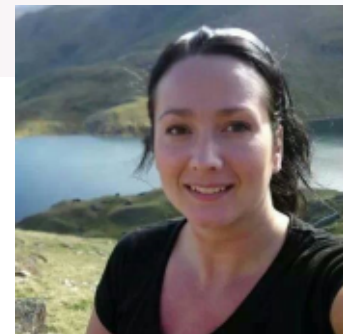


# Meet **Bev Tolley**, the BARS chair and regional DESP manager for the South of England



I took over the role as chair of BARS after the last conference in Liverpool, which I believe was one of our best conferences ever and this gives me an unbelievably difficult standard to maintain, but I am very much looking forward to this year's conference in Newcastle. We already have some excellent speakers lined up, a great venue and we are working on some exciting entertainment.

Taking over as chair of BARS would be a daunting task for anyone, but having to take over from Phil Gardner seems like an impossible task. Anyone that knows Phil will appreciate the dedication and work he puts into everything he does and not to mention his amazing presentations! He really is an inspiration and if I can do half as good a job as he has done, I will be happy.

I will be continuing the good work that Phil has introduced during his time as chair including the bursary places at conference and the education project to name just two. The education project has been a much bigger task than we had ever imagined. Council members give up their spare time to do this and as such, this has taken longer than we would have liked meaning we have had to reassess where we go with this. We are producing some very useful resources for admin staff, as this was identified as a gap in training when the new health screeners diploma was introduced. We hope to have an education page on our website soon with these short courses, and other useful information for anyone completing their diploma or working in diabetic eye screening.

I am looking forward to working with our new president Elizabeth Wilkinson. I am sure she will be an excellent asset to the BARS council with all the expertise she brings, and a great travelling companion to council meetings and conferences with us both being in the South West! Conference booking is now open, and we hope to get a draft programme on the website shortly. So book your place and I look forward to seeing you in September.

## Failsafe Day

Following the success of last year's springtime event, the BARS failsafe forum is happening again.

The subject this year will be **'Writing audits'**.

Many staff are tasked with writing reports associated with audits completed as part of internal quality assurance within their diabetic eye screening services. But for some staff these reports can be quite daunting and they are often unsure as to how best to present the findings of their audit investigations. Drawing on his knowledge and experience with the Screening Quality Assurance Service (SQAS), Rob Davis will be presenting an all-day workshop on constructing and writing reports that allow readers to easily understand why and how an audit/failsafe check was completed, and to present its outcomes.

The workshop will look at aspects including: - **What is an audit and why are they important?**

- **What makes a bad audit report?**

- **The importance of a structured report**

- **Using plain English**

- **Explaining what will happen with the findings of an audit**

The day will again involve group-work to allow people to explore their current understanding and to absorb new learning that will encourage improved report writing. The forum will not be limited to failsafe staff and is open to anyone wishing to improve their knowledge and skill in writing an effective audit report. Demand for last year's event was incredibly high, and we expect the same again this year, so keep a look out for this year's announcement and booking information very soon.

**PLEASE NOTE:** In order to allow failsafe staff greater amount of time to explore and discuss failsafe topics, the failsafe forum this year will be limited to this single event and will not coincide with the main BARS conference.

**'Audits are often highlighted in External QA - so good audits make for a good QA'**



## The new President of BARS Elizabeth Wilkinson

Clinical lead of Devon DESP and Vice Chairman  
of National Diabetic Eye Screening Advisory Board

It's a great honour to be asked to be President of BARS, especially following on from the legendary Professor Tunde Peto! I shall try hard not to disappoint. But mostly I will try hard to represent you, the members of the British Association of Retinal Screening, and diabetic eye screening in a way which reflects the passion and enthusiasm we all have for this vital service.

What you do in diabetic eye screening is hugely important and genuinely saves sight as we have seen in studies from Moorfields and Wales. It is brilliant news that diabetic eye disease is now NOT the leading cause of blindness in the working age population and something to be very proud of. Referring people with diabetes on time to eye units for treatment really does work. But, there is a lot more to people than their eyes. Yes, that's coming from an ophthalmologist!

Diabetic Eye Screening has a hugely important and valuable resource on its hands. Pretty much all diabetics are registered as is the rate of progression of one of their diabetic complications. Surely the future lies within using that data to improve control of diabetes and prevent further diabetic complications, for example, amputations and renal failure. We've seen Professor Roy Taylor's amazing work on the low calorie diabetes reversal diet serialised recently in the Daily Mail, so the general public is becoming aware that diabetes does not have to be a chronic, progressive disease with life limiting complications.

I think that we are moving in the direction of risk stratification in diabetic eye screening with the introduction of longer intervals for some people with diabetes as well as the very promising data coming from The Liverpool Risk Engine project. I am excited about moving away from the 'one size fits all' to a service which concentrates resources on those highest at risk of complications. Obviously we need to still engage with those who are well controlled and need us less, but my experience of being part of Bowel Cancer Screening was that I felt like I had been 'patted on the back' when I had my screening extended out to 5 years.

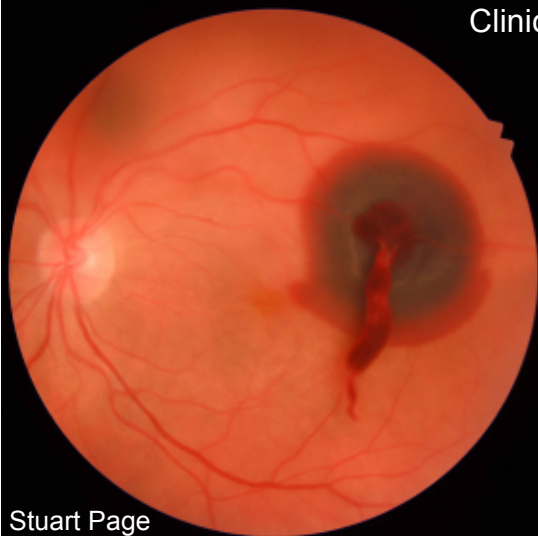
I am really looking forward to the next 3 years and hope to see you all in September in Newcastle for our fantastic homecoming conference.

# 2020 bars



## Conference in the City of Newcastle

Clinical - CATEGORY - Artistic



Stuart Page

2019 BARS Photo Competition



Stacey Barbaccia

# Working to support **professionals involved in retinal screening** for people with diabetes

**BARS Qualification and Education Group** was set up in 2017 to establish how we could develop the education needs of staff involved in screening and grading, and administration. The first members were:

Phil Gardner

Grant Duncan plus

Andrew Brown Zoe Tobin

Tunde Peto Charlotte Wallis

Karen Whitehouse and Iveta Olejkova.

