We welcome our new first year OD students to the University of Melbourne this week. These students will form the Class of 2019, and have arrived having completed a variety of undergraduate programs. While many are previous students from the University of Melbourne, there are many others who completed their undergraduate training at other universities in Victoria, or interstate or overseas. Most have degrees in Science or Biomedicine. Some have completed Honours level research years, and all seem enthusiastic to commence their professional training. The diversity of students in our OD cohort is refreshing and promises a healthy future for optometry as a discipline.

Since our last newsletter, we have also said goodbye to the Class of 2015, who represent the second graduating class of Doctor of Optometry students. We wish them all the best for their professional careers, and look forward to maintaining contact with them as they embrace the next stages of their career journey.

Inside this newsletter, we highlight several upcoming events for alumni. One of these is a new occasional evening lecture (“Seeing Beyond Lecture Series”. Our staff are recognised experts in a variety of areas of optometric practice and undertake a diversity of internationally recognised research. Often our work is presented to the international community but not as regularly to the local optometric community. We are hoping that you will support this endeavour and look forward to seeing many of you for an informative evening back on campus.
Third year OD students Kyra, Kahla, Nuwan and Prince alongside the Department’s Christine Nearchou completed a volunteer Eye Care trip in conjunction with the Global Hand Charity. They were part of a dynamic team made up of four optometrists, four students, three interpreters, two drivers and Global Hand Charity organizers Regina Lau (nursing) and Gordon Smith (pharmacy).

The villages visited by the team included Phouluang, Nong Khiaow, Muk Muk and Viengkham, all in the northern region of Laos, who were all very welcoming. Each had members of their community ready and waiting for much needed eye care services. Together the team managed to assess the eyes of 1375 patients, 517 of which were children. Over 500 sunglasses and 615 ready made glasses were prescribed, as well as, approximately 15 custom made prescriptions and referrals for cataract surgery and further ophthalmological care.

Dr Laura Downie was awarded a University of Melbourne Dyason Fellowship to undertake an international research collaboration visit with A/Prof Jennifer Craig in the Department of Ophthalmology, University of Auckland, New Zealand. Laura has recently returned from her one-week visit, which involved time in A/Prof Craig’s Ocular Surface Laboratory, to establish a collaborative research platform for multi-centre clinical trials in anterior eye disease. During her time in Auckland, Laura also presented an invited seminar about her recent research in dry eye disease, to the Department of Ophthalmology.

Congratulations to Dr Christine Nguyen (bottom right), for winning along with Dr Mirella Dottori the Melbourne Neuroscience Institute’s “NO-BELL” Prize. Judges for this prize included Dr Adam Bandt (Federal member for Melbourne) and Dr Mel Thompson (Scientist and Science communicator).

Well done to the Department’s winners at the School of Health Sciences Awards 2015: Anthea Cochrane for Excellence in Engagement, Bang Bui for Excellence in Research, and Bronwyn Thomson for Behind the Scenes Excellence.
Congratulations to Jane Frances Duffy for her 2015 DOVS Alumnus award for her outstanding contributions to Optometry. Nominations for the 2016 Alumni Award will open in late March.

**Department of Optometry & Vision Sciences 10-, 20-, 30- & 40-year Reunion Tours.**

The Department of Optometry and Vision Sciences at The University of Melbourne is holding evening reunion tours in June for its teaching, research and clinical facilities for the classes (final year) of 2006 (14th June), 1996 (16th June), 1986 (21th June) and 1976 (23th June). Please save the date.

10 year: Class of 2006 - Tuesday 14th June 6-7:30 pm
20 year: Class of 1996 – Thursday 16th June 6-7:30 pm
30 year: Class of 1986 – Tuesday 21st June 6-7:30 pm
40 year: Class of 1976 – Thursday 23rd June 6-7:30 pm

**Seeing Beyond Lecture Series: “Focusing on Glaucoma”**

A new occasional lecture series from DOVS.

