

# Centre for Eye Research Australia

# Annual Report for 2003

Includes a review of the activities
of the University of Melbourne Department of Ophthalmology
and the Eye Research Australia Foundation



# Centre for Eye Research Australia

Contents	
Chairman's Report	4
Managing Director's Report	5
Awards for 2003	10
Activities as a World Health Organisation Collaborating Centre	11
Vision 2020: The Right to Sight Australia	12
Global Initiative for the Elimination of Blindness	13
The Vision Initiative	14
Vision Co-operative Research Centre	15
Teaching	16
Research:	18
Corneal Research Unit	18
Eye Health Promotion Unit	19
Glaucoma Research Unit	21
Macular Research Unit	21
Ocular Genetics Unit & McComas Family Laboratory	22
Retinal Vascular Unit	24
40th Anniversary - University of Melbourne Department of Ophthalmology	25
Attendance at Conferences and Meetings in 2003	26
Visitors in 2003	28
Research Grants for 2003	30
Publications in 2003	31
Centre for Eye Research Australia Board, Eye Research Australia	
Foundation Trustees, Centre and Department of Ophthalmology Staff	34
Eye Research Australia Foundation Report	40
Abridged Financial Statements:	
Centre for Eye Research Australia	44
Eye Research Australia Foundation	45
Acknowledgements	46



# Chairman's Report Ms Tina McMeckan

In addition to the Vision CRC, other highlights for 2003 include our work on The Vision Initiative and the promotion of Dr Robyn Guymer to Associate Professor.

It was a great honour and pleasure to be appointed Chairman of the Centre for Eye Research Australia, a nationally significant force in the field of advanced research into the prevention, treatment and rehabilitation of eye disease, vision loss and blindness.

In my first report as Chairman, I begin by paying tribute to the outstanding leadership of my predecessor, Mr Charles Macek, who retired as both Chairman and Director in November this year. Charles joined the Centre at its inception in 1996 as the representative of the Ansell Ophthalmology Foundation, one of the Centre's stakeholders. Over the following seven years, Charles has been a dedicated and committed Board member, also providing invaluable expertise and counsel as Chairman of our Finance and Audit Committee. Fortunately, he is not lost to us completely as he will continue in his role as Trustee of the Eye Research Australia Foundation, for which we are most grateful!

At the same time, I would also like to compliment and thank our Managing Director, Professor Hugh Taylor, for the outstanding job he does in leading the Centre's numerous research projects and collaborations. His enthusiasm and energy are infectious and the Centre's successes throughout 2003 are a testament to these qualities. A prime example of this has been his ongoing role in the establishment, formulation and supervision of research programs for the Vision Co-operative Research Centre (CRC), an enormous and ambitious venture of which the Centre is one of four core partners. Professor Taylor is also a Director on the Vision CRC Board and member of the Vision CRC Executive Committee.



In addition to the Vision CRC, other highlights for 2003 include our work on The Vision Initiative and the promotion of Dr Robyn Guymer to Associate Professor. All these achievements reflect very favourably on our staff and I wish to congratulate them all.

I would also like to thank all our private and public benefactors for their continued support of the Centre's important work. We are also indebted to our stakeholders, the University of Melbourne, Royal Victorian Institute for the Blind, Vision Australia Foundation, Royal Victorian Eye & Ear Hospital, Christian Blind Mission International, Ansell Ophthalmology Foundation, Victorian Lions Foundation and Royal Australian and New Zealand College of Ophthalmologists Victorian branch for their much valued support on which we will continue to build.

Ms Tina McMeckan



# This year we celebrated the 40th Anniversary of the University of Melbourne Department of Ophthalmology

This year we celebrated the 40th **Anniversary of the University of Melbourne Department of** Ophthalmology. It was the first **Academic Department of** Ophthalmology in Australia; in fact it was also the first medical speciality Department of any sort. The Centre for Eye Research Australia was established in 1996 and incorporated the activities of the Department. The Centre is a **World Health Organisation (WHO) Collaborating Centre for the** Prevention of Blindness, the only such centre in Australia. It is recognised for its contributions. skills and leadership in eye research, teaching and public health programs. Our success comes from the commitment and effort of our staff, linked with the support and encouragement of our stakeholders.

This has been a year of planning and preparation. We have had some notable achievements and successes during the year and it is with pleasure that these are detailed in this report. However, my sense of the future is encapsulated in the old line "you ain't seen nothing yet!" A lot of programs and activities were set up over the past year and the real benefits and achievements will flow over the next few years. These include the Vision Co-operative Research Centre (CRC), The Vision Initiative in Australia, work with Vision 2020 especially in the Pacific and, much closer to home, our own administrative policies and procedures.

**Staff** The single most important resource the Centre has is clearly our staff. We now have over 50 people working with the Centre and the Department, either full-time or part-time. Without their intelligence, commitment and initiative, in whatever position they hold, we would not be able to achieve what we have.

It was wonderful at the start of the year to celebrate with Robyn Guymer her promotion to Associate Professor. She surely represents the future of academic ophthalmology, a young mother of two who has become Australia's leading clinical authority on macular degeneration and whose research is published in the world's foremost journals. In December we were thrilled to learn that Robyn had been awarded a prestigious National Health and Medical Research Council (NHMRC) Career Development Fellowship that funds her position for the next five years.

This has been a year of planning and preparation. We have had some notable achievements and successes during the year and it is with pleasure that these are detailed in this report.



The Hon. Bronwyn Pike MP, Minister for Health, opening the Colloquium to celebrate the 40th anniversary of the University of Melbourne Department of Ophthalmology. On her left is Professor James Angus, Dean, Faculty of Medicine, Dentistry & Health Sciences, University of Melbourne, on her right, Professor Hugh Taylor



Associate Professor Tien Wona

Last year I wrote about Associate Professor Hector Maclean's contribution over the previous 26 years before his retirement in January. We were delighted to welcome Associate Professor Tien Wong who joined us in a part-time capacity in July and starts full-time in January 2004. Tien is from Singapore and has also trained in the US and Australia. His work on retinal vascular changes as an indication of systemic disease has revolutionised the field and been published in the world's leading journals. We are proud that we were able to attract him to Melbourne and I know he has a superb future ahead of him.

Associate Professor Jill Keeffe has also had an extremely successful year. She leads a number of our largest programs, such as the Lions Eye Health Promotion and Lions Low Vision programs discussed elsewhere in this report. She also has a major role in The Vision Initiative and the Vision CRC.

Unfortunately we cannot keep her skills and expertise "under a bushel" and she is in high demand to advise on low vision and eye health programs around the world with the WHO, Lions International, Christian Blind Mission International (CBMI) and other organisations.

I would also like to recognise the great contribution that Rod Watts has made since he joined us as Executive Manager at the end of 2002. Over the last year he and his staff have done much to streamline our administrative and financial procedures so our researchers can confidently get on with their jobs and research. With help from Clive Mitchell, our executive team has built a firm basis for our future activities.

Research Our staff is renowned for their world-class research on eye disease. Their success is documented throughout this report. The essential prerequisite for good research is said to be a "good idea and running water". Often you can get away without the running water, but a good idea is essential. In addition, you must have the grants and funds to support the work. Although we were disappointed this year to have several key grants not funded by NHMRC, our success with other applications was pleasing and we are most grateful to the organisations, trusts and individuals who had faith in us and our work and who supported us.

The Centre is a recognised research institute. As such we are eligible to receive infrastructure funding from the Victorian Government. Although we have had to wait some years for this funding to build up, it now makes a vital and critical difference to our ability to get on with the job. We gratefully acknowledge this support.



Dr Xavier Csar (left), Manager, BioMedical Research, Dept. Innovation, Industry and Regional Development, and the Hon. Matt Viney MP (third from left), Parliamentary Secretary - Innovation and Industry, with Professor Taylor and the Centre's Unit Heads

**Vision Co-operative Research** Centre (CRC) Our biggest success this year has been the Vision CRC. The CRC Program was set up by the Federal Government as a way to bring different research and academic groups together within industry to develop and commercialise new ideas. A lot of time was spent in establishing the new Vision CRC that was initiated on 1 July 2003 and formally launched by the Minister for Science, the Hon. Peter McGauran MP on 30 October 2003. The Centre is one of four core partners in the Vision CRC, the others being the Institute for Eye Research and the International Centre for Eye Care Education in New South Wales, and the LV Prasad Eye Institute in Hyderabad, India. There is a total of 34 partners from leading centres around the world. The Vision CRC is the largest CRC, it receives \$32 million over seven years from the Commonwealth Government and with the contribution in cash and in kind from the parties, the total will be over \$360 million. It aims to eliminate refractive error as a cause of visual impairment and is truly a prodigious undertaking.

### Collaboration

### **University of Melbourne**

The Centre for Eye Research Australia grew out of the University Department of Ophthalmology and the University is a stakeholder in the Centre. The Centre has greatly enhanced research and training in ophthalmology and we greatly value the close linkage and relationship with the University. The University is also specifically linked to the Vision CRC and supports its activities.



### **Royal Victorian Eye & Ear Hospital**

The Hospital is also a stakeholder in the Centre. We both value the close links and shared resources for clinical activities, research and teaching. In many ways the Centre is the research arm for the Hospital.

# WHO and International Agency for the Prevention of Blindness

As a WHO Collaborating Centre we work closely with the WHO on a number of programs and activities. The International Agency for the Prevention of Blindness (IAPB) is the global body of non-government organisations and others working on the prevention on blindness. I serve as Chairman for the Western Pacific Region for IAPB. In 1999, the WHO and IAPB launched Vision 2020 – The Right to Sight, an ambitious global initiative to eliminate avoidable blindness by the year 2000.

We host the Vision 2020 regional co-ordinating offices for the Western Pacific. Dr Richard Le Mesurier is the Western Pacific Regional Co-ordinator and he has wide ranging responsibilities in East Asia and the Pacific countries. His position is supported in part by CBMI – another stakeholder. Associate Professor Keeffe and I serve on a number of WHO/IAPB groups dealing with Vision 2020, trachoma, low vision services and training.

Professor Brien Holden OAM at the launch of the Vision Co-operative Research Centre at the University of New South Wales in October



### Vision 2020: The Right to Sight Australia

As part of the global program a national body, Vision 2020 Australia was established in 1999. With Professor Brien Holden OAM, I was the foundation Co-Chairman and continue to serve as a Deputy Chairman. The current Chairman is the Hon. Dr Barry Jones AO. The Centre has close links with Vision 2020 Australia and participated in the World Sight Day activities (the second Thursday in October) that in 2003 were held in Parliament House in Canberra.

The Centre is also a major player in The Vision Initiative. The campaign, publicly known as "Save your Sight – Get Tested", is funded by the Victorian Government and co-ordinated by Vision 2020 Australia. The Centre is evaluating the impact of this Initiative as part of its Vision CRC activities.

### **Lions Clubs**

The Lions continue to provide us with great support. In addition to being a stakeholder, they assist with the Lions Corneal Donation Service (Eye Bank), which is part of the Centre. They also support the Lions Eye Health Project, the Lions Low Vision Project and other work on diabetes performed by the Eye Health Promotion Unit.

A team of dedicated bike riders from the Centre participated in the Lions Mallacoota to Melbourne 650 km bike ride. This was the 10th Annual Ride for Sight the Lions in Gippsland have organised that helps support our work. It was a fantastic effort and the Lions of District V2 donated the \$40,000 they raised to help us renovate new offices for our expanding staff. We are most grateful for this generous gift.



# Royal Victorian Institute for the Blind and Vision Australia Foundation

Although still two separate organisations, these two stakeholders are well advanced in the process of combining with the Royal Blind Society of New South Wales to form a new organisation. Each organisation gives us tremendous support - Associate Professor Guymer is the Royal Victorian Institute for the Blind Fellow, and the Vision Australia Foundation support Associate Professor Keeffe's research. In addition, each organisation collaborates with us on a number of research projects.

### **Eye Research Australia Foundation**

A report of the Foundation's activities is presented later, but we at the Centre very much appreciate their hard work to support us. Our staff has welcomed the opportunity to meet Foundation supporters on a number of tours of the Centre to discuss their research activities.

We are excited by the prospects of additional funding through the G.W. Crock Fellowship when it becomes established and fully funded.

Many of the Centre's staff also participated in the Foundation's Melbourne Marathon. It was not only hard work, but also a lot of fun and raised a significant amount of money.

