

**EAsDEC Conference, 26<sup>th</sup>- 28<sup>th</sup> May 2022  
PROGRAMME**

**Thursday, 26<sup>th</sup> May 2022**

**VENUE: Assembly building**

<https://www.presbyterianireland.org/Utility/About-Us/Assembly-Buildings.aspx>

**16:00 Registration**

**16.30 - 18.30: Symposium: Re-imaging the diabetic eye: from cameras to cost-effectiveness**

**Chairs: Professors Simon Harding and Tunde Peto**

16.30 -16.35: **Professor Simon Harding:** Introduction

16.35 – 16.50: **T Peto, UK:** Imaging the diabetic eye – current best practices and pitfalls

16.50 – 17.05: **P Silva, USA:** Association of Predominantly Peripheral Lesions on Ultrawide Field Imaging and the Risk of Diabetic Retinopathy Worsening Over Time: Results from DRCR Retina Network Protocol AA

17.05 – 17.25: **S Sadda, USA:** Re-thinking diabetic eye disease severity scales

17.25 – 17.45: **S Harding, UK:** Adding cost to the equation: cost effectiveness of diabetes eye care

17.45 – 18.05: **A Tuulonen, Finland:** How to think big when considering costs?

18.05 -18.20: **P Huhtinen Finland:** Game plan to implement screening – findings after 15 years of experimenting

18.20 – 18.40: Discussion

**18.40: Official opening of EAsDEC and the Annual Meeting Welcome Reception**

**VENUE: Assembly building: Fingerfood and soft drinks**

<https://www.presbyterianireland.org/Utility/About-Us/Assembly-Buildings.aspx>

**FRIDAY, 27<sup>th</sup> MAY 2022**

**VENUE: Assembly building**

<https://www.presbyterianireland.org/Utility/About-Us/Assembly-Buildings.aspx>

08.00 Registration

**08.55 INTRODUCTION AND WELCOME**  
**Professor Tunde Peto, QUB, UK**

**9.05: SESSION 1: Neurodegeneration and the neuro-vascular unit in the diabetic eye**

Chaired by: Dr Ingeborg Klaassen and Professor Tim Curtis

9.05 - 9.17: *A.R. Santos, Portugal*: **CHARACTERIZATION OF TWO-YEAR PROGRESSION OF NEURODEGENERATION IN DIFFERENT RISK PHENOTYPES OF DIABETIC RETINOPATHY**

9.17 – 9.29: **The winner of the Anne-Katrine Sjolie Best Student Abstract prize:**  
*H. Ramos, Spain* **TRANSCRIPTOMIC ANALYSIS REVEALS THAT RETINAL NEUROMODULATION IS THE MAIN UNDERLYING MECHANISMS OF THE NEUROPROTECTIVE EFFECT OF SITAGLIPTIN IN DIABETIC RETINA**

9.29 - 9.41: *F. Cano-Cano, Spain*: **INFLAMMATION IS UNDERLYING IN RETINAL DEGENERATIONS. SIMILARITIES AND DIFFERENCES BETWEEN DIABETIC RETINOPATHY AND RETINAL DEGENERATION IN HUNTINGTON'S DISEASE**

9.41 -9.53 *K. Little, UK*: **RETINAL NEUROVASCULAR DYSFUNCTION IN A MOUSE MODEL OF ALZHEIMER DISEASE COMBINED WITH TYPE 2 DIABETES**

9.53 -10.05: *M. J. Albargothy, UK*: **INVESTIGATION OF THE HETEROCELLULAR FEATURES OF THE RETINAL NEUROVASCULAR UNIT USING 3D ELECTRON MICROSCOPY**

**10.10: Professor Tim Curtis, QUB, UK**  
**The relevance of blood flow autoregulation in diabetic retinopathy**

10.40 - 11.10: Coffee/tea break

**11.10 SESSION 2: New approaches to understanding diabetic eye pathology**  
Chaired by: Professor Rafael Simó and Dr Elena Beltramo

