



# External Quality Assurance Systems for Graders

**Prof. Peter Scanlon MD FRCOphth FRCP DCH**

- Programme Director
- English National Programme



# Quality Assurance of Staff

To ensure that whole screening programme is provided by a trained and competent workforce

1. Staff accreditation

2. Evidence of ongoing CPD and EQA test sets



# Standardising the grading of retinopathy

In 2009/10, English DESP introduced:

Monthly QA test sets for all (1500+) graders in 84 local screening sites

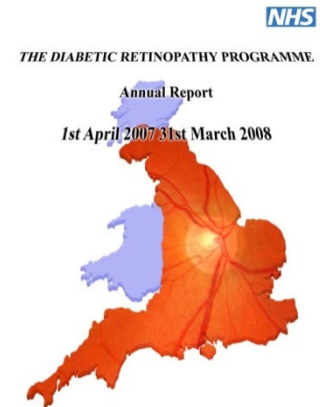
Latest version provides 20 image sets per month.

The grading is lesion based it also provides feedback with more of a training element

We have approximately 1100 graders per month taking this in the English programme



**Accessed via the internet**



http://www.drseqa.org/eqa/ drseqa.org

File Edit View Favorites Tools Help

Peter Scanlon Vote Here Grading Standards

Online Test and Training

!! You have not yet read the following article  
Visual Acuity equivalents

All visual acuities shown in the on-line EQA test set are given as logMAR values. A simple logMAR to/from Snellen (metre) conversion chart is now available on the site on the Help Page - or click the button on the top menu to view the chart.

My details My Notes FAQs User Guides News Bulletin Board Blog Helpdesk

QUESTION 1 OF 20

Logout Home Conversion Chart » Revised English Grading Definitions »

Show all charts

August 2013

90%  
80%  
70%  
60%  
50%  
40%  
30%  
20%  
10%  
0%

■ National Average  
■ Programme Average  
■ Your average

If you have not completed a set last month, no yellow column will be displayed.

If nobody from your programme completed a set last month, no green column will be displayed.

Please record a response to all the questions on the right - there is no time limit.

Click the link on the left hand menu to download the Revised English Grading Definitions

★ If you have not already done so, please click [here](#) and read these notes before you continue.

For guidance, please use the User Guide Section from the top menu - you can click that without losing your place on the training set.

For other users' comments, and to record your own feedback, please use the Bulletin board. You can also click that without losing your place on the training set.

★ Click on any of the images to open them full sized in a new window.

Question1

Images to be assessed using only the revised DESP grading definitions and the Feature Based Grading form

Macular image Nasal image

Features

Please select any DR features you can identify (N.B. not all features are activated but all are visible)

- No DR
- microaneurysm(s) \*
- retinal haemorrhage(s)
- venous loop
- any exudate in the presence of other features of DR
- any number of cotton wool spots (CWS) in the presence of other features of DR
- multiple blot haemorrhages > MBH stds 1 2 or 3
- intraretinal microvascular abnormality (IRMA)
- venous reduplication
- venous beading
- Stable pre-retinal fibrosis + peripheral retinal scatter laser
- Stable fibrous proliferation (diso or elsewhere) + peripheral retinal scatter laser
- Stable R2 features (from feature based grading) + peripheral retinal scatter laser
- R1 features (from feature based grading) + peripheral retina scatter laser

Your current selections of features indicate that this image represents :  
**R0 M0**

I\_Image - Windows Internet Explorer

http://www.drseqa.org/i\_image/I\_Image.asp?Y=4&OAnn=&cn=1&N=1&ref=emDd5y3ov1144Fnta6B&A=9&annotationid=819&viewmode=V1

Peter Scanlon Screen : 1  
Macular image Visual Acuity : 0.00

TOOLS

- show/hide Fovea and disc
- Grayscale  Red
- Free  Green

Browser: http://www.drseqa.org/eqa/ | drseqa.org

Navigation: File Edit View Favorites Tools Help

Header: Peter Scanlon | Vote Here | Grading Standards | Online Test and Training

Warning: !! You have not yet read the following article TAT cases and the National Grading College

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Logout

Home

Conversion Chart »

Revised English Grading Definitions »

Show all charts

August 2013

Category	% score compared to Guide Grade
National Average	90%
Programme Average	~95%
Your average	Not displayed

Legend: National Average (blue), Programme Average (green), Your average (yellow)

If you have not completed a set last month, no yellow column will be displayed.

