between complete and incomplete congenital stationary night blindness (4 cases), retinitis pigmentosa (3), x-linked retinoschisis (1 case), enhanced s-cone syndrome (1 case) and rod dysfunction secondary to isotretinoin use (1 case). Conclusion: ERG studies beyond the ISCEV standard protocols are useful in diagnosing various causes of nystagia in children.

A Case of Foveal Hypoplasia
Ms Allanah Crameri
BHlthSc & MOrth (Hons)

Affiliation:
Ballarat Eye Clinic

Biography:
Allanah has been working as a full time Orthoptist at the Ballarat Eye Clinic for the last 3 years. She completed her Orthoptic degree at La Trobe University in 2013 with Honours. Allanah is the current public relations coordinator for Orthoptics Australia and a member on the Victorian Branch committee.

Abstract:
A four-year-old boy was referred to the clinic for poor visual acuity which the optometrist was unable to improve. On further investigations by the orthoptist and ophthalmologist, foveal hypoplasia was suspected. Foveal hypoplasia is the underdevelopment of the fovea and macula which includes an absent or abnormal maculofoveal reflex, unclear definition of the area and capillaries running abnormally close to the foveal region. Isolated foveal hypoplasia is often subtle and difficult to detect however, other accompanying signs may include nystagmus, poor visual acuity, aniridia, albinism, microphthalmus and achromatopsia. This case looks at the initial presentation, investigations and suspected diagnosis of foveal hypoplasia.

A Review of StEPS Outcomes
Ms Danielle Morgan
MOrth

Affiliation:
Sydney Children’s Hospital/Prince of Wales Hospital, Randwick

Biography:
Danielle graduated with a Bachelor of Science majoring in Anatomy from The University of Sydney in 2011 and a Masters of Orthoptics from The University of Sydney in 2013. Danielle has been an Orthoptist at Prince of Wales/Sydney Children’s Hospitals Eye Clinic since 2013. She is currently one of Orthoptic clinical educators and also manages the StEPS tertiary screening clinics.

Abstract:
The Statewide Eyesight Preschool Screening program provides free vision screening for all 4-year-old children in NSW. The program targets children before starting school in order to maximise the potential for visual improvement during the critical period of visual development. This talk explores outcomes from the Sydney Children’s/Prince of Wales Hospital StEPS clinics over the last few years and focuses on the importance of encouraging patient attendance and the need for orthoptic screening in the StEPS program.
Children Referred for Tertiary Care at the Children’s Hospital at Westmead from Community Based Surveillance with Complex Neurodevelopment and Additional Needs

Ms Lindley Leonard
BAppSc(Orth) Hons

Other Authors:
Louise Brennan, BAppSc(Orth) Hons

Affiliation:
The Children's Hospital at Westmead.

Biography:
Lindley Leonard graduated from the University of Sydney in 2001 with first class honours. She has been working in the area of paediatrics since obtaining her qualification and is currently employed as a senior orthoptist at The Children’s Hospital at Westmead. Lindley has been an active member of the profession since graduation with representation on state and federal bodies of the Orthoptics Australia council (currently holds position on both NSW committee and is NSW Federal representative), RANZCO Strabismus Society Council and The Agency of Clinical Innovation Orthoptic Standing Committee. Lindley has presented at numerous national conferences and in 2006 and 2015 was awarded the OA Paediatric Orthoptic Award.

Abstract:
With the initiation of a pilot clinic in 2010 there has been an evolution in the management of children seen within a busy outpatient combined Orthoptic/Ophthalmology service. Changes have been evident in referral patterns including a noticeable increase in referral of children with complex neurodevelopment and additional needs being assessed within the community, requiring appropriate Ophthalmology assessment. This has required us, as Orthoptists to consider a model of service delivery to accommodate children that previously have not been reviewed within this particular clinic. Discussion will highlight modifications within the service and a number of cases that confirm the necessity of a thorough assessment whilst considering adaptations for children with additional needs.
Eye Care Abroad

The Development of Australian International Ophthalmology – from Aid to Development. A 25-year Review

Dr Laurie Sullivan
BSc, MBBS, FRANZCO

Affiliation:
RANZCO International Development Committee
RVEEH, LaserSight, Bayside Eye Specialists

Biography:
Dr Laurie Sullivan is a fellowship trained Corneal Specialist. He specialises in the medical and surgical treatment of diseases of the front of the eye, including small incision refractive Cataract Surgery, Corneal diseases (including Keratoconus Cross Linking) and Corneal Transplantation Surgery, and Laser Refractive Surgery. His public hospital teaching appointment is to the Corneal Clinic at the Royal Victorian Eye and Ear Hospital, where he is involved in training Ophthalmology registrars and fellows. Laurie has been a Clinical Associate at the University of Melbourne Department of Ophthalmology and the Centre for Eye Research Australia since 1994. He is an Examiner for the Royal Australian and New Zealand College of Ophthalmologists. Laurie has lectured at the University of Melbourne Department of Optometry and Visual Science, and examined candidates for the Graduate Certificate in Ocular Therapeutics. He has lectured internationally. Laurie has worked overseas volunteering his time for third world eye camps with the Fred Hollows Foundation in Nepal, and also in Fiji. He helped conduct the first ever Ophthalmology fellowship examinations for Cambodia in 2009 and has maintained his involvement in that country in teaching ophthalmic trainees and helping to develop the curriculum. He is a member of RANZCOs International Development Committee. He is involved in major research projects at the Royal Victorian Eye and Ear Hospital and has authored numerous scientific papers and book chapters. Laurie is a member of the Royal Australian and New Zealand College of Ophthalmologists, Australasian Society of Cataract and Refractive Surgeons, the American and European Societies of Cataract and Refractive Surgeons and the Australasian Cornea Society.

Abstract:
Over the last 25 years, and particularly in the last decade, the concept and practice of overseas ophthalmology "aid" has morphed towards "development". The Principles include partnership, empowerment, and sustainability. Outcomes are now mainly delivered via human resources development, along with infrastructure, and are guided by the target country’s own assessment of its current and future needs. Examples from the Asia Pacific region will be used to illustrate these points.

Bula! Orthoptists in Fiji 2015

Ms Maria Pritchard & Mr Tony Wu
MHA, MAppSc(Orth) & BOrthOphthSc

Affiliation:
Geelong Private Eye Centre & HumanWare

Biography:
Maria has 30 years’ experience working as a clinical orthoptist in private practice, public hospital and a rehabilitation Centre. Tony has 10-year experience working as a clinical Orthoptist. Tony currently work as a Regional Account Manager at HumanWare

Abstract:
Last November a group of volunteering medical & allied health professionals visited Coral Coast in Fiji to provide a range of health based services and education to the local community. The two Orthoptists provided vision screening, education and glasses. The experience of these Orthoptists will be presented.
The Role of Orthoptists in Eliminating Poor Vision

Mr Greg Johnson
GradCertBus

Affiliation:
Essilor Vision Foundation

Biography:
Greg Johnson was CEO of Optometry QLD/NT for 12 years during which the profession was granted therapeutic prescribing rights, established one of the nation’s largest optometric conferences and enhanced the profile of the profession with government and the community. Nowadays he is Australian/NZ CEO of Essilor Vision Foundation.

Abstract:
Australia and New Zealand CEO of the Essilor Vision Foundation, Greg Johnson, was encouraged by a number of orthoptists to submit an abstract to the Annual Scientific Conference following their attendance at recent roadshows across the nation at which he presented. There are 2.5 billion people in the world who have uncorrected poor vision and the role of the Foundation is to reach out to those people by providing free vision screening and free prescription spectacles where required. Over the past twelve months, in both countries, optometrists, optometry students, dispensers and practice managers have screened hundreds of primary and secondary school students, refugees, migrants, people with mental illness and indigenous peoples with concerning results. Between 30% and 50% of children screened required a subsequent comprehensive optometric examination and one-third required free prescription spectacles. Almost all of the adults in the remaining groups needed the free spectacles. Essilor Vision Foundation welcomes the participation of orthoptists in this voluntary program and Mr Johnson’s call to action at this Conference is "Can you lend a day a year for good vision?"
Education and Professional Development

The Australian Orthoptic Board and You
Assoc. Prof. Kerry Fitzmaurice
DipAppSc(Orth), PhD, AOBR

Affiliation:
Australia Orthoptic Board & LaTrobe University

Biography:
Currently Head of Department Community and Allied Health and Director Learning and Teaching School of Allied Health, La Trobe University. Kerry has held a range of positions in Orthoptics including Senior Orthoptist at the RVIB and Head of the School of Orthoptics La Trobe University. Her research interests are in low vision rehabilitation an area in which she is well recognized both nationally and internationally. Kerry is the Chair of the Australian Orthoptic Board.