### **Neurosciences Victoria**

In July 2003, the Centre became a member of Neurosciences Victoria. We are very pleased to be in partnership with the Howard Florey Institute, National Stroke Institute, University of Melbourne, Brain Research Institute, Monash University and Mental Health Research Institute of Victoria in this venture.

Thank You I want to thank all the members of the Centre's Board for their commitment and expertise throughout the year and especially Chairman Charles Macek. Charles was a founding Board member and Chairman for two years. We have greatly benefited from his insightful and wise counsel that has been freely and warmly given. I am delighted to welcome the new Chairman, Tina McMeckan, who has enthusiastically accepted the challenge. I also want to thank all our staff, more than 50 in all, for their dedication and hard work. Together we are making progress in understanding more about eye disease and our ability to reduce the amount of vision loss and disability in our community.



Professor Hugh R. Taylor AC



Associate Professor Jill Keeffe with a reporter after the launch of the Diabetic Retinopathy Handbook in May 2003

# Awards for 2003



Dr Ecosse Lamoureux



Dr Amy Cohn



Ms Judy Carrigan

### Research Award: Dr Ecosse Lamoureux

Dr Ecosse Lamoureux has displayed a high level of professionalism in his research work at the Centre. In addition to his own research, he is a nominated supervisor of Doctor of Philosophy (PhD) and Advanced Medical Science students. He provides support to other students in the design and analysis of their research. He has accepted a leadership role within the Eye Health Promotion Unit for administrative functions and also in the mentoring of other staff.

During 2003 he has had two first author papers and three as co-author accepted for publication in high-ranking international journals. A further two papers were published from his PhD thesis, one as first author. Ecosse has been named chief investigator on two successful grants and has made major contributions to other grants that are still awaiting decision on award.

### Travel Award: Dr Amy Cohn

Dr Amy Cohn is a Masters Student with the University of Melbourne who plans to enter the ophthalmology training program at the Royal Victorian Eye & Ear Hospital.

Amy worked very hard during 2003 and has received a University scholarship to support her studentship for 2004. Her thesis will be titled "Autosomal Dominant Optic Atrophy: Correlating Disease Severity and Optic Disc Appearances". Her supervisor is Associate Professor David Mackey.

Amy presented a paper detailing her research at the Neuro-ophthalmology Society of Australia meeting in December that received very good reviews. She will present further findings at the Association for Research in Vision and Ophthalmology meeting in Fort Lauderdale in April 2004 and we are pleased that this award will help subsidise her travel to this meeting.

# Administration Award: Ms Judy Carrigan

As Professor Taylor's Personal Assistant, Judy performs a key role as the interface between the Centre and the outside world. She has important responsibilities in managing the activities of the Centre's Board and its various committees and other meetings.

In addition, she plays a key role in the effective functioning of the Centre. As a senior member of the Administrative Unit she provides timely and invaluable support to all the Units and their staff. She is an excellent role model to newer members of staff for whom she is a great mentor.

Often the answer to many problems in the Centre is "Ask Judy"; she is sought by staff and students for advice that she readily provides. Her commitment and high standards are an example to us all.



# Activities as a WHO Collaborating Centre

During 2003, the Centre undertook a wide range of WHO-related activities for the prevention of blindness

The Centre for Eye Research Australia was originally designated a WHO Collaborating Centre for the Prevention of Blindness in 1992. In 2002, this designation was renewed for a third time, to 14 August 2006.

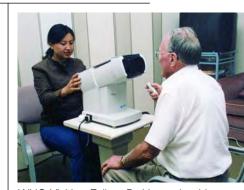
The terms of reference of the Centre are to:

- participate actively in the development of activities for the prevention of blindness
- provide facilities for the training of personnel at different professional levels, especially from developing countries
- conduct applied field research on the epidemiology, management and operational aspects of avoidable blindness
- foster a multidisciplinary approach to the promotion of eye health and to the delivery of eye care, including rehabilitation, to all
- participate in the collection, elaboration and distribution of pertinent information.

During 2003, the Centre undertook a wide range of WHO-related activities for the prevention of blindness. Included in this category is the global initiative for the elimination of blindness described in later parts of this report, also the work that Associate Professor Keeffe and her Unit undertake on behalf of the WHO Low Vision Working Group which she chairs. Professor Taylor plays an important role as an advisor to the WHO Alliance for the Global Elimination of Trachoma, and attended meetings in Geneva in January and August in this capacity. Similarly, Dr Deb Colville produced an educational publication in the form of a multi-author teaching manual entitled

"An International Workshop on Gender Mainstreaming in Health", based on a collaboration with the WHO and UN at Bellagio, Italy, in 2001. This work is continuing in Australia and the Centre participated in the National Medical Educators Gender Skills Workshop held at Monash University in December 2003.

We were very pleased to host WHO Visiting Fellow Dr Huanming Liu from Shandong Provincial Qianfoshan Hospital, Jinan City, Shandong Province, People's Republic of China. She came to the Centre in September on a six-month placement to work with Associate Professor Keeffe and her staff on The Vision Initiative.



WHO Visiting Fellow Dr Huanming Liu



# Vision 2020: The Right to Sight Australia

provides a platform for Australian eye health professionals to work together

Each year, Vision
2020 Australia
participates in World
Sight Day activities
designed to promote
awareness of the
problem of global
blindness.

The WHO has established that globally there were around 45 million people who were blind and an additional 135 million people who suffered from visual impairment. This led to the establishment in 1999 of Vision 2020: The Right to Sight, a global initiative to eliminate avoidable blindness by the year 2020. This initiative builds on the alliance between WHO and the International Agency for the Prevention of Blindness.

Vision 2020: The Right to Sight - Australia, which was launched one year later, provides a platform for Australian eye health professionals to work together. It has three areas of interest; the Australian Community, Aboriginal and Torres Strait Islander Communities, and Global Eyecare.



The Hon. Julie Bishop MP, the Hon. Dr Barry Jones AO and Professor Taylor at the launch of World Sight Day at Parliament House, Canberra, 9 October 2003

# THE RIGHT TO SIGHT A U S T R A L I A

Each year, Vision 2020 Australia participates in World Sight Day activities designed to promote awareness of the problem of global blindness. In 2003, the newly appointed Federal Minister for Ageing, the Hon. Julie Bishop MP, launched World Sight Day at Parliament House, Canberra on 9 October. She was joined by the Hon. Dr Barry Jones and Professor Taylor in speaking about the importance of eye health and the role of Vision 2020 Australia in raising awareness both nationally and on a global basis to help prevent avoidable blindness and vision loss throughout the world.

Further information on Vision 2020 Australia is available at: www.vision2020australia.org

# Global Initiative for the Elimination of Blindness

Dr Richard Le Mesurier is the Regional Co-ordinator for the Western Pacific for Vision 2020 and Professor Taylor is the Regional Chairman.

Highlights for 2003 included Declarations of Support for Vision 2020 in five more countries, with Mongolia, Nauru, South Korea, Tonga and Vanuatu now being added to the large list of countries that support Vision 2020. A number of Vision 2020 workshops and seminars have also been held throughout the region that have facilitated the development

of National Action Plans for countries such as Fiji, Mongolia and South Korea.

A strong relationship with the WHO Western Pacific Regional Office in Manila and the WHO country representatives has been forged. In addition, the introduction of the Vision 2020 Government Toolkit, the World Health Assembly Resolution on Prevention of Avoidable Blindness passed in Geneva in May, and the publication of an important paper on the health economics of blindness and Vision 2020 intervention, are all powerful advocacy tools for the region.



Professor Taylor (seated 2nd right) and Dr Richard Le Mesurier (standing 4th from right) at the signing of the South Korean Declaration of Support for Vision 2020, 27 October 2003



## The Vision Initiative

is the world's first large-scale public eye health program committed to improving the vision of the community



Vision Initiative cards

In October 2002, the Victorian Government granted \$1.8 million over three years to Vision 2020 **Australia to fund The Vision** Initiative. This program, that grew directly out of the Centre for Eye Research Australia's research findings and public health activities, has a steering committee that includes the **Centre, Optometrists Association** Australia, Royal Australian and **New Zealand College of Ophthalmologists, Royal Victorian** Eye & Ear Hospital, Royal Victorian Institute for the Blind and Vision Australia Foundation.

It promotes professional best practice and allows ophthalmologists, optometrists, general practitioners, pharmacists and other vision specialists to promote a consistent message to their community regarding eye care.



The Hon. Bronwyn Pike MP, the Hon. Dr Barry Jones AO and Professor Taylor at the launch of the "Save Your Sight - Get Tested" campaign in the Melbourne City Square, 25 November 2003

The Vision Initiative is the world's first largescale public eye health program committed to improving the vision of the community by health promotion and developing best professional practice for eye care services.



Part of The Vision Initiative team

On 25 November, the Victorian Minister for Health, the Hon. Bronwyn Pike MP, launched The Vision Initiative's public campaign, the slogan for which is "Save Your Sight - Get Tested." Also speaking at the launch, the Hon. Dr Barry Jones AO, Vision 2020 Australia Chairman, reiterated the campaign's key messages.

The Vision Initiative's public campaign promotes the simple things that we can do to protect our vision. Health promotion messages for the public, including community service announcements kindly donated by satirists John Clarke and Bryan Dawe, have been produced to alert people to the need for regular eye tests and indicate high-risk groups.

Any program such as this needs to be carefully evaluated. As part of its work in the Vision CRC the Centre is monitoring and evaluating the impact of The Vision Initiative.



# The Vision Co-operative Research Centre (CRC)

The Centre for Eye Research Australia is one of the four core participants in the Vision CRC, other core participants being the **International Centre for Eyecare Education, LV Prasad Eye Institute** (Hyderabad, India) and the Institute for Eye Research. In addition, there are a number of supporting participants including Vision 2020 Australia, WHO, IAPB, CBMI, Lions, and Save Sight Foundation. Professor Taylor is a member of the Board of the Vision CRC. The objectives of the Vision CRC are to become a leader in research, education and the delivery of vision correction; improve international eyecare; and maximise commercial opportunities.

Although the official start-up date for the Vision CRC was 1 July, the Centre's staff have been engaged in numerous planning activities and meetings related to this exciting venture since the announcement of its funding in December 2002. These activities have involved the finalisation of contractual and program agreements, together with the detailed development of various research programs. Professor Taylor, Associate Professor Keeffe and researchers from the Eye Health Promotion Unit worked closely with Professor Brien Holden, Associate Professor Debbie Sweeney, Professor Nag Rao and other researchers from the Vision CRC in a two-day meeting in April to work on one of the five major program areas, Vision Care Delivery. There was also a four-day meeting in March attended by Professor Taylor, Dr Paul Baird and their Vision CRC colleagues to develop the myopia research program.



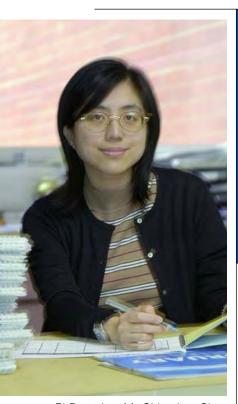
Attendees at the Vision CRC workshop held in April to work on the Vision Care Delivery program

Detailed project agreements have now been formulated within each of the program areas and are being finalised. The Centre is involved in six project agreements; myopia genetics, eye care delivery, enabling technology - the retinal camera, enabling technology - low cost spectacles, Aboriginal eye health, and The Vision Initiative.



# **Teaching**

# Postgraduate research training is an important component of the Centre's activities



PhD student Ms Shiao-Lan Chou

Teaching activities focus on integrating within the education of a number of "student" groups the Centre's research on the determinants of eye disease, ophthalmic clinical care, and eye health promotion in the community. The activities are curriculum development, face-to-face teaching, support for ophthalmologists as teachers, and educational research and publications. The Centre also has an active program of research degree students.

This year our research students have benefited from the Journal Club organised by the Eye Health Promotion Unit for all researchers. Our medical school undergraduate research students have also participated in preparatory courses in laboratory methods, epidemiology and biostatistics, and qualitative methods.

Student groups include eye registrars, medical students, general practitioners, undergraduate and postgraduate research students.

Postgraduate education in ophthalmology is conducted under the direction of the Hospital Clinical School, while the Centre assists with the teaching program and occasional research projects generated by registrars. The Centre also participated in the development of the Epidemiology Module within the new Royal Australian and New Zealand College of Ophthalmologists ophthalmology curriculum.

