



**MAKE
FRED'S VISION
YOUR VISION
IN 2020**

**THE
FUTURE
FUND**

2020 PROJECTS

WELCOME TO THE 2020 FUTURE FUND

In just two years

Fred's Future Fund has raised

\$3,653,441

from private and institutional donors including New Zealand Ministry of Foreign Affairs and Trade, making significant progress in achieving Fred's vision of a world where no one is needlessly blind.

2018/2019 Future Fund Projects



The upgrade and extension of Vanuatu National Eye Centre.



Operational costs for the upgraded Vanuatu National Eye Centre.



The Mobile Eye Clinic in Fiji conducted 17,815 consultations and performed 1,463 surgeries.



Surgical teams in Papua New Guinea visited 15 rural communities scattered in rugged and remote regions, reaching 10,139 people for consultations and conducting 1,813 surgeries.



11 scholarships to attend international conferences such as The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) conference.



Supported newly graduated Dr Johnson Kasso (Vanuatu) and Dr Duke Mataka (Tonga) to lead comprehensive eye care services in their countries.



Vital medical equipment, (including ophthalmoscopes, cataract sets, slit lamps and other essential items) was sent to graduates and health clinics in Fiji, Papua New Guinea and Solomon Islands.

The following pages detail the significant projects selected for the **2020 Future Fund** that you can choose to support. Costings are detailed throughout the booklet.

It is estimated at least 1 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.

We are working hard to change this.

Here's how:

1 RESTORING SIGHT

An estimated 90% of the world's visually impaired people live in low-income countries. Disadvantaged and vulnerable communities are the worst affected because there's a strong link between eye health, poverty and education. Over 27 years, The Foundation has restored sight to more than 2.5 million people globally and performed over 70,000 sight-saving operations in the Pacific.

The 2020 Future Fund seeks ongoing operational support for its Mobile Eye Clinic in Fiji.

2 DRIVING INNOVATION AND RESEARCH

Like Fred, we're a practical bunch. We use evidence-based approaches in our programmes and we don't shy away from doing things differently if it gets us closer to ending avoidable blindness and vision impairment in the Pacific.

The 2020 Future Fund seeks support to establish **Fred's Innovation Hub** to test and pilot opportunities our digital age presents.

3 TRAINING AND SUPPORTING DOCTORS AND NURSES

Fred believed in empowering people. That's why we train a range of eye care professionals — from community health workers to surgeons. Developing local skills will always be at the heart of our work.

The 2020 Future Fund seeks support for its crucial Graduate Programme.

4 BUILDING AND MAINTAINING CLINICS AND PROVIDING MEDICAL EQUIPMENT

Delivering eye health can't be done in isolation. We work with local Ministries of Health and organisations to strengthen local eye care systems. Key to this is building and maintaining health clinics and providing medical equipment.

As well as seeking vital medical equipment, we are looking to build the **Papua New Guinea Centre of Excellence for Eye Health**. This is our Project of Significance.

2020 PROJECT OF SIGNIFICANCE

PAPUA NEW GUINEA CENTRE OF EXCELLENCE FOR EYE HEALTH



Over 8.5 million people live in Papua New Guinea, and it has one of the highest rates of avoidable blindness in the world. We are working with local partners on the ground to change this.

Delivering eye care to those who need it is an immense challenge, but with your help we will meet it.

Only 13% of the population lives in urban areas.

It is estimated 40% of the population live below the poverty line (US\$1.90 a day).

5.6% of adults over 50 are blind.

There are only 11 eye doctors working in PNG. There should be at least 85 to meet the population's eye care needs.

Since 2007, we have restored sight to over 9,400 people, trained 86 eye nurses and provided scholarships to seven doctors to become eye specialists. But many, many more local eye specialists need to be trained if Papua New Guinea is to be successful in reducing the high rates of avoidable blindness.



There is no doubt that this is an ambitious project. But we simply cannot ignore the immense eye care challenges facing our Pacific neighbours in PNG. Fred wouldn't. We won't. We invite you to support us.

Centre of Excellence in Port Moresby

The Foundation is committed to a significant expansion of its training and clinical service provision in Papua New Guinea, through a new purpose-built Centre of Excellence in Port Moresby. When complete, the Centre will provide high quality, year-round, training and services.

Future management of the Centre will be undertaken as a strategic collaboration with our partners, including the National Department of Health, Port Moresby General Hospital and University of Papua New Guinea.

