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It gives me great pleasure to introduce this Annual Review which marks another successful year for the British Council for Prevention of Blindness and its work. Throughout the year we have continued our mission to promote blindness prevention through our support of high quality research, education and mentorship programmes.

Most of us will be familiar with the saying that “if you give a hungry man a fish, you feed him for a day, but if you teach him how to fish, you feed him for a lifetime”. Though the origins of this saying are uncertain, the truth that underlies the sentiment is not disputed. At BCPB we believe that similar principles can be applied to the relief of blindness.

As a charity with limited funds at our disposal, it is through education, research and mentorship programmes that we can have the greatest impact on the prevention of blindness. Knowledge gained in this way can be cascaded through many health professionals to benefit large and needy populations in low income countries throughout the world. For a relatively small cost, we can eventually impact on many thousands of individuals where help is most needed. I hope that you will agree with me that the work described in this review is testament to the efficacy of this philosophy.

As a small charity seeking to make a large impact, we are privileged to have the services of a small but highly dedicated team of staff and trustees whose support has been unwavering over the years. This year saw the retirement of Professor John Sparrow as a trustee and Chair of our Advisory Panel, a role that he has performed with great expertise and diligence for the past three years. We have benefitted enormously from his wisdom and advice which will be much missed.

I am delighted that another trustee, Dr David Yorston, was appointed in his place as Panel Chair. David brings great experience to the role having worked as an ophthalmologist in East Africa for many years before taking up an appointment at a teaching hospital in the UK.

We also welcomed another new trustee, Richard Wormald, to the Board. Richard is a consultant ophthalmologist with great understanding in the field of blindness prevention through his research and teaching, and he has proved to be a valuable addition to the Board.

The year also saw the appointment of a new and dedicated Fundraiser, Emma McGuigan who has already made a significant contribution to the Charity’s fundraising and communications. I am delighted to welcome her to her new role which neatly complements the work of our Charity Manager, Diana Bramson whose expertise ensures the smooth running of the Charity.

A report by the Vision Loss Expert Group published in The Lancet in 2017 estimated that there were 36 million blind people in the world with a further 217 million people with severe or moderate visual impairment. This is the size of the challenge that the world faces. We believe that BCPB has a unique role in meeting this challenge and I invite you to read this Annual Review and be inspired by the stories of the outcomes and impact of our work.

Paul Hunter FRCP, FRCS, FRCOphth
BCPB and VISION 2020: The Right To Sight

VISION 2020: The Right to Sight is the global initiative for the elimination of avoidable blindness - a joint programme of the World Health Organization (WHO) and the International Agency for the Prevention of Blindness (IAPB) set up to intensify and accelerate prevention of blindness activities. The initiative has subsequently been complemented and built upon by a series of additional plans and been reinforced by four World Health Assembly resolutions. “Universal Eye Health: A global action plan 2014 – 2019” (GAP) aims to reduce prevalence of avoidable visual impairment by 25% by 2019 - a more realistic global target for what can be achieved by the end of this decade, rather than the original target of global elimination by 2020. Some individual countries may achieve, or be close to, elimination by 2020. The long-term goal of both GAP and VISION 2020 remain the same – to rid the world of avoidable blindness and visual impairment. VISION 2020 is making a huge difference to global eye health creating a major focus in the countries and districts where action is needed.

BCPB fully supports the aims of VISION 2020; The Right To Sight and we are committed to playing our part in eliminating avoidable and treatable blindness by funding:

- Practical research into the causes of blindness, more effective treatments, and preventive methods
- The training of eye care professionals from the developing world to enable them to implement blindness prevention programmes in their home countries.
Our belief and our aim is that no-one, anywhere in the world, should lose their sight if this can be prevented.

About BCPB

The British Council for Prevention of Blindness is a small niche charity, established in 1976, employing two part-time members of staff. We fund innovative research and training that seeds the development of local resources – skills, knowledge and expertise – to build programmes which save and restore sight in low and lower middle income countries. Our belief is that no-one, anywhere in the world, should lose their sight if this can be prevented.

We focus almost entirely on long-term interventions relevant to the poorest communities. We believe that the most effective use of resources in order to have the greatest impact is through the support of the few, who will transfer their knowledge and skills in blindness prevention through educating healthcare workers and influencing governments who are then in the position to pass on the benefits to the many - the so-called ‘cascade effect’.

Our Aims:

1. To enhance our work as a niche player in blindness prevention by funding training and medical research
2. To raise our profile
3. To improve income generation for further grant-making

Blindness:

- Somewhere in the world, a child goes blind every minute
- 75% of this blindness is avoidable. With adequate funding it could be treated or prevented.
- 89% of the world’s 36 million blind people live in poor countries
- Interventions to prevent blindness are amongst the most cost-effective: a blind person requires care and rehabilitation and cannot usually work, so saving sight makes economic sense as well as transforming lives
- Training one person to be a leader, trainer and advocate creates a cascade effect when they pass on their knowledge and skills to others who can go on to build eye care programmes in developing countries, to save the sight of many people and promote the development of new knowledge to help treat eye conditions.

(Statistics from The World Health Organization)
Our key achievements:

- Making ground-breaking discoveries that have led directly to a breakthrough in the eye medication Ivermectin. This is now widely used in Africa to prevent ‘river blindness’ (onchocerciasis) – a condition that once blinded millions of people.

- Validated the use of smartphones for the diagnosis of eye diseases in Kenya (PEEK), meaning we have been able to save the sight of thousands of people in the region. PEEK technology is now being used throughout Africa and Asia where millions of people don’t live near eye health facilities or cannot access treatment.

- Supported the development of an eye healthcare training module to be delivered within the World Health Organization’s Integrated Management of Childhood Illness programme. The Tanzania Ministry of Health have now agreed that this training can be delivered to over 800 frontline child health care workers, thereby detecting eye problems early and avoiding childhood blindness.

- We have supported over 160 eye care professionals from the world’s poorest countries to train and undertake research, developing their expertise in planning and managing blindness prevention programmes, as well as leadership and advocacy skills.

- Each of these new eye care leaders will save the sight of up to 40,000 people in the course of their career, and will on average train a further 200 people to save sight.

We thank everyone who has supported us throughout the year enabling us to continue to save and restore the sight of thousands of people across the developing world. BCPB receives no government funding and all of our work is funded through voluntary gifts including legacies.
# Research and Training Projects Currently Funded

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Cost of Project per Account</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professor Barrie Jones Fellowship</strong> – <strong>Dr William Dean</strong>, <strong>International Centre for Eye Health</strong>: Ophthalmic surgery incubator training units in Sub-Saharan Africa: up-skilling ophthalmic surgeons for high quality and high volume cataract and glaucoma surgery.</td>
<td><strong>£199,961</strong></td>
</tr>
<tr>
<td><strong>Research project - Mr Gus Gazzard, Institute of Ophthalmology</strong>: Health-Related Quality of Life in two treatment pathways for newly diagnosed open angle glaucoma and ocular hypertension in China: an unmasked, randomised controlled trial of initial selective laser trabecuoplasty versus conventional medical therapy.</td>
<td><strong>£59,482</strong></td>
</tr>
<tr>
<td><strong>Research project - Dr Tobi Somerville, University of Liverpool</strong>: Microbial Keratitis in Malawi: A Microbiological Pilot Study.</td>
<td><strong>£16,484</strong></td>
</tr>
<tr>
<td><strong>Research project - Dr Ian Murdoch, Institute of Ophthalmology</strong>: Determination of the optimal treatment and management strategy for glaucoma control in Tanzania, Sub-Saharan Africa: an integrated clinical and health economics modelling perspective.</td>
<td><strong>£59,950</strong></td>
</tr>
<tr>
<td><strong>Research project – Dr Aeesha Malik, International Centre for Eye Health</strong>: Integration of primary eye care for children into primary health care in Tanzania: development and pilot testing of an Eye Module for inclusion in the curriculum of staff providing Reproductive and Child-Health services.</td>
<td><strong>£63,139</strong></td>
</tr>
<tr>
<td><strong>Research mentorship - Professor Tunde Peto, Queen’s University Belfast</strong>: To create an advocacy package to enable Swaziland’s Ministry of Health to reliably plan for their Diabetic Retinopathy (DR) Vision 2020 priorities in their planning template.</td>
<td><strong>£11,954</strong></td>
</tr>
<tr>
<td><strong>Boulter Fellowships, International Centre for Eye Health</strong>: Part funding for four eye care professionals from developing countries to undertake MSc in Public Health for Eye Care.</td>
<td><strong>£18,505 per student</strong> Total <strong>£74,020</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>£484,990</strong></td>
</tr>
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Most of these projects are funded across more than one Financial Year.
Advisory Panel