If nobody from your programme completed a set last month, no green column will be displayed.

- venous loop
- any exudate in the presence of other features of DR
- any number of cotton wool spots (CWS) in the presence of other features of DR
  
- multiple blot haemorrhages > MBH stds 1 2 or 3
- intraretinal microvascular abnormality (IRMA)
- venous reduplication
- venous beading
  
- Stable pre-retinal fibrosis + peripheral retinal scatter laser
- Stable fibrous proliferation (disc or elsewhere) + peripheral retinal scatter laser
- Stable R2 features (from feature based grading) + peripheral retinal scatter laser
- R1 features (from feature based grading) + peripheral retina scatter laser
  
- new vessels elsewhere (NVE)
- new vessels on disc (NVD)
- pre-retinal or vitreous haemorrhage
- pre-retinal fibrosis
- tractional retinal detachment
- Reactivation in a previous stable R3s eye
  
- No referable Maculopathy
- any microaneurysm or haemorrhage within 1 disc diameter (1DD) of the centre of the fovea if associated with a best VA of <= 6/12 where the cause of the reduced vision is known and not diabetic macular oedema
- exudate within 1DD of the centre of the fovea
- group of exudates >=1/2 DA within the macula
- any microaneurysm or haemorrhage within 1DD of the centre of the fovea only if associated with a best VA of <= 6/12 (0.30 logMAR) (if no stereo)
- retinal thickening within 1DD of the centre of the fovea (if stereo available)

Your current selections of features indicate that this image represents :

**R1 M1**

The notes below summarise your responses when compared to the Guide Grade.

Of the 3 urgent referrals, you recorded 3 (100 %) as urgent referral

Of the 8 routine referral cases, you recorded 8 (100 %) as routine referral

Of the 9 annual rescreen cases, you recorded 9 (100 %) as annual rescreen

**Level of agreement Chart : Comparison with Guide Grade**

Peter Scanlon 08/09/2013 : 17:39:43

**Guide Grade Level of Agreement**

Grader: Peter Scanlon

Guide Grade	R0	R1M0	R1M1	R2M0	R2M1	R3M0	R3M1	R3aM0	R3aM1
R0	4	0	0	0	0	0	0	0	0
R1M0	0	5	0	0	0	0	0	0	0
R1M1	0	0	5	0	1	0	0	0	0
R2M0	0	0	0	0	0	0	0	0	0
R2M1	0	0	0	0	2	0	0	0	0
R3M0	0	0	0	0	0	0	0	0	0
R3M1	0	0	0	0	0	0	0	0	0
R3aM0	0	0	0	0	0	0	0	1	0
R3aM1	0	0	0	0	0	0	0	0	2

The above chart includes only responses for Test sets you have completed

The chart displays how you responded when compared to the Guide Grade.





