

# Images in Medicine for Producers and Users

The University of Westminster in London's Regent Street was the venue of this year's Medical Group symposium. Entitled "Images in Medicine for Producers and Users", this all-day symposium brought together around 50 medical photographers and clinicians to discuss the ways in which medical photography is used in the modern NHS.

Speakers highlighted techniques, best practice and clinical interpretation of imagery across four major disciplines: ophthalmology, dermatology, maxillofacial surgery and medical education. The symposium was a great success, generating useful discussions and sharing of experience.

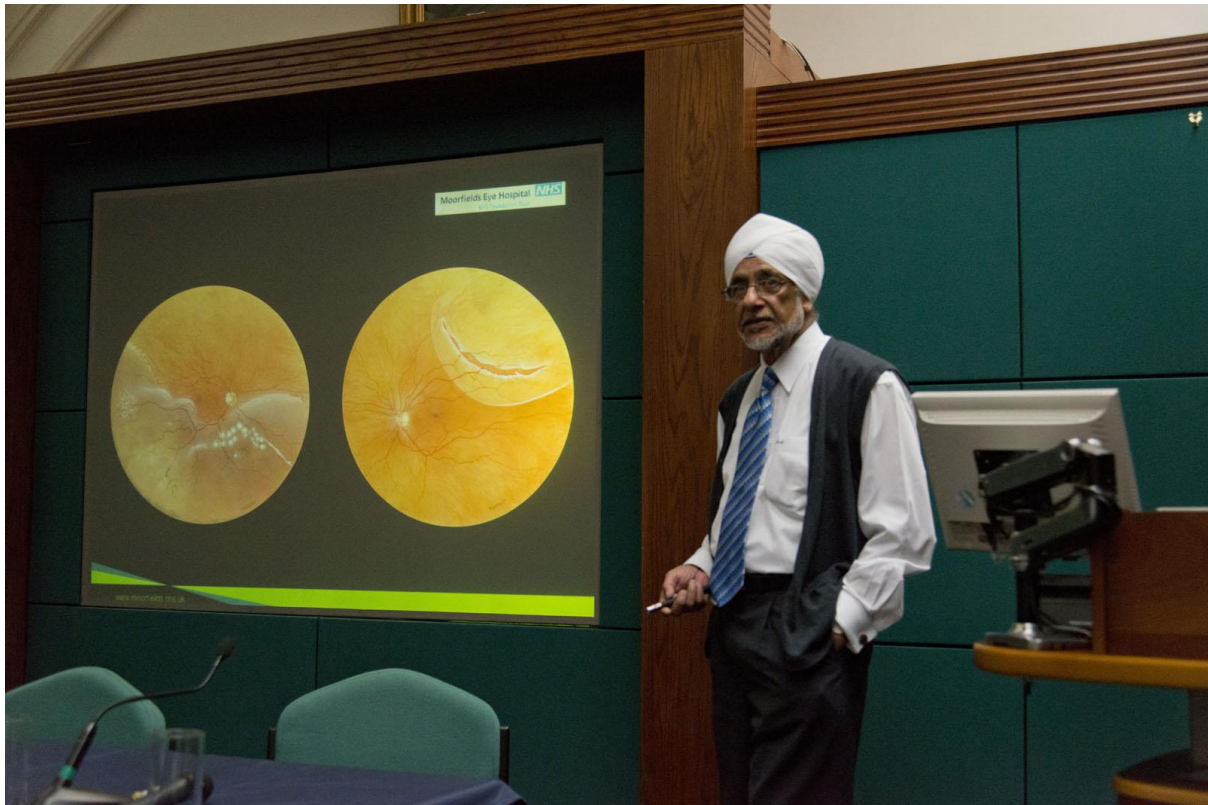
*(All photos by Gary Evans ASIS FRPS)*



Andy Golding (Head of Photography and Film, University of Westminster) welcomes the delegates with typical humour.



President of the RPS, Derek Birch ASIS HonFRPS, opens the symposium.



Kulwant Sehmi (above) and Becky MacPhee (below), both from Moorfields Eye Hospital, gave an overview of ophthalmic imaging techniques and their application to a variety of diagnostic requirements.







Gabriela De Salvo (University Hospital Southampton) discussed the clinical use of ophthalmic imaging, particularly how many modalities may be compared to aid primary diagnosis.



Photographer David Bishop (above) and consultant dermatologist Dr Edward Seaton (below), both from the Royal Free Hospital in London, debated the use of imaging in dermatology,

especially the types and operation of dermatoscopes for inspection and recording of skin lesions and the use of telemedicine in remote diagnosis.







Marie Jones and John Volcano (Great Ormond Street Hospital) gave a fascinating talk on the importance of standardised views in medical photography, especially in recording patients with cleft palate.



Maxillofacial surgeon Miss Victoria Beale (Manchester Royal Infirmary) discussed the use of photography as a vital tool in planning intervention and managing outcome of surgery in complex cases.



Carly Dakin (Wellcome Trust) gave a review of early clinical photography before discussing the importance of medical illustration in teaching.







Professor Owen Epstein (Royal Free Hospital) gave a stimulating talk about the use of capsule cameras, or 'Pill-Cams' in gastro-intestinal medicine as a patient-friendly option in imaging the stomach and bowel.



Discussion panels ended each of the two sessions.







The meeting was summarised and brought to a close by the convener, Dr Afzal Ansary ASIS FRPS.



# REPORT AGM

## **MEDICAL GROUP AGM AND TALK BY GARY EVANS ASIS FRPS Moorfields Eye Hospital, London.**

The Medical Group was hosted by the Moorfields Eye Hospital (MEH) for their AGM and a talk by Gary Evans ASIS FRPS from the Science Photo Library (SPL) on 16 January.

At the AGM, the following were elected officers:

**Dr Afzal Ansary ASIS FRPS (Chair)**  
**Bob Tapper ASIS FRPS (Hon Secretary)**  
**Gary Evans ASIS FRPS (Hon Treasurer)**

After the AGM and before Gary Evan's presentation, the Group Chairman, Dr Afzal Ansary ASIS FRPS, presented Bob Tapper ASIS FRPS with the Chairman's Award. This Award is presented at the personal whim of the Chairman without advice or opinion of any other person. There are no rules laid down as to the purpose of the award but it has often been used to give credit for long-standing service to the Group.



*Bob Tapper ASIS FRPS receiving the Chairman's Award from the Group Chair, Dr Afzal Ansary ASIS FRPS (photo courtesy Laurence Lane, Moorfield's Eye Hospital)*

Gary's presentation was on 'Science and Medicine in Stock Photography'. It was a joint meeting between the Medical Group of The Royal Photographic Society (RPS) and the Institute of Medical Illustrators (IMI). About 50 people attended this meeting including the President, Derek Birch ASIS Hon FRPS, Vice President, Walter Benzie ARPS and Past President, Professor

Ralph Jacobson ASIS Hon FRPS. Most of the participants were with Clinical Photography and Ophthalmic Imaging background from the Medical Group (RPS), IMI and Ophthalmic Imaging Association (OIA), Imaging Science Group and the hospital staff. Gary's presentation was excellent, well illustrated with some examples and very informative too. It generated comments and discussions. Questions were answered by Gary Evans and Rose Taylor, Director at Science Photo Library.



