



THE UNIVERSITY OF
MELBOURNE

Department of Optometry and Vision Sciences Newsletter

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Head's Report

2019 has been a very busy year for Optometry and Vision Sciences at the University of Melbourne. As can be seen from the highlights presented within this newsletter, staff and students have been extremely active in teaching and learning, research, and engagement in the broader community beyond the university.

I would like to draw your attention to two major events. Firstly, in early 2020, the department will be relocating from our current home in the Alice Hoy Building and Swanston St (UMEyecare) into a new facility at 200/202 Berkeley St, Carlton. The move will consolidate our teaching, research, clinical practice, and office space, all into a single building. The new location will place us within the University's biomedical and hospital precinct and will be proximate to the new Parkville station being built as part of the Melbourne Metro Rail Tunnel project. Some further details and a few preliminary visuals are presented later in the newsletter in the UMEyecare report. We are excited by the new opportunities that the move will bring and look forward to welcoming you to see the new facilities by mid-2020.

The second event to highlight is the upcoming 50th Anniversary for the Department of Optometry & Vision Sciences (2023). The University Department was officially formed in 1973. It is still a few years until our anniversary, however, we are commencing planning. Our new first year students in 2020 will be the graduating class of 2023. One activity that we are hoping to achieve is to tell a brief story from each graduating class (one story per week for 50 weeks in 2023). So, please send through stories, photos, copies of covers of student magazines or student society t-shirts. We need the support of all of you to enable recognition of all 50 years of optometry at University of Melbourne.

50
**OPTOMETRY
AND VISION
SCIENCES**
50 years 1973–2023

Contact:

If you have any suggestions or items for the next newsletter, please contact our editor: Tom Cougan

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Department News

3MT Grand Final

Congratulations to Ceecee Zhang (pictured right) who won the University of Melbourne 3 minute thesis Grand Final. Ceecee is undertaking her PhD studies on omega 3 fatty acids and diabetes, supervised by Doctor Laura Downie and Associate Professor Jennifer Craig from the University of Auckland. Ceecee will now go to The University of Queensland to represent both the Department and the University of Melbourne in the Asia-Pacific 3MT competition. Well done Ceecee!



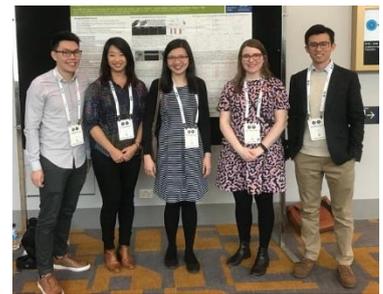
ARVO Conference

Students and staff of the Department had a wonderful time presenting their latest vision science findings at the Association for Research in Vision and Ophthalmology (ARVO) 2019 annual meeting in Vancouver, Canada. This annual event is the premier research meeting internationally within the industry. The theme for this year's event was "From Bench to Bedside and Back". Well done to all our staff and students for their presentations and posters during this event.



O=omega

Thank you to Jeremiah Lim, Vickie Wong Anna van Koeverden, Pei Ying Lee and Darren Zhao (pictured right) on their research presentations at the O=omega Conference which took place from July 19th-21st. The Department's booth at the event was very well attended. Our volunteers were busy informing alumni of our upcoming 50th anniversary in 2023 and the latest information from the Department.



Neuro-ophthalmology Society of Australia

PhD student Bing Dai received the prize for best platform presentation by a non-trainee (med student or registrar) at the annual meeting of the Neuro-ophthalmology Society of Australia in Brisbane. Bing is supervised by Professor Larry Abel. Congratulations to Bing for her achievement.

European Conference on Visual Perception

Department Head Allison McKendrick alongside graduate researchers Menaka Malavita and Chongyue He (pictured right) presented their latest research at the European Conference on Visual Perception (EVP), hosted this year in Leuven, Belgium. Menaka and Chongyue both received competitive travel scholarships from the EVP committee to present their research to international colleagues.



