

Department of Optometry and Vision Sciences Newsletter

Issue Number 2 | October 2018

In this issue

Head's Report

Department News

Alumni

Teaching Matters

Myopia Management Masterclass

Student Achievements

Seeing Beyond Lecture Series

UMEyecare

Publications

UMOSS

Postgraduate Courses

Acknowledgements

Contact:

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

Address:

tcougan@unimelb.edu.au



Head's Report

Welcome to our second newsletter for 2018. We have had a very busy year to date in both teaching and research domains. A specific highlight was the award of the David White Award for Teaching Excellence to Ms Anthea Cochrane. The David White Award is an annual, university wide teaching award, and recognizes Anthea's longstanding contributions to the education and training of optometry students. I am also pleased to announce that university promotions have been awarded to Dr Christine Nguyen and Dr Holly Chinnery, recognizing their sustained excellent contributions to our program.

Our final year OD students are rapidly approaching the end of their time with us. Their experience of optometry has been significantly guided by our clinical placement partners, our wonderful clinical teaching optometrists at UMeyecare, and their varying contacts with alumni and supporters of the program. Several of these events are highlighted in this newsletter. A big thank you to everyone who participated, and please get in contact if you would like to be involved in our program.

We have also been active in our education of graduate optometrists. Our fully online Master of Clinical Optometry is increasing in popularity, with two new subjects offered for the first time in 2018 ("Glaucoma and Retinal Disease" and "Anterior Eye Disease and Dry Eye"). Seventeen enthusiastic optometrists also spend a weekend at our recent Myopia Management Masterclass (see newsletter for highlights). In addition, we have our upcoming Seeing Beyond Lecture on October 3rd. Details are included in the newsletter and we hope to see you there.

This newsletter also highlights some of our recent equipment upgrades at UMeyecare. The state of the art equipment is being used for clinical care, research and teaching. Our research students have been busy travelling to conference and winning awards and contributing to the scientific knowledge base that is critical for future eyecare.

Department News

MDHS Dean's Innovation Grant

The Department is very proud to announce Dr. Laura Downie as the recipient of the inaugural MDHS Dean's Innovation Grant in 2018.

The new grant aims to boost the Faculty's commercial pipeline for scientific discoveries by supporting the development of innovative projects towards a stage where they are in a position to attract further funding from government, industry or venture capital.

The judges awarded first prize of \$50,000 to Dr Laura Downie, praising her compelling presentation and the ingenuity behind her vision for a device that, if translated into a new product, could have very real benefits for clinicians and patients.

Congratulations Laura!

For more information see:

https://mdhs.unimelb.edu.au/news-and-events/winners-of-inaugural-deans-innovation-grants-announced



Dr. Laura Downie and Professor Shitij Kapur



Professor Linda Denehy, Anthea Cochrane and Professor Shitij Kapur

David White Award for Teaching Excellence

Anthea Cochrane was awarded the University's David White Award for Teaching Excellence in 2018. The David White Award is an annual, University-wide teaching award that recognises overall teaching excellence in any of the following, or related, fields: Science; Health; Agriculture; and Veterinary Science.

This is a wonderful achievement and recognises many years of hard work and dedication to our students, department and more broadly to the university.

For more information see: https://melbourne-cshe.unimelb.edu.au/awards/university-of-melbourne-awards-for-excellence/honour-roll/2018-winners

Association for Research in Vision and Ophthalmology (ARVO) Conference

Congratulations to our staff and students who presented their research findings at the Association for Research in Vision and Ophthalmology (ARVO) annual conference in Honolulu in May. It was a wonderful opportunity to interact with over 12,000 researchers and clinicians spanning the gamut of vision science research and to also to catch up with old friends. The Department has a vibrant research program that is internationally recognised. Please contact the Department for more information or to be involved.



Staff and Students attending ARVO

Associate Professor Andrew Anderson, Dr Kwang Cham and students

Vision Science Workshop at Science Festival.

