



## Restored vision helps grandfather pursue lifelong dream

AT 73, SID POWLEY ISN'T A TYPICAL UNIVERSITY STUDENT BUT THE VISUAL ARTS UNDERGRADUATE SAYS HE'S EMBRACING CAMPUS LIFE AND THE OPPORTUNITY TO HONE HIS ARTISTIC SKILLS.

"Whenever I see a white surface I just want to draw on it, to put my mark on it somehow. Art allows me to express myself," Sid said.

Two years ago, Sid feared he would have to abandon his art after blurry and distorted vision made it difficult to focus.

Sid consulted an ophthalmologist who diagnosed him with wet age-related macular degeneration (AMD), a severe form of the disease characterised by rapid central vision loss.

"I was shattered. My first thought was, 'if I go blind, I'll no longer have my art,'" he said.

Sid's eye was treated with regular injections of Lucentis, a drug trialed at CERA that has been shown to stop the progression of wet AMD, and in some cases improve a patient's vision. The treatment improved his sight dramatically.

Professor Robyn Guymer, head of CERA's Macular Research Unit, said it is fortunate Sid was diagnosed early.

"Blurred or distorted vision is an important sign of wet AMD. Unfortunately, some patients ignore the signs and have suffered irreversible vision loss by the time the condition is diagnosed," Professor Guymer said.



Sid with one of his drawings.

"While there's no cure for wet AMD, the good news is that there are several treatments that are very effective when applied early. That's why early diagnosis is so important," she said.

For Sid, the improvement to his vision has been life changing, allowing him to fulfil his lifelong dream of studying art.

**"IF YOU OR SOMEONE YOU LOVE IS EXPERIENCING CHANGES IN VISION, DON'T IGNORE THE SIGNS. BOOK AN EYE TEST, IT COULD SAVE YOUR SIGHT."**

## INTERNATIONAL GLAUCOMA SPECIALIST APPOINTED AS CERA MANAGING DIRECTOR

Australia's first Professor of Glaucoma, Professor Jonathan Crowston was appointed CERA Managing Director and Ringland Anderson Professor of Ophthalmology at the University of Melbourne in June.

His appointment follows an international search headed by CERA and the University of Melbourne.

Professor Crowston said it is an enormous privilege to be leading Australia's top eye research institute.

"It's a very exciting time in eye research and I look forward to overseeing CERA's role in projects like the bionic eye and the Royal Victorian Eye and Ear Hospital redevelopment," Professor Crowston said.

Not one to shy away from a challenge, Professor Crowston has an ambitious vision for CERA's future.

"Given that CERA is a relatively small institute, the fact that our research output is competitive with some of the world's leading eye research institutes is an excellent achievement".

"But to expand on our success, CERA now needs to build our research portfolio and grow in size".

"One of our key objectives is to increase our capacity in basic science and translational research. We're also looking to further strengthen our clinical research."



BORN AND EDUCATED IN LONDON, PROFESSOR CROWSTON TRAINED IN OPHTHALMOLOGY AT MOORFIELDS EYE HOSPITAL. IN 2006, HE MOVED TO MELBOURNE FROM THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, TO ESTABLISH A NEW GLAUCOMA RESEARCH LABORATORY AT CERA.

## Landmark survey reveals startling levels of Indigenous vision loss

RESEARCHERS AT CERA HAVE FOUND THAT THE RATE OF BLINDNESS IN INDIGENOUS ADULTS IS MORE THAN SIX TIMES HIGHER THAN NON-INDIGENOUS AUSTRALIANS.

The survey, a joint undertaking by CERA's Population Health Unit and the University of Melbourne, is the first study into the impact of eye disease in Indigenous communities since Fred Hollows pioneered a national study into trachoma in the 1970s.

The report was launched in September by Governor General Quentin Bryce, who described it as a "milestone in Indigenous health".

Head of CERA's Population Health Unit, Professor Jill Keeffe said cataract, optic atrophy, refractive error, diabetic eye disease and trachoma are the major causes of vision loss in Indigenous adults.

"Ninety four per cent of the vision loss associated with these diseases is preventable or treatable, so these figures are unacceptable," Professor Keeffe said.

Conversely, Indigenous children are five times less likely to experience vision loss than their non-Indigenous peers.



"Indigenous kids are born with better eyesight than non Indigenous kids. Alarmingly however, they're six times more likely to be blind and three times more likely to have low vision in adulthood," Professor Keeffe said. While the findings of the report are discouraging, Professor Keeffe said the information will help to achieve equitable eye health services for Aboriginal and Torres Strait Islander people.

"Over the next six months, there will be a review into the eye health services available in Indigenous communities. This will form the basis of our recommendations to Government on

the best way to develop adequate eye care services for these communities."