# International Test and Training Creation

## The creation of a non-English language version of the Test and Training System

仅使用经修订的DESP分级定义和基于特征的分级形式进行评估图片



鼻图像      鼻图像

**产品特点**

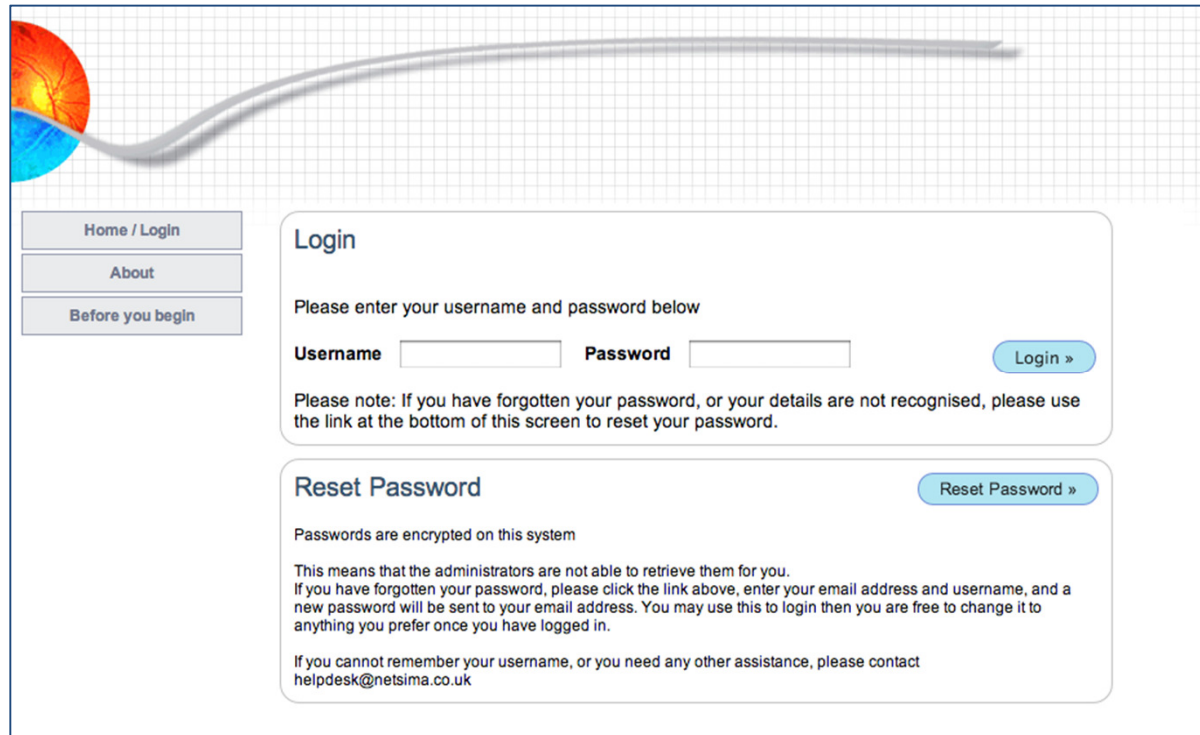
请选择任何DR功能，可以识别（注：并非所有的功能都activated，但都是可见的）

- 没有DR
- 微血管瘤
- 视网膜出血
- 静脉襻
- 任何渗出伴有其他DR的特征性病变
- 任意数量的棉絮斑伴有其他DR的特征性病变
- 多处点状出血>MBH 标准1 2 或3
- 视网膜内微血管异常 (IRMA)
- 静脉自复制
- 静脉串珠

# International Test and Training Creation

A mechanism was required that enabled the translator to translate the system efficiently and reliably.

Removed English from the Logo



Home / Login

About

Before you begin

### Login

Please enter your username and password below

Username  Password

Login »

Please note: If you have forgotten your password, or your details are not recognised, please use the link at the bottom of this screen to reset your password.

### Reset Password

Reset Password »

Passwords are encrypted on this system

This means that the administrators are not able to retrieve them for you.  
If you have forgotten your password, please click the link above, enter your email address and username, and a new password will be sent to your email address. You may use this to login then you are free to change it to anything you prefer once you have logged in.

