Greetings from the Head of School

Welcome to this new communication format from the School. Much has changed for us in the last 2 years and we hope to use this newsletter to share some of those highlights with our colleagues.

In 2008, the Guide Dogs NSW/ACT committed to establish an Ocular Imaging Centre co-located with the School of Optometry and Vision Science at the University of New South Wales, to support the early diagnosis of eye disease and to provide this as a free service to the community. Guide Dogs NSW/ACT will contribute $40m to the Centre’s establishment and operations over a 10-year period. This is a remarkable initiative in community eyecare, but also in education of those involved in the diagnosis, management and rehabilitation of individuals with eye disease. The new Centre provides enormous research and collaborative possibilities. We look forward to further updates as this project progresses.

2008 saw undergraduates in the combined BOptom BSc degree entering the 3rd year of the new 5 year programme. This new programme has entailed complete revision of the curriculum and the integration of therapeutic management of ocular disease into the programme. Vision Science teaching has been further enhanced and we hope to shortly welcome our first graduates in Advanced Science with a Vision Science major. As part of the School commitment to best practice in learning and teaching, A/Prof Barbara Junghans was awarded an Australian Learning and Teaching research award to benchmark approaches to learning and teaching for students of optometry in Australia and New Zealand with respect to their preparation for rural practice and servicing of the aging and low vision population. This project has been achieved with the support and collaboration of all 4 Schools.

We are grateful to the OAA for their ongoing support, through supporting our Graduate Certificate students to attend their clinical placements at the Royal Hobart Hospital throughout 2008 and for their commitment to support a new position in the Optometry Clinic in 2009. The new clinic development manager will be responsible for ongoing development and marketing of the optometry clinic and to model best practice for our undergraduates.

We look forward to continued success in 2009 and I would like to thank the academic staff, general staff, visiting clinicians and adjunct staff for their commitment and contributions in 2008.
HIGHLIGHTS IN POSTGRADUATE EDUCATION

The School offers a range of postgraduate education via coursework and research. Follow the links at www.optom.unsw.edu.au for a description of programmes.

NEW EVIDENCE BASED OPTOMETRY COURSE OFFERED FROM 2008

This new core course was introduced to the Master of Optometry, Graduate Diploma in Optometry, Graduate Certificate in Optometry and Graduate Diploma by Research in Optometry. This course aims to develop skills in critical thinking, encourage the questioning of received wisdom and develop a critical approach toward optometry practice. Distance-learning is available, but on-campus visits will allow participation in face-to-face modules during which lively discussion and debate takes place.

NEW MASTER'S AND GRADUATE DIPLOMA PROGRAMS IN COMMUNITY EYE HEALTH

This program is offered in collaboration with the LV Prasad Eye Institute and the Learning and Teaching Unit, University of New South Wales. The Master's program combines coursework with a community eye health-related research project, while the Graduate Diploma consists of coursework only.

Delivered in Hyderabad, India, in a location where practical aspects of community eye health can be readily experienced, the courses are exciting and delivered by staff with a high level of expertise in community eye health and excellent facilities and equipment. To find out more, contact Dr Catherine Suttle (c.suttle@unsw.edu.au).

FIRST GRADUATES IN OCULAR THERAPEUTICS

October 2nd 2008 saw the first 24 optometrists graduate from the Graduate Certificate in Ocular Therapeutics programme at UNSW. A reception was held to recognize the graduates and those who had contributed to the development of the programme. Particular thanks were due to Michael Knipe, Dr Paul McCartney and Dr Tom Bonnelane of the Royal Hobart Hospital eye clinic, for their invaluable contribution to the hospital placements and to all ophthalmic practitioners who have kindly provided clinical placements. Luxottica generously sponsored the reception.

The successful (GradCertOcTher) graduates were Susan Ang, Alan Burrow, Hui-Chia Chiang, Agnes Choi, MI Ja Choi, Barry Cennar, Dirk Dendulk, Mark Feltham, Philip Hong, Paula Katalinic, Chcheng Kouch, Fernando Lamas, Michael Mangraviti, Maria Markoulli, Christine Musson, Vinita Nand, Derek Posniak, William Trinh, Andrew Watkins, Dominic Wilson, Olivia Wynford, Maya Zakzouk, Jennifer Chea and Gregory Flynn.

