IMI Belfast 2019

4 - 5 October
Stormont Hotel
The IMI 2019 Conference Handbook is kindly sponsored by NHS Greater Glasgow & Clyde:

Meet the Conference Team

Adrienne Ruddock  
Conference Chairman

Amy Lake  
Conference Secretary

Caroline Erolin  
Art and Graphics Stream

Jo Culley  
Art and Graphics Stream

Stephen Comiskey  
Ophthalmic Stream

Tommy Walsh  
Photography and Video Stream

Anthony Edwards  
AV Co-ordinator and House Manager  
Ross Milligan  
Conference Treasurer

Paul Quinlan  
Trade Exhibition Co-ordinator
The IMI Conference Team has great pleasure in welcoming you to Belfast!

This is the first time an IMI conference has been held in Northern Ireland and we have been overwhelmed at the response we have had from speakers, workshop presenters, trade representatives and delegates.

This has enabled us to put on a rich variety of workshops and plenary sessions for you to choose from and a wide range of trade stands for you to visit.

Our conference starts with the launch of the Trade Exhibition in the Ballroom. Please take time throughout the day to drop in and talk to the trade representatives who support us at our conferences and throughout the year.

This year we have two fully functioning photography studios set up in the trade area. Delegates can try out the latest cameras, lenses, lights and innovations in photography. Don’t miss this opportunity: it’s your chance to get Hands On.

Our workshops include anatomy drawing and modelling, and a variety of others on photography, video, and ophthalmic photography. We also have Adobe software training running throughout the day, which offers both the chance to get hands on or to observe.

On Friday night, following a trade and workshop packed day, delegates will have the opportunity to visit the Dark Horse, a traditional Irish bar in the Cathedral Quarter, for drinks and craic. The Cathedral Quarter has some of Belfast’s oldest and prettiest streets, with courtyard murals, poetry and storytelling sessions. Buses have been laid on to take us to and from the Dark Horse.

On Saturday we have two keynote speakers, three streams of specialist talks, and the New Voices session for first time speakers. Whether you are interested in photography, video, art, graphics or ophthalmic photography there is something for you.

On Saturday night after the official close of conference, we will regroup for the Conference Photograph and pre-dinner drinks in the Reception Bar. The highlight of the night will be the Awards Ceremony and Conference Banquet.

We have been aware of a great buzz leading up to the conference, so we hope this excitement continues throughout the conference and that you find it stimulating and rewarding.

Thank you for attending!

Adrienne Ruddock
2019 Conference Chairman
The settings required to shoot, edit and render video footage

**Lex Ballantyne**

The workshop will cover the technical settings required in video production, so that video can be shot, edited and rendered for use. Explaining what the settings are, how they are applied and why they are selected.

These settings are required for all video production and software, for internet, broadcast television and film making. I’ll explain what settings are required when shooting video, such as frame rates and when to use interlaced or progressive and the difference between PAL and NTSC.

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Introduction to recognition of skin lesions using a dermoscope

**Carmel Blake and Tommy Walsh**

Dermoscopy photography of skin lesions is becoming increasingly common. However, the recognition by the photographer of what they are photographing is not always clear. In this workshop we propose to demonstrate the various types of patterns seen in some of the most common types of skin lesions, while demonstrating the best technique to capture the pertinent pattern of these lesions to enable the best patient outcome.

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3D imaging at RCH, Melbourne

**Robert Reitmaier**

1. Present what we do in the 3D imaging centre at The Royal Children’s Hospital in Melbourne, Australia.
2. How we use 3d to evaluate treatment and review what steps need to be taken for future treatments.
3. Discuss registration techniques to get the best results for evaluation.
4. Show examples of what we capture mainly with Craniosynostosis, Plagiocephaly and Pectus Carinatum.
5. Show how we create files for spinal orthosis in scoliosis patients.
6. Other techniques where we use 3d for clinical and research purposes.
A practical guide to your Dermatoscope

David Bishop and Andrea Jones

The aim of this workshop is to demonstrate the key aspects of best practice currently used by the photographers at the Lancashire Teaching Hospitals NHS Trust and the Royal Free London NHS Trust, highlighting a few tips and tricks along the way.

A brief introduction will discuss Dermoscopy in general, what is imaged and why. This will be followed by a brief overview of the equipment/accessories used by Lancashire and The Royal Free medical illustration departments and why they were selected.

Further discussion will highlight how the dermatoscope is attached to the camera including, how to get the best field of view, colour and focusing, concluding with a brief guide to infection control/equipment cleaning and maintenance.

Before a hands-on practical, a short open forum discussion will take place to enable everyone who has previously used a Dermatoscope to share their Dermoscopy experiences.

Working in small groups guided when needed by Andrea and David, the workshop will give everyone the opportunity to practise Dermoscopy imaging on colleagues with a view to exploring the different techniques employed in order to capture excellent Dermoscopy photographs including how to take multiple images of large lesions and how to take photographs in difficult to reach areas. The workshop will conclude with a short Q&A session.

Do you know your loop from your butterfly?
Key lighting techniques for the portrait photographer

David Bishop

A good portrait depends on the photographer mastering key elements, such as: angle of view; positioning; background and lighting.

Light has four main properties:
1. Quantity
2. Quality
3. Colour
4. Direction

This workshop will look at the direction of light demonstrating some of the most well-known lighting arrangements: Rembrandt; butterfly/clamshell; loop and split and how to use these techniques to create great portraits.

After a brief introduction with various sample images, the lighting techniques will be demonstrated using speedlites as the light source with images being displayed live as they are created. The audience will then be invited to create a portrait ‘on location’; working hands on using the equipment and techniques demonstrated.

Open discussion and audience participation essential – bring your own equipment optional although useful if you want to take away some of your creations.

Image review and critique will take place throughout the workshop.
The magic of analysing images of the eye
Alyson Muldrew, Nicola Quinn, Barbra Hamill, Tunde Peto

This workshop will cover up-to-date ophthalmic image analysis techniques, starting from the initial step of developing the imaging protocol through current issues with human ground truth grading and the use of artificial intelligence in analysing the ever increasing image-sets.