**Professor John Sparrow**  
**Outgoing Chairman**  
MBBCh DPhil DO FRCS FRCOphth  
Consultant Ophthalmologist  
Bristol Eye Hospital

**Professor Matthew Burton**  
PhD MA MBBCh DTM&H  
MRCP FRCOphth  
Professor of International Eye Health  
International Centre for Eye Health  
London

**Mr Andrew Cassels-Brown**  
MBBS FRCS (Ophth)  
FRCOphth MScCEH  
Consultant Ophthalmologist and  
Consultant Community Eye Health  
Leeds Teaching Hospitals NHS Trust

**Professor Nathan Congdon**  
MD MPH  
Ulverscroft Chair of Global Eye Health  
Queen’s University Belfast

**Professor John Dart**  
MA DM FRCS FRCOphth  
Consultant Ophthalmologist  
Moorfields Eye Hospital, London

**Miss Winifred Nolan**  
MBChB FRCOphth MD  
Consultant Ophthalmologist  
Moorfields Eye Hospital, London

**Professor Tunde Peto**  
MD M-HealthEd PhD  
Professor of Clinical Ophthalmology  
Queen’s University Belfast

**Mr John Salmon**  
MD FRCS FRCOphth  
Consultant Ophthalmologist  
Oxford Eye Hospital

**Professor Peter Scanlon**  
MD DCH DRCOG DO PG Cert Med Ed FACP FRCOphth  
Consultant Ophthalmologist  
Cheltenham General Hospital

**Dr Elena Schmidt**  
BA MPH PhDc  
Head of Research  
Sightsavers International

**Dr David Yorston**  
**Incoming Chairman**  
MBChB  
Consultant Ophthalmologist  
Gartnavel General Hospital, Glasgow
BCPB Prevention of Blindness Fellowships

Our Fellowships are fully funded by BCPB and lead to the award of PhDs and MDs. Sir John Wilson Fellowships are awarded to researchers based overseas who come to the UK for part of their project, whilst Barrie Jones Fellowships are awarded to UK based researchers who travel to a developing country to carry out their research.

The aims are:

- to provide top level eye care personnel in low income countries, in order to build knowledge and skills in eye care where they are most needed. Fellows from developing counties are selected partly on their ability and ambition to disseminate knowledge and skills through teaching and training
- to build the knowledge base about how best to prevent blindness in low income countries
- to foster links between UK institutions and those in developing countries, to facilitate a mutually beneficial transfer of knowledge in eye care.

To achieve these aims an Advisory Panel selects and monitors projects - see table on page 9.

BCPB is a member of the Association of Medical Research Charities (AMRC) and complies with its guidelines for best practice.
Update from Barrie Jones Fellows

Dr Victor Hu: United Kingdom

In 2017 I took up a consultant ophthalmology post at Mid Cheshire NHS Hospitals, with a subspecialty interest in cornea, and I also work two days a week with the London School of Hygiene and Tropical Medicine. I am coordinating a mentoring programme to help overseas ophthalmologists develop their subspecialty practice. I am also able to carry on engaging with research in low and middle income countries and am involved in research projects on trachoma, microbial keratitis, in vivo confocal microscopy, and biosynthetic corneal implants.

The PhD work that I undertook, funded by the Barrie Jones Fellowship from the BCPB, has given me the foundation to continue with this overseas work and I look forward to developing this further in the future.

Our Impact: Mentoring

BCPB’s funding of Dr Hu’s Fellowship in 2008 to conduct research into blinding trachoma in Tanzania, and his work since then have given him the foundation to become a mentor and to co-ordinate a mentoring programme for overseas ophthalmologists.

“I am coordinating a mentoring programme to help overseas ophthalmologists develop their subspecialty practice.”
Our Impact:

Training

This method of simulation training for eye surgeons in Sub-Saharan Africa, with its high standard curriculum, equipment and learning environment, has resulted in the average surgical competency of trainees more than doubling in just three months, compared with standard training in this region of 2-4 years.

Dr William Dean: South Africa

Ophthalmic surgery incubator training units in Sub-Saharan Africa: up-skilling ophthalmic surgeons for high quality and high volume cataract and glaucoma surgery.

In Africa almost one in ten people over the age of 50 are blind, yet two thirds of blindness is due to two treatable conditions - cataract and glaucoma. Cataract surgery is one of the most cost-effective of all health interventions, capable of restoring sight in a high proportion of cases. Glaucoma is more challenging, as treatment cannot restore the sight that has been lost, but it can reduce the risk of progression to total irreversible blindness. Surgery is often recommended for the treatment of glaucoma in Africa, as compliance with other current forms of medical treatment may be extremely low.

To reduce avoidable blindness in Africa and the poverty associated with it, the number of cataract and glaucoma surgeries needs to increase. There is also a great need to train many eye surgeons safely, efficiently, effectively, to an acceptable level of competence, and to maintain and improve the quality and outcomes of surgery. We have set up a simulation Surgery Training Unit at the University of Cape Town to offer educationally-underpinned and standardised simulation surgical training.

The results of this project so far have been exceptionally encouraging. We have trained 24 trainee eye doctors from Eastern and Southern Africa in cataract surgery, and a further 19 in glaucoma surgery. The initial results of the training, in terms of surgical competence, have been profound. We will train a further sixty eye surgeon trainees in the year ahead.

The most notable success was a young Ugandan eye doctor. She excelled in the course, and was very motivated. The week after returning from training, she was in theatre. She was not only invited to perform a supervised cataract operation over a year before she normally would have been given this opportunity, but completed a perfect operation until half-way when the Consultant took over.

He was surprised that a young doctor so new to training was capable of this, and couldn’t understand how she, being only four months into her three-year training course was suddenly so able. Her comments were: “Today I was able to make my first tunnel on a patient. They did not let me continue as it was my first case, but I can see the fruits of the training already. I will keep practicing and pushing for an opportunity to operate.”

“... The initial results of the training, in terms of surgical competence, have been profound. We will train a further sixty eye surgeon trainees in the year ahead."

We will also train-the-trainers by running workshops for all Heads of Departments of collaborating training institutions in Kenya, Uganda, Tanzania and Zimbabwe.

This is the first time that eye surgery training has been evaluated in terms of impact to such a degree. Each surgeon is objectively assessed for changes in surgical competence and skills, surgical output, and surgical outcomes. Impact is further assessed subjectively by the change in surgical confidence.

Our Impact: Training

This method of simulation training for eye surgeons in Sub-Saharan Africa, with its high standard curriculum, equipment and learning environment, has resulted in the average surgical competency of trainees more than doubling in just three months, compared with standard training in this region of 2-4 years.
Dr Mathenge - Champion for Change

Update from BCPB’s Sir John Wilson Fellows

Dr Ciku Mathenge: Rwanda

Since being awarded BCPB’s first ever Prevention of Blindness Fellowship, named after one of our founders Sir John Wilson in 2006, Dr Mathenge has gone on to spearhead blindness prevention work in Africa. Most recently, the first four ophthalmology residents to be trained in Rwanda were admitted to the Rwanda International Institute of Ophthalmology, the institution she directs with her husband Dr John Nkurikiye. The government of Rwanda has given them major support, seeing the course as an example of providing solutions for the shortage of eye health workers through public/private partnership.