POSTGRADUATE RESEARCH EDUCATION

The postgraduate room has been bursting at the seams with 25 PhD and 3 MSc students currently on their way towards a higher degree in research. Six new students have joined our postgrad community in 2009 and we warmly welcome Kholoud Bokhary, Moneisha Gokhale, Khalid Jamous, Ingrid Jimenez, Jennifer Long and Vinod Maseedupally. Four of our students have submitted their theses so far in 2009 and congratulations are due to Paul Gifford, Jeong Ho Yoon, Daniel Cui and Robyn Main.

School of Optometry and Vision Science research students have been well represented at national and international conferences throughout 2008 and 2009 and have had much success in obtaining a number of competitive travel awards including the ARVO travel fellowship, the BCLA Da Vinci award, the OrthoK Society of Oceania grant, the ECVP grant as well as a number of UNSW travel scholarships.

UNSW Vice-Chancellor’s Award for Teaching Excellence: Our Head of School, Professor Fiona Stapleton, is the proud recipient of this award in 2009, which recognises her as an exemplary postgraduate supervisor and a leader in the field of postgraduate research training.

Information on our postgraduate research programme is available on the School website: www.optom.unsw.edu.au. Research projects are available in a range of areas ranging from clinical and applied science, optometry and public health. UNSW is currently providing travel bursaries for suitable prospective students from around Australia and New Zealand who would like to visit the campus to find out more. If you are interested in adding another dimension to your career by pursuing a PhD or MSc, please contact Dr Blanka Golebiowski at b.golebiowski@unsw.edu.au.
OPTOMETRY CLINIC UPDATE

The year 2008 saw the School receive a number of donations which were related to clinical activities which the School conducts. The principle donations were $100,000 of consulting room equipment from BOC Ophthalmic Instruments to establish an optometric consulting room within the Eye Clinic at the Prince of Wales Hospital, a Perkins tonometer and cases from Designs for Vision and 3 teaching eyepieces for clinic slitlamps donated by practising optometrist William Trinh. Optometrist Mark Falkenstein also donated a range of Zeiss equipment from his practice and optometrist Paul Mathers donated a Pascal tonometer.

Already this year the clinic has received the generous donation of a chair, stand, slitlamp, keratometer and refractor head from Staff Optometrist Effey Kokkolis, and a consulting room filled with on-loan equipment from BOC Ophthalmic Instruments of the latest Nidek automated equipment including autolensmeter, projector chart, autorefractor, tonometer and keratometer and linked refractor head, as well as a Nidek slitlamp, so that the students can appreciate the latest in eye examination equipment.

Some of the clinical research areas investigated last year include the detection of keratoconus, a new method for the detection of diabetes and diabetic retinopathy, investigating the new ORA instrument and its ability to measure intraocular pressure and the biomechanical properties of the cornea, and the development of methods for evaluating the water content of the cornea.

MEET OUR POSTGRADUATE RESEARCH STUDENTS

PAULINE KANG

Tell us a little about yourself and why you decided to do a PhD?

I graduated from UNSW at the end of 2006. I decided to do a PhD as I had an interest in orthokeratology (OK) lenses and I was given the opportunity to do research with the ROK (Research of Orthokeratology) group. I am currently in my 2nd year.

Tell us about your research and why you decided to go into this area?

Researchers are constantly investigating ways to reduce or even cease myopia progression due to the high prevalence of myopia especially in Asia. Animal models have shown that that the peripheral retina appears to have a large influence on the development of foveal refractive errors, more than previously thought.

OK involves wearing rigid contact lenses of a reverse geometry design and is a means of temporarily correcting low to mild degrees of myopia. I am investigating whether OK contact lenses can manipulate the way light focuses on the peripheral retina and to determine which lens parameters can effectively manipulate peripheral refraction while allowing clear central vision.

Has doing research affected the way you practice optometry?

I have gained and acquired skills in different instruments which are used both in clinical research as well as in some practices. Additionally, I have gained knowledge in the different innovative procedures or options that are available to patients which I can advise them on if appropriate.

