



Welcome to our spring issue of Visibility. We're looking forward to warmer days ahead and to Eye to Eye's 10th anniversary, our annual fundraising walk on Sunday 23 June. Patients, staff, researchers and supporters will pound the streets past iconic London landmarks and celebrate with a fun-filled family-friendly street party next to Moorfields Eye Hospital. We can't wait!

In this issue, we update you on the new eye health centre opening in 2027 in St Pancras, as cranes go up on the site to establish the foundations of a future global landmark, and the state-of-the-art designs are showcased in an exhibition.

We mark the re-launch of our innovation and improvement grant programme with an 'innovation and improvement' themed Visibility. We hear from the charity's grants and research team how the funding is helping innovators at Moorfields to bring their ideas to life – ultimately benefitting patients.

We spotlight Artificial Intelligence (AI) at Moorfields which has been in global headlines and continues to lead the agenda not just in eye health but across wider NHS patient care. We're supporting projects that aim to embed AI practices and improve diagnostics – with safe, efficient patient services.

We meet some of our most dedicated supporters who tell us why Moorfields matters so much to them and why they're taking part in Eye to Eye this year. Thank you to everyone who supports our work investing in critical research and innovation at Moorfields and UCL. A huge thank you from us all - whether you donate to an appeal, play the lottery, or are taking part in Eye to Eye 2024!

We hope you enjoy reading this issue.



#### Our news

#### Designing for the future of eye health

Construction of the new eye health centre is progressing at pace! We're very pleased to update that our state-of-the-art centre for eye care, research and education is taking shape. Cranes are on-site, foundations are being laid and the building is starting to appear from the ground up.

Oriel is a joint initiative between Moorfields Eye Hospital, the UCL Institute of Ophthalmology and Moorfields Eye Charity with services moving from near Old Street to a site in Camden. The new centre and home for Moorfields and the UCL Institute of Ophthalmology, will enhance collaborative working with patient care, research and education all under one roof. This will accelerate advances in our understanding of eye disease and bring new treatments to people in the UK and globally.

In March, we held a public exhibition showcasing external and internal designs for the new centre.

- · Over 700 people attended
- · Patients, staff, neighbours and donors were represented



Watch footage of the site from Bouygues UK as work progresses, and find out about the use of renewable energy.



youtu.be/\_XUzVFV3ckk

Visit the Oriel website to see highlights from the exhibition oriel-london.org.uk

"We're delighted to be supporting Moorfields Eye Charity and partners Moorfields and UCL, helping to create this new centre, purpose built for the future, that will combine clinical care, education, and research. This is a great opportunity to design a world-leading centre for eye health, harnessing new technologies to accelerate research breakthroughs, and transform the patient experience."

Douglas Griffiths, President of Oak Foundation

Philanthropy is critical to realising this new global centre for advancing eye health, opening in 2027. Thank you to our very generous donors for making this possible. Watch the charity's brand new video with a virtual tour of the centre, insights from people at Moorfields and the UCL Institute of Ophthalmology, and patients telling us why they're so excited about the new centre and what it means to people with sight loss. youtu.be/sxTZ9IOUeVw

Thank you to our generous donors to date. If you'd like to find out how to get involved, contact Rachel Jones by email at rachel.jones310@nhs.net or call 020 7566 2565.

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### **Investing in innovation**

Our relaunched innovation and improvement grant programme enables Moorfields and UCL staff to test new ideas that will help transform clinical practice and services, and staff and patient experiences across the Moorfields network of sites.

Previous initiatives we've helped launch include the installation of digital keys at City Road, exploring smartphone monitoring of eye health and reviewing community care for glaucoma.

We look forward to supporting more ideas and helping staff put them into practice.

Find out more about our ambitions for the programme with Aoife Kiely, funding manager in the charity's grants and research team, and the difference it will make to Moorfields and patients on page 10.



## Increasing our impact through partnerships

We're working with Diabetes UK to better understand the causes of sight loss in diabetes and improve outcomes.

People living with diabetes can gradually develop sight loss over time. This is caused by complications

of diabetes called diabetic retinopathy (DR) and diabetic macular oedema (DMO). DR and DMO are caused by high blood sugar levels, causing damage to the blood vessels in the light-sensitive part of the eye, called the retina.