11.10 -11.22: *E.K Bosma, Netherlands*: **DIFFERENTIAL ROLES OF ENOS IN VEGF-INDUCED PERMEABILITY IN BARRIER VERSUS NON-BARRIER MICROVASCULAR ENDOTHELIAL CELLS**

11.22- 11.34: *S. Bridgett, UK*: **SINGLE CELL ANALYSIS OF THE RETINA TO ELUCIDATE EARLY CHANGES IN DIABETES**

11.34 – 11.46: *H Winter, UK*: CIRCADIAN RHYTHMS IN DIABETIC RETINOPATHY

11.46 – 12.01: *E. Beltramo, Italy*: EXTRACELLULAR VESICLES DERIVED FROM M1-ACTIVATED MICROGLIA INDUCE PRO-RETINOPATHIC FUNCTIONAL CHANGES IN MICROVASCULAR CELLS

12.01 -12.16: *P. Fort, USA*: PROTEOMICS ANALYSIS OF OCULAR TISSUES FROM DONORS WITH DIABETES AND DIABETIC RETINOPATHY

**Summary of the morning sessions led by Session Chairs**

**12.25 Lunch**

*(Poster presenters have priority for lunch)*

**13.00 SESSION 3: POSTER SESSION**

**Diabetic Eye Screening: Moderated by Dr K Curran and Dr P Piyasena**

R. Thomas (UK): INCIDENCE OF SIGHT AND SEVERE SIGHT IMPAIRMENT CERTIFICATIONS FROM 2010 TO 2020 DUE TO DIABETIC RETINOPATHY IN ENGLAND AND WALES

I. Marques (Portugal): CHARACTERIZATION OF TWO-YEAR PROGRESSION OF CAPILLARY CLOSURE IN NONPROLIFERATIVE DIABETIC RETINOPATHY

E. McBride (Ireland): ADDRESSING TECHNICAL FAILURES IN A DIABETIC RETINOPATHY SCREENING PROGRAMME

I.O.B.A. Laurencio, Spain: TELEOPHTHALMOLOGY DIABETIC RETINOPATHY SCREENING PROGRAM IN CASTILLA Y LEÓN

I. Brennan (Ireland): EVALUATING THE EFFICIENCY OF THE IRISH NATIONAL DIABETIC RETINAL SCREENING SERVICE'S TREATMENT PATHWAY

A. Hamid (UK): FIVE-YEAR OUTCOMES OF DIABETIC EYE SCREENING IN PATIENTS AGED 85 YEARS

L. Ribeiro (Portugal): CHARACTERISATION OF TWO-YEAR PROGRESSION OF RISK PHENOTYPES OF DIABETIC RETINOPATHY

**Clinical practice in diabetic eye: Dr M Cicinelli and Dr A R Santos**

V.A. Biletskaya (Russia): ASSESSMENT OF PROLIFERATIVE DIABETIC RETINOPATHY BIOMARKERS IN VITREOUS FLUID

J. Grauslund (Denmark): PRESENCE AND DEVELOPMENT OF DIABETIC RETINOPATHY IN 153,238 PATIENTS WITH TYPE 2 DIABETES IN THE DANISH

## **REGISTRY OF DIABETIC RETINOPATHY**

**G. Weisner (UK): THE EFFECT OF DEFERRED INJECTION TREATMENT DUE TO COVID-19 ON DISEASE ACTIVITY IN PATIENTS WITH DIABETIC MACULAR OEDEMA**

**J. Perais (UK): PREDICTIVE FACTORS ASSOCIATED WITH ANATOMICAL AND FUNCTIONAL OUTCOMES FOLLOWING PANRETINAL PHOTOCOAGULATION IN PEOPLE WITH PROLIFERATIVE DIABETIC RETINOPATHY**

**K. Gooding (UK): EXAMINING WHETHER GROWTH DIFFERENTIATION FACTOR-15 IS ALTERED IN THE EARLY STAGES OF DIABETIC RETINOPATHY IN INDIVIDUALS WITH TYPE 2 DIABETES**