Abstract:
Historically the Orthoptic profession in Australia was regulated by the Orthoptic Board of Australia, a sub-committee of the Royal Australian College of Ophthalmologists (RANZCO). The Board members included Ophthalmologists and Orthoptists and the functions included conferring the entry to practice qualification – Diploma of the Orthoptic Board of Australia and to ensure professional standards. As the Orthoptic Profession developed having professional standards regulated by another professional body became inappropriate. The preferred position was regulation under Government legislation however as this was not possible the agreed option was to form an independent body that would be recognized nationally in a court of law. The Australian Orthoptists Registration Body Pty Ltd was formed with a sub-committee – the Australian Orthoptic Board (AOB). The current AOB provides independent oversight of the quality of orthoptic practice by: accrediting the University training programs for Orthoptists in Australia, assessing the equivalence of non-Australian qualifications, regulates professional development and provides disciplinary procedures and actions in the case of professional misconduct. The role of the AOB in professional regulation will be discussed.

AHPA: Sharing, Collaborating and Advocating for Allied Health
Ms Lin Oke

Affiliation:
Allied Health Professions Australia

Biography:
Lin Oke, as the Executive Officer of AHPA, works together with the CEOs of AHPA’s Member Organisations, to represent Allied Health to policy makers, ensuring that the combined voices are heard. Lin qualified as an OT and a Neurophysiologist, and has worked in rural hospitals, disability and rehabilitation services, tertiary teaching, Association management and a large paediatric hospital where she successfully sought funding for trialling telehealth technologies. Lin has a personal interest and commitment to work with First Australian colleagues for better Indigenous health in Australia.

Abstract:
Orthoptics Australia is one of the 22 national allied health associations who collectively comprise Allied Health Professions Australia. Lin Oke, AHPA’s Executive Officer (who once used to teach neurophysiology to Orthoptic students) will provide an overview of the collaborative work of AHPA and the benefits that flow to Member Organisations like Orthoptics Australia.
How to Write a Case Report for the AOJ
Ms Linda Santamaria
MApSc, DipAppSc(Orth)

Biography:
After many years lecturing at La Trobe University, Linda Santamaria is currently the Senior Orthoptist and Manager of the Ophthalmology Department at Monash Health, the largest metropolitan health network in Victoria. She is also Adjunct Research Fellow at Monash University and is presently Co-Editor of the Australian Orthoptic Journal, a position she has held for several years. This long-term involvement in education, research and clinical practice has demonstrated her passion for mentoring, with a particular focus on helping enthusiastic new graduates and early writers, encouraging them to achieve their professional goals.

Abstract:
Are you thinking of writing for the Australian Orthoptic Journal, but not sure where to start? For the beginning writer, this could be with a case report, or an outline of a new model of care. This presentation will take you through the process of preparing a case report for submission to the journal, with hints on ethics considerations, literature searching, reading and writing.

RANZCO Clinical Audit Tool (RCAT) update
Dr Sam Lerts
FRANZCO, MPH

Affiliation:
RANZCO

Biography:
Dr Lerts is a member of these RANZCO committees, Board, Council, CPD, NSW branch, Workforce and OBCK. He is a general ophthalmologist with special interest in uveitis. He trained at Sydney Eye Hospital and National Eye Institute, NIH, USA. He worked at Liverpool Hospital from 1998-2013 and now practices at Liverpool and Norwest in Sydney.

Abstract:
RANZCO commissioned Episoft to create RCAT to assist Fellows with their audit requirements in CPD in 2015. It was designed to include common eye procedures, starting with cataract surgery. The key features are ease of use, accessibility and automatic reporting. There are now over 5000 cases in 18 months enabling good bench mark data.

The Use of Blended Learning to Increase Orthoptic Students’ Acceptance and Success in Evidence-Based Practice Learning
Dr Amanda French
PhD

Other Authors:
Prof. Kathryn Rose, PhD

Affiliation:
University of Technology Sydney

Biography:
Amanda French is a lecturer and researcher in the Discipline of Orthoptics at UTS. She graduated from Orthoptics in 2007 with class 1 honours and the university medal and completed her PhD in 2013. She has published papers in peer-reviewed international journals and presented at a number of national and international meetings.
Abstract:
Purpose: This study aimed to assess the impact of blended learning on student acceptance and success in learning evidence-based practice (EBP). Method: Blended-learning was introduced to increase student engagement in EBP subjects in the Master of Orthoptics course in Sydney, Australia. Student acceptance was assessed quantitatively through formal subject evaluation scores and qualitatively through thematic analysis of student survey comments. The contribution of blended learning to student success was investigated by analysis of grades. Results: In 2010, student acceptance of learning EBP was low with only 37% satisfied with the research subject. With the introduction of a preparatory subject incorporating blended learning in 2011, student satisfaction with the semester 2 subject increased to 56% although, student comments suggested that the relevance was not well understood “I do not at all see the relevance to my degree and how this knowledge will be used in my career as an orthoptist” (student, 2011). With further refinement of the curriculum, student satisfaction increased to 87%, 100% and 81% in 2012, 2013 and 2014 and comments indicated a greater understanding of the relevance. Student grades for the final research subject also increased, with the failure rate dropping and an upward shift in the mean grade. Conclusion: The use of blended learning strategies to encourage orthoptic students’ engagement has significantly increased student acceptance and success in their learning of EBP. This is likely to translate into greater engagement in EBP and research as orthoptic graduates.
Video Competition

**The Orthoptist Awakens**
Ms Michelle Courtney-Harris  
BAppSc(Orth)  
UTS Staff and Students

**Affiliation:**  
UTS Orthoptics

**Biography:**  
A team of staff and students at UTS Orthoptics have pooled their creative hidden talents together to create a video about what an orthoptist is.

**Abstract:**  
In the search to answer the old age question "What is an orthoptist?" a collaborative group of UTS rebellions have searched the literature and travelled the world to find out, who we are.

**What is Orthoptics?**
Ms Han Nguyen (Orthoptic student)  
Latrobe University SOS

**Other Authors:**  
Maria Tomanoska (student)  
Christine Dang (student)  
Kaitlin Rust  
Sachinee Jayasuriya  
Denise Bartolo  
Rachele Stin  
Jenna Mcnamara

**Affiliation:**  
LaTrobe University SOS

**Biography:**  
The Student Orthoptic Society (SOS) currently consists of students from the Orthoptics faculty within La Trobe University. The role of an Orthoptist is often confused with feet, optometry and bone surgery. The purpose of this society is to ensure that this no longer happens! We are aiming to network students across all years to enhance social welfare, provide academic support and establish future professional contacts.

**Abstract:**  
The video is a cartoon illustrated video to introduce about the profession of Orthoptics in a friendly way that can be understood by general public, patients and health professionals. It will introduce key facts about Orthoptics: who we are, what we do (mainly strabismus), where do we work and why Orthoptics is a remarkable profession in eye care.
The Future of Corneal Transplantation

Dr Dermot Cassidy
BSc (Hons), MBBS, FRANZCO

Affiliation:
Bayside Eye Specialists, RVEEH, Eye Surgery Consultants

Biography:
Dr Dermot Cassidy is an Ophthalmologist who is fellowship trained in the medical and surgical treatment of diseases of the front of the eye, including Cataract, Corneal Transplantation, Pterygium and Laser Refractive Surgery. He also maintains a keen interest in General Ophthalmology. Dermot qualified from the University of Sydney in 2000 before returning to Melbourne to undertake his Ophthalmology training at the Royal Victorian Eye and Ear Hospital (RVEEH). He completed subspecialist fellowship training in Corneal surgery at the RVEEH before completing a further subspecialist fellowship in Corneal, External eye disease and Laser Refractive Surgery at the Manchester Royal Eye Hospital. He held a Locum Consultant appointment at the same institution prior to returning to Melbourne where he is a Consultant on the Corneal Unit at the RVEEH in addition to consulting in private practice. Dermot has presented at international meetings and published in his area of subspecialty in peer-reviewed journals and in book chapters. He has a particular interest in lamellar corneal transplantation, the management of keratoconus and cataract surgery.