We will demonstrate step-by-step how to approach ophthalmic image analysis in different settings, starting from diabetic eye screening through epidemiological studies to clinical trials. We will cover major concepts in how to tie these techniques in with the differing needs of countries (such as in low/middle income or high income populations) and how to take the complexities of studies into account. By the end of the workshop, attendees will have a more detailed understanding of interpreting ophthalmic images.

Ophthalmic Image Reading Centre, Queen’s University Belfast

The team at the Ophthalmic Image Reading Centre at Queen’s University Belfast has over 15 years experience in analysing images of the eye taken in screening, epidemiological studies and clinical trials.

Use of free and proprietary imaging software in spectacle fitting measurements
Claire McDonnell and Alena Lane

Traditionally patients being fitted for spectacle frames and lenses have been measured using customized rulers or gauges. As lens designs have become more complex, the need for greater accuracy in these measurements has grown. Some proprietary software has been developed for this purpose, but it is also possible to carry out these measurements using a tablet and free software such as ImageJ. In this workshop the presenters (a dispensing optician and an optometrist) will show delegates how to use different measurement software to take measurements on patients for customised spectacle lenses and frames.

Claire Mc Donnell is a qualified optometrist, who lectures BSc Optometry and BSc Ophthalmic Dispensing students in TU Dublin (formerly DIT). She has supervised numerous undergraduate projects which have examined the possibility of replacing traditional spectacle fitting measurements made by ruler with measurements taken using images and measurement software.
Anatomy still life
Jo Culley
Anatomy still life drawing class using pastels and coloured paper.

Life drawing
Caroline Erolin and Jo Culley
A life drawing class drawing the human figure. A chance to capture the human figure through direct observation and drawing. The figure will be a male and female, starting with short poses of various shapes and postures. Finishing with a longer pose.

Evaluating the educational effectiveness of running a regular anatomy drawing workshop for the students at the University of Sheffield
Daheen Lee
The workshop will begin with a 5-minute presentation introducing how the anatomy drawing workshop session is run at the University of Sheffield. This will be followed by the main activity set in the same condition as the usual anatomy drawing workshop session, where attending members follow the workshop instructor’s step-by-step guide in drawing an anatomical structure along with an explanation of its anatomy; this will last about 40 minutes. To close the workshop session, there will be 5 minutes of discussion and feedback regarding the effectiveness of the workshop in an educational manner with the instructor.

Wax workshop: Reconstructing the anatomy of the eye and surrounding tissue
Catherine Sulzmann
This workshop will focus on recreating the anatomy of the eye and surrounding soft tissue in relation to the orbit in wax. It will focus on the muscles, glands and cranial nerves that support the eye. Participants will be given a section of the human skull to work with which is a 3D print of a CT scan. They will be able to accurately recreate the routes of cranial nerves and visualize an intricate and complex mosaic of anatomical structures. This will not only aid in the learning of anatomy through performing the creation of the structures, but will teach some basic modelling skills too.
Software Workshops

**Photoshop: Mastering the Selection Tools**
See the various selection tools demonstrated and learn the most appropriate time to use each one. Make use of the selection modes and modifying selections. Utilise layers for future-proofed composites.

**Photoshop: Retouching Photos**
Learn the basic techniques for photo restoration and enhancement. Correct white balance, remove imperfections and remove unwanted objects. Practise portrait enhancements from a RAW image.

**Illustrator: Tour of Tools**
Walk through the lesser used/known tools in Illustrator and establish their proper uses. Covers the Pencil, Shape, Blend, Shape Builder, Knife, Scissors, Eraser, Join, Gradient and Width Tools.

**Illustrator: Mastering the Pen and Curvature Tools**
Master the Pen tool for drawing open and closed paths, polygons and curves. Use some structure exercises to establish the different key combinations to manipulate and customise your bezier curves.

**Illustrator: Preparing Artwork for Video & Animation**

**After Effects: Animating Logos**
Discover the best practice preparation for Illustrator files, artboards and layers if they are to be animated in After Effects. Work with the IMI logo and build a re-useable animated title. Familiarise yourself with the compositing and keyframing basis of After Effects.

**After Effects: Feature Tracking Video**
Working with live video footage, learn the techniques of basic feature tracking to append text elements to specific parts of a video. Learn how to anonymise faces with pixellation effects.

All sessions will be delivered by Dr. Keith Bailey from Taught Media (kib@taughtmedia.com).

Keith is an Adobe Certified Instructor and Apple Certified Master Trainer. His company primarily serves the all-Ireland market with training and consultation in the use of Adobe Creative Cloud and Apple Pro Apps.

With over 12 years experience in using such programs, Keith enjoys honing and imparting skills to freelancers, film schools, broadcasters, corporates, government, non-profit and military bodies.

Sessions will cater for both hands-on experience (limited seats available) and spectator viewing of the demonstrations.
Trade Show

Get Hands On in our photography studio

At this year’s IMI Conference we have two studios set up in the trade area. Delegates can get their hands on the latest innovations in photography, video cameras and lenses.

Don’t miss this opportunity: it’s your chance to get Hands On.

*Studios supplied by Wex*

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**The Same, But Different...**  
Image & Video Capture with Mirrorless & LED

**Bobby Gavin**

Medical illustration itself is a very prescribed discipline, increasingly however there is a requirement for video and corporate/PR work.

Stills and video technology is also changing, with LED lighting and mirrorless cameras becoming more advanced.

Our workshop aims to give delegates the opportunity to see these systems at first hand, and to have the opportunity to trial them in an environment where there is support from the equipment manufacturer representatives.

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**3D Scanning -**  
Aiding Medical Photography to do more

**Capturing 3D to complement facial reconstruction**  

**Two workshops by Patrick Thorn**

Each workshop has the common theme of capturing real things that will aid the onward studies and creation of digital and practical resources. From medical prosthetics and constructing implants to forensic and historical reconstructions, 3D is being utilised in all sorts of areas and their are various ways of capturing data externally and internally. With the scanners that we will show and let you try, we are concentrating on external physical 3D capture with speed, flexibility and ease of use. From exposed bones to actual skin we can illustrate many applications that should interest you.
3dMD is the leading worldwide developer and provider of static-3D and temporal-3D (motion) camera systems for human subject input applications that demand anatomical-3D image precision including healthcare, wearable technologies, apparel, anthropometrics, human factors, and security. 3dMD combines patient workflow efficiency with the ability to generate a progressive sequence of high-quality motion 3dMD images to support clinical innovations.