Assoc. Professor Andrew Anderson and Dr Kwang Cham conducted a Vision Science Workshop as part of the Science Festival 2018. The Science Festival is a yearly event that helps to communicate to the public the latest information on Vision and Vision Sciences. Andrew introduced the 30 participants to a number of situations where our eyes appear to give us false information about the world around us and consider what this tells us about how the eye and brain functions. Kwang provided a commentary while two final year OD students performed a live demonstration of the microscopic structures of the living human eye, and how we go about testing colour vision and depth perception.

Good Friday at the Teddy Bear Hospital

On Good Friday at the Teddy Bear Hospital, 107 of our OD students made a wonderful contribution to the Royal Children's Hospital Good Friday Appeal. 3300 children and teddies came for a visit and total of \$23,000 was raised! It was great to see so much enthusiasm from the OD students, giving all the teddies who attended muchdeserved tender loving care.



Students attending the Good Friday Teddy Bear Hospital



Clément Beugnet, Janet Chan Astrid Zeman and Adela Park.

European Conference on Visual Perception

The Department's Adela Park and Janet Chan recently attended the 41st European Conference on Visual Perception ECVP 2018 in Trieste, Italy. As well as presenting their research work Adela and Janet were also able to spend time with collaborators to the Department in Clément Beugnet (University of Lille, France) and Astrid Zeman (KU Leuven, Belgium) during this event.

Visiting Scholar

In the week beginning Monday 27th August 2018, our Department was pleased to host Associate Professor Jennifer Craig from the Department of Ophthalmology, University of Auckland. During her visit, Jennifer presented a research seminar to the Department on the topic of "Exploring drivers of meibomian gland dysfunction development", and also spent some time discussing her research focussing on intense pulsed light therapy with our 2nd year Doctor of Optometry students.



Associate Professor Jennifer Craig, Ceecee Zhang and Dr Laura Downie

Victoria Brain Bee Challenge

The 2018 Victoria Brain Bee Challenge was held at the Melbourne Brain Centre in July, and was co-ordinated by the Department's Associate

Professor Andrew Metha. The event is a competition for high school students in year 10 to learn about the brain and its functions, learn about neuroscience research and find out about careers in neuroscience. The Department's Holly Chinnery also presented a lecture at this event. We are proud to support community events that promote vision science and eyecare.

Participate in a brief online case study exploring clinical decision making

The University of Melbourne School of Health Sciences is conducting a survey to explore the decision making of clinicians prescribing vision or hearing appliances. This collaborative project is led by Associate Professor Karyn Galvin (Department of Audiology and Speech Pathology) and Dr Laura Downie (Department of Optometry and Vision Sciences). Participation in this project involves reading a short case scenario, and then answering four simple questions relating to the type and priority of clinical information that would be provided to a patient. For more information and to access the survey, please click this link: https://melbourneuni.au1.qualtrics.com/jfe/form/SV 3JIMp0lSVra0mwt

Alumni

Reunion Tours

Welcome back classes of 1978, 1988, 1998 and 2008! Thank you for joining us for our reunion tours. 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.









F

From left to right: the Class of 2008, the Class of 1988, the Class of 1978 and Daryl Guest addressing the Reunion tour

We are currently looking for champions from the classes of 1979, 1989, 1999 and 2009 to assist with our reunions in 2019. Please contact the Department to be involved in the Reunion Tours in June 2019.



Dr. Kwang Cham alongside 1st and 2nd year Optometry students

Meet-The-Alumni Panel Seminar

A Meet-The-Alumni Panel Seminar was organised for 1st and 2nd Year Optometry students to engage with our graduates in practice. They shared their work experiences, positives and challenges in their workplace, and how volunteering changed their perspectives of life and Optometry. The students were grateful for the opportunity to build professional relationships and to be inspired as well. This event was partly supported by the University of Melbourne Student Services and Amenities Fee Grant Program 2018.

School of Health Sciences Alumnistudent Career Roundtable

Thank you to our Optometry Alumni, Attilio Gioia, Andrew Harris, Clare Campitelli, Laurence Fusillo and Sam Day for attending the School of Health Sciences Alumni-student Career Roundtable aimed at encouraging students to engage with alumni of the School and to expand their professional networks. Thank you for sharing your stories and insights into career options in support of future generations of Optometrists.