Abstract:
For more than half a century penetrating corneal transplantation, consisting of full-thickness replacement of the diseased cornea, was the dominant procedure for the treatment for most causes of corneal blindness. Over the last decade or so a revolution has taken place that has delivered on a long held hope that allows selective replacement of only diseased layers of the cornea in the form of lamellar corneal transplantation. This talk will highlight some of these key developments and their effects on corneal transplant outcomes as well as looking at future techniques and developments that hope to advance corneal transplantation further still.

The Safety and Efficacy of Corneal Collagen Cross Linking Combined with Orthokeratology Lenses for Keratoconus

Mr Mitchell Bagley
MClinVisSc

Other Authors:
Dr Tess Huynh, MBBS, FRANZCO

Affiliation:
South West Vision Institute

Biography:
Mitchell has worked in a variety of clinics and specialties including glaucoma, paediatrics and refractive surgery. He has volunteered for the Myanmar Eye Care Project and has been involved in clinical trials. Currently he is working in Liverpool at South West Vision Institute as well as at UTS as a practitioner teacher.

Abstract:
Purpose: To evaluate the results of corneal collagen cross linking (CXL) alone compared to when CXL is performed in combination with corneal moulding orthokeratology (OK) lenses for progressive keratoconus. Method: A pilot study was conducted involving patients who presented with progressive keratoconus and proceeded with treatment of either CXL alone or CXL with OK wear. Patients who were treated using OK lenses wore these for a minimum of 1 month prior to CXL and resumed
OK wear 1 month post-operatively, continuing until vision had stabilised. The same accelerated CXL protocol was followed for all cases. Vision, autorefraction, keratometry and pachymetry were obtained throughout the study. Results: There were 10 eyes in each group. In both groups VA improved by 7 letters and there was no progression across all keratometric indicators between the pre-operative appointment and the most recent appointment post CXL. Mean BCVA indicated a slightly greater improvement in the OK group of 3 letters compared to 1. The mean minimum pachymetry revealed greater thickening in the OK group (+23.22 μm) compared to the control group (+12.13 μm). Two patients in each group appreciated an improvement in their vision however three patients who wore OKs reported ocular discomfort. There were no adverse events in either group. Conclusion: Given the similarity in results between CXL alone and combining this procedure with OK wear it is difficult to ascertain what place this treatment option has in the current clinical context. It is likely that a higher powered study may reveal more significant findings.

Australian and New Zealand Eye Banking: Towards 2020

Dr Graeme Pollock
BSc (Hons), MPH, PhD

Affiliation:
Lions Eye Donation Service Melbourne

Biography:
Director of Lions Eye Donation Service Melbourne. Graeme holds joint appointments with the Centre for Eye Research Australia and The University of Melbourne. In 1991 Graeme became the inaugural Manager of the then named Lions Eye Bank Melbourne and has spent the past 25 years involved in eye banking at local, national and international levels. During this time, he has overseen the development of the routine use of specular microscopy in Australian eye banks, the re-introduction of the organ culture technique of corneal preservation, the first processing and licensing of human amniotic membrane for ocular surgery, and the first eye bank pre-cut corneas for DSAEK surgery in Australia. Trained in pathology at the University of Melbourne, Graeme’s association with donation and transplantation extends back to the 1980’s while working as a cell biologist in organ preservation for transplantation. He completed his doctorate in this field at the University of Queensland. Graeme also hold a Masters degree in Public Health from Monash University in Health Administration.

He currently is
• Chair of the Eye Bank Association of Australia and New Zealand
• Member of the Clinical Governance Committee of the Commonwealth’s Organ and Tissue Authority
• President of the Global Alliance of Eye Bank Associations

Immediate past-member of the Medical Advisory Board of the Eye Bank Association of America

Abstract:
The continued development, complexity, professionalism and evolution of services provided by Australian and New Zealand Eye Banks means that eye banking today is very different from that practiced only 10 to 20 years ago. Such generational change has consigned to history the concept of eye banking as an activity undertaken by a sole practitioner, equipped with only a telephone and refrigerator. This presentation will provide an overview of the current status of eye banking in ANZ and cover the structure of the banking system, the techniques and services that are currently available, risk management strategies, regulatory requirements, donation and transplant activity, training and education initiatives and conclude with emerging developments in the field – eye banking as it is likely to be carried out in 2020.

Orthoptists Driving Clinical Improvements via the Save Sight Registries (SSR)

Ms Amanda Dinh
BAppSc(Orth)

Other Authors:
Amparo Herrera-Bond, BBus
Phuc Nguyen, PhD, Statistics
Prof. Mark Gilles, PhD, FRANZCO
Prof. Stephanie Watson, PhD, FRANZCO

Affiliation:
Save Sight Institute, Sydney Eye Hospital

Biography:
Amanda is a Clinical Research Officer for Save Sight Registries- Fight Corneal Blindness Project. She is also a Clinical Research Orthoptist at Save Sight Institute with appointment of Honorary Research Associate at Sydney Eye Hospital for the Macular Research Group.

Abstract:
Background: The SSR is a sophisticated web-based data system used worldwide to collect data on the outcomes of therapy for eye disease, including patient reported treatment outcomes. Modules are currently available for macular degeneration (nAMD), diabetic retinopathy and keratoconus. Outcomes data collected via the registry is driving improvements in patient care and providing a clear picture of the patient journey. Orthoptists play a key role facilitating the use and growth of this significant registry and providing patient education on the outcomes of their eye disease and treatment course. Method: A review of the current procedures for implementation of the SSR was conducted utilizing the keratoconus module. Key roles for the orthoptist were identified. Data collected from the keratoconus module was used to illustrate the role of the orthoptist for the Save Sight Registries. Results: 116 key roles for the orthoptist were identified. Orthoptists identified as being actively involved with data input from patients in real-life clinical settings, facilitating the collection of patient reported outcomes via survey, reviewing treatment outcomes with the ophthalmologist and patient education. Interests in the SSR have been encouraging with increasing implementation across various centres nationally and internationally. The database for nAMD has grown from 293 patients in 2009, to 5,500 patients, 7109 eyes in 2016 with a total of 146,159 treatments. Likewise, there are already 261 treatments captured and 851 eyes in the Keratoconus Module. Conclusion: SSR is a unique system empowering orthoptists with clinical knowledge. It is driving improvements in ophthalmology by tracking outcomes of treatment in real life clinical settings with a patient focused approach. Orthoptists registered in the system are self-educating and becoming more actively involved in patients care and patient’s treatment journey and in turn, professional development.
Orthoptic History

Orthoptists and Orthoptics in The War Years, 1939-1945

Ms Shayne Brown
DOBA, DipAppSc(Orth), MAppSc, Cert. of Health Ec, BA

Biography:
Shayne worked in Sydney as a Clinical Orthoptist and immediately before coming to Melbourne in 1985 was Orthoptist-in-Charge at Sydney Eye Hospital. In Melbourne she was a Lecturer and Clinical Co-ordinator at Lincoln Institute, followed by a promotion to Senior Lecturer in the Orthoptic School at La Trobe University. When she left La Trobe in 1995 she worked as a Research Assistant at CERA. In 2000 she returned to Sydney and worked at RANZCO where she was an Administrator in charge of Examinations; the College’s Continuing Development Program, and the Committee to assess the qualifications of Overseas Trained Ophthalmologists. She is a Fellow of the Orthoptic Association of Australia. She is past President of International Orthoptic Association, and of the NSW and Victorian Branches of the Orthoptic Association of Australia. Shayne is currently enrolled in a Master of Arts program at the University of Sydney. Her thesis is “A History of Australian Orthoptics, circa 1930-1990”.