Albert Waeschle was founded in 1959 as the UK agent for several German manufacturers to distribute their medical equipment. From nothing this has grown in to offering multiple brands across multiple functions establishing the unique position and experience to be able to engage with medical professionals in order to understand their day to day challenges. Through this collaboration we have been able to develop our own brands. At the forefront of these brands is to provide best in class quality. We strive to improve patient care and diagnosis accuracy.

With everyday pressures on time, resource and budgets Albert Waeschle has a solution for your needs. Our UK based technical sales, after sales, servicing and repairs enables fast response to any requirement or challenge faced by medical professionals.

Ashgrove are a friendly, family-run, UK-based specialist provider of innovative material and equipment solutions for digital production printing and finishing. Our mission is to help anyone who is a producer of digital print to generate more profit and save time by increasing creativity and maximising print revenue without additional effort.

Ashgrove supply many medical illustration departments throughout the UK with unique materials such as digitally printable tearproof, wipeable films, poster textiles, sheet labels and other added-value time-saving materials for both small and large format digital print. We have also installed several pieces of equipment for digital printing and finishing into printrooms throughout the UK.

Dougie and Rolf look forward to meeting everyone in Belfast and showcasing our products which we are confident will be of great interest to you all!

For over 30 years staff at Anova Technology (www.anova.technology) have been independent & trusted providers of computer related products & services to illustrators / Photographers throughout the UK.

Currently we are working with over 60 hospitals throughout the UK helping with:

- The Secure Clinical Image Transfer (SCIT) Solution - Developed by University Hospitals Birmingham
- Image Management scalable from single user to trust wide with PAS integration & Web browser access
- Media Job Manager (MJM) - Job management which has been specifically developed for Illustration Departments. With PAS integration & web browser access, It can be deployed as single user, staff only or trust wide allowing clients to place electronic orders for your services
- As an Adobe Authorised Software Specialist we work with IMI members to supply their departments with the most appropriate licensing to minimise costs
- 3dMD 3D surface imaging solutions
- Thermal Imaging cameras complete with training and support
- Excellent pricing on Apple & Windows Computers plus associated peripherals, software, networking, servers & RAID storage.

Whether you need advice on a solution to meet your needs or you know what you require but want assistance in sourcing it, please call Anova on 0121 353 9170 or 020 8855 6120.

Colourcom has been supplying Universities and Hospitals with Large Format Printers and Print Solutions for over 20 years.

As an official Canon reseller partner, we supply, install and support Canon large format printers, RIPS, OEM inks and roll media.
DB Orthodontics provide the highest quality products, services and educational events for the global orthodontic and dental technology industry. The IMI in Belfast showcases our large range of dental photography products; including retractors, contrastors and mirrors.

DB Customer Timothy Zoltie, Head of Medical and Dental Illustration at The School of Dentistry, Leeds University, says, “The DB Orthodontics custom long length large palatal mirror provides easier handling to avoid unintentional fingers in the shot and achieve adequate angle alignment. It also offers the ability to switch mirror ends, allowing two options for varied mouth sizes.”

Our success lies in our collaborative approach with clinicians. Ailbhe McMullin, Consultant Orthodontist at the Royal Manchester Children’s Hospital, commented following a trial, “I’ve tried out the stainless steel (DB04-0154A) retractor a few times now and can give nothing but really positive feedback … It is easy to use, brilliant for the autoclave, and the slim-line feel allows for maximum patient comfort when positioning it…the handle design reduces any risk of your hand slipping when retracting. I give this product an all-round thumbs up!”

As many dental professionals are enhancing their photography skills to succeed in social media and digital marketing of their cases, DB Orthodontics and Timothy Zoltie have teamed up to offer hands on in-house photography courses aimed at beginner and intermediate level. To arrange a visit, call 01535 656 999, email sales@dbortho.com, or visit www.dbortho.com.

Epipole was founded in 2011 to directly assist in the prevention of avoidable blindness globally. Its range of CE marked ophthalmic retinal cameras deliver high quality images from hand-held devices that, perhaps uniquely, do not sacrifice image quality to achieve both portability and affordability.

EpiCam M (Monochrome) was designed for the detection and management of Diabetic Retinopathy. Like all epiCam devices, it captures live lossless retinal video as well as conventional still images with software that allows healthcare professionals extract the best still images from the video stream.

EpiCam C is a full colour a general purpose video ophthalmoscope. Initially developed to screen for Retinopathy of Prematurity, following evaluation in both tertiary referral centres and developing world settings, its unique features are increasingly being applied to the assessment of other clinical conditions.

From Capture to Output, FujiFilm have a wide selection of Products on display for you. Please visit us & see for yourself what’s on Offer.

From FujiFilm’s popular X Series Range, including our groundbreaking GFX 100 Megapixel Camera. We will also have a wide selection of Lenses too. Here for you to Test.

We are also delighted to offer Free Sample Prints from the NEW DE100 Micro Minilab, this will connect to PC or Mac & is capable of printing onto 5”, 6”, 8” & 8.25” x 65m Rolls, on Lustre or Gloss Paper. Nathan & John are here to guide you through the Product Offerings.

Have a Great 2019 Conference!!

Medialogix have been supplying image management solutions for the private and public sector, including healthcare, for over 17 years and are the UKs only FotoWare Platinum Partner.

We offer fully configured solutions to manage clinical photographs, video and media files creating a secure and effective workflow. We have our own in-house developers who have created a range of products to enhance and extend the scope and functionality of your central system to provide a robust and comprehensive solution.

Come and visit us on our trade stand for an informal chat and a product demonstration of FotoWare’s latest features and to see our Clinical Uploader App and other Medialogix products!
Optos introduced optomap® ultra-widefield (UWF™) retinal imaging to enable eyecare professionals to discover, diagnose, document and treat ocular pathology that may first present in the periphery - pathology which may go undetected using traditional examination techniques and equipment. Our UWF, high resolution retinal imaging devices each image more than 80% or 200° of the retina in a single capture in less than ½ second.