Associate Professor Bang Bui presenting to alumni and students

Please stay connected with us through our Alumni network:



alumni.unimelb.edu.au/alumni

Teaching Matters

Teaching and Learning Presentations



During the mid-semester break our Teaching staff promoted their educational scholarship excellence at interstate conferences. Kwang Cham presented at the HERDSA meeting held in Adelaide in July providing a workshop on the use of an eOSCE app that has been developed in Optometry. Kwang Cham and Anthea Cochrane also attended the ANZHPE meeting in Hobart in July and gave a talk on the eOSCE development.

Anthea Cochrane and Dr Kwang Cham

Overseas Externships for final year students

Overseas externships continue to be a capstone experience for our final year students. Students have travelled to a wide range of locations again this year. For the second year now students have attended Oklahoma which is a very interesting site for students to visit because optometrists in Oklahoma have access to an extended scope of practice including anterior eye laser procedures and minor eyelid surgical techniques. Below are some comments from Isaac Curkpatrick and Mark Glogowski regarding their placement:



Mark Glogowski and Isaac Curkpatrick (pictured 1st and 3rd from the left)

"The experience during our externship in Oklahoma was incredible. What we have learnt across the last 4 years easily translated to the landscape of optometry in Oklahoma and the USA. The scope of practice here in Australia as optometrists definitely has the space and capacity to expand".

Myopia Management Masterclass

On September 1st and 2nd, 17 enthusiastic optometrists participated in a weekend long course updating their skills as part of our Myopia Management Masterclass. A big thank you to Laura Downie for her efforts in leading the course, and to our wonderful presenters: Tim Martin, Tim Fricke and Russell Lowe.

The course consisted of lectures, tutorials, and hands-on workshops in the Preclinical facility.

If you are interested in next year's course please lodge an enquiry via: https://commercial.unimelb.edu.au/custom-education/search-courses/optometry/myopia



Dr. Laura Downie (far right) presenting to the Masterclass

Student Achievements

Anna van Koeverden

Congratulations to Anna van Koeverden for winning Optometry Victoria's Best Student Oral Presentation for her talk on the ways in which both low and high blood pressure might increase the risk of glaucoma at SEMO 2018. Well done Anna.





Jessica Healey

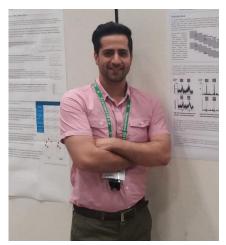
We are delighted to announce that Jessica Healey is the winner of Optometry Victoria's Academic Award: University of Melbourne. Jessica graduated in December 2017 and is currently working in regional Victoria. You can read more about Jessica on our website, or in the April edition of Scope. Congratulations Jessica.

http://www.optometry.org.au/.../latest.../academic-award-winner/

Selwyn Prea

Congratulations to Selwyn Prea who is this year's winner of Optometry Victoria's Postgraduate Travel Grant! At the ARVO conference Selwyn presented a poster that outlined the potential for home-monitoring of patients with age-related macular degeneration. To read more about Selwyn and his research visit www.optometry.org.au/.../latest-n.../postgraduate-travel-grants/





Dr Mojtaba Kermani Ahangarani Farahani

Congratulations to Dr Mojtaba Kermani Ahangarani Farahani on successful completion of his PhD entitled "Electrophysiological and behavioural studies of top-down mechanisms of attention". This comprehensive work helps us better understand brain pathways that allow us to allocate attention when we read. Well done on a fine thesis.

Seeing Beyond Lecture Series

Seeing Beyond Lecture Series April 2018

On Wednesday the 18th of April Associate Professor Andrew Metha and Dr. Christine Nguyen presented at the Department's Seeing Beyond Lecture Series.

