and saved 40% (p=0.0002, n=10) of count time. To perform IF after HEC, prolonged washing in PBS is an effective method to remove residual Calcein fluorescence and allows release of the FITC/Alexa 488 filter.

**Conclusion** This study provides effective technical tips for optimizing the endothelial viability assay using Calcein AM and for performing IF after the viability assay.

---

### P39-A145 ANALYSIS OF CORNEA DONATION PROGRAM IN CROATIA

**1Elizabeta Zaplatin, 2Ivan Nural, 3Marina Roncic Krajina, 2Jasna Brezak, 2Irena Vugrek, 2Danijela Rac, 4Maja Pipic, 2Ivana Vidovic, 1Branka Golubic Cepulic.**

**Purpose** Croatian Tissue and Cell Bank (CTCB) regularly monitors the effectiveness of cornea donation program on the national level. All hospitals are required to have designated tissue donation coordinators in charge of detection, family interview and tissue procurement. If hospital has cornea donation program only from donors after brain death (DBD), tissue donation coordinator can be the same as for organs. Five collection centres have cornea donation program for donors after circulatory death (DCD) with designated cornea donation coordinators.

**Methods** We retrospectively analyzed all monthly reports from tissue donation coordinators in the period from May 2019 to September 2022. Additional data was collected from national organ and tissue database Croatian National Transplantation Network (NTM).

**Results** During the analyzed period, 25,753 deaths were recorded, from which 38.6% to 54.7% of DCD and 0.6% to 1.1% of DBD donors were considered for cornea donation, depending on the hospital. Out of all deceased, 2.4% to 5.2% of patients were realized as cornea donors, 0.4 to 0.5% of which were DCD and 2 to 4.7% were DCD. Cornea donations were realized in 18.2% to 38.9% cases of all DBD donors. As SARS-CoV-2 pandemic has strated in March 2020, the cumulative number of donations declined for 26.1% in 2020 and 12.1% in 2021, compared to the pre-pandemic 2019. Moreover, CTCB received 30.5% less DCD in 2020 and 21.9% less in 2021. Despite that, we recorded increase in DBD during 2020 and 2021, for 13.3% and 44.7%, respectively. The same trend continued throughout 2022, where only until September 16,1% more DBD were received than in the whole 2019.

**Conclusion** Hospitals involved in cornea donation program record high number of deaths, however only a small proportion of which are realized for cornea donation. This is particularly pronounced in DBD donors. SARS-CoV-2 pandemic left significant impact on donation program. However, CTCB recorded higher number of DBD donors during that period. The current situation leaves plenty of room for improvement of CTCB and corresponding donation hospitals, to increase disproportionately low rate of cornea procurement in respect to the total rate of deaths and considered donors.

---

### P40-A122 HOW TO ESTABLISH SUCCESSFUL NETWORKING: EDUCATIONAL TRAINING & EXCHANGE OF EXPERIENCES

1Andrea Katharina Gareiss-Lok, 2George M Galea, 3Kurt Dimech, 4David Grima, 2Danae Malikides, 1Claus-Dieter Lok.

**Purpose** Educational training within eye bank staff is needed to fulfill legal requirements and to keep staff up-to-date in times of rapid change and innovation.

Especially when starting with eye banking a good and close contact to experienced colleagues could be of great benefit for both parties – the newcomers and old staggers.

**Purpose** The exchange of experiences and the mutual support in key processes of eye retrieval and banking contributes to the establishment of a structured and functional cooperation with the further goal of establishing a successful network far beyond the national borders.

**Materials and Methods** In July 2018 a first visit of Hornhautbank Munich team in Malta was organized followed by a visit of Malta staff members in November 2018 and July 2019 and a further visit in August 2022 after a longer pause related to Covid-pandemic.

The SOPs of both facilities were compared with regard to local regulations and analyzed to assess how they can best be implemented taking into account local regulations and conditions.

Hands-on training in in-situ-excision and the evaluation of the retrieved donor corneas using slit lamp- and endothelial-microscopy deepened the theory for practical implementation.

**Results** Training materials have been loaned to the team in Malta for further training, and joint online meetings are planned for further training and sharing of difficult case reports to provide the team with appropriate assurance in all eye bank areas.

Such cooperation has increased the confidence of the teams and supported the licensing inspections by competent authorities.

---

### P41-A155 FLYING HUMAN CORNEAL TISSUES FOR TRANSPLANTATION – A TRANSPORT NETWORK CONNECTED BY DRONES

1Milos Bogovac, 2Salla Sabine, 3Sturm Ann-Kristin, 4Holsten Johanna, 1Moormann Dieter, 2Walter Peter, 3Föllmann Andreas, 1RWTH Aachen University, Department of Anaesthesiology, Germany; 3RWTH Aachen University, Department of Ophthalmology, Germany; 2RWTH Aachen University, Institute of Flight System Dynamics, Germany; 4FlyDrive GmbH, Germany

**Purpose** Transportation of human corneal tissue for transplantation always needs to be conducted in a timely manner. For this reason, even single corneal tissue samples are frequently transported by cars. This causes higher operational costs, increases the traffic load, and contributes to environmental pollution in general. Because of their small size, it is technically possible to transport corneal tissue transplants by unmanned aerial vehicles (UAV), more commonly referred to as drones. Such way of transportation would be faster,