John Landman PhD scholarship

Congratulations to Katie Tran (pictured right), the inaugural recipient of the John Landman PhD scholarship, which supports a well-qualified student a well-qualified student undertaking eye health research. Katie Tran is co-supervised by Christine Nguyen, Bao Nguyen, Allison McKendrick and Bang Bui to undertake studies exploring how changes in the eye function may be a useful indicator of neurodegenerative diseases, including Parkinson's disease. This PhD scholarship to support research in eye health is in honour of Jascha (John) Landman (<https://scholarships.unimelb.edu.au/donors/the-john-landman-phd-scholarship/the-john-landman-phd-scholarship>).



ODSC

The 2019 Doctor of Optometry Student Conference (ODSC) took place on September 19th and 20th at the Melbourne Brain Centre. The conference discussed new and innovative research in the field, highlighted the importance of evidence-based practise, and discussed vision impairment and its consequences from the perspectives of both practitioner and affected individuals.

The ODSC is a student led and student run initiative, with the 2019 convenors working hard all year to construct an exciting two days of educational content and social activities. A huge thank you to the organising committee for putting together a fantastic 2019 Optometry student conference. An additional large thank you to all guest speakers and sponsors.



International Engagement

Sri Lanka Visit

In April 2019, volunteers from the Department, including senior lecturer Christine Nearchou and OD4 students Kieren and Chamath travelled to Sri Lanka to support an eye camp team in reaching the communities surrounding Ulpotha Village and to provide eye care and training.

In 5 days, 1300+ patients were seen and over 1200 glasses dispensed. Sri Lanka was reeling from the Easter bombings at the time of the visit. Upon return, OD4 student Kieren reflected on the goodwill of the people even during the toughest of times and how impactful and important an eye test can be to an individual, no matter the location or resources. Thank you to everyone who supported the team on their journey.



Student Achievements

PhD Graduation

Congratulations to our PhD graduates (pictured right). Dr Menaka Malavita (supervised by Professor Allison McKendrick and Professor Trichur Vidyasagar) for her work on the visual experience of older people. Dr Adela Park (supervised by Associate Professor Andrew Anderson, Associate Professor Andrew Metha, and Dr Phillip Bedggood) for her work on how the visual system stabilises a moving world. Dr Angel Duan (supervised by Associate Professor Bang Bui, Associate Professor Andrew Metha, and Dr Phillip Bedggood) for her work using adaptive optics to image autoregulation of the retinal capillaries in human eyes.



Alumni

Alumnus Award

The DOVS 2019 Alumnus award honours Dr Genevieve Napper (pictured right), for her sustained contributions to public health optometry. She has worked tirelessly to improve eye care access for indigenous communities through her work at the Australian College of Optometry, Vision 2020 and Optometry Australia. She has also made significant contributions to optometric research and to educating and mentoring optometry students and new graduate optometrists. Thank you, Genevieve, for all that you've done for the profession and broader community.



Reunion Tours

Welcome back to the classes of 1979, 1989, 1999 and 2009! Thank you for joining us for our reunion tours on Friday March 22nd. It was a great opportunity to hear about your lives and careers since graduating from the University of Melbourne. We all enjoyed the evening and hope to keep in touch.



We are currently looking for champions from the classes of 1980, 1990, 2000 and 2010 to assist with our reunions in 2020. Please contact the Department to be involved in the Reunion Tours in 2020.

Teaching Matters

Overseas externship

We have just concluded another successful overseas program with all our final year students spending a period of time at an overseas optometry/ophthalmology location again in 2019. Students shared their amazing experiences at the recent OD student conference. These sites provide students with experiences that show them aspects of eye disease and care that are different from Australia. We are very grateful to our overseas partners who contribute their time toward the education of our final year students.

ANZHPE conference Canberra July 2019

Jia Jia Lek, Kwang Cham, and Anthea Cochrane recently attended the Australian and New Zealand Health Practitioner Educator Conference held in Canberra. Kwang and Anthea both presented posters on novel teaching initiatives in the field of Optometry. Our attendance allows Optometry's profile to grow and for the Department to keep abreast of new initiatives from across the professions in teaching in the health domain.

Student placements for final year OD students – Can you help?

Why consider a placement for an OD4 student?

