



A O N A VISION

The national newsletter of the Australian Ophthalmic Nurses' Association

DECEMBER 2017

Media Release - Macular Disease Foundation Australia Research Grants (22 November 2017)

His Excellency General the Honourable Sir Peter Cosgrove, Governor-General of Australia, awarded \$600,000 in research grants to three of Australia's leading researchers on behalf of Macular Disease Foundation Australia. The special event was held at Admiralty House, Sydney on Tuesday 21 November.

This latest round of funding brings the Foundation's total commitment to research to \$3.6 million since the research grants program was launched in 2011. The program funds leading Australian research into age-related macular degeneration (AMD), the leading cause of low vision and blindness in Australia. The ultimate goal of the program is to reduce the incidence and impact of the disease.

The three recipients of the prestigious research grants program are Associate Professor Alice Pébay, Centre for Eye Research Australia, Professor Erica Fletcher, The University of Melbourne and Dr Fred Chen, Lions Eye Institute, The University of Western Australia.

Calendar of Events - 2018

February

Sat 3rd Eye TeleC – Eye Pain

Sat 24th QLD Clinical meeting

March

Sat 17th AONA WA Seminar at Wollaston
Centre Topic - TBA

May

Sat 5th Eye TeleC – Topic TBA

Sat 19th QLD Clinical meeting

June

Sat 23rd AONA NSW - Conference
"Eyes All Over" at Sofitel Wentworth Hotel,
Sydney

Sat 23rd AONA WA Seminar at Wollaston
Centre Topic - TBA

August

Sat 25th AONA QLD - Annual Conference at
Brisbane Conference & Exhibition Centre

September

Sat 1st Eye TeleC – Topic TBA

Sat 15th AONA WA Seminar at Wollaston
Centre Topic - TBA

November

Sun 18th RANZCO2018 & AONA
National Conference in Adelaide - TBA

Sat 24th AONA QLD Clinical Meeting

These grants provided funding to undertake cutting edge research which includes:

- The development of a laboratory model using human retinal cells derived from people with dry AMD. This will enable a better understanding of the processes that cause disease and identification of relevant new treatments.
- Investigating the varied presentation and natural history of Stargardt's in Australia. This funding will help early diagnosis as well as develop techniques and infrastructure to discover mechanisms of new mutations in the Stargardt's gene.
- Exploring how the removal of debris in the eyes change as we age and whether certain cell functions can be used as diagnostic blood test to identify people at greatest risk of disease progression.

The event was attended by distinguished guests including Patron Ita Buttrose AO OBE, Board Chairman Robert Kaye SC along with members of the macular disease community.

Macular Disease Foundation Australia CEO, Julie Heraghty said, "Our latest round of grants are supporting exciting

and innovative projects that will contribute to the body of evidence produced by Australian research to support the macular disease community".

"The Foundation is proud to support these 2017 grant projects. Our target is to raise \$10 million to invest in macular degeneration research. We are now a third of the way towards achieving this target. We all understand that research costs a lot of money and the journey is slow, but the consequence of not investing is the loss of vision for far too many Australians".



Associate Professor Alice Pébay, Professor Erica Fletcher, His Excellency General the Honourable Sir Peter Cosgrove and Lady Cosgrove, Dr Fred Chen.

The Macular Disease Foundation web site (<https://mdfoundation.com.au/>) is a great resource for a wide variety of interesting news and information on macular disease.

RANZCO / AONA National Conference 2018 Adelaide

Hosted by AONAVIC and SA sub-branch

Save the date: Sunday 18th November 2018

International Speakers:

Dr Elethia Dean - RN MBA PhD (Chicago, USA)



AONA WA President's Report December 2017

We have made it through the year of 2017, everyone has earned a holiday.

Our biggest achievement was successfully hosting the AONA National Conference ("From Little Things Big Things Grow"), in conjunction with RANZCO Congress, in Perth on Friday 27th and Saturday 28th October. We had 106 interstate and international delegates who enjoyed an interesting and informative program.

