



XXVII Annual Meeting of the European Eye Bank Association

Synergies between Eye Banks, Tissue Banks and Advanced Therapy Units: Challenges for the Global Treatment of Ophthalmic Patients

Venue: Padiglione Rama, Fondazione Banca degli Occhi del Veneto Onlus

Programme

THURSDAY 15th JANUARY 2015

12.00 – 19.00: Wet Labs

Local organizers: *Diego Ponzin* *Alessandro Ruzza* and *Gianni Salvalio* (International Centre for Ocular Physiopathology, Fondazione Banca degli Occhi del Veneto Onlus).

12.00 – 14.00 **Ziemer** Ophthalmic Systems AG: **The power of keratoplasties with the FEMTO LDV Z6**

Femtosecond laser-assisted keratoplasties with special focus on ultra-thin DSEK and inverse DSEK.

14.30 – 16.30 **Gebauer** Medizintechnik GmbH: **DSAEK & UT- DSAEK using Gebauer SLc Original Microkeratome**

Preparation of Posterior lamellar grafts (DSAEK / UT DSAEK) using the Gebauer Microkeratome

The wet-lab will be concluded by a lecture about DSAEK Surgery conducted by *Antonella Franch* (Head of the Department of Ophthalmology, SS Giovanni e Paolo Hospital, Venice, Italy).

17.00 – 19.00 **Moria** SA: **Easy UT-DSAEK/DSAEK with the NEW Moria linear systems: One Use and One Use-Plus DSAEK**

This wet-lab will be conducted by *Massimo Busin* (Head of the Department of Ophthalmology, Villa Igea Hospital, Forlì, Italy), who will stress the ease and reliability of these systems.

FRIDAY 16th JANUARY 2015

09.00-13.30: Registration

09.00-12.00: EEBA Committee Meeting (Closed)

11.00-12.30: WORKSHOPS: EXPERTS MEET EXPERTS

Microbiology and eye banking

Featuring:

Diego Ponzin (Executive and Medical Director of Fondazione Banca degli Occhi del Veneto)

Elisa Zanetti (Eye Bank Laboratory Manager)

Pre-cut tissues for endothelial keratoplasty

Featuring:

Mattia Baruzzo (Eye Bank Laboratory Assistant)

Irina Negura (Eye Bank Laboratory Assistant)

Gianni Salvalaio (Eye Bank Laboratory Assistant & Research Scientist at the International Centre for Ocular Physiopathology)

DMEK tissues for endothelial keratoplasty

Featuring:

Mohit Parekh (Research Scientist at the International Centre for Ocular Physiopathology)

Alessandro Ružžga (Eye Bank Laboratory Assistant & Research Scientist at the International Centre for Ocular Physiopathology)

Cell therapy for limbal stem cell deficiency

Featuring:

Stefano Ferrari (Head of the Research Centre)

Marina Bertolin (Research Scientist)

Claudia Breda (Research Assistant)

The exchange of tissues between Eye Banks in Europe

Featuring:

Silvia Andrighetti (Programming & Biostatistics Office, with special responsibility for Follow-Up)

Carlo Griffoni (In charge of the Programming & Biostatistics Office, and Follow-Up Manager)

12.30-13.30: Lunch

13.30-14.00: **Opening Ceremony**

14.00-16.00: SESSION I – EYE BANKING: NEW HORIZONS

Chairman: *John Armitage* (School of Clinical Sciences, University of Bristol, Bristol, United Kingdom)

14.00-14.30 - **Keynote Speaker:** *Gilles Thuret* (Laboratory "Biology, imaging and engineering of Corneal Graft" BiiGC, EA2521, University Jean Monnet, Ophthalmology dpt/University Hospital, Saint-Etienne, France, Institut Universitaire de France, Paris, France) “**Why it is Time to Revisit Corneal Storage**”

Lecture introduced by *Philippe Gain* (Laboratory "Biology, imaging and engineering of Corneal Graft" BiiGC, EA2521, University Jean Monnet, Ophthalmology dpt/University Hospital, Saint-Etienne, France)

14.30-16.00:

- **3D Mapping of the Folded Endothelium and Segmentation Methods Improve Endothelial Count in Eye Banks**

Aurélien Bernard (Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Jean Monnet University, Saint-Etienne, France and Federative Institute of Research in Sciences and Health Engineering, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France)

- **A New Software for Non-Supervised Endothelial Counting**

Uta Wolke (Eye Center, Albert-Ludwigs University of Freiburg, Freiburg im Breisgau, Germany)