#### **RD Lawrence Fellowship**

Fellowship with Diabetes UK, awarded to Dr Giulia De Rossi at the UCL Institute of Ophthalmology. This grant supports postdoctoral researchers in becoming leaders in the field of diabetes research. Dr De Rossi is searching for new ways to treat the early stages of diabetes related eye disease. This is an urgent need, because current treatment using drugs to block vascular endothelial growth factor (VEGF), is

We're proud to co-fund the prestigious RD Lawrence

of the disease and achieves a positive outcome for just around 50% of patients. Dr De Rossi's exciting research could potentially help develop new treatments for early DR and stop the disease before any vision loss only effective in the later vision-threatening stages has occurred in patients.



#### Co-funding with Diabetes UK, Fight for Sight and the Macular Society

A partnership with Diabetes UK, Fight for Sight and the Macular Society to jointly fund research to tackle sight loss in diabetes will increase our impact. Funding has been awarded to Professor Karl Matter, a researcher at the UCL Institute of Ophthalmology. His research looks at the behaviour of MarvelD3, a 'stress sensor' in the retina's blood vessels which becomes over activated in DR. Professor Matter will investigate whether 'turning it off' could prevent damage. The aim is to increase our understanding of the causes of diabetic retinopathy and lead to new therapies for people affected by sight loss in diabetes.

## Fundraising news Help us make our 10th Eye to Eye the most successful ever

Eye to Eye, our annual fundraising walk, is returning on Sunday 23 June **2024** under summer skies for the first time. We would love for you to join us and show your thanks to Moorfields for the care they give.

#### 1 in 5 of us will live with sight loss in our lifetime

You can walk 1, 5 or 15 miles on routes that explore the capital's big landmarks, including the London Eye. As part of our celebrations, we will be hosting a street party at the start and end point outside Moorfields Eye Hospital – expect family-friendly fun, games and food.

It's an excellent opportunity to come together with the Moorfields community patients, staff, researchers and charity supporters all walking to raise money to support the essential and life-changing work of Moorfields.

#### Over 10 years





Total miles walked (approximately)

And for those who wish to fundraise closer to home, there's My Eye to Eye - our virtual run, ride or walk event, held between 22-23 June. You decide how, when and where you take

part. You could cycle through local woods, run along your favourite beach or trek over lush green hills – the choice is yours. Get involved as part of #TeamMoorfields.

Visit: moorfieldseyecharity.org.uk/eyetoeye Email: moorfields.eyecharity@nhs.net



#### Christmas raffle - thank you!

Thanks to the incredible generosity of our supporters, over £50,000 was raised through the Christmas raffle to support the groundbreaking research and innovation at Moorfields and UCL. Our favourite phone calls each year are to let our winners know the good news, and we were delighted to find out this year's first prize winner has been a regular supporter of ours for over a decade!

Thank you to everyone who entered this makes a massive difference to patients at Moorfields and people with sight loss everywhere.

#### Play our lottery

Can't wait until this year's Christmas raffle? For as little as £1 a week, you can help us invest in the life-changing work at Moorfields and UCL, with the chance to win £25,000 in the Moorfields Eye Charity lottery.

Play today to invest in a better future for people with sight loss and you could win big prizes at the same time.

The easiest way to play is online via our partner Unity, visit lottery.moorfieldseyecharity.org.uk or call 0370 050 9240.



## Spotlight on Artificial Intelligence

The UCL Institute of Ophthalmology and Moorfields Eye Hospital are at the forefront of Artificial Intelligence (AI) in eye health and we're proud to support their work. Researchers have unrivalled and secure access to patient data covering a range of eye conditions, including rare eye diseases.



anonymised sets of patient data in a safe and ethical way. High-quality, curated datasets are essential for developing accurate AI systems.

Last year, UCL and Moorfields achieved global recognition with the discovery that eye scans analysed by AI can detect Parkinson's disease up to seven

years before symptoms appear.
This groundbreaking research
is having an impact beyond eye
health.

We focus on two leading researchers in AI at Moorfields and UCL, supported through charity grant programmes, who are transforming eye care.



#### Embedding use of AI to improve diagnoses

We're delighted to support Professor Pearse Keane, professor of artificial medical intelligence at the UCL Institute of Ophthalmology and consultant ophthalmologist at Moorfields Eye Hospital, in his work to improve best practices in creating datasets and AI models, and ultimately diagnostics.

#### Al in a clinical setting

Clinical AI systems have
the potential to streamline
workflows in clinics and improve
the identification of diseases,
but are yet to become widely
adopted in healthcare settings.
To achieve widespread patient
benefit, clinical AI systems must
be designed for accuracy, be
robust, reliable and safe. Little is
known about how best clinical
AI systems can work in tandem
with healthcare professionals,
enhancing their abilities and
earning their trust.