Date: April 20th 2016, 6:30-8:30pm
Location: Theatre 2, 207 Bouverie St, Carlton 3053

Come along to update your glaucoma skills and knowledge

Assoc Prof Bang Bui: “New insights into non-IOP risk factors in glaucoma ”
Prof Allison McKendrick: “New developments in macular assessment for glaucoma”

CPD points: 6 therapeutic points (pending approval)

RSVP: shs-corporateservices@unimelb.edu.au (please provide your name and OA registration number if applicable to assist with CPD point allocation)
**Occupational Colour Vision Clinic**

UMeyecare now runs an Occupational Colour Vision Clinic on Wednesday mornings.

The clinic can conduct a full range of occupation-specific colour vision testing including:

- Farnsworth Lantern and CAD test for aviation,
- Railway LED Lantern for rail safety workers,
- D15 and Holmes-Wright Lantern Type B for maritime engineering and deck personnel,
- D15 and Farnsworth Lantern for Australian Defence Force,
- Farnsworth-Munsell 100 Hue and HVC Color Skill Test for colour matchers,
- Testing for other occupations, such as police, ambulance, firefighters, motor sports drivers, aircraft refuellers.

In addition to occupational colour vision screening and testing the clinic has a comprehensive general colour vision diagnostic capability including:

- Anomaloscopy for deutan and protan, and for tritan defects, allowing precise diagnosis of defects;
- Testing for rarer congenital defects, including monochromatism and achromatopsia;
- Differentiation between and assessment of congenital and acquired defects, even if both occur in the same patient;
- Assessment of the severity of colour vision defects;
- Screening and testing for children.

The clinic is run by Dr John Parkes, CSC with the assistance of UMeyecare optometrists and University of Melbourne Department of Optometry students. Dr Parkes is a specialist occupational physician who has run his own comprehensive occupational colour vision clinic for over 15 years. He takes a risk assessment approach to assessing workers’ ability to carry out tasks involving colour vision, combining careful and appropriate colour vision testing with an assessment of the occupational demands and risks involved with carrying out those tasks. He is recognised by the various State and Federal authorities (e.g. Civil Aviation Safety Authority, Australian Maritime Safety Authority, Australian Defence Force, National Transport Commission and so on) for referral for advanced assessment of colour vision capability of applicants and workers.

Dr Parkes is happy to give advice to Optometrists regarding the colour vision testing of workers and assist them in the interpretation of the results of their own colour vision screening and testing.
**Eye movement assessments/ Neuro-Ophthalmic Disorders Clinic**

With generous support from Anne and Orlando Pezzimenti of Pezzimenti Optometrists the Department of Optometry & Vision Sciences has recently gained access to an SR Research EL1000 high-speed remote-view video-based eye tracker. This unit has enhanced our ability to offer clinical ocular motor testing. A/Prof Larry Abel has updated the software to make this advanced piece of eye movement testing equipment more user friendly to the clinician and researcher. The eye tracker facilitates the recording of patients with ocular oscillations over the age range from infants to adults, allowing for the identification of nystagmus of various types. A/Prof Abel has years of experience in the analysis of eye movement recordings and uses this information to aid diagnosis of eye movement disorders. Using similar equipment he has been involved in the workup of patients with disorders such as internuclear ophthalmoplegia or ocular myasthenia as well as both congenital and acquired forms of nystagmus. All of this can be done with the patient sitting a comfortable distance from the display monitor and without the need to wear any apparatus. There are no scalp electrodes and the like that may unsettle young children and unlike most “remote view” eye trackers, the data obtained are at a very high resolution.

Last year we moved some of Larry’s eye movement assessments to UMeyecare, to enhance teaching and access to other optometric evaluations. OD4’s are now part of the clinical workups, creating a long-term interest in this very important assessment area. We are pleased to be able to expand DOVS ability to continue to offer the only clinical motor lab services in Australia and to provide clinical support to A/Prof Abel. Many more recent graduates will fondly remember Larry’s first and third year neurological lectures. If you have a patient who you would benefit from eye movement testing and analysis please contact UMeyecare on 03 9035 6666. Alternatively email the clinic at uni-eyecare@unimelb.edu.au.

