

COVID RESPONSE

**THE
FUTURE
FUND**

2021 PROJECTS



“To my mind,
having a care and
concern for others
is the highest of the
human qualities.”

PROFESSOR FRED HOLLOWS

WELCOME

Three years ago, Fred's Future Fund was established to fund programmes that will have a lasting impact on eye care in the Pacific. Since then, generous donors, bequestors and government agencies have donated **\$5,078,520** towards the Future Fund projects.

Because of this support, The Foundation has been well placed to weather the immediate effects of the COVID-19 pandemic. With at least one ophthalmologist residing in each of the key countries we operate in, we were able to continue eye care services once emergency restrictions lifted.

But across the Pacific, the number of people desperately needing eye care grew larger every day our clinics were closed and, with our experienced surgical Outreach Team unable to travel to support the local teams, the patient backlog got bigger and bigger.

Now, the team is planning more surgeries, more patient consultations, more Outreaches and, with your help, they will get the vital equipment needed to emerge from this pandemic, ready for the future.

We are proud to work in partnership with the various Ministries of Health around the region. But with their budgets being repurposed for the COVID-19 effort, their economies decimated and the cyclone



seasons becoming increasingly destructive, we need to step up.

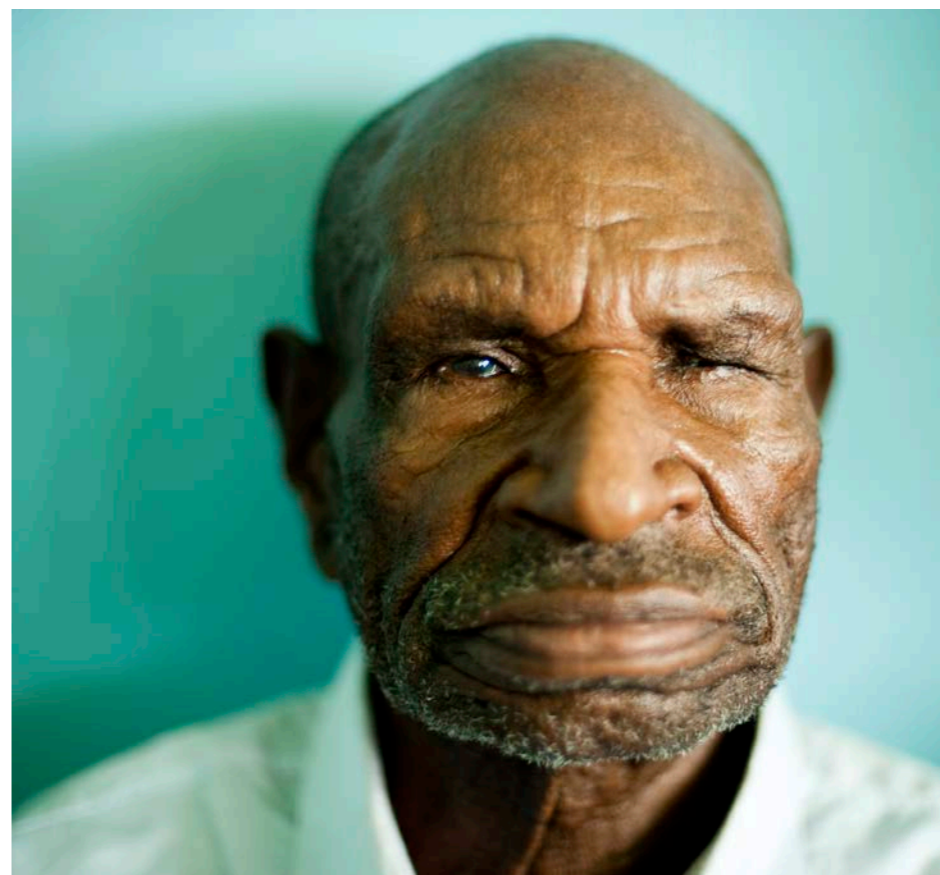
2021 will be a challenging year with much to do, but thanks to the generosity of you and our other Future Fund donors, we are sure we can do it.