The Federal Government has committed \$58.3 million over four years to improve eye and ear health services for Indigenous Australians.

This figure includes more than \$16 million to tackle trachoma, a disease eliminated from mainstream Australia more than one hundred years ago, but still existing in the Indigenous population.

To conduct the survey, researchers collected data from 3,000 Indigenous adults and children living in major cities, rural and remote areas.

The National Indigenous Eye Health Survey was headed by Professor Hugh Taylor, Harold Mitchell Chair of Indigenous Eye Health, University of Melbourne and Professor Jill Keeffe OAM.

To download the full report visit [www.cera.org.au/research/pophealth](http://www.cera.org.au/research/pophealth) or phone 03 9929 8360.

# AMD and heart disease link to assist in early diagnosis

A STUDY BY CERA RESEARCHERS HAS FOUND THAT PEOPLE WITH EARLY AMD ARE ALMOST 60 PER CENT MORE LIKELY TO DEVELOP HEART DISEASE THAN THOSE WITHOUT THE DISEASE.

Principal Investigator Professor Tien Wong said that while scientists have long thought AMD to be associated with cardiovascular disease, this study is the first to establish a consistent link between the two.

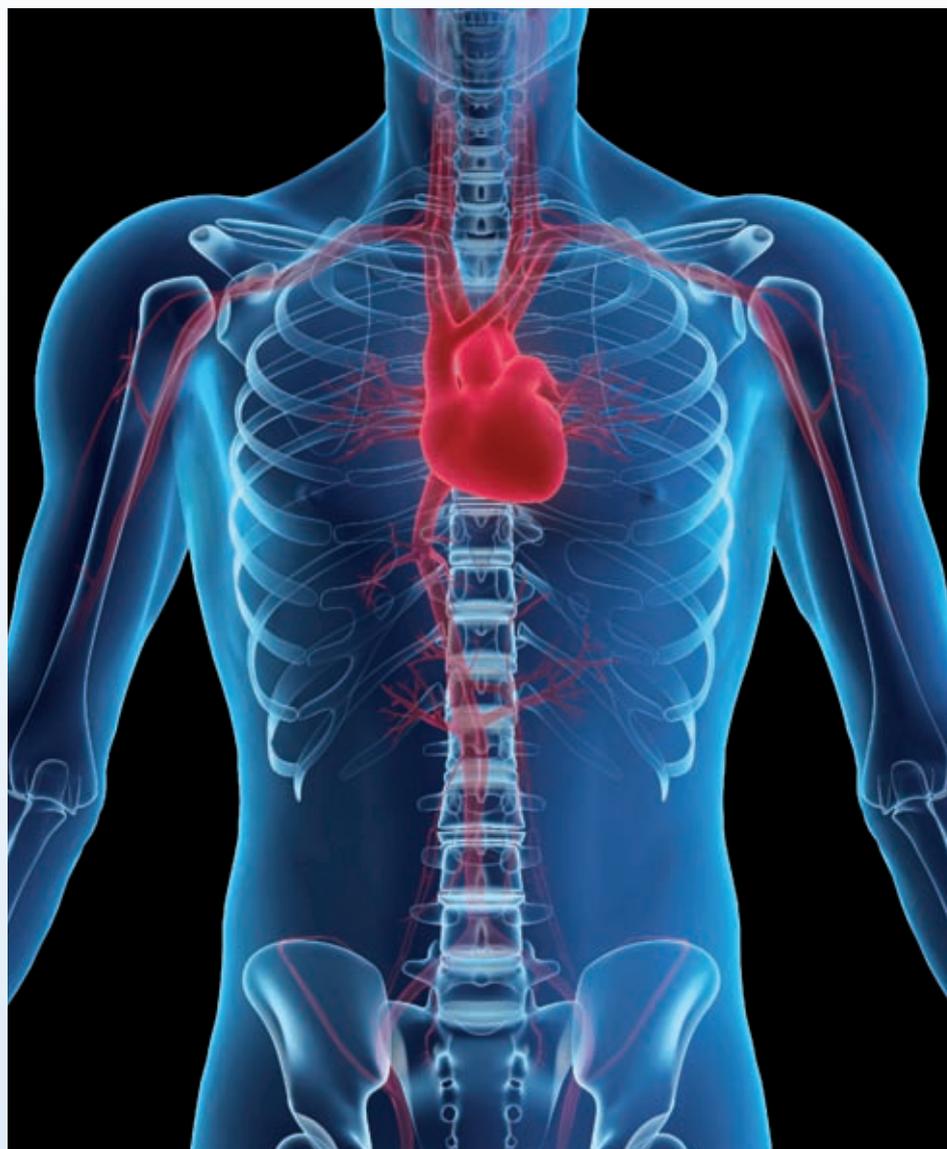
"We don't fully understand the causes of AMD however increasing evidence suggests the disease shares similar genetic and environmental risk factors with cardiovascular disease," Professor Wong said.