As Ophthalmic nurses, and with strong support from RANZCO, we are nudging our way into the realm of our Ophthalmologist's and becoming more entwined as part of the RANZCO congress. This year our delegates were for the first time able to enter the RANZCO Trade Exhibition. Next year we are looking at holding the AONA National Conference on the same day RANZCO Congress starts and for nurses and RANZCO delegates to attend reciprocal sessions. We are also contemplating adding breakaway workshops to the AONA Conference.

Many thought provoking presentations were given that highlighted the journey of our presenters, the professional development and role of Ophthalmic nurses, professional practice standards and where our profession is heading. A collaborative session by Keynote Speaker Dr Elissa McDonald was dedicated to empowering nurses on how to kick start their own research projects.

The networking was amazing and the welcome reception and tour at Perth Eye

Hospital on Friday evening was fantastic. The trade tables at the Conference were well received. We are very grateful for the strong financial and practical support from our sponsors.

The response from our Conference feedback survey was very positive and I would like to acknowledge the committee who worked hard to plan it all. Our aim was to educate and leave delegates inspired, to stimulate the desire for research and showcase the achievements of some of our nurses.

I would like to welcome Jennie O'Hare to the committee. Jennie has volunteered to keep our website up to date. Jennie works part time and is a busy mum with two young children and does not have to attend the committee meetings. We plan to send Jennie on a course to learn advanced computer skills such as mail merge and document filing. Dr Vicki Drury, who lives in Bunbury and participates by teleconference, and Jenny are perfect examples of how members can be involved with the committee. There are also sub committees on the National Council. If you have an interest in furthering your Ophthalmic profession please contact a committee member, you can become involved in so many different ways. As they say many hands make light work. I know there are many of you who are willing and your ideas are valued.

The proposed update to our website early next year is proceeding. We will try to establish a blog on our webpage and see how that goes. Perhaps in the future and as part of AONA National Council objectives we can combine with other States to have a national website. A Facebook page was also created, it will be another way of connecting, so go to Facebook and search for AONA WA. Our new logo was completed and displayed at the National Conference.

I encourage more nurses to participate with and consider joining the committee. The networking and resources are fantastic, its rewarding, and new ideas are welcome.

I would like to thank the Committee

members for their support and work during the year. Finally, I hope everyone has a safe and joyful Christmas break. See you in the new year.

Gina Storey

Gina Storey (AONAWA) and Mark Daniell (RANZCO) - Welcome



AONA WA - Adele Sangster, Vicki Drury, Lois Anne Marshall, Andrea Montague, Kris Jamieson



Dr Elissa McDonald - Keynote Speaker



AONA National Conference - Perth 2017



Joanna McCulloch - Speaker, AONA NSW President & National Council Chair 2017



Heather Machin - Speaker, AONA VIC President & National Council Chair 2018



A Multi-Disciplinary Approach to Developing a New Eye Drop Dispenser - Dr Vicki Drury

Nurses have been involved in the purchase of relevant equipment in the workplace for many years, however few have been involved in designing or adapting equipment. Previously the design and purchase of equipment has rested with the medical specialties and biomedical engineering, however, nurses are usually at the forefront of care delivery and so are able to see first-hand what modifications and equipment is needed. This has resulted in nurses being responsible for refining or remodelling, not just procedures, but also equipment and practices. Unfortunately, despite their unique place in the healthcare team and their intimate knowledge of patient care, nurses have not always been involved in such projects.

In Singapore the Low Vision team is comprised of staff from Medicine, Nursing, Occupational Therapy and Medical Social Work. Each team member brings a different skill set but work collaboratively in a program designed to facilitate self-management in people with low vision due to diverse causes. It was highlighted during the program that many people had difficulty administering their eye drops. This is consistent with international findings which found that more than 40% of patients experience difficulty administering eye drops effectively (Davies et al., 2016; Schwartz, Hollander, & Williams, 2013). Further studies have concluded that eye drop administration remains difficult for patients despite education (Al-Busaidi, Samek, & Kasner, 2016). Difficulties identified include correctly aiming the drop into the eye, extending the neck and looking upwards, avoiding contamination of the bottle tip and contents, preventing excess drops from coming out and producing sufficient force

on the bottle to expel a drop (Davies, Williams, & Muir, 2016). The use of instillation aids has been found to improve administration of eye drops and increase patient satisfaction (Davies et al., 2016). However, despite the number of assistive instillation devices available, none have managed to overcome all the aforementioned difficulties. A major issue with available aids is that they are not multi-purpose, so cannot be used for all bottles as well as minims. The Low Vision team in Singapore, led by the Medical Social Worker approached the Pharmacy and the local Biomedical students at the Polytechnical College to see if together they could design a multi-purpose, inexpensive, easy to use eye drop dispenser.