*Dr Afzal Ansary ASIS FRPS thanking Gary Evans ASIS FRPS for his presentation (photo courtesy Laurence Lane, Moorfield's Eye Hospital)*

It was indeed a pleasure to see Mr Declan Flanagan, Medical Director at the Moorfields Eye Hospital, London, who welcomed the participants and thanked the RPS for hosting the meeting at the Moorfields Eye Hospital. He also thanked Kulwant Sehmi FRPS and Becky Smith ARPS from the Medical Imaging Department for arranging the meeting at the Moorfields Eye Hospital. This is not the first time that Kulwant Sehmi has hosted such a meeting at the MEH. I am most grateful to Kulwant for making the venue available to use and for his active participation in the meeting. I would also like to thank Becky Smith for making all the necessary arrangements for the refreshment which was sponsored by the Science Photo Library. The Medical Group is very grateful to the Science Photo Library for sponsoring the refreshment.

**Dr Afzal Ansary ASIS FRPS**

Chair Medical Group

The Royal Photographic Society



# Report on the RPS Medical Group AGM & IMI Meeting



**21 January 2019**

***SIG: Medical***

Photo: Angelos Rantis

The Medical Group AGM was held at the Gordon Museum of Pathology, Guy's Hospital, London on Friday 11 Jan 2019 which was also a joint meeting with IMI.

The Medical Group AGM was held before the joint meeting with IMI. The committee officers were re-elected as:

Chairman: Afzal Ansary ASIS FRPS

Secretary: Bob Tapper ASIS FPS

Treasurer: Juliet Chenery-Robson



R: Bob Tapper (Secretary) Dr Juliet Chenery-Robson (Treasurer) Julia Kepinska (IMI Rep) Prof Afzal Ansary (Chairman) Hoosain Ebrahim (Speaker) Photo: Angelos Rantis

There was one vacancy on the committee for which no nomination were received. This will be filled by a co-opted member by the committee.

After refreshments, the joint meeting with IMI was held where Hoosain Ebrahim ASIS FRPS presented a very interesting the thought-provoking lecture on '*Evidence-Based Practice and its effect on the medical photographer's continuing professional development*' which was followed by interesting discussion/debate.

The RPS Medical Group and IMI are most grateful to Hoosain Ebrahim for having traveled from sunny and warm Cape Town, South Africa to wintery and cold London to come and give this excellent lecture.

Lecture abstract:

Roots of Evidence-Based Practice (EBP) can be traced to the emergence of Evidence-Based Medicine during the early 1990's. It has been adopted by many professions allied to medicine and medical education since then. The aim of the presentation is to give guidance to the process of becoming an Evidence-Based Practitioner in Medical Photography.

Evidence-Based Practice relates to information which helps to establish facts from various sources. This information helps influence and support conclusions, having the attributes of explicitness and distinctness that applies to the process and outcomes of health services. It means using evidence wisely in decisions one will make as a medical photographer about patient management and care.

The adoption of EBP model is an important feature to ensure the medical photographer's continued success and growth. Unless people outside the imaging profession can be persuaded of the medical photographer's worth, it will be difficult to have a viable future in providing a service. The evidence that is used is increasingly outcomes-driven aligned with the sector in which the medical photographer works. Outcomes become the drivers of the development and selection of processes chosen. This may lead to change in what is being done, what we think we should do and why we do it. It could well influence what medical photographers become. It can



thus provide information about our occupation that is in the profession's history when we are discovering, defining and refining the uniqueness of our service and professional focus.

EBP approaches have the potential not only to inform and reform our practice, but also to transform it. Any concept or procedure is based on the best available evidence, namely EBP. In the past medical photographers were involved in a pure service delivery function, engaged in research to assist clinicians and professions allied to medicine.

EBP encourages us to look to the past; consider current practices and establish whether these need to be changed based on changing approaches to medical management and care. EBP assists us to concentrate our thoughts and actions on what is right for the profession and the people we serve now and in the future. EBP will allow us to re-evaluate the medical photographer's role.

Before closing the meeting the Chairman's award was presented to Angelos Rantis. Many congratulations to him. Photo: Philippa Stiff



# Combined Royal Colleges Medal Lecture at The Royal College of Physicians London



**23 November 2018**

**SIG: Medical**

On 15 November 2018 about 50 people turned up including the President of the Royal College of Physicians, Professor Andrew Goddard and the President of the Royal Photographic Society, Robert Albright HonFRPS to attend the lecture by Dr Andrew Bastawrous, the recipient of the Combined Royal Colleges Medal for 2017.

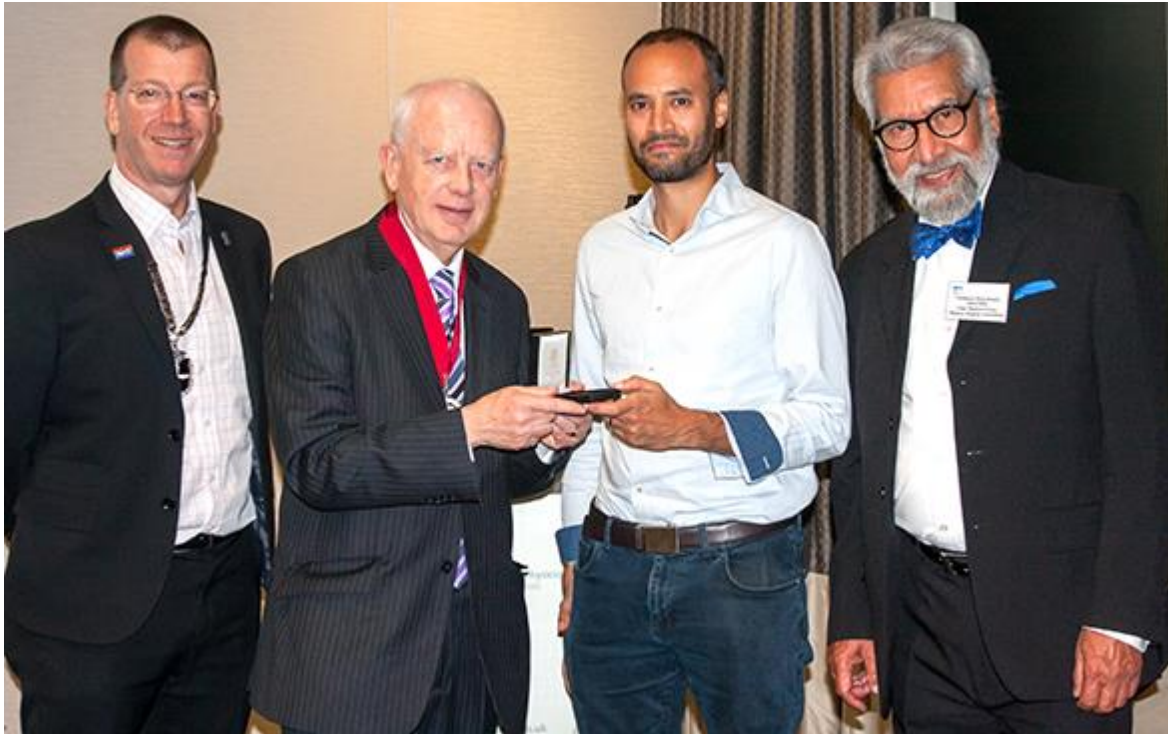
Thirty-nine million people in the world are blind, and the majority lost their sight due to curable and preventable diseases. But how do you test and treat people who live in remote areas, where expensive, bulky eye equipment is hard to come by? Dr Andrew Bastawrous gives a fascinating lecture on the medical photography that may provide a solution.