#### **Empowering clinicians**

Professor Keane will carry out the first evaluation of Al's potential to enhance clinicians' diagnostics. This will involve measuring Al and humans' diagnostic abilities independently, then assessing the impact of different types of Al 'suggestions' on clinicians' diagnostic accuracy.

He will identify key factors of trust in AI as a diagnostic tool by analysing clinicians' impressions of their interactions with AI throughout the study.

## Integrating and expanding for global impact

Uncovering the benefits of AI assistance for clinicians could influence current standards for training AI models for healthcare. Findings might then significantly affect our understanding of AI's role in healthcare and integrate its use in clinical workflows beyond the field of ophthalmology. Ultimately, this could be foundational in realising AI's potential to enhance efficiency and accuracy in medicine, affecting patients globally.

"Al-enabled healthcare has the potential to bring world-leading expertise out of specialised centres such as Moorfields and into the communities and homes of patients in the future."

Professor Pearse Keane, professor of artificial medical intelligence at the UCL Institute of Ophthalmology and consultant ophthalmologist at Moorfields Eye Hospital



## Using AI for facial examination

In another pioneering project, we're supporting Swan Kang, ophthalmic and oculoplastic surgeon at Moorfields Eye Hospital, who is researching the use of Al for capturing facial measurements in virtual diagnostics.

With her clinical research colleagues, Professor Konstantinos Balaskas and Dr Peter Thomas, Swan Kang will develop an algorithm to identify key facial features to help manage conditions that affect the eyes and face.

The traditional measurement of facial features with a ruler is not always accurate and there can be differences in quantitative measurements obtained by different doctors. Video consultations have been vital in delivering safe and convenient patient care. However, facial measurements cannot be obtained over video.

"An examination of the face can inform doctors about a previous experience of a stroke, facial nerve palsy, Parkinsonism, head and orbital cancers, and chronic diseases with multi-morbidity."

Swan Kang, ophthalmic and oculoplastic surgeon at Moorfields Eye Hospital



## Developing algorithms

Recent advances in AI have allowed machines to learn how to make sense of pictures and videos shown to them. Social media users may have witnessed how AI can automatically recognise an individual's face.

Al can be used to examine faces and measure fine details like the drooping of an eyelid at millimetre accuracy. Swan Kang and her team have run

patient focus groups which show support for this technology. They intend to develop an Al algorithm to examine faces and eyelids over video.

To train the AI, they will use videos from Moorfields patients and people without sight loss, and implement new processes to power continuous AI improvement. They will compare the facial measurements obtained by AI with those obtained by doctors to ensure the AI is reliable, accurate and rapid.

#### Improving virtual diagnostics

The algorithms will become better trained over time with increasing data.
They will be used to improve t

They will be used to improve the accuracy of diagnosing patients by video assessment, thus

allowing more patients to be seen in the comfort of their own home. Although the research is still at an early stage, it is hoped that patients will be empowered to monitor their conditions using this Al-assisted technology, reassuring those that are stable or improving, and automatically prioritising the critical cases. It will be more time efficient, save costs and help improve remote care.

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## **Superstar supporters!**

Our supporters share a love of Moorfields and all have different experiences of sight loss. We meet some of our biggest champions finding out what 'innovation and improvement' at Moorfields means to them and why they support the future of eye care by taking part in our fundraising walk, Eye to Eye.

#### Suzy and Samuel

What's your connection to Moorfields, and what makes it special to you?

Samuel is a life-long patient, and I, along with other family members, have received treatment as well. Moorfields is incredibly special to us because of Samuel and the fantastic staff who look after him. They never hurry an appointment and are so thorough and well-trained. Moorfields has given Samuel a high quality of life, and he feels



#### Why is the work of Moorfields Eye Charity so important?

Samuel has seen many changes in how eyesight is monitored. We absolutely know how integral funding is for continual improvements to services, critical and groundbreaking treatments and facilities for patients.

#### What does innovation and improvement at Moorfields mean to you?

Innovation is at the heart of all Moorfields does with new techniques, research, treatment and training. Moorfields continues to be world-beating in a world that is vastly changing; it keeps up with the times.

#### What do you love about Eye to Eye?

Meeting other participants and patients on the day is very uplifting; it's like being part of one big family that comes together to raise awareness of how Moorfields has touched their lives, to say thank you and

"It is wonderful to see how Moorfields has developed its treatments over the years and how innovations in eye care are evolving. Samuel has been lucky enough to benefit from a lot of the available technology and it's changing at an amazing pace."

to give back to Moorfields. It's a perfect challenge, too, because often people with sight loss or eye problems can't do extreme challenges, the Eye to Eye walk is perfect for anyone.