The result of this interdisciplinary collaborative project was the development of the SNEC eye drop dispenser (Figure 1). This eye drop dispenser can fit any size bottle or a minim, is easy to use and is inexpensive. There are discussions underway to include different colours so that the aids may be colour coded for antibiotics, mydriatics or miotics.

A YouTube video was also created and uploaded to visually assist patients and caregivers to use the dispenser. The link to this video is:

<https://www.youtube.com/watch?v=zTQgtduiTDQ&feature=youtu.be&app=desktop>

This project shows how an interdisciplinary team can come together and develop an inexpensive aid that may improve patient care. Working with the Polytechnical College provided us with the expertise of biomedical lecturers and students. The students undertook the development of the dispenser as their major project. An added advantage to the students was being able to see the dispenser being used, so promoted the concept of bench to bedside, allowing them

to witness first-hand the clinical application of their prototype. Each member of the team contributed specific expertise to the development of the dispenser. Providing a way for patients to effectively administer their eye drops may enhance adherence and increase patient satisfaction.



Figure 1: SNEC eye drop dispenser

References

- Al-Busaidi, A., Samek, D. A., & Kasner, O. (2016). Eye drop administration in patients attending and not attending a glaucoma education center. *Oman journal of ophthalmology*, 9(1), 11.
- Davies, I., Williams, A. M., & Muir, K. W. (2016). Aids for eye drop administration. *Survey of ophthalmology*.
- Davies, I. J., Brown, N. H., Wen, J. C., Stinnett, S. S., Kubelick, K., Patel, R. P., . . . Muir, K. W. (2016). an upright eyedrop bottle: accuracy, usage of excess drops, and contamination compared to a conventional bottle. *Clinical ophthalmology (Auckland, NZ)*, 10, 1411.
- Schwartz, G. F., Hollander, D. A., & Williams, J. M. (2013). Evaluation of eye drop administration technique in patients with glaucoma or ocular hypertension. *Current medical research and opinion*, 29(11), 1515-1522.



AONA NSW President's Report December 2017

NSW held the final clinical day for 2017 at Chatswood Private Hospital with a Glaucoma update. Case Studies were presented to give clear examples of the patient journey with Glaucoma. Compliance for patients using current medications continues to be an ongoing challenge even with the newer combination drops. We also learnt about the exciting new surgical techniques being performed including the use of Glaucoma Stents.

October 14 was our first International EyeTeleC with Lynne Hadley (currently President of IONA - International Ophthalmic Nurses Association) speaking with us from the UK. Lynne addressed Nurse Led Botulinum Toxin Clinics in the NHS University Foundation Trust. It was a wonderful session and especially to know that extended clinical roles for ophthalmic nurses are working well in the UK. Thanks to Cheryl Moore for making this connection with nurses in the UK and we look forward to continuing this into the future.

Set aside Saturday February 3 for the next EyeTeleC - topic is eye pain and please remember to register direct to Cheryl Moore 0437 898202 or Cherylmelo@bigpond.com. Cheryl will then give you the phone number and code to join in the discussion. We are currently averaging 15 members.

I was thrilled to be invited as AONA representative to the Macular Disease Foundation Award Presentations at Admiralty House on 21st November and to learn about the current research in age-related macular degeneration.

ACI NSW Agency for Clinical Innovation continues to support scholarships for ophthalmic nurses working in NSW Health for their professional development. Search google for ACI Scholarship, follow prompts past Urology and Neuro to Ophthalmology. A short report is required at the end about your main objectives for attending conference or workshop, benefits you have gained and how you will share your new knowledge. 2 nurses have been funded via this scholarship program and we appreciate this opportunity for nurses.