Dr Andrew Bastawrous is the founder and CEO of Peek Vision, and an Associate Professor of International Eye Health at London School of Hygiene & Tropical Medicine. He is also a TED Fellow and in 2014 delivered a compelling talk 'Get your next eye exam on a smartphone'. His company Peek Vision work to bring better vision and health to everyone, developing technology and partnerships to create sustainable access to eye care. Peek's smartphone-based technology, Peek Retina, also generates data which enables health care providers to supply cost-effective, targeted treatment, and Andrew explained how the programme has grown from a PhD research project to an internationally-adopted national programme in just five years.

He was the recipient of the Combined Royal Colleges Medal at The Royal Photographic Society Awards in 2017. Established by The Society in 1958 in collaboration with the Royal College of



Physicians of London, the Royal College of Surgeons of England and the Royal College of Obstetricians and Gynaecologists, The Combined Royal Colleges Medal is awarded for an outstanding contribution to the advancement and/or application of medical photography or the wider field of medical imaging.



L-R: Professor Andrew Goddard (President, Royal College of Physicians) Robert Albright (President, The Royal Photographic Society, Dr Andrews Bastawrous (Speaker, Combined Royal Colleges Medal winner), Professor Afzal Ansary (Chair of the Medical Group - Medical Awards Committee) at the Royal College of Physicians, London.

Photo: Angelos Rantis (Moorfield Eye Hospital, London)

# Tim Flach Lecture 'Endangered' at his studio- 20 April 2018



30 April 2018  
*SIG: Medical*



Photos: Tim Flach Studio



About 50 people attended (RPS members, IMI members and non-member) Tim Flach's lecture on 'Endangered' at his studio in London on 20 April.

After light refreshment all went downstairs in his studio for Tim's presentation which was very well illustrated on a large screen with his amazing images of endangered animals which he shot for his current book.



Animal photographer Tim Flach presented images from *Endangered*, a project that was realised over a period of two years to document animals on the edge of extinction - some iconic, some lesser-known. In Kenya, he has stood and looked the very last male northern white rhino in the eye. In the waters off the coast of the Galapagos Islands, he has watched hammerhead sharks circling serenely above. In Mexico, he has turned his gaze upward to see thousands of monarch butterflies filling the sky like golden confetti. Tim Flach questions the way we communicate through animal representation, to better connect people to the natural world.



Tim's lecture was amazing, educational, informative and all were very appreciative. The evening was a great success with some very positive feedback.

RPS and IMI would like to thank Tim Flach and his staff for hosting the event.



# Medical Group AGM RPS/IMI Event: 'Much larger than life' lecture by Spike walker ASIS FRPS.



**22 January 2018**

***SIG: Medical***

Photos: Angelos Rantis (Moorfield Eye Hospital, London).

Medical Group AGM

RPS/IMI Event: 'Much larger than life' lecture by Spike walker ASIS FRPS.

The meeting, RPS Medical Group AGM and RPS/IMI lecture by Spike Walker, was held at the Gordon Museum of Pathology, Guy's Hospital London. About 30 people, members of the RPS and IMI, attended this meeting.

Spike is an Accredited Senior imaging Scientist and a Fellow of the Royal Photographic Society. He is a multi award winning photomicrographer who has won the Wellcome Trust Bio-Medical awards several times.

Spike looked back over a period of almost 75 years during which he has attempted to record as many as possible of the colours and forms offered by the 'microworld'.

His presentation was very interesting regarding the use of various microscopes and techniques using different lighting techniques with polarising filters. He showed many interesting examples which were very inspiring and informative. Many thanks to Spike Walker for an excellent lecture.



Several awards were presented by the Chairman of the Medical Group.



Chairman's award was given to Bill Edwards (The Gordon Museum of Pathology, Guy's Hospital London)





The chairman presented the ASIS FRPS certificates to Mr Vasilios Papastefanou.



Bob Tapper ASIS FRPS was presented with his certificate as the Honorary member of the Medical Group.



Hoosain

Ebrahim ASIS FRPS was presented with long service award having been a South African corresponding member of the Medical Group Committee for four years.



L-R Julia Kepinska (IMI Rep), Bob Tapper (Medical Group Secretary), Dr Juliet Chenery-Robson (Medical Group Treasurer), Professor Afzal Ansary (Medical Group Chairman), Spike Walker (Speaker), David Bishop (Medical Group Committee Member), Hoosain Ebrahim (Corresponding Committee Member-South Africa).

The meeting ended by the chairman thanking the Medical Group Committee members, Julia Kepinska (IMI Rep), Bill Edwards (Gorden Museum ), Angelos Rantis (Moorfield Eye Hospital) and all those who helped and supported the meeting.



# Combined Royal Colleges Medal Lecture 2017



**27 November 2017**

**SIG: Nature**

Photo: Michael Pritchard FRPS & Angelos Rantis

## **Craniofacial Analysis and Depiction**

**Professor Caroline Wilkinson FRSE FRAI MMAA**

The lecture was delivered on Thursday 23 November at the Royal College of Obstetricians & Gynaecologists, London by the winner of 2016 Combined Royal Colleges Medal, Professor Caroline Wilkinson\*, Director of the Face Lab, a LJMU research group based in Liverpool John Moores University (LJMU) and Director of Liverpool School of Art & Design.

Caroline explained how clinical images are incredibly important for the analysis and assessment of living bodies, but they can also be utilised for forensic identification and archaeological investigation.

The presentation also described how clinical images contribute towards the depiction of faces from the past and from contemporary forensic investigation and discuss the challenges and limitations of this research.

Professor Wilkinson also explained the application of clinical imagery to the depiction of famous historical figures (such as Richard III and Robert the Bruce), preserved bodies (such as Ancient Egyptian mummies or bog bodies) and disease or trauma in ancient populations.

\*Caroline has a background in art and science and her research and creative work sits at the forefront of art-science fusion and includes subjects as diverse as forensic art, human anatomy,

medical art, face recognition, forensic science, anthropology, 3D visualisation, digital art and craniofacial identification.



R: Professor Afzal Ansary ASIS FRPS (Chaired the meeting), Professor Lesley Regan (President, Royal College of Obstetricians & Gynaecologists), Professor Caroline Wilkinson (Royal Colleges Combined Medal award winner), Robert Albright HonFRPS (President, Royal Photographic Society) .



