

Diabetic RetinaScreen clinical conference 2024: Innovating retina screening & treatment for the future

Date: Friday 8 November 2024 @ 8:30 - 16:30

Venue: Radisson Blu Royal Hotel, Golden Lane, Dublin

8:30	Registration	
9:00	Welcome & introductions	Ms Fiona Murphy, Chief Executive, National Screening Service, Dublin

Session 1 - Diabetic Retinal Screening

<p><i>Moderated by:</i> Ms Marie Hickey Dwyer, Clinical Lead for Ophthalmology, University Hospital Limerick Dr Mark James, Consultant Ophthalmologist, Cork University Hospital</p>		
9:15	Diabetic Retinal Screening: a Global Context	Prof Simon Harding, President of the European Association for the Study of Diabetes Eye Complications
9:35	Diabetic Retinal Screening: The Irish Programme (Diabetic RetinaScreen)	Mr Robert Acheson, Consultant Ophthalmic Surgeon and NEC Care Clinical Lead Prof David Keegan, Clinical Director, Diabetic RetinaScreen Irish Treatment Centre Presentation
10:15	Discussion	
10:30	<p>Tea & coffee Viewing of poster presentations</p>	

Session 2 - Artificial Intelligence in Diabetic Retinopathy Screening

Moderated by: Dr Alan Smith, Consultant in Public Health Medicine, National Screening Service, Dublin

Ms Emer Henry, Clinical Lead for Ophthalmology, University Hospital Waterford

11:00	Future role of AI in Population Based Screening Programmes: Irish Context	Dr Alan Smith, Consultant in Public Health Medicine, National Screening Service, Dublin
11:10	Role of AI in Global DR Screening	Prof Simon Harding, President of the European Association for the Study of Diabetes Eye Complications
11:30	Differential Algorithms in DR Screening: a critical analysis	Mr Adnan Tufail, Consultant Ophthalmologist, Moorfield's Eye Hospital, London
11:55	Predicting Disease and Prognosis based on Imaging	Ms Catherine Egan, Consultant Ophthalmologist, Moorfields Eye Hospital, London
12:20	Artificial Intelligence Application in Non DR Disease	Ms Kate Coleman, Ophthalmic Surgeon & Founder of iKey®
12:40	Discussion	
13:00	Lunch Viewing of poster presentations	

Session 3 - Therapies

Therapies I

Moderated by: Ms Deirdre Townley, Clinical Lead for Ophthalmology, University of Galway

Dr Darren McAteer, Consultant Ophthalmologist, Sligo University Hospital

13:30	Intraocular Therapies Innovative new therapies	Ms Angela Rees, Clinical Director and Consultant Ophthalmologist, Moorfields Eye Hospital, London
-------	---	---

13:55	The Role of Laser in DR now & in the Future	Mr Robin Hamilton, Consultant Ophthalmic Surgeon
14:20	Discussion	
14:30	Tea & coffee Viewing of poster presentations	
Therapies II Moderated by: Mr Max Treacy, Clinical Lead for Ophthalmology, Royal Victoria Eye & Ear Hospital, Dublin Mr Nicholas Brennan, Consultant Ophthalmic Surgeon, Mater Hospital, Dublin		
15:00	Role of Retinal Surgery in Diabetic Eye Disease Current and Expanded	Mr Alistair Laidlaw, Consultant Ophthalmologist and Vitreo Retinal Surgeon, Guy’s and St Thomas’ Hospital, London
15:25	Gene therapy Application to Diabetic Retinopathy	Prof Lejla Vajzovic, Associate Professor of Ophthalmology, Adult and Paediatric Vitreoretinal Surgery and Disease, Duke University Eye Center, North Carolina
15:45	Panel discussion and Q&A	
16:15	Prize giving and summary	Ms Helen Kavanagh, Programme Manager, Diabetic RetinaScreen Prof David Keegan, Clinical Director, Diabetic RetinaScreen
16:30	Close	

Conference Accreditation and Recognition

Irish College of Ophthalmologists: 6 CPD Credits

Speakers

Ms Fiona Murphy is the Chief Executive Officer of the HSE's National Screening Service (NSS) in Ireland. The NSS delivers four national population based screening programmes:

- [BreastCheck - The National Breast Screening Programme](#)
- [CervicalCheck - The National Cervical Screening Programme](#)
- [BowelScreen - The National Bowel Screening Programme](#)
- [Diabetic RetinaScreen - The National Diabetic Retinal Screening Programme](#)

These programmes aim to reduce morbidity and mortality in the population through early detection of disease and treatment, both of which greatly improve health outcomes.

A pharmacist by background, Fiona has over 25 years' experience in the NHS in Scotland and has worked in a range of roles in Pharmacy and then in senior management positions in Primary & Community Care, Acute & Unscheduled Care, National Information & Intelligence, National Commissioning of Population Screening Programmes, Specialist Services and National Care Networks. Fiona returned to Ireland to take up post in the HSE in mid 2020.