- **Increased Sensitivity of Blood Culture Bottles for Microbiological Testing of Cornea Organ Culture**

Ina Wilkemeyer (University Tissue Bank, Cornea Bank Berlin, Institute of Transfusion Medicine, Charité-Universitätsmedizin, Berlin, Germany)

- **Validation of RESEP, a Device for Elimination of Antibiotics from Liquid Samples**

Laura Giurgola (Alchilife S.r.l., Viale Austria 14, 35020 Ponte S. Nicolò - Padua, Italy)

- **Silencing HLA Expression in Corneas to Decrease the Risk of Graft Rejection after Keratoplasty**

Constanca Figueiredo (Institute for Transfusion Medicine, Hannover Medical School, Hannover, Germany)

16.00-16.30: Coffee break

16.30-18.30: SESSION II – DSAEK AND DMEK: SHIFTING PARADIGMS ON CORNEAL TRANSPLANTATION

Chairman: *Massimo Busin* (Department of Ophthalmology, Villa Igea Hospital, Forlì, Italy)

16.30-17.00 - **Keynote Speaker:** *José L. Güell* (Cornea and Refractive Surgery Unit, Instituto Microcirugía Ocular of Barcelona, Autònoma University of Barcelona, Spain) “**DMEK: Surgical Technique, Update International Results and Limitations**”

17.00-18.30:

- **Preliminary Results of a Multicenter Prospective Randomized Controlled Trial Comparing Ultra-Thin and Standard DSAEK**

Mor Dickman (University Eye Clinic, Maastricht, The Netherlands)

- **The use of Corneas with Previous LASIK Surgery for Processing Ultrathin DSAEK Lamellas**

Elba Agustí (Barcelona Tissue Bank [BTB], Banc de Sang i Teixits, Barcelona, Spain)

- **Suitability of Pseudophakic Donor Material For DMEK – A Masked, Experimental Study**

Kristina Spaniol (University Eye Hospital, Düsseldorf, Germany)

- **Graft Dislocation and Graft Failure after DMEK using Precut Tissue**

Philipp Maier (Eye Center, University Hospital Freiburg, Germany)

- **Two Cases of Ultrathin Descemet Stripping Automated Endothelial Keratoplasty**

Diego Ponzin (Fondazione Banca degli Occhi del Veneto Onlus, Zelarino-Venice, Italy)

18.30-18.40: Conclusion and information about dinner or social events

19:00: Bus transfer to Venice

20:00: Gala Dinner in Venice Historical City Centre, Scuola Grande di San Giovanni Evangelista

SATURDAY 17th JANUARY 2015

08.30-09.30: EEBA Business Meeting (Open)

09.30-13.00: SESSION III – EYE BANKS MEET CELL FACTORIES: NEW CHALLENGES AHEAD

Chairman: *Stefano Ferrari* (Fondazione Banca degli Occhi del Veneto Onlus, Venice, Italy)

9.30-10.00 - **Keynote Speaker:** *Julie T. Daniels* (Moorfields Eye Hospital Cells for Sight Stem Cell Research Unit, London, United Kingdom). “**From Tissues to Tissue Equivalents: New Horizons for Eye Banks?**”

10.00-11.15 Advanced Therapies for the Reconstruction of the Ocular Surface (Cornea and Conjunctiva):

- **Expression Pattern of Epithelial Stem Cell Markers in the Normal Human Cornea**

Michael Nicolas (Department of Ophthalmology, University of Lausanne, Jules-Gonin Eye Hospital, Lausanne, Switzerland)

- **Functional and Molecular Characterization of Limbal Stem Cells**

Marina Schock (Department of Ophthalmology, University of Duisburg-Essen, Essen, Germany)

- **Long Term Results of Autologous Transplantation of Cultivated Limbal Epithelium in Limbal Stem Cell Deficiency**

Simone Scholz (Department of Ophthalmology, University of Essen, Germany)

- **Comparative Analysis of Corneal Epithelial Markers in Mesenchymal Stem Cells From Bone Marrow (BM-MS)**

Nuria Nieto Nicolau (Department of Surgery, School of Medicine, University of Barcelona, Spain)

- **Gene Based Approach to Correct Ocular Surface Disorders in EEC Syndrome**
Vanessa Barbaro (Fondazione Banca degli Occhi del Veneto Onlus, Zelarino-Venice, Italy)

11.15-11.45: Coffee break

11.45-13.00 Advanced Therapies for the Reconstruction of the Endothelium: an Alternative to DMEK?:

- **The ex Vivo Expansion of Human Corneal Endothelial Cells**

Mohit Parekh (International Center for Ocular Physiopathology -ICOP, Fondazione Banca degli Occhi del Veneto Onlus, Zelarino-Venice, Italy and Department of Molecular Medicine, School of Biomedicine, University of Padua, Padua, Italy)

- **Influence of Pressure on Corneal Endothelial Cells Derived from Human Induced Pluripotent Stem Cell**

Aurélien Bernard (Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Saint-Etienne, France and Federative Institute of Research in Sciences and Health Engineering, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France)

- **Bioengineering of Endothelial Grafts using Decellularized Femtosecond-Cut Corneal Lamellae**

He Zhiqiao (Corneal Graft Biology, Engineering and Imaging Laboratory, EA2521, Saint-Etienne, France and Federative Institute of Research in Sciences and Health Engineering, Faculty of Medicine, Jean Monnet University, Saint-Etienne, France)

- **Effects of Alfa-Melanotropina on Human Cornea Tissue in Vitro**

Mirjana Nasic (University Hospital Center Zagreb, Croatia)

- **Increasing the Pool of Graft Tissue by Implementing the Hemi-DMEK Technique**

Esther Groeneveld-van Beek (Netherlands Institute for Innovative Ocular Surgery, Rotterdam, The Netherlands and Amnitrans EyeBank, Rotterdam, The Netherlands)

13.00-14.00: Lunch

14.00-15.30: SESSION IV – **TISSUE AND EYE BANKS: A CLOSER LINK FOR A BETTER SERVICE**

Chairman: *Diego Ponzin* (Fondazione Banca degli Occhi del Veneto Onlus, Venice, Italy)

14.00-14.30 - **Keynote Speaker:** *Esteve Trias-Adroher* (Barcelona Tissue Bank [BTB], Banc de Sang i de Teixits, Barcelona, Spain), “**Collaboration between Eye and Tissue Banking in the Era of Regenerative Medicine: an Opportunity or a Need?**”

14.30-15.30:

- **Preparation of Pre-Cut DMEK Transplants in a Tissue Bank**

Christian Gabriel (Red Cross Blood Transfusion Service for Upper Austria/Austrian Cluster for Tissue Regeneration, Linz, Austria)

- **Linking Eye and Tissue Banks "Because a Network Makes Sense"**

Martin Boergel (German Society for Tissue Transplantation (DGFG), Hannover, Germany)

- **Human Limbal Stem Cells Cultured on Different Scaffolds**

Natasa Draca (University Eye Hospital Svjetlost, Zagreb, Croatia)

- **Thickness Control of Precut DSAEK Grafts in Eye Banks**

Sandrine Pereira (French Blood Centre Auvergne Loire, Eye Bank, Saint Etienne, France)

15.30-16.00: Coffee break

16.00-17.30: SESSION V – **RULES OF ENGAGEMENT: HOW GUIDELINES AND COUNTRY DIRECTIVES ARE AFFECTING EYE BANKS AND CELL FACTORIES**

Chairman: *Jesper Hjortdal* (Department of Ophthalmology, Aarhus University Hospital, Aarhus, Denmark)

16.00-16.30 - **Keynote Speaker:** *Deirdre Fehily* (Tissues and Cells Italian National Transplant Centre – CNT, Rome, Italy), “**Regulation of Eye Banks in the EU – the Challenges Posed by Emerging Technologies**”

16.30-17.30:

- **Validation of Automated Sterility Controls for Fresh and Cryopreserved Amniotic Membrane**

Henning Thomasen (Department of Ophthalmology, University of Duisburg-Essen, Essen, Germany)

- **How did German Laws and Organ Transplantation Irregularities Influence the Rate of Corneal Donation**

Marie-Christine Knoche (Eye Center, Albert-Ludwigs University of Freiburg, Germany)

- **Transitioning to ISBT128 – The experience of The Eye-Bank for Sight Restoration**

Patricia Dahl (The Eye-Bank for Sight Restoration, Inc., New York, New York, USA)

- **Unique Donor Documentation Database and First Implementation of Global Coding ISBT 128 in Ocular Tissue Bank in Czech Republic**

Yveta Urbanova (Ocular Tissue Bank/International Eye Bank of Prague, Faculty Hospital Kralovske Vinohrady, Prague, Czech Republic)

17.30-18.00: Conclusions and Closing Ceremony