University of Melbourne students are keen to learn about independent practice as a viable and enjoyable way to practice optometry. Hence, we are interested in creating an independent metropolitan experience in Melbourne (or nearby) for all students in their final year. If you are in a rural area or an interstate metropolitan location we would still be interested to hear from you. A number of our students are from interstate, and country placements facilitate exposure to a breadth of optometric practice.

Current placement providers say they are involved to:

- Give back to the profession
- Give students a chance to see independent optometry in action
- Get to meet final year students in case they are looking for a new employee
- To keep up to date – they learn from the students while the students learn from them

When?

We are looking for practices to take students between March through to early October 2020. At this stage we are looking for anybody who is interested, and then details can be worked through. In particular, March/April and August/September are times that work well for our program. The placements are for two weeks for between three to five days per week.

What do we expect from placement providers?

We expect enthusiasm for teaching the next generation of optometrists. We don't expect assessment of students as this is done through their other clinical experiences (particularly at UMeyecare and the ACO). We expect you to mentor the students. Students will be looking for feedback, because we value and they value what you say. We will offer you face to face and online training opportunities if you would like to be involved.

If interested, please email either Daryl Guest (daryl.guest@unimelb.edu.au) or Anthea Cochrane (antheac@unimelb.edu.au).

Seeing Beyond Lecture Series

Seeing Beyond Lecture Series October 2019: Ocular gene and cell therapy: from bench to bedside and beyond

On Wednesday the 2nd of October Professor Keith Martin and Doctor Lauren Ayton presented at the Department's Seeing Beyond Lecture Series. Thank you to all who attended (and rural practitioners who joined us online). We look forward to your attendance in 2020!

Presentation Summaries

Professor Keith Martin

Gene therapy promises to revolutionise the treatment of inherited eye disease. To date, this treatment has only been applied to rare diseases caused by single gene defects. Glaucoma is the leading cause of irreversible blindness worldwide, but only a small minority of glaucoma cases have single gene defects. In this lecture, Professor Martin discussed these ideas as well as the different challenges that arise when treating more complex eye diseases. Professor Martin also gave an overview of the current ocular gene therapies, and a glimpse into their future possibilities.



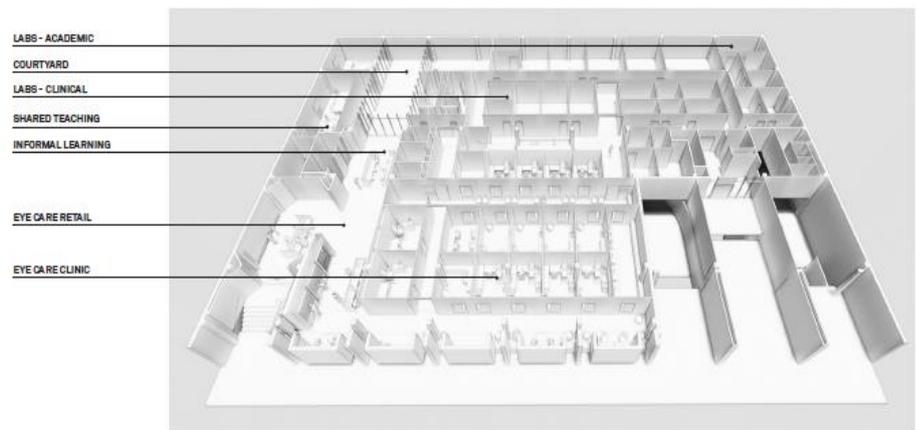
Dr. Lauren Ayton

Ocular gene therapies are rapidly moving from preclinical experimentation to commercially-available clinical treatments. In late 2017, the first ever direct-to-patient gene therapy was approved for Leber Congenital Amaurosis, a form of retinitis pigmentosa. Other treatment modalities are close behind, including gene editing technologies such as CRISPR. Dr Ayton described a clinically-relevant overview of the technologies, and a discussed the ocular diseases which may be amenable to treatment. In addition, she detailed the importance of optimal patient selection and sensitive outcome assessments in gene therapy clinical trials.



UMEyecare

As Allison has mentioned in her introduction, the clinic is on the move along with the rest of the Department. It is very exciting that we will be alongside our research and teaching colleagues again. The opportunities for fellowship, shared research and shared resources are real positives for the clinic staff, students, and our patients.