Professor Lesley Regan, President Royal College of Obstetrics and Gynaecology





Robert Albright HonFRPS, President, RPS.







# Ophthalmic OCT Imaging 2017



**16 June 2017**

**SIG: Medical**

Photos by: Angelos Rantis (Moorfields Eye Hospital, London).

The above symposium which was well attended by 50 delegates was a collaboration between the Medical Group and the Moorfields Eye Hospital.

Thank you to all the speakers who came to share their knowledge and expertise with us and to our supporters and sponsors- Science Photo Library, Heidelberg Engineering and EMIS.

The Chairman of the Medical Group, Professor Afzal Ansary ASIS FRPS, welcomed the attendees and the President of The Royal Photographic Society, Mr Walter Benzie HonFRPS, declared the symposium open after a short speech.

## **Six speakers read papers on various subjects including applications of Virtual reality and Artificial Intelligence in Ophthalmology:**

Ocular imaging, present and future by Mr Chris Mody FDSO FRCOphth(Hon)

An unusual case of Central Serous Chorioretinopathy (CSCR) by Mr Richard Hancock ASIS FRPS

Artificial Intelligence and Optical Coherence Tomography – Reinventing the eye exam by Mr Pearse A Keane MD MSc FRCOphth MRCSI

Assessment of medical retina cases using Triton swept source OCT and OCT-A by Mr Vasilios P Papastefanou MD PhD

Virtual Reality now reality? Application in ophthalmology by Prof Adnan Tufail

Multimodal imaging in medical retina by Dr Gabriela De Salvo MD.

After question/ answers and discussion the meeting was closed by the symposium chairman Professor Afzal Ansary ASIS FRPS.

Thanks also to the Moorfields Eye Hospital (Kulwant Sehmi FRPS) for hosting the symposium and to Gary Evans ASIS FRPS for displaying the Science Exhibition and to the committee members of the Medical Group, particularly the symposium convenor, Bob Tapper ASIS FRPS.











# Medical Group Chairman's Award 2017



**10 April 2017**  
**SIG: Medical**

Photo: Richard Poynter

**Medical Group Chairman's Award 2017**  
**Awarded to Hoosain M Ebrahim ASIS FRPS**  
**The Kinora Viewer**

Throughout recorded history, man has attempted to reproduce the world of movement. The Mutoscope was an early motion picture device, invented by WKL Dickson and Herman Casler. It was later patented by Herman Casler on November 21, 1894. The Mutoscope did not project on a screen and provided viewing to only one person at a time, similar to Thomas Edison's Kinetoscope.

By the mid-1890's in the USA, Edison's Kinetoscope viewer which used fifty-foot rolls of Eastman Kodak film, had been installed in hundreds of small penny arcades around the country. Other arcades had installed a competing system of viewing moving images known as the Mutoscope.

The Mutoscope worked on the same principle as the flip book. The individual image frames were conventional black-and-white, silver-based photographic prints on tough, flexible opaque cards. Rather than being bound into a booklet, the cards were attached to a 14cm diameter wheel. This wheel is attached to an external crank which is turned by the viewer causing each of the pictures mounted on the wheel and held tensely bent into viewing position by a small metal piece (spring leaf) to flip over against a static peg. As the cards flip by, the rapid hand-driven frame rate produces the illusion of movement brought about by the inability of the retina to signal



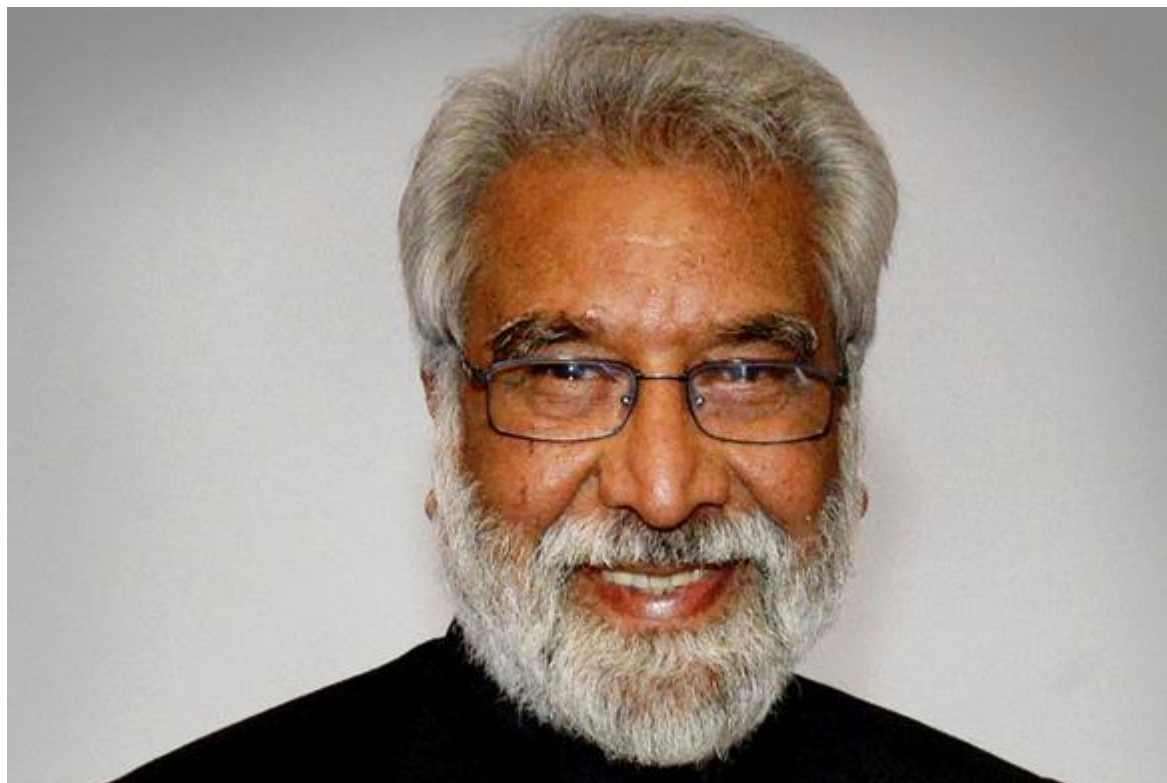
rapidly changing intensities known as “persistence of vision” or “retention of image”. The Mutoscope contributed to the better understanding of the principles of cinematography and those early inventions which may now appear to be relatively easy. Furthermore, we can now understand that the appearance of continuous motion can be achieved without actually recording the entire cycle of movement.

The design of the Mutoscope which has a wooden base with a hinged wooden strip bearing mechanism, a supporting strut holds the viewer at approximately 45 degrees, viewing lens and metal eyeshield, did not rely on any special illumination or an electric motor. Viewers had greater control over the viewing as they could control the speed at which the action took place. The major inspiration of the Mutoscope was certainly the flipbook, a shorter, more primitive form of animation which was hand-drawn rather than recorded on film. The Mutoscope's predecessors other than the Kinetoscope included the Tachyscope, Muybridge's Zoopraxiscope and Demeny's Phonoscope. The major contemporary of the Mutoscope was the Lumiere Brothers' Cinematographe in 1895.