Dr Mathenge will serve a further two years on the Board of the International Council of Ophthalmology (ICO), and at the ICO World Ophthalmology Congress she received a “Champion for Change” award from the Women in Ophthalmology group for her work in supporting social change, especially by reducing barriers to women accessing care.

One of her major achievements which will have a massive impact on eye health care in Africa is her contribution to the World Health Organization AFRO’s Primary Eye Care Training Manual. Her role was to prepare the first draft, lead field testing of the training package, and incorporate feedback from facilitators and participants. http://www.afro.who.int/publications/primary-eye-care-training-manual

Our Impact: Leadership

BCPB’s funding of research and training have led to inspiring and high-achieving leaders in the field of hands-on blindness prevention, government and health policy and cascaded training in developing countries.
Detection and effective management of glaucoma in Nigeria.

There are very real problems with glaucoma in Africa. Difficulties start from detection and confirmation of diagnosis to effective treatment and adequate follow-up. Because glaucoma doesn’t present with symptoms early in the disease process, it is difficult to detect so patients present late with irreversibly damaged optic nerve and lost vision. Detection of glaucoma involves checking for damage by direct visualisation of the optic nerve head using an ophthalmoscope or fundus camera; and more advanced imaging techniques outside the reach of most eye clinics in Africa. The other method of detecting the disease is by checking for functional damage in the presenting vision and tests to explore damage to the patient’s visual field using analysers, which are not commonly available in many African eye clinics.

To help in detecting glaucoma early, we screen all eligible patients with a digital fundus camera, which gives the ophthalmologist a clear image of the optic nerve head for diagnosis. Having this machine means that a technician can take the photos, which are then analysed by the doctor; increasing time efficiency. Through BCPB’s funding, we were able to purchase the digital fundus camera, which is also used for screening diabetic retinopathy and other diseases.

To help with early glaucoma detection, we invite all first-degree relatives of our glaucoma patients for free screening using fundus photography and other tests.

The most commonly offered glaucoma treatment is medical which involves the use of eye drops or tablets every day for the rest of the patient’s life. But there is lack of adherence to the prescribed regime due to high cost of medications, poor availability, questionable potency and the ability of the patient to instil this drug correctly into the eye, as they are usually elderly with low vision, and may have other conditions that make the simple exercise of using eye drops difficult. Through a research grant from BCPB, we have adapted motivational interviewing, which is now delivered by locally trained staff to counsel our patients appropriately to improve adherence.

The second treatment option, arguably the more effective in black people, is surgery to redirect eye fluid flow, which relieves the high pressure. This is an invasive procedure, so acceptance is poor especially as there is usually no improvement in vision afterwards and the patient needs to present regularly to the clinic for follow-up to check for complications. Adherence is very low, due to long distances and huge financial commitment. For this reason surgeons are wary of performing surgery on patients who may not attend regularly for follow-up. Counselling of these surgical patients for adherence to follow-up is also routine in our clinic thanks to training from our BCPB research grant.

The third treatment option is laser, which is much less invasive than surgery and is a good alternative to drugs and surgery. Laser equipment is expensive so not many clinics have the facility.

To help in detecting glaucoma early, we screen all eligible patients with a digital fundus camera.

Our Impact: Detection and management

Through the research grant from BCPB, we have purchased the equipment and identified and tested a treatment method, which we found safe and effective in our African population. We have treated hundreds of patients and saved them from blindness and I believe many more will continue to benefit from this BCPB support. M. Abdull.
Research, Training and Mentorship Updates

Dr Aeesha Malik: Tanzania

Global Child Eye Health Project: Developing and pilot testing an eye module for inclusion in the UNICEF/WHO child health programme in Tanzania.

The problem: Three-quarters of the world’s blind children live in low income countries such as Tanzania. Most of these children have treatable or preventable conditions but there is a lack of local skilled eye care professionals to provide preventive measures or to detect and treat eye problems at primary care level. Children frequently present too late for effective treatment leading to avoidable vision loss and blindness. These children and their mothers regularly access primary level child health clinics to receive vaccinations and access health advice and education, but these health workers are not taught about eye problems in children. In fact child health systems and programmes, including the UNICEF/WHO Integrated Management of Childhood Illness (IMCI), do not include eye care in their primary level services for young children.

Our solution: Basic child eye care services should be included into mainstream child health systems. This would be a sustainable and scalable solution to address the health worker and services gap. The UNICEF/WHO IMCI child health programme is used in over 100 countries worldwide as a blueprint for primary level child health services. We want eye care to be included in this programme, potentially giving thousands of children access to basic primary eye care services.

Progress: BCPB funding has been invaluable to start our project. Our first step has been to develop and pilot test a training module which can be included in the IMCI programme. Since then we have been pilot testing the training module and materials in “real life” conditions. This is nearly complete and has shown that the training can be done, and it has provided valuable lessons for the programme.
Training outcomes: After the training staff will be able to:

- Explain why it is important to examine all children for eye disorders
- Explain the causes of eye disorders that cause damage to the eye over long periods of time or which cause blindness
- Recognise an injury
- Recognise poor vision or an inability to see
- Recognise whiteness or a white clouding of the cornea or pupil and its causes
- Recognise if there is any pain in the eye(s)
- Recognise an eye that is not its usual size
- Recognise a cross-eyed condition/squint/eye(s) dancing/darting around
- Recognise redness of the eye, excess rheum or oozing
- Recognise weeping eye(s)
- Classify and identify the right medical care and treatment for an eye disorder
- Advise the parents/carers about general eye health
- How to work with parents to ensure that treatment is able to continue at home
- Monitor a child with an eye disorder in accordance with IMCI guidelines.

Long term outcome: Our next steps are to evaluate this programme in Tanzania to provide evidence for scale-up in the global IMCI programme.

“Children frequently present too late for effective treatment leading to avoidable vision loss and blindness.”

Our Impact: Training

Dr Malik’s team has been working closely with the Ministry of Health in Tanzania to develop the training module and it has been agreed to include eye care in their national IMCI programme. There is now the potential to give mothers and children access to basic eye care services in over 100 low income countries globally.
Health-Related Quality of Life in two treatment pathways for newly diagnosed open angle glaucoma and ocular hypertension (OHT) in China: an unmasked, randomised controlled trial of initial selective laser trabeculoplasty versus conventional medical therapy.

Primary Open Angle Glaucoma (POAG) affects 9 million patients in China. This number is expected to rise significantly due to the aging population and longer life expectancy. The LiGHT trial in China, sponsored by BCPB, is looking to establish whether selective laser trabeculoplasty (SLT) is superior to standard topical medication.

The trial is being run at The Zhongshan Ophthalmic Centre in Guangzhou. Funding from BCPB has enabled the team from Moorfields Eye Hospital, UK, to provide extensive support and assistance in running the trial to a high standard with excellent data quality.

Over 690 patients have been randomised to receive either medication or SLT as primary treatment. Recruitment is expected to be completed towards the end of 2018 as patient retention within the trial has been much better than anticipated. Excellent questionnaire return rates have been seen, and data collection and accuracy is well over 90%. Additional funding acquired within China has enabled the patient follow-up period to be extended from 3 years to 6 years allowing us to gain longer term clinical and quality of life data in these patients.

We look forward to completing the recruitment of the largest trial in the world looking at primary laser treatment for POAG and OHT.

Our Impact: Skilled clinical trial recruitment

Effective collaboration and training leading to high levels of recruitment and retention of patients for clinical trials can assist with more robust results and research outcomes.
Dr Ian Murdoch, Tanzania:

Determination of the optimal strategy for glaucomas in Tanzania, Sub-Saharan Africa: an integrated clinical and health economics model.