Abstract:
When war broke out in September 1939 the exact number of trained orthoptists in Australia was unknown. At least six were in Sydney, at least four in Melbourne, one in Adelaide and one in Hobart. The profession was in its infancy. The Orthoptic Association of Australia (OAA) was yet to be formed and the Orthoptic Board of Australia (OBA) was barely a year old. Research by Canadian born, British ophthalmologist, Air Commodore Sir Philip Livingston developed visual standards required for trainee aircrew in the Royal Air Force (RAF) and these standards were mainly adopted by the Royal Australian Air Force (RAAF). Livingston had found that some trainee pilots with poorly controlled heterophorias displayed inaccuracies in depth perception which affected their ability to land their aircraft safely. He was a strong advocate for orthoptic treatment. This was a controversial matter both in England and in Australia. However Australian ophthalmologist, Joseph Ringland Anderson, argues for the inclusion of orthoptic investigation and treatment for aircrew trainees under the Empire Air-Training Scheme. Consequently, Australian orthoptists, Beatrice Barnes, Ethel D’Ombrain, Diana (Mann) Craig, Emmie Russell and Lucy (Willoughby) Retalic assessed and treated RAAF aircrew with ocular motor imbalances from 1940-45. Little has been written about this period in Australian orthoptic history. To my knowledge there are no personal records written by these orthoptists. Much of what we know is through scientific papers and some accounts by ophthalmologists and RAAF personnel. Nevertheless, there is sufficient evidence to show that these women played an important part in aviation medicine.

Before I was Born

Ms. Kirsten Campbell
DipAppSc(Orth)

Affiliation:
Ringwood Eye Specialist, Assistance Curator RANZCO Museum

Biography:
Kirsten has worked at a variety of private Ophthalmology practises since graduating in 1987, now working full time between Ringwood Eye Specialists and East Melbourne Eye Group. In 2012, Kirsten took on a "little" project of electronically cataloguing the RANZCO museum, a job that is still continuing.

Abstract:
Prior to the development of computerised perimetry, monitoring glaucoma involved measuring IOP, often by Schiotz tonometry and performing fields with a Bjerrum screen or arc perimeter. Pilocarpine was the standard treatment for glaucoma with the resulting miosis reducing the field. Refracting patients after cataract surgery meant waiting for 6-8 weeks for the large wound to heal and refraction to stabilise. Aphakic correction required patience and continued explanation whilst refracting to get an accurate refraction. The artist Monet exemplified difficulties following cataract surgery and his rejection of what was then a satisfactory result.
The Use of a Tool to Detect the Presence of Vision Defects in Patients Diagnosed with Stroke – Vision Screening Tool Validation Results

Ms Michelle Courtney-Harris
BAppSc(Orth)

Other Authors:
Mrs Neryla Jolly, MA(Macq) DOBA (T)
Prof. Kathryn Rose, PhD, DOBA, DipAppSc (Orth), Grad Dip(Neurosci)

Affiliation:
Graduate School of Health, Discipline of Orthoptics UTS

Biography:
Michelle Courtney-Harris is an orthoptist with extensive clinical experience accepting the challenge to foster academic learning and clinical education of orthoptic students as Associate Lecturer and Clinical Coordinator at the discipline of Orthoptics UTS. Michelle is currently undertaking a PhD research degree with a focus in the area of stroke.

Abstract:
Aim: To validate a vision screening tool for use by hospital-based health practitioners in stroke affected patients to identify pre-existing and stroke-related ocular conditions. Methods: A vision screening tool was devised in consultation with multidisciplinary vision care experts to be part of routine stroke assessment. Stroke units in two metropolitan Sydney public hospitals with no access to on-site eye care professionals, participated in the study. Patients admitted to these units for a minimum of 3 days were eligible for recruitment. Participants were allocated randomly to one of two groups. In Group 1, a detailed visual assessment by an experienced eye care practitioner (orthoptist) was compared to information elicited by the tool when administered by a non-eye practitioner. In Group 2, the vision screening tool was administered by both the orthoptist and practitioner for comparison. This study had institutional ethical approval. Results: 100 participants were recruited; Analysis shows the tool was highly successful in ascertaining pre-existing eye conditions. While the tool is able to detect obvious newly acquired visual problems, subtle conditions are more likely to be missed. Conclusion: The vision screening tool is suitable and a valid instrument for achieving its designated purpose of identifying pre-existing and newly acquired visual problems in patients with a diagnosis of stroke. It is suggested that minor modifications to the vision screening tool along with an education package will enhance its overall functionality.

Understanding the Relationship Between Incomitant Strabismus and the Radiological Findings.

Ms Natalie Ainscough
MMedSc (Vision & Strab)

Other Authors:
Gulsah Bakar, MOOrth,
Nermina Mustafic, MOOrth,
Jessica Collins, BAppSc(Orth)

Affiliation:
Women's and Children's Hospital and Flinders Medical Centre, Adelaide

Biography:
Natalie Ainscough trained at the University of Liverpool, qualifying in 2008. Post-qualification she worked for over 5 years in the NHS before moving to Adelaide and specialising in paediatric ophthalmology, with an interest in adult ocular motility issues. In 2014 she graduated from University of Sheffield’s Vision &
Abstract:
Using case studies seen in Ophthalmology departments run by South Australia Health, interpret the results of a range of radiological assessments, including MRI and CT scans, and their relationship to eye movement deficits identified in the outpatient clinic.

Papilloedema: True Swelling, Drusen in Disguise.... or both?
Ms Melanie Lloyd
BOrthOphthSc

Affiliation:
Lady Cilento Children's Hospital

Biography:
Melanie graduated La Trobe University in 2010. Shortly after she relocated to Brisbane to assume a position at the Queensland Eye Institute where she worked in the areas of Neuro-ophthalmology and general ophthalmology. She currently practices at the Lady Cilento Children's Hospital.

Abstract:
Children are often urgently referred to the Ophthalmology department with "Papilloedema". We take a closer look at the literature regarding the prevalence, diagnosis and management of Idiopathic Intracranial Hypertension and Drusen, as well as the necessary investigations required to differentiate between them.
**Strabismus**

**The TED Talk: An Overview and Case Presentations**

Ms. Lindsay Horan

**Affiliation:**
University of Michigan Kellogg Eye Center

**Biography:**
Lindsay received a Bachelor of Science in Biopsychology & Cognitive Science from University of Michigan in 2005. She then completed a 2-year orthoptic training fellowship at the Ross Eye Institute in Buffalo, New York. Following completion of the program, she became certified by the American Orthoptic Council. Currently on staff at the University of Michigan Kellogg Eye Center in the Pediatric Ophthalmology & Adult Strabismus Clinic, she enjoys working with and teaching orthoptic students, residents, and fellows. She has been an active member of the American Association of Certified Orthoptists having served as the membership chairman, Midwest regional representative, parliamentarian, and organizer of the 2017 Joint Regional Orthoptic Meeting.

**Abstract:**
Thyroid eye disease is autoimmune disorder that can lead to dysfunction of multiple organ systems. Its effect on the eye can be mild to very severe. The eye muscles are often involved, leading to eyelid retraction, dry eye, and restrictive strabismus. In this presentation, an overview of thyroid eye disease (including its ocular manifestations and natural history) will be provided. In addition, there will be case presentations discussing disease course and management.

**Early Life Risk Factors of Amblyopia, Strabismus and Anisometropia in a Young Adult Population**

Mr. Gareth Lingham

**Other Authors:**
Seyhan Yazar, PhD
Paul G Sanfilippo, PhD
Jenny Mountain, MBA
Alex W Hewitt, PhD, FRANZCO
John Newnham, MD, FRANZCOG
David A Mackey, PhD, FRANZCO

**Affiliation:**
Lions Eye Institute

**Biography:**
Gareth completed his Orthoptics degree at La Trobe University in 2014. He has since been working as a Clinical Research Orthoptist at the Lions Eye Institute in Perth. In 2016 Gareth commenced postgraduate research studies at the University of Western Australia in the Centre for Ophthalmology and Visual Science.