**Specialist Certificate– Management of Neuro-Ophthalmic Disorders**

If the above has caught your attention, you might also wish to enhance your skills in this area and enrol in our Specialist Certificate in the Management of Neuro-Ophthalmic Disorders which is planned to run in semester 2, 2016. For more information go to - [http://www.commercial.unimelb.edu.au/neurood/](http://www.commercial.unimelb.edu.au/neurood/)

**Clinical Teaching Opportunities**

UMeyeCare is interested in hearing from optometrists looking to get involved in clinical teaching of Year 3 and Year 4 optometry students. This would involve a commitment of one midweek afternoon session per week during clinical teaching semesters. Teaching clinicians need to have at least three years experience and be therapeutically qualified. Please contact Daryl Guest daryl.guest@unimelb.edu.au or Anthea Cochrane antheac@unimelb.edu.au if you are interested.
Age-related changes in auditory and visual interactions in temporal rate perception.


We routinely integrate vision and hearing to navigate the world. We find that healthy aging does not alter integration of auditory and visual rates provided sensory deficits are compensated for.

Retinal Microglial Activation Following Topical Application of Intracellular Toll-Like Receptor Ligands.

Chinnery HR, NaranjoGolborne C, Leong CM, Chen W, Forrester JV, McMenamin PG.

Invest Ophthalmol Vis Sci. 2015 Nov 1;56(12):7377-86.

We showed that microbial nucleic acids applied to the injured cornea activate retinal microglia. Corneal infections may affect the progression of chronic inflammatory processes that often occur in retinal pathologies, including AMD, diabetic retinopathy, and glaucoma.

An acute intraocular pressure challenge to assess retinal ganglion cell injury and recovery in the mouse.

Crowston JG, Kong YX, Trounce IA, Dang TM, Fahy ET, Bui BV, Morrison JC, Chrysostomou V.

Exp Eye Res. 2015 Dec;141:3-8.

Modeling intraocular pressure (IOP) elevation has furthered our understanding of glaucoma. Assessing ganglion cell responses to an acute, well-controlled IOP challenge can shed light on processes that govern cell vulnerability in the early stages of glaucoma.

Flicker-defined form stimuli are minimally affected by centre-surround lateral contrast interactions.

Denniss J, McKendrick AM.


Flicker defined form is used in perimetry. We find that visual field defects outside the target – but in the flickering background - are unlikely to markedly influence the detection and perception of the FDF stimulus.

Automated Tear Film Surface Quality Breakup Time as a Novel Clinical Marker for Tear Hyperosmolarity in Dry Eye Disease.

Downie LE.


This paper describes an automated, non-invasive measure of tear film stability, derived from Placido-disc corneal topography, as a novel clinical marker for diagnosing dry eye disease.
Accuracy of Laboratory Assays in Ophthalmic Practice.
Downie LE, Vingrys AJ.
This article outlines key factors that can confound the interpretation of tear osmolarity measures in clinical practice.

A Pragmatic Approach to Dry Eye Diagnosis: Evidence into Practice.
Downie LE, Keller PR.
This review presents a pragmatic, clinical approach to best-practice, evidence-based diagnosis of dry eye patients.

Rasch Analysis of the Independent Mobility Questionnaire.
Fenwick EK, O’Hare F, Deverell L, Ayton LN, Luu CD, McSweeney S, Bentley SA, Guymer RH, Finger RP.
The Independent Mobility Questionnaire (IMQ) assesses participants’ perceived ability for independent mobility. This study explored the IMQ’s psychometric properties in participants with severe visual impairment.