**Other members of BARS council have joined lately to assist with the latest project, and skills will be called upon for each speciality from current and future members.**

To begin with, a questionnaire was sent to BARS members in March 2017 to establish how they felt about their career and where they wanted to develop. The BARS Education Survey demonstrated that there is enthusiasm for a new qualification, but there is also concern amongst screening staff about a 'glass ceiling', and that if people complete a new qualification it won't progress them.

It was agreed that a further qualification is no guarantee of career progression, and BARS needs to be careful not to give that impression.

**In December 2017, Diabetic Eye Screening Programme (DESP) Clinical Leads in England were invited to complete a brief online questionnaire about their role. The survey was available online for a period of approximately five weeks, and a total of 30 responses were received representing just under half of DESP Clinical Leads in England.**

The large majority of clinical leads are ophthalmologists, and these made up 90% of respondents, with the remaining 10% being Diabetologists.

The findings at the time indicated that of those that do grade, 95% perform Referral Outcome Grading (ROG), but almost all of these will do Digital Surveillance and/or Arbitration.

In 13% the Clinical Lead is the only person who undertakes ROG.

87% share the ROG duties with others,

In 85% of these cases (73% overall), senior graders are allowed to undertake a proportion of the ROG workload.

Digital Surveillance (DS) grading, ophthalmologists undertaking 44% of all DS grading nationally, compared to 38% done by senior graders.

## **OCT and SLB**

Ophthalmologists perform 70% of this activity

Slit Lamp Biomicroscopy (SLB), 60% of programmes perform some or all of their SLB in DESP clinics

A third of DESPs have senior graders performing some slit lamp examinations

40% of the Clinical Leads said they would consider training senior graders to do so.

NDESP's SLB Examiner Training and Accreditation Framework sets out guidance for the training and supervision of slit lamp examiners, and compliance with this guidance was found to be very good, with 97% of Clinical Leads stating that their slit lamp examiners have completed this.

## **Grading**

The training and criteria used to assess a grader's suitability for this role is determined locally and is therefore likely to vary from programme to programme.

~75% of DESPs now appear to be using senior graders to complete a proportion of the ROG workload.

## **Clinical Leads additional roles**

Clinical Leads are also responsible for:

Review and feedback of Test & Training performance and Intergrader Reports

Individual sessions with graders

ROG meetings to discuss cases as a team

MDT meetings and teaching sessions

Feedback on individual grading cases as required

In conclusion, the survey showed that the roles of Clinical Leads and DESP grading staff are evolving over time, and that graders are increasingly being developed to undertake higher level grading and other clinical activities that may previously have been performed by ophthalmologists or optometrists.

There appears to be a clear opportunity, therefore, for organisations such as BARS and NDESP to support this training and encourage the development of grading staff in order to meet an ever-increasing service demand.

**The Education Group** met to discuss areas of expertise that we considered beneficial to staff members across the speciality, and several options were considered.

#### Administration & Failsafe

Management

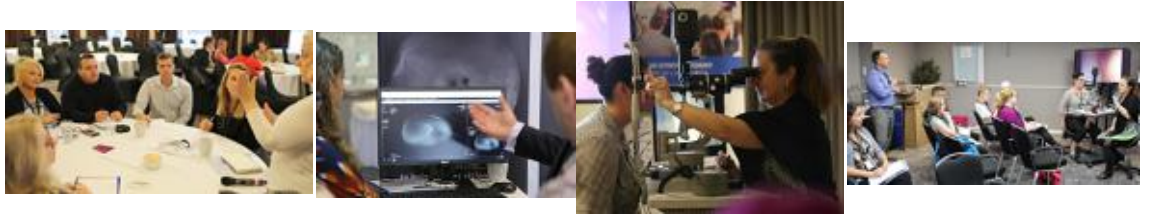
Diabetes

Grading

Slit Lamp

Clinical Leadership

OCT



Changes to the screening pathway which may include the use of OCT may necessitate the further development of graders and other staff in order to meet demand. **It was decided that we tackle Administration and Failsafe first**, due to the lack of formal training for failsafe/admin since the demise of C&G. We were aware that the module must be suitable for all staff regardless of background or knowledge, and must be easy to access, interesting, and cover all aspects of the admin/ failsafe role so that they feel empowered by the increase in knowledge. The modules will be online and with certification.

**Unit 1:** Understand the policies, procedures and principles of diabetic eye screening and the wider field of health screening

**Unit 2:** Be able to follow the requirements for informed choice and consent in health screening

**Unit 3:** Understand the impact screening may have on individuals

**Unit 4:** Understand the importance of quality assurance, standards, reporting and managing incidents and key performance indicators in health screening

**Unit 5:** Understand diabetes and its relevance to diabetic eye screening

**Unit 6:** Administration and patient management systems in diabetic eye screening Programmes

**Unit 7:** Exclusions and Suspensions. Although this module was not in the national document, this was deemed important as the Administration team need to be aware of these important patients and make relevant checks.

**Unit 8:** Communication. Communication is a very important aspect of the role therefore added as a module.

We have now covered most of the units, and these will be agreed by BARS council before they are rolled out as a training course. It has taken longer than expected due to time constraints and the work commitments that we all have!

## The Future of Education

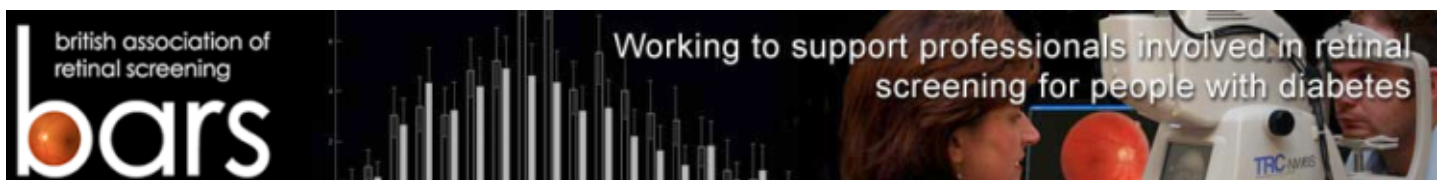
We have also looked into another key subject – the **Health Screener Diploma**. One consideration that we have recommended to BARS is for a library of images (DR and non DR) that would be available for learners to access via the BARS website so that they can complete '**Anatomy Physiology and Pathology of the Eye**', and '**Detect Retinal Disease and Classify Diabetic Retinopathy**' units.

Training and Education is such a vital commodity. We need to ensure we have well-trained, confident staff that can develop their skills.

We are always seeking to gain knowledge, and deserve the chance to do so.