More than 800 published and ongoing clinical trials, as well as thousands of case studies and testimonials, show the long-term value of optomap UWF imaging in diagnosis, treatment planning, and patient engagement.

Optos is committed to continue to deliver new products and software that support optomap as a standard of care, helping eye care professionals around the world save sight and save lives.

Coming from an engineering background Patrick Thorn & Co was established in 1991. How to make things with machines and design software, required skills that many other markets were unaware of at the time. Progressively we have worked with customers who need the knowledge of making organic shapes with CNC milling machines, that the traditional solutions proved to be difficult and time consuming.

To capture the forms we introduced affordable digitising arms, this allowed user’s to trace the shapes more easily into a digital format that could easily be reproduced. Adding a laser scanner to the arm made capturing quicker. In 2010 Artec, appointed us as a UK partner for their new Artec 3D scanners based on friendly white light. Apart from a cable to the computer, Artec offered users more freedom and speed to capture 3D forms, that can be easily made on milling and 3d printing systems. The scanners cover a wide range of capacities from a finger print to a building, the scanners and software are used in many markets.

Continually working with Artec3D, in 2014 they introduced their partner accreditation, which we have achieved Gold status every year. It is a badge that gives you the confidence that we can provide the fully supported solution to suit your needs.

Nikon is a world leader in digital imaging, precision optics and photo and video capture technologies; globally recognized for setting new standards in product design and performance for an award-winning array of equipment that enable visual storytelling and content creation.

Nikon distributes consumer and professional digital SLR cameras, NIKKOR optics, Speedlights and system accessories, Nikon COOLPIX® compact digital cameras and Nikon software products, as well as the revolutionary Nikon Z series of mirrorless cameras and NIKKOR Z lenses, which achieve a new dimension in optical performance.

Surface Imaging Solutions is the exclusive distribution partner of Canfield Scientific Inc. (www.canfieldsci.com) in the UK & Ireland and has been since 2004; offering an extensive portfolio of 2D and 3D medical imaging solutions and services to Plastic, Oncoplastic, Reconstructive, ENT, Craniofacial, Orthognathic, Dermatology, Cosmetic and Aesthetic specialisms in the NHS & Private Healthcare. Our state-of-the art turnkey solutions portfolio includes the VECTRA® portfolio, VISIA® skin analysis, DermaGraphix® plus the VEOS™ and VI SIOMED range of Canfield Medical Dermatology devices.

The IMI Conference 2019 sees the Waba team continue our support for the Institute and its members. This will be our 15th Conference and we are looking forward to this year as much as the first!

Visit the team during the Trade Show to catch up on our latest projects, developments and news. In addition, we have some exciting changes on the horizon and will be sharing those with visitors to our stand.

The pace of change in the NHS continues unabated. Speak to us about the end to end approach for clinical image management, the options on mobile device capture, integration and securing the future for clinical photography.
Topcon is a leading innovator worldwide in the field of ophthalmic imaging systems, software and instrumentation. Founded in Tokyo in 1932, Topcon has far-reaching expertise and also offers an extensive range of education from their clinical affairs team; and have a specialised team of service engineers. www.topcon-medical.co.uk 01635 551120 medical@topcon.co.uk

As forward thinkers for more than 20 years in the professional broadcast, film, tv, music and medical (including veterinary) markets, Polecam proudly present their latest Medical system; perfectly matched for all the leading camera manufacturers of 4K, UHD, Hi-Motion and HD cameras.

Designed to perform and engineered to perfection, Polecam has proven itself globally and been adopted as the ‘go-to-product’ by Medical device companies for product promotion and training, whilst being used extensively by leading surgeons globally for live television transmissions and to aid the training of pioneering Medical procedures in theatre for both human and animal subjects.

Forward thinkers in various medical companies around the world have recognised Polecams potential for looking over the shoulders of surgeons in the operating theatre to give an unrestricted ultra-high, high-definition or even 3D view of the procedure without compromising the medical team.

Polecam is pleased to offer Asset Finance Lease with the benefits of Managed Service Solution (MSS)

As technology continues to evolve at an ever-accelerating pace, Polecam recognise the benefits available from offering customers a managed services solution; comprising either a fixed or variable periodic rental charge which incorporates the provision of equipment, software and services, and includes maintenance, support, installation and training from £417-00/month.

Unite is the largest Trade Union in Britain and Ireland. Its Health Sector is one of the largest groups within the Health service representing a wide range of staff across the NHS in a range of roles and professions including Community Nursing, Psychology, Pathology, Pharmacy, Speech and Language Therapy among others.

We sit along with Other Trade Unions on the Staff Council of the NHS which negotiates and determines staff Pay terms and Conditions.

Established in 1997, Wex Photo Video is the market-leading provider of photographic and video equipment to the private and public sectors. The company places a great emphasis on providing expertise, dedication and outstanding customer support, underpinned by competitive pricing and the widest range of products in the UK, with more than 20,000 currently listed. The representatives attending the 2019 IMI Conference are all from Wex Business; a nationwide team of internal and external account managers who can provide support to guide you through the decision making process when selecting cameras, lenses, accessories, professional camcorders, lighting equipment and studio installations.

Wex are always proud to be part of the IMI Conference and this year, rather than a traditional ‘Trade Stand’, the team will have some of the latest stills, video and lighting products available for you to try out in our workshop ‘studios’.

We look forward to seeing you there..!