Thank you to all who attended and joined in our discussion. Associate Professor Metha and Dr. Nguyen discussed some of their latest research from the Department. Andrew discussed retinal vascular structure and function both now and into the future while Christine presented on changes in the eye and what this can tell us about the health of our brains.



Dr. Christine Nguyen, Associate Professor Metha and Professor Allison McKendrick introduce April's seminar presentation

Seeing Beyond Lecture Series October 2018: Seeing the World with disordered vision

When: Wednesday 3rd October 2018

Guest speakers: A/Prof Andrew Anderson and A/Prof Larry Abel from the Department of Optometry and Vision Sciences, University of Melbourne

Times: 6.30pm – 8.00pm (please arrive at 6.00pm to sign in)

Location: Fritz Loewe Theatre, McCoy Building, Corner of Elgin and Swanston Streets, The University of Melbourne (https://maps.unimelb.edu.au/parkville/building/200/fritz loewe theatre)

CPD points: 6 CPD points

Presentation Summaries

Associate Professor Andrew Anderson – The influence of the eye (and brain) disorders on artists

Vision is an important tool through which visual artists obtain information about the world. Visual disease and disorders may disturb vision however, and multiple authors have argued that the effects of particular characteristic vision disturbances are evident in the works of several prominent artists. This lecture will review some of these arguments.

Associate Professor Larry Abel - Beyond the double-H test: ocular motor abnormalities real, imagined and in-between.

With a focus on vision problems, it is sometimes easy to overlook that the eyes not only see but also move. While some conditions are obvious, others may be more difficult to detect. Others may not have an organic basis, while in other cases a real problem may be "enhanced" for reasons of secondary gain. This seminar will look at a few interesting cases, most of which have come up in our teaching clinic in the last few years.





Please register for this event below: http://go.unimelb.edu.au/e3w6

UMEyecare

Where is recent tech taking us?

UMeyecare has been able to commission a range of equipment recently. We thought you may be interested it what we have been playing with and the uses of the equipment so far.

OCT-A

Earlier in the year we commissioned a Topcon Triton OCT-A. One of the main reasons that we are interested in OCT-A over other advances in OCT technology is that we are running diabetic studies in the clinic. The clinic is hosting the bulk of the clinical trials of a PhD study by Felicia Widyaputri under the supervision of Associate Professors Andrew Symons, Lyndell Lim and Daryl Guest. The study is looking at the natural progression of diabetic retinopathy in females with pre-existing diabetes who become pregnant. This has never been done before. Previous studies



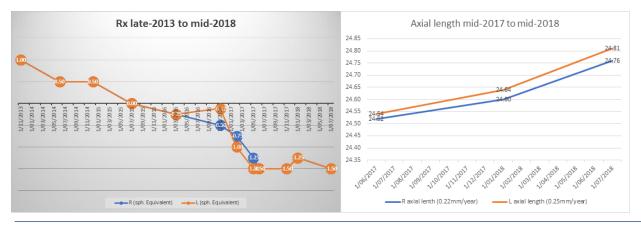
have focussed on gestational diabetes, and they have been inconclusive. Felicia's outstanding work has meant that she has recruited over 90 patient/subjects. These patients have been seen by OD4 students at UMeyecare under the supervision of our teaching optometrists. As the patients are being seen as part of a clinical trial, all the clinical results have to follow a very strict clinical protocol and the quality of the findings and scans have to be of a high enough standard to be used in the research. We have had very few patients where the data has had to be excluded from the study. We are hopefully training the next generation of practitioners to be able to undertake valid chairside research when they enter practice.

IOL master

We have on extended loan an IOL-master from the RMH to significantly improve patient flow for the RMH Ophthalmology@UMeyecare Clinic patients within The RMH. A side benefit has been that we have been able to use the IOL master to look at axial length measurements for the patients undergoing orthoK and atropine therapy for myopia.