Postgraduate research training is an important component of the Centre's activities, and includes medical and science graduates in Masters or PhD courses and medical graduates doing MD degrees. The following students are currently enrolled:

### Degrees Awarded

### Master of Medicine (Ophthalmology)

Dr Andrew McAllan: "The relative values of diagnostic criteria in glaucoma: diagnostic criteria and glaucoma screening."

### **Bachelor of Science (Honours)**

Mr Elie Khalil: "Analysis of two cholesterol pathway genes in age-related macular degeneration."

### **Advanced Medical Science**

Mr Jason Lee: "The use of the laser flare meter in the diagnosis and management of corneal graft rejection."

Miss Xiang Hua Loh: "Laser flare readings in a cohort of patients following corneal transplant."

## Theses Submitted

### **Doctor of Medicine**

Dr Anthony Chiu: "The role of cholesterollowering medications ("statins") in the progression of Age-related Macular Degeneration."

Dr Niro Narendran: "Genetics of age-related macular degeneration."

# Theses in Progress Doctor of Philosophy

Ms Shiao-Lan Chou: "Economic evaluation of rehabilitation programs for people with impaired vision."

Ms Gillian Cochrane: "Development of a model of care for children with vision impairment."

Dr Van Lansingh: "Primary health care approach to trachoma control."

### **Doctor of Medicine**

Dr Matthew Chamberlain: "Hereditability of features of early age-related macular degeneration: a twin study."



# **Teaching**

Dr Claire Hooper: "Does cataract surgery precipitate choroidal neovascular membranes in susceptible eyes?"

Dr Reuben Phiri: "Diabetic retinopathy screening; use of the Polaroid non-mydriatic camera versus the digital non-mydriatic camera."

### **Advanced Medical Science**

Mr Shane Battye: Project related to protein analysis of donor age-related macular degeneration tissue.

Ms Sing Pey Chow: Project related to diabetic retinopathy studies.

Ms Cheryl Leung: Project related to vision and quality of life measurements.

Ms Kay Yan Lo: Project related to monitoring and evaluation of The Vision Initiative.

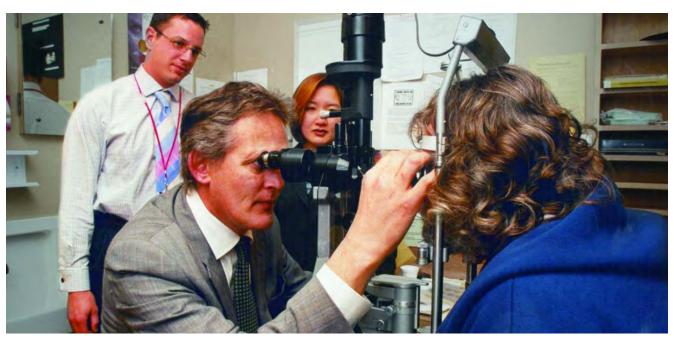
### **Alcon Visiting Professor Program**

Alcon Australia continued to fund a Visiting Professor Program in 2003. We are most grateful for their ongoing support of this important program. The three invited speakers listed below each spent one day with us and Hospital staff. During this time, they gave two lectures on their particular area of speciality and participated in ward rounds and public clinics.

June 2003 Dr Andrew Chang, Sydney

September 2003 Dr Mark Gillies, Sydney

October 2003 Associate Professor Graham Barrett, Perth



Dr Mark Gillies, Alcon Visiting Professor Program, September 2003



# Research

# Activities at the Centre for Eye Research Australia revolve around the work of our five Units

The Lions Corneal
Donation Service is
primarily a service
provider, supplying
donor corneal tissue,
sclera and amniotic
membrane to surgeons
for transplantation
procedures performed in
Victoria, Tasmania and
occasionally other states.

Research activities at the Centre for Eye Research Australia revolve around the work of our five Units, each of which utilises the skills and expertise of its specialised staff to fulfil the Centre's vision of eliminating vision loss and blindness in our community.

### **Corneal Research Unit**

The Corneal Research Unit includes the work of the Lions Corneal Donation Service, research activities of the Melbourne Excimer Laser Group and affiliated Hospital Corneal Unit consultants, and projects undertaken by Corneal Fellows under the supervision of Corneal Research Unit staff.

The Lions Corneal Donation Service is primarily a service provider, supplying donor corneal tissue, sclera and amniotic membrane to surgeons for transplantation procedures performed in Victoria, Tasmania and occasionally other states. Research activities are focused on issues relating to corneal transplantation and related procedures and may be summarised as follows:

- (a) The Artificial Cornea Trial: This is an international multi-centre trial of the AlphaCor Keratoprosthesis, a new form of artificial cornea.
- (b) Cultivation of Corneal Epithelial Cells: This study aims to reconstruct a healthy ocular surface in patients with total limbal stem cell deficiency by grafting "stem cells" grown on amniotic membrane carrier which has been cultivated from donor eyes.

(c) Early Graft Failure: An extensive analysis of our donor database indicates that no one factor contributed to a higher incidence of graft failure. This suggests that a close study of recipient charts may be invaluable to shedding light on reasons for graft failure.



Dr Grant Snibson performs eye surgery on a patient

### **Refractive Surgery Research**

The Centre continues to play a role in the ongoing evaluation of excimer laser procedures, both in the correction of refractive error and in the treatment of corneal disease. Current projects include:

- (a) Evaluation of current treatment algorithms for LASIK using Bausch and Lomb 217z Excimer laser and the AMO Amadeus Microkeratome in the treatment of myopia, astigmatism and hyperopia.
- (b) Genetics of myopia.
- (c) The role of excimer laser phototherapeutic keratectomy in the treatment of painful bullous keratopathy.



## Research

### **Cyclosporin Studies**

Two clinical trials of cyclosporin A are currently in progress, one on the management of corneal allograft rejection, the other on treatment of steroid dependent atopic and vernal keratoconjunctivitis.

### **Topical Antibiotic Prophylaxis**

A clinical study to evaluate the effect of three topical preparations on the conjunctival flora of patients with sutures in place following corneal transplantation has been completed. The results are currently being analysed.

### **Microbial Keratitis Study**

A clinical trial of three topical antibiotic regimes for the treatment of microbial keratitis commenced in 2002. This study, which is funded by Alcon, will be finalised in 2004.

### **Eye Health Promotion Unit**

This Unit, under the leadership of Associate Professor Keeffe, has grown significantly in size and output over the last 12 months. Core research focuses on projects related to The Vision Initiative, quality of life and economic impact of vision impairment, low vision and diabetic retinopathy.

### The Vision Initiative

The Unit is responsible for conducting the research and evaluation components of The Vision Initiative, a comprehensive public health program designed to prevent avoidable blindness and to reduce the impact of vision impairment on individuals and the community.

The first recruitment stage of The Vision Initiative has been completed. By November 2003, 1,700 participants aged between 70 and 79 years from randomly selected metropolitan postcode areas, stratified by socio-economic status, had been enrolled.

Each responded to a self-administered questionnaire designed to evaluate the eye health promotion strategies used, after which an eye examination was performed. The second stage of The Vision Initiative will be repeated in two years time to assess changes due to its implementation.

### **Vision Impairment and Low Vision**

Four separate studies are currently underway that focus on factors related to vision impairment and low vision:

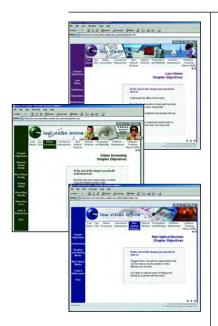
(a) Burden of Eye Disease - Impact of Vision Impairment: This study has been designed to determine the vision-specific rehabilitation needs of people with vision impairment and to measure the outcomes of vision rehabilitation programs. To accomplish this, a 32-item questionnaire, the Impact of Vision Impairment, has been developed. Using this tool, 319 participants with low vision have been tested pre- and post-rehabilitation services, generating a comprehensive data set that has allowed us to identify factors related to the need for low vision services and the impact of age-related macular degeneration and diabetic retinopathy.

Guide Dogs Victoria Neurological Mobility Service is also working with the Centre on a study into people's quality of life resulting from a sudden acquired vision loss, most commonly the result of stroke, accident or substance abuse.

(b) Economic Evaluation of Rehabilitation
Programs for People with Impaired Vision:

The Vision and Quality of Life index (VisQoL), which addresses six categories important to quality of life in people with vision impairment, was developed for use in conjunction with the generic quality of life utility instru-





The Low Vision Online website developed by Ms Sarah Squire and Associate Professor Jill Keeffe

ment, AQoLII. The second phase of the pilot study to test the validity of VisQoL has now been completed and results indicate that it should be a useful add-on dimension to the existing AQoLII. Specially designed expense diaries have been used to obtain the indirect costs for people with impaired vision. Three groups of participants have been enrolled, representative of all age groups, including children. Data collection will be completed by July 2004.

- (c) Lions Low Vision Initiative: In many developing countries there is no vision care and a barrier to the establishment of services has been the lack of affordable vision devices such as magnifiers. A source of low-cost vision devices has been identified and these are to be compared with the "gold standard" high-quality devices to demonstrate no significant difference in their performance. A website, to be launched early in 2004, has also been developed to increase awareness about low-vision issues and educate people working with those with low vision. The website address is: <www.lowvisiononline.org> The Lions Low Vision Initiative continues its weekly radio segment on 3RPH. A series of Technology Information days was also conducted in regional Victorian centres to inform people with low vision of the range of devices available to assist them.
- (d) Development of a Model of Low Vision
  Care for Children: Globally, less than
  10% of school age children with vision
  impairment are able to receive a school
  education. This study will assess the
  needs of such children and categorise
  them into three levels so that the requirements for human resources, equipment
  and infrastructure can be incorporated
  into National Vision 2020 plans.

### **Diabetic Retinopathy**

The Eye Health Promotion Unit continues to pursue various approaches to aid with the early detection of diabetic retinopathy.

### (a) Diabetic Retinopathy Screening:

A Department of Human Services (DHS) funded resource guide for community-based partnerships such as Divisions of General Practitioners and Primary Care Partnerships has been published and distributed through the DHS and the Centre's website.

(b) Diabetic Retinopathy Screening: This study aims to show that screening for diabetic retinopathy with the polaroid camera, which is easy to use and does not require computers or computer literacy, is as effective as screening with the digital camera, a more technologically advanced instrument. As part of the Centre's ongoing research into enabling technology for the Vision CRC, a new portable non-mydriatic camera that is small, portable, easy to use and cheap is also being developed for testing.

### (c) Lions Eye Health Program-Australia:

The Lions Eye Health Program-Australia (LEHP-Australia) is a community-based public awareness and education program delivered through Lions Clubs, the objective of which is to prevent vision loss or blindness resulting from diabetic retinopathy or glaucoma. This year saw the program's continued introduction nationally. A LEHP-Australia Challenge was also issued to all 1,350 Lions Clubs in Australia to ensure that all Lions members themselves heed the LEHP-Australia message, namely the need for regular, comprehensive eye examinations.

## Research

(d) AusDiab Study: Dr Alex Harper has graded all the retinal photographs from participants of a population-based study of diabetes in Australia undertaken by the International Diabetes Institute to provide accurate information on the prevalence of diabetes and retinopathy in Australia.

### **Glaucoma Research Unit**

The Glaucoma Research Unit, which Dr Julian Rait heads, is currently running three clinical trials:

- (a) A five-year post-marketing safety study of Latanoprost (Xalatan) compared to usual care (Pharmacia).
- (b) A trial of a prostaglandin drug (Alcon) that has now been in train for four years with a further year to go.
- (c) A trial of a neuroprotector (Allergan) that will be completed at the end of 2006.

Dr Rait has also been working on the development of a computerised decision support system for the management of open-angle glaucoma. The aim of this project, which is funded by Allergan Australia, is to improve visual functioning and quality of life for people with this condition.

### **Macular Research Unit**

The Macular Research Unit, under the leadership of Associate Professor Robyn Guymer, has grown significantly in size and output during 2003. This Unit's studies continue to investigate the genetic and environmental risk factors for age-related macular degeneration (AMD) and to define treatments to slow progression of this disease.