Contrast and response gain control depend on cortical map architecture.
Hietanen MA, Cloherty SL, Ibbotson MR.
This study of cat cortex revealed a new dimension of cortical functional organization, linking the contrast adaptation of cells with the orientation preference of their nearest neighbours.

Abnormal inhibition-excitation imbalance in migraine.
Nguyen BN, McKendrick AM, Vingrys AJ.
Steady-state visual evoked potentials showed significantly more supersaturation in patients in between migraine attacks, supporting an excitatory-inhibitory imbalance as a pathophysiological disturbance in migraine.

Body Image in Anorexia Nervosa: Body Size Estimation Utilising a Biological Motion Task and Eyetracking.
Phillipou A, Rossell SL, Gurvich C, Castle DJ, Troje NF, Abel LA.
Eur Eat Disord Rev. 2015 Dec 1.
When viewing point-light displays of walkers, patients with anorexia nervosa fixated the same regions as controls and similarly estimated body size, consistent with the idea that patients have a body image distortion only for their own bodies.
2015 - What a year! After the success of the years UMOSS events, including the Masquerade EyeBall, End of year BBQ and End of Exams party, and the efforts involved in seeing out the academic and clinical year, the cohort enjoyed a well deserved break.

Four OD3 students however continued the hard work into their holidays, along with DOVS lecturer Christine Nearchou and three other Melbourne optometrists, leaving for a week-long volunteer trip with Global Hand Charity to Laos, just a few days after exams ended. Read the full story here: [http://www.globalhandcharity.org.au/ optometrist.html](http://www.globalhandcharity.org.au/optometrist.html)

The second half of 2015 was not lacking in social, educational or voluntary activities for our students. The success of the Royal Children’s Hospital Good Friday Appeal’s Teddy Bear Hospital over Easter saw selfless OD2s, 3s and 4s participate in the Teddy Winter Check-up at Chadstone in August. A new committee will ensure that similar events run in 2016, where money is raised for children in need.

The 2015 ODSC was again outstanding, showcasing the students hard work and inviting industry renowned guest speakers including Prof Robyn Guymer and Dr Elsie Chan. And finally the phenomenal fundraising efforts of the cohort paid off, raising $2132 for Optometry Giving Sight, and raising the bar for 2016 endeavours.

The 2015 UMOSS AGM saw a brand new committee elected, and we were excited to jump into our roles before the year was out- brainstorming new events and ideas for the OD and RHD students. Both old and new UMOSS committees would like to thank the many event sponsors of 2015, who’s generous support made the year possible.

2016 will start with a bang, at least for first and second year ODs who will be met in typical UMOSS fashion with an orientation day, a welcome BBQ and various exciting club events throughout first semester. Third and fourth year students have already been quietly chipping away at 2016, accruing a few weeks of experience before the going gets tough. A reward for the extra academic weeks will come in the form of a relaxing night of lawn bowls- UMOSS’ first official calendar event, to be held on February 24.

The OD3s have begun taking consultations at both UMEyeCare and the ACO, and by all accounts rose to the occasion. They are looking forward to learning about more specialty areas this year including eye disease, advanced contact lens practise, binocular vision and paediatrics. They are also excited about peer-mentoring the OD2s which will both foster new relationships between the year levels and refine their own skills.

OD4s have already stepped up to the mark this year- filling in the big shoes left by the graduating class of 2015, and have plenty to look forward to with metropolitan, rural and ophthalmological placements coming up, and overseas placements starting as early as February. Social UMOSS events dispersed between busy weeks of clinic are sure to release the stress, and regular meetings with our allocated department mentors will keep us on track.

Much anticipated 2016 events include BBQs, student recruitment nights, the EyeMazing Race, Bowling and Laser tag night, Trivia night, the World Sight Day Bake sale and the Annual UMOSS EyeBall!

It’s sure to be a great year, and I can’t wait to see how our students and new graduates continue to shape the profession in the future. Welcome to the new OD1s and best of luck!

From the 2016 UMOSS committee, and eye.

Kyra

President
UMOSS 2016