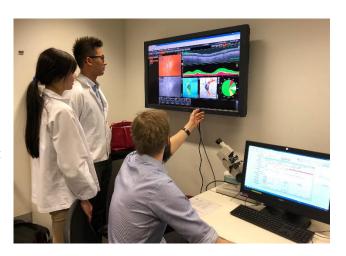


Tim Martin has been looking at patient by patient results for axial length changes and refractive changes using the IOL-master. Below are the graphs of Rx and axial lengths for a 9 year old boy who has been using 0.01% Atropine since May 2017. Axial length elongation is higher than ideal with a stable correction.



How big is a big screen?

We were able to secure a couple of big screen TVs that were being decommissioned elsewhere in the University. Recycling can be fantastic. The combination of the big screen and ImageNet OCT viewing software has been a fantastic teaching tool. The ability to analyse OCT results, not simply by report, has lead to much more sophisticated use of the data output by the students. ImageNet has meant that we have been able to merge the databases of the two Topcon OCT's and then analyse the result of a patient from either machine in any of the consulting rooms and the teaching clinicians room.



Video slit lamps

We have commissioned the last of the eight consulting rooms with video slit lamps. These are useful for capturing images to aid patient management. Under the "Do you see what I see" principle (apologies to Hunters and Collectors) we can see what the student sees in real time and vice versa. No longer is it good enough for the student to say "yes I saw that". We can actually see what they are looking at in both anterior and posterior eye viewing. Also students can see what we are looking at to aid them in locating lesions for them to subsequently look at and evaluate.

Publications

Detecting glaucomatous progression with infrequent visual field testing.

Anderson AJ, Asokan R, Murata H, Asaoka R.

Ophthalmic Physiol Opt. 2018 Mar;38(2):174-182.

Testing visual field less frequently than recommended guidelines does not dramatically alter positive and negative predictive values for detecting rapid progression at 2 years, but does substantially delay when significant progression may first be detected.

Sampling the Visual Field Based on Individual Retinal Nerve Fiber Layer Thickness Profile.

Ballae Ganeshrao S, Turpin A, McKendrick AM.

Invest Ophthalmol Vis Sci. 2018 Feb 1;59(2):1066-1074.

Current perimeters use fixed grid patterns. We find that using structural information (nerve fibre layer thickness) to choose locations to test in a VF for individual patients identifies more abnormal locations than using existing fixed grid patterns.

Understanding glaucoma pathogenesis.

Bui BV.

Clin Exp Ophthalmol. 2017 Dec;45(9):853.

A commentary on the importance of considering the appropriateness of animal models in research.

Use of an automated feedback application to improve communication skills

Cham KM, Lek JJ, Lim JKH, Cochrane AL

MedEdPublish https://doi.org/10.15694/mep.2018.0000011.1)

We have implemented a digital automated feedback application that is user-friendly to staff, efficient, and has provided effective feedback that is well-received and valued by students.

Recovery of the sub-basal nerve plexus and superficial nerve terminals after corneal epithelial injury in mice.

Downie LE, Naranjo Golborne C, Chen M, Ho N, Hoac C, Liyanapathirana D, Luo C, Wu RB, Chinnery HR. Exp Eye Res. 2018 Mar 14;171:92-100.

We aimed to compare regeneration of the sub-basal nerve plexus (SBNP) and superficial nerve terminals (SNT) following corneal epithelial injury. We find that four weeks after superficial corneal injury, there is differential recovery of mice epithelial nerve axons; SBNP sum length is reduced, however the sum length of SNTs is similar to naïve eyes.

A biologically-based computational model of visual cortex that overcomes the X-junction illusion.

Eskikand PZ, Kameneva T, Ibbotson MR, Burkitt AN, Grayden DB.

Neural Netw. 2018 Feb 16;102:10-20. doi: 10.1016/j.neunet.2018.02.008.

Using a computational model, we propose that interactions between form and motion information may assist neurons in the motion-specific regions of primate cortex to differentiate intrinsic from extrinsic terminators.

Long-term sensorimotor adaptation in the ocular following system of primates.

Hietanen MA, Price NSC, Cloherty SL, Hadjidimitrakis K, Ibbotson MR.

PLoS One. 2017 Dec 4;12(12):e0189030.