Friday night’s entertainment at the Dark Horse kindly sponsored by Unite
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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tr>
<td>09.00 - 10.00</td>
<td>Conference Registration</td>
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<tr>
<td>09.50 - 10.00</td>
<td>Official Opening of Conference and Trade Show in the Ballroom - IMI Chairman Kathy McFall</td>
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<tr>
<td>10.00 - 10.45</td>
<td>Photoshop: Mastering the Selection Tools Taught Media</td>
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<td>10.45 - 11.30</td>
<td>Photoshop: Retouching Photos Taught Media</td>
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<tr>
<td>11.30 - 12.15</td>
<td>Illustrator: Tour of Tools Taught Media</td>
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<td>12.15 - 13.00</td>
<td>Illustrator: Mastering the Pen and Curvature Tools Taught Media</td>
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<td>13.00 - 14.00</td>
<td>Lunch</td>
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<td>14.00 - 14.45</td>
<td>Illustrator: Preparing Artwork for Video and Animation After Effects: Animating Logos Taught Media</td>
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<tr>
<td>14.45 - 15.30</td>
<td>After Effects: Feature Tracking Video Taught Media</td>
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<tr>
<td>15.30 - 15.45</td>
<td>Coffee Break</td>
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<td>15.45 - 16.30</td>
<td>Ask your Adobe Expert Taught Media</td>
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<tr>
<td>16.30 - 18.00</td>
<td>AGM in Confex Room 4 &amp; 5</td>
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<tr>
<td>18.15</td>
<td>Dinner in the Assembly Room</td>
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<td>19.30</td>
<td>Visit to the Dark Horse for drinks and craic agus ceol</td>
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## Saturday’s Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 09.00 - 09.45 | **Opening Keynote** Keeping our digital heritage… forever or until the hard drive dies  
Tim Keefe, Head of Digital, Chester Beatty Library |
| 09.45 - 10.10 | **Plenary Sessions**  
*Photography and Video - Ballroom*  
Challenges at the Chester Beattie Museum  
Tim Keefe  
*Art and Graphics - Confex 4 & 5*  
Using virtual reality to complement and enhance anatomy education  
Caroline Erolin  
*Ophthalmic - Confex 2 & 3*  
Videography of ocular motility – the clinician’s perspective  
Tony McAleer |
| 10.10 - 10.35 | **Manchester bombing, forensic collaboration and major incident planning**  
Geraldine Thompson  
*The Royal Institution BBC Christmas Lectures - behind the scenes getting arty with equines*  
Samantha J Elmhurst  
*Detecting demodex blepharitis at the slit lamp*  
Orla Murphy |
| 10.35 - 10.50 | **Coffee Break** |
| 10.50 - 11.15 | **Utilising photography in the production of an artificial eye**  
Tim Zoltie  
*The creation of a contemporary art collection within an anatomy department*  
Victoria McCulloch  
*The window of the eye - slit lamp imaging of the cornea*  
Jonathan Jackson |
| 11.15 - 11.40 | **Fungal toe nail photography - three clients, three different capture systems**  
Kevin Jacob  
*After Effects compositing techniques for medical animation*  
Stefanie Okemow  
*Consolidation of trachoma elimination, cataract services and comprehensive eye care in Southern Ethiopia*  
Donal Brosnanhan, Diane Weatherup |
| 11.40 - 12.05 | **Introducing debrief sessions - providing emotional support to Medical Photography staff**  
Jayne Noctor  
*‘Antimicrobial Avengers’ - antimicrobial resistance public engagement through graphic medicine*  
Mark Roughley  
*Retinitis pigmentosa and degenerative eye disease*  
Paul Kenna |
| 12.05 - 12.30 | **The ‘Rise’ of patient information - interactive e-learning modules**  
Cat Lamoone, Wayne Troake  
*Ride your challenges towards your prize*  
Belal Kamel  
*Diabetic eye screening: what is new and exciting?*  
Tunde Peto |
| 12.30 - 13.30 | **Lunch** |
| 13.30 - 14.10 | **Clinical Photography in the post-digital Dystopia**  
Anthony Edwards |
| 14.10 - 14.20 | **New Voices**  
To donate or not to donate? That is the question!  
Jessica Irwin |
| 14.20 - 14.30 | **New Voices**  
Where to start? The practical creation and application of a standardised photographic protocol for hair loss  
Emily Arthur |
| 14.30 - 14.40 | **New Voices**  
Creating movement within an orbital prosthesis  
Danielle Adair |
| 14.40 - 14.50 | **New Voices**  
Endometriosis: the common gynaecological condition you’ve probably never heard of  
Aimee Hutchinson |
| 14.50 - 15.00 | **New Voices**  
The role of teleradiology photography in diagnosing skin cancers  
Rosie Hallam |
| 15.00 - 15.15 | **Coffee Break** |
| 15.15 - 15.45 | **Can scientific photographs exist as art?**  
Norm Barker  
*Surgical simulation and virtual reality: a medical illustrator’s perspective*  
Nicky L Webster |
| 15.45 - 16.15 | **Using 3D animation to provide clear demonstrations in medical information videos**  
Richard Wyatt-Haines and Imi Ridley |
| 16.15 - 17.00 | **Closing Keynote**  
Creating care - the Dundee V & A effect  
Rod Mountain, ENT Surgeon and Lead for Healthcare Design and Innovation |
| 17.00 | **Official close of Conference** |
| 18.30 - 19.00 | **Conference Photograph** |
| 19.00 - 19.30 | **Pre-dinner drinks in the Reception Bar** |
| 19.30 - Late | **Awards Ceremony, Banquet and Entertainment** |
Keynote Address

Keeping our Digital Heritage... Forever or until the hard drive dies

Tim Keefe

As a museum managing some of the world’s most important objects of cultural heritage, a critical task for the Chester Beatty is to develop tools, techniques and workflows to manage our important digital assets far into the future. This task, carried out for the physical collections by a combination of curators, archivists and conservationists, is now relegated to data architects, computer programmers, and metadata cataloguers for our digital collections. Where once we talked about physical storage into perpetuity we now wonder what will happen in the next 10-15 years, a particularly long time in the world of information technology.

So how can an organisation manage a preservation process for electronic bits and bytes that supports a truly long term effort to preserve digital assets into the future? And how do we choose to recognise these new digital objects that are important new museum collections in their own right?