**Karen Whitehouse**

BARS Education Lead





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## Infectious Retinitis

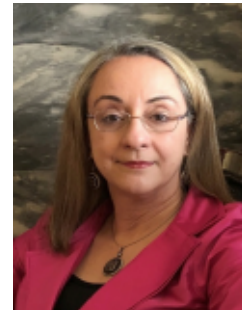


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3. Director of Studies, Moorfields Eye Hospital NHS FT and UCL Institute of Ophthalmology, London, UK
4. Honorary Associate Professor, UCL Institute of Ophthalmology, London, UK
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## Introduction

The retina can be infected by a large variety of organisms, including bacteria, viruses, fungi, parasites and tick-borne organisms. These infections may present with scarring due to past infection or active inflammation due to current active pathology. Infectious diseases of the retina may have devastating consequences resulting in severe visual loss or blindness.

Patients with ocular infection that is current and active will present with ocular symptoms. Those with quiescent scars in the retina are often asymptomatic and may present after the retinal findings are noted by coincidence during a routine eye exam (e.g. at diabetic retinopathy screening or at routine visit for a glasses check at the optometrist).

Successful management of active infectious retinitis requires early recognition, diagnosis and appropriate timely referral for treatment. The goals of management are to prevent visual loss in the affected eye and protect the fellow eye.

Herein we describe three causes of infectious retinitis, namely Ocular Toxoplasmosis, Herpetic retinitis and Cat-scratch disease. These can be recognised based on their fundus findings, and clinical presentation. We discuss the clinical presentation, diagnostic features and management.

## Ocular Toxoplasmosis

Toxoplasmosis is a disease caused by the protozoan parasite *Toxoplasma gondii*, which is estimated to infect up to 50% of the world human population <sup>[1]</sup>. Wild and domestic cats are the definitive hosts for the parasite, while humans and other mammals are the intermediate hosts. Infection can be acquired by eating raw/undercooked meat or by drinking contaminated water. In immunocompetent adults, contracting the disease often goes unnoticed as the disease is asymptomatic. However, newly infected adults may present with mild flu-like symptoms such as fever, headache and cervical lymphadenopathy.

## Other Lesions

Globally, ocular toxoplasmosis is the most common cause of retinal infections. Many individuals who have Toxoplasmosis scars in the retina (in one or both eyes) are asymptomatic and do not present with any ocular disease. Reactivation of toxoplasmosis infection causes ocular inflammation (vitritis, chorioretinitis and anterior uveitis) which then leads to the patient seeking healthcare due to blurring of vision, and onset of floaters. The affected eye may be red and photophobic if the inflammation affects the front half of the eyeball.

Patients with active *Toxoplasma* chorioretinitis may present with one reactivation only (in their entire life) or recurrent disease. Active *Toxoplasma* chorioretinitis has the appearance of whitish focus of necrotizing retinitis (**Figure 1**) with or without an adjacent (often pre-existing) pigmented retinochoroidal scar (**Figure 2**).

In acute reactivations in the presence of severe vitritis the classic “headlight in the fog” appearance may be seen. On slit lamp examination, concurrent anterior chamber inflammation and elevated intraocular pressure can also be noted. Symptoms of diminished visual acuity and floaters may occur as a result of macular lesions/scars and/or vitritis.

Patients with quiescent *Toxoplasma* scars (as in **Figure 2**) are most often asymptomatic. Darkly pigmented scars are typical of quiescent disease. However, scarring resulting in a ‘white’ lesion can be seen and may readily be mistaken for ‘active’ retinitis.

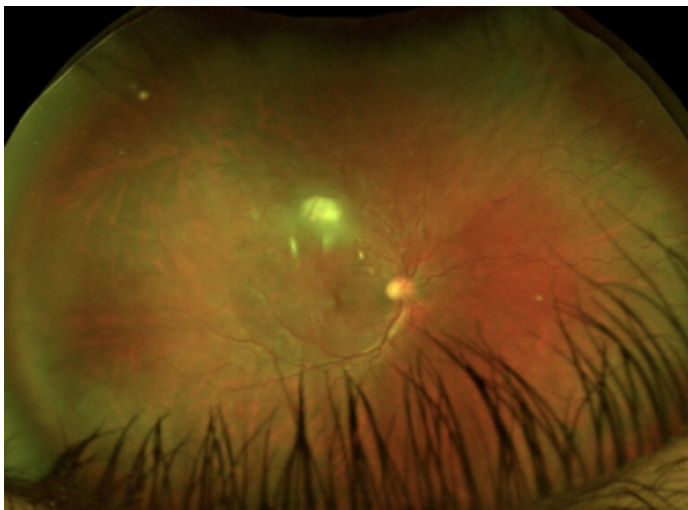
The diagnosis of ocular toxoplasmosis is usually based on the typical clinical presentation of the disease in the majority of the cases. However, detection of intraocular parasite DNA in aqueous and vitreous samples by polymerase chain reaction (PCR) may provide definitive evidence for accurate diagnosis for atypical presentations [2].

Ocular toxoplasmosis is self-limiting and systemic treatment is indicated in selected cases to prevent loss of vision. Treatment is indicated ‘topically’ for patients with anterior chamber inflammation and in addition ‘systemically’ for patients presenting with posterior segment disease where the chorioretinitis is of a direct threat to vital ocular structures (macula, optic disc, papillomacular bundle, major vascular arcades). Systemic therapy is also instigated if the affected the eye is the only seeing eye or if the visual acuity (in affected eye) is 6/12 or worse due to vitritis. As the disease is self-limiting (over a period of approximately 3 months) delayed presentations (for example if > 6 weeks post onset of symptoms) may warrant an altered approach to systemic treatment.

The current approach for treatment of the ocular disease consists of a combination of (topical and /or oral) corticosteroids (to limit the damaging effect of inflammation) and antimicrobial agents (to prevent infection exacerbation that may occur as a result of corticosteroids).

All immunocompromised patients required urgent systemic and topical treatment. Immune deficient patients should be treated with much higher doses of antimicrobial agents in close collaboration with infectious disease/HIV medical teams.

Intravitreal injection of antibiotic and dexamethasone has been also used as an alternative administration route in order to avoid the systemic side effects of the oral medications e.g in pregnancy.



**Figure 1.**

Ultra-wide-field fundus photograph of the right eye showing a single whitish focus of necrotizing retinitis typical of active toxoplasma chorioretinitis. The lesion has indistinct ‘fluffy’ borders typical of active retinitis and is affecting the macula and the supero-temporal vascular arcade. This immunocompetent patient presented with a one week history of floaters and blurred vision. He was noted to have a best corrected visual acuity of 6/12. Slit lamp examination reveals a mild granulomatous anterior uveitis and mild vitritis in the affected eye, with normal intraocular pressure. The other eye has a visual acuity of 6/5 and remains unaffected. This patient should be referred same day to ophthalmology A&E department to discuss management options.