**Abstract:**
Aim: Amblyopia, strabismus and anisometropia are childhood diseases that frequently co-occur. We investigated the underlying possible early life risk factors associated with these three conditions in 20-year-old individuals. Methods: The Western Australian Pregnancy Cohort (Raine) Study is a cohort study of individuals born between 1989 and 1991. During prenatal period, parents of these individuals completed comprehensive questionnaires on medical history, life style and environmental exposures. At the
20 year follow up, 1344 participants underwent an extensive eye exam including a complete orthoptic assessment. Risk factors were explored for each condition by comparing with a disease-free control group. Identified differences were further investigated using univariate and multivariate regression models. Results: Of 1128 participants of Northern European ancestry, 14 (1.2%) had amblyopia, 47 (4.2%) had clinically significant strabismus and 34 (3.0%) were anisometropic. The frequency of individuals born via normal delivery was consistently lower in amblyopia (42.9%), esotropia (40.7%), exotropia (50%) and anisometropia (58.8%) groups compared to control (78.3%, all p<0.001). Birth by caesarean section was associated with increased likelihood of having amblyopia after adjusting for sex (OR: 2.28, 95% CI: 2.08-2.49, p<0.001). Occipitofrontal diameter, median gestational age and duration of first stage of labour and delivery mode were all associated with strabismus in univariate analyses (all p<0.05). Conclusion: Among the long list of risk factors we investigated, non-vaginal delivery was associated with amblyopia, strabismus and anisometropia in our Western Australian cohort. This study supports the hypothesis that abnormal delivery methods may be related to common childhood eye diseases.

Risk Factors for Esotropia and Exotropia
Ms Felicia Adinanto
MOrth

Other Authors:
Dr Amanda French, PhD
Prof Kathryn Rose, PhD

Affiliation:
University of Technology Sydney

Biography:
After completing a Master of Orthoptics degree in 2014, Felicia enrolled in a PhD at the University of Technology Sydney. She is now in her second year, researching in the prevalence and risk factors associated with strabismus.

Abstract:
Purpose: Identify risk factors associated with the development of esotropia and exotropia, which may have contributed to trends observed in the prevalence over the past few decades. Methods: We have performed a systematic literature review to provide insight into the relative contribution of genetics and modifiable risk factors to the development of esotropia and exotropia in children. Results: Genetic studies of strabismus have established that the risk of developing esotropia is 3-5 times greater if a first degree relative had strabismus. The overall prevalence of strabismus was not significantly different between ethnicities (p=0.81). However, in European Caucasian populations 62.6% had esotropia while 74.3% of those in East Asian populations had exotropia. Modifiable risk factors such as low socio-economic status, maternal exposure to smoking, low birth weight, prematurity and admission to neonatal intensive care units have been previously identified. Esotropia is associated with antenatal factors, such as admission to NICU and low birth weight, whereas exotropia is related to modifiable risk factors such as low socio-economic status. Conclusions: While the prevalence of strabismus is consistent across different locations, there is variation in the prevalence of esotropia and exotropia based on ethnicity. A family history of strabismus increases the risk of developing strabismus, but in itself is unable to account for the majority of strabismus cases. The contributions of modifiable risk factors appear to play a major role in the development of esotropia and exotropia in children. However ethnic differences in esotropia and exotropia are unexplained by any of these risk factors.

Not your Average Squint...
Ms Nicole Carter
BHlthSc & MClinVisSc

Affiliation:
The Children's Hospital at Westmead

Biography:
Nicole graduated from the University of Sydney in 2012 with a Bachelor of Health Science / Master of Clinical Vision Sciences. Nicole has worked as a paediatric orthoptist at the Children’s Hospital at Westmead since 2014 and this year commenced part
time work at the Children’s Eye Centre in Wentworthville.

Abstract:
In a paediatric setting doing initial examinations on patients with a possible strabismus becomes as routine as brushing your teeth. From the information on the referral and the parent’s description of eye signs, the orthoptist usually has a good idea of one or two differential diagnoses as soon as they enter the room…. But every now and then a case presents that is not your average squint! This presentation showcases a selection of interesting squint cases. The details of each case will be followed from referral to orthoptic and ophthalmic examination to diagnosis and follow-up.

Ocular Torsion in Strabismic Patients and how it Affects their Binocular Potential

Ms Angela Serna
BAppSc(Orth), MPH

Affiliation:
Southern Ophthalmology Kogarah NSW.

Biography:
Angela Serna is currently an orthoptist in Sydney. She graduated from the University of Sydney, with a bachelor of Applied Science in Orthoptics in 1999. She then took a job in the United states and worked at Paediatric Ophthalmology & Associates for over fifteen years. During this time, she completed her Master in Public Health at the Ohio State University. She has a strong interest in research, convergence insufficiency, paediatric and adult strabismus.

Abstract:
We prospectively looked at 40 patients who presented to our clinic with binocular diplopia. Using a Clement Clarke Synoptophore, we assessed how many of these patients presented with ocular torsion and how this impacted their binocular potential by testing Worth’s three grades of binocular vision. Clinically, we have seen that small negligible amounts of torsion can often affect a patient’s binocularity, especially their horizontal fusional amplitudes and stereopsis. Often these patients are unable to fuse with prisms, they demonstrate intermittent fusion or report a somewhat 'single' but blurred image when corrected with prism or post surgically. These patients often will not complain of torsional diplopia and ocular motility testing doesn’t always indicate the presence of a superior oblique palsy. The results and conclusions of this study will be discussed further in our paper.

A Novel Method for Measuring Nystagmus

Mr Cem Oztan
BAppSc(Orth)

Affiliation:
Vision Australia

Biography:
Mr Cem Oztan is a Sydney based clinician with interest in paediatrics low vision, neuro - ophthalmology and disability sports.

Abstract:
Nystagmus is the involuntary repetitive rhythmic oscillation of the eyes. The movements of the eyes are commonly from side to side, but sometimes can be up and down, clockwise and counter clockwise rotation or any combination of these. Additional characteristics of nystagmus include type divided into pendular or jerk, amplitude, frequency, intensity, foveation, conjugate /disconjugate and presence of null point. Nystagmus in infancy and childhood can be idiopathic or associated with ocular or systemic conditions. It is a common cause of vision impairment, resulting in variable classifications from near normal vision to profound low vision. The clinician is faced with a unique challenge of examining and treating patients with nystagmus. The aim of this presentation is to briefly review current eye movement recording techniques used in nystagmus like electrooculography, electronystagmography, and video eye/gaze tracking devices, and evaluate a novel method for measuring nystagmus which can be used in clinic and applied to the assessment phase and treatment success of nystagmus patients.
Glaucoma

Targeting the Coma in Glaucoma. Neurorecovery in Retinal Ganglion Cells

Prof Jonathan G Crowston
BSc, MBBS, PhD, FRCOphth, FRANZCO

Affiliation:
Centre for Eye Research Australia

Biography:
Jonathan Crowston is the Ringland Anderson Professor of Ophthalmology, University of Melbourne, Managing Director of the Centre for Eye Research Australia (CERA) and a practising glaucoma specialist clinican at the Royal Victorian Eye and Ear Hospital. He gained his ophthalmology training at Moorfields Eye Hospital, London and was awarded a PhD for work on ocular wound healing at the Institute of Ophthalmology, University College London (2000). He subsequently completed Glaucoma Fellowships Westmead Hospital, Sydney and the Shiley Eye Center, UC San Diego where he then joined the glaucoma faculty, prior to moving to Australia in 2006. Jonathan is a director on the Centre for Eye Research Australia (CERA) Board (2009+). He is also a director on the ORIA Board (2008+), World Glaucoma Association Board of Governors (2013+), CERA Technologies Pty Ltd (2015+), Et Al Research Pty Ltd (2015+) and Sight for All (2016). Jonathan’s research is currently focussed on understanding why ageing predisposes to optic nerve disease and in particular focussing on neuroplasticity and the potential for retinal ganglion cell recovery. He has published over 150 peer-reviewed manuscripts and co-authored three books. Jonathan has received a number of awards for his research and training. He is the recipient of the 2016 Peter Watson Medal from Cambridge Ophthalmology Society and the inaugural recipient of 2016 Association for Research in Vision and Ophthalmology (ARVO) Foundation for Eye Research, David L Epstein Award recognising outstanding research in Glaucoma and for mentoring young clinical investigators.