If you cannot remember your username, or you need any other assistance, please contact [helpdesk@netsima.co.uk](mailto:helpdesk@netsima.co.uk)

# International Test and Training Creation

Every link, heading and button was modified so that it could display either the English, or a translated version of the text

  
Click below to take the Test Set for this month

**Take Test Set**

  
点击下面的图标，领取这个月的测试题


**领取测试题**

  
Click below to view your history

**My History**

  
点击下面的图标，浏览你的历史记录

**我的历史记录**

  
Click below to take training set

**Take training set**


  
点击下面的图标，领取练习题

**领取练习题**

# International Test and Training Creation

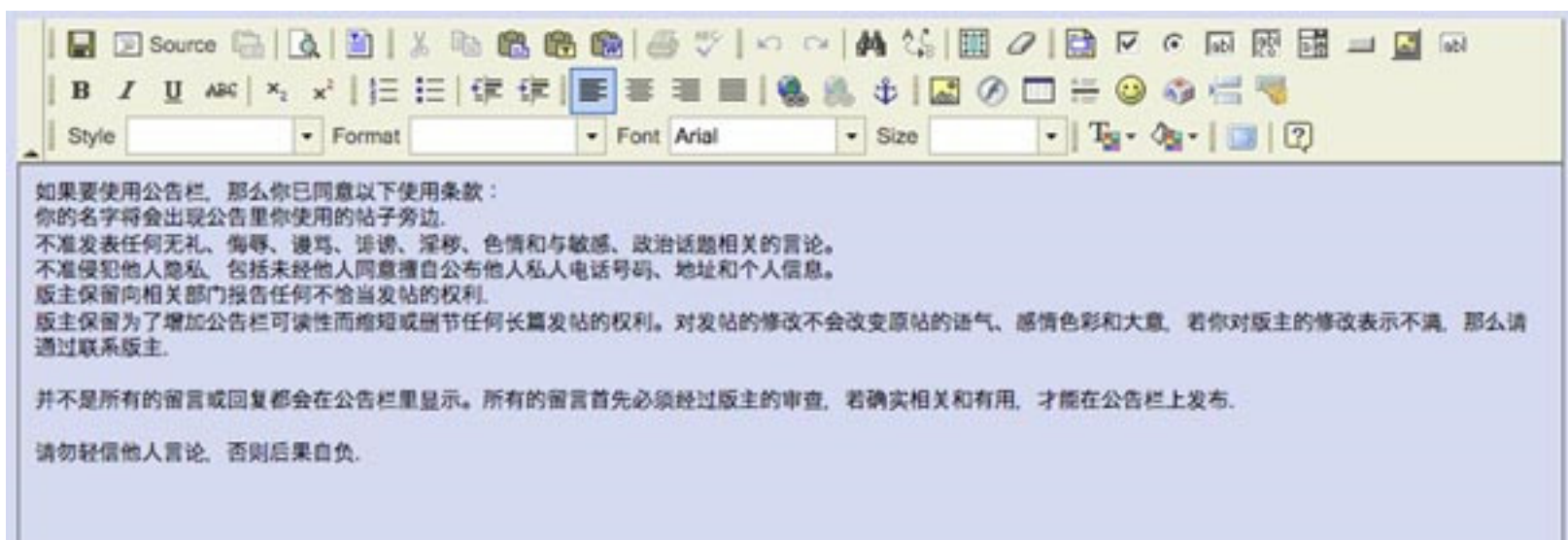
A configuration system was created to enable the translator to simply record the translations for all the main links, headings and buttons on the system.

Click below to take the Test Set for this month	点击下面的图标、领取这个月的测试题
Take training set	领取练习题
Click below to take training set	点击下面的图标、领取练习题
Click below to view your history	ç.'à†>â,èççè,â)%æ † %(Eæµèç"â% çè,âŽ†â"èè"â%>
Click here to manage mailing lists	点击此处来管理邮件列表
Click take set to begin	点击“领取”以开始
Close	關閉

 <b>Logout</b> <input type="text" value="註銷"/> <input type="button" value="Go"/>
 <b>Home</b> <input type="text" value="主页"/> <input type="button" value="Go"/>
 <b>Conversion Chart »</b> <input type="text" value="換算表"/> <input type="button" value="Go"/>

# International Test and Training Creation

Large pieces of text were translated by the translator using the on line content editor.



