

Thursday March 07th 2024

13:00 – 14:00 Workshops on cornea tissue preparation

Workshop 1A: “Video based interactive course: ultra-thin DSAEK”

Moderators: Bernard Duchesne

Speakers: Vincent Lambert

Explore best practices in the handling and processing of donor corneal tissue for ultra-thin DSAEK and participate in interactive Q&A with experienced professionals to exchange insights and experiences.

Workshop 1B: “DMEK interactive course and live demo”

Moderators: Sorcha Ni Dhubhghaill

Speakers: Nezahat Bostan

In this informative wet lab, we will demonstrate the procedures involved in preparing for Descemet Membrane Endothelial Keratoplasty (DMEK) and delivering pre-stripped tissue to clinics. The session will begin with a video-based overview of various DMEK techniques practiced globally. A live demonstration will cover DMEK stripping techniques, including peeling, blister preparation, and managing challenging tags and tears. Participants will gain valuable insights into the intricacies of DMEK preparations, benefiting their professional knowledge and tissue delivery.

14:00 – 15:15 Workshop on personal development

Workshop 2: “Psychological microtrauma for eye bank collaborators”

Moderators: Bernard Duchesne

Speakers: Mireille Monville

The purpose of this workshop is to explore the concept of psychological microtrauma and its potential impact on the emotional well-being of eye bank collaborators. We will discuss effective coping strategies and resilience-building techniques to navigate the unique challenges encountered in the field of eye banking.

15:15 – 15:30 Break

15:30 – 17:00 Social and networking workshops

Workshop 3A: Chocolate Nation

Speakers: Anke Vlyminckx

Chocolate Nation in Antwerp, the world's largest Belgian chocolate museum is a place full of sensory experiences and stories from chocolate brands and chocolatiers. In 14 themed rooms, we take visitors on a chocolate journey, starting in the cocoa plantations on the equator and following the cocoa bean to the world's largest cocoa storage port in Antwerp. A giant fantasy machine shows how Belgian chocolate is made and how its velvety taste is created. In the workshop itself, small groups will make their own chocolate.

Workshop 3B: Architectural walk in the Antwerp Zoo

Speakers: Dutch and English speaking guides

Gain insight into the rich history of the Antwerp Zoo, dating back to its establishment in the 19th century. Hear captivating stories about the architects, visionaries, and cultural influences that have shaped this living testament to architectural brilliance. Learn how the zoo's architectural heritage plays a pivotal role in the ongoing conservation efforts, providing a sustainable and enriching environment for the diverse species within its care.

Workshop 3C: Guided walking tour of Antwerp

Speakers: Dutch and English speaking guides

Admire the blend of medieval, Renaissance, and modern architecture that gives Antwerp its unique character. From guild houses to contemporary designs, each structure has a tale to tell. Walk in the footsteps of history as we explore iconic landmarks such as the gothic Cathedral of Our Lady and the Grote Markt with its 16th century guild houses.

15:30 – 17:30 Committee Meeting (closed meeting)

EEBA Board meeting.

18:30 – 20:00 Reception at the Antwerp City Hall

The Antwerp City Hall was completed in 1565 and became a symbol of the city's civic power and wealth during the Renaissance period. The City Hall, along with the adjacent guildhalls, is part of the UNESCO World Heritage Site inscribed as "Belfries of Belgium and France."

Friday March 08th 2024

09:00 – 09:30 Opening ceremony

Moderators: Carina Koppen, Philip Maier

Speakers: Cathy Berx, governor of the province of Antwerp

09:30 – 10:00 Keynote lecture: cell culture and tissue engineering, a changing landscape for cornea banks

Moderators: Carina Koppen, Agate Noer

Speaker: Neil Lagali, University of Linköping, Sweden.

Tissue engineering and cell culture introduce new challenges but also opportunities for eye banks in tackling corneal blindness. Neil Lagali from Linköping University will provide an introduction and overview of the field, highlighting his work on translating laboratory findings into clinical applications.

10:00 – 11:00 Session I - Using pharmacology to influence cell growth

Moderators: Elisabeth Van Aken, Iva Dekaris

Invited lecture: Pharmacological aspects of corneal regeneration, in the lab and in vivo research. Félix Sauvage, University of Ghent, Belgium.

Free papers:

Effect of autologous serum eye drops on therapy resistant corneal erosions and ulcers on corneal graft vs. patient's own cornea.

Hamon Loïc, Saarland University Medical Center UKS, Homburg/Saar, Germany.