Reflexive tracking of sudden wide-field image motion is enhanced immediately after a saccade, although this enhancement wanes with extended training, representing a novel form of sensorimotor learning in the context of a reflexive movement.

A Tablet-Based Retinal Function Test in Neovascular Age-Related Macular Degeneration Eyes and At-Risk Fellow Eye.

Ho CYD, Wu Z, Turpin A, Lawson DJ, Luu CD, McKendrick AM, Guymer RH.

Transl Vis Sci Technol. 2018 Mar 1;7(2):2. doi: 10.1167/tvst.7.2.2.

Our study utilized an iPad-based vision test, and highlighted the potential of tablet-based devices in performing visual function measures as a home monitoring tool with remote surveillance for the earlier detection of neovascular AMD.

Methods for In Vivo CRISPR/Cas Editing of the Adult Murine Retina.

Hung SS, Li F, Wang JH, King AE, Bui BV, Liu GS, Hewitt AW.

Methods Mol Biol. 2018;1715:113-133.

CRISPR/Cas9 can be used to safely edit genes in vivo in the adult mouse retina. This publication provides protocols for gene editing and its quantification.

Attentional asymmetry between visual hemifields is related to habitual direction of reading and its implications for debate on cause and effects of dyslexia.

Kermani M, Verghese A, Vidyasagar TR.

Dyslexia. 2018 Feb;24(1):33-43. doi: 10.1002/dys.1574.

Controversy surrounds whether any of the many visual and phonological deficits found to be correlated with reading difficulty cause the impairment or result from the reduced amount of reading done by dyslexics. By studying people who read left-to-right or right-to-left, we show reading experience biases search performance in the direction of reading.

Electrical receptive fields of retinal ganglion cells: Influence of presynaptic neurons.

Maturana MI, Apollo NV, Garrett DJ, Kameneva T, Cloherty SL, Grayden DB, Burkitt AN, Ibbotson MR, Meffin H.

PLoS Comput Biol. 2018 Feb 12;14(2):e1005997. doi: 10.1371/journal.pcbi.1005997.

We present a computational model that accurately predicts both the spatial and temporal nonlinear interactions of multi-electrode stimulation of rat retinal ganglion cells (RGCs), and show that the nonlinearities arise largely from activation of presynaptic interneurons.

Mismatched summation mechanisms in older adults for the perception of small moving stimuli.

McDougall TJ, Nguyen BN, McKendrick AM, Badcock DR.

Vision Res. 2018 Jan;142:52-57.

Previous studies have found evidence for reduced cortical inhibition in aging visual cortex. The present study on motion direction suggests aging impacts on short-range summation mechanisms.

Congenital achiasma and see-saw nystagmus in VATER syndrome association with hydrocephalus.

Nguyen CT, Goh C, Desmond P, Abel LA, Lim CHL, Andrew Symons RC, Hardy TG.

J Clin Neurosci. 2018 Feb 23. pii: S0967-5868(17)31240-7.

We report a case of congenital achiasma and see-saw nystagmus with VATER association and hydrocephalus. fMRI showed isolated activation of the ipsilateral visual cortex upon stimulation. Despite the lack of nasal retinal fiber decussation, the visual field was intact.

Acute caffeine ingestion affects surround suppression of perceived contrast.

Nguyen BN, Hew SA, Ly J, Shin HY, Wong JC, Yeung E, McKendrick AM.

J Psychopharmacol. 2018 Jan;32(1):81-88.

We find that acute consumption of caffeine influences perceptual surround suppression strength. Perceptual surround suppression is predominantly attributed to inhibitory processes involving the major cortical inhibitory neurotransmitter, gamma-aminobutyric acid.

Differences in regional grey matter volumes in currently ill patients with anorexia nervosa.

Phillipou A, Rossell SL, Gurvich C, Castle DJ, Abel LA, Nibbs RG, Hughes ME.

Eur J Neurosci. 2018 Jan;47(2):177-183.