Abstract:
Vision loss from glaucoma is traditionally considered irreversible, however accumulating evidence derived from a number of clinical studies using a diverse array of endpoints has revealed that vision may improve after IOP lowering. We have developed a model of acute IOP injury to examine loss and subsequent recovery of function in the mouse eye. This has revealed that the capacity for RGCs to recover function is strongly influenced by age, diet and exercise. We subsequently conducted patch-clamping studies in individual RGCs in whole mounted mouse retina to identify the cellular changes associated with injury and functional recovery. Current work is refining clinical tools aimed at better monitoring short term changes in RGC function in the clinic.

Goldmann Applanation Tonometry Audits (RVEEH)

Ms Debra Gleeson
DOBA DipAppSc(Orth)

Affiliation:
Royal Victorian Eye and Ear Hospital Melbourne

Biography:
Debra Gleeson is the Orthoptic Lead in Glaucoma and the Glaucoma Services Coordinator at the RVEEH Melbourne. She has been a team member of the multidisciplinary glaucoma monitoring clinic since 2009 and is currently working on the new RVEEH and Australian College of Optometry collaborative glaucoma clinic.

Abstract:
Raised IOP has been shown to be a significant risk factor for glaucomatous damage and progression. The goal for treating patients with glaucoma is to lower the IOP to a targeted pressure in order to reduce the risk of further damage. Goldmann Applanation tonometry (GAT) is the gold standard for measuring IOP and accuracy performing this test is of high importance. It had been noted on the EGTH glaucoma clinic (RVEEH) that there was some disparity between the IOP measurements taken by
the orthoptists and those measured later by the glaucoma consultants. An audit was undertaken over a three-week period to note the number and range of disparity in the IOP measurements. A professional development opportunity was provided on several occasions for the orthoptic staff to outline the many factors affecting measurement and how to improve technique. An audit of IOP readings were conducted in 2016 after two of these teaching sessions.

Eye & Ear Hospital and ACO Collaborative Clinic - A New Model of Care for Low Risk Glaucoma Patients

Dr Linda Malesic
PhD

Other Authors:
Dr Catherine Green, Consultant Ophthalmologist (Glaucoma Specialist), Unit Head, Glaucoma Services Eye and Ear Hospital
Dr Caroline Clarke, Executive Director Performance & Improvement, Eye & Ear Hospital,
Tracy Siggins, Director Ambulatory Services, Eye & Ear Hospital,
Associate Professor Sharon Bentley, Director of Clinical Services, Australian College of Optometry
Maureen O'Keefe, CEO, Australian College of Optometry

Affiliation:
La Trobe University & Royal Victorian Eye and Ear Hospital

Biography:
Dr Linda Malesic is an academic within the Discipline of Orthoptics, La Trobe University, Melbourne. She is also affiliated with the Royal Victorian Eye and Ear Hospital and is part of the multi-disciplinary team for the Glaucoma Monitoring Clinic. She has research interests in glaucoma and neuro-ophthalmology.

Abstract:
To develop a sustainable clinical model of care for the management of glaucoma suspects involving a collaboration between the Royal Victorian Eye and Ear Hospital (E&E) and the Australian College of Optometry (ACO). The Glaucoma Collaborative Clinic (GCC) was established in April, 2016, at the ACO's main clinic in Carlton, Melbourne. The clinic utilises the full scope of eye care professionals - ophthalmologists, optometrists and orthoptists - to provide eye care the numerous public patients suspected of having glaucoma. The service has been developed with a focus on providing the most appropriate care at the most appropriate time in the patient journey. This presentation will outline how this new clinic has involved new collaborative models and pathways to eye care, building on and bringing together the skills and experience of both the E&E and ACO to deliver the best outcomes for patients. In addition, the ways in which the new GCC has provided scope for the clinical training of orthoptists and optometrists in a unique collaborative environment will be presented.
Macular Disease Foundation Australia: New publications, Research Grants Programs, Low Vision Aids, Professional Friends

Ms Julie Heraghty
BA, Dip Ed, Assoc MAPS

Biography:

Julie Heraghty joined Macular Disease Foundation Australia as Chief Executive Officer in 2004. Under Julie’s leadership the Foundation has evolved into a robust organisation serving the needs of the macular disease community. The activities of the Foundation over this time have resulted in Australia becoming a world leader in awareness of macular degeneration. Prior to joining the Foundation, Julie spent over seven years as a Policy Advisor to NSW State Ministers, and also served as a director and manager in major government departments. She has served in local government as Deputy Mayor and worked voluntarily for many charitable causes. Julie’s career began as a secondary school teacher and she is also a registered psychologist. In 2013 Julie was awarded the Harvard Club of Australia Non-profit Fellowship to attend the course Strategic Perspectives in Non-profit Management at the Harvard Business School. The prestigious fellowship was a personal honour for Julie and supported the continued growth and development of the Foundation.

Abstract:

In 2016 the Foundation celebrated 15 years of supporting the macular disease community: patients, families, carers, and health care professionals. Feedback received from the Foundation’s Treatment Cost Survey in 2015 highlighted the patients’ need for information on costs and rebates for eye injections. As a result, a new publication has been developed, endorsed by the Foundation’s Medical Committee, to assist patients better understand the costs and rebates for eye injection treatment. The Foundation is proud to be a leading source of funding for macular degeneration research in Australia. To date, it has committed almost $3 million to fund Australian researchers. It is anticipated the next round of research grants will open in early 2017 (details will be on the Foundation’s website). Opportunities exist for all health care professionals to apply for this funding. The Foundation continues to progress work on and advocate for access and affordability of treatment and rehabilitation, including a national low vision aids and technology scheme. The Foundation enjoys a long and valuable relationship with ophthalmology across Australia; our combined efforts continue to save the sight of thousands of Australians. Ophthalmologists who join the Foundation’s Professional Friend Program access a range of benefits and help the Foundation continue its sight-saving work.

The Evaluation of Patient Education and the Provision of Information Regarding Patient Support Groups and Low Vision Services to Patients Receiving Treatment for Neovascular AMD

Ms Jessica Boyle
BOrthOphthSc, BHlthSc (Hons)

Other Authors:
Dr Meri Vukicevic, PhD
Dr Konstandina Koklanis, PhD
Associate Professor Catherine Itsiopoulos, PhD
Dr Gwyneth Rees, PhD

Affiliation:
La Trobe University

Biography:
Jess works as a clinical orthoptist in private practice at Eye Surgery Associates, Whitehorse Eye Specialists and Rosebud Eye
Clinic, and holds a research appointment with Zave Clinical Research Management. She is also an academic within the School of Allied Health at La Trobe University, Melbourne where she is currently undertaking her PhD.