Ex-vivo model of aged human Bruch's membrane to test cell therapy products.

Daniele Elena, Veneto Eye Bank Foundation, Venice, Italy.

Keep on ROCKIn[®]: Repurposed ROCK inhibitors to boost corneal endothelial cell growth.

Hendrik Vercammen, University of Antwerp, Belgium.

11:00 – 11:30 Break

11:30 – 12:30 Session II - Ocular tissue storage and quality control

Moderators: Nezahat Bostan, Silke Wahl

Free papers:

New non-toxic fluorescent marker for quantifying the viability of corneal endothelial cells.

Corantin Maurin, Biiio Laboratory, Saint-Priest-en-Jarez, France.

Retrospective Clinical Outcomes of Keratoplasty using Human Donor Corneas Preserved in Eusol-C Hypothermic Storage Medium.

Laura Giurgola, AL.CHI.MI.A. Srl, Ponte San Nicolò (PD), Italy.

A novel viewing chamber: comparative analysis and evaluation under corneal hypothermic storage conditions.

Laura Giurgola, AL.CHI.MI.A. Srl, Ponte San Nicolò (PD), Italy.

DMEK and DSAEK graft preparations after corneal preservation in a new corneal hypothermic storage medium.

Moreno Piaia, Veneto Eye Bank Foundation, Venice, Italy.

Unlocking Corneal Microbiology.

Eva M Martinez-Conesa, Barcelona Tissue Bank (Banc de Sang i Teixits), Barcelona, Spain.

12:30 – 13:30 Lunch Break

13:30 – 15:00 Session III - Regulatory affairs regarding eye banking

Moderators: Hilde Beele, Esteve Trias

Panellists: Stefaan Van der Spiegel (European Commission DG Santé), Isabelle Martinache (Haut Conseil de la Santé Publique, France), Paul Ormel (Senior Policy Advisor Tissues and Cells at the Ministry of Health, the Netherlands), Manon Huizing (Medical Director of the Cell and Tissue Bank and of the Biobank Antwerp, Belgium)

In this session, participants will gain insights into the new Regulation on Substances of Human Origin, and its challenges for all stakeholders. Our speakers will share information about the origin and current status of the European Regulation, about the growing impact of the EDQM guidelines and monographs, and about the practical implications of this new legislative framework for the competent authorities in the Member States. You should also join the panel discussion at the end of the session: you will learn about the impact of the SoHO legislation for eye banks and for corneal surgeons, as well as the position and the future of the so-called borderline applications.

15:00 – 15:30 Break

15:30 – 16:00 Session IV - Digitalisation of eye banks

Moderators: Heleen Delbeke, Stefano Ferrari

Feedback on the EEBA survey on digitalisation.

Heleen Delbeke, Leuven, Belgium.

Transition from paper to digital: the Antwerp Cell and Tissue Bank experience.

Jeroen Caremans, Antwerp, Belgium.

Digitalisation of the eye bank work flow at the Veneto Eye Bank.

Diego Ponzin, Veneto Eye Bank Foundation, Venice, Italy

Some eye banks still use and keep paper files; the trend toward digitalisation is desirable in all tissue banks. Important aspects of this process will be standardization and harmonization amongst the recommendations of European Competent Authorities.

16:00 – 17:30 Session V - Miscellaneous free papers and rapid-fire poster presentations

Moderators: Jesper Hjortdal, Wessel Vermeulen

Free papers:

EGALiTE (European Group for Accreditation and Liaison of Blood-Tissues and Cells Establishments).

Rita Piteira, Barcelona Tissue Bank - Banc de Sang i Teixits, Barcelona, Spain.

The burden of medical contraindications to corneal donation, with no medical or scientific basis. Gilles Thuret, Laboratory Biology, engineering and imaging for Ophthalmology BiiO, Saint-Etienne, France.

Bovine cornea ex vivo model for eye banking and eye surgery applications
Laura Giurgola, AL.CHI.MI.A. Srl, Ponte San Nicolò (PD), Italy.

How to rescue a pancorneal melting caused by a pyocyanic endophthalmitis after a cataract surgery?
Thibaud Garcin, Lariboisiere Hospital, Paris, France.

Poster pitches:

Cost-benefit analysis of mandatory corneal tissue donor screening for the presence of pathogenic prion proteins in the Czech Republic.
Magdalena Netukova, Vinohrady Teaching Hospital, Prague, Czech Republic.