The clinic staff have been working very hard on the detail of the new fit out. The area is very similar to UMEyecare but I feel that flow through the space and the layout of the consulting rooms will enhance capacity and efficiency. The new clinic is very clearly designed around the principles of peer teaching.

The move also puts us firmly in the sphere of the health precinct that is formed by the Royal Melbourne, Women/s and Children's hospitals and the VCCC. We hope physical proximity will aid future collaborations.

At the same time as the move, we are also changing name. UMEyecare and our logo are being phased out. In line with the University's branding principles, we will have a new look and feel and we will be known as Melbourne Eyecare Clinic.

The new look and feel reinforces our link with the University and firmly acknowledges the place that our clinic holds within the Teaching and Health clinics of the University.

By the next newsletter we should be able to give you tangible views of the new clinic and an appreciation how it will fit into the clinical teaching program and research conducted by the Department.





Opportunity for optometrists to participate in a study of new practice tools for age-related macular degeneration (AMD)

We are seeking Australian optometrists to volunteer for a study that is evaluating different clinical practice tools for managing AMD.

Optometrists will be required to complete a short online survey, complete some case study questions, participate in an educative workshop and audit their clinical practices (involving the evaluation of clinical practice records for 10 patients with AMD, at two time points).

All data contributed to the project will be in a de-identified format and confidentiality will be strictly maintained.

There are no costs to participate. The project has achieved CPD accreditation from Optometry Australia, with up to 10 Therapeutic CPD points available.

This study is being conducted by Sena Gocuk (M.Phil Candidate), Dr Laura Downie and Prof Allison McKendrick from the Department of Optometry and Vision Sciences, University of Melbourne.

For further information please email Sena (sgocuk@student.unimelb.edu.au) or scan the QR code.



The project is funded by a Macular Disease Foundation of Australia (MDFA) research grant and has been approved by the University of Melbourne Human Research Ethics Committee (#1851607).

Publications

DOVS publications appearing in PubMed over the February 2019 – August 2019 period

Exercise and Glaucoma: Positive Steps Toward Finding Another Modifiable Risk Factor to Prevent Vision Loss.

Anderson AJ.

Ophthalmology. 2019 Jul;126(7):965-966

Commentary on recent work suggesting exercise might be beneficial in slowing the rate of vision loss in glaucoma.

Mapping flow velocity in the human retinal capillary network with pixel intensity cross correlation.

Bedggood P, Metha A.

PLoS One. 2019 Jun 25;14(6).

A new software algorithm applied to adaptive optics imaging data improves upon existing methods to track cellular movement across the retinal capillary network, rendering flow velocity patterns with micrometre resolution.

Psychosocial assessment of potential retinal prosthesis trial participants.

Bentley SA, O'Hare F, Murphy GC, Finger RP, Luu CD, Keeffe JE, Abbott CJ, Guymer RH, Ayton LN.

Clin Exp Optom. 2019 Sep;102(5):506-512.

Psychosocial questionnaires are useful for exploring patient suitability for a retinal prosthesis (bionic eye). However, currently validated questionnaires are not good at predicting a person's interest in experimental clinical trials.

Optical coherence tomography: seeing the unseen.

Bui BV, Downie LE, Lindsay RG.

Clin Exp Optom. 2019 May;102(3):193-194.

This editorial highlight novel advances in optical coherence tomography imaging and its application to eye research and clinical practice.

A digital resource to assess clinical competency.

Cham KM, Cochrane AL.

Clin Teach. 2019 May 29. doi: 10.1111/tct.13030.

An iPad-based assessment and feedback resource has been developed to provide students with immediate written feedback after OSCEs. This innovation has also resulted in more effective staff administration.

Surgical interventions for infantile nystagmus syndrome

Cochrane Systematic Review - Intervention - Protocol Version published: 05 August 2011

Cham KM, Abel LA, Busija L, Kowal L, Bachar Zipori A, Downie LE

The aim is to assess the efficacy and safety of surgical interventions for infantile nystagmus syndrome since there is no consensus and guidelines regarding best surgical options for this condition.

Relating excitatory and inhibitory neurochemicals to visual perception: A magnetic resonance study of occipital cortex between migraine events.