### **AMD Inheritance Study Database**

The database of individuals with AMD continues to grow. Information gained from this database allows genetic analyses to be undertaken that hopefully will lead to a better understanding of roles genes play in the pathogenesis of this disease.

### **Genetics of AMD**

Twin Study: This study, conducted in collaboration with the Ocular Genetics Unit, Australian Twin Registry and Professor John Hopper from the Centre for Genetic Epidemiology at the University of Melbourne, aims to better define the hereditability of AMD and uncover potential new risk factors.

### **Epidemiology of AMD**

Dietary and Genetic Risk Factors in AMD: This study, conducted in collaboration with the Ocular Genetics Unit, Professor Hopper and Professor Graham Giles, Director of the Cancer Epidemiology Centre, Cancer Council of Victoria, simultaneously investigates dietary, genetic and other protective/risk factors for AMD in a large cohort of elderly participants of the Cancer Research Centre's Health 2000 Study. If a genetic/environmental interaction is found, it will indicate potential ways to modify the course of AMD in those at higher risk.

### **Clinical Studies**

(a) Functional test to monitor and predict outcome in AMD: In collaboration with Associate Professor Algis Vingrys from the Victorian College of Optometry, tests of retinal function are being developed that will provide a better assessment of early AMD and be a sensitive and specific way to predict risk of severe complications in AMD.



Dr Liubov Robman who is researching the epidemiology of AMD



Poster used to recruit participants for the Twin Study to investigate the genetics of AMD

A major new research thrust was established on the genetics of myopia as part of the Vision CRC.

- (b) Cholesterol lowering medications (statins) in the progression of AMD: This randomised control trial aims to determine whether statin treatment, administered over three years to people with high-risk fundus changes, can slow the progression of AMD.
- (c) The Geelong Osteoporosis Study: In collaboration with Professor Geoff Nicholson and his team at Geelong Hospital, retinal photographs will be taken of their cohort of women aged 50 years and over who participated in a study that monitored the protective role of statins for osteoporosis over a decade, to determine the prevalence of AMD. This study will help provide evidence as to what, if any, role statins have in delaying the progression of AMD.
- (d) Cataract Surgery and Age-related Maculopathy: This study sought to determine if cataract surgery in people with high-risk AMD eyes induces the neovascular complications of AMD. It also addressed whether the quality of life for people with both AMD and cataracts improved after surgery. Analysis of the 70 participants enrolled in this study indicates a tremendous benefit to the quality of life of a patient with successful cataract surgery as seen by our assessment pre and post surgery. Analysis is underway to determine the risk of AMD complications.
- (e) The EYETECH Anti-Vascular Endothelial Growth Factor International Multicentred Study: In this study, a drug that blocks the action of vascular endothelial growth factor (VEGF) is injected intravitreally into the eyes of people with classic choroidal neovascularisation secondary to AMD in the hope that this drug will halt the growth of new blood vessels beneath the retina. Fourteen people have been enrolled in this study that

- involves six-weekly injections of this anti-VEGF drug over a two-year period.
- (f) The ALCON Anocortave acetate study for choroidal neovascular membranes secondary to Age-related Macular Degeneration: This study is investigating a different antiangiogenic drug with a different mode of delivery to the anti-VEGF drug being tested in the EYETECH Study. As one of two recruiting sites in Australia, the Centre has 15 participants enrolled in this trial.

### **Animal Studies**

Hypercholesterolaemic rats: can statins reverse the damage in Bruch's membrane?

This study, undertaken in collaboration with Associate Professor Vingrys, aims to determine whether the administration of the cholesterol-lowering medication "statins" will reverse the lipid build up in Bruch's membrane of rats that have been fed a high fat, Westernstyle diet, thereby improving retinal function.

# Ocular Genetics Unit and McComas Family Laboratory

Dr Paul Baird oversees the research in this area. The laboratory-based aspects of the genetics of glaucoma concluded this year, while studies on the genetic basis of agerelated macular degeneration (AMD) continued throughout 2003. A major new research thrust was established to investigate the genetics of myopia as part of the Vision CRC.

The outcome of the various glaucoma studies may be summarised as follows:

### The Myocilin Gene

(a) The Glu368STOP mutation of myocilin in the Blue Mountains Eye Study:

The Glu368STOP mutation of the myocilin gene is the most common mutation so far



## Research

identified in glaucoma. Two thousand individuals from the Blue Mountains Epidemiological Eye Study conducted in New South Wales were screened for this mutation. Although not identified in the glaucoma cases within this population (reflecting its low disease prevalence), it was identified in two individuals, both of whom did not appear to have a history of glaucoma. This finding corroborates earlier reports of the presence of this mutation in individuals from the general population.

(b) Establishing a global haplotype of the Glu368STOP mutation of myocilin:

A collaboration with Dr Vincent Raymond from Quebec was established to compare the Glu368STOP disease haplotype of French-Canadian families from Quebec with Glu368STOP containing families from South East Australia. This study confirmed that all examined glaucoma families shared the same haplotype and were therefore most likely descended from a common ancestor.

(c) Genetic discovery in glaucoma: Statistical analysis of a large glaucoma family, undertaken in collaboration with Dr Alexandre Bureau from the University of Lethbridge, Alberta, Canada, has identified a second putative disease locus on chromosome 3. Additional statistical analysis of this family is also underway using individual clinical parameters of glaucoma to try and identify putative gene regions. This work is being undertaken in collaboration with Ms Jacqui Charlesworth from the Menzies Centre, Hobart.

### The Optineurin Gene

Mutation screening of the optineurin gene, a second glaucoma gene, was completed in individuals from the Blue Mountains Eye Study. A risk factor allele, M98K, was identified at a higher, but not significant level, in glaucoma patients. Two other variants were also identified within this gene but appear unlikely to be associated with disease. Research into the genetic basis of AMD continues. A number of different but related studies undertaken by the Unit involve:

### **Retinal Tissue Bank**

A more efficient process was established to allow retrieval of donor eyes for the purpose of investigating protein and RNA expression in AMD. Initial protein studies have been undertaken using a monoclonal antibody to  $\beta$ -amyloid, a protein typically associated with Alzheimer's disease. A number of other monoclonal antibodies are now being applied to identify the proteins found in the drusen of AMD patients.

# The Role of Cholesterol genes in Age-related Macular Degeneration

- (a) The Apoliprotein Gene (ApoE): Statistical analysis of a large cohort of cases and control samples confirmed that the common polymorphic variants ( $\epsilon 2$ ,  $\epsilon 3$  and  $\epsilon 4$ ) of the apoE gene are associated with AMD. The ε4 allele appears as a protective factor in individuals who have an ε3ε4 genotype, leading to an approximate halving of disease risk for end-stage AMD relative to those with the  $\varepsilon 3\varepsilon 3$  genotype. This protective effect appears to be greatest in individuals who have the dry form of disease and are male. However, individuals with the  $\varepsilon 2\varepsilon 3$  genotype appear to have an earlier age of diagnosis of disease relative to those with the  $\varepsilon 3\varepsilon 3$  genotype. This was most apparent in individuals with the wet form of disease who were female.
- (b) The Serum Paraoxonase Gene: Analysis of the serum paraoxonase (PON1) gene, an important component in the cholesterol



Dr Paul Baird, Head of the Ocular Genetics Unit and McComas Family Laboratory

pathway, has identified an association between this gene and AMD in Japanese individuals. Two genetic variants within the gene were identified in our cohort of Anglo-Celtic individuals and were assessed for their association with AMD. No significant association was detected in Anglo-Celtic individuals but a significant difference in the frequency of these alleles was found in Anglo-Celtic compared to Japanese individuals.

### **Early Onset Drusen**

Individuals who presented with clinical signs of AMD, but at an earlier age than would be expected (less than 60 years), were identified with the aim of pinpointing a genetic component to this disease.



Ms Pam Garoufalis "at the bench" in the McComas Family Laboratory

In the first study, a single point mutation (Arg345Trp) in the EFEMP1 gene that has previously been associated with both Malattia leventinese and Doynes Honeycomb retinal dystrophy, both early onset macular diseases, was screened in this cohort of early onset drusen patients. However, neither this change nor any other mutation in the EFEMP1 gene was detected in these individuals, indicating that this gene was unlikely to be involved in disease.

An early onset drusen family with an index case of clinical Doynes Honeycomb Retinal Dystrophy was identified. All family members were screened for the Arg345Trp mutation of the EFEMP1 gene, previously described as causing all cases of this disease. However, no members of this family presented with this mutation. A second disease gene for Doynes Honeycomb Retinal Dystrophy may explain this finding.

A third study involved a large early onset drusen family presenting with both early onset AMD and polycystic kidney disease (PKD). Analysis of a known mutation in the PKD2 gene in this family was undertaken and revealed that onset of maculopathy occurred at an earlier age in individuals who also inherited the PKD2 gene mutation. These findings support the hypothesis that this mutation may act as a modifier of macular disease.

### The Genetics of Myopia (Shortsightedness)

As part of the Vision CRC, the Ocular Genetics Unit has commenced a study in collaboration with the Melbourne Excimer Laser Group (MELG) to investigate the genetic basis of myopia. MELG has approximately 8,000 individuals (index cases) with refractive errors (-1 to -20D) in its database and these will act as an initial point of contact to identify families with myopia. The aim of this study is to identify disease genes involved in the causation of myopia.

### **Retinal Vascular Unit**

Associate Professor Tien Wong joined the Centre in a part-time capacity mid-way through 2003. He will take up a full-time position at the beginning of 2004 as Head of the newly created Retinal Vascular Unit.



# 40th Anniversary

# University of Melbourne Department of Ophthalmology

To celebrate the 40th anniversary of the University of Melbourne Department of Ophthalmology, a two-day colloquium was held at the Royal Victorian Eye & Ear Hospital on Thursday 24 and Friday 25 July 2003.

Entitled "Changes in Ophthalmology", this meeting was opened by the State Minister for Health, the Hon. Bronwyn Pike MP. It celebrated and honoured those who have worked over the last 40 years to make the Department of Ophthalmology recognised both nationally and internationally for its teaching, research and clinical contributions. The colloquium also included a challenging and provocative assessment by renowned experts of the issues in the provision of eye care that face us now and in the future.

Many Department alumni from Melbourne, interstate and overseas attended this meeting that also attracted a wide audience including hospital staff, optometrists, representatives of Government departments, agencies and non-government agencies.

A highlight of our celebrations was the function hosted by the Governor of Victoria, John Landy AC MBE and Mrs Landy at Government House on 24 July in honour of the Department and to recognise and thank a number of our very generous donors to the Eye Research Australia Foundation, of which Governor Landy is Patron. We were also thrilled to have the Chancellor of the University of Melbourne, Mrs Fay Marles AM, propose the toast to the Department at our Colloquium dinner on 25 July at University House.