Blindness due to glaucomas in Sub-Saharan Africa is amongst the highest recorded levels globally. Many factors account for this including:

- A lack of knowledge by the population
- A lack of eye care resources and personnel
- The high risk ethnic groups involved.

This project has now entered its second year of work. As outlined in last year’s report we are developing a population-based model for Tanzania. This model will look at the cost-effectiveness of a range of strategies designed to reduce the burden of disease due to glaucomas. The detailed literature review completed last time is under final review for publication. The patient questionnaire finalised during the consensus meeting of health professionals has received ethical permission for administration, and data collection has commenced. Once we have these findings we can start to construct the model combining available literature, health professional and patient views.

“Blindness due to glaucomas in Sub-Saharan Africa is amongst the highest recorded levels globally.”

Our Impact: Research Resourcing

Once complete this model will be an online resource enabling other countries to input their own data and assess optimal strategies for preventing sight loss from the second most common cause of preventable blindness.
Andrew Bastawrous: PEEK (Portable Eye Examination Kit), Botswana

Smartphones help bring eye health to a generation of children in Botswana.

The Government of Botswana will bring better vision to an entire generation of schoolchildren by 2021, using innovative smartphone technology developed with support from BCPB.

PeekVision develops smartphone apps and hardware which enable eye checks to be conducted in homes, communities and schools. BCPB supported the testing and validation of Peek Acuity, a smartphone eye check which has since launched on Google Play store and is in use in over 150 countries.

In 2017, the Government of Botswana confirmed that it will use Peek technology to deliver a national programme - Pono Yame (“My Vision”) - to screen and treat schoolchildren for eye health issues across Botswana. Pono Yame will be the world’s first national comprehensive school eye health programme. The President of Botswana, Honourable Mokgweetsi Masisi, highlighted it during the Commonwealth Heads of Government meeting in 2018, where a historic commitment was made to improve vision in all Commonwealth countries.

Led by the Botswana Government, the comprehensive eye health programme will use Peek technology and health intelligence solutions to identify schoolchildren with vision problems and link them efficiently and accurately to appropriate eye health services.

“Pono Yame will be the world’s first national comprehensive school eye health programme.”

In Botswana, an estimated one in ten school children have an eye health or vision problem, and it is thought that 30,000 children could benefit from access to spectacles and other vision services. Children who see better are able to learn better, and treating vision and eye health problems in childhood has long-term benefits for wellness and productivity. Economic analysis indicates that by putting a nationwide comprehensive eye health programme in place, Botswana could gain $1.3bn over the lifetime of the children screened through improved productivity and reduced long-term healthcare costs.
Microbial Keratitis in Malawi: A Microbiological Pilot Study.

Microbial Keratitis (MK) is an infection of the cornea (the transparent front part of the eye) that may lead to ulcers, scarring and loss of sight. The risk factors and organisms that cause MK are unknown in Malawi meaning that treatment is limited and outcomes are poor. One of the barriers to identifying the organisms has been the difficulty in collecting samples from the cornea which has depended on the use of sharp instruments and specialist equipment, which are not available in resource-deprived settings like in Malawi. In 2015, we developed a new method to obtain corneal samples which requires the use of corneal impression membranes (CIM), like a small piece of filter paper, to be placed on the corneal ulcer before being transported to the laboratory. This technique is simple to perform and is less invasive than scraping methods that are normally used at the moment. The aim of our current study is to assess how well this new method, which does not require specialist equipment, can be used to identify organisms that are causing MK in Malawi.

We have collected corneal samples from 71 patients with MK in Malawi using the CIM. We found organisms likely to be causing infection in 80.3% of participants which is much higher than that seen with traditional corneal scraping methods. The most commonly found type of organism has been gram-positive bacteria, which is similar to what we see in the UK. As the method is not invasive and there have been no adverse events or reactions, we are extending this study by collecting samples from the participants’ other eye. This will help us work out which of the organisms we find are likely to be really causing MK and which are only found as they naturally live on the front surface of the eye without causing infection.

This new methodology means that samples can be transported long distances from remote areas without loss of information.

The project is helping us to understand which organisms cause MK in Malawi and will help find ways of improving subsequent treatment and outcomes.

“

The project is helping us to understand which organisms cause MK in Malawi and will help find ways of improving subsequent treatment and outcomes.

”

Our Impact: Treatment for Microbial Keratitis in the future

This research has provided data which is clinically important. Medical, nursing and other staff will apply this simple corneal sampling technique to better detect and treat cases of Microbial Keratitis long-term.

Dr Tobi Somerville: Malawi

Our Impact: Recognising Potential

BCPB’s funding of the testing and validation of this technology in 2012 has led to PEEK being used in many countries to prevent blindness.
Investigation of the need for low vision services among children who have undergone surgery for bilateral cataract.

Cataract is the commonest cause of avoidable blindness in children in many developing countries. However, vision after surgery is often poor because children present late, which leads to “lazy eyes”, they have other eye abnormalities, and poor or complicated surgery. Post-surgery, these children need an assessment for low vision aids such as magnifiers and telescopes that might improve their visual function and enable them to attend school. Little is known about the low vision needs of these children or the extent to which their visual function can be improved. Simple, inexpensive interventions which lead to greater educational opportunities for children with low vision will have a lifelong impact.

This project was undertaken in two high volume child eye centres in Nepal and Bangladesh to understand whether all children require low vision assessment after cataract surgery. Data collection is complete and the results have also been analysed and are being written up for publication. The process has taken longer than anticipated as the data collected at both centres, while using the same standardised tool, varied according to who completed it.

Myself, Andrew Miller, low vision specialist from Focus Birmingham conducted successful three-day training workshops attended by all those involved in low vision assessment and rehabilitation at both centres. The workshop consisted of theory sessions and hands-on sessions where the participants conducted low vision assessments for children.

Some of the key findings from this research will be used for recommendations to both centres. An interesting finding is that while children need to be assessed for low vision after their cataract surgery, referring all children may not be the best use of the limited resources. However, this would mean that the personnel that decide which children require a low vision assessment would need training to ensure they have the skills to make that decision.

Priya Morjaria: Nepal and Bangladesh

Identifying gaps in training and assisting children to use vision aids leads to many more children being able to attend school after bilateral cataract surgery.
Mentoring for the success of diabetic eye screening programme in Swaziland.

BCPB is funding a research mentorship between Professor Tunde Peto of Queen’s University Belfast and Dr Jonathan Pons of Good Shepherd Eye Clinic in Siteki, Swaziland. Professor Peto reports:

In Swaziland, currently 60% of those presenting at the eye clinic with diabetic eye disease do so due to sight loss in their second eye, so they are desperate for treatment. Currently, there is no country-wide provision for structured diabetic retinopathy screening (DRS) to find early, treatable cases before sight loss sets in, but a pilot DRS service has been established for detection of sight threatening disease.

Reciprocal visits have been held between the mentor and mentee to train staff, evaluate current DRS provision and plan for provision of sustainable service. Ophthalmic cameras have been put in place and training given on how to take the photographs and analyse the images, and what to tell the patient. The images taken by the Swaziland staff were reviewed by the UK and the Swaziland Teams together to provide reassurance and quality control. There was a lot of interest both from the patients and the staff in this new activity and so additional staff members received structured DRS screening/grading training, and are being enrolled into the relevant international training course. Specific software has been designed and is successfully integrated into clinic/grading workflow. Protected DRS time and space are available and regular DRS imaging and timely grading takes place. Of those 400 people with DM screened, 100 (25%) required laser treatment, most for sight threatening proliferative DR (92%); these were duly carried out without complications, saving the sight of those affected.