The whole system was then proof read by another Mandarin language speaker and final minor modifications were made

# International Test and Training Creation



主页 / 登录

關於

在開始之前

## 登录

请输入用户名和密码

用户名  密码

[登录 »](#)

请注意：如果你忘记密码，或者你的个人信息无法确认，请使用屏幕下方的链接重设密码

## 重設密碼

[重設密碼 »](#)

密码是该系统中的加密

这意味着管理员无法替你找回密码

如果您忘记了密码，请点击上面的链接，输入你的电子邮箱地址和用户名，我们会将新密码发送至你的电子邮箱。你可以使用这个新密码来登录，登录以后，你可以根据自己的喜好修改密码。

如果您不记得您的用户名，或者您需要任何其他帮助，请联系[helpdesk@netsima.co.uk](mailto:helpdesk@netsima.co.uk)

# International Test and Training Creation

## 重設密碼

请输入您的电子邮件地址

与您的用户名

如果您不记得您的用户名, 或者不确定您的电子邮件地址, 请联系  
[helpdesk@netsima.co.uk](mailto:helpdesk@netsima.co.uk)

重設密碼 »

# International Test and Training Creation

请在这个页面的顶部点击任何问题链接可查看相应的屏幕。  
点击任何图像缩略图在一个浏览器，使您能够操纵它的亮度，对比度，过滤器和缩放打开图像。

你可以在各个图片之间自由切换，但只有你最近的操作才会被保存

当你点击你已保存某一操作的图片时，会显示出你已勾选的选项

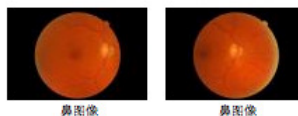
当你准备好保存你的操作时，点击“保存我的操作”

当你已完成所有图片的操作时，点击“现在结束我的测试练习”

- 屏幕 1
- 屏幕 2
- 屏幕 3
- 屏幕 4
- 屏幕 5
- 屏幕 6
- 屏幕 7
- 屏幕 8
- 屏幕 9
- 屏幕 10
- 屏幕 11
- 屏幕 12
- 屏幕 13
- 屏幕 14
- 屏幕 15
- 屏幕 16
- 屏幕 17
- 屏幕 18
- 屏幕 19
- 屏幕 20

## 2013 - 022 (Training)

仅使用经修订的DESP分级定义和基于特征的分级形式进行评估图片



鼻图像

鼻图像

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请选择任何DR功能，可以识别（注：并非所有的功能都activated，但都是可见的）

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- 任意数量的棉絮斑伴有其他DR的特征性病变
- 多处点状出血>MBH 标准1 2 或3
- 视网膜内微血管异常 (IRMA)
- 静脉自复制
- 静脉串珠
- 稳定的视网膜前膜+外周视网膜散在激光斑
- 稳定的纤维膜（视盘或视盘外）+外周视网膜散在激光斑

Close

您当前选择的功能表明，这种形象代表：

**R0 M0**



# Seeing is Believing sites:

## Botswana – Tunde Peto Moorfields

- Staff member Peter Blows, is going to Botswana to do more training second part of May
- For the new Botswana users, we have created 10 user accounts, at this stage registered as Trainee with access only to the Training (not Test) elements of TAT.

# Bangladesh and Indonesia – Mahi Muqit from Moorfields

- Mahi plans to travel to Indonesia again in May/June
- For the Bangladesh Programme users, who took part in the original pilot we have given access to active monthly Test sets (as well as training sets).
- For the new Indonesia users, we have created 10 user accounts, at this stage registered as Trainee with access only to the Training (not Test) elements of TAT.