The audience at the 40th Anniversary Colloquium on Thursday 24th and Friday 25th July 2003



Guests at the Colloquium dinner held at University House on 25th July 2003



Mr John Simpson addressing the Colloquium on "What do they need to know about eye disease? - Diabetic Support Staff"



# Attendance at Conferences and Meetings in 2003

### **Overseas**

7th Meeting of the WHO Alliance for the Global Elimination of Blinding Trachoma, Geneva, January - Professor Hugh Taylor

Singapore Eye Research Institute/Association for Research in Vision and Ophthalmology (ARVO) Meeting, Singapore, February -Professor Hugh Taylor, Dr Ecosse Lamoreux, Associate Professor Tien Wong

창립 30주년 기 of KF & Signing 003년 27일

Professor Taylor speaking at the signing of the South Korean Declaration of Support for Vision 2020, October 2003

International Agency for the Prevention of Blindness (IAPB) Task Force and Executive Meeting, Geneva, February - Professor Hugh Taylor

Alcon Research Institute Meeting, Fort Worth, March - Professor Hugh Taylor

ARVO Meeting, Fort Lauderdale, May -Professor Hugh Taylor, Associate Professor Robyn Guymer, Associate Professor Jill Keeffe, Dr Paul Baird, Dr Niro Narendran, Dr Elaine Wong

American Ophthalmological Society Meeting, Santa Barbara, May - Professor Hugh Taylor

Royal College of Ophthalmologists (UK), Birmingham, May - Dr Niro Narendran

WHO Global Scientific Meeting on Trachoma, Geneva, August - Professor Hugh Taylor

IAPB Task Force and Executive Meeting, Hyderabad, September - Professor Hugh Taylor

IAPB / Vision 2020 Meetings, Ulaanbaatar, Beijing and Seoul, October - Professor Hugh Taylor, Dr Richard Le Mesurier

National Eye Institute Meeting on Age-related Macular Degeneration, Washington DC, October - Associate Professor Robyn Guymer

Christian Blind Mission International Meeting, Bensheim, Germany, October / November -Associate Professor Jill Keeffe



# Attendance at Conferences and Meetings in 2003

Royal Australian and New Zealand College of Ophthalmologists Congress, Auckland, November - Professor Hugh Taylor, Associate Professor Robyn Guymer, Associate Professor David Mackey, Dr Matthew Chamberlain, Dr Amy Cohn, Dr Deb Colville, Dr Alex Harper, Dr Richard Le Mesurier, Dr Graeme Pollock, Dr Julian Rait, Dr Grant Snibson, Associate Professor Tien Wong

Improving Women's Eye Health Symposium, Boston, November - Professor Hugh Taylor invited speaker: "Translating Research Into Public Health Action"

International Trachoma Initiative 5th Anniversary Meeting, United Nations, New York, November - Professor Hugh Taylor keynote speaker: "Priorities and challenges in attaining the elimination of blinding trachoma"

American Academy of Ophthalmology, Anaheim, November - Professor Hugh Taylor

First Taiwan Symposium on Community Ophthalmology, Taiwan, November Associate Professor Jill Keeffe invited speaker: "Vision Impairment and Eye Care, Diabetic Retinopathy Screening; and Foreign Experience of Prevention of Blindness Eye Care Delivery Models"

Asia Pacific Academy of Ophthalmology Meeting, Bangkok, December - Professor Hugh Taylor, Dr Richard Le Mesurier

### **Australia**

Vision CRC Myopia Meeting, Sanctuary Cove, March - Professor Hugh Taylor, Dr Paul Baird

Vision CRC Workshop, Woodend, April -Professor Hugh Taylor, Associate Professor Jill Keeffe, Dr Richard Le Mesurier, Dr Reuben Phiri, Dr Hien Vu, Ms Karen Bradshaw, Ms Shiao Lan-Chou, Ms Gillian Cochrane, Ms Tamara Pollard, Ms Jennifer Hassell

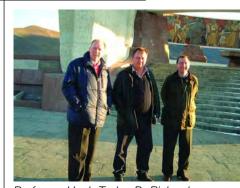
International Congress of Genetics, Melbourne, July - Dr Paul Baird

Changes in Ophthalmology Colloquium, Melbourne, July - all staff

National Health and Medical Research Council Clinical Trials Panel, Canberra, August - Professor Hugh Taylor

University of Melbourne Faculty Planning Conference, Lancemore Hill, October -Professor Hugh Taylor

Australasian Ophthalmic and Visual Sciences Meeting, Melbourne, November / December - Meeting Convenor Dr Paul Baird, Dr Khin Zaw Aung, Dr Ecosse Lamoreux, Dr RoseAnne Misajon, Dr Reuben Phiri, Dr Luba Robman, Mr Shayne Battye, Ms Gillian Cochrane, Mr Peter Dimitrov, Ms Pam Garafoulis, Ms Jennifer Hassell, Ms Nicola Hunt, Ms Andrea Richardson



Professor Hugh Taylor, Dr Richard Le Mesurier and Dr Serge Resnikoff during their visit to the IAPB / Vision 2020 Meetings, held in Ulaanbaatar, Mongolia, Oct 2003

## Visitors to the Centre in 2003



Associate Professor Hector Maclean



Ms Carley Nicholls, Executive Director,
Vision2020 Australia

### January

Dr Lesley Russell, Advisor to Shadow Minister for Health, the Hon. Julia Gillard MP

### **February**

Ms Vicki Taylor, Program Manager, Centre for Remote Health Professor Frank Larkins AM, Deputy Vice-Chancellor (Research), University of Melbourne

### **April**

Hon. Evan Walker AO
Professor Gullapalli Rao, LV Prasad Eye Institute, Hyderabad, India
Hon. Robert Doyle MP, Leader of the Opposition
Hon. David Davis MLC, Shadow Minister for Health
Hon. Bill Forwood MP, Member for Templestowe Province

### May

Mr Peter Jovic, Partner, KPMG Mr Wayne McMaster, Allens Arthur Robinson

### June

Mr Raymond Mow and Mrs Leah Mow
Dr Andrew Chang, Sydney
Professors Dang Van Phuoc, Phan Quan Chi
Hieu, Truong Dinh Kiet and Dang Van
Giap, Ho Chi Minh City

Ms Kim Dung Nguyen, Centre for the Study of Higher Education, University of Melbourne

### July

Hon. Matt Viney MP, Parliamentary Secretary - Innovation and Industry

Dr Xavier Csar, Manager, BioMedical Research, Department of Innovation, Industry and Regional Development Mr Peter Clemenger AM, Director, Clemenger BBDO

Dr Subhabrata Chakrabarti, LV Prasad Eye Institute, Hyderabad, India

Dr Vince Harley, Prince Henry's Institute of Medical Research. Melbourne

# 40th Anniversary of the University of Melbourne Department of Ophthalmology Colloquium included:

Hon. Bronwyn Pike MP, Minister for Health Dr Noel Alpins, Cheltenham Eye Centre Professor James Angus, Dean, Faculty of Medicine, Dentistry & Health Sciences, University of Melbourne

Professor Frank Billson AO, Head, Department of Ophthalmology, University of Sydney

Dr Garry Brian, Chief Executive Officer, International Centre for Eyecare Education

Ms Lisa Briggs, Victorian Aboriginal Community Controlled Health Organisation

Mr Craig Butler, Director, Professional Education, Vision CRC

Dr James Cairns, Former First Assistant, University of Melbourne Department of Ophthalmology

Professor John Catford, Dean, Faculty of Health and Behavioural Sciences, Deakin University

Mr Joe Chakman, Optometrists Association Australia

Professor Doug Coster, Head, Department of Ophthalmology, Flinders Medical Centre

Professor Emeritus Gerard Crock AO, Inaugural Professor, University of Melbourne Department of Ophthalmology

Dr Peteris Darzins, Associate Professor of Geriatric Medicine, Monash Ageing Research Centre

## Visitors to the Centre in 2003

- Hon. John Dawkins AO, Treasurer, International Agency for the Prevention of Blindness
- Dr J.E.K. Galbraith, Director, ASPECT Foundation
- Ms Jayne Gallo, General Manager, Community Services, Vision Australia Foundation
- Dr William Glasson, President, Australian Medical Association
- Dr Robert Grogan, Executive Director, Clinical Services, Royal Victorian Eye & Ear Hospital
- Mr Bob Guest, Chief Executive Officer, Royal Australian & New Zealand College of Ophthalmologists
- Dr Peter Henderson, President, Royal Australian & New Zealand College of Ophthalmologists
- Professor Brien Holden OAM, Chief Executive Officer, Vision CRC
- Mr Graeme Houghton, Chief Executive Officer, Royal Victorian Eye & Ear Hospital
- Hon. Dr Barry Jones AO, Chairman, Vision 2020 Australia
- Ms Dorothy McDiarmid, Managing Director, CIBA Vision
- Ms Carley Nicholls, Executive Director, Vision 2020 Australia
- Professor Denis O'Day, Executive Director, American Board of Ophthalmology
- Associate Professor Justin O'Day, Representative, Royal Australian & New Zealand College of Ophthalmologists
- Dr Joseph Reich, Camberwell Eye Clinic Day Surgery and Laser Centre
- Ms Helen Robbins, Past President, Optometrists Association Australia
- Professor Graeme Ryan AC, Chairman, Royal Victorian Eye & Ear Hospital Board
- Dr Hugh Ryan, Former Chairman, Ophthalmic Research Institute of Australia

- Professor Richard Smallwood AO, Immediate Past Chief Medical Officer, Department of Health and Aged Care
- Dr Damien Smith AM, President, World Council of Optometry
- Dr Shane Solomon, Executive Director, Metropolitan Health and Aged Care Services, Department of Human Services
- Mr Craig Stamp, Managing Director, Australia and New Zealand, Bausch & Lomb
- Associate Professor Deborah Sweeney, Vision CRC

### **August**

Dr Ross Bury, Manager, Biomedical and Public Health Research, Department of Human Services, and Ms Rosemary Calder, PPR Consulting Pty Ltd

### **September**

Dr Mark Gillies, University of Sydney Professor Brien Holden OAM, Chief Executive Officer, Vision CRC

### **October**

Associate Professor Graham Barrett, Perth Mr George Pappas, Under Secretary, Department of Premier and Cabinet, and Mr Alan Gray, Senior Advisor, Policy and Strategy Projects

### **November**

- Mr Steve Gow and Ms Kerri Martin, Service Planning, Programs Branch, Metropolitan Health & Aged Care Services, Department of Human Services
- Mr Peter Clemenger AM, Director, Clemenger BBDO



Associate Professor Jill Keeffe and Mr David Newport, Dept of Education and Training, at the launch of CERA's report on "Analysis of Support to Students with Visual Impairment"



Mr Bal Chansi, visiting WHO ophthalmic theatre nursing trainee, with Professor Hugh Taylor

# **Research Grants for 2003**

We are most grateful to the organisations, trusts and individuals who had faith in us and our work and who supported us.

Granting Body	\$	Granting Body	\$
Corneal Research Unit		RVEEH Research Committee	\$25,818
Alcon Australia	\$41,450	Pfizer CVL Research	\$22,600
		National Health & Medical	
Eye Health Promotion Unit		Research Council (NHMRC)	\$22,039
Lions Clubs International		Macular Vision Loss	
Foundation	\$312,160	Support Society	\$14,000
Commonwealth		Collier Charitable Fund	\$10,000
Government CRC	\$221,000	Ophthalmic Research Institute	
Wagstaff Fellowship	\$159,090	of Australia (ORIA)	\$6,507
International Agency for			
Prevention of Blindness	\$130,365	Ocular Genetics Unit	
Victorian Department		Commonwealth Government CRC	\$96,500
of Human Services	\$127,000	Helen Macpherson Smith Trust	\$50,000
Vision Australia Foundation	\$100,000	L.E.W. Carty Charitable Trust	\$50,000
Christian Blind Mission		Mr and Mrs Peter Clemenger	\$50,000
International Australia	\$100,000	Myra Stoicesco Trust Fund	\$33,000
Australian Research Council	\$72,772	NHMRC	\$14,243
The Jack Brockhoff Foundation	\$40,000	RVEEH Research Committee	\$7,909
Department of Education,			
Science & Technology	\$15,000	Other Research	
Royal Victorian Eye & Ear Hospita		Victorian Department	
(RVEEH) Research Committee	\$11,523	of Human Services	\$170,983
Fred Hollows Foundation	\$5,272	Ansell Ophthalmology	
Ian Potter Foundation	\$2,000	Foundation	\$150,000
William Angliss Charitable Fund	\$1,000	ORIA	\$126,705
		Department of Innovation,	
Glaucoma Unit		Industry & Regional	
Allergan	\$232,163	Development	\$120,798
Alcon Australia	\$4,350	Victorian Lions Foundation	\$60,000
Pharmacia & Upjohn	\$2,500	Alcon Australia	\$48,750
		RVIB	\$38,181
Macular Research Unit		Vision Australia Foundation	\$25,000
PPD Development	\$165,503	Commonwealth Government CRC	\$23,076
Alcon Australia	\$156,500	Leon Mow Nominees	\$15,000
John T Reid Charitable Trusts	\$135,650	Medownick Laser Clinic	\$10,000
Royal Victorian Institute for		F J Wiseman Estate	\$9,500
the Blind (RVIB)	\$90,909		