Our proven methodology will see doctors and nurses trained side-by-side as eye care specialists before being deployed across Papua New Guinea to regional hospitals and health facilities as specialist eye doctors and nurses.

The Centre will provide space for consultations, refraction and surgery; central coordination for local teams to conduct outreaches to rural areas; and provide screening treatment and counselling for eye-related complications of diabetes.

Early indications show the Centre of Excellence will require funding in excess of \$30 million to build and provide operational support for five years.



As we embark on the project's design phase, we invite you to consider how you might get behind this crucial Project of Significance.

1 RESTORING SIGHT

THE MOBILE EYE CLINIC, FIJI



Since 2015, the Mobile Eye Clinic (MEC) in Fiji has revolutionised access to eye care services in the remote parts of Fiji over the two main islands.

Despite widespread urban migration, 70% of the Fijian population is still based rurally. By breaking down accessibility barriers, we hope to clear the country's backlog of avoidable blindness.

The MEC is an innovative, 11.5 metre facility. It is equipped with a consultation room, sterilising room and single-bed operating theatre capable of delivering screening and treatment of cataracts, refractive error, diabetic eye disease and other eye conditions.

2020 Mobile Eye Clinic funding requirements

For eleven months of the year the MEC travels to locations throughout Fiji to provide eye care services.

FUNDING REQUIRED

\$279,400

\$25,400 per month

2_DRIVING INNOVATION AND RESEARCH

THE INNOVATION HUB

Unleashing Fred's spirit of innovation

26 years ago, Fred's Intraocular Lenses (IOL) and local doctor training programmes revolutionised avoidable blindness treatment rates in the developing world. These significant innovations have resulted in millions of people who were facing a lifetime of avoidable blindness being able to see again.

To meet the challenge of preventing blindness today, we are looking to establish a coalition of partners to work with our graduates to unleash Fred's spirit of innovation across New Zealand, Fiji and Solomon Islands to research, test and pilot the promising opportunities that this digital and connected age can bring to ending preventable blindness and vision impairment in the Pacific.

Our vision for the establishment of the Innovation Hub

The Innovation Hub insert requires capacity to bring together strategic leadership, project management, researchers and trainers on a range of projects to be researched, piloted and, if successful, scaled up across the region.

The Hub will deepen current health research partnerships with the universities in New Zealand and the Pacific to build research capacity.

FUNDING REQUIRED

\$100,000

Our Innovation programmes

1. We are intending to pilot Artificial Intelligence (AI) systems to read images of the eye that can accurately diagnose and grade diabetes eye disease. Once fully developed, general nurses in local health centres will be trained to use devices with AI software and local ministries of health will have the potential to significantly expand screening services for diabetes eye disease.
2. We are investigating social enterprise solutions. The initial project aims to develop the region's first affordable, reliable supply of Avastin which is a transformational injectable treatment widely used globally to treat a range of eye conditions.
3. A childhood blindness survey that can be carried out during outreaches in remote and urban communities to assess childhood blindness and the impact of digital devices on vision impairment in the Pacific.



3 TRAINING AND SUPPORTING DOCTORS AND NURSES

GRADUATE PROGRAMME



2020 is a milestone year for The Foundation. Seven Pacific countries now have at least one trained eye doctor supported by trained eye nurses.

Our focus is supporting them. Not just to do their jobs, but to give them the platform from which they can unleash Fred's spirit of innovation. In doing this, our mission to end avoidable blindness in the Pacific will be met.

However, the medical environments our graduates return to are very different to that of New Zealand. Often modern medical technology and equipment is scarce, in need of repair or simply not there. There are often no senior colleagues locally to guide them and so professional development opportunities are critical. It is vital that we support our graduates to continue to successfully help their communities.

We seek your support to provide our graduates with the equipment and some of the professional development opportunities afforded to their New Zealand counterparts.

Graduate grants

Every year graduates are awarded grants that will further their professional development and ensure they are best placed to treat people living with avoidable blindness and visual impairment.

These grants cover equipment maintenance or replacement, and conference attendance to upskill their eye care practices.

Conference attendance

Specialist eye health associations invite Pacific representatives to attend and present at their annual conferences. The Foundation sponsors selected graduates, enabling the Pacific to showcase their work and be updated with the newest technology, treatments and knowledge of the industry. The most significant conference we work to award graduate scholarships to is **The Royal Australian and New Zealand College of Ophthalmologists (RANZCO) annual congress**. The congress brings together specialists from across New Zealand, Australia and overseas to share and discuss the latest innovations, techniques and advances in eye healthcare. In 2020 we hope to secure enough funding to support up to 12 graduates to attend.