Prof Simon Harding is leading the development of the early detection and treatment of retinal diseases locally, nationally and internationally, particularly in relation to diabetic retinopathy. He has research programmes in diabetic eye disease (screening, early detection, treatment, imaging, large data, AI, risk factors/biomarkers), and wider topics in retinal diseases. He has written or contributed to over 200 peer reviewed publications in the field. He has extensive experience leading translational eye research, linking scientists and clinicians within the University and NHS sectors. Internationally he is leading policy developments in early detection of diabetic retinopathy within Europe with WHO, and in China and sub-Saharan Africa. He is a founder of AI-Sight, a recent spin-out from the University of Liverpool on AI in medical imaging.

Mr Robert W Acheson FRCOphth, Consultant Ophthalmologist and Vitreoretinal Surgeon

Current Professional role and affiliations: Consultant Ophthalmologist/Medical Retinal Specialist, retired from surgery.

Clinical Lead for NEC Care in Ireland which provides diabetic retinopathy screening services for Diabetic RetinaScreen.

Clinical Director of Diabetic Retinopathy - Clinical and Management Services Ltd (DR - CMS) which provides clinical governance, quality assurance and management services for the NEC Care DRS.

Prof David Keegan completed his basic and higher ophthalmology surgical training at Moorfield's Eye Hospital, London (1997-2005). He completed his Fellowship in Vitreo-retinal surgery at Columbia University / New York Presbyterian Hospital, New York, USA (2005-2006).

Mr Keegan's areas of special interest include inherited retinal degeneration, diabetic retinopathy, retinal transplantation (immunological consequences), health economics, low-vision device development, biomarkers in age-related macular degeneration, retinal detachment, retinal repair and regeneration. In addition to his role as consultant vitreo-retinal surgeon, Mater Hospital, Mr Keegan also serves as:

- National Clinical Lead for Diabetic Retinopathy, National Screening Service, Dublin
- Honorary Consultant Vitreo-retinal Surgeon, Temple Street Children's University Hospital, Dublin
- Board Member of National Council for the Blind (NCBI) and Fighting Blindness Ireland Volunteer
- Chair of the NCBI Vision 20/20 committee to develop a state of the art low vision assistance programme in Ireland.

He is involved in an active retina research group and strives to ensure that the basic sciences studies parallel those in the clinic and has run seven clinical trials.

He is involved in residency and fellow training and lectures at undergraduate and postgraduate level. He is a member of Scientific and Medical Advisory Board for Retina International.

Dr Alan Smith is a graduate of University College Dublin (1992). He is a certified specialist in both General Practice and Public Health Medicine. He is a Consultant in Public Health Medicine with the HSE National Screening Service, which runs BreastCheck, CervicalCheck, BowelScreen & Diabetic RetinaScreen.

He has also held the roles of Deputy Chief Medical Officer in the Department of Health during COVID, Director of Quality and Patient Safety with St Vincent's University Hospital in Dublin between 2015-2018 and National Director of Performance Improvement for Scheduled Care in the Department of Health, Special Delivery Unit (SDU) between 2011 and 2013.

He has a long history with cancer screening in Ireland dating back to 2007 when the National Cancer Screening Service was established. There were no national cancer screening programmes at that time but between 2007 and 2013, he was part of the team that expanded BreastCheck into a national programme and which then went on to deliver CervicalCheck, BowelScreen and Diabetic RetinaScreen programmes.

Mr Adnan Tufail is a consultant ophthalmologist in the Medical Retina Service at Moorfields Eye Hospital, London, with special expertise in medical and inflammatory diseases of the retina and choroid. He is a Professor of Ophthalmology at University College London with extensive clinical and research experience. Professor Tufail is also a highly experienced cataract surgeon with expertise in the complex management of patients with cataract and the above retinal conditions.

Ms Catherine Egan is a world renowned retinal expert at Moorfields Eye Hospital, associate professor at the Institute of Ophthalmology, UCL and the clinical lead for the diabetic retinopathy service at Moorfields Eye Hospital. She has published extensively on disorders of the retina and retinal blood supply, from the most common blinding disorders, such as diabetic retinopathy, to rare diseases like MacTel. Her pioneering work on the MacTel study has engendered new insight into this condition and paved the way for new treatments. She has particular interest in preventing blindness due to the complications of diabetes and her group set the standard for validation of AI approaches to diagnosis of diabetic retinopathy.

Ms Kate Coleman is a former Consultant Mater University Hospital, in RetinaScreen (for diabetic retinopathy) and Eye Emergency services. Founder of www.righttosight.no, empowering African eye surgeons. Right to Sight has now delivered 39 cataract surgeon centres in Africa.