# **Publications in 2003**

# Refereed Publications in Scientific Journals

- Arvind H, Paul PG, Raju P, Baskaran M, George R, Balu S, Sripriya S, Ramesh SV, Mukesh BN, Vijaya L, Kumaramanickavel G, McCarty C. Methods and design of the Chennai Glaucoma Study. *Ophthalmic Epidemiol* 2003; 10; 5: 337-348.
- **2** Baird PN, Craig JE, Richardson AJ, Mackey DA, Sim P, Foote SJ, Ring MA, Stanwix S. Analysis of 15 primary open-angle glaucoma families from Australia identifies a founder effect for the Q368STOP mutation of myocilin. *Hum Genet* 2003; 112: 110-1106.
- Burdon KP, McKay JD, Sale M, Russell-Eggitt IMRE, Mackey DA, Wirth MG, Elder JEE, Nicholl A, Clarke MP, Fitzgerald M, Stankovich J, Shaw MA, Sharma S, Gajovic S, Gruss P, Ross S, Thomas P, Voss AK, Thomas T, Gecz J, Craig J. Mutations in a novel gene, NHS, cause the pleiotropic effects of Nance-Horan Syndrome, including severe congenital cataract, dental anomalies, and mental retardation. *Am J Hum Genet* 2003; 73: 1120-1130.
- Burdon KP, Wilkinson RM, Barbour JM, Dickinson JL, Stankovich JM, Mackey DA, Sale MM. Investigation of albinism genes in cogenital esotropia. *Mol Vis* 2003; 9: 710-714.
- Burdon KP, Wirth MG, Mackey DA, Russell-Eggitt IMRE, Craig JE, Elder JEE, Dickinson L, Sale MM. Investigation of crystallin genes in familial cataract, and report of two disease associated mutations. *Br J Ophthalmol* 2003; 88: 79-83.
- Carnicelli AP, Keeffe JE, Martin K, Carbone J, Balding LC, Taylor HR. Vision screening for older people: the barriers and the solutions. *Australas J Ageing* 2003; 22; 4: 179-185.
- Chan SW, Mukesh BN, Sizeland AM. Treatment outcome of N3 nodal head and neck squamous cell carcinoma. *Otolaryngol Head Neck Surgery* 2003; 129;1:55-60.
- **8** Chou S, Misajon R, Gallo JG, Keeffe JE. Measurement of indirect costs for people with vision impairment. *Clin Exp Ophthalmol* 2003;31:336-340.
- Colville D, Guymer R, Sinclair RA, Savige J. Visual impairment caused by retinal abnormalities in mesangiocapillary (membranoproliferative)

- glomerulonephritis type II ("dense deposit disease"). *Am J Kidney Dis* 2003 Aug; 42 (2): E2-5.
- Craig JE, Clark B, McLeod JL, Kirkland MA, Grant G, Elder JEE, Toohey MG, Kowal L, Savoia HF, Chen C, Roberts S, Wirth MG, Mackey DA. Hereditary Hyperferritinemia-Cataract Syndrome. *Arch Ophthalmol* 2003; 121: 1753-1761.
- Dandona L, Dandona R, Anand R, Srinivas M, Rajashekar V. Outcome and number of cataract surgeries in India: policy issues for blindness control. *Clin Exp Ophthalmol* 2003; 31: 23-31.
- Dandona R, Dandona L. Childhood blindness in India: a population-based perspective. *Br J Ophthalmol* 2003; 87: 263-265.
- Dandona R, Dandona L. Corneal blindness in a southern Indian population: need for health promotion strategies. *Br J Ophthalmol* 2003; 87: 133-141.
- Dimitrov P, Mukesh BN, McCarty CA, Taylor HR. Five-year incidence of bilateral cause-specific visual impairment in the Melbourne Visual Impairment Project. *Invest Ophthalmol Vis Sci* 2003;44: 5075-5081.
- **15** Essex RW, Qureshi SH, Cain MS, Harper CA, Guymer RH. Photodynamic therapy in practice: a review of the results of the first 12 months experience with verteporfin at the Royal Victorian Eye & Ear Hospital. *Clin Exp Ophthalmol* 2003; 31: 476-481.
- Francis BH, Thomas AK, McCarty CA, Permezel JMH. The impact of rubella immunization on the serological status of women of childbearing age: a retrospective longitudinal study in Melbourne, Australia. *Am J Public Health* 2003; 93; 8:1274-1276.
- Gole GA, Schluter PJ, Hall J, Colville DJ. Comparison of the Retinomax autorefractor with hand-held retinoscopy in 1-year-old infants. *Clin Exp Ophthalmol* 2003; 31: 341-347.
- Hicks CRH, Crawford GJC, Tan DTT, Snibson GR, Sutton GL, Downie ND, Gondhowiardjo TDG, Lam DSCL, Werner L, Apple D, Constable IJ. AlphaCorTM Cases Comparative Outcomes. *Cornea* 2003; 22; 7: 583-590.



# Publications in 2003

- Hicks CRH, Crawford GJC, Lou X, Tan DTT, Snibson GR, Sutton GL, Downie ND, Werner L, Chirla TV, Constable IJ. Cornea replacement using a synthetic hydrogel cornea, AlphaCor TM: device, preliminary outcomes and complications. *Eye* 2003: 17: 385-392.
- **20** Hooper CY, Guymer RH. New treatments in age-related macular degeneration. *Clin Exp Ophthalmol* 2003;31: 376-391.
- Howell N, Herrnstadt C, Shults C, Mackey DA. Low penetrance of the 14484 LHON mutation when it arises in a non-haplogroup J mtDNA background. *Am J Med Genet* 2003; 119A: 147-151.
- Howell N, Oostra RJ, Bolhuis PA, Spuruijt L, Clarke LA, Mackey DA, Preston G, Herrnstadt C. Sequence analysis of the mitochondrial genomes from Dutch pedigrees with Leber Hereditary Optic Neuropathy. *Am J Hum Genet* 2003; 72: 1460-1469.
- Howell N, Smejkal CB, Mackey DA, Chinnery PF, Turnbull DM, Herrnstadt C. The Pedigree rate of sequence divergence in the human mitochondrial genome: there is a difference between phylogenetic and pedigree rates. *Am J Hum Genet* 2003; 72: 659-670.
- Kowal, L. Pediatric Ophthalmology in Australia. *J Am Assoc Pediat Ophthalmol Strabis* 2003; 7; 5: 311-313.
- Kowal L, Kushner BJ. Diplopia after refractive surgery: occurrence and prevention. *Arch Ophthalmol* 2003;121:315-312.
- **26** Le A, Mukesh BN, McCarty CA, Taylor HR. Risk factors associated with the incidence of openangle glaucoma: the Visual Impairment Project. *Invest Ophthalmol Vis Sci* 2003; 44: 3783-3789.
- **27** Luu CL, Kiely PK, Crewther DP, Kowal L, Crewther SC. Central and peripheral vision loss associated with nefazodone usage. *Doc Ophthalmol* 2003; 106: 319-325.
- Mackey DA, Fingert H, Luzhansky JZ, McCluskey PJ, Howell N, Hall AJH, Pierce AB, Hoy J. Leber's hereditary optic neuropathy triggered by antietroviral therapy for human immunodeficiency virus. *Eye* 2003; 17: 312-317.

- Mackey DA, Healey DL, Fingert H, Coote BD, Wong TL, Wilkinson CH, McCartney P, Rait JL, De Graaff S, Stone M, Craig JE. Glaucoma phenotype in pedigrees with the myocilin Thr377Met mutation. *Arch Ophthalmol* 2003; 121: 1172-1180.
- Mackey DA, Heon E, Webster AT. Predictive DNA testing in ophthalmology. *Br J Ophthalmol* 2003; 87: 633-638.
- Mackey DA, Craig JE. Predicitive DNA testing for glaucoma: reality in 2003. *Ophthalmol Clin N Am* 2003; 16: 639-645.
- McCarty CA, Mukesh BN, Dimitrov P, Taylor HR. Incidence and progression of cataract in the Melbourne Visual Impairment Project. *Am J Ophthalmol* 2003;136:10-17.
- McCarty DJ, Fu CLJ, Harper CA, Taylor HR, McCarty CA. Five-year incidence of diabetic retinopathy in the Melbourne Visual Impairment Project. *Clin Exp Ophthalmol* 2003; 31: 397-402.
- Nicolas C, Robman L, Tikellis G, Dimitrov P, Dowrick AS, Guymer RH, McCarty CA. Iris colour, ethnic origin and progression of age-related macular degeneration. *Clin Exp Ophthalmol* 2003; 31: 465-469.
- Noe G, Ferraro JG, Lamoureux E, Rait JL, Keeffe JE. Associations between glaucomatous visual field loss and participation in activities of daily living. *Clin Exp Ophthalmol* 2003;31: 482-486
- **36** Owens SLO, Bunce CB, Brannon AJB, Wormald RW, Bird ACB, Gross MG, Potthofer SP, Beheme TB, Foerster, MF, Broeskamp GB, Holz FGH, Bellman CB, Poloschek CP, Schutt FS, Staudt SS, Taufonbach DT, Volcker HEV, Kerber MK, Weiss HW, Weber CW, Guymer RH, Allen PJ, Cain MS, Luu CD, Newton AN, Jackson HJ, Contrino CC, Lane LL, Leung AL, Martin CM, Poynter RP, Sehmi KS, Sullivan TS, Waters RW, Crossland MC, Donaldson LD, Grigg CG, MacNaughton CM, Milliken AM, Mitty JM, Pinto LP, Reid AR, Chisholm IHC, Downie JD, Reck AR, Mole TM, Ashleigh AB, Wasfi EW, Parish KP, Bryant SB, Simons PS, Haugh JH. Prophylactic laser treatment appears to promote choroidal neovascularisation in high-risk ARM: results of an interim analysis. *Eye* 2003;17: 623-627.



# Publications in 2003

- Phipps JA, Guymer RH, Vingrys AJ. Loss of cone function in age-related maculopathy. *Invest Ophthalmol Vis Sci* 2003; 44:2277-2283.
- Pollard TL. The Vision Initiative. *IAPB News* 2003; 39: 9-10.
- Pollard TL, Simpson JA, Lamoreux E, Keeffe JE. Barriers to accessing low vision services. *Ophthalmic Physiol Opt* 2003; 23:321-327.
- Pollock GA, McKelvie PA, McCarty DJ, White JF, Mallari PLT, Taylor HR. In vivo effects of fluro-quinolones on rabbit corneas. *Clin Exp Ophthalmol* 2003; 31: 517-521.
- Rochthchina ER, Mukesh BN, Wang JJ, McCarty CA, Taylor HR, Mitchell P. Projected prevalence of agerelated cataract surgery in Australia for the years 2001 and 2021: pooled data from two population based surveys. *Clin Exp Ophthalmol* 2003;31:233-236.
- Sasaki H, Kawakami Y, Ono M, Jonasson F, Ying YB, Shui YB, Cheng HM, Robman L, McCarty CA, Chew SJ, Sasaki K. Localisation of cortical cataract in subjects of diverse races and latitude. *Invest Ophthalmol Vis Sci* 2003; 44: 4120-4214.
- Sun D, Rait JL, Kalloniatis M. Inner retinal neurons display differential responses to N-methyl-D-aspartate receptor activation. *J Comp Neurol* 2003; 465: 38-56
- Tapp RJ, Shaw JE, Harper CA, De Courten MP, Balkau B, McCarty CA, McCarty DJ, Taylor HR, Welborn TA, Zimmet P. The prevalence of and factors associated with diabetic retinopathy in the Australian population. *Diabetes Care* 2003; 26:1731-1737.
- **45** Wilkinson CH, Van Der Straaten D, Craig JE, Coote MA, McCartney P, Stanovich J, Stone M, Mackey DA. Tonography demonstrates reduced facility of outflow of aqueous humor in myocilin mutation carriers. *J Glaucoma* 2003;12: 237-242.
- Wong TY, Klein RK, Mueuer SM, Hubbard LD. Retinal vessel diameters and their associations with age and blood pressure. *Invest Ophthalmol Vis Sci* 2003; 44: 4644-4650.
- Wong TY, Mosley TH, Klein RK, Klein BE, Sharret AR, Couper D, Hubbard LD. Retinal microvascular

changes and MRI signs of cerebral atrophy in healthy, middle-aged people. *Neurology* 2003;61: 806-811.