The 2021 Future Fund projects will hardcode the resilience required to see us through what will be an incredibly tough few years and help us emerge to an even stronger future.

To do this we are concentrating on three key platforms:

- 1. Restoring Sight**
- 2. Graduate Programme and Health System Strengthening**
- 3. Training Doctors and Nurses**

The following pages detail the Covid Response projects selected for the 2021 Future Fund that you can choose to support. Costings are detailed throughout the booklet.



Incredible story from a remote Outreach

Durkita, a crocodile hunter from a small village in the Western Province of Papua New Guinea, had his sight restored when our Surgical Outreach Team visited the remote area.

But even then, Durkita and his great nephew Michael had to travel for three days and two nights on a dugout canoe to reach the Outreach Team. It was an arduous journey, made even more difficult by his blindness. When he finally arrived, he was diagnosed with a dense cataract in one eye and a trachoma infection in the other. A short 20-minute cataract operation saved the sight in his right eye. With earlier treatment, we could have saved the sight in the other as well, however unfortunately

this was not the case.

It was a special moment for everyone in the room when Durkita looked at his great nephew and smiled for the first time in years. Within hours, Durkita was moving with confidence and laughing. He told us, "I will always remember you."

Our in-country Outreach Teams need your urgent support today.

PROJECT OF SIGNIFICANCE PAPUA NEW GUINEA

Papua New Guinea (PNG) has an eye care crisis. The prevalence of blindness in PNG is one of the highest in the world.

Over 5.6 per cent of the population over the age of 50 are blind, and over 90 per cent of blindness in PNG is avoidable. The main cause is untreated cataract and uncorrected refractive error. Around the world, many people with cataracts receive low cost, sight-saving surgery, but to date there has been little access to this surgery in PNG and the surgical quality of those performed has varied. Currently, we are supporting our PNG Team as they respond to the COVID-19 outbreak in their community. However, we remain committed to our strategy of working with our partners to tackle the immediate crisis, strengthen the health system and build more accessible, sustainable, local eye care.



RESTORING SIGHT

It is estimated at least one billion people are blind or visually impaired simply because they can't access eye care. Many of our Pacific neighbours are suffering this exact fate. COVID-19 has exasperated this with decreased Outreaches, surgeries, and patients unable to afford travel to eye clinics.

Our Pacific teams and partners have identified these following projects that will ensure their fellow countrymen and women have access to eye care services in 2021.



Samoa Outreach Support

Samoa's growing eye care backlog is causing significant concern to Dr Lucilla Ah Ching-Sefo, our Pacific Eye Institute trained ophthalmologist. The programme in Samoa has been impacted by both the measles outbreak and the COVID-19 lockdowns. Dr Lucilla and her team have a plan to deal with this and have asked for support and consumables for two Outreaches so they can travel to the island of Savai'i, where the surgical backlog is causing great concern.

Funding required
\$8,000

Tonga Outreach Support

Now that Dr Duke Mataka has returned to Tonga as the first resident ophthalmologist, the enormity of the job ahead is apparent. Although COVID-19 has meant that Dr Duke is unable to receive any outside clinical support, this has not stopped him, or his team's commitment, to reducing the eye care and surgical backlog. In 2021 he is planning three Outreaches to the Ha'apai and Vava'u group of islands and has asked for equipment and consumables to support these.

Funding required
\$13,500

Fiji Mobile Eye Clinic

Since 2015, the Mobile Eye Clinic (MEC) has revolutionised access to eye care services in the remote parts of Fiji over the two main islands. The MEC is an innovative, 11.5 metre facility. It is equipped with a consultation room, sterilising room and single-bed operating theatre. In 2021 the MEC is central to the Fiji team's Covid Response Plan. It will travel across the country, operating at full capacity to reduce the increasing eye care backlog.

Funding required
\$200,000

Solomon Islands Outreach Support

Solomon Islands is home for our Medical Director, Dr John Szetu. It is one of the most remote, scattered and rugged countries in the world. They need support for four Outreaches to some of the more remote villages and islands.

