European Society of Ophthalmology



Name: Spela Stunf Pukl European Leadership Development Program Class of 2023-2025

Project Abstract

Title of Project: Corneal tissue bank upgrade

Purpose: To upgrade the current cold storage method of corneal tissue banking and establish an organ culture type of corneal tissue banking at the Slovenian only corneal tissue bank at the University Eye Hospital Ljubljana.

Methods: - education in a refence center, - employing a cell laboratory expert, - create adequate environment and room air quality, - new equipment, instruments and reagents, - upgrade of the current standard operative procedure with technical guidelines and quality control, - laboratory validation.

Results: The proposed project means a new method of tissue banking in an organ culture with wider indications for donor evaluation and higher rates of tissue utilization. All this eventually results in higher numbers of corneas available for transplantation. This type of tissue bank also ensures additional tissue quality control due to preoperative tissue microbiologic testing as well easier surgical planning due to longer tissue preservation time.

Conclusion: Organ culture tissue bank at the Slovenian only corneal tissue bank would add quality, help in surgical planning, and expand the transplantation program at the tertiary center, University Eye Hospital Ljubljana.