**L. Cushley (UK): INTEGRATING DIABETIC EYE SCREENING INTO REGIONAL HAEMODIALYSIS UNITS, NORTHERN IRELAND**

**S. Kelly (Ireland): NON-ATTENDANCE RATES OF PATIENTS ATTENDING TREATMENT CENTRES FOR DIABETIC RETINOPATHY IN IRELAND**

**I. Brennan (Ireland): EVALUATION OF EFFICIENCY OF THE TREATMENT PATHWAY OF IRISH NATIONAL DIABETIC RETINAL SCREENING SERVICE**

### **Laboratory and experimental studies: Moderated by K Little and H Ramos**

**J. Augustine (UK): EVALUATION OF 2-HYDRAZINO-4,6-DIMETHYLPYRIMIDINE (2-HDP) AS A THERAPEUTIC FOR THE EARLY-STAGE TREATMENT OF DIABETIC RETINOPATHY**

**A.I. Arroba (Spain): UNRAVELLING THE ANTI-OXIDATIVE EFFECTS OF A BIOACTIVE MARINE MOLECULE DURING NEUROINFLAMMATION ASSOCIATED WITH DIABETIC RETINOPATHY**

**P. Barabas (UK): INTRAVITREAL AAV2.COMP-ANG1 PREVENTS LOCAL CAPILLARY BLOOD FLOW CHANGES IN THE DIABETIC MOUSE RETINA**

**S. Tarban (UK): TRANSCRIPTOMIC ANALYSIS OF BARRIER GENE EXPRESSION IN HUMAN RETINAL MICROVASCULAR ENDOTHELIAL CELLS(HRMECS) EXPOSED TO HYPERGLYCAEMIA AND VEGF**

**A. Rollo (UK): TARGETING TRP CHANNELS FOR THE RESTORATION OF MICROVASCULAR BARRIER FUNCTION IN DIABETIC MACULAR OEDEMA**

**B.M. Karan (UK): GENE THERAPEUTIC ENHANCEMENT OF ACROLEIN DETOXIFICATION MECHANISMS FOR THE TREATMENT OF DIABETIC RETINOPATHY(DR)**

**E. Beli (UK): DISRUPTED RYTHMS IN THE DIABETIC RETINA: ARE THEY CONTROLLED BY A BROKEN CLOCK?**

Tea/coffee will be available throughout the poster session

**2.30 - 3.15: EVA KOHNER Lecture: Professor Sobha Sivaprasad, Moorfields Eye Hospital NHS Foundation Trust, London, UK**  
**Introduced by Professor Tunde Peto, QUB, UK**

**3.20: SESSION 4: Clinical issues in diabetic eye care**

Chaired by: Professor Stela Vujosevic and Dr Recivall Salongcay

3.20 – 3.45: *N Lois, UK*: **DIABETIC MACULAR OEDEMA AND DIODE SUBTHRESHOLD MICROPULSE LASER (DIAMONDS TRIAL)**

3.45 – 3.59: *M.V. Cicinelli, Italy*: **FLUCTUATIONS IN DIABETIC RETINOPATHY SEVERITY: ASSOCIATED FACTORS AND PROGNOSTIC SIGNIFICANCE**

3.59 – 4.11: *J. Talks, UK*: **EVALUATION OF INTRAVITREAL AFLIBERCEPT TREATMENT EFFECTIVENESS IN UK ROUTINE CLINICAL PRACTICE FOR PATIENTS WITH DIABETIC MACULAR OEDEMA: 24-MONTH OUTCOMES OF THE DRAKO STUDY**

4.11 – 4.23: *T. Peto, UK*: **REAL-WORLD COHORT OF PATIENTS WITH DIABETIC MACULAR OEDEMA FROM 4 UK NATIONAL HEALTH SERVICE TREATMENT CENTRES**

4.23 - 4.35: *P. McCullough, UK*: **OUTCOMES AND COMPLICATIONS OF PARS PLANA VITRECTOMY FOR TRACTIONAL RETINAL DETACHMENTS IN PEOPLE WITH DIABETES MELLITUS: A SYSTEMATIC REVIEW AND META-ANALYSIS**