#### What are you looking forward to about this year's 10th anniversary walk?

The 10th anniversary is extra special - it's a way to show how much the charity has supported through its work. Just being there on the day and talking to people as we walk along will be a great feeling. For Samuel and me, it's very poignant because we did the first walk and are now doing the 10th anniversary; it's a real celebration and a pleasure to be part of it!

## Celebrating



Thank you to everyone who participates in Eye to Eye to support the charity! Visit moorfieldseyecharity.org.uk/eyetoeye to find out more.



#### Jess

What's your connection to Moorfields and what makes it special to you?

I've been a patient at Moorfields since October 2021. My consultant has been a great help and never made me fearful, we have open and honest conversations about the future of my eye condition. Moorfields has taught me about uveitis while also treating it. As a teenager it was important that I could make my own decisions about my choice of treatments. I really appreciated that. I felt in control of my own situation.

#### Why is the work of Moorfields Eye Charity so important?

I think it's important because eye health is generally not a health issue people are concerned about. When I first noticed something was wrong, it was put down to dehydration or too much exposure to sun. Moorfields and the charity help grow peoples' understanding.

#### What does innovation and improvement at Moorfields mean to you?

To me it means that people can be treated exactly how they need to be, getting treatment quickly before their condition deteriorates.

Why did you decide to take part in Eye to Eye?

I want to help fundraise for something that has really helped me. I was surrounded by a lot of anxiety when I was diagnosed. I'd like to give back to a place that provided me with security and comfort in an isolating situation.

What are you looking forward to about this years 10th anniversary walk?

Seeing the sights of London, and I'm excited that my family are involved in a cause I am passionate about.



#### St George's Stars hospital team

What's your connection to Moorfields, and what makes it special?

My name is Christine Real, and I'm the matron of St George's network site, Moorfields South Division. Moorfields is special to me because people's sight matters, and I'm proud to say that this is the only hospital that delivers the most updated research and training for eye specialists, including nurses from around the world.

Why is the work of the charity so important, and what does innovation and improvement mean to you?

The charity's funding is critical for improvements which benefit patients. Innovations in eye care can potentially improve patient outcomes and deliver new treatment options. Al in ophthalmology is gaining traction as algorithms help physicians predict risk for a wide range of

ophthalmic conditions, such as diabetic retinopathy and agerelated macular degeneration.

Tell us about St George's Stars!

St George's Stars started with a group of only four of us taking part in Eye to Eye 10 years ago. Then we recruited more staff which is fulfilling and enjoyable. We're not only helping the charity, but bringing our team and families together for the walk which is suitable for everyone's health and wellbeing, and it's fun.

What are you looking forward to about this year's walk?

Celebrating a decade of lovely walks, laughter and memories! I can't wait to reach the finish line.





## **Championing innovation** and improvement

We ask Aoife Kiely in the charity's grants and research team to tell us about their aspirations for the recently relaunched innovation and improvement grants programme, the difference this will make to patients and why innovation is so important!

#### What's your role at Moorfields Eye Charity, and what's the best thing about working for the charity?

I'm a funding manager at Moorfields Eye Charity. I work closely with staff at Moorfields and UCL who apply for funding. I'm involved with the selection process which includes seeking feedback from global eye health experts - ensuring we're funding high quality work which delivers impactful outcomes to Moorfields patients and the wider population.

For me, the best thing about working for the charity is hearing the newest research ideas first-hand, and learning how staff want to improve the clinical environment, service delivery or patient experience.

#### Why is innovation and improvement so important at Moorfields and for eye health?

An innovative mindset is vital to drive research and clinical progress. Our grant applicants share why their idea is innovative, whether it's developing a new algorithm to improve the accuracy of diagnoses or a tech solution tested by front line nursing staff to reduce waiting times.

#### Can you share some examples of the projects the grants will support?

These grants have supported a broad range of projects including the installation of digital keys for medicine cabinets in the hospital and assessment of community care for glaucoma to identify potential improvements. We're looking forward to hearing how innovative new ideas from staff and researchers will deliver clinical improvement.

#### Find out more about the innovation and improvement grants programme at

moorfieldseyecharity.org.uk/innovationandimprovement

#### What's your vision for the grants and outcomes for patients?

We know that staff are the first to spot an opportunity or a clinical challenge. This funding enables them to implement ideas and provides the additional resources they need to deliver powerful results. We expect these projects to improve the patient and staff experience through positive impactful

#### Who's the most innovative person in the grants and research team at the charity, and why?

Ruth Darby is the most innovative person on our team, hands down! She is a project manager introducing a new grant management software to the charity. We're very excited about how this will transform our work - processing grant applications and reporting on outcomes in a streamlined and user-friendly way.