Excellent progress is being made in Swaziland, definitely helped by the mentoring opportunities provided by the UK-team. Screening for sight threatening diabetic eye disease is now offered to everyone with diabetes on the new database. Trained staff are seeing patients, freeing up scarce medical resources to deal with more severe cases and carry out laser treatment and other necessary operations.

The impact on staff and patients has been very positive, and is contributing to the efforts of reducing blindness amongst those with diabetes.

"In Swaziland, currently 60% of those presenting at the eye clinic with diabetic eye disease do so due to sight loss in their second eye, so they are desperate for treatment."

The immediate effect on staffing level is one of the positive aspects of the project. Historically, nurses and technicians are moved around at short notice, and individual teams have little control over the move. Since the inception of the DRS, a highly-motivated technician stayed with the team and his skills with the camera and his excellent inter-personal skills made this project possible, together with the dedication of the lead clinician and the lead nurse. He is getting to know individual patients, has a good relationship with the rest of the team and is an anchor to the whole service. It is wonderful to see how a whole team grew around this mentoring project.

Our Impact: Mentorship

BCPB’s research mentorship awards enable blindness prevention training, development and capacity building in low income countries.
The project: The aim of this mentorship project is to build capacity for research relevant to the VISION 2020 goal in the region covered by the College of Ophthalmology of Eastern, Central and Southern Africa (COECSA) by ‘training the trainers’ of ophthalmologists. This is taking place in three eye care training institutions in Kenya, Tanzania and Uganda. Masters’ degree in Medicine (MMed) trainees produce a research dissertation as part of their training.

The key objectives are to train a lecturer and a training lead in each of the three institutions in research methods, and strengthen training in research methods as a recognised component of the MMed training curriculum. Workshops have been held and the learning has been cascaded to trainees at the three institutions.

International Centre for Eye Health research mentorship project: Kenya/Tanzania/Uganda

Activities that were planned and undertaken after the first workshop included:

- Providing a cascade seminar on research methodology to residents
- One-on-one mentorships – successfully assigned mentors to all trainees
- Developing research priorities so trainees have a pool of projects to pick from and now find it easier to develop research ideas.

Positive changes included inspiring more interest in research amongst trainees, more organised research plans with timelines and more support to residents, with the ability to work with residents from the planning stage. Previously residents would design the whole project themselves and then have it criticised if it was not appropriate. There is now more guidance and flexibility in the programme.

Update and reflections from Simon Arunga and Sam Ruvuma, Mbarara University of Science and Technology, Uganda.
Our Impact: Cascading research skills

The mentorship project will enhance the quality of research carried out by MMeds during their training and in their future careers, which will help them to drive future improvements in eye care service provision and research.
Our 2017/18 impact at a glance

- Competency scores of trainees on a BCPB-supported surgery simulation training project in Sub-Saharan Africa have doubled in just three months.

- After BCPB’s initial funding in 2012 of the Portable Eye Examination Kit PEEK to test and validate the technology, the Botswana Government are now screening and treating all schoolchildren for eye health issues.

- BCPB’s investment in the development of a Tanzania Ministry of Health child eye health module will result in 848 frontline child health workers receiving training for the first time in child eye health and the production of educational videos which can be used around the world.

- BCPB-funded research and training work in Nepal and Bangladesh is enabling many more children to attend school after bilateral cataract surgery.

- A BCPB-supported project in Malawi will enable medical, nursing and other staff in the country to use a simple corneal sampling technique to better detect and treat cases of Microbial Keratitis.

- A mentorship programme supported by BCPB has helped to establish a diabetic retinopathy screening programme in Swaziland.
Hundreds of patients in Nigeria have had their sight saved through early detection of glaucoma after a BCPB grant helped to test methodology and purchase equipment.

A mentorship grant awarded by BCPB is building research capacity in eye care training institutions in Kenya, Tanzania and Uganda.

BCPB’s support of emerging eye health professionals has led to high-achieving leaders in the field of blindness prevention, with our first ever Fellow Dr Ciku Mathenge taking a leading role in the production of a World Health Organization eye health care training manual.

BCPB’s four Boulter Fellows from India, Kenya and Nigeria who attended the 2017/18 Public Health for Eye Care Masters’ Degree course at The International Centre for Eye Health in London will save the sight of an estimated 285,000 people in their home countries over the course of their careers.

Once completed, a BCPB-supported project in Tanzania will become an online resource enabling countries to share data and best practice for preventing sight loss from glaucoma.

BCPB funding has ensured excellent recruitment and retention of patients to the world’s largest trial for alternative glaucoma treatment in China, leading to more robust results.
BCPB’s Boulter Fellowship programme was set up in 1982 to enable eye care professionals from the developing world to train at the UK’s International Centre for Eye Health and achieve the specialist skills needed in their country of origin. The name Boulter refers to one of our most inspiring founders, Mr Eric Boulter, whose background included the American Foundation for Overseas Blind (now The Helen Keller Foundation) and who was later Director General of RNIB. Eric knew what it was like to be blind through his own experience of being without sight since World War II.

Each year, we support the training of a small number of applicants who study for an MSc in Public Health for Eye Care. This course equips them with the skills and knowledge they will need to plan and implement national and regional blindness prevention programmes. The MSc students learn how to effectively develop, manage, monitor and evaluate programmes; become leaders, advocates and trainers in eye health; develop a relevant research agenda, and directly influence eye health policy at government level.

By the end of the one-year programme students will be able to:

- describe the basic epidemiology of the major blinding eye diseases
- design and interpret studies to assess public health eye care needs using appropriate research methods
- critically appraise and select appropriate public health interventions for the major blinding eye diseases
- design a comprehensive eye care programme for appropriate preventative and therapeutic measures for a community
- develop the skills necessary for resource mobilisation, management and evaluation of local comprehensive eye care programmes and integration into health systems
- discuss the importance of disability in the global context
- appraise the epidemiology of visual and other impairments leading to disability and the impact of disability on people’s lives.

The Master’s degree is awarded by the London School of Hygiene and Tropical Medicine, University of London.
Dr Ahmed Bako 2017-18: Nigeria

Dr Bako is Head of Ophthalmology at Specialist Hospital, Sokoto.

He tells us that the MSc course has helped him develop a public health-oriented approach to delivery of eye care services and the control of blindness. He has developed skills in epidemiological and operational research and critical analysis for control of blinding eye diseases, as well as programme planning, management and evaluation.

The course has also helped him in facilitating his personal development, "enabling me to contribute more fully to my country’s and society’s eye health". He has obtained the skills required to engage with local, national and international networks of health professionals and systems for the prevention of blindness worldwide.

On returning to Nigeria, Dr Bako plans to organise a framework for improving the delivery of cataract surgery in the Sokoto area by improving the efficiency of services provided and reducing the cost of cataract surgery using cost containment and cost reduction strategies, thereby increasing the cataract surgical volume.

He intends to monitor and improve the quality of surgical activity which in turn builds trust in the services and improves uptake.

His MSc project is on the subject of reducing the cost of cataract surgery at Specialist Hospital. Despite the availability of cataract surgical services in Sokoto State, up to 40% of cataract intervention is due to couching (a precursor to modern cataract surgery). A rapid assessment of avoidable blindness survey conducted in 2016 revealed cost as the major barrier to the uptake of cataract surgery in the State. In order to reduce the cost of cataract surgery, the components that contribute to the cost must be analysed.

These components include the fixed and variable costs from the provider’s perspective, and the direct and indirect costs from the patient’s perspective. The result of this study will go a long way to assist the eye care programme and help the health authority decide on the best way to reduce the cost of cataract surgery in Sokoto State.

On returning to Nigeria, Dr Bako plans to organise a framework for improving the delivery of cataract surgery in the Sokoto area by improving the efficiency of services provided and reducing the cost of cataract surgery using cost containment and cost reduction strategies, thereby increasing the cataract surgical volume.