**"SMOKING, A DIET HIGH IN FAT AND HIGH BLOOD PRESSURE ARE ALL RISK FACTORS OF BOTH AMD AND HEART DISEASE AND THE TWO SHARE COMMON GENETIC VARIANTS," HE SAID.**

The findings suggest that common treatments for cardiovascular disease, such as cholesterol lowering medication, may be useful for AMD prevention. However further research into this area is required.

To conduct the study, researchers monitored 1786 people between the ages of 69 to 97 years who were free of coronary heart disease over a seven year period. Of those who had early AMD, almost 26 per cent developed heart disease, compared to 19 per cent of those without AMD.

AMD is a leading cause of vision loss and blindness in Australia and one in seven people over the age of 50 are affected by the condition.



## *Tips for preventing AMD*

- Eat a balanced diet incorporating green leafy vegetables, whole grains, seeds and nuts
- Oily fish varieties, such as salmon and tuna, contain omega-3 fatty acids that are important to eye health. Research suggests that eating 2-3 servings a week helps to maintain good vision
- Limit your intake of foods that are high in saturated fats such as red meat
- Incorporate regular exercise into your lifestyle
- Monitor your blood pressure
- Be smoke free

## AUSTRALIANS URGED TO TEST FOR GLAUCOMA

An estimated 150,000 Australians have glaucoma, an eye disease that can lead to irreversible vision loss and blindness, and they don't know it yet.

While everyone is at risk of developing glaucoma, people over 50 and those with a family history of the disease are at greater risk.

Diagnosed with glaucoma at the age of 56, CERA Board member and former Labor MP Dr Barry Jones said glaucoma has been dubbed the 'sneak thief of sight' because vision loss caused by the disease is gradual and often without warning or symptoms.

"My sister, who is seven years younger, slowly lost her peripheral vision and

was subsequently diagnosed with glaucoma," Dr Jones said.

"Her ophthalmologist wisely told her 'send your brother for testing. If you have it, he probably does too'."

CERA Managing Director Professor Jonathan Crowston said that while treatment can delay the progression of glaucoma, it can't reverse the damage already done.

"A simple eye test will pick up glaucoma long before the patient notices any symptoms.

Early diagnosis and treatment significantly reduce the risk of irreversible vision loss and blindness," Professor Crowston said.

"People aged 50 years and over should have an eye test every two years. If you're overdue for a test book one today and remind a friend or loved one to do the same. It could end up saving their sight."

Glaucoma occurs when the optic nerve is damaged, often by high pressure within the eye. Glaucoma is Australia's leading cause of irreversible blindness, affecting more than 300,000 Australians.

## New investigator awarded glaucoma research grant

CERA was awarded six of the 13 available grants from the Ophthalmic Research Institute of Australia (ORIA) in October.

More than \$250,000 will be distributed across four CERA research units to help fund studies into conditions such as age-related macular degeneration, glaucoma and myopia.

Fleur O'Hare of the Glaucoma Research Unit received a New Investigator grant of \$45,000, jointly funded by Glaucoma Australia, to study the auditory function in individuals with glaucoma.

"Preliminary research suggests that some glaucoma patients experience auditory hearing processing impairments, a potential sign of generalised sensory nerve problems," Ms O'Hare said.

"The results of the study will provide us with new ways of detecting glaucoma and a better understanding of the impact of glaucoma on the central nervous system."

For the study researchers will recruit individuals with open-angle glaucoma between the ages of 40 and 65, who have reportedly 'normal' hearing.

**If you're interested in participating in the study, please contact Fleur O'Hare on 03 9929 8791.**



## STATE GOVERNMENT SUPPORTS RESEARCH INFRASTRUCTURE

In August, Victoria's Innovation Minister Gavin Jennings announced that CERA will receive \$668,000 under the State Government's Operational Infrastructure Support (OIS) program for medical research institutes. The funding will help cover core operating costs for laboratories, facilities and administration.

OIS grants are awarded to 13 institutes in Victoria based on an assessment of their productivity and innovation.

CERA is the only institute that has for three years running been awarded the maximum 30% increase available from one year to the next, reflecting its strong growth and success in recent years.

"Government funding to cover operating costs is vital" said CERA General Manager Gerlinde Scholz.

"For donors, it will be reassuring to know that this funding ensures that donations, bequests and foundation investments are not called on for administration expenses," Ms Scholz said.

Of course, effective management and provision of services allows top research to happen and is therefore a sensible use of funding.

"We are all partners in eye research. The government's operational infrastructure support is as important as competitive research grants and support from our community and stakeholders. Like the legs on a three-legged stool, we cannot function properly without any one of them."