Is there an impact of cancer treatment on corneal transplantation?
Nezahat Bostan, Antwerp University Hospital, Belgium.

Yap reveals the biomechanical effects on human corneal endothelial cells of passive corneal storage in eye banking.
Hanielle Vaitinadapoulé, Laboratory BiiO, Saint-Priest-en-Jarez, France.

Influence of umbilical cord blood platelet lysate on biological characteristics of human corneal endothelium during organ culture.
Ivana Vidović, University Hospital Centre Zagreb, Zagreb, Croatia.

Implementation of autologous serum based eye droplets in a hospital setting.
Jeroen Caremans, Antwerp University Hospital, Belgium.

Root cause analysis of corneal contamination with bacteria *Ralstonia insidiosa*.
Marina Roncevic Krajina, University Hospital Centre Zagreb, Zagreb, Croatia.



Cell and Tissue Engineering:
a Changing Landscape

EEBA 2024
March 7 - 9 | ANTWERP



16:30 – 17:30 EEBA Corresponding Members Meeting (open meeting)

Moderators: Gary Jones, Philip Maier

18:30 – 01:00 Dinner dance at the Grand Café Horta

Horta is a modern Grand Cafe in the bustling heart of Antwerp. Above the Grand Cafe is an awe-inspiring Art Nouveau Room, decorated with the iron trusses of the demolished Maison Du Peuple from Brussels by the famous Art Nouveau architect Victor Horta.

Saturday March 09th 2024

08:30 – 09:30 Business meeting

Moderators: Philip Maier, Gary Jones

09:30 – 10:00 Niels Ehlers Memorial Lecture: what is on the horizon for corneal transplantation and eye banking in the next decade?

Moderators: Philip Maier, Diego Ponzin

Speaker: Jodhbir Mehta, Singapore, Rep of Singapore.

At the EEBA meeting in 2023, we celebrated 50 years of the organ culture storage of the human cornea. In this year's lecture, Prof Jodhbir Mehta will be looking into the future of eye banking in the next decade. Assoc Prof. Jod S Mehta is Head of the Tissue Engineering and Stem Cell Group at the Singapore Eye Research Institute and Head of the Corneal Service and Senior Consultant in the Refractive Service of the Singapore National Eye Center (SNEC)

10:00 – 11:00 Session VI - Artificial or bio-engineered alternatives for donor tissue

Moderators: Sorcha Ni Dhubhghaill, Bernard Duchesne

Invited lecture: Artificial cornea alternatives for tissue transplantation. Gerd Geerling, University of Düsseldorf, Germany.

Free papers:

Design, Biocompatibility and Animal Results of a Novel Flexible Fully Synthetic Cornea Device. Esen Akpek, The Wilmer Eye Institute, Johns Hopkins University School of Medicine, Baltimore, United States.

Biosynthetic corneal endothelial grafts- in vivo evaluation.

Hannah J Levis, Institute of Life Course and Medical Sciences, University of Liverpool, Liverpool, United Kingdom.

Femtosecond laser cutting of human crystalline lens capsule and decellularization for corneal endothelial bioengineering.

Olfa Ben Moussa, Biology, engineering and imaging for Ophthalmology laboratory, Saint-Priest-en-Jarez, France.

10:00 – 11:30 Break

11:30 – 12:30 Session VII - Challenges in eye banking and corneal transplantation – New Developments

Moderators: Anders Ivarsen, Henning Thomasen

Free papers:

Characteristics of donors and corneal tissue grafts from the first Ukrainian cornea bank (2013-2023).

Igor Aleshchenko, State Enterprise "Bioimplant" of the Ministry of Health of Ukraine, Kyiv.

Donor and eye bank factors influencing the outcome of DMEK grafts preparation.

Elisa Fasolo, Fondazione Banca degli Occhi del Veneto - FBOV, Venice (VE), Italy.

The BEST Cornea study: a real world pragmatic comparison of DMEK versus ultra-thin DSAEK focusing on patient reported outcomes.

Barbara de Bruyn, UZ Antwerpen, Belgium.

Performance of a new hypothermic corneal storage solution and its potential for extending corneal storage to 28 days.

Khoa Tran, VisionGift, Portland, OR, United States.

New perspectives in organ culture

Laura Giurgola, AL.CHI.MI.A. Srl, Ponte San Nicolò (PD), Italy.

12:30 – 12:45 Closing ceremony

Handover awards for best oral and best poster presentation

Flag ceremony and announcement EEBA 2025 Rome

12:45 – 13:30 Lunch