This talk will explore the new field of long term digital preservation as it is being applied in museums and research libraries, explore the collaborative activities taking place in the space, and evaluate the progress to date on this complex and multifaceted set of technical tasks. We will explore the answers we have to date and see how we might collaboratively explore solutions to this growing problem that spans the traditional disciplines of arts, heritage and the sciences, in both the public and private sectors.
Challenges at the Chester Beatty Museum

Tim Keefe

The Chester Beatty is lucky to hold one of the most varied privately acquired collections of cultural artefacts in the world. For our digitisation department this means that we deal with a wide-ranging collection of materials, each with their own challenges. For example, the difficulties in photographing illuminated manuscripts, the varying opaqueness of jade and the reflectiveness of glazed biblical papyri.

We also have challenges deciding what to do with the images created during this process because we need to make our collections available, ‘in the most appropriate ways for the use and enjoyment of the public and for scholarly study and research’.

We are constantly looking for new technologies or strategies, including 3D, digital beacons and virtual reality to help us to widen and improve access and enjoyment of our special collection.

Manchester bombing, forensic collaboration and major incident planning

Geraldine Thompson

An account of the night, the emotions, the reactions and an overview of the Manchester bombing. The action of the Clinical Photography team, the leadership values and behaviours on the central site. Covering both the children’s hospital and the adults hospital, the lessons learnt, the de-briefing and the collaborative work.

Concluding with a description of the major incident plan and action action cards, an update of the current forensic collaboration with the Greater Manchester Police and their serious crime unit, scenes of crime photographers.

Utilising photography in the production of an artificial eye

Timothy Zoltie

Many patients suffer from anxiety and depression associated with perceived disfigurement following enucleations or eviscerations. The multi-specialty research team in Leeds has spent the past few years looking at improving the patient experience by producing a unique personalised high-definition prosthesis using digital photography.

The method of production combines intricate digital photography, colour calibrated printing, and a specialist manufacturing process which produces a simple, reproducible, life like prosthesis.

Initial results demonstrate favourable outcomes in terms of patient satisfaction, prosthetic appearance, and manufacturing turnaround time. Further research is required to formally evaluate these factors. In turn, this should help us achieve our aims of improving the rehabilitation pathway, quality of life and patient experience of our ocular prosthetic service. This talk will demonstrate the photography pathway from patient to prosthesis.
Fungal Toe Nail Photography - Three Clients Three Different Capture Systems

Kevin Jacob

When approached by potential clients, Illingworth Research Medical Photography department tailor their proposed capture systems and processes to provide the most efficient solution for each clinical study:

- Which system will capture optimal images to achieve the study end-points,
- Ease and consistency of use for both site staff and patients alike,
- Total cost in terms of equipment and time – considering configuration of equipment and set-up during use at site.

The last three clients have opted for three very different capture solutions despite each study predominantly researching changes in Onychomycosis severity. The pros and cons associated with each system are demonstrated within the presentation.

Introducing Debrief Sessions - Providing Emotional Support to Medical Photography Staff

Jayne Noctor

Medical photographers can come up against some upsetting cases during their working lives. These cases can range from the simple, the traumatic through to bereavement and critical incidences.

Health Creatives have recently introduced debriefing sessions as an emotional support tool, to help the photographers express, process, and release any trauma they have witnessed or experienced.

Through connecting and story telling, debriefing sessions provide a healthy outlet, helping to offset compassion fatigue, post traumatic stress and long-term sickness.

The ‘Rise’ of patient information - interactive eLearning modules

Cat Lamoon, Wayne Troake

After producing patient information videos as well as patient information leaflets for many years, we now use eLearning development tools to create bespoke interactive and engaging patient resources.

Traditionally patient leaflets are very dry, restricted word count with little to no images. Patient information videos are good but long videos are difficult to edit if any of that information changes.

Utilising these new development tools meant we could incorporate bite sized sections of the video, that we could then further expand with text that can be edited easily with the addition of interactions, images, links to other resources and websites. Once published, these interactive and responsive eBooks can be accessed via any internet-connected smart device or personal computer with a modern browser. If hosted on a Learning Management System or web hosting with analytics you will be able to see how patients access and interact with this content.
Using Virtual Reality to Complement and Enhance Anatomy Education

Caroline Erolin

The use of digital three-dimensional (3D) models to aid learning and teaching in anatomy education has become common place over the last decade. More recently, virtual reality (VR) has been explored by a number of universities as a means of further engaging students with virtual models. This paper describes the development and evaluation of a pilot VR anatomy resource at the University of Dundee. Students were exposed to a collection of 3D anatomical models in VR to evaluate the potential usefulness and adoption of this technology for anatomy education.

The Royal Institution BBC Christmas Lectures - behind the scenes getting arty with equines!

Samantha J Elmhurst

I have just finished being filmed with TV Presenter and Anatomist Prof. Alice Roberts who invited me to this year’s BBC Christmas Lectures at the Royal Institution to paint the skeleton on to a horse to demonstrate comparative anatomy. This will be broadcast on Boxing Day BBC4 8pm. It was an engaging way to demonstrate anatomy to youngsters in the audience as part of Alice’s ‘Who Am I’ lectures; an honour to have been asked, I’d like to share my experiences and knowledge of how I achieved painting on ‘Leo’ the horse, from the Royal Windsor barracks, with supporting material. A phenomenal and prestigious engagement at this august Institution.

The Creation of a Contemporary Art Collection within an Anatomy Department

Victoria McCulloch

Art and Anatomy have gone hand-in-hand since human anatomy caught our curiosity, with artists exploring the human body through art. The use of art within anatomy education has aided our understanding of the structures and their spatial relationships within the body, allowing anatomy to be accessible to all. The Anatomy department at the University of Edinburgh, Anatomy@Edinburgh, have a vast collection of historic anatomical artwork, which has undergone conservation work to allow for its public display within the department. With the increase in popularity of anatomical artwork, and the acceptability of its public display, it was realised that there was no contemporary record of anatomical artwork within the department, thus, the Anatomy@Edinburgh Contemporary Art Collection was created. The aim of this collection is to mark the artistic abilities of our present students and visiting artists, with the objective of highlighting the importance of the display of anatomical artwork within an anatomy department, and to showcase the talent of both amateur and professional artists. This talk takes the audience through the ongoing creation of this collection, the process of acquisitions, and the impact of the collection on students and visiting members of the public.
After Effects Compositing Techniques for Medical Animation

Stefanie Joelle Okemow

After Effects is an important tool in post-production for medical animations. Its usefulness goes far beyond its ability to compile sets of image sequences initially composed in 3D software. This presentation will demonstrate how the software can also be used to manipulate layered Photoshop files in order to create animations in the program alone.