Finally, the Mutoscope, despite its somewhat short existence stimulated other investigators in chronophotography, analysis and synthesis of motion, and in early cinematography. There have been various studies and imaging attempts at comprehensive gait recording, the principal interest being patients with Parkinson's Disease. Mutoscopes can also be used to teach animation and how motion pictures were realized.

Hoosain M Ebrahim ASIS FRPS

# RPS Fellow Appointed Honorary Professor



**21 June 2016**

***SIG: Medical***

Dr Afzal Ansary, a Fellow of the Royal Photographic Society and also an Accredited Senior Imaging Scientist who is the Chairman of the Imaging Scientist Qualifications Board, Chairman of the Medical Group, Member of the Science Committee and the Distinctions Advisory Board (DAB) has been appointed an Honorary Professor at the University of Nottingham in the School of Life Sciences to teach on the postgraduate MSc course in Biological Photography and Imaging.

He joined The Society in 1966 and has been actively involved in various roles. In 2011 he established and co-ordinated the first International Images for Science Exhibition (IISE) which was a huge success. One set of the exhibition is now in the permanent archives of the National Media Museum. He then co-ordinated the second IISE in 2013 which showcased an exhibition of the world's best scientific photography. The images in these exhibitions were aesthetically beautiful and also had scientific data within them. The purposes behind these exhibitions were three fold- firstly, to meet the remit of the Society 'to promote the Art and Science of Photography', secondly, to create public awareness of the important role imaging plays in the modern-day science and, thirdly, to promote the Society's Imaging Science Qualifications. Since then the IISE has grown large with excellent exhibitions being produced annually.

In 1999 he was awarded by the Medical Group The Lancet Award for the publication of his book '*Colour Atlas of AIDS in the Tropics*' for which he was the principal author. In 2013 he was awarded the Fenton Medal and Honorary Life Membership for his services to The Royal Photographic Society. Besides his academic qualifications he has been awarded six Fellowships in Medical, Scientific and Biological Photography including in Microscopy. He has also been

awarded Honorary Fellowships by the British Institute of Professional Photography and Master Photographers Association.

His images have been published worldwide and also used in several television documentaries including '*Embarrassing Bodies*'. He has presented many papers at national and international conferences and published several papers.



# Medical Group AGM 2016



**17 February 2016**

***SIG: Medical***

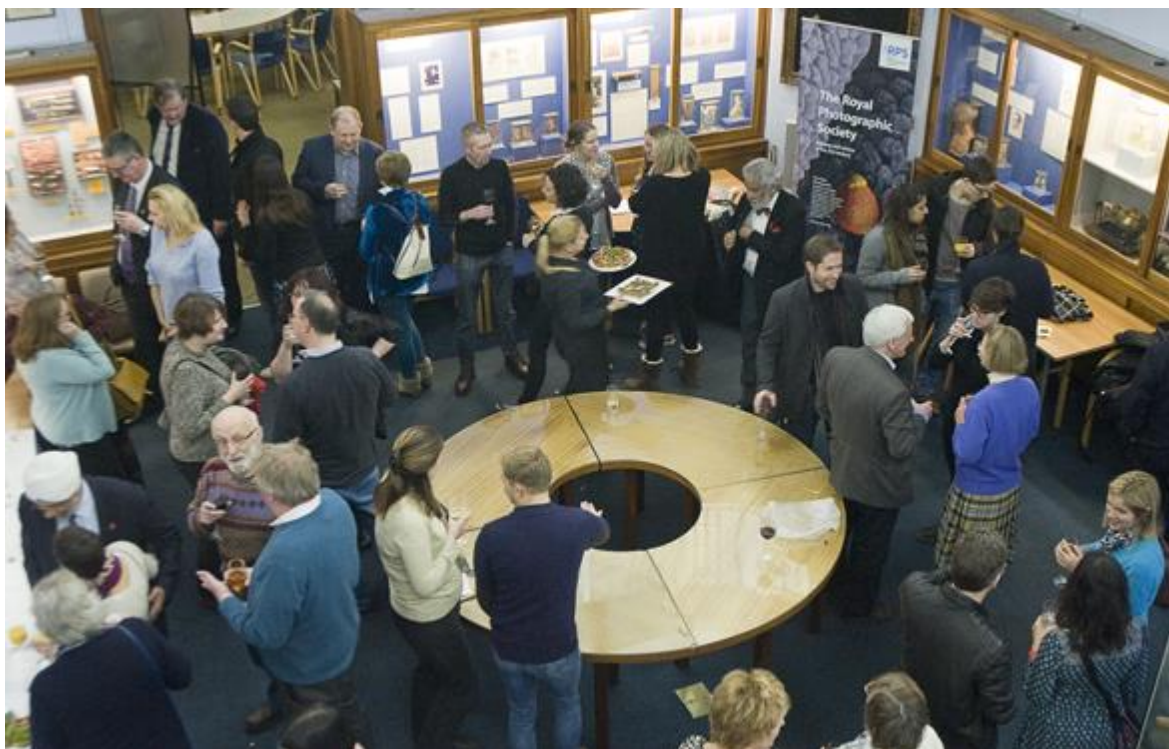
All Photos by: Richard Poynter

The 68<sup>th</sup> Medical Group AGM took place on the 15th January 2016 at the Gordon Museum Guy's Hospital, London. The meeting was attended by the Medical Group membership as well as the President Mr Walter Benzie and the Treasurer of Society, Mr Geoff Blackwell.

At the meeting the following members were elected to serve on Committee: Dr Afzal Ansary ASIS FRPS (Chairman), Mr Bob Tapper ASIS FRPS (Hon. Secretary) Dr Juliet Chanerey-Robson (Hon. Treasurer) and Mr David Bishop (Committee member)



Following the AGM and light refreshments there was a Joint Meeting with The Institute of Medical Illustrators (IMI) attended by approx. 60 people. Before the lecture there was an award ceremony where Mr Richard Hancock was presented with a certificate for attaining the highest qualification and distinction Society can award of ASIS FRPS (Accredited Senior Imaging Scientist and Fellow of the Royal Photographic Society) congratulations Richard.



The award ceremony was followed by a lecture entitled "Forty Years of Murder" presented by Mr Bill Edwards, curator of the world-famous Gordon Museum of Pathology, who gave us an eye-

opening look at the work of Professor Keith Simpson, widely regarded as one of the leading forensic pathologists of the 20th Century.

Professor Simpson pioneered many of the founding techniques of forensic pathology and applied them to several celebrated cases, not least of which were the infamous Acid Bath Murders.

As usual, Bill did not disappoint in his delivery or content and I would like to thank him for not only giving such a excellent and fascinating presentation, but also for the support he has given to Medical Group and IMI over the years.