He intends to monitor and improve the quality of surgical activity which in turn builds trust in the services and improves uptake.

Dr Bako’s Ophthalmology Statistical Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many eye patients do you see every year?</td>
<td>1,600</td>
</tr>
<tr>
<td>How many eye patients would you see over your career in total?</td>
<td>32,000</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>800</td>
</tr>
<tr>
<td>How many staff would you train over a year?</td>
<td>2</td>
</tr>
<tr>
<td>How many patients would they see?</td>
<td>500</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>200</td>
</tr>
<tr>
<td>How many staff will you train over your whole career?</td>
<td>40</td>
</tr>
</tbody>
</table>
Dr Funmilayo Oyediji 2017-18: Nigeria

Dr Oyediji is an ophthalmologist at Jos University Teaching Hospital in Plateau State where the population is approximately 6.3 million, but there are only three ophthalmologists.

The key things she will take away from the course and implement in her work include:
- improved IT skills
- a community approach to eye health care and leadership
- designing studies
- eyecare field project work
- proposal development
- critical thinking, how to appraise publications and write in high impact journals
- training and curriculum development.

On returning to Nigeria, she plans to organise an outreach programme, and hopes to present a proposal to Bauchi State Ministry of Health on the need for a State blindness survey and the need to put in place a functional eye care programme. Data on prevalence of blindness and common causes will aid in advocating for partners/stakeholders to liaise with the State to work on prevention of blindness, reduce the burden of avoidable blindness and provide low vision aids for those with unavoidable blindness.

Dr Oyediji’s MSc project is the evaluation of trachoma trichiasis (TT) surgery provision following the training of trichiasis surgeons in Bauchi State, north eastern Nigeria. She considers it an important topic because with the year 2020 in view, all hands are on deck to ensure elimination of trachoma as one of the focal diseases of Vision 2020.

Trichiasis is the inward turning of eyelashes from repeated chlamydial infection, with painful irritation of the eye and vision loss. Persons most affected are rural, poor, women folk. With lid surgery, discomfort can be relieved and occasionally there is some vision improvement. The surgery is best done in the community, which means increased workload for the already over-burdened ophthalmologists.
With the shortage of human resources for eye health in Nigeria and especially in Bauchi State, it is necessary to train ophthalmic nurses and certify them as trachomatous trichiasis surgeons to help clear the trichiasis backlog. Some nurses have been trained in trichiasis surgery for the scale-up in eliminating trachoma. High quality surgery, adequate training, patient counselling, supportive supervision, good follow-up of patients, and surgery for those with recurrent trichiasis were found to be reasons for the current success of the programme. The TT surgeons cannot do all of this alone hence the supportive role of case finders in identifying patients and bringing them to the health centre, while health assistants help with the sterilization and inflow of patients.

With these resources, the road map for reducing trichiasis to levels where it is no longer of public health significance is set, but there is a need for sustainability of the programme.

### Dr Oyediji's Ophthalmology Statistical Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many eye patients do you see every year?</td>
<td>3,600</td>
</tr>
<tr>
<td>How many eye patients would you see over your career in total?</td>
<td>72,000</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>20,000</td>
</tr>
<tr>
<td>How many staff would you train over a year?</td>
<td>15</td>
</tr>
<tr>
<td>How many patients would they see?</td>
<td>18,000</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>14,000</td>
</tr>
<tr>
<td>How many staff will you train over your whole career.</td>
<td>3,000</td>
</tr>
</tbody>
</table>
I am a Consultant Ophthalmologist at Kajiado County Referral Hospital in charge of the eye department and County eye services. Some of the key things I learnt whilst on the course which I will use in my blindness prevention work are:

- Thinking globally while acting locally - the course was a real eye opener providing a global picture of eye care. We had lecturers from diverse backgrounds both academically and geographically which enriched the learning experience immensely. I have learnt of success stories in countries like Nepal and Rwanda through experiences shared both in the classroom and outside. I will draw inspiration from many of these experiences in my own work going forward.

- Access to a variety of resources meant that the learning experience was fulfilling and helped to cement some of the lessons learnt in class, which will be useful for my work as an ophthalmologist.

- I made a network of friends and colleagues from around the world from whom I have learnt a great deal. I hope that we will keep sharing our work experiences, challenges and achievements with the aim of bettering ourselves and offering the best services to our patients.

My MSc project seeks to evaluate the incremental cost-effectiveness of providing cataract surgical services integrated into a pre-existing trachoma outreach service in Kajiado County where resources are scarce. The recent initiative towards achieving global elimination of trachoma has seen a lot of resources made available towards this goal, but patients with other disabling conditions such as cataract lose out when programmes only focus on the key disease which has funding. In the context of a semi-nomadic community such as the Maasai, screening a whole population for trachoma trichiasis while not addressing cataract is a missed opportunity. It is hoped that results from this research can be used to advocate for an integrated approach in Kenya and other parts of the world where trachoma is targeted for elimination.
Dr Oenga tells us of a 50-year old mother and business woman from Kajiado who was experiencing difficulty in doing close work and needed to ask for help from her family and colleagues. She learnt from a friend that an eye care outreach team was visiting 10 kilometres away from her home, so she walked there. She was examined by the ophthalmic nurse who told her that her eye condition was due to advancing age and she required spectacles for close work. She was given a free pair of glasses which at first she was quite shy to wear, but after a while she found that she couldn’t do without them. She is now able to do all activities independently and plans to explain to her local community the importance of seeking help at the health facility.

On returning to Kenya, Dr Oenga plans to set up diabetic retinopathy screening, develop an advocacy for eye care service at Kajiado, and talk to the county health leadership team about training for eye care workers.

### Dr Oenga’s Ophthalmology Statistical Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many eye patients do you see every year?</td>
<td>3,000</td>
</tr>
<tr>
<td>How many eye patients would you see over your career in total?</td>
<td>60,000</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>4,000</td>
</tr>
<tr>
<td>How many staff would you train over a year?</td>
<td>30</td>
</tr>
<tr>
<td>How many patients would they see?</td>
<td>30,000</td>
</tr>
<tr>
<td>Of these, what is the number of patients whose sight will be saved as a result of your work?</td>
<td>2,500</td>
</tr>
<tr>
<td>How many staff will you train over your whole career.</td>
<td>3,500</td>
</tr>
</tbody>
</table>
Subeesh Kuyyadiyil 2017-18: India

Before commencing the master’s degree, Mr Kuyyadiyil was working as project lead at Sadguru Netra Chikitsalaya, an eye care hospital in rural Chitrakoot, Madhya Pradesh. On returning to India after the course, he expects to take up a position as head of community ophthalmology at the hospital.

The key skills he has learnt on the MSc course include:

- Data analysis and design, and statistical methods for research
- Interpretation of findings from statistical analysis
- Application of concepts - efficiency, equity, elasticity, marginal analysis in eye care
- Critical reading of scientific papers and its presentation
- District level eye care assessment and its implementation
- Disease control programme development
- Policy analysis framework, costing and budgeting
- Conducting epidemiology surveys
- Conducting qualitative and quantitative research
- HR planning and training skills
- Blindness estimation in a given population with available figures.

“Leadership and vision are the key to bringing people together in difficult rural areas.”
On his return to India he plans to strengthen the existing system of programme management, conduct training, establish a research team, and set up a post-graduate course in eye care management – leading to enhanced work with stakeholders at all levels including government.

Mr Kuyyadiyil’s MSc project on retention of ophthalmologists in rural and underserved areas of India will review the evidence on strategies and influencing factors that increase the retention of special medical workforce in rural areas, and document best practice. Around 70% of the Indian population live in rural areas, but the majority of the health system and resources are located in urban areas leading to problems in retaining ophthalmologists in the rural areas.

He tells us about an exceptional Indian ophthalmologist, Dr B K Jain who he interviewed in-depth regarding retention of ophthalmologists in rural areas. Dr Jain has been at the Institute in Chitkrakoot for four decades.