After participating in the session, attendees should be able to describe three different After Effects techniques that will enhance their workflow. First, how to utilize different layer modes to enhance the look of 3D footage; secondly, the difference between alpha mattes and luma mattes and how they can be quickly utilized to isolate different image sections; and lastly, how the mask tool can be an effective way to build colour on top of an animated image.

Antimicrobial Avengers! Antimicrobial resistance public engagement through graphic medicine

Mark Roughley

Liverpool University’s Arts-Lab and Liverpool School of Art and Design’s MA Art in Science programme presents the superheroes ‘Shark Boy’ and ‘Komodo Dragon’ versus the evil ‘Superbugs’ in the ‘Antimicrobial Avengers!’ Our joint art-science artist in residence has been working with researchers, high school students and the general public across Liverpool to generate three comics that focus on current topics of antimicrobial research and the fight against bacterial and viral superbugs.

We will present a summary and evaluation of the project, including an overview of our participatory and co-curation activities, and showcase three ‘Antimicrobial Avengers!’ comics.

Ride your challenges towards your prize

Belal Kamel

I want to share with you the story of Artivay company. It’s the story of how a major accident or challenge can become an incredible change in your career path, how you can pursue your true passion, and how you can apply your education and talent in art or medicine to your practical work. From graduating from medical school to becoming a plastic surgeon and medical illustrator, my vision has always been to make full use of my potential to create excellent solutions in healthcare and education. Now I continue to pursue that dream as part of the talented team in Artivay Inc. A major part of our uniqueness is created by IMI members, who continue to inspire us and shape who we will become in the future. I hope that in this presentation, I can deliver our appreciation for this organization, our experience and some of our successful projects.
Videography of ocular motility – the clinician’s perspective

Tony McAleer

Disorders of ocular motility and strabismus are particularly suited to recording as video rather than still photographs. It is important that the clinician and the videographer understand what needs to be captured and how best to do this.

This presentation is given by a clinician with no formal videography skills, who has been recording ocular motility conditions for several years. It describes a personal view of what is needed for a successful recording and shows some of the many errors made along the learning curve.

The aim is to familiarise the audience with how the clinician would like the final product to look, so that both can work towards a better quality result.

Detecting Demodex blepharitis at the slit lamp

Orla Murphy

The aim of this workshop is to teach the audience how to detect and diagnose Demodex blepharitis at their slit-lamps. We would scan the eyelids looking for cylindrical dandruff or any other signs of Demodex infestation. Then using the sterile forceps, audience members would learn how to manipulate a patient’s eyelash, without epilating it, and hopefully see Demodex folliculorum tails emerging from the follicle. We can then discuss who, when and how to treat those patients.

Ideally the audience could be split into small groups and they could practice the technique on each other. Hopefully, this would give the audience members the confidence to start incorporating the technique into their practice.

The window of the eye – slit lamp imaging of the cornea

Professor Jonathan Jackson

The determination of ocular health, utilising fundus photography, fluorescein angiography and new generation OCT technology, is dependent on accessing clear high resolution images of the retina. The maintenance of corneal clarity is fundamental to this task. In this presentation I will highlight the morphological and physiological features that enable the cornea to maintain transparency throughout life. Thereafter I will illustrate, using slit lamp biomicroscopic, anterior optical coherence topography, specular microscopic and confocal microscopic images, how disease processes impact on corneal structure and function. The role this technology plays in assisting with contact lens management plans will also be illustrated.
Diabetic eye screening: what is new and exciting?

**Professor Tunde Peto**

This plenary lecture will cover the evolution of diabetic eye screening in the United Kingdom and how imaging and image analysis revolutionised the way we think about eye diseases in general and diabetic eye complications in particular.

The success of diabetic eye screening contributed to the fall in blindness registration in England and Wales.

In addition to improved patient outcomes and better quality of life in those patients who retained sight for longer, a whole cadre of new healthcare professionals has been trained and is now working not only in the UK, but internationally to promote image-based eye care.

The audience will learn how contribution to the diabetic eye care programme led to better care for diabetes around the World.

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Consolidation of Trachoma Elimination, Cataract Services and Comprehensive Eye Care in Gamo Gofa, Derashe, Konso, Alle and Dawuro Zone in Southern Ethiopia

**Donal Brosnahan, Orbis Ireland**

Orbis’ mission is to eliminate the threat of avoidable blindness in low-income countries, restore sight, where possible, and build a legacy of quality eye care.

Trachoma, cataract and refractive error (RE) are the leading causes of avoidable blindness and visual impairment in Ethiopia. The devastating consequences are deeply felt by poor and marginalised people who are often hardest to reach. Loss of sight impacts an individual severely often limiting ability to engage in education, productive work, basic household tasks and caring for oneself and family.

For over 20 years Orbis has focused on eliminating avoidable, blinding diseases in the Gamo Gofa, Derashe, Konso and Alle (and more recently Dawuro) areas of Ethiopia. Orbis implements the WHO’s SAFE strategy and has enhanced local government’s capacity to manage treatment of eye diseases through intensive training and capacity-building initiatives, health systems strengthening and community engagement. In just over a decade, Orbis has significantly reduced the prevalence of blinding trachoma in a population of 2,768,955 people in GGDKA. Donal will relay the work of Orbis since 2006, the successes, learnings and decision to expand the project.
Clinical Photography in the post-digital dystopia

**Anthony Edwards**

Technology is developing at an unprecedented rate and every step forward offers huge potential for improvements within health care. Smartphones have become ubiquitous and they have penetrated the clinical setting in the same way that they have daily life. Improved hardware, lenses and sensors, and an increasing variety of mobile phone apps offer the opportunity to change the way patient care is delivered.

There is however a need to balance innovation with regulation, for the safety of patients and for the continued development of our profession. The Institute will take this opportunity to launch updated guidelines on the use of mobile phones and apps for clinical photography.