**Figure 2.**

Fundus photograph of the left eye showing multiple pigmented scars of inactive toxoplasmosis in the macular area between the temporal arcades. None of these lesions are currently active. The blurring of the optic disc due to overlying vitreous haze (and Weiss ring) may be indicative of previous ocular inflammation and vitritis in this patient.

## Herpetic Retinitis

Herpes viruses specifically herpes simplex virus (HSV), varicella zoster virus (VZV) and cytomegalovirus (CMV) can cause a spectrum of retinal infections which include acute retinal necrosis (ARN), progressive outer retinal necrosis (PORN, VZV retinitis) and CMV retinitis. Whereas PORN and CMV retinitis develop exclusively in immunocompromised patients, ARN (which is caused by either HSV or VZV) can present in immunocompetent or immunocompromised patients.

Patients with ARN usually complain of blurred vision, floaters, photophobia and/or ocular pain. These symptoms start unilaterally but may rapidly progress to involve the fellow eye if appropriate therapy is delayed.

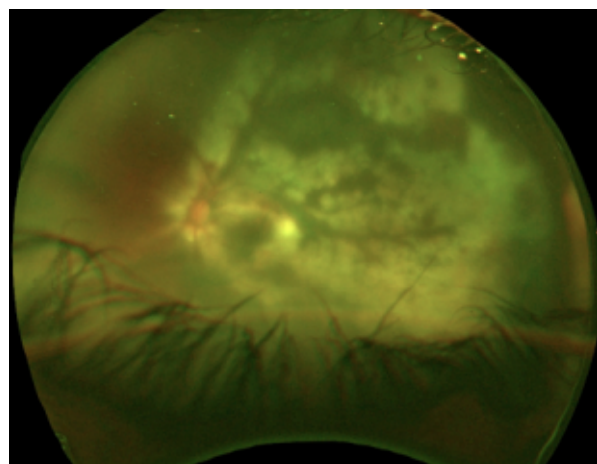
It is important to examine both eyes (with dilated funduscopy of peripheral retina) in all patients presenting with ocular inflammation, because it is in the peripheral retina that the diagnosis is made, and occasionally a patient with ARN will present with 'just' an anterior uveitis before developing classical signs of ARN hours or a day later. One third of patients present with bilateral ARN (BARN). It is also possible to see a recurrence in the same eye in spite of ongoing antiviral treatment.

Characteristic features of the disease on examination include extensive peripheral multifocal retinitis with discrete borders (and circumferential spread in absence of treatment), occlusive vasculitis (arterioles and veins), vitritis and anterior chamber inflammation. ARN is associated with pan-uveitis, with vitritis which may yield a hazy view of the fundus on photography. However the vitritis may be mild.

ARN can lead to blindness from retinitis, subsequent retinal detachment, retinal and optic nerve atrophy. The prognosis is poor in the absence of very prompt, early and aggressive local, topical and systemic intervention.

PORN is most often caused by VZV. Patients with PORN usually present with unilateral or bilateral rapid painless decrease in visual acuity. Characteristic features of the disease on examination include central and peripheral necrotizing retinitis with minimal or no vitritis. Haemorrhagic lesions in the area of retinitis are not pronounced.

CMV retinitis usually presents in patients with CD4 counts less than  $50/\text{mm}^3$ . Patients with CMV retinitis usually complain of vision loss, field loss and/or floaters. Characteristic features of the disease on examination include small whitish areas of necrotizing, hemorrhagic retinitis in a perivascular distribution (**Figure 3**), which may be described as "mozzarella pizza pie" or "brushfire" in appearance (**Figure 4**). With better therapy for HIV and AIDS, today most cases are seen in patients' immunosuppressed due to systemic medication (e.g. following organ transplantation).

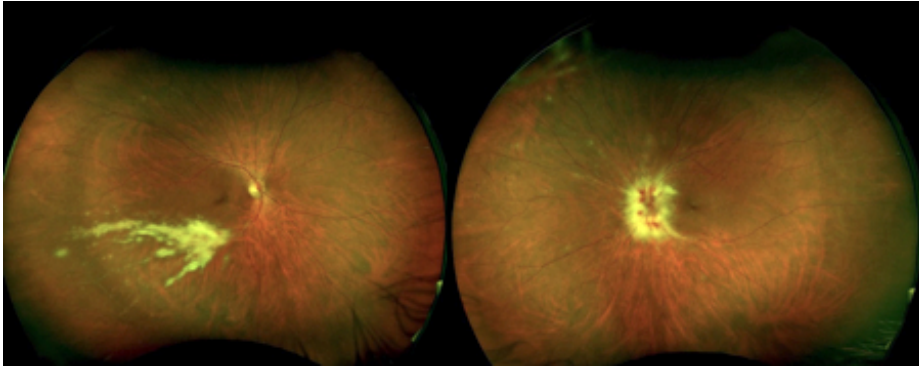


**Figure 3.**

Ultra-wide-field fundus photograph of the left eye demonstrating viral retinitis. The view is hazy due to overlying vitritis. The involvement of peripheral and post-pole retina in a perivascular distribution is commonly seen in viral infections of the retina. PCR identification of virus resulted in diagnosis of CMV retinitis (for which the lack of haemorrhage is less typical). The differential diagnosis here also includes syphilis and toxoplasma chorioretinitis.



## Other Lesions



**Figure 4.**

Ultra-wide-field fundus photograph of both eyes showing a CMV retinitis in a patient with the diagnosis of AIDS.

The diagnosis of herpetic retinitis can be made clinically based on typical clinical presentation. Sampling of ocular fluids for detection of Viral DNA by polymerase chain reaction (PCR) is required to reach a definitive diagnosis and identify the exact virus responsible (as this guides systemic medication). Treatment should commence immediately after a clinical diagnosis is established without waiting for the laboratory results.

Antiviral agents are the mainstay of treatment for herpetic retinitis. Antiviral therapy is administered into vitreous cavity and provided systemically [3, 4]. All patients are treated with intensive topical steroid eye drops (with cycloplegia and IOP control as indicated). In selected cases, intravitreal / oral corticosteroids can be added in addition to the antiviral therapy.