The Committee held our annual planning day and if you have suggestions for clinical days and or conference topics please let us know before the end of the year via "contact Us" on www.aonansw.org.au

Wishing everyone a Merry Christmas, safe holiday break and lots of enthusiasm for 2018

Jenny Keller



AONAVIC President's Report December 2017

2017 has been the year that redefined our professional body, and one I feel honoured to be part of. You may recall in November 2016 we officially founded the National Council, a feat that is testament to the dedication and hard work of our wider community - past and present. During our first year, under the helm of our founding Chair Joanna McCulloch (NSW) with Secretarial support from yours truly, and together with WA, QLD, and our sub-branch representatives in SA and TAS, we put in motion a series of new ventures inclusive of the standards/competency development, and an ambitious project to examine how we can attract and retain young nurses within our profession. At our first-year milestone meeting in Perth (adjacent to the AONAWA-RANZCO activities) our committee continued working on and preparing several initiatives for the sector – we hope to talk more about them shortly. What became abundantly apparent during these sessions was our collective *coming-together* as a national community – with collective involvement and collective responsibility. This will only lead to greater opportunities and positive outcomes. I commend the current representatives and members for their support of the national agenda. As we have in place an administrative rotation system to ensure each State

group is involved in the leadership, VIC is now the sitting Chair, while QLD are the Secretary (held previously by myself and Carmen Newman respectively).

Closer to home, VIC and sub-branches have had a busy year, with SA and TAS hosting their final clinical meetings just prior to the Christmas break. Our VIC team have also been busy – managing the 2017 Melbourne conference. This year's speaker line up focused on disability and inclusivity in vision impairment – ensuring our patients are always at the forefront of any training and development session.

On behalf of the AONAVIC and our SA/TAS Sub-Branch Representatives, I wish you a wonderful end of year.

Thank you
Heather Machin RN MBA
President (*and National Chair*)

Clinical Indicators (CI)

The Australian Ophthalmic Nurses Association, National Council (AONANC) participated in a working party in 2016 aimed at assessing, revising and developing clinical indicators relevant to ophthalmology for ACHS (*Australian Council Healthcare Standards*). AONANC expressed concern at the lack of clear information around general rates of endophthalmitis; and with the increased numbers of intravitreal injections, the need to develop CI's around intravitreal injections generally and intravitreal engendered endophthalmitis specifically. Because they often do not present to the original centre AONANC was concerned that CI information may not be collected. AONANC also questioned the benefit of reporting Toric Intraocular Lens implants.

Outcomes from the meeting included

new indicators for antibiotic prophylaxis during cataract surgery; occurrence of TASS in cataract surgery – by monitoring ‘...Reprocessing of reusable medical devices...’ and planned second eye cataract surgery delay, plus modification of Toric Lens CI’s to assess accuracy and effectiveness of Toric IOL’s. These changes are being collected from January 2017.

Over 700 health organizations Australia wide participate in this process with relevant Clinical Indicator data submitted every 6 months. Currently ophthalmic CI’s look at **Cataract Surgery** – readmissions within 28 days, readmissions within 28 days due to endophthalmitis, unplanned overnight stays, anterior vitrectomy rates;

Intraocular Glaucoma surgery – readmission within 28 days, readmissions within 28 days due to endophthalmitis, length of stay > 3 days; **Retinal Detachment Surgery** - readmissions within 28 days, readmissions within 28 days due to endophthalmitis, unplanned readmissions within 28 days, length of stay > 4days, unplanned operations within 28 days; **Toric Lens Implantation**

The goals are to improve the standards of care in health organisations by bringing all of the relevant information together and analyzing the outcomes. For further information and report details go to:

https://www.achs.org.au/media/131898/2017acir_web_version.1.pdf

Ophthalmic Nursing Pictorial from Anna Huigen – Alice Springs Hospital N.T.



Anna Huigen RN &
Dr Jas Aujla, weekly
bush trip



Trachoma screening
trip



Alice Springs Hospital,
NT Health Dept.



