

Academic Service Project for Social Welfare: Creating a Network for Eye Tissue Donation and Establishing Walailak Eye Bank

The Academic Service Center of Walailak University, led by faculty members from the School of Medicine and Ophthalmologists from the Walailak University Hospital, along with the Walailak Biomaterial Center Project, has organized a workshop on eye tissue donation for organ transplantation. This training is aimed at nurses and medical personnel in the upper southern region of Thailand, with the goal of establishing the Walailak Eye Bank as the first eye bank in the southern region. The opening ceremony was attended by Dr. Arak Wongworachat, Director of the Walailak University Hospital, and faculty members from the School of Medicine and Ophthalmologists from the Walailak University Hospital.

Assistant Professor Dr. Jakkrit Juhong, a faculty member from the School of Medicine and an Ophthalmologist at Walailak University Hospital, who is the project leader, stated, "Currently, Thailand has a significant number of patients with corneal diseases who need corneal transplants to improve their vision, such as patients with corneal edema, corneal degeneration, corneal opacity due to genetic disorders, corneal scars, or severe corneal ectasia. However, the problem is that Thailand is currently experiencing a severe shortage of corneas for transplantation. The waiting time from booking an appointment to undergoing surgery averages 3-5 years, causing patients to wait for corneal transplant surgery and some may lose their eyes or go completely blind due to complications before they receive surgery. Therefore, the Walailak Biomaterial Center has established the 'Walailak Eye Bank' to coordinate with the Thai Red Cross Eye Bank for eye donations, procurement, and distribution of eyes. This involves proactive negotiations and collecting eyes from deceased patients in hospitals within Nakhon Si Thammarat Province to serve as a central hub for searching, storing, and delivering donor eyes to ophthalmologists for treating patients with corneal blindness, addressing the shortage of corneas, and developing a sustainable system to ensure equitable and fair access to treatment for the public."

The cornea is a unique organ in that corneal transplants do not require tissue matching like other organ transplants, such as liver, kidney, heart, or lung transplants. It also has a very high success rate with organ transplantation, without the need for immunosuppressive medication to reduce organ rejection. Additionally, one eye can potentially be used to perform surgeries for more than one patient, depending on the corneal layers needed for transplantation. Patients benefit the most when they receive surgery that is appropriate for their specific condition. The project expresses its deep gratitude to the Thai Red Cross Eye Bank for its support, knowledge, and advice that contributed to this success.

Assistant Professor Dr. Jakkrit Juhong further stated that the Walailak Eye Bank represents an extension of the Walailak Biomaterial Center's academic service project. The project, led by Asst.Prof. Lunla Udomwech, Asst.Prof.Dr. Auemphon Mordmuang, Dr. Wararee Sriyuttagral, and Dr. Suwit Kongbundansuk. In addition to its mission of eye tissue collection and medical amniotic membrane production, the center also has projects for other tissue services, including the production of frozen bone, dry bone, and tendons. Each year, numerous surgeries using these tissues are performed, and there remains a shortage of such tissues.