“Around 70% of the Indian population live in rural areas, but the majority of the health system and resources are located in urban areas.”

His exceptional leadership qualities and dedication have brought positive changes and attracted ophthalmologists who have stayed for a long time, resulting in a large and high quality eye care centre in a very remote area of India. In 2017-18 the hospital served close to a million patients and performed over 130,000 eye surgeries. According to Dr Jain, leadership and vision are the key to bringing people together in difficult rural areas. His value-based transparent system helps people to gain confidence and grow together. Continuous focus on improvement with collaborative partnerships with similar organisations has enabled a sustainable system with high volume, quality and increased financial viability.
Dr Srinivas Marmamula: Boulter Fellow 2002/2003

Dr Marmamula is now Associate Director for Primary Eye Care, Community Eye Health Education and Research at the Gullapalli Pratibha Rao International Centre for Advancement of Rural Eye Care, L V Prasad Eye Institute in India.

Hyderabad Ocular Morbidity among Elderly Study (HOMES).

Visual impairment is more common among elderly people living in residential care when compared to those living in non-institutionalised environments. A significant proportion have an impairment that can be corrected by simple interventions such as the use of spectacles and cataract surgery. Studies have shown that visual impairments in the elderly affect all dimensions of their life such as mobility, self-care, driving and participation in social and religious activities, general health and overall quality of life.

I am researching visual impairment among elderly people in residential care in India. My research aims to investigate the prevalence and causes of visual impairment and assess the impact of intervention, including the provision of cataract surgery and spectacles, on the visual functions of elderly individuals in residential care. The overarching goal is to provide insights on vision status among elderly people, and help in health policy formulation and planning strategies to provide services and contribute towards 'healthy aging' in these vulnerable populations.

This pre and post interventional study design is being conducted in homes for aged in Hyderabad in the State of Telangana, India. Over 500 participants from 15 care homes have been examined, and data collection is scheduled for completion in 2019.
Dr Ibanga works at Calabara Teaching Hospital in Cross River State, Nigeria. She reports on her glaucoma awareness work:

The focus in the last year has been on glaucoma which is an irreversible cause of blindness. Some of the challenges have been late presentation to hospital, poor knowledge, low level of awareness and poor adherence to treatment. The Know Your Glaucoma Status campaign was flagged at Calabar Teaching Hospital during World Glaucoma Week for staff who are at risk. The programme is initially to be run between 2017 and 2026. The Know Your Glaucoma Status card, which is coded into green, red and orange, is given out during screening. Green means normal, with a requirement to return for screening the following year. Orange means glaucoma suspect, and they will be given a short appointment for proper assessment. Red means glaucoma and will be managed as per protocol. 170 members of staff were screened in 2017, and 125 screened in 2018.

We went to eight churches in the locality with health education messages on glaucoma during World Glaucoma Week, and also encouraged at-risk populations to come for screening. Church leaders in the locality were invited for a talk on glaucoma and other eye diseases, and were screened free of charge. The aim of the interaction is to foster a good working relationship with the hope that they will encourage worshippers from churches who are in the at-risk group to come for regular eye checks as a habit because they are very influential and the people listen to them.

The glaucoma patient group in the hospital is getting stronger and more people have become members. Currently members have identity cards giving them 10% discount in designated pharmacy shops. This was introduced to improve adherence to medications.

In creating awareness on glaucoma and the service we engaged the local television station to send out health education messages and information during World Glaucoma Week in 2017 and 2018 respectively.

Anne Orlina: Boulter Fellow 2011/2012

The MSc in Public Health for Eye Care equipped me with knowledge and skills to take an active role in blindness and vision impairment prevention. I gained a wealth of knowledge that continues to empower me in attaining a wide range of skills to be effective as a public health trained optometrist in developing countries.

Guyana, on the northern coast of South America, is considered as one of the poorest countries in South America. The geographical location and distribution of communities in Guyana creates a substantial gap in healthcare service delivery. I am working as a Clinical Optometrist in a private optometry practice. As a part of company commitment to serve the underprivileged communities, we collaborate with Lion’s Club to provide eye examination and spectacle correction to school children.

Affiong Ibanga: Boulter Fellow 2011/2012

Dr Ibanga works at Calabara Teaching Hospital in Cross River State, Nigeria. She reports on her glaucoma awareness work:

In Manila, Philippines, I was involved as a Low Vision Course Workshop facilitator for optometry students at Centro Escolar University. The training aims to increase the knowledge and skill level of optometry students in low vision. There is a prevalence of low vision in developing countries in Asia and Africa, and only a limited number of eye care professionals able to provide low vision services in these settings.

I participated as a Volunteer Optometrist in rural healthcare delivery in Guinobatan, Albay, Philippines, establishing a partnership with local community leaders to provide community optometry services to rural residents.
### Income & Expenditure:

**Year ended 31st March 2018**

<table>
<thead>
<tr>
<th></th>
<th>Unrestricted Funds 2018</th>
<th>Restricted Funds 2018</th>
<th>Total 2018</th>
<th>Total 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME FROM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legacies and Donations</td>
<td>126,321</td>
<td>42,000</td>
<td>168,321</td>
<td>204,443</td>
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<tr>
<td>Investments</td>
<td>6,547</td>
<td>–</td>
<td>6,547</td>
<td>7,273</td>
</tr>
<tr>
<td>Other Income</td>
<td>75</td>
<td>–</td>
<td>75</td>
<td>–</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>132,943</strong></td>
<td><strong>42,000</strong></td>
<td><strong>174,943</strong></td>
<td><strong>211,716</strong></td>
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<tr>
<td><strong>EXPENDITURE ON</strong></td>
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</tr>
<tr>
<td>Raising funds</td>
<td>53,409</td>
<td>–</td>
<td>53,409</td>
<td>40,043</td>
</tr>
<tr>
<td>Charitable activities</td>
<td>213,314</td>
<td>–</td>
<td>213,314</td>
<td>323,943</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>266,723</strong></td>
<td>–</td>
<td><strong>266,723</strong></td>
<td><strong>363,986</strong></td>
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<tr>
<td>Unrealised (loss)/gain on investments</td>
<td>(4,856)</td>
<td>–</td>
<td>(4,856)</td>
<td>16,007</td>
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<tr>
<td>Net income/(expenditure)</td>
<td>(138,636)</td>
<td>42,000</td>
<td>(96,636)</td>
<td>(136,263)</td>
</tr>
<tr>
<td>Transfers between funds</td>
<td>42,000</td>
<td>(42,000)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>NET MOVEMENT IN FUNDS</strong></td>
<td><strong>(96,636)</strong></td>
<td>–</td>
<td><strong>(96,636)</strong></td>
<td><strong>(136,263)</strong></td>
</tr>
<tr>
<td><strong>FUND BALANCES BROUGHT FORWARD</strong></td>
<td>544,719</td>
<td>–</td>
<td>544,719</td>
<td>680,982</td>
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<td><strong>FUND BALANCES CARRIED FORWARD</strong></td>
<td>448,083</td>
<td>–</td>
<td>448,083</td>
<td>544,719</td>
</tr>
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</table>
## Balance Sheet:

**Year ended 31st March 2018**

<table>
<thead>
<tr>
<th></th>
<th>Group 2018</th>
<th>Group 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIXED ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible Assets</td>
<td>£1,649</td>
<td>£45</td>
</tr>
<tr>
<td>Investments</td>
<td>£184,396</td>
<td>£150,369</td>
</tr>
<tr>
<td><strong>Total Fixed Assets</strong></td>
<td>£186,045</td>
<td>£150,414</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debtors</td>
<td>£144,914</td>
<td>£162,534</td>
</tr>
<tr>
<td>Short term bank deposits</td>
<td>£275,116</td>
<td>£402,753</td>
</tr>
<tr>
<td>Cash at bank and in hand</td>
<td>£58,422</td>
<td>£187,734</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>£478,452</td>
<td>£753,021</td>
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<tr>
<td><strong>CREDITORS</strong></td>
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<td></td>
</tr>
<tr>
<td>Amounts falling due within one year:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed grants</td>
<td>£169,177</td>
<td>£225,246</td>
</tr>
<tr>
<td>Accruals</td>
<td>£8,540</td>
<td>£8,124</td>
</tr>
<tr>
<td><strong>Total Creditors</strong></td>
<td>£177,717</td>
<td>£233,370</td>
</tr>
<tr>
<td><strong>NET CURRENT ASSETS</strong></td>
<td>£300,735</td>
<td>£519,651</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS LESS CURRENT LIABILITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CREDITORS: AMOUNTS DUE AFTER ONE YEAR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NET ASSETS</strong></td>
<td>£448,083</td>
<td>£544,719</td>
</tr>
</tbody>
</table>

Represented by:

- **RESTRICTED FUNDS**
  - Boulter Fellowship Award Fund: £180,000
  - BCPB Fellowship Award Fund: £200,000
  - Fundraising Development Reserve: £21,971

- **UNRESTRICTED FUNDS**
  - General Fund: £46,112

Full financial details are available in our Annual Report & Accounts 2018.
Independent Auditors’ Statement to the Trustees of the British Council for Prevention of Blindness

We have examined the summarised financial statements of the British Council for Prevention of Blindness for the year ended 31st March 2018. (Pages 38 and 39.)

This statement is made solely to the Trustees, as a body, in accordance with the terms of our engagement. Our audit work has been undertaken so that we might state to the Trustees those matters we have agreed to state to them in this statement and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than Trustees as a body, for our audit work, for this statement, or for the opinions we have formed.

Respective responsibilities of trustees and auditors

The Trustees are responsible for preparing the summarised financial statements in accordance with recommendations of the charities SORP.

Our responsibility is to report to you our opinion on the consistency of the summarised financial statements with the full financial statements and Trustees’ Annual Report. We also read the other financial information contained in the summarised annual report and consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the summarised financial statements.

Opinion

In our opinion the summarised financial statements are consistent with the full financial statements and the Trustees’ Annual Report of the British Council for Prevention of Blindness for the year ended 31st March 2018.

Knox Cropper
Registered auditors

Date: 13th July 2018

The Trustees confirm that the financial statements on pages 38 and 39 are taken from the full set of financial statements comprising the Trustees’ Report and Accounts which were approved on 13th July 2018. The summarised financial statements may not contain sufficient information to allow a full understanding of the financial affairs of the British Council for Prevention of Blindness.

For further information the Annual Report and Accounts should be consulted. A copy of this document, upon which the auditors have reported without qualification, has been delivered to the Charity Commission and is available on request from the British Council for Prevention of Blindness, 4 Bloomsbury Square, London, WC1A 2RP and on our website - www.bcpb.org

By order of the Trustees.

Date: 13th July 2018
Board of Trustees

The Officers and Trustees of BCPB as at September 2018 are:

**Chairman**
Mr Paul Hunter  
MA FRCP FRCS FRCOphth  
Retired Ophthalmologist  
Past President of Royal College  
of Ophthalmologists

**Vice-Chairman**
Mr David Hughes  
MB ChB FRCOphth  
Consultant Ophthalmologist  
Royal Gwent Hospital, Newport

**Treasurer**
Mr Afzal Ismail  
BSc (Hons) MSc ACA  
Chief Internal Auditor Wholesale  
Banking, Nordea Bank, Sweden

**Charity Manager**
Miss Diana Bramson

**Fundraising Manager**
Ms Emma McGuigan

**Trustees**

Miss Brenda Billington  
OBE MB ChB DO FRCS FRCOphth FEBO  
Retired Ophthalmologist  
Past President of Royal College of  
Ophthalmologists

Mr Anthony Blackman  
BSc(Hons) FBDO CL (Hons)SLD  
SMC(Tech) CertAcc(Open)  
MRSB MRSPH FinstCPD  
Dispensing Optician / Director of  
Training at Insight Optical Training /  
Development Director at The CET  
Academy / Joint Managing Director  
at Micony Apps

Mr Richard Wormald  
MA MB BCh (Cantab) MSc (LSHTM)  
FRCS (Glasg) FCROphth (London)  
Consultant Ophthalmologist  
Moorfields NHSFT and Honorary  
Senior Lecturer, Institute of  
Ophthalmology University College  
London and London School of  
Hygiene and Tropical Medicine

Dr David Yorston  
MB ChB FRCOphth  
Consultant Ophthalmologist  
Gartnavel Hospital, Glasgow

**Principal Address**
British Council for  
Prevention of Blindness  
4 Bloomsbury Square  
London WC1A 2RP

Telephone: 020 7404 7114  
Email: info@bcpb.org  
Website: www.bcpb.org

**Registered Charity Number:**  
270941

Member of the Association  
of Medical Research Charities  
(AMRC)  
Member of the International  
Agency for the Prevention of  
Blindness (IAPB)  
Member of the National  
Association of Voluntary  
Organisations (NCVO)  
Member of the Small  
Charities Coalition

**Auditors**
Knox Cropper  
8/9 Well Court  
London EC4M 9DN

**Bankers**
HSBC Bank Plc  
90 Baker Street  
London W1M 2AX

CAF/Shawbrook Bank  
Lutea House  
Warley Hill Business Park  
The Drive, Great Warley  
Brentwood, Essex CM13 3BE
Vision testing in Swaziland
Supporting BCPB

Our work in preventing blindness cannot take place without the generosity of individuals, trusts and companies

CONTACT DETAILS

Name: ___________________________ Email: ___________________________
Address & postcode: ___________________________

☐ Please tick if you would like BCPB to keep you updated on the work your gift supports.

SINGLE DONATION

Online: www.bcpb.org/donations.html (Through JustGiving)

POSTAL DONATION

Please complete and send this form to BCPB, 4 Bloomsbury Square, London WC1A 2RP.
Please accept my donation of £ ____________________ towards preventing blindness. I enclose my cheque made payable to British Council for Prevention of Blindness.

REGULAR DONATIONS - BANKERS FORM

Please complete and send this form to BCPB, 4 Bloomsbury Square, London WC1A 2RP.
To (Bank name): ___________________________ Your Bank’s address & postcode: ___________________________

Please pay: The British Council for Prevention of Blindness, 4 Bloomsbury Square, London WC1A 2RP
Bank sort code: 40 01 06, Account Number: 81168150 the sum of £ ___________________________
Amount in words: ___________________________
Your Bank sort code: ___________________________ Your account number: ___________________________
Account holders name: ___________________________
Start date*: _____________ (At least one month from today’s date) and afterwards on the same day each month/quarter/year until further notice. * This cancels all previous orders.

GIFT AID

If you are a UK tax payer we could claim Gift Aid on your donation and receive an extra 25p for every £1 you give.

☐ (Please tick) YES I am a UK tax payer and I wish BCPB to claim Gift Aid on all donations I have made over the past four years and all future donations. I understand that if I pay less income tax and/or capital gains tax in the appropriate tax year than the amount of Gift Aid claimed on all my donations, it is my responsibility to pay any difference. You can cancel your declaration at any time, and you must inform us of changes to your name, address or tax status. If you pay Income Tax at the higher or additional rate and want to receive the additional tax relief due to you, you must include all your Gift Aid donations on your Self-Assessment tax return or ask HM Revenue and Customs to adjust your tax code.

Signature: ___________________________ Date: ___________________________

MAKING A WILL

Whether you have already made a Will or are thinking of doing so, please consider making a charitable gift to BCPB.
Please email fundraiser@bcpb.org for more information.