The meeting concluded with Dr Ansary presenting the Chairman's award. The guidelines to this award are "...given at the personal whim of the Chairman without influence of any other person" Dr Ansary announced that this year's award was going to Catherine Draycott. Unfortunately, Catherine was not in attendance due to family commitment and therefore the trophy would be presented at a suitable venue sometime in the future.

## Medical Group Member Awarded ASIS FRPS - Richard Hancock



**20 November 2015**

***SIG: Medical***

Richard Hancock has been involved in ophthalmic imaging and medical photography his entire working career. During his training at Manchester Royal Eye Hospital, he gained fundamental key skills in ophthalmic imaging, this was enhanced by additional training in general medical photography at Christie Hospital, Manchester. Utilising this broader knowledge and experience, he was asked to establish and manage a new Medical and Ophthalmic Photography department at Aintree University Hospitals, Liverpool in 1990. The photography department has significantly developed into a highly respected and renowned unit overseeing 15,000 patents per annum. The department boasts state of the art imaging equipment and has been at the forefront in providing



innovative patient pathways for the monitoring and surveillance of patients with medical retina diseases. Since taking his first eye photographs 30 years ago, he has been extremely passionate about ophthalmic imaging and is profoundly involved in the profession's learned society, the Ophthalmic Imaging Association. Richard has been instrumental in the organisation, development and delivery of education and training in ophthalmic photography and diagnostics and has over the years successfully organised study days and workshops for fellow ophthalmic photographers, clinicians and professions allied to ophthalmology. He has presented at numerous national and international meetings on a variety of subjects and also published in peer review journals. He has won several imaging awards and was a finalist in the Department of Health Innovation awards 2012.

He starts a new post, Nov 2015, as Director of Ophthalmic Imaging for Medical Imaging UK – a provider of healthcare for the NHS and Private sector.

## CRCM LECTURE 2015 Professor Fercher



**19 November 2015**

***SIG: Medical***

Photo: Michael Pritchard FRPS

2014 recipient of the Combined Royal Colleges Medal Professor Fercher gave a lecture at the Royal College of Physician, London, on 17 November.

**OCT – Principles, Basic Properties and Recent Developments**

Professor Fercher's lecture started with an overview on the beginnings of OCT, its initial developments and its fundamental properties like resolution, depth of field and sensitivity. He then explained the basic properties of OCT-light sources and OCT-relevant sample properties.

Professor Fercher then describes some of the historic developments leading to nowadays dominating Fourier-OCT. Furthermore, some of the modern OCT techniques that are directly related to Fourier-domain OCT were described, together with their particular imaging properties. He then gave an overview on Fourier-OCT motivated light source developments.

## Medical Group Member Awarded ASIS FRPS - Hoosain Ebrahim



**22 October 2015**

***SIG: Medical***

**Medical Group Member Awarded ASIS FRPS**

Photo: Melvin Bond

Hoosain Ebrahim, Medical Group member and a co-opted corresponding committee member (South Africa) was recently awarded Accredited Senior Imaging Scientist (ASIS) qualification and the distinction of Fellowship (FRPS). He was awarded with his certificates by the Chairman of the Medical Group and Imaging Science Qualifications Board Dr Afzal Ansary ASIS FRPS at the

Institute of Medical Illustrators (IMI) annual conference (2015) banquet/awards night in Manchester at Renaissance Hotel on 10 October.  
Hoosain was also awarded Honorary Fellowship of the Institute of Medical Illustrators on the day by the IMI Chairman Jason Candlin.

## Volunteer Recognition Scheme



**12 October 2015**

***SIG: Medical***

### **Volunteer Recognition Scheme**

The Society has recently introduced a Volunteer Recognition Scheme that recognises members who have given their time by volunteering for the Society. The recognition takes the form of a certificate and badge (bronze, silver and gold) to recognise the individual's commitment to Society.

The following criteria will apply:

- The member is registered as a volunteer on the Society database.



- The member has carried out their volunteer duties as agreed.
- The voluntary service does not need to be consecutive.
- Dual roles carried out simultaneously will count as one measure of service.

The formal presentation of the award will be as follows:

4 year (bronze) and 8 year (silver) awards will be sent to the Region and Chapter Organiser, the Chairman of the Special Interest Group or Distinctions Panel as appropriate.

12 year (gold) awards will be presented by the President or his delegated representative e.g. Council Member. Every effort should be made to ensure this presentation is not unduly delayed. A short résumé of the service given will also be provided to the presenting officer.



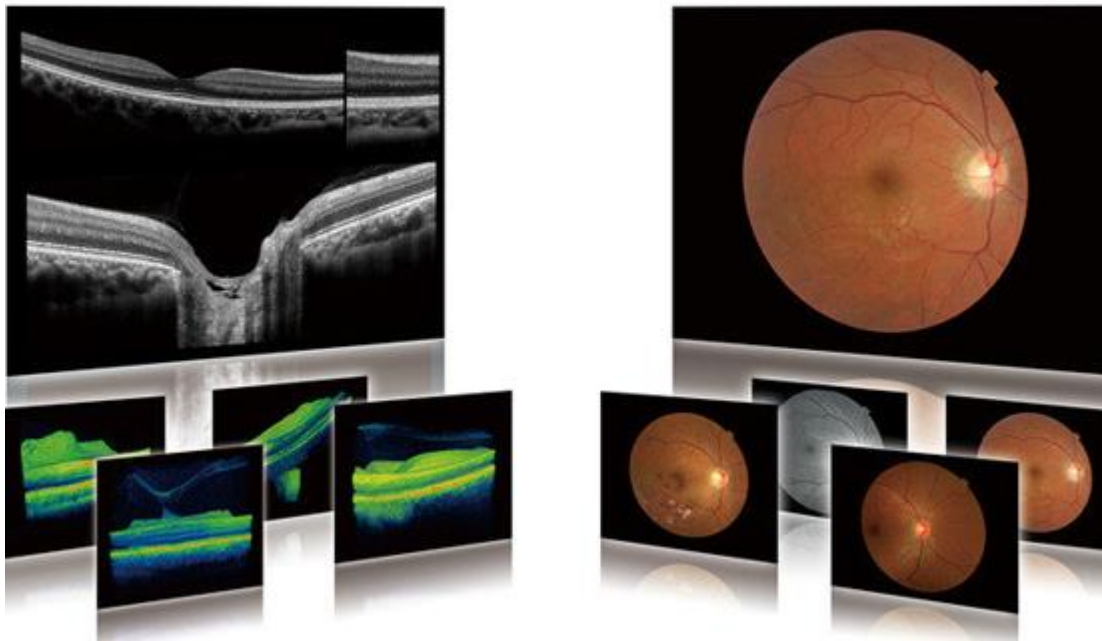
Photo: Michael Pritchard FRPS

R to L: Walter Benzie HonFRPS (President), Bob Tapper ASIS FRPS, Vanessa Slawson FRPS (Council Member)

One of the recent recipients of the award is Robert (Bob) Tapper ASIS FRPS who has been a member of the RPS medical group for many years and has served on its Committee. Bob started as a co-opted member on Committee as an assistant exhibition convenor and, when as an ordinary member on Committee held several positions, such as newsletter editor, archivist, EFSI (European Federation of Scientific Image) representative and for a number of years he has been the Hon. Secretary of the Medical Group - the post he still holds. Bob has been recognised for his services as a volunteer for over 12 years. Bob received his certificate and gold badge from the newly elected President of the RPS, Walter Benzie HonFRPS at the advisory board meeting in Bath on 26 September 2015.