Abstract:

Background: Central to the patient experience of ophthalmic treatment is patient education. Despite the chronic and invasive nature of anti-vascular endothelial growth factor (VEGF) treatment for neovascular age-related macular degeneration (AMD), the perceptions of patients around patient education have not been widely investigated in this clinical population. Of the handful of studies to have explored this to date, all have been limited by small sample size. These studies have reported that patients receive inadequate information pertaining to the injection procedure and its outcomes. Improving patient education standards may help minimise known pre-procedural anxiety often experienced in those undergoing anti-VEGF treatment for neovascular AMD. In addition, no study to date has investigated issues surrounding the provision of information to patients in relation to patient support groups/low vision services from the perspective of ophthalmologists and orthoptists involved in patient care. The aim of this study was to investigate the experiences and perceptions of patients undergoing repeated intravitreal anti-VEGF injections for neovascular AMD in relation to patient education. A secondary aim was to identify issues surrounding patient education and the provision of information relating to low vision services and patient support groups from the perspective of ophthalmologists and orthoptists. Methods: Forty patients (16 males, 24 females) with neovascular AMD undergoing anti-VEGF treatment were recruited from a private ophthalmology practice and public hospital in Melbourne. Patients underwent semi-structured, one-on-one interviews. Interview topics included: treatment burden and satisfaction; tolerability; barriers to adherence; treatment motivation; and patient education. Interviews were audio recorded and thematic analysis performed using NVivo 10 (QSR International, Doncaster, Australia). Eighteen orthoptists and one ophthalmologist with experience in managing patients with neovascular AMD were recruited from the same private ophthalmology clinic and public eye hospital. Eye health care professionals completed a self-administered electronic questionnaire designed by the study investigators exploring their perceptions around patient education and the provision of information to patients about support groups/services. Results: Patient satisfaction in relation to the provision of educational information was low, especially among public patients. Many patients reported receiving inadequate information about AMD and its treatment. Visual feedback in the form of optical coherence tomography (OCT) imaging was perceived by patients to represent a useful adjunct to verbal information conveyed by their specialist and facilitated their understanding of treatment. However, not all patients reported having been shown their OCT scan in the past. A lack of patient awareness was found concerning low vision services and support groups, irrespective of public versus private status. Not surprisingly, service uptake was also low with only one patient enrolled in a patient support group and few patients aware of low vision services available to them. Factors influencing the uptake of low vision rehabilitation services and patient support groups (as identified by patients) included: timing of referral, financial outlay, perceived benefit/s, and accessibility. Referral rates were low amongst orthoptists. Barriers to the referral of patients to low vision services and patient support groups (as identified by orthoptists) included: practical factors, knowledge-based factors, patient factors and clinical protocol. Conclusion: Despite treatment adherence typically being high in patients undergoing anti-VEGF injections for neovascular AMD, patient satisfaction with the level of educational information provided was low, especially in public patients. Many patients felt uninformed about the treatment process and also reported limited knowledge of support services available to them. Improving the standards of patient education may help lessen pre-procedural anxiety and assist patients to better manage the challenges of AMD treatment.

New OCT Signs in Intermediate AMD

Ms. Pyrawy Sharangan
BOrth

Affiliation:
Centre for Eye Research Australia

Biography:
Pyrawy Sharangan completed her Bachelor’s degree in Orthoptics & Ophthalmic Sciences at LaTrobe University. She currently works as a Clinical Trial Orthoptist at the Centre for Eye Research Australia.

Abstract:

Age-related Macular degeneration is the leading cause of vision loss in people aged fifty (50) and over in Australia. AMD has relatively slow progression from the early to the advanced stage therefore leaving a window of opportunity for early intervention. With the advancement of available technology and introduction of high resolution imaging techniques, we are now able to detect and analyse new characteristics of AMD that may assist with better understanding the disease. Through this we
would be able to detect high risk signs that indicate a subgroup more likely to progress to vision loss. The SD-OCT (spectral domain optical coherence tomography) is one such device with the ability to help identify additional risk features. This presentation will focus on the following three features that have been identified through our longitudinal studies: Nascent geographic atrophy (nGA), Reticular Pseudodrusen (RPD) & Non-exudative detachment of the neurosensory retina.

Geographic Atrophy in the Clinical Trial World
Ms Sutha Sanmugasundram
BOrthOphthSc

Affiliation:
Centre for Eye Research Australia

Biography:
Sutha Sanmugasundram completed a bachelor of orthoptic and ophthalmic sciences and is currently working as a Clinical Trials Coordinator at the Centre for Eye Research Australia, University of Melbourne. Over the last six years she has worked in several research areas, including AMD, Diabetic Retinopathy, Glaucoma, Uveitis and corneal diseases.

Abstract:
Age-related macular degeneration (AMD) is a progressive eye disease, which is the leading cause of irreversible blindness in people aged 50 years and older in the developed world (Friedman et al. 2004). There are two clinical forms of AMD: a non-exudative form or dry form, Geographic Atrophy (GA) and an exudate form or wet form. GA affects roughly 5 million people worldwide and its occurrence increases exponentially with age. Although the cause of GA is not well understood, scientific studies have shown specific genetic characteristics and environmental factors may contribute to the development and progression of GA. In the early stages of GA, patients typically show minimal changes in their central visual acuity. Patients can also experience symptoms from visual dysfunction including dense parafoveal scotomas, delayed dark adaptation and reduced contrast sensitivity. In later stages, as the GA lesion/s expands into the fovea, a significant decrease in central VA occurs. Currently there are no approved medical treatments for GA, however there are several clinical studies investigating for a way to reduce the rate of GA progression and vision loss. At CERA, we are currently partaking in five different sponsored clinical studies for GA, with three trialing three different investigational drugs and two studying the natural history of these patients. In this presentation I will be discussing briefly the three different investigational products we are trialling and the differences and benefits of participating in both treatment and non-treatment trials.

A Retrospective Study- To Identify Factors That Influence Clinical Adherence Rates in Patients with Diabetic Macular Oedema Undergoing Intravitreal Injection Treatment
Ms Monique Rose
BOrthOphthSc (Hons)

Other authors:
Professor Catherine Itsiopoulos
Dr Meri Vukicevic
Dr Connie Koklanis
Dr Gwyneth Rees
Dr Suki Sandhu

Affiliation:
La Trobe University

Biography:
Monique Rose completed BOrth (Hons) at La Trobe University in 2011. Monique’s training and work experience have included both public and private practice. She has extensive knowledge in the areas of Ocular Motility & Strabismus, Cataract & Refractive
surgery and Retinal/AMD. Monique’s primary area of interest has focused on psychosocial issues, which included the completion of an Honours study, and current commencement of a PhD.

Abstract:
Diabetic macular oedema (DME) is due to leakage of fluid from damaged blood vessels. Vascular Endothelial Growth Factor (VEGF) is elevated in eyes with DME, and drives vascular leakage. Centre-involving sight-affecting DME is currently treated with intravitreal anti-VEGF injections. It is a commonly performed procedure, which involves multiple injections every 4–6 weeks until the fluid is resolved and may be continued indefinitely to maintain vision. To date no studies have identified clinical attendance rates and explored personal and clinical factors that influence attendance and non-attendance in patients with DME receiving intravitreal injection treatment. Studies have primarily focused on the barriers and incentives to attend diabetic retinopathy screening. A retrospective study utilising data from medical records of DME patients who attended (patients who attended all appointments) and did not attend (patients who missed one or more appointments in the previous 12 months) the eye clinic between 1st January 2014 to 31st December 2014 was identified from The Royal Victorian Eye and Ear Hospital medical retina injection clinic and retinal clinics at the Cheltenham Eye Centre. A telephone survey was conducted to gain patients perspectives on attendance and non-attendance. The attendees were asked one open-ended question and non-attendees two open-ended questions. Data analysis has commenced and results will be presented. This person-centred approach will inform strategies for patient education and support to minimise non-attendance in patients with diabetes-related eye complications.

Diabetic Retinopathy in Pregnancy: A Review
Ms Julie Morrison
BOrthOphthSc (Hons), MPH

Other Authors:
Lauren A B Hodgson, BSc(Hons) MPH
Lyndell L Lim, MBBS DMedSci FRANZCO
Salmaan Al-Qureshi, MBBS FRANZCO

Affiliation:
Centre for Eye Research Australia

Biography:
Julie completed her Orthoptics degree at LaTrobe University and has since completed a Masters of Public Health in Clinical Epidemiology at Monash University. She has worked at the Centre for Eye Research Australia for the past ten years and is a senior clinical trial coordinator and training manager within the Clinical Trials Research Unit.

Abstract:
The prevalence of diabetes in Australia has more than doubled in 20 years. The prevalence of diabetes in pregnancy is increasing even more rapidly due to increasing gestational age and the increasing prevalence, and younger age of onset of type 2 diabetes in the population. Pre-existing diabetes is present in 1 in 167 pregnancies in Australia, divided equally between type 1 and type 2 diabetes. Diabetic retinopathy is a leading cause of blindness in women during their childbearing years and pregnancy increases the short-term risk of diabetic retinopathy progression. We examine the risk factors for progression of diabetic retinopathy during pregnancy including; duration of diabetes, baseline level of retinopathy, level of glycaemic control and hypertension. We also examine current screening and management guidelines and their levels of evidence, current treatment options for diabetic retinopathy and avenues for further research.