- 48 Yamada K, Andrews C, Chan CWN, McKeown CA, Magli A, Teresa T, Loewenstein A, Lazar M, O'Keefe M, Letson R, London A, Ruttum M, Mansumoto N, Saito S, Morris L, Del Monte M, Johnson RH, Eiichiro E, Houtman WA, De Vries B, Carlow TJ, Hart BL, Krawiecki N, Shoffner J, Vogel MC, Katowitz J, Goldstein SM, Levin AV, Emin EC, Ozturk BT, Akarsu AN, Brodsky MC, Hanisch F, Cruse RP, Zupcov AA, Robb RM, Roggenkaemper P, Gottlob I, Kowal L, Battu R, Traboulsi EI, Franceschini P, Newlin A, Demer JL, Engle ECE. Heterozygous mutations of the kinesin KIF21A in congenital fibrosis of the extraocular muscles type 1 (CFEOMI). Nat Genet 2003; 35: 318-321.
- Yi Q, Bamroongsuk P, McCarty DJ, Mukesh BN, Harper CA. Clinical outcomes following laser photocoagulation treatment for diabetic retinopathy at a large Australian ophthalmic hospital. *Clin Exp Ophthalmol* 2003;31: 305-309.

### **Conference Publications**

Taylor HR. Eye Care for the Future: The Weisenfeld Lecture. *Invest Ophthalmol Vis Sci* 2003;44; 4:1413-1418.

### **Chapters**

- Dadzie KY, Vannewkirk MR, Taylor HR. Onchocerciasis. In: *International Ophthalmology* 2002-2003.
- Taylor HR, Couzos S. Trachoma. In: *Aboriginal Primary Health Care: An Evidence-based Approach* 2nd Edition.

### **Letters / Reviews / Editorials**

- Jonathon BR, Mackey DA, Downie NA. Clinical progression of keratoconus following a Vth nerve palsy. *Clin Exp Ophthalmol* 2003; 31: 363-365.
- Ng WT, Toohey MG, Mulhall L, Mackey DA. Pigmentary retinopathy, macular oedema, and abnormal ERG with mitotane treatment. *Br J Ophthalmol* 2003; 87: 500-501.
- Taylor HR, Dax EM. New precision in measuring trachoma infection. *Lancet* 2003;362: 181-182.
- Taylor HR. Stemming the tide of river blindness: the early years of ivermectin. *Med J Aust* 2003; 179: 617-619.



### Centre for Eye Research Australia Board of Directors

Ms Tina McMeckan, Director (from September 2003), Chairman (from November 2003)

Mr Charles Macek, Director & Chairman (until November 2003)

Professor James Angus (from July 2003)

Ms Rosanne Cunningham

Mr Malcolm Daubney (from January 2003)

Professor John Funder AO

Mr Graeme Houghton

Mr John Jeffries

Hon. Dr Barry Jones AO

Professor Richard Larkins AO (until July 2003)

Dr Mark McCombe

Mr Philip Molyneux, Treasurer

Professor Hugh R. Taylor AC,

Managing Director

Mr David Welsh

Hon. Dr Michael Wooldridge (from July 2003) Company Secretary: Mr David Doyle

### Centre for Eye Research Australia Finance and Audit Committee

Mr Philip Molyneux, Chairman

Mr Charles Macek (until November 2003)

Ms Tina McMeckan (from November 2003)

Professor Hugh R. Taylor AC

Mr David Welsh

### **Investment Committee**

Mr Charles Macek

Mr Philip Molyneux

### Centre for Eye Research Australia Research Committee

Associate Professor Justin O'Day, Chairman

Professor James Angus

Professor John Funder AO

Mr Philip Molyneux

Professor Terence Nolan

Professor Hugh R. Taylor AC

# Eye Research Australia Foundation

### Patron:

John Landy AC, MBE, Governor of Victoria

### Governors:

Mr Brian Ansell

Professor Emeritus Gerard Crock AO

Mr Andrew Fairley

### **Trustees:**

Professor John Funder AO, Chairman

Professor Gerard Crock AO

(until September 2003)

Professor Derek Denton (until July 2003)

Mr David Doyle, Secretary

Mrs Anne Grindrod

Ms Belinda Hope

Mr Charles Macek

Mr Philip Molyneux, Treasurer

Mr David Rath

Professor Hugh R. Taylor AC

### Fundraising:

Mr Greg Romanes, Executive Director

(until December 2003)

Ms Elizabeth Douglas, MA,

Bequests Manager

### **Fundraising Committee:**

Mr Peter Nankivell, Chairman

Mrs Myriam Wylie, Deputy Chairman

Mrs Susie Daniell

Associate Professor Elizabeth Dax AM

Mr Roger Harley

Ms Barbara Inglis

Commander Tony Murphy AFSM

Mrs Sally O'Day

Mr Andrew Skinner

Professor Hugh R. Taylor AC



### Head of Department and Ringland Anderson Professor of Ophthalmology

Professor Hugh Ringland Taylor AC, MD FRANZCO

# Corneal Research Unit including Lions Corneal Donation Service

- Dr Grant Snibson, MB BS DipRACOG FRCOphth (UK) FRANZCO FRACS FAICD, Senior Lecturer, Medical Director, Lions Corneal Donation Service
- Dr Graeme Pollock, PhD, Deputy Director, Lions Corneal Donation Service
- Ms Melinda Cain, RN, Senior Research Nurse, Senior Clinical Trial Co-ordinator
- Mr Anthony Carnicelli, BOrth, Transplant Co-ordinator, Lions Corneal Donation Service (from July 2003)
- Mr Marios Constantinou, BSc (Hons) BOrth, Research Assistant (from November 2003)
- Dr Prema Finn, PhD, Transplant Co-ordinator, Lions Corneal Donation Service
- Ms Melissa Goodman, BSc (Hons), Transplant Co-ordinator, Lions Corneal Donation Service (until April 2003)

### **Melbourne Excimer Laser Group**

Mr Terry Couper, BAppSc (Orth), MOAA, Unit Manager

Ms Kate Craig, BSc (Orth), Orthoptist Ms Caroline Gibbs, BSc (Orth), Orthoptist Ms Ilona Probyn, Receptionist

### **Eye Health Promotion Unit**

Associate Professor Jill Keeffe, PhD, Principal Research Fellow, Unit Head

Dr Alex Harper, FRANZCO FRACS, Senior Lecturer

Ms Sharon Amira, Research Assistant (from September 2003)

- Ms Karen Bradshaw, DipDT, Cert Health Promotion (Oral), Cert Health Promotion, Senior Research Fellow, Program Manager (until May 2003)
- Mr Marios Constantinou, BSc (Hons) BOrth, Research Assistant (from September 2003)
- Mr John Ferraro, BSc BOrth, Research Assistant
- Ms Jennifer Hassell, BA BAppSc DipEd, Research Assistant
- Dr Ecosse Lamoreux, BEd Grad Dip (Sports Sc) M App Sc PhD, Research Fellow
- Ms Melanie Larizza, BBSc Grad Dip (Sec), Research Assistant
- Mrs Leanne Mazzoni, BAppSc (Hons), Research Assistant
- Dr RoseAnne Misajon, BA BSc (Hons) PhD, Senior Research Assistant
- Ms Tamara Pollard, BOptom, Project Officer (until August 2003)
- Mr Todd Robin, MHS, Research Fellow (until May 2003)
- Mr John Simpson, Project Officer (until June 2003), Program Manager (from July 2003)
- Ms Jessica Towers, BA (Hons), Administrative Assistant (from November 2003)
- Dr Elaine Wong, MB BS, Research Associate



Dr Prema Finn, Dr Graeme Pollock and Mr Anthony Carnicelli of the Lions Corneal Donation Service



Eye Health Promotion Unit staff





Dr Khin Zaw Aung from the Macular Research Unit

### **Postgraduate Students**

Ms Shiao-Lan Chou, Adv Dip Bus MComm Ms Gillian Cochrane, BSc(Hons) MCOptom Dr Claire Hooper, MB BS Dr Van Lansingh, MD Dr Reuben Phiri, MBCHB Dip Ophth

### **Advanced Medical Science Students**

Ms Sing Pey Chow Ms Kay Yan Lo Ms Cheryl Leung

### **WHO Visiting Fellow**

Dr Huanming Liu

# Department of Human Services Public Health Trainee

Dr Alison Seccull, MB BS MPH

### **Glaucoma Research Unit**

Dr Julian Rait, FRANZCO FRACS, Senior Lecturer, Unit Head Ms Danielle Healey, BSc (Hons), Grad Dip (Couns), Research Co-ordinator Associate Professor David Mackey, MD MB BSTas, FRANZCO FRACS Ms Rachel McKinstry, BOrth, Grad Dip Journ, Orthoptist



Macular Research Unit staff

### **Macular Research Unit**

(from July 2003)

Associate Professor Robyn Guymer, MB BS PhD FRANZCO, RVIB Research Fellow, Unit Head

Dr Penny Allen, MB BS FRANZCO, Fellow Dr Khin Zaw Aung, MB BS (Rgn) GDipAppSci (Health Stats), Research Assistant

Ms Melinda Cain, RN, Senior Research Nurse, Senior Clinical Trial Co-ordinator

Mr Anthony Carnicelli, BOrth, Research Assistant, Clinical Trial Co-ordinator (until July 2003)

Mr Peter Dimitrov, BOrth, Orthoptic Research Assistant

Dr Colin Foo, MB BS FRANZCO, Retinal Fellow (until June 2003)

Dr Alex Harper, FRANZCO FRACS, Senior Lecturer

Ms Nicola Hunt, BSc (Hons), BOrth, Research Assistant (from August 2003)

Dr Lyndell Lim, MB BS, Retinal Fellow (from July 2003)

Mrs Caroline Nicholas, BSocSc (Hons) (Family Studies), Research Assistant (until December 2003)

Dr Salmaan Qureshi, MB BS FRANZCO, Fellow Dr Liubov Robman, PhD MB BS (Alma-Alta), Research Fellow

Dr Gabriella Tikellis, BSc Grad Dip (Epi & Biostat) PhD, Research Assistant Mrs Fulya Torun, Administrative Assistant

### **Postgraduate Students**

Dr Matthew Chamberlain, MB BS Dr Anthony Chiu, MB BS Dr Claire Hooper, MB BS Dr Niro Narendran, BSc MB BS MRCOphth (UK)





Ocular Genetics Unit and McComas Family Laboratory staff

# Ocular Genetics Unit and McComas Family Laboratory

Dr Paul Baird, BSc (Hons), PhD, Research Fellow, Unit Head

Ms Diep Chu, BSc, Research Assistant (until July 2003)

Ms Pam Garoufalis, BSc BScOrthop, Research Orthoptist (from October 2003)

Ms Elizabeth Guida, BSc (Hons), Lab Manager, Senior Research Assistant (until April 2003)

Dr Liam Lim, MB BS

Ms Andrea Richardson, BSc (Hons), Research Assistant, Lab Manager (from May 2003)

### **Postgraduate Students**

Dr Matthew Chamberlain, MB BS Dr Niro Narendran, BSc MB BS MRCOphth (UK)

### **Advanced Medical Science Student**

Mr Shane Battye

### **Undergraduate Summer Student**

Ms Debbie Farrell (from December 2003)

### **Retinal Vascular Unit**

Associate Professor Tien Yin Wong, MB BS MPH FRCS MMed PhD,Unit Head Mrs Fulya Torun, Administrative Assistant

### **Research Staff**

Dr Richard Le Mesurier, FRCS FRCOphth, IAPB/Vision 2020 Regional Co-ordinator (Western Pacific)

Dr Wendy Marshman, MB BS MD FRANZCO FRACS, Senior Lecturer

Dr Hien Thi Van Vu, BSc (Hons) PhD, Biostatistician

# Undergraduate and Registrar Teaching

Dr Deb Colville, MB BS FRANZCO FRACS, Grad Dip Epidemiology MPH Grad Cert Vocational Ed & Training (Clinical Instruction)



Dr Deb Colville (centre), Ms Tamara Pollard (left) and Dr RoseAnne Misajon (right) with the Centre's four AMS students





Ms Sarah Squire of the Visual Communications Unit

### **Administrative Staff**

- Mr Rod Watts, MBA FCPA FPNA, Executive Manager
- Ms Judith Carrigan, BSc (Hons) BA, Communications Co-ordinator
- Mr Peter Coates, Finance and Personnel Assistant
- Ms Irina Kalpakidis, BBus, Finance and Administrative Assistant (from March 2003)
- Ms Anna Koutsiafaras, Administrative Assistant and Receptionist (from July 2003)
- Ms Amanda Lancaster, Administrative Assistant and Clinical Receptionist (from March 2003)