If you have given your time to the RPS by volunteering then you can also receive recognition for all the work you have done for The Society by filling in the form - please contact Simon Bibb ([simon@rps.org](mailto:simon@rps.org)).

# Skills in Retinal Imaging, Diagnosis and Therapy Seminar – an overview



01 October 2015

*SIG: Medical*

## *Skills in Retinal Imaging, Diagnosis and Therapy Seminar – an overview*

*4<sup>th</sup> –5<sup>th</sup> June 2015*

*The Royal College of Ophthalmologists, London*

**Rahila Bashir - Medical Imaging UK Ltd**

This year more than 150 eye care health professionals attended a two-day seminar in London, organised and co-chaired by Professor Heinrich Heimann and Professor Yit Yang.

With a programme that consisted of twenty-six lectures by seventeen speakers, it highlighted the growing clinical application of multimodality imaging and Optical Coherence Tomography (OCT) in ophthalmic practice. There were eight interactive sessions questioning how we translate images in daily practice, and national and international speakers gave us the most up-to-date information on imaging modalities. The seminar was supported by a trade exhibition from leading ophthalmic companies including Topcon, Carl Zeiss and Heidelberg Engineering.

The topics covered ranged from imaging modalities such as reflectance, OCT, FFA and ICG, to the use of diagnostic ultrasound and electro diagnostics. Particularly valuable topics included the ABC of Age Related Macular Degeneration (ARMD) imaging, Macula Telangiectasia, evidence of clinical trial treatments in Retinal Vein Occlusions (RVO), and anti-VEGF therapy for Diabetic Macula Oedema (DMO).

Mr Ethan Priel (MOR Institute, Israel) opened day one with his talk *The Wonderful World of Retinal Imaging*. This lecture embraced the use of video rather than still images which enabled us, the audience, to view the blood circulation of the eye clearly. Mr Priel concluded the dynamic angiogram in video format is a better aid to understanding pathology.

Both fluorescence and OCT were considered by Mr Priel to be central to the revolution that has taken place in ophthalmic imaging, diagnosis and treatment. Initial OCT equipment resembled arcade machines; the newer models are much smaller and produce high definition images. Advances in wide field multi-colour imaging, wide field OCT, and OCT angiography, now give striking and dramatic images of the vitreous interface (VIR).

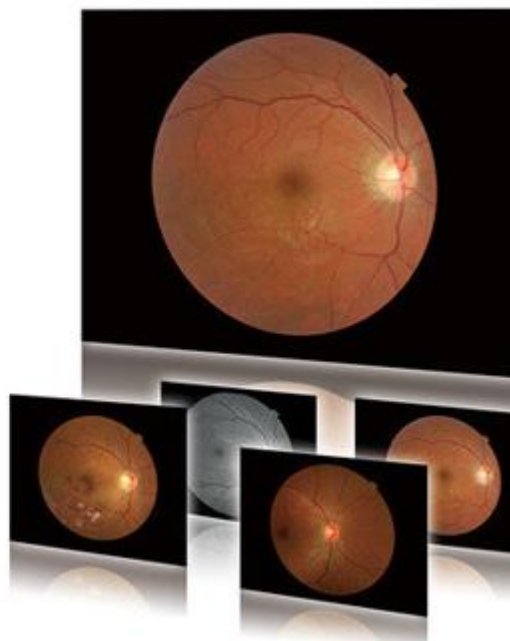
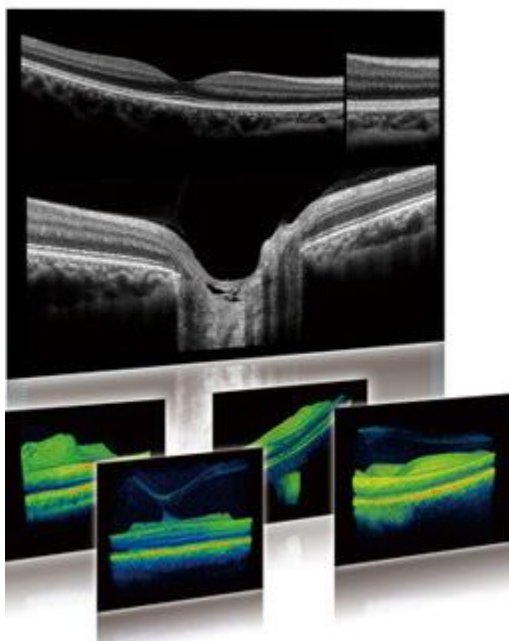
Mr Pearse Keane (Moorfields Eye Hospital, London) added to the comprehensive overview of the modalities used in retinal imaging. He discussed the range of image modalities from the 1980s' scanning laser ophthalmoscopes to the newer models shown in the current trade exhibition.

Dr Werner Inhoffen (University of Tuebingen, Germany) gave a scientific explanation of the new OCT angiography. Combined with swept source OCT, it is a non-invasive imaging technique used to visualise the micro-vascular network. The new product uses a layer-by-layer tissue peeling graphical user interface. Patient comfort was increased as the latest technology requires no dye or dilation with rapid image capture.

Professor Michel Michaelides (Moorfields Eye Hospital, London) gave an extensive in-depth talk on *Inherited Macular and Retinal Disorders* including Choroideremia and Retinal Pigmentosa (RP). Study of the progressive Vitelliform Dystrophy (Best disease) has raised the possibility of gene therapy and in severe Stargardt Disease (STGD) patients can be treated with stem cell therapy and retinal implants.

*Images Courtesy of Topcon UK, product agent presenting at the 2015 RCOP Seminar.*





## Fund awards



21 May 2015

### **SIG: Medical**

The two most recent recipients of financial awards from the **Peter Hansell Scholarship Fund** have been telling us how the awards have helped them.



Thomas Capon (2014 awardee):

*"As a student I had to commute 60 miles to get into university so the Scholarship contributed towards my travel costs meaning that I could spend valuable extra time at university using the resources necessary to complete my course. I would recommend everyone who can to apply as it will add an extra level of learning to your studies"*



Rahila Bashir (2015 awardee):

*"This platform (attending a two day international conference) of learning provides a very rare opportunity of getting direct answers from highly trained and experienced professionals, who are participants in leading clinical trials and are at the forefront of research. The scholarship fund will contribute immensely in supporting my knowledge and skills in capturing illustrated eye disease in detail and interpreting visual image and image model techniques into sound knowledge."*

The Medical Group of the Royal Photographic Society administers the scholarship fund in memory of **Dr Peter Hansell HonFRPS**, a pioneer of the practice and teaching of medical photography in the second half of the 20<sup>th</sup> century.