## Cat Scratch Disease

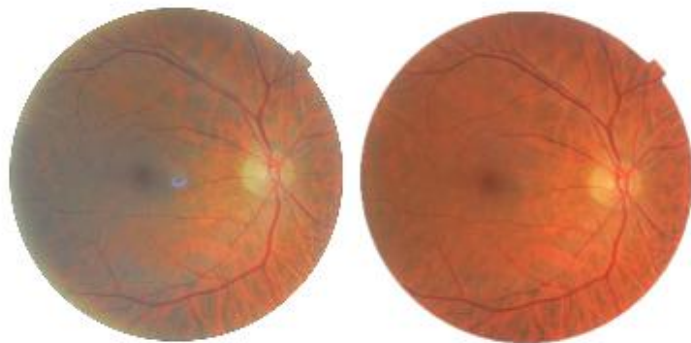
Cat scratch disease (CSD) is caused by the bacterium *Bartonella henselae* carried by cat fleas. It can be transmitted to humans through a cat scratch or bite (or occasionally from a dog), or from hand to eye contact. Patients can range in age from children to the elderly. Only 2/3 of patients remember a cat / kitten scratch. This disease is the most common cause of parinaud oculoglandular syndrome. Patients with this syndrome typically present with unilateral conjunctivitis associated with febrile lymphadenopathy involving ipsilateral preauricular, submandibular, and/or cervical lymph nodes.

The most common posterior segment finding of CSD is neuroretinitis that presents as a macular star with optic disc oedema [5]. Additional ocular findings can be seen in patients with CSD include macular edema, macular hole, retinal vasculitis and vitritis.

The diagnosis of ocular CSD is often made based on history and clinical finding, and serology is performed to confirm the diagnosis. Ocular CSD is benign self-limited disease with a good overall visual prognosis without systemic therapy. In approx. 10% of patients the condition is pronounced with severe loss of vision at presentation. Oral antibiotics such as doxycycline or azithromycin with rifampin can be commenced [6].

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# A generation to end the harm from diabetes

**New year, new decade. Every two minutes, someone is newly diagnosed with diabetes in the UK, and there are 12 million people at risk of the condition. How will Diabetes UK meet this challenge, going forward? Dr Susan Aldridge, Editor of Diabetes Update, Diabetes UK's magazine for healthcare professionals, introduces the charity's 2020–2025 strategy – A Generation To End The Harm**

First of all, I think we have a plan here that all of you involved in retinal screening can get behind – whether or not you are a professional member of Diabetes UK (and I hope you are and, if not, that you will consider joining us). It's an ambitious strategy and we're going to need all the help we can get, from policy makers, healthcare professionals, people with diabetes and all our other supporters

## **Here are our two ambitions:**

- We want people with diabetes to live well and longer
- We want to cure or prevent diabetes

## **Stop diabetes ruining and ending lives**

You help prevent sight loss from diabetes every day. And you are well aware of the other complications that the condition can bring. We know more than ever before about how to prevent and treat diabetes, how to manage it and help people live well with it.

We believe that the next five years are critical and, among our goals, is to make sure that more people with diabetes will get the quality of care they need to manage their diabetes well – including attending for their retinal screening appointments and follow-up. We know that the British Association of Retinal Screening (BARS) already does so much to help us towards this goal, with programmes for 'hard to reach' groups and the development of one-stop shops, where a person with diabetes can have more than one check in the same place.

## **Alongside our goal for quality care, we also aim for:**

- More people with type 1, type 2 and other forms of diabetes benefiting from new treatments that will cure or prevent the condition
- More people being in remission from type 2 diabetes, and fewer getting type 2 or gestational diabetes
- More people living with confidence with diabetes, free from discrimination.

These, explained in more detail below, are the areas that would make the most difference to people living with, and at risk of diabetes, according to the feedback we have received.

## **Looking back**

Thanks to the dedication of our supporters and leading UK scientists, more diabetes research has been funded than ever before. For instance, there is a new national programme to prevent type 2 and great discoveries from the international consortium for immunotherapy for type 1. Meanwhile, campaigning has helped make flash glucose monitoring available on the NHS, bring diabetes psychological care to the forefront and reduce limb amputations. Most of all, we have worked with all our supporters to dispel the myths and improve the understanding that diabetes is a life-threatening condition. And we thank you for the contribution that the retinal screening community has made to these advances.



## The five outcomes

So, here are the five outcomes we are planning for, going forward, just to focus our activities:

### 1. More people with type 1, type 2 and all other forms of diabetes will benefit from new treatments that cure or prevent the condition

For instance, we believe that a licensed immunotherapy for type 1 diabetes will be available within the next five years. Ultimately, that means fewer people needing to attend for retinal screening, so you can focus on those most at risk!

### 2. More people will be in remission from type 2 diabetes

Have the people you see at a retinal screening appointment heard about the exciting news from the DiRECT trial that we funded? This clinical trial of a low-calorie diet showed that Type 2 diabetes need not be a lifelong, progressive condition – with the risk of sight loss and other complications. The NHS will be replicating this intensive low-calorie weight management programme over the coming months and years. If you have time, why not mention this during a retinal screening appointment?

### 3. More people will get the quality of care they need to manage their diabetes well

Here, we are pushing for quick, clear and accurate diagnosis – away from the situation where a quarter of children with type 1 are diagnosed dangerously late, when they are very ill. We also want all healthcare professionals to know more about diabetes – both in hospital and in the community.



Diabetes UK offers a number of leadership programmes that can help make this happen.

Why not check these out at [www.diabetes.org.uk/professionals/resources/leadership-programmes](http://www.diabetes.org.uk/professionals/resources/leadership-programmes)

### 4. Fewer people will get type 2 and gestational diabetes

Obesity has become an urgent public health problem in the UK with 29% of adults and up to 20% of 10 to 11-year-olds living with the condition. Obesity is a major risk factor in type 2 and diabetes in pregnancy. We are working with government and industry to make it easier to make healthy choices.

### 5. People with diabetes will live better and more confident lives, free from discrimination

Personalised psychological and emotional support for living with diabetes has been our aim for some time now, and we intend to enhance this effort going forward. Diabetes is still widely misunderstood and we will lead the charge to change the public conversation about the condition, making it easier for people to talk more openly about it.

## Fighting diabetes with you

We work with so many healthcare professionals, volunteers, researchers, campaigners, donors and our Diabetes UK members. But to achieve our ambitious goal to end the harm from diabetes within a generation, we need more people to get involved.

If we don't push ourselves, our partners and society forward, then who will? Our ambition is bigger than ever before, because the challenges and opportunities demand it. But we can only get there with your experience, energy, fundraising and determination. Together we will take big steps towards making people's lives healthier, easier, better, longer. We will reduce the harm that diabetes does. We know that diabetes is relentless. But so are we. Will you join us?

[www.diabetes.org.uk/strategy2025](http://www.diabetes.org.uk/strategy2025)



For a world  
where diabetes  
can do no harm





## Hosting for OptoMize

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NPS OptoMize was designed by clinicians to streamline the full retinal screening pathway. It is continually updated so that you can stay focused on patients. The latest release allows you to deploy NPS OptoMize through the cloud.