Anna Huigen –
Ophthalmic Nurse
with Dr Tim
Henderson

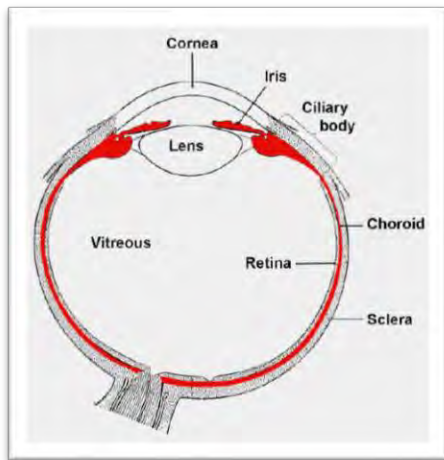


Typical dense white
cataract



UVEITIS (Part 1 of 2 - A & P) - Pat Usher RN

DEFINITION; Inflammation of the uveal tract.

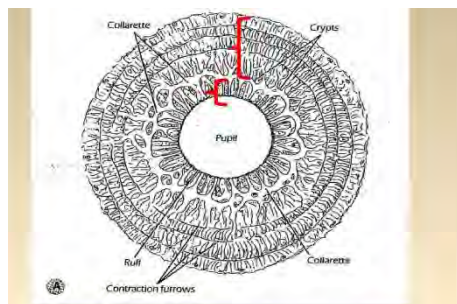


What is the Uveal Tract?

The uveal tract is the middle, vascular coat of the eye, between the sclera and retina. It is divided into 3 parts; the iris anteriorly, the ciliary body intermediate; the choroid posteriorly. Its major function is nutritional and supportive, but segments are also responsible for production of aqueous humor, accommodation via the ciliary muscle attachment to the zonules, control of light entering the eye.

The Iris

Is a thin circular pigmented structure located in the anterior chamber.

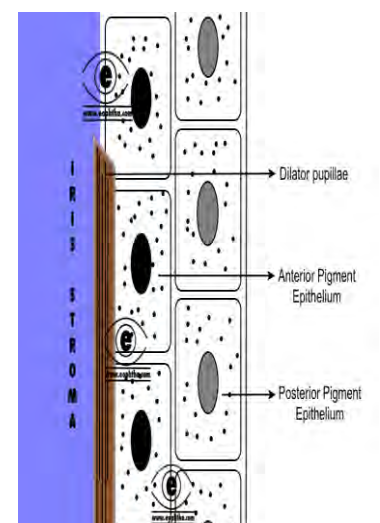


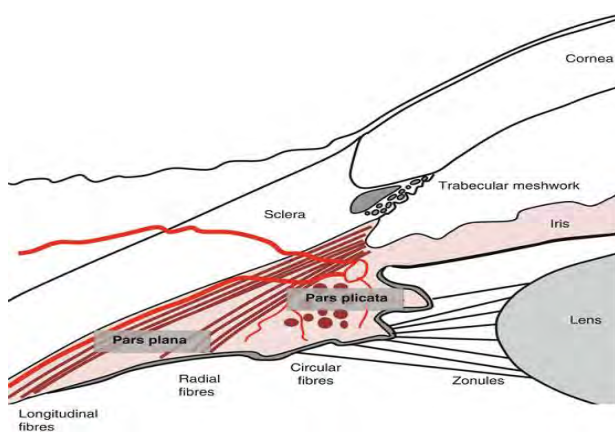
Macrostructure: It is subdivided into the Pupillary zone and Ciliary zone with the pupil central separated by the collarette – the thickest part of the iris where the sphincter and dilator muscles overlap. Small openings known as crypts of Fuch allow deeper tissues access to aqueous.

Microstructure –

3 layers:

The anterior limiting layer containing fibroblasts on the surface and melanocytes beneath the fibroblasts; the stroma containing blood vessels, melanocytes, fibroblasts, lymphocytes, macrophages and mast cells; smooth muscle fibres circulating & radial. The circular sphincter pupillae are parasympathetic and constrict the pupil, the radial dilator pupillae are sympathetic and dilate the pupil; next come 2 layers of pigmented epithelium containing a dense layer of pigmented cells. Two types of melanin are present in the melanocytes – eumelanin – black to brown; and pheomelanin – yellow to reddish, the percentage of each type and the amount determine the colour of the iris. The main function of the iris is to regulate the amount of light entering the posterior eye.