The fund provides support for any person working in a programme of study or research in the field of illustrative documentation in medicine. Such support might be for the purchase of books, materials or equipment, for attendance at conferences, or for travel costs incurred during a research or study project. The fund is not intended to replace finance that would usually be available from bodies such as the NHS or universities in the normal course of work or study.

Any person of any nationality, whether a member of the RPS or not, may apply for an award from the fund. Grants will not normally exceed £500 and include free membership of the RPS and the Medical Group of the RPS for one year. The award of grants from the fund is made by the Committee of the Medical Group of the RPS. The award is not exclusive, so could be used in conjunction with other funding to achieve a specific goal.

Successful applicants are expected to submit a final report and an article suitable for publication in the RPS Journal to the Committee on completion of their work. Expenditure under the funds provided must be supported by receipted invoices

Requests for grants should be made to the Honorary Secretary of the Medical Group, **Mr. Bob Tapper ASIS FRPS**  
[medicalsecretary@rps.org](mailto:medicalsecretary@rps.org).

## Obituary: Keith Duguid FRPS



**01 May 2015**

***SIG: Medical***

Keith Duguid FRPS Hon FIMI sadly passed away during the night of 5<sup>th</sup> March at his home in Bearsden, Glasgow.



He was highly respected in The RPS Medical Group and the Institute of Medical Illustration where he had made major contributions. His views were heard seriously and well respected. He held various positions in both organisations. Within the RPS he was active on Fellowship panels and in the Medical Group.

In early 1960s Keith trained as a Medical Photographer under Dr Robert Ollerenshaw at the Manchester Royal Infirmary and then went on to become a deputy to Dr Peter Hansell at the Department of Medical Photography and Illustration at Westminster Medical School in central London. With very strong training and experience he was subsequently appointed as the Director of Medical Illustration at the University of Aberdeen. There he made major contributions to medical education with his expertise in multi-media. He will also be remembered as former Editor of the Journal of Audio-Visual Media in Medicine. During this period he edited many high class articles.

Keith worked closely with me when I was the co-ordinator of the major projects for the IMI diploma and for the IMI diploma conversion course to the BSc degree awarded by the Glasgow Caledonian University. He was meticulous, very thorough and fair when marking projects and gave sound advice to those students who had not achieved the required standard. During his retirement he enjoyed his hobby of making stained-glass windows as can be seen in the photograph (courtesy of Dr Ron Callendar FRPS) taken in his garden shed in Bearsden. Keith will be sorely missed and fondly remembered by many who had the pleasure of knowing him Afzal Ansary.

## RPS Science Forum



**11 March 2015**

***SIG: Medical***

Members of the RPS have access to a depth and breadth of knowledge about all aspects of photography across art and science that is unrivalled by any other photographic society. In

particular, in the Medical, Imaging Science and 3D & Holography special interest groups of the RPS, there is scientific and technical knowledge and experience that can be of benefit to both scientists and non-scientists. To share this knowledge the Society has created a **Science Forum** to discuss and answer questions that relate to the science and technology of imaging, scientific imaging, medical imaging, 3D, holography etc. It will work on two levels. The forum has a number of specialized in-house "moderators" who will endeavour to address queries as they get raised, but if they cannot do so satisfactorily, they have a range of additional specialists they can call upon internationally.

This is new and experimental. The Science Committee hopes it will become very successful, and will monitor and review how well the forum meets its goal, and how it could be improved. If you have any queries that lie within the scope of this new forum, please help us to get started by visiting the new forum and posting them at:- <http://www.rps.org/rps-forum?q=topics&f=84>

## AGM 2015 MEDICAL GROUP



16 January 2015  
*SIG: Medical*

The 67th Annual General meeting of the Medical Group, The Royal Photographic Society, was held on the 16th January at the Moorfields Eye Hospital, London. The current officers were re-elected unopposed.

Dr Afzal Ansary ASIS FRPS (Chairman Medical Group) presented the Chairman's Award to Kulwant Sehmi FRPS who is the Head of Medical Imaging at the Moorfields Eye Hospital. After the award presentation Catherine Draycott and Carly Dakin, both from Wellcome Trust, gave an excellent illustrated presentation on 'The picture library model as a tool for medical education'.

(Photo: Richard Poynter, Moorfields Eye Hospital, London)

## Images in Medicine for Producers and Users



**14 November 2014**

***SIG: Medical***

A photo report on the symposium "Images in Medicine for Producers and Users" is available on the Medical Group pages. [Click here](#) to go directly to the report.





# The Art of Scientific Imaging



**18 March 2014**

**Region: East Anglia**

Saturday 15th March saw the culmination of almost a year's planning when *The Art of Scientific Imaging* was released on an unsuspecting world. The event was conceived last Spring as a joint venture by the RPS East Anglia Region, three of the scientific RPS Special Interest Groups (3D and Holography, Imaging Science and Medical), and Cancer Research UK's Cambridge Institute.



The date was chosen to coincide with the Cambridge University Science Festival, and a showing at the same location of the RPS International *Images for Science 2013* print exhibition. A mammoth piece of organisation, which all came together remarkably well on the day. Even better we had over 100 people attending the event, many of whom were members of the general public.

Text by Ian Wilson ARPS

Images © Ian Wilson ARPS

# Science and Medicine in Stock Photography



**02 February 2014**

***SIG: Medical***

Following the Medical Group AGM on 16th January, the first MG event of 2014 was a talk on the use of scientific and medical images in the stock photography industry, hosted by the Postgraduate Education Centre of Moorfields Eye Hospital, London. The talk was given by Gary Evans ASIS FRPS, Hon.Treasurer of the Medical Group and an employee of the Science Photo Library for 23 years.

The presentation was richly illustrated with images selected from SPL's collection of more than 500,000 pictures and 30,000 video clips. Gary first outlined the role of stock agencies in the media before showing the kinds of scientific and medical images that are purchased by picture buyers and publishers. The talk was followed by a lively Q&A session.

For more information about the AGM and this event, please look at the report [here](#).

*Photo: Gary Evans ASIS FRPS (left) being thanked by Group Chair Dr Afzal Ansary ASIS FRPS. Courtesy of Laurence Lane, Moorfields Eye Hospital.*



# Bob Tapper ASIS FRPS Awarded Chairman's Award



**02 February 2014**

***SIG: Medical***

On 16th January, in between the Annual General Meeting and the following Group event, Medical Group Chair Dr Afzal Ansary ASIS FRPS exercised the right due his office and presented the Chairman's Award to the Hon.Secretary, Bob Tapper ASIS FRPS.

The Chairman's Award is given entirely at the whim of the Group Chair, with no rules laid down as to its purpose and no advice or opinion sought from any other members. However, it is traditionally used to celebrate outstanding service to the Medical Group.

The award is a mounted Kinora, a 'flip card' motion picture device similar to a mutoscope, invented by the Lumiere Brothers and made in London prior to 1914.

For a report on the AGM and the talk that followed, look [here](#).

*Photo: Bob Tapper ASIS FRPS (right) being given the award by Group Chair Dr Afzal Ansary ASIS FRPS. Courtesy of Laurence Lane, Moorfields Eye Hospital.*