Neurobiological findings in anorexia nervosa are inconsistent, including differences in regional grey matter volumes. Methodological limitations often contribute to these inconsistencies. Using an improved analysis method, we find reduced grey matter volumes in anorexia nervosa that are associated with eating disorder symptomatology.

How Many Subjects are Needed for a Visual Field Normative Database? A Comparison of Ground Truth and Bootstrapped Statistics.

Phu J, Bui BV, Kalloniatis M, Khuu SK.

Transl Vis Sci Technol. 2018 Mar 2;7(2):1.

We provide guidance for choosing the cohort size for different levels of error when performing normative comparisons with glaucoma patients.

Six-month longitudinal comparison of a portable tablet perimeter with the Humphrey Field Analyser.

Prea SM, Kong YXG, Mehta A, He M, Crowston JG, Gupta V, Martin KR, Vingrys AJ.

Am J Ophthalmol. 2018 Mar 14. pii: S0002-9394(18)30107-7.

The Melbourne Rapid Fields (MRF) is an iPad-based perimeter. The MRF correlated strongly with conventional perimetry across 4 visits over a 6-month period, with good reliability. The MRF is suitable for monitoring visual fields in settings where conventional perimetry is not readily accessible.

Saccades under Mental Load in Infantile Nystagmus Syndrome and Controls.

Salehi Fadardi M, Abel LA.

Optom Vis Sci. 2018 Apr;95(4):373-383.

We examined saccades and visual task performance in patients with infantile nystagmus syndrome (INS) under mental load. Our results highlighted that to more completely evaluate INS therapies recognition time should also be measured with mental load, resembling real-world conditions.

The interpretation of results of 10-2 visual fields should consider individual variability in the position of the optic disc and temporal raphe.

Tanabe F, Matsumoto C, McKendrick AM, Okuyama S, Hashimoto S, Shimomura Y.

Br J Ophthalmol. 2018 Mar;102(3):323-328.

The anatomical position of the optic disc and the temporal raphe affects the mapping between structure and function with respect to superior and inferior hemifields.

Fostering Spontaneous Visual Attention in Children on the Autism Spectrum: A Proof-of-Concept Study Comparing Singing and Speech.

Thompson GA, Abel LA.

Autism Res. 2018 Jan 22

In this study, children with autism spectrum watched videos of someone singing or reading a story. The results show that children look more at the person if they were singing and if the story was familiar to them.

AAV-mediated gene delivery of the calreticulin anti-angiogenic domain inhibits ocular neovascularization.

Tu L, Wang JH, Barathi VA, Prea SM, He Z, Lee JH, Bender J, King AE, Logan GJ, Alexander IE, Bee YS, Tai MH, Dusting GJ, Bui BV, Zhong J, Liu GS.

Angiogenesis. 2018 Feb;21(1):95-109.

Using in vitro and in vivo models we show that calreticulin delivery to the eye using an adeno associate virus show promise as a treatment for abnormal growth of blood vessels.

Omega-3 polyunsaturated fatty acid supplementation for improving peripheral nerve health: protocol for a systematic review.

Zhang AC, MacIsaac RJ, Roberts L, Kamel J, Craig JP, Busija L, Downie LE.

BMJ Open. 2018 Mar 25;8(3):e020804.

The aim of this systematic review is to assess the effects of oral omega-3 PUFA supplementation on peripheral nerve integrity, including both subjective and objective measures of peripheral nerve structure and/or function.

Age-related changes in the response of retinal structure, function and blood flow to pressure modification in rats.

Zhao D, Nguyen CTO, He Z, Wong VHY, van Koeverden AK, Vingrys AJ, Bui BV.

Sci Rep. 2018 Feb 13;8(1):2947.

Peripapillary optic nerve tissue are less flexible in older eyes. This might account for why ganglion cell function in older eyes is more susceptible to acute intraocular pressure elevation.