Chan YM, Pitchaimuthu K, Wu QZ, Carter OL, Egan GF, Badcock DR, McKendrick AM.

PLoS One. 2019 Jul 10;14(7).

We were able to estimate the amount of excitatory and inhibitory neurotransmitters in visual cortex using brain imaging. We did not find any difference in these neurochemicals between people with migraine and those without, when tested in between migraine events.

The Effects of Aging on Corneal and Ocular Surface Homeostasis in Mice.

De Silva MEH, Hill LJ, Downie LE, Chinnery HR.

Invest Ophthalmol Vis Sci. 2019 Jun 3;60(7):2705-2715.

The clinical and histological features of the mouse ocular surface was examined in ageing. Compared to young mice, aged mice had epithelial thinning and fewer corneal nerves, but similar tear osmolarity and dendritic cell density.

Knowledge, perspectives and clinical practices of Australian optometrists in relation to childhood myopia.

Douglass A, Keller PR, He M, Downie LE.

Clin Exp Optom. 2019 Jun 30. doi: 10.1111/cxo.12936.

This survey-based study finds that current Australian optometric practices reflect the inconclusive nature of several key aspects of the evidence for childhood myopia management.

Analysis of a Systematic Review About Blue Light-Filtering Intraocular Lenses for Retinal Protection: Understanding the Limitations of the Evidence.

Downie LE, Wormald R, Evans J, Virgili G, Keller PR, Lawrenson JG, Li T.

JAMA Ophthalmol. 2019 Jun 1;137(6):694-697.

This commentary discusses that using blue light-filtering IOLs to impart benefits to the macula is currently not supported by the best available clinical research evidence.

Effects of age and visual attention demands on optokinetic nystagmus suppression.

Dyer RK, Abel LA.

Exp Eye Res. 2019 Jun;183:46-51.

While simple OKN suppression is easy for young and old alike, older subjects have greater difficulty when their attention is also directed to the detection of a feature of the moving background.

A Systematic Review of Interventions to Reduce the Effects of Cognitive Biases in the Decision-Making of Audiologists.

Galvin KL, Featherston RJ, Downie LE, Vogel AP, Hamilton B, Granger C, Shlonsky A.

J Am Acad Audiol. 2019 Jul 5. doi: 10.3766/jaaa.18096.

This systematic review identifies a lack of peer-reviewed scientific studies that have investigated strategies to reduce the impact of cognitive biases on the clinical decision-making of audiologists.

Topographical and Morphological Differences of Corneal Dendritic Cells during Steady State and Inflammation.

Jiao H, Naranjo Golborne C, Dando SJ, McMenamin PG, Downie LE, Chinnery HR.

Ocul Immunol Inflamm. 2019 Aug 20:1-10.

Mouse corneal dendritic cells alter their morphology during acute and chronic inflammation caused by injury and/or exposure to microbial products. This effect also occurred in response to systemic and contralateral eye challenge.

Corneal Epithelial Dendritic Cell Response as a Putative Marker of Neuro-inflammation in Small Fiber Neuropathy.

Kamel JT, Zhang AC, Downie LE.

Ocul Immunol Inflamm. 2019 Aug 14:1-4.

This case report, involving a 41-year old with systemic lupus erythematosus and Sjögren's syndrome, identifies corneal dendritic cell density as a potential non-invasive marker of symptomatic small fibre neuropathy due to inflammation.

Nutrition and Eye Health.

Lawrenson JG, Downie LE.

Nutrients. 2019 Sep 6;11(9).

This Guest Editorial, with a particular focus on diet and age-related macular degeneration, provides an overview of studies in a Special Issue of 'Nutrients' relating to nutrition and eye health.

A Critical Appraisal of National and International Clinical Practice Guidelines Reporting Nutritional Recommendations for Age-Related Macular Degeneration: Are Recommendations Evidence-Based?

Lawrenson JG, Evans JR, Downie LE.

Nutrients. 2019 Apr 11;11(4).

This paper identifies scope to improving current Clinical Practice Guidelines for AMD, and emphasises the importance for guideline developers to use evidence from existing high quality systematic reviews to inform clinical recommendations.

Utility of self-destructing CRISPR/Cas constructs for targeted gene editing in the retina.