### Why move to cloud hosting?

- 24/7 access - self service and agile working
- End-to-end service
- Cut costs and unlock the true value of your staff and applications
- Secure and efficient
- Scalable infrastructure with no capital expenditure
- Improved disaster recovery procedures and secure UK-based data centres
- Easily purchased via the G Cloud framework

### About NPS OptoMize

- 25 years experience
- 1m+ patients screened annually
- 1,500+ locations
- 48 customers
- 5 countries



Speak to us today about OptoMize.

[northgateps.com/diabetic-eye-screening](https://northgateps.com/diabetic-eye-screening)

Email

[enquiries@northgateps.com](mailto:enquiries@northgateps.com)



# Career opportunities in Diabetic Eye

## Buki Asanbe

PHE National Data Manager  
NCL DESP Failsafe Manager



### Q: What did you do before screening?

**A:** Before screening I worked as a project support officer / software tester at Hamburger University (McDonald's Head office in London). I worked as a deputy store manager for eight years in McDonald's restaurant at Gatwick airport. During my time there, I was also studying part-time at the university. When I finished my degree, I volunteered to work in the head office to gain meaningful work experience in my new qualification.

### Q: How did you become involved with Public Health?

**A:** Back in June 2018 I saw a post being advertised for a National Data Manager. For many years I had been looking for a position where I would be challenged to use skills I had acquired at University where I had studied BSc in Information System Management. I had been involved with diabetic eye screening for more than 9 years. First starting as an failsafe officer at West Hertfordshire Screening Programme, then moving to NCLDESP where I took on more responsibilities and was promoted after 9 months from failsafe officer to failsafe manager.

I had a passion for working in the healthcare sector and was using my data analysis skills to improve the Programme's performance and conduct audits to improve patient outcomes. The position advertised was for a part-time secondment and provided me with the opportunity to continue in a field I loved, but would also allow me the chance to have an overview of eye screening, not normally accessible, with the opportunity to shape the future of eye screening and input from the ground up.

I was successful in my application and the Programme manager was keen to support me by allowing flexibility of working. I have not looked back!

### Q: Which aspects of the role have you enjoyed the most?

**A:** Over the last fifteen months my placement has afforded me the opportunity to gain skills and experience in many areas across diabetic eye screening. I have thoroughly enjoyed how this secondment has allowed me to transfer my knowledge and skills between, and within, the two organisations that I have been working with. When planning for the implementation of new standards and pathways I have felt that I have been able to put forward a programme's perspective, hopefully making a contribution to the changes which we will all see in the coming months and years. This exchange of information is encouraged within PHE, as they are keen to ensure that, when something new is rolled out nationally, they have incorporated as many areas of expertise as possible.

Another aspect of this secondment has been the opportunity to see a different way of working. This experience has allowed me the chance to apply my skills in a different environment. I had always enjoyed the analytical and audit aspects of the failsafe role but working with PHE has allowed me to review data in order to research key aspects of the eye screening programme direction with a view to improving outcomes for patients and reduce potential health inequalities.

### Q: What have been the challenges that you have faced?

**A:** Obviously, there was a steep learning curve when I started my secondment to PHE. Trying to balance the demands and workload of two very challenging positions and not losing sight of the key deliverables of each respective role required me, that I quickly review my project management skills training. However, these challenges were mitigated by the support received from management and colleagues in both organisations, who were keen to ensure that such transfers of skills and collaboration would be successful.

### Q: What do you enjoy in your free time?

**A:** I am currently learning data science 'R programming' and hope that I will gain enough skills and knowledge to help reduce the huge amount of time spent in processing data, using the more traditional methods. R-programming allows the user to transform messy data into a structured form, allowing for an eye catching report which allows the audience to easily understand the data being presented. It also allows for direct action based on trends and so empowers a manager to make better decisions.

I also have three young sons...so there really isn't much free time left after trying to spend quality time with them.

### And the future...?

I have always had a passion for remaining within the NHS and I enjoy the challenge of using data to increase quality within the health sector. Therefore it would be a dream for me to be in a position to continue my education to Masters Level, ideally with a Master's degree in Public Health, thereby allowing me to improve screening outcomes for people and reducing the risk of long term conditions.

## Audits of Exclusions within North Central London DESP

### Introduction

As part of National Audit requirements NCLDESP is required to undertake a comparative analysis audit of the rate of exclusion by GPs within the catchment area.

NCLDESP currently provides screening across 5 CCGs, comprising 210 GP practices. It is also worth mentioning that NCL-DESP has 313 care homes situated within its boundaries.

Exclusion is defined by NDESP as "the eligible population on the programme list who are not invited for routine digital screening and do not have their retinae checked for DR in another part of the screening pathway." This includes those who have made a written informed choice to opt out of NDESP and those who could never be able to receive and/or benefit from treatment due to another existing medical condition, making attendance for screening very difficult, e.g. physical or mental health illness.

### Purpose

To audit exclusions by GP Practice, and investigate those practices with unusual levels of exclusion rates, i.e. outside the norm. It is also important to ensure that all exclusions have adequate supporting documentation.

### Methodology

The source of data used to prepare this audit was the OptoMize reporting tool, as well as writing specific SQL queries to obtain additional data from the eye screening software.

The report includes all individuals excluded from NCLDESP on the final day of the reporting period ending on 31/03/19.

**Result**

The total number of patients excluded from the database was extracted at the end of the period.

The patients were split into the following exclusion criteria;

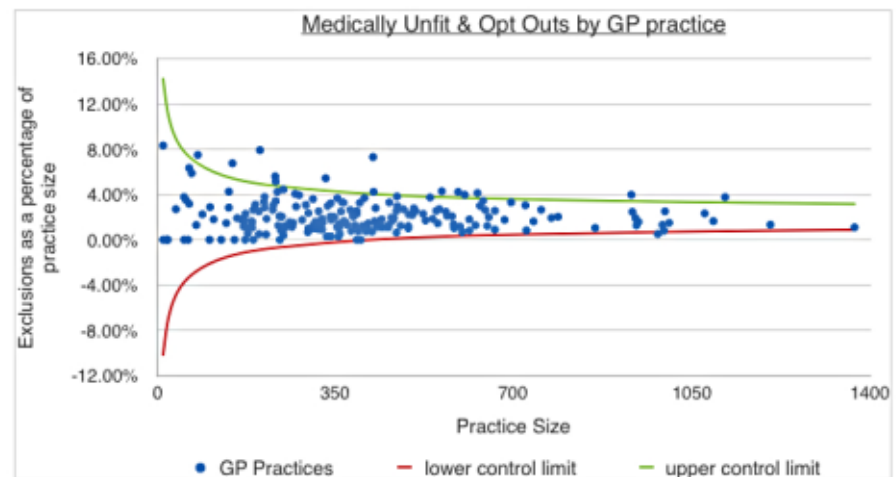
	<b>Total</b>
Medical Unit	1,172
Opt-out	556
<b>Total</b>	<b>1,728</b>

The percentage of exclusion within NCLDESP is 2.02%. There is currently no threshold set for this standard.