Any advice for anyone thinking of doing a PhD?

If you are thinking about doing a PhD, do it now! Although it takes many years, I believe that the time and effort invested while doing a PhD will be worth the opportunities it will open up for you in the future.
The School welcomes four new academic staff. From left to right, Dr Mei Ying Boon, Dr Michele Madigan, Dr Isabelle Jalbert and Dr Sieu Khuu

**DR MICHELE MADIGAN** brings her sense of humour and great insights into retinal disease mechanisms as she teaches undergraduate Ocular Diseases and Ocular Therapeutics in collaboration with Dr Isabelle Jalbert. Michele graduated from Optometry at UNSW a long time ago, and then completed a PhD on the underlying pathogenesis of corneal responses to contact lens wear (also at UNSW) before joining the Save Sight Institute, University of Sydney in 1990. She then spent some postdoctoral time at Doheny Eye Institute, University of Southern California, studying ultrastructural and immunological changes associated with HIV optic neuropathy and Leber’s optic neuropathy. Until the end of 2007, she worked in the Save Sight Institute and Discipline of Clinical Ophthalmology, University of Sydney, continuing laboratory-based collaborative studies predominantly on age-related macular degeneration, retinal development and ocular tumours. Her research interests include retinal, choroidal and vitreal ageing and pathology, ocular tumours especially melanoma, and the role of the microenvironment to tumour invasion and metastases. She is also currently being enticed to look at the anterior eye in studies of corneal and conjunctival changes in dry eye, and the role of Wnt signalling pathways in keratoconus.

**DR ISABELLE JALBERT** brings with her an OD from the University of Montreal, Canada, experience in private practice and the Cornea and Contact Lens Research Unit in Sydney, Australia where she specialised in contact lens and clinical research. Following the completion of a PhD in Optometry at UNSW in 2004, she held in turn the positions of Director of Clinical Research at the Institute for Eye Research and of Deputy Director, Knowledge Creation Programs at the Canadian Institutes of Health Research. Her research interests include dry eye diseases, contact lenses, ocular diseases and policy and public health background. She teaches undergraduate Ocular Diseases and Ocular Therapeutics in collaboration with Dr Madigan.

**DR MEI YING BOON** joins the vision science group at UNSW, having completed both undergraduate and PhD studies at UNSW. Her research interests include colour vision, how the visual system changes throughout the lifespan (during maturation and ageing), particularly the visual cortex as assessed using electrophysiological techniques. Prior to joining UNSW, she was in private practice and had both research and teaching positions at the Schools of Optometry in Singapore Polytechnic, Queensland University of Technology and the University of New South Wales. She currently teaches aspects of clinical optometry, dispensing, vision science and low vision.

**DR SIEU KHUU** is a new member of the vision science group. He brings his training in psychology (specialising in sensory perception) with Bachelor and PhD qualifications from the University of Western Australia in 2003. For the last five years, Dr Khuu was at the University of Hong Kong as a Research Assistant Professor. He specialises in visual neuroscience, particularly how the visual system detects global structures through form and motion. He teaches second and third year undergraduate vision science courses.

RESEARCH NEWS

At the Research in Orthokeratology (ROK) group facilities in the School of Optometry and Vision Science, a number of research projects are being conducted under the supervision of Associate Professor Helen Swarbrick. The main current research project is the myopia (short sightedness) control project involving children from an East Asian background. This research project is supported by the Australian Research Council through the Linkage Grant scheme, and by industry partners Boston Products Group (USA), Capricornia Contact Lens Pty Ltd (Australia) and BE Enterprises Pty Ltd (Australia). The main purpose of this research is to investigate the possibility of slowing or ultimately stopping myopia progression using orthokeratology (OK), a contact lens-based technique that uses specially designed rigid contact lenses worn on an overnight basis to correct myopia. Another objective is to establish the safety of this lens-wearing modality. Since its launch in December 2007, the project has attracted extensive media coverage. As a result, an overwhelming number of parents have lodged expressions of interest to allow their children to participate in this project. Within the next month, a number of participants will be completing the 12-month lens-wearing period. A final report will be published once all participants have completed the study.