Li F, Hung SSC, Mohd Khalid MKN, Wang JH, Chrysostomou V, Wong VHY, Singh V, Wing K, Tu L, Bender JA, Pebay A, King AE, Cook AL, Wong RCB, Bui BV, Hewitt AW, Liu GS.

Hum Gene Ther. 2019 Aug 2. doi: 10.1089

in vivo genome editing can have unwanted "off-target" effects if left unchecked. This study shows that it is possible to engineer a gene editing construct that self-destructs without compromising on-target effects.

Hypercapnia Impairs Vasoreactivity to Changes in Blood Pressure and Intraocular Pressure in Rat Retina.

Liu G, Cull G, Wang L, Bui BV.

Optom Vis Sci. 2019 Jul;96(7):470-476.

This study shows that high carbon dioxide levels (hypercapnia) makes retinal blood vessel less able to autoregulate; that's is to maintain blood flow in the face of increased intraocular pressure and decreased blood pressure.

Robot Assistants for Perimetry: A Study of Patient Experience and Performance.

McKendrick AM, Zeman A, Liu P, Aktepe D, Aden I, Bhagat D, Do K, Nguyen HD, Turpin A.

Transl Vis Sci Technol. 2019 Jun 28;8(3):59.

This study showed that like having support during visual field assessment. If a human is not available, a humanoid robot may suffice. People do not like being left alone and also preferred the robot to automated voice commands delivered via speakers.

Tear Film Extensional Viscosity Is a Novel Potential Biomarker of Dry Eye Disease.

McDonnell A, Lee JH, Makrai E, Yeo LY, Downie LE.

Ophthalmology. 2019 Aug;126(8):1196-1198.

This paper describes a highly novel approach to diagnosing dry eye disease, through characterisation of the extensional viscosity of a microliter tear sample.

Diversity of Feature Selectivity in Macaque Visual Cortex Arising from a Limited Number of Broadly Tuned Input Channels.

Mohan YS, Jayakumar J, Lloyd EKJ, Levichkina E, Vidyasagar TR.

Cereb Cortex. 2019 Apr 10. pii: bhz063. doi: 10.1093/cercor/bhz063.

This paper shows that the preference of visual cortical cells for a range of stimulus orientations is built from a limited number of orientations that cells in retina and geniculate prefer.

The influence of perceptual stabilisation on perceptual grouping of temporally asynchronous stimuli.

Park ASY, Bedggood PA, Metha AB, Anderson AJ.

Vision Res. 2019 Jul;160:1-9.

Our eyes are constantly in motion, yet perceptual stabilization mechanisms prevent our perceiving a constantly jiggling world. The current study indicates such mechanisms can also measurably influence visual function.

The influence of retinal image motion on the perceptual grouping of temporally asynchronous stimuli.

Park ASY, Metha AB, Bedggood PA, Anderson AJ.

J Vis. 2019 Apr 1;19(4):2.

Small retinal image shifts from small, random eye movements have been previously exploited in a perceptual grouping task. We find that grouping performance also improves with concurrent smooth pursuit movement producing larger, known shifts.

High-definition transcranial direct current stimulation in anorexia nervosa: A pilot study.

Phillipou A, Kirkovski M, Castle DJ, Gurvich C, Abel LA, Miles S, Rossell SL.

Int J Eat Disord. 2019 Aug 21. doi: 10.1002/eat.23146.

Recent studies of abnormal fixational eye movements in anorexia nervosa implicate specific neural pathways. This pilot study examines the effects of TDCS in modifying activity there.

Insights into Australian optometrists' knowledge and attitude towards prescribing blue light-blocking ophthalmic devices.

Singh S, Anderson AJ, Downie LE.

Ophthalmic Physiol Opt. 2019 May;39(3):194-204.

Our survey suggests blue light-blocking lens prescribing has increased, despite practitioners acknowledging the lack of high-quality evidence for their use and the common belief that patient responses may, in part, be placebo effects.

Head and Gaze Behavior in Retinitis Pigmentosa.

Titchener SA, Ayton LN, Abbott CJ, Fallon JB, Shivdasani MN, Caruso E, Sivarajah P, Petoe MA.