4.35 – 4.50: *T. Peto, UK*: **DISCUSSING THE BENEFIT-TO-RISK PROFILE OF LONG TERM INTRAVITREAL CORTICOSTEROID THERAPY IN DME**

**4.50 – 5.15: Professor Sobha Sivaprasad: The ever expanding treatment choices for DME**

**5.15: ANNUAL GENERAL MEETING**

Moderator: **Professor Stela Vujosevic**

**7.00 CONFERENCE DINNER**

Location: Crumlin Road Gaol – truly an old gaol and can be cool inside, so please have an extra layer of clothing with you just in case you need it!

<https://visitbelfast.com/partners/crumlin-road-gaol/>

**SATURDAY, 28<sup>th</sup> MAY 2022**

**VENUE: Assembly building**

<https://www.presbyterianireland.org/Utility/About-Us/Assembly-Buildings.aspx>

08.30 Registration

**8.55 SESSION 6: Imaging the diabetic eye**

Chaired by: Professors Reinier Schlingemann and Paolo Silva

9.00 – 09.12: *K.L.R. Locaylocay, Philippines*: **UTILIZATION OF DILATED SMARTPHONE FUNDUS IMAGING FOR SCREENING OF DIABETIC RETINOPATHY IN AN URBAN COMMUNITY SETTING IN PASIG CITY, PHILIPPINES**

09.12 -09.24: *K Curran, UK*: **UK BIOBANK RETINAL IMAGING GRADING: METHODOLOGY, BASELINE CHARACTERISTICS AND FINDINGS FOR COMMON OCULAR DISEASES**

9.24 – 9.36: *S. Vujosevic, Italy*: **MULTIMODAL RETINAL IMAGING AS BIOMARKER FOR CARDIOVASCULAR DISEASE IN PATIENTS WITH DIABETES MELLITUS**

9.36 – 9.48: *R. Salongcay, Philippines, UK*: **RETINAL FIELDS NONPERFUSION IDENTIFIED ON ULTRAWIDE FIELD FLUORESCEIN ANGIOGRAPHY IN DIABETIC EYES**

9.48 – 10.00: *M. Torm, Denmark*: **MACULAR VASCULAR DENSITY IN CHILDREN AND ADOLESCENTS WITH TYPE I DIABETES**

10.00 – 10.12: *Y. Meng, UK*: **DIAGNOSIS OF DIABETIC NEUROPATHY BY ARTIFICIAL INTELLIGENCE USING CORNEAL CONFOCAL MICROSCOPY**

**10.15 -10.40: Mini-lecture: Dr Paolo Silva, Joslin Diabetes Centre, USA:**  
Association of Ultrawide Field Fluorescein Angiography-identified Retinal Nonperfusion with Risk of Diabetic Retinopathy Worsening Over Time: Results from DRCR Retina Network Protocol AA

10.40 – 11.05: *Coffee/tea break*

**11.05 SESSION 7: Dual sensory loss and visual function**

Moderators: Dr Ruth Hogg and Professor C Plack

11.05 – 11.20: **Mr Brian Symington and Ms Colette Gray, Sense NI: Introduction to dual sensory loss: hearing and visual loss**

11.20-11.40: *C.J Plack, UK*: **SUB-CLINICAL AUDITORY DEFICITS IN TYPE 1 DIABETES MELLITUES**

11.40 – 11.52: *R. Hogg, UK*: **INTERPRETABLE MACHINE LEARNING TO IDENTIFY VISUAL FUNCTION MEASURES WHICH BEST DESCRIBE DIABETIC RETINOPATHY STAGE**

**11.55 -12.05: Best poster prize ceremony**  
**Presented by Professor Tunde Peto**

**12.05 – 12.55: Public lecture: Hosted by Professor Tunde Peto, QUB, UK**  
**(Panel of speakers including Dr Kieran Walshe, Paolo Silva, Tunde Peto)**  
**We thank the Wellcome Trust for enabling this lecture**

**12.55 - 13.00: Closing remarks - Professor Tunde Peto**