Kate is passionate about adapting current technology to eliminate needless sight loss, in particular, for glaucoma, and especially because of the new ease of non-mydratic retinal photography. Glaucoma is the most common cause of irreversible sight loss in the world, with rates soaring with ageing population demographics. It affects 7.9% Africans and 3.8% caucasian aged over 40yrs. In Ireland, 75% of people are unaware of their diagnosis and 25% will be blind in one eye at the end of their illness, with significant costs to the economy. Kate founded iKey®, a dual-use biometric of the optic nerve, to allow every citizen to store their baseline retina photo for future iKey® artificial intelligence change alerts to silent disease at the blind spot, ie glaucoma. [Www.iKey.ie](http://www.iKey.ie)

Miss Angela Rees is a Consultant Ophthalmologist specialising in medical retina and uveitis at Moorfields Eye Hospital City Road and St George's Hospital. Miss Rees Trained initially as an optometrist graduating from Aston University 1989. She subsequently studied medicine at The United Medical and Dental schools of Guy's and St Thomas' graduating in 1996. Ophthalmology training was in the North London Deanery with an MD at UCL in Age-related Macular Degeneration and psychophysics.

She has participated in many commercial medical retina and uveitis Trials as sub investigator.

Current research interests in Birdshot Chorioretinopathy, uveitis treatments, and infective uveitis.

Mr Robin Hamilton is a Consultant Ophthalmic Surgeon since 1985. Education & Experience: Moorfields Eye Hospital, Medical Research Council UK, Royal Victoria Hospital Ophthalmology Department. Queen's University Belfast. Special Interests: Diabetic Retinopathy, Macular Degeneration, Retinal detachment surgery, cataract surgery. Clinical Research & Professional Memberships: Publications on diabetic retinopathy and sickle cell retinopathy Member of Club Jules Gonin, Royal College of Ophthalmologists and Irish College of Ophthalmologists.

Mr Alistair Laidlaw is a consultant ophthalmologist who also specialises in vitreoretinal surgery. As a leading expert within his field, he performs surgery for retinal detachment, macular hole, epiretinal membrane and cataracts. He has a specialist interest in the medical and surgical treatment of diabetic retinopathy and age related macular degeneration. With a career spanning over 25 years, Mr Laidlaw is now one of the UK's foremost experts in his field. His initial medical training was in Newcastle Upon Tyne, with a subsequent six years (including a medical higher degree) in Bristol, before a final three years of training at Moorfields Eye Hospital in London.

Dr. Lejla Vajzovic is a vitreoretinal surgeon and tenured Professor of Ophthalmology at Duke University School of Medicine with expertise in adult and pediatric retinal diseases and surgery.

Dr. Vajzovic is passionate about translational research and collaborates closely with Duke biomedical engineers to develop imaging devices to improve ophthalmic care. She serves as a principal investigator for numerous national clinical trials in early to late stages of development. Her research interests span from pediatric retinal diseases such as retinopathy of prematurity to adult diseases such as age-related macular degeneration, diabetic retinopathy and venous occlusive diseases, as well as vitreoretinal surgical topics such as retinal tears, retinal detachments, macular holes and macular puckers. In addition, Dr. Vajzovic is interested in cutting edge technologies and recovery of vision in hereditary and common retinal diseases with gene-therapy, stem cell technology and retinal implants. She is a co-director of the Duke Pediatric Retina and Optic Nerve Center, and directs the Duke Center for Artificial and Regenerative Vision, where she performs gene-therapy delivery, and implantation of the Argus II "bionic eye" to restore vision to individuals with total blindness.

An influential educator, she organises and directs several highly successful national and international courses, including the first-of-its-kind Advances in Pediatric Retina Course at Duke and the international Duke Fellows Advances in Vitreous Surgery Course. She is director of prestigious Duke Vitreoretinal Surgical Fellowship and director of Duke Eye Center's Continuing Medical Education program.

Dr. Vajzovic completed her vitreoretinal fellowship training at Duke and residency training at Bascom Palmer Eye Institute in Miami, FL. While in training, she received Heed Fellowship Award, Society of Heed Fellows Award and Retina Society Research Award. She is active on the Women in Ophthalmology Board of Directors where she serves as a Treasurer and a Chair of Clinical Trial Training Program. In addition, she serves as a Retina Society AAO Council Representative. She is elected member of the Retina Society, Macula Society and Club Jules Gonin Society. Dr. Vajzovic has been awarded the American Academy of Ophthalmology Achievement Award, American Society of Retina Specialists Senior Honor Award, Women in Ophthalmology Emerging Leader Award and Emerging Leader Award by Duke University School of Medicine and Duke Medical Alumni Association.

Ms Helen Kavanagh is Programme Manager of Diabetic RetinaScreen, Ireland's national retinal screening programme for people who have diabetes. She has been in this role for 3 years. Previously she was Deputy Programme Manager, and before that she served as clinical co-ordinator with the programme.

Helen has a background in business management and operations, having studied Health Service Management at Trinity College Dublin where she completed her MSc in HealthCare Management. She also has a degree in Business Management. She has co-authored several papers on screening in Ireland and presented at national and international conferences.