Invest Ophthalmol Vis Sci. 2019 May 1;60(6):2263-2273.

To compensate for peripheral vision loss in retinitis pigmentosa (RP), RP patients generally use more head movement than eye movement. This is correlated with the severity of their vision loss.

Visual attention and neural oscillations in reading and dyslexia: Are they possible targets for remediation?

Vidyasagar TR.

Neuropsychologia. 2019 Jul;130:59-65.

Based upon the role of cortical oscillations in enabling the attentional system to parse the letters and words of a text, possible ways of treating dyslexia are discussed.

An Integrated Neuronal Model of Claustral Function in Timing the Synchrony Between Cortical Areas.

Vidyasagar TR, Levichkina E.

Front Neural Circuits. 2019 Feb 5;13:3.

Based on the pattern of functional connections, we suggest a mechanism whereby the claustrum synchronizes oscillations between cortical areas to aid sequential processing of sensory information.

Optical coherence tomography angiography findings in a case of adult-onset vitelliform dystrophy.

Wang J, Tan J, Snibson K, Cham KM.

Clin Exp Optom. 2019 May;102(3):341-342.

Adult-onset vitelliform dystrophy is characterised by progressive vision loss due to sub-macular deposition of drusenoid material. Genetic testing and imaging may help to clarify the diagnosis and reveal choroidal neovascularisation.

Electroretinogram Recording in Larval Zebrafish using A Novel Cone-Shaped Sponge-tip Electrode.

Xie J, Jusuf PR, Goodbourn PT, Bui BV.

J Vis Exp. 2019 Mar 27;(145).

The zebrafish has emerged as a useful model of ocular development and disease. A new simpler method is described for objectively measuring visual function (or electroretinography) in zebrafish larvae.

Synaptic Basis for Contrast-Dependent Shifts in Functional Identity in Mouse V1.

Yunzab M, Choi V, Meffin H, Cloherty SL, Priebe NJ, Ibbotson MR.

eNeuro. 2019 Apr 9;6(2).

Cells with nonlinear spatial summation in visual cortex summate linearly at low contrasts. We show that this is due to a synaptic mechanism, not a threshold mechanism.

Comparison of contrast-dependent phase sensitivity in primary visual cortex of mouse, cat and macaque.

Yunzab M, Cloherty SL, Ibbotson MR.

Neuroreport. 2019 Oct 9;30(14):960-965.

We repeated the same measures of phase sensitivity in visual cortex of mouse, cat and monkey – all three had similar characteristics, making the mouse a reasonable model for future work.

Pattern Motion Processing by MT Neurons.

Zarei Eskikand P, Kameneva T, Burkitt AN, Grayden DB, Ibbotson MR.

Front Neural Circuits. 2019 Jun 21;13:43.

MT is the motion-processing centre of the primate brain. This model shows how its unique properties arise by cleverly combining inputs from several types of precursor neurons.

Preliminary Validation of a Food Frequency Questionnaire to Assess Long-Chain Omega-3 Fatty Acid Intake in Eye Care Practice.

Zhang AC, Downie LE.

Nutrients. 2019 Apr 11;11(4).

This study describes and validates a new questionnaire, the Clinical Omega-3 Dietary Survey (CODS), for rapidly estimating a patient's long-chain omega-3 intake in clinical practice.

UMOSS

With the Department of Optometry & Vision Science preparing for the migration of the department and its facilities, your beloved student committee has taken the mature approach by adopting an owl (Owlbert) as its mascot and setting up its own Instagram page. These actions are aligned with the main goals of the 2019 committee, which is to promote student engagement and the development of the student body heading into 2020. Over the last eight months, Owlbert has been involved in numerous events and made dozens of friends. It seems like an eternity ago when we were welcoming the OD1s into Alice Hoy! Since then, Owlbert has seen two foreign body kits raffled off, become a laser tag champion overnight, tested his general knowledge at the inaugural MDHS Trivia Night and even made some new friends from Deakin University at our Optometry Victoria Paediatrics Seminar. Owlbert has also embraced his social media account and released his own revision pop quizzes during SWOTVAC!