## Helping you to have your will written

Want to make a will but don't know where to start? We can help.

#### First steps:

Imagine you passed away yesterday; you can't predict the future, so plan from then.

What have I got?

House, contents, car etc Family, friends, charity

Who do I want to have it? Who is going to organise it?

Executors - who to choose?

Once you've answered those questions, you're ready to have your will written. Free wills through Moorfields Eye Charity:

Bequeathed - A convenient online will writing service, a step-by-step process to write a will.

The Goodwill Partnership - A face to face will writing service via a home visit. A trained counsellor will come to take your will instructions, at a convenient time.

Simple wills are free, and there's no obligation to include a gift in your will to Moorfields Eye Charity, but we hope you'll consider what a difference such a gift could make.

For details, or more help, please get in touch with Jackie Birch email jacqueline.birch1@nhs.net or call on 07545 654688

Find out more about the will writing offers online at MECwills.org





Wherever you live, you can take part in the Eye to Eye celebrations!

Our virtual event My Eye to Eye offers you the chance to fundraise from your own doorstep.

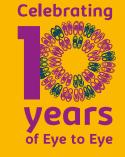
You can walk, ride or run your 1, 5 or 15 miles from your home, perhaps along a coastal path or through a national park. Come together with friends, family or perhaps just the dog - do it your way.

We will support you every step so you can fundraise with confidence, and you'll get our charity t-shirt plus a medal upon completion. In return, we ask that all adult participants raise a minimum of £100.

So sign up now and make a massive difference to the lives of people with sight loss.

Visibility readers benefit from a 30% discount on the registration fee with code VISIBILITY

I chose Moorfields Eye Charity's My Eye to Eve walk, to help raise money that will fund important research into life-altering, and potentially sight-stealing conditions such as glaucoma and keratoconus. Karl Boonton, My Eye to Eye walker



To find out more and book your place visit: moorfieldseyecharity.org.uk/MyE2E



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# Join our 10th anniversary celebrations at Eye to Eye to support Moorfields

Sunday 23 June 2024

Our annual fundraising walk turns 10! We will be coming together with our Moorfields community wandering through historic London streets to raise money that will support innovation in eye care and research.

As part of the celebrations, we will host a family-friendly street party outside Moorfields Eye Hospital full of fun activities, games and delicious food.

#### 1 in 5 of us will live with sight loss in our lifetime.

You can choose 1, 5 or 15-mile routes with all ages and abilities welcome; we can even buddy you up with a volunteer if you'd like some support during your walk. And you'll get our limited edition 10th anniversary t-shirt to stride with pride!

We ask all adults to fundraise a minimum of £100 - the more you raise, the more we can support those with sight loss.

So step up, sign up now and be part of #TeamMoorfields

Visibility readers benefit from a 30% discount on the registration fee with code VISIBILITY

To find out more and book your place visit: moorfieldseyecharity.org.uk/eyetoeye





You can support us in many ways: set up a regular direct debit, leave a gift to us in your will, do your own fundraising, play the lottery, or donate to one of our seasonal appeals – these are just a few of them.

Eye to Eye - hold the date: 23 June 2024, bookings now open!

Lottery – play our weekly lottery, you could win £25,000 and support Moorfields at the same time

Fundraising event – cycling, running or walking – we have lots of challenges to get you active

DIY fundraising – hold a cake sale, play a 24-hour game-athon - you can be as creative as you like!

Regular giving – support us with a regular gift and have an impact on the future of eye health

Remember us in your will – become part of our supporters' circle - the Moorfields Visionaries

Summer appeal - look out for this launching in June

Visit moorfieldseyecharity.org.uk for more details on the projects we fund and our support of innovations

Get in touch - Email: moorfields.eyecharity@nhs.net Tel: 020 7566 2565

If you have a specific enquiry:

Individual giving – John Painter john.painter1@nhs.net

Leaving a gift in your will - Jackie Birch jacqueline.birch1@nhs.net

Fundraising events - Holly Hollis holly.hollis@nhs.net

Major giving, trusts and foundations – Julide Troedson julide.troedson@nhs.net

Oriel fundraising campaign – Rachel Jones rachel.jones310@nhs.net

Research and grant-making programme - Ailish Murray ailish.murray1@nhs.net

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Registered Charity No 1140679 Registered No 7543237

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