# Qualifications in diabetic retinopathy screening

Competence framework

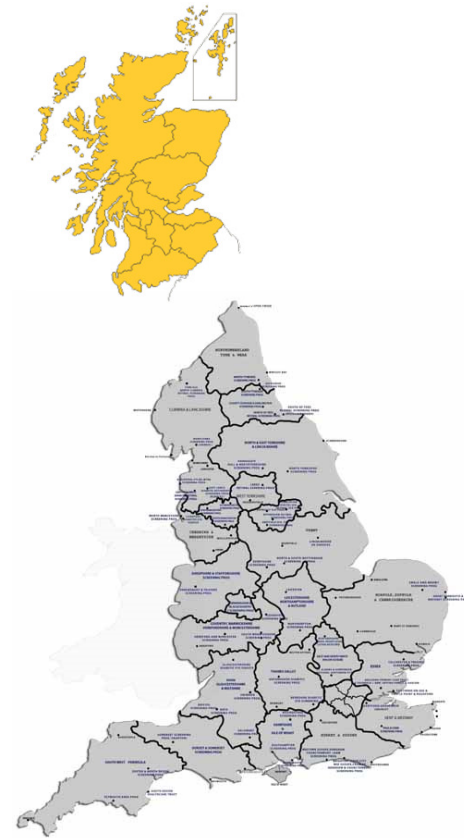
National Occupational Standards

Qualifications in Diabetic Retinopathy Screening

Accreditation / awarded by City & Guilds



- Choice of 5 qualifications (2 Diplomas, 2 Certificates & 1 Award), dependant on candidate's professional role
- 9 modules, mixed selection to create the various qualifications



## Certificate of Higher Education

### Diabetic Retinopathy Screening

# International Undergraduate Certificate in Diabetic Retinopathy Screening

A new University-validated course and qualification will soon be available to staff working in diabetic retinopathy (DR) screening around the world.

The **Certificate of Higher Education in Diabetic Retinopathy Screening** has been developed by Gloucestershire Hospitals NHS Foundation Trust and is validated and awarded by the University of Gloucestershire.

The distance learning delivered course and award, supported by clinical and educational experts, has been developed for staff working in DR screening programmes without access to a qualification.

**Cert HE in Diabetic Retinopathy Screening is coming your way!**

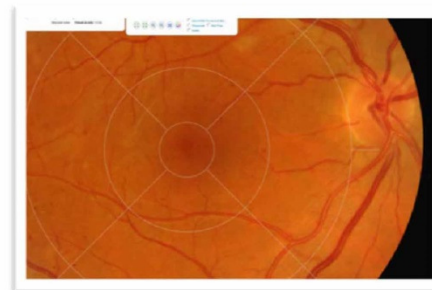
#### Key features:

- University-validated course & award
- 120 CAT points at level 4
- 24/7 access to web-served distance learning (no Time Zone issues)
- Modular course structure with guided self-learning
- Feature-based retinopathy learning
- Local practical skills assessments
- Access to clinical & education experts
- Completion within one year

Feature-based retinopathy learning and assessment



Image Viewer window with manipulation tools:



#### Course structure and content:

The Level 4 Cert HE award comprises 5 modules:

HS4301	An introduction to the Study of Diabetic Retinopathy	15 CAT
HS4302	Diabetic eye screening programmes, processes and protocols	15 CAT
HS4303	Preparing the patient for diabetic eye screening	30 CAT
HS4304	Performing retinal screening	30 CAT
HS4305	Assessing retinal images	30 CAT

Student learning is through web-served course content and guided further study.

Sequential learning and assessment methods include structured 'quizzes' and reflective learning, multiple-choice exams and locally observed practical skills assessments.

University of Gloucestershire

- On line distance learning
- Developed the learning outcomes.
- Has been approved by the University of Gloucestershire
- 18-20 screeners from the National Screening Programme in Ireland commence in May 2014 & 1 person from New Zealand

### Course structure and content:

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All enquiries via email contact: [drsadministrator@glos.nhs.uk](mailto:drsadministrator@glos.nhs.uk)

HCDRS\_flyer v0.3

# Costs

- £1500 (2479 USD) split between University & GHNHSFT
- Costs in development for GHNHSFT – distance learning web platform alone £15,000 (24,790 USD) – need 30 students to recover this cost alone
- Need to work out a way of providing an International qualification at a cost that is affordable for trainees and for us to provide it.

Thank you for inviting me to speak and  
for listening