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

PROFESSOR FRED HOLLOWES



Graduates' training of health care workers

After a year of specialist eye care training, our graduate nurses are well placed to distribute this knowledge upon their return home. The Primary Eye Care training is a three-day course that graduates present to other health care workers. This not only sees the dissemination of eye care knowledge and skills, it also encourages local networks and referral pathways to ensure eye care is available to all.

In 2020 we intend to award graduate grants to eye doctors and nurses in the following countries:

COUNTRY	FUNDING REQUIRED
Papua New Guinea	\$38,800
Fiji	\$21,400
Solomon Islands	\$20,000
Kiribati	\$9,650
Vanuatu	\$8,700
Samoa	\$8,700
Tonga	\$7,740



Graduate short course: advanced refraction

This course is an extension of the knowledge and skills learnt during the one-year eye care training for nurses. During the four weeks the graduates tackle difficult cases of prescribing custom-made spectacles, learn to prescribe low vision aids for those whom spectacles are not enough, gain skills in spectacle repairs and acquire the knowledge to set up and manage spectacle supply systems. A large part of avoidable vision impairment is due to refractive error and prescribing spectacles is not always simple. This course will allow our graduates to become experts.

FUNDING REQUIRED	\$69,500
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4 BUILDING AND MAINTAINING CLINICS AND PROVIDING MEDICAL EQUIPMENT

2020 MEDICAL EQUIPMENT REQUIREMENTS

Working in the tropical humidity of the Pacific requires an intensive equipment repair and maintenance programme. Additionally, to ensure the best possible delivery of eye care, we encourage the uptake of new technology where appropriate, especially when older equipment is simply not up to the task.

Papua New Guinea

The Madang Provincial Hospital Eye Clinic is in urgent need of the following equipment to ensure the best possible delivery of eye care both in the centre and on outreaches.

Two Autoclaves: One portable and one benchtop	Sterilisation unit using steam to decontaminate surgical items.	\$11,000
Vital signs monitor	An essential monitor for measuring a patient's vital signs in the operating theatre.	\$3,250
Direct ophthalmoscope	An instrument the size of a small torch with several lenses that can magnify up to 15 times, which is crucial in determining the health of the eye.	\$1,340

Solomon Islands

The team at the Regional Eye Centre require the following equipment to ensure the best possible delivery of eye care at the clinic and to remote locations in Solomon Islands.

Bench top autoclave	Sterilisation unit using steam to decontaminate surgical items.	\$6,700
Surgical cautery machine	Used to arrest bleeding from the blood vessels during surgery.	\$6,000
Portable operating microscope	For use by the Outreach team for surgery in remote locations.	\$18,500
Vital signs monitor	An essential monitor for measuring a patient's vital signs in the operating theatre.	\$3,250

“ I believe the basic attribute of mankind is to look after each other, and that’s what makes humans look after other humans when they are in need.”

PROFESSOR FRED HOLLOWES



Fiji

The Pacific Eye Institute is seeking equipment that will enhance the teaching programme as well as treatment of Fijians with eye conditions. This year we are hoping to secure funds for a Vitrectomy Phaco system that will enable our specialists to widen the range of sight-saving surgeries they can perform. For the first time in the Pacific we have two qualified doctors to perform vitrectomy to rectify retinal detachments a common complication of diabetic eye disease.

Vitrectomy Phaco system	This system gives specialists better access to the eye, allowing for a variety of repairs, including removal of scar tissue and cataracts, repair of retinal detachments and treatment of macular holes.	\$110,500
Two LED slit lamps with teaching scope and tonometer	This provides a magnified view of the eye structures, enabling diagnoses to be made for a variety of eye conditions. It is an important test in the evaluation of patients at risk of eye disease such as glaucoma. As a teaching scope it allows another student/teacher to observe the examination.	\$37,600
Direct ophthalmoscope	An instrument the size of a small torch with several lenses that can magnify up to 15 times, which is crucial in determining the health of the eye.	\$1,340

HELP TO UNLEASH FRED'S SPIRIT OF INNOVATION

If you are interested in finding out more about any of these programmes, full project plans and costings are available.

Please indicate your interest in the enclosed reply form or contact Stephne Vaughan directly on **09 304 0524 Ext: 210** or email svaughan@hollows.nz



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