- Ms Jennifer Marshallsea, Finance and Administration Manager (from September 2003)
- Mr Colin Miles, BAppSc (Computer Science & Software Engineering), IT Manager (from May 2003)
- Mr Trevor Stone, Dip Info Tech, Cert Bus, Network Administrator (until April 2003)
- Ms Fiona Warden, Grants Administration Officer

### **Visual Communications Unit**

- Ms Joanna Ong, BAppSc (Photography), Unit Head
- Ms Sarah Squire, BAppSc (Photography), Technical Assistant



Administrative staff

### **Professors Emeritus**

Professor Gerard W. Crock AO, KStJ MB BS FRCS FRACP FRANZCO FRACS Associate Professor Hector Maclean, MB ChB St And DO Lond. FRCS Edin. FRANZCO FRCOphth

### **Principal Fellows**

Associate Professor David A. Mackey Associate Professor Catherine A. McCarty Associate Professor Justin O'Day

### **Senior Fellows**

Dr Anne M.V. Brooks

Dr William Campbell

Dr Trevor Gin

Dr Robert S. Grogan

Dr Anthony J.H. Hall

Dr Peter N. Henderson

Dr Alan Isaacs

Dr Alicia Jenkins

Dr Lionel M. Kowal

Dr James H. La Nauze

Dr Mark G. Lazarus

Dr Sanduk Ruit

Dr Richard J. Stawell

Dr Robert H. West



Ms Melanie Larizza from the Eye Health Promotion Unit



Dr Hien Vu, Biostatistician

### **Fellows**

Dr Penelope J. Allen

Dr Lawrence Carroll

Dr Richard B. Clark

Dr Joan M. Cosgrove

Mr Terry Couper

Dr Jamie E. Craio

Dr Mark Daniell

Mr Andrew Dudley

Dr James E. Elder

Dr Kevin P.Y. Foo

Dr Wilson J. Heriot

Dr Robert L. Hudson

Dr David V. Kaufman

Dr Mark F. McCombe

Dr John D. McKenzie

Dr Alan A. McNab

Dr John Manolopoulos

Ms Carley E. Nicholls

Dr Salmaan H. Qureshi

Dr Christine Tangas

Dr Faye A. Walker

Dr Elaine Y.H. Wong

Dr David M.S. Workman

Dr Julian Sack

Dr Laurence J. Sullivan



# This has been a year of growth for the Eye Research Australia Foundation



This has been a year of growth for the Eye Research Australia Foundation. Income from our major fundraising event, the Melbourne Marathon, doubled, as did the number of donors and the number of notified bequests. In addition, we have received strong support from a number of corporate donors including **Alcon Laboratories (Australia)** Pty Ltd, the Clemenger Foundation, John T. Reid **Charitable Trusts, Sunglass Hut** International, and the University of Melbourne Floral Group.

The mission of the Foundation is to enable the further development of eye research. Our focus is thus on raising funds through our regular mail approaches and events. However, success in this endeavour is dependent upon public awareness of both the Foundation and of the need for eye research. Many people still believe that the majority of vision impairment cannot be treated. In particular, it is often erroneously accepted that it is part of the ageing process that cannot be alleviated.

The Foundation's biannual newsletter, Vision, is an excellent way to extend the community's understanding of eye disease, as are our brochures on the five main causes of vision impairment: Aged Macular Degeneration, Cataract, Diabetic Retinopathy, Glaucoma and Refractive Error. They are available free of charge from the Foundation and from ophthalmologists. Written in lay language, they outline the causes, symptoms, risk factors and treatment of each condition, and also include details of current research and sources of further information.

Our donors are the most important element in the achievement of our mission. We value every donor and each donation, large or small. We show our appreciation in a number of ways, not least the prompt banking and acknowledgement of donations. In 2002 we established an honour board to record the names of our major donors and a beautifully inscribed donor book listing the names of our regular donors. Each year more names are added to both these forms of permanent recognition, provided the donors have given their consent.

The success of our mission is also dependent upon the growth of our cohort of donors. Since our establishment in 1996, we have built up a loyal and supportive group of donors. The continuing need for increased funds and the natural attrition of our donor list means that we need regularly to recruit new donors. However, we are mindful of ensuring that this is achieved in the most cost effective way. We are also vigilant about the integrity of our donor list and use an Australia Post bar-coding and address verification program.

Towards the end of the year, the Trustees agreed to some administrative changes designed to strengthen the public profile of the Foundation and to emphasise its relation to the Centre for Eye Research Australia. The Foundation and the Centre now share the same logo and stationery design. The word "Australia" has been added to the Foundation's title, and the key words, "Eye Research Australia", are prominent in the names of both organisations on stationery and publications. In an era when branding is an integral part of marketing, these changes will assist us to provide a consistent message about the critical importance of eye research.

The Foundation calendar comprises a series of regular events for our donors and some one-off highlights. Donors are always welcome at the launch of the Annual Report at which researchers from the Centre present updates on their work. In addition, our program of tours of the Centre for Eye Research Australia continues to receive very positive feedback. These tours enable our donors to meet our researchers in their laboratories. Supporters are rightly concerned that their donations are applied to essential work and our guests leave in awe of the way the Centre's internationally applauded research is undertaken in such modest facilities.

In July, the Governor of Victoria, John Landy AC MBE, and Mrs Landy kindly hosted a late afternoon reception at Government House for the Foundation and also to celebrate the 40th anniversary of the University of Melbourne Department of Ophthalmology from which the Centre for Eye Research Australia developed. Mr Landy, who is Patron of the Foundation, presented Honorary Governor awards to Mr Brian Ansell, Professor Emeritus Gerard Crock AO and Mr Andrew Fairley in recognition of their long service to the Eye Research Australia Foundation and, prior to that, to the Ansell Ophthalmology Foundation.

The success of our mission is also dependent upon the growth of our cohort of donors. Since our establishment in 1996, we have built up a loyal and supportive group of donors.



The Governor of Victoria, John Landy AC MBE, presents an Honorary Governor award to Professor Emeritus Gerard Crock AO, in recognition of his long service to the Foundation

Our main fundraising event this year was the Melbourne Marathon in October from which we raised more than \$80,000. Most of our team of 94 walked the half marathon or the fun run of 10.4 kms. Thanks to Ms Lihla Wyles and four members of the Association of Massage Therapists Aust. Inc. who generously donated their time and skills, we were able to offer each team member a 20-minute massage. This was a strong incentive for participants and was greatly appreciated by everyone. We were also grateful for the support of Ego Sun Sense sunscreen, and Go Natural Energy Bars and Toscano's of Kew who provided part of the welcome sustenance at our hospitality marquee. What made the event an outstanding success, however, were the participants, their sponsors and the ever-generous donors of the Foundation, many of whom also responded to our annual appeals.



Associate Professor Robyn Guymer addresses guests at one of the tours of the Centre



Professor Taylor, the Hon. Bronwyn Pike MP, Minister for Health, and the Hon. Glenyys Romanes MLC proudly display their medals after participating in the Melbourne Marathon in October

The Foundation's Bequest Program continues to grow. We need to build up a substantial capital fund to enable the Centre's research to be expanded on a long-term basis and it is bequests that will make this possible. Only the interest from this capital fund will be applied to eye research, the principal remaining in perpetuity. Leaving a bequest is thus a practical way to make a permanent contribution to eye research. Some believe that bequests have to be large but this is not the case at all. A small proportion of a residual estate represents a greatly appreciated gift to the Foundation.

This year of growth would not have been possible without our volunteers. For their assistance in the administration of the office we offer our heartfelt thanks to Mrs Maureen Moore, Ms Leanne Nguyen, Mr Jude Sebastian and Mr Ken Wright. They not only give their time and talents each week to assist with sometimes repetitive tasks, but they bring to the office a range of life experiences that helps to make it such an enjoyable work place.



Mr Greg Romanes, Executive Director of the Foundation, left us at the end of the year to take up new challenges. We thank him for his involvement in the development of the Foundation, especially in the area of donor acquisition, and wish him every success for the future.

The Committee members also give generously of their time, providing advice and support in the form of attendance at events and sponsors for our fundraising events. Mr Peter Nankivell has once again chaired the Fundraising Committee with verve, leading by example with his unfailing support. We thank all members of the Committee for their efforts during 2003. At the end of the year we were sorry to farewell two foundation members, Mrs Sally O'Day and Mrs Myriam Wylie, the Deputy Chair. Despite having many demands on their time, they have given sterling service to the Foundation over a number of years. We greatly appreciate all that they and their husbands did to help us and we will miss them.



Professor John Funder AO, Foundation Chairman

The Foundation is governed by a board of Trustees chaired by Professor John Funder AO. They provide specialist guidance and are always willing to make themselves available for consultation. We place on record our sincere appreciation of their commitment. This year we were sad to farewell Professor Emeritus Gerard Crock AO and Professor Derek Denton, two long-serving Trustees who were also members of the Ansell Ophthalmology Foundation. Between them they have given many years of service to eye research. Though incredibly busy, they always made us feel that they had all the time in the world for the Foundation. We were also sorry to farewell Mrs Annie Grindrod and thank her for her contribution. particularly in the area of governance.

Finally the Foundation would like to thank the administrative staff of the Centre, in particular Mr Rod Watts and Mr Peter Coates, Ms Judy Carrigan and Ms Anna Koutsiafaras, and all the staff who assist us in the daily operation of the Foundation. Professor Hugh Taylor AC, Managing Director of the Centre for Eye Research Australia, is always willing to give his time to assist the Foundation; whether it be as a Trustee, Committee member, leader of tours, or Marathon runner extraordinaire, nothing is ever too much trouble. In both his worldrenowned research and his leadership in many spheres of eye health, he provides an inspiring example.

With the support of our donors and volunteers we look forward to 2004.

# Donations to the Eye Research Australia Foundation

may be made via:

- Annual appeal: reply-paid coupons mailed in May and October
- Telephone: on 1300 737 757
- Web site: www.eraf.org.au
- Our Community:

   the national donation
   service that operates at
   no cost to donors or the
   charities they support:
   www.ourcommunity.com.au

# Centre for Eye Research Australia Ltd

# Abridged Financial Statements for the year ended 31 December 2003

Income and Expenditure	2003 \$	2002 \$
Revenue	•	•
Federal Government	281,860	416,476
State Government	291,782	314,552
Charitable Contributions	2,315,579	2,468,518
	2,889,221	3,199,546
Less: Expenditure	2,884,419	2,587,218
Surplus (Deficit) for the year *	4,802	612,328
Balance Sheet		
Current Assets	1,429,515	927,106
Non-Current Assets	266,220	244,155
Total Assets	1,695,735	1,171,261
Current Liabilities		
Payables	610,183	103,547
Provisions	75,328	57,838
Other	274,563	279,017
Total Current Liabilities	960,074	440,402
Non-Current Liabilities	-	-
Total Liabilities	960,074	440,402
Net Assets	735,661	730,859
Total Equity	735,661	730,859

<sup>\*</sup> The Centre for Eye Reseach Australia Limited is operated as a not for profit organisation. Accordingly, accumulated surpluses are held in the form of working capital and fixed assets to support committed and planned research projects.

# Abridged Financial Statements for the year ended 31 December 2003

Income and Expenditure	2003 \$	2002 \$
Revenues from ordinary activities	327,692	353,344
Less: Expenditure	323,518	323,849
Surplus (Deficit) for the year	4,174	29,495
Balance Sheet		
Current Assets Non-Current Assets	265,057 0	250,400 3,107
Total Assets	265,057	253,507
Total Liabilities	26,273	18,897
Net Assets	238,784	234,610
Funds and Reserves	238,784	234,610



# Acknowledgements

Messrs John Clarke & Brian Dawe

Mr William Fazio, Partner, Herbert Geer & Rundle

Mr Peter Jovic, Partner, KPMG

Ms Sarah Lacey, Messrs Wayne McMaster,
Ashley Midalia and Stephen Natoli of Allens Arthur Robinson

Ms Jenni Lightowlers, Partner, Francis Abourizk Lightowlers

Mr Lindsay Davies, J&J Printing (Aust)

Mr Peter Nankivell, Partner, Herbert Geer & Rundle

Ms Yvonne von Hartel and staff, peckvonhartel



# Centre for Eye Research Australia

32 Gisborne St, East Melbourne, Vic 3002 Tel: 61 3 9929 8360 Fax: 61 3 9662 3859

Website: www.cera.org.au

Email: cera-info@unimelb.edu.au

ABN: 72 076 481 984