A funnel plot was used to compare the data using a standardised ratio because GP practices differ in size. See **Diagram 1**.

**Diagram 1:**

Funnel plot showing the exclusions by practice



1. No patients were excluded without any supporting documentation.
2. No patient was found to have an expired opt-out.
3. 14 practices were outliers when plotted against the graph.

A further investigation was carried out on the 14 practices that were showing as outliers on the funnel plot.

They all had supporting documentation which meets the national standard.

It was apparent that 10 out of the 14 practices were located within the boundaries of one or more nursing homes, which would form a rationale for the higher levels within their practice.

Of the four remaining practices, three surgeries had over 90% of their exclusions for individuals who fell between the age of 85 and 95 years old.

The final practice's results were found to be outliers in the funnel plot because they had a higher level of individuals wishing to opt out of the service

In conclusion, it was found that all NCLDESP exclusions met the national standard.



## Highlights from the Haag-Streit Academy Slit Lamp Imaging Course

**Richard Bell** – Medical Photographer and BARS Webmaster,

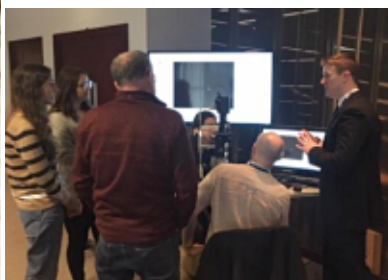
from Radisson Blu Hotel in Glasgow on 25th November 2019.

I was fortunate to be sponsored and attend this course, along with my work colleague Stuart Page (Medical Photographer). We both work at Newcastle Eye Centre, Newcastle upon Tyne where we see and photograph various eye conditions.

Being able to photograph the anterior elements of the eye is not an easy task. This slit lamp imaging course has been set up to make a photographer's life a little bit easier, as it has been designed to teach the skills necessary to achieve high quality results.

This course was led by Grant Duncan (HSUK Clinical Training Manager & BARS Co-opted member) along with Sam Laidlaw, Angela Masson plus expert speaker and photographer Steve Thomson from Switzerland. Also present was Ingo Ehrie from VRMagic, who was demonstrating the Eyesi slit lamp, a High-End Virtual Reality Simulator.

The day started off with a brief introduction giving an overview of the day, followed by a small presentation on the history of the slit lamp and the company. It was fascinating to learn how the slit diaphragm illumination system began back in 1911, up to the present system that we use today.



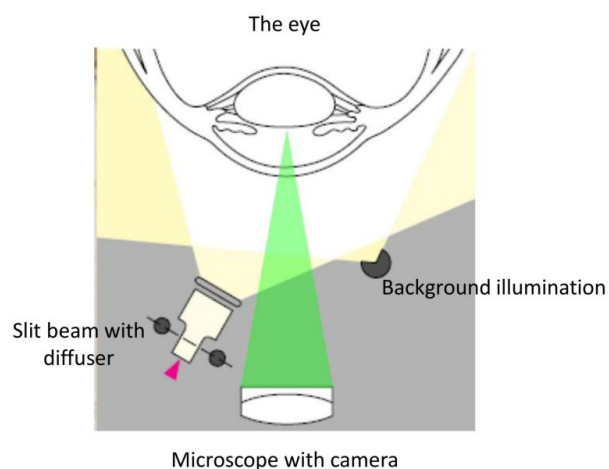
Having had our history lesson, it was time for Steve to give a presentation on the different lighting techniques, as well as an overview of the slit lamp camera. He explained in great detail how it works and showed with images how the different lighting techniques provide the clinician detailed photographs of an eye condition. Other topics included care, cleaning and preventative maintenance of the slit lamp, slit lamp accessories as well as tonometry principles (means of measuring intraocular pressure).

After that it was time for the delegates (approx. 20) to get their hands on the slit lamps and start taking pictures. We were separated into four groups. This was because there were four different imaging systems to work through. On show were the IM 900 and IM 600 imaging modules, the BX 900 slit lamp and the Eyesi slit lamp.

Stuart and I started off with the BX 900 as we are fortunate enough to have that at work. It is designed and made for photographers. We all managed to get a hands on feel for the camera as we had a go at different lighting techniques. **These included:**

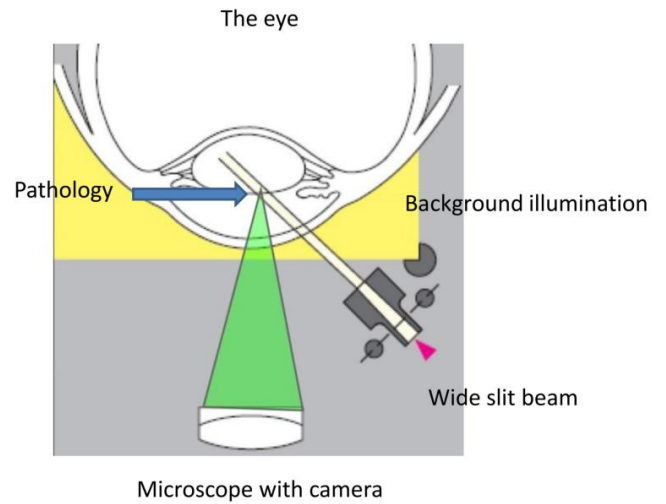
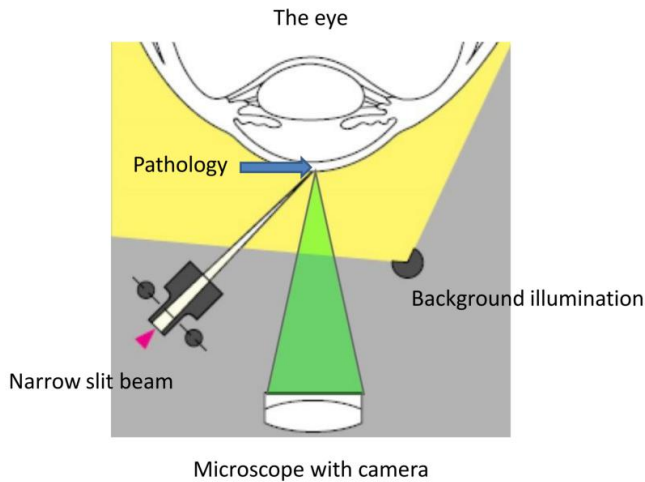
### Diffuse illumination

This type of light beam is ideal to give an overview of the whole picture at a low magnification such as 10x and 16x. The light source is covered with a diffusing filter.