Funding required
\$23,000

Solomon Islands Patient Transport Programme

The Solomons' Team is also planning to trial an innovative Patient Transportation Programme that aims to remove what is a key barrier facing people needing pre and post-surgery eye care services - transportation.

Funding required
\$12,000



GRADUATE PROGRAMME AND HEALTH SYSTEMS SUPPORT

We are proud of the partnerships we have with local Ministries of Health and our graduates to strengthen local eye care systems. However, COVID-19 has put Pacific economies under enormous stress and our partners require support more than ever before. Key to our COVID-19 response is ensuring our graduates have the right equipment to do their job. Without this, it is very difficult for them to provide the high-quality eye care services they have been trained to deliver.

The 2021 equipment focus is to ensure our clinics and graduates are as best placed as possible for their Covid response and into the future.



Dr Duke Mataka

Dr Duke is our first trained Tongan ophthalmologist. He graduated from Fiji's Pacific Eye Institute at the end of 2018 after four years of study. Since graduating, he has returned to Tonga and his family, as the country's only full-time, qualified ophthalmologist. Like many of our graduates, he is now working with his local Ministry of Health to deliver essential eye care. We still support his professional development and ensure he and the Ministry have the right equipment and assistance to ensure as many Tongans as possible have access to eye care.

Fiji Equipment

The eye care equipment throughout Fiji has not been upgraded for a long time and is starting to cause concern. As a teaching eye hospital, it is imperative that the Pacific Eye Institute (PEI) has well-functioning equipment to teach its students and treat the many patients who visit. New equipment is needed now to treat the cataract backlog and the staggering increase in patients reporting to PEI, the regional clinics and the Mobile Eye Clinic, with diabetes eye disease.

Funding required
\$132,325

Solomon Islands Equipment

The Regional Eye Centre's operating theatre urgently needs a new microscope. Dr Szetu tells us that without the microscope, it will be very hard for his team to carry out even basic surgery. "Because the eye is small, surgery needs to be very accurate. This specialist microscope uses light and magnification to assist the operating clinician to better view the eye whilst performing procedures." The Solomon Islands' team is also looking to update some other key equipment and have asked for our help.

Funding required
\$257,061

Papua New Guinea Equipment

A key element of our strategy to effectively tackle the eye care crisis in PNG is supporting the current eye care team, many of whom are working with little or substandard equipment in clinics and hospitals throughout the country. We are looking to assist them with essential equipment.

Funding required
\$14,000

Samoa Equipment

Dr Lucilla urgently requires a YAG Laser for her Operating Theatre. This laser treats Posterior Capsular Opacification, a cloudy layer of tissue that forms behind the intraocular lens, which can occur six months to two years following cataract surgery. She also requires portable Outreach equipment.

Funding required
\$50,000

Please refer to the Glossary at the back for full details on each country's equipment requirements.



TRAINING DOCTORS AND NURSES

Fred believed in empowering people. That is why we train a range of eye care specialists — from community health workers to surgeons. Developing local skills will remain at the heart of our work. This way, we will emerge from the pandemic with strength. We have been 100 per cent committed to continuing our training through the pandemic. Donors have heard of how we quickly moved to online learning and in-country clinical attachments. This will continue in 2021.

Also, our commitment to training eye doctors and nurses to deal with Papua New Guinea’s devastatingly high levels of avoidable blindness, has not wavered.



Dr Rabebe in Kiribati



Kiribati Training In-Country Medical Assistants

Kiribati is one of the most physically remote and dispersed countries in the world, making it very difficult for the fully trained ophthalmologist, Dr Rabebe Tekeraoi, and her team to reach everyone in need. COVID-19 has made it even harder. In 2021, Dr Rabebe has designed a training programme to train Medical Assistants from isolated islands around the country to learn the basics of eye care, eye emergencies and referral systems. Help Dr Rabebe implement her programme.