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New Voices

**To Donate or Not To Donate? That is the Question!**

**Jessica Irwin**

The thought of dying can be a difficult topic of discussion for many people. But dying is a fact of life! What to do with your body once you have died can be a strange and confusing decision to make. It’s never too early to start thinking about what will happen to your body once you’re no longer living in it. To donate or not to donate? That is the question! is a comic that aims to dispel myths and misconceptions surrounding body donation through Graphic Medicine. This presentation will address the motivation behind the project (public education and engagement), and the comic development and evaluation, during a three month practice-led MA Art in Science research project.

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**Where to start? The practical creation and application of a Standardised Photographic Protocol for Hair Loss**

**Emily Arthur**

This talk discusses the role of Clinical Photography at Gloucestershire Hospitals in generating a new photographic protocol for the recording of alopecia and conditions relating to hair loss. This talk will discuss the research, planning and implementation methods of generating a new protocol alongside collaborative input from a specialist consultant Dermatologist. It will also discuss equipment purchased, infection control considerations and ethical considerations when documenting patients with hair loss. The results of the new protocol have been positive for both patients and clinicians alike.
Creating Movement within an Orbital Prosthesis

Danielle Adair

Maxillofacial prosthesis replaces a missing part of the face so that it restores a patient’s more natural appearance. Unlike other parts of the head and neck that can be replaced with prosthetics, orbital prosthetics are static and are immediately obvious when the healthy eye moves. The ideal orbital prosthetic would be dynamic.

I investigate the most effective ways of creating a moving orbital prosthesis, initially by programming various micro servomotors to replicate the movements made from the muscles around the eye. I wish to develop a more realistic prosthetic that would be synchronised and replicate the natural movements of a healthy eye.

Endometriosis: The common gynaecological condition you’ve probably never heard of

Aimee Hutchinson

Endometriosis is a gynaecological condition affecting 1 in 10 women in the UK. However education and knowledge around the condition is sorely lacking.

I aim to bring a broader awareness of endometriosis by developing and producing medical illustrations and an interactive, dissectable, 3D model of the uterus, which will allow people to gain a better understanding.

Through the use of an iBook style format, I will look at endometriosis from a histological viewpoint, explore the main associated symptoms and how the condition might be treated or managed.

The role of Telderm Photography in diagnosing skin cancers

Rosie Hallam

Telederm photography at the Royal Free Hospital Trust has increased the amount of patients the consultants can see and has sped up diagnosis time and treatment time. Out of every 100 patients I photograph in my GP referral Telederm Clinic, 60 of those patients do not need to see a Consultant Dermatologist as they can either be treated directly by the GP via advice set out by the Consultant or they don’t need any treatment at all. The cost of a GP referral to a consultant is £120.00 whereas it costs the GP service £50 to refer a patient to the telederm clinic with that amount going up by a further £70.00 if they are then referred to a consultant. The savings are huge for both the GP service and the hospital service in terms of money and appointment slots which can now be used almost exclusively for patients needing treatment.

Being able to upload images on the day ready for review by the consultant makes this an efficient service.
Can Scientific Photographs Exist as Art?

Professor Norm Barker

What makes a scientific image created with the intent to illustrate science also be considered as a work of Fine Art? An almost impossible question to answer, but certainly worthy of consideration. Photography and science have had a very close symbiotic relationship since the invention was announced in 1839. In many ways the sciences and arts share a common creative aesthetic. Leading scientists are active in the creative process, whether it is an elegant solution to a scientific problem or writing, painting, sculpture, the so-called creative arts. The artist and scientist both study the natural world, although for different aims and means. In many ways scientists and artists created the discipline of photography and were the first to realize the tremendous potential of the new medium. Photography is not only a system for illustrating science; in many ways it’s also a method for doing science. This short talk will examine how the context in which a photograph is viewed can have an effect on how the image is interpreted.

Using 3D animation to provide clear demonstrations in medical information videos

Richard Wyatt-Haines and Imi Ridley

Health and Care Videos create patient facing information videos to prepare patients for procedures, enabling them to better manage their condition, and also create NHS and medical staff training videos.

We produce videos conveying complex medical procedures, the use of medical products and facilitate staff training.

Our work utilises 3D animation to provide a clear, visual demonstration of procedures that cannot be performed on a real life example.

We aim to share the positive impact that animation is having in the medical world by creating consistent, clear messaging, enhancing staff training and removing margin for error. There are also wider cost saving benefits from these videos’ ability to free up staff time and enable remote training.

Surgical simulation and virtual reality: a medical illustrator’s perspective

Nicky L Webster

After 13 years working as a medical photographer I changed career paths to work within the healthcare technology industry as a 3D artist. My main role is to model and texture real-time anatomical models and surgical tools for virtual reality simulations with advanced haptic feedback for Fundamental Surgery™, provided by FundamentalVR.

This talk will introduce medical illustrators to the essential tools and software my team use to create our artwork, and the challenges I face as a 3D artist working within the confines of virtual reality.
Closing Keynote

Creating Care - the Dundee V&A effect

Rod Mountain
ENT Surgeon and Lead for Healthcare Design and Innovation

Our science based Healthcare model, based on medications and operations is failing. I will share my experience and ideas learned from working at the interface of Healthcare, Art, Design and Engineering.

The Dundee V&A Museum of Design has become a catalyst for change, opening up a wide range of options to collaborate, co-design and create a new future, a future where creativity and the Creative Industries will play a lead role.

Rod Mountain works in Dundee, Scotland.

He is employed by the NHS as a Head and Neck cancer surgeon.

He also works closely together with staff and students at DJCAD (Duncan of Jordansone College of Art and Design) and with V&A Dundee.

Satruday night

Conference photograph
Pre-dinner drinks in the reception bar
Awards Ceremony
Banquet
Entertainment

Next year...

IMI 2020
2 & 3 October
The Institute of Medical Illustrators strongly recommends that all qualified clinical photographers should be on the Accredited Register of the Academy for Healthcare Science.

This demonstrates your commitment to

- patient safety;
- maintaining professional standards;
- high standards of conduct;
- maintaining your own professional development;
- strengthening the profession as a whole.

Visit www.ahcs.ac.uk to start or renew your registration.