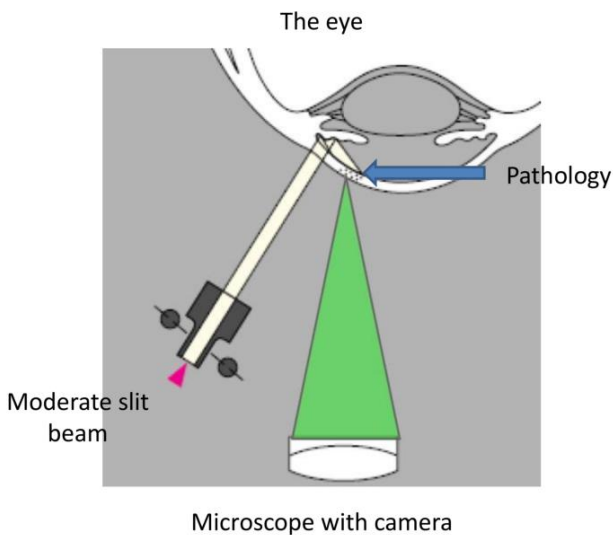
**Direct focal illumination**

This refers to projecting the light on the subject at the plane of focus so the light penetrates transparent structures.



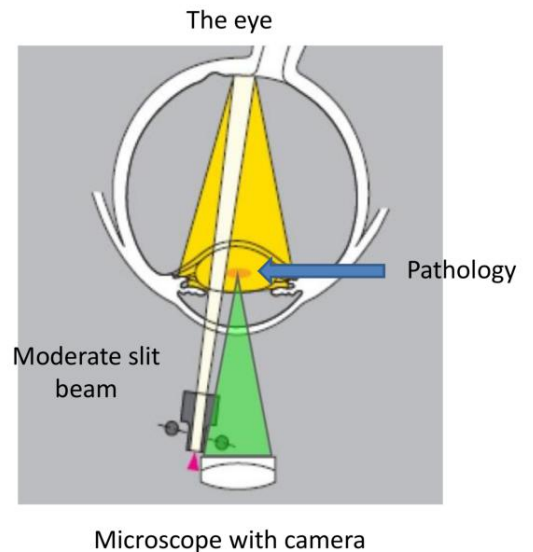
**Indirect illumination**

This is where the light does not fall directly on the pathology. The slit beam is decentred and falls slightly adjacent to the subject area and the pathology is illuminated by scattered internally reflected light. Ideal for abrasions on the cornea.



**Retro illumination**

This is where the light reflected from the fundus or iris illuminates the pathology from behind. It is a form of indirect illumination. Ideal for showing corneal graft stitches.



*Images provided by Haag-Streit.*

This was valuable as it made us more aware of what to do in certain eye conditions.

We all went round the different imaging modules and spent a good time getting used to them. Stuart and I don't use the IM 900/600 modules, but it was great to use something new. These are more of what our clinicians would use. We finished off with the Eyesi. A fantastic training tool for clinicians, as it is a high-end virtual reality simulator for training eye examinations. It is similar and based around how a pilot would learn to fly a plane using VR simulation. With the Eyesi, there are various eye conditions to search for and offers all the functions of a slit lamp.

The day ended with a small competition for the best images taken, along with a few final words from Grant. It was a very enjoyable and relaxed day set in lovely surroundings. We look forward to the masterclass course in June.

For any updates about featured events in relation to coronavirus (COVID-19) outbreak please check the websites directly.

**Retinopathy Screening Centre**, Heartlands Hospital, Birmingham

Screener Training

Introduction to DR Grading

Advanced DR Grading

OCT Interpretation for DR Graders

Clinical Leads Programme

[www.retinalscreening.co.uk/training/training-courses/](http://www.retinalscreening.co.uk/training/training-courses/)

**City University of London**, London EC1V 0HB

Professional Certificate in Medical Retina

[www.city.ac.uk/courses/cpd/medical-retina](http://www.city.ac.uk/courses/cpd/medical-retina)

**Gloucestershire Retinal Education and Retinal Research Groups**, Gloucester Royal Hospital, Gloucester GL1 3NN

L3 Health Screeners Diploma

Qualifications in Diabetic Retinal Screening

Qualifications in OCT

and variety of other in-house courses

<https://drscreening.org/qualifications>

**Moorfields Eye Hospital**, 162 City Road, London EC1V 2PD

Slit-lamp Workshops

Optometry

Retinal Imaging Grading

<https://checkout.moorfields.nhs.uk/>

**Diabetes UK**

Diabetes in Healthcare

The Essentials of Diabetes Care

Clinical Champions

[www.diabetes.org.uk/Professionals/Training--competencies/Courses/](http://www.diabetes.org.uk/Professionals/Training--competencies/Courses/)

**Haag-Streit UK**

Variety of courses

[www.haag-streit.com/haag-streit-uk/haag-streit-academy](http://www.haag-streit.com/haag-streit-uk/haag-streit-academy)

**University College London**

Medical Retina Level 1 (Professional Certificate)

[www.ucl.ac.uk/loo/study/online-and-short-course-vision-and-eye-health-experts/courses-optometrists-and-5](http://www.ucl.ac.uk/loo/study/online-and-short-course-vision-and-eye-health-experts/courses-optometrists-and-5)

**National DES Conference 2020**

24th April 2020

Royal Society of Medicine, London

[www.rsm.ac.uk/events/ophthalmology/2019-20/opn08](http://www.rsm.ac.uk/events/ophthalmology/2019-20/opn08)

**The RCOphth Annual Congress 2020**

18th - 21st May 2020

ICC, Birmingham

[www.rcophth.ac.uk](http://www.rcophth.ac.uk)

**30th EASDec Annual Meeting**

21st - 23rd May 2020

Barcelona, Spain

[www.easdec.org/pages](http://www.easdec.org/pages)

**The Healthcare Show**

24th - 25th June 2020

ExCel, London

[www.healthcareshow.co.uk](http://www.healthcareshow.co.uk)

**Skills in Imaging, Diagnosis and Management of Retinal Disease Seminar**

25th June 2020

The Royal College of Ophthalmologists, London

[www.rcophth.ac.uk/events-and-courses](http://www.rcophth.ac.uk/events-and-courses)

**Eye Disease in Diabetes and Endocrinology**

25th Jun 2020

Royal Society of Medicine, London

[www.rsm.ac.uk/events/endocrinology-and-diabetes/2019-20/edn02](http://www.rsm.ac.uk/events/endocrinology-and-diabetes/2019-20/edn02)

**EASD 2020**

21st - 25th September 2020

Vienna, Austria

[www.easd.org](http://www.easd.org)

**The 20th Annual BARS Conference**

24th - 25th September 2020

Newcastle Upon Tyne

[www.eyescreening.org.uk/pages](http://www.eyescreening.org.uk/pages)

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