Funding required
\$15,000

Papua New Guinea Teaching Ophthalmologist

In 2021 we are funding a teaching ophthalmologist who will work alongside the ophthalmology teaching team at the University of Papua New Guinea. This will provide a much-needed boost in resources to the training programme to help meet the critical shortage of ophthalmologists. We will also undertake essential feasibility work for the Papua New Guinea Centre of Excellence for Eye Health.

Funding required
\$80,000



Fred’s passion for teaching

Fred believed there should always be three people in a room: a teacher, a student and a patient. He took great delight in seeing the moment of understanding in his students’ eyes and knew that one day they’d be teachers too.

Despite being very ill with cancer, Fred discharged himself from hospital in July 1992 to fly to Hanoi. He wanted to fulfil his promise to train over 300 Vietnamese eye specialists in modern eye surgery techniques. Students packed the operating theatre as Fred, too ill to perform the surgeries himself, instructed his students with his usual enthusiasm, dedication and demand for perfection. Today, his former students are performing more than 160,000 surgeries a year.

“Teach the teachers first, then the teachers can teach others.”

PROFESSOR FRED HOLLOWES

Professor Fred Hollows anaesthetises the eye of a patient being prepared for cataract surgery in Hanoi (Vietnam) in 1992.

Photo courtesy of www.michaelamendolia.com

GRADUATE PROGRAMME

EQUIPMENT GLOSSARY

A & B Scan

This scan can take images of the eye using sound waves. It is useful to measure the distance between structures of the eye - which helps decide what intraocular lens power to use during cataract surgery. It is also useful in diagnosing certain conditions at the back of the eye when a patient has a dense cataract.



Pachymeter

A pachymeter is a medical device used to measure the thickness of the eye's cornea and is useful in screening for patients suspected of developing glaucoma, among other uses.



Operating Theatre microscope

Zeiss Lumera 700

Because the eye is small, surgery needs to be very accurate. This specialist microscope uses light and magnification to assist the operating clinician to better view the eye whilst performing procedures.



Ophthalmoscope

An ophthalmoscope is used to look directly at a patient's retina through the pupil. It does not require any external lenses and is very portable.



Ultrasonic Bath

Ophthalmic surgery uses very fine-tuned instruments and sometimes material may still remain after standard surgical cleaning. Soundwaves from this machine loosen this material which means nothing remains inside.



Portable Microscope

Zeiss Pico

This operating microscope is similar to the one above but, being portable, it can be taken on Outreaches and used in clinics without standard surgical equipment.



Portable Slit Lamp

The portable slit lamp is a smaller version of a table mounted slit lamp. It is helpful if a patient cannot sit behind a table mounted slit lamp or to take on Outreaches.



Campimeter Field Instrument

A visual field machine is used to test a patient's peripheral vision. It is a very important test in diagnosing and treating glaucoma.



Vitreotomy Machine

The vitrectomy machine cuts and cleans up any of the vitreous (the gel that is behind the lens) if the gel ends up in the front part of the eye during cataract surgery.



Table Mounted Slit Lamp

This is used to look at the eye under magnification.



YAG Laser

This laser treats Posterior Capsular Opacification (PCO) that can occur six months to two years following cataract surgery. This is when a cloudy layer of tissue forms behind the intraocular lens. It is very easily treated with a short laser treatment using a YAG laser and the patient can see very well again.



iCare Tonometer

This measures the pressure inside the eye which is regulated by a fluid. The iCare tonometer does not need any anaesthetic and is portable.



Auto Refractor and Keratometer

This machine can provide a measurement of the refraction (what power a patient's spectacles need to be) as well as measuring the curvature of the cornea (the front clear window of the eye).



Graduates such as Dr Lucilla Ah Ching-Sefo really need your support.

With at least one graduate ophthalmologist back in each of the key countries we operate in, we were able to continue eye care services once the COVID-19 emergency restrictions lifted. But the number of people desperately needing eye care has grown larger and with the experienced surgical Outreach Team unable to travel to support the local teams, our graduates need your help with their Covid Response Plan.



If you are interested in finding out more about any of these Covid Response programmes, please indicate your interest in the enclosed reply form or contact Stephne Vaughan directly on **09 217 4914** or email **svaughan@hollows.nz**