The Role of Ocular Electrophysiology in Autoimmune Retinopathies
Ms Jo Lynch
BOrthOphthSc

Affiliation:
Eye Surgery Associates
Biography:
Jo has worked as an Orthoptist for more than 25 years, at the Royal Children’s Hospital, Melbourne Children’s Eye Clinic and at Eye Surgery Associates. She has been performing ocular electrophysiology since 1989 in both adult and paediatric settings and has also worked in glaucoma, corneal and strabismus clinics.

Abstract:
Autoimmune retinopathies such as MAR (melanoma associated retinopathy) and CAR (cancer associated retinopathy) are rare conditions but need to be considered in patients who present with rapidly progressive, bilateral, painless vision loss, particularly if they have a history of cancer. Symptoms may include visual field defects, nyctalopia, photopsias and defective colour vision. Extensive testing is required in order to exclude other causes such as genetic conditions and electrophysiology has an important role to play.

Plaquenil Toxicity - a Dramatic Case
Ms Sally Steenbeek
DipAppSc(Orth)

Affiliation:
Sydney Eye Hospital & St Vincent’s Clinic

Biography:
Sally Steenbeek graduated in 1984 and has worked ever since in numerous roles including orthoptist, ophthalmic assistant, surgical assistant and marketing. Sally currently works at Sydney Eye Hospital and in private rooms with ophthalmologists specialising in glaucoma and inflammatory eye disease.

Abstract:
Plaquenil toxicity is fortunately rare as the damage to eye sight is irreversible. A case and current screening guidelines will be discussed.
Models of Eye Service

Specialist Clinic Redesign at the Eye and Ear Hospital
Ms Catherine Mancuso
BOOrth

Other Authors:
Ms Tracy Siggins - Director, Ambulatory Services, Royal Victorian Eye and Ear Hospital, Masters of Public Health

Affiliation:
Royal Victorian Eye and Ear Hospital

Biography:
Catherine is the Manager of Diagnostic Services at the Royal Victorian Eye and Ear Hospital, she manages a large passionate group of orthoptists and a smaller but equally passionate group of medical photographers. Catherine trained as an Orthoptist over 20 years ago and worked clinically in both the private and the public sector before taking on her current public health management role.

Abstract:
The Eye and Ear Hospital is changing. Anyone who works there or has visited the Eye and Ear in the past 4 years can see that. There are workmen walking through the hospital in their hard hats and high-vis vests, there is a large gantry erected off the side of the hospital and there is dust and noise and vibration. This is all because we are undergoing a major redevelopment which will bring our facilities into the 21st Century. Although these changes are significant they are not the only changes taking place at the Eye and Ear. Significant clinic redesign activities have also taken place, in order to achieve this, we have had to look at:

- How The Royal Eye and Ear Hospital transitioned from an undifferentiated general eye clinical service to the Surgical Ophthalmology and Acute Ophthalmology specialist eye services.
- The use of Data to support well informed service decisions
- Defining clinic role and patient pathways – a compelling narrative for change

The Orthoptic Lead Diabetic Screening Clinic at The Alfred Hospital
Ms Mercy Nguyen
BHlthSc & MOrth

Affiliation:
The Alfred Hospital

Biography:
Mercy graduated from LaTrobe University in 2014 with a Bachelor of Health Science and Master of Orthoptics. She currently works at various eye clinics including the Alfred Hospital, the Royal Children’s Hospital and privately at a clinic in Mt Waverley.

Abstract:
In 2014, the ophthalmology department at the Alfred Hospital introduced an orthoptic lead diabetic screening clinic. This clinic was developed in response to the increasing demand required to care and monitor the ocular health of those with diabetes. It allows the orthoptist to be more actively involved in patient care and management, as well as provide a more efficient and effective way of dealing with the ever growing diabetic health concern. Through this diabetic screening clinic, results have shown that patients receive a more thorough and comprehensive assessment than previously, as well as more appropriate regular eye appointments. This presentation will cover the appropriate protocols and procedures that have been implemented through this screening clinic and the benefits it has provided both to the patients and to the productivity of clinic.
Fingolimod (Gilenya) Screening at the Alfred Hospital

Ms Alannah Price
BOrthOphthSc (Hons)

Affiliation:
Alfred Hospital and Zave Clinical Research Management

Biography:
Alannah Price has a Bachelor of Orthoptics and Ophthalmic Science (Hons) and has previously worked at Concord Eye Care (Paediatrics) in New Hampshire USA. She currently works in the Orthoptic Department at the Alfred Hospital and also as a clinical trials coordinator for ZAVE in various private practices in Melbourne.

Abstract:
In 2013 at the Alfred Hospital an Orthoptic Drug Screening Clinic was established to screen and monitor ocular changes associated with the use of Plaquenil, Ethambutol and Fingolimod (Gilenya) medications. Gilenya 0.5mg was approved for use in Australia by the Therapeutic Goods Administration (TGA) in February 2011 and placed on the Pharmaceutical Benefits Scheme (PBS) in September 2011 for the treatment of relapsing forms of Multiple Sclerosis (MS). Collective data from clinical trials found the incidence of macula oedema associated with the use of 0.5mg of Gilenya to be 0.4% of participants. It is therefore recommended that patients who commence Gilenya have an eye exam to assess macula oedema within the first 3-4 months of commencing the drug. An overview of the protocols and procedures for Gilenya screening in the Orthoptic Drug Screening Clinic will be discussed.

Orthoptics in an Ophthalmic Clinic

Ms Becc Page
BOrthOphthSc

Other Authors:
Shandell Wishart, BOrthOphthSc (Hons)

Affiliation:
Eyemedics

Biography:
Becc graduated from La Trobe in 2009 and has worked in clinics across 3 states. She has been at Eyemedics since 2013 and has a special interest in refractive surgical outcomes analysis.

Abstract:
It’s nearing the middle of a busy, 4 doctor clinic and a new patient has presented to a retinal specialist with a 6th nerve palsy – they turn to you for your expert opinion for how to manage this patient. What do you do!? Working within a busy ophthalmic practice, we saw a need to follow in the footsteps of several public hospitals and set-up orthoptic only clinics to provide one-on-one care to patients that require an in depth orthoptic assessment that cannot be provided within the confines of an ophthalmic clinic. These sub-contracted clinics allow ocular motility patients to be seen at a more suitable time and managed by their orthoptist on an ongoing basis. This talk aims to explain how we got our clinics up and running, what challenges we faced along the way and explain why this model could be useful to many other clinicians working in an ophthalmic setting.

How Do We Communicate with Our Patients?

Ms Catherine Devereux
MAppSci

Affiliation:
Peter MacCallum Cancer Centre / Vision Australia
**Biography:**
Cath is an Orthoptist, Course Designer, Facilitator and Project Manager. Cath’s interest is in designing “experiential” person-centred resources.

Recent contracts are to:
- Victorian Government in the Healthy Ageing program;
- Alzheimer’s Australia to create the award winning Virtual Dementia Experience;
- Peter MacCallum to develop communication tools for cancer workers; and;
- Vision Australia to support low vision education.

**Abstract:**
Increasing health providers are expected to partner with their patients in the delivery of health care services. Person centred practice puts the consumer (patients, family and their carers) at the centre of their care by including them in decision making and focusing on their unique and individual needs. Patients tell us that they want timely care, respect, positive communication and to feel supported. Based on a series of consumer led projects this presentation will address communication as the integral component in building effective relationships with patients and their families. How we talk with consumers and consider their understanding of health information is pivotal to empowerment and maximising health outcomes. The Teach Back technique will be outlined and encouraged as a useful method to “confirm that you have explained to the patient what they need to know in a manner that the patient understands” (Health Literacy Toolkit, 2010).