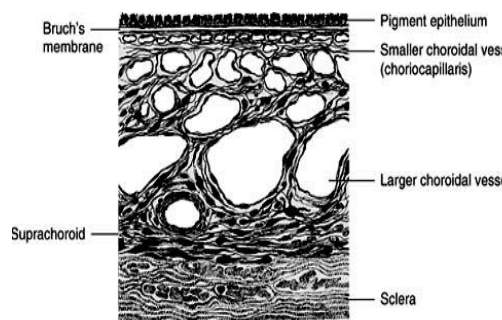




The Ciliary body is triangular shaped and extends 5 – 6mm from the root of the iris to the beginning of the choroid. It is divided into 2 sections; anterior - the Pars Plicata and posterior - the Pars Plana. The Pars Plana is flat, less vascular transition zone between the ciliary body and choroid and terminates at the Ora Serrata, used as an entry point for Pars Plana vitrectomy. The Pars Plicata consists of 60 – 80 ridges

known as ciliary processes that produce aqueous humour. Layers of the ciliary body include the Epithelium – a pigmented and non-pigmented layer; the stroma containing blood vessels, nerves and the ciliary muscles. It is continuous anteriorly with the iris stroma and posteriorly with choroid stroma. The ciliary muscles are smooth muscles, attached to scleral spur and the zonules that control the refractive power of the lens - accommodation, contraction causes relaxation of the zonules causing thickens the lens, relaxation tightens the zonules flattening the lens. The ciliary body also has a minor role in aqueous outflow via the supraciliary lamina – the outermost layer of the ciliary body. (around 10%)

The Choroid is a thin, pigmented, highly vascular tissue (*constitutes 85% of circulation in the eye*) between the sclera and RPE (*Retinal Pigment Epithelium*) that extends from the optic disc to the ora serrata. It has 4 layers; the outer lamina fusca, containing the long posterior arteries and nerves; the stroma containing pigmented loose connective tissue, blood vessels arranged in size – larger vessels in the outer layers, medium vessels then small vessels; melanocytes, fibroblasts, mast cells and collagen are also found here; Choriocapillaris, a single layer of fenestrated capillaries (*larger than regular capillaries*) and Bruchs Membrane, consisting of elastin and collagen, regulates exchange of nutrients oxygen waste products between the choroid and retina. Its role is nutrition, waste removal, regulation of heat, absorption of excess light. All of these structures can be affected by Uveitis.



Part 2 will discuss causes & signs and symptoms of Uveitis.

<http://photobiology.info/Hu.html>

<http://www.sciencedirect.com/topics/neuroscience/ciliary-body>

<http://www.eophtha.com/eophtha/Anatomy/anatomyofuvea.html>

<https://entokey.com/topographic-anatomy-of-the-eye-an-overview/>

<https://www.slideshare.net/FUTUREDESIGNER/uveal-tract-anatomy>



AONAQLD President's Report December 2017

Well I can't believe we are at the end of another year, another great year for AONAQ. There's no better way to finish off the year than with an educational morning. A big thank you to Sarah Patrick from the RBWH Eye Clinic for hosting a successful clinical meeting on Saturday.

Ophthalmologist Dr Conrad delivered a very thorough presentation on Uveitis and Orthoptist Paul Cawood gave us an interesting look at the history of Orthoptics and how the profession evolved. We also had the opportunity to visit the RBWH Eye Clinic.

If you would like to host a clinical meeting in 2018, please contact us through the website. A great opportunity for you, your staff and our members. Also remember if you have been a financial member for two years, you are eligible to apply for an educational grant. Use this grant to attend our conference or meetings in other states or even overseas. Check the website for further details www.aona.org.au

2018 will be a special time for AONAQ, being our 30th year in the making – what an achievement! We have some exciting plans for our conference, so stay tuned!

As we approach the busy, silly season, stay safe and have a wonderful Christmas and New Year's.

See you in 2018!

Pene Gill



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