The highlight of our first semester was our Eyemazing Race; with the ambitious revamp of the race being a massive hit amongst the competitors. Thank you to all who participated and congratulations to all racers especially the winners - Team Peter PanOptics. Despite the committee being in four different continents due to our overseas externships, the committee has worked diligently to turn our new initiatives into reality for our student members. Semester 2 saw the introduction of the first UMOSS Student Newsletter, which aims to promote the activities of UMOSS and other student initiatives such as the Big Brother Big Sister Program, OD student volunteering trips and the DOVS futsal team.

The first major event for Semester 2 was our annual Trivia Night, where the students were able to dress up as their heroes on their quest for bragging rights over their peers and to learn more about the heroes in the contact lens field. Semester 2 also saw the introduction of UMOSS Education events where industrial optometric heavyweights presented talks to our students with aims to supplement our knowledge attained during the OD program. The theme adopted this year was 'Confidence with Contact Lenses', with two major contact lens companies presenting talks to our students. These talks allowed students supplementary exposure to product ranges available and further guidance on fitting multifocal contact lenses in complex settings and triaging difficult contact lens cases.

Semester 2 also sees the reestablishment of Project Spectrum; a program designed to emphasize the importance of colour vision testing within the optometric community. Students will be tasked to create their own colour vision tests that will be available for purchase to the OD community. October will also welcome our annual Bake Sale, which will coincide with World Sight Day – where all proceeds will go towards the Optometry Giving Sight charity.

Then, of course, there is the most coveted event of our calendar, our EYEBALL. This year's 'Carn-Eye-Val' will be held at the Mayfair Ballroom, Grand Hyatt Melbourne. The carnival theme is excitingly a big hit amongst the student body. The event promises to be the most elaborate, wacky, aesthetically pleasing and Instagram-worthy ball ever in UMOSS history, with the committee working on ensuring its success since last November! The event was quickly sold out with 90% of the tickets sold within 24 hours of release. The Eyeball is a perfect way to celebrate the community of staff and students we have within the OD program. We have also promised the students the delivery of one last celebration on the high seas at the conclusion of their annual university exams later in November. All these events and activities are only made possible with the combined teamwork of the UMOSS committee and the committed members of its community.

On behalf of the committee, we would like to thank our hard working student representatives (OD1: Diba Rezazadeh & Louise Jiang, OD2: Adam Barresi & Sushweta Pal, OD3: Ashviney Vigneswaran & Chamasha Dissanayake and BBBS: David Yosua & Ravindri Weerasingha), our sponsors for their generous support towards our initiatives and for the students who have all contributed to our amazing educational and social events. A special mention goes to Daryl Guest, Allison McKendrick and Tom Cougan for their support throughout the year.

Kieren Do & Julia Nguyen

UMOSS President & Vice-President 2019



UMOSS 2019 Committee at the 2019 Eyemazing Race.

Top: Julia Nguyen, Kieren Do and Tiffany Lee

Bottom: Jack Nguyen and Sam Stephenson

UMOSS 2019 Committee at the Annual Trivia Night.

Left to Right: Tiffany Lee, David Winton, Bryant Wong, Baturay Ozcelik, Julia Nguyen, Sam Stephenson, Kieren Do, Jack Nguyen and Joe Tanner.



Acknowledgements

Donation of contact lenses for OD contact lens teaching

We would like to give a special thanks to Gelflex – Australia Contact Lenses for generously donating several contact lens trial sets for the Limbal Lift corneo-scleral and Zenlens mini-scleral lens designs. These trial sets will be used in the 3rd year Doctor of Optometry program, for the Advanced Contact Lenses practical class sessions, to provide our students with hands-on experience in fitting these specialty lens designs.

Doctor of Optometry contact lens teaching program

We also thank the ongoing support received from CooperVision, Bausch & Lomb and Johnson & Johnson, in providing soft contact lens trial sets and contact lens solutions for the 2nd year Doctor of Optometry contact lens teaching program.

Science Festival

Thank you to our OD3 students for volunteering their time for The University of Melbourne 2019 Science Festival.

Open Day

Thank you to all our optometry student volunteers for giving their time inspiring the next generation of optometrists at the 2019 University of Melbourne Open Day.

Stay in touch



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