UMOSS

A lot has happened at UMOSS in 2018! Whilst the students have been busy learning & honing their skills in clinic, we have found time for many extra activities. Although we lost our beloved Alice Hoy barbecue space in the mess of construction that has been 2018, UMOSS events have continued to be a regular social staple. As part of an SSAF grant the committee secured with the help of Dr Kwang Cham, OD students had the unique opportunity to learn about employability and digital literacy in a first event of its kind held in April. This helped prepare students for post-university life with enhanced awareness of how social media impacts our professional careers. Students were also given the opportunity to have professional photos taken for use on their professional profiles.

For the first time ever, UMOSS combined with 'DOSS' (Deakin Optometry Student Society) to hold a joint seminar evening in July generously sponsored by OV (pictured right). The event saw students from both Universities mix with presentations focusing on future scope of practice and our role in advocacy of the profession. We look forward to watching this event grow in the future and thank those who attended for their enthusiasm is getting this event off the ground! Pictures of the event can be found on the OV website and Facebook page.



This year's marquee social events have once again been hotly contested. The Eye-mazing race was taken out OD2 team "Low Visibility" & recently the successors for the annual trivia night were OD4 team "Late Night Hot Dogs" with a close 1-point victory.

We've had a strong presence at both of 2018's Teddy Bear Hospitals as part of the RCH Good Friday Appeal, and the OD4 students have made a significant impact in school screenings with the G4K program as featured in an Article by the Herald Sun. In sporting news, our UMOSS team came 3rd in the interdisciplinary mixed netball competition and the DOVS futsal team is in the midst of its finals campaign after holding second place with a fantastic 2018 season.

The committee has been very busy organising what is shaping to be a fantastic Eye-ball for 2018 at 'The Pavilion' in the Arts Centre on October 6th with a "Black & Goldmann" theme set to feature. See you all there! In the coming week, the AGM will be held to elect the new UMOSS committee for 2019. We look forward to sharing the new committee for 2019 with everyone, and as a whole are very grateful for all the help we have received throughout this year.

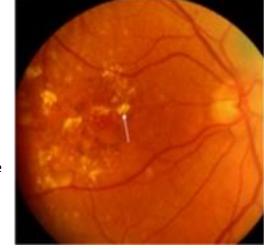
Postgraduate Courses

Online Postgraduate Courses Offered 2019

The Department of Optometry and Vision Sciences strives to disseminate cutting edge evidence-based education to all participants of the optometry profession, including students and practicing optometrists. The latest additions to the suite of subjects, which can contribute to Specialist Certificates and/or Master of Clinical Optometry, address areas where latest research is informing changes to clinical practice and

keeping abreast of research developments.

The Specialist Certificate in Glaucoma and Retinal Disease is an online, postgraduate course, offered for the first time in semester 1, 2018. This course/subject is designed to allow optometrists to advance their capabilities in the day-to-day management of eye disease by affording them the opportunity to review the most current ideas on the pathophysiology, diagnosis and management of ocular disease affecting the back of the eye, thus also preparing them for any further shifts in the scope of optometric practice in this area. This review will include a critical examination of how the state-of-the-art diagnostic and imaging tools can be incorporated into clinical practice. Given the explosion in the literature of health



sciences, the course concentrates on developing a deep understanding in a select group of eye diseases regularly seen in optometric practice (for example, glaucoma, diabetes, age-related macular degeneration). The course will, however, provide optometrists with the tools necessary to develop a deeper, evidence-based understanding in other eye diseases of their choosing.

The Specialist Certificate in Anterior Eye Disease and Dry Eye is also a newly developed online, postgraduate course. This course/subject allows optometrists to advance their clinical capabilities in the day-to-day management of eye disease by affording them the opportunity to review the most current theories on the pathophysiology, diagnosis and management of anterior eye disease

Specific details of all the Specialist Certificate courses and the Master of Clinical Optometry (MClinOptom) being offered in 2019 are available at the following weblink:

https://study.unimelb.edu.au/find/courses/graduate/master-of-clinical-optometry/

Acknowledgements

We would like to thank "Designs For Vision" for their ongoing support to our students' preclinical training with their generous equipment donation valued at \$19,865.

Stay in touch



http://www.optometry.unimelb.edu.au