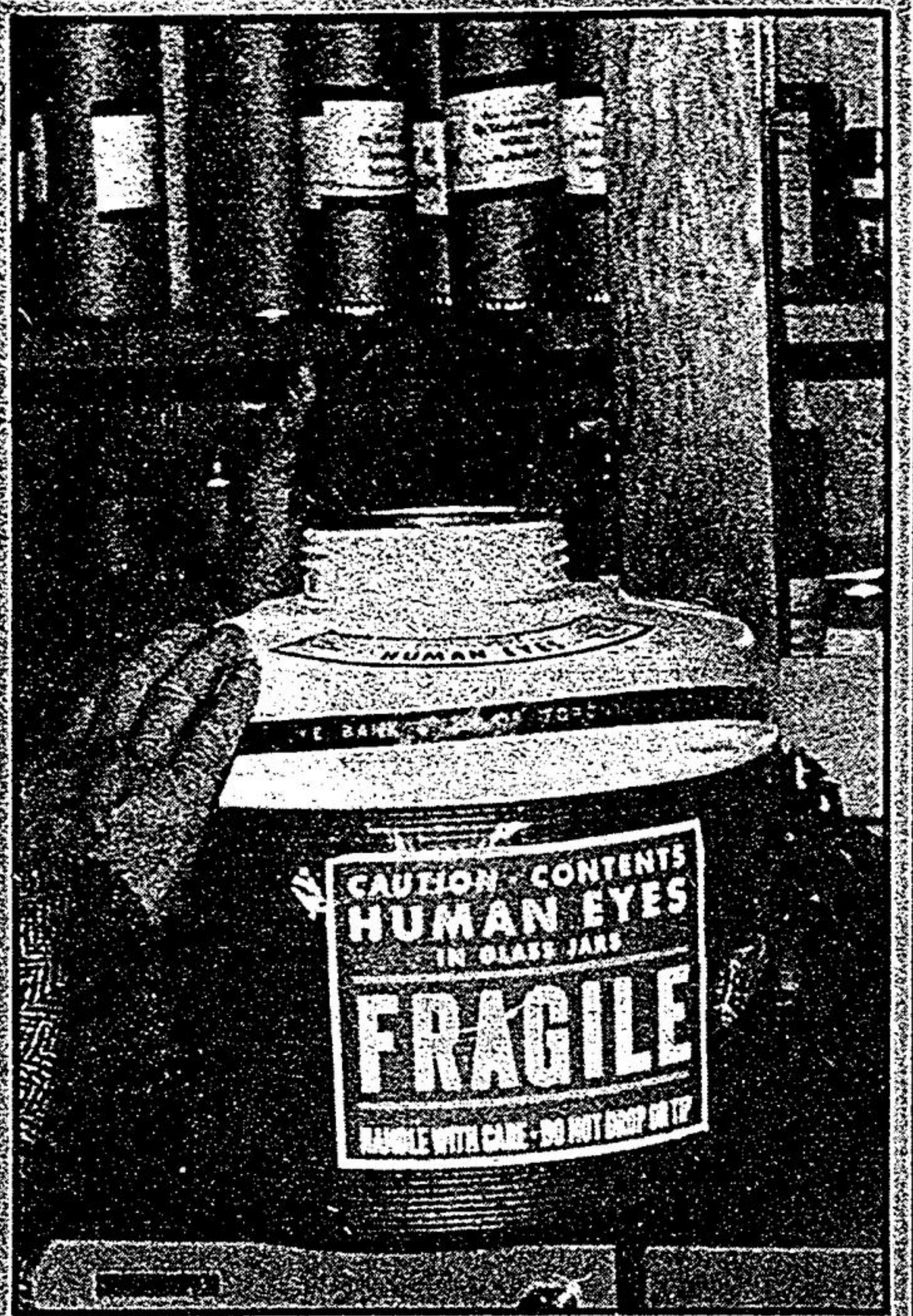




Unionville researcher Dr. P.K. Basu has been instrumental in bringing sight to many vision-impaired Canadians over the years. Here, Dr.

Basu displays an experiment to determine the effect of electro-radiation on the human eye at his University of Toronto research centre.



As a result of research, 86 per cent of corneal transplant operations are successful today. This container is specially designed to transport human eyes for transplant without damaging tissue.

**Story and photos
by Ed Rogers**

Gift of sight given by local doctor

Eye-bank manager Anne Wolf talks excitedly into the phone. An eye donated from a child killed in a traffic accident is on the way and she's hurriedly tracking down a patient to receive a cornea graft.

Chances are great it will be that patient's lucky day. About 86 per cent of cornea grafts restore sight, says Mrs. Wolf — but time is short.

Corneas, the clear, concave tissue covering the eye lens, last about 24 hours, says Dr. P.K. Basu, director of the University of Toronto eye bank and the university's ophthalmic research centre.

The lifespan can be extended to four days with steroids and refrigeration but "the fresher

the eye, the better it is for transplant," he said in an interview at the university in downtown Toronto.

Dr. Basu moved to Unionville two years ago with his wife, son and daughter-in-law. Earlier this month he was made an honorary member of the Unionville Lion's Club, with which he has had a 15-year association.

Over that time, Lion's Clubs in district A-16 have donated more than \$50,000 to further Dr. Basu's eye research, said Dave Gascoigne, director of A-16's ophthalmic foundation.

The ophthalmic research department costs approximately \$500,000, including salaries, to run each year, said Dr. Basu.

The ten rooms under his direction are home to a wide

variety of researches including the effect of pollution, prescription drugs and electronic radiation on the eye.

There, scientists search for a workable plastic cornea and extensively study the use of animal corneas for humans.

Another important area of his research is to extend to seven days the lifespan of a detached cornea.

"Both positive and negative results are a success because you find the truth," he said.

In Canada, corneal disease is the eighth leading cause of blindness, according to a spokesman for the Canadian National Institute for the Blind.

In India, where the 65-year-old doctor's distinguished career began, it was the num-

ber one cause, he concluded in a medical paper.

Between 1951 and 1955 the eye specialist operated in a village mission hospital.

Indian and English language newspaper clippings from the time reported cornea grafts, implants into the vitreous (the white walls of the eye), surgery to correct squinting and cross-eyed vision and other advanced eye surgery.

Dr. Basu also began the first Indian eye bank at the mission hospital.

A local hero, his surgical skill came to the attention of the Canadian government, who "couldn't believe this work was being done outside a teaching hospital," he said.

A fellowship brought him

temporarily to Canada, but when he was to return to India in 1957, the University of Toronto offered him a research job.

"I thought I could do more good by research rather than on individual operations," he said of his decision to stay.

"I could have been quite rich if I had stayed operating. But money is not the only thing," he said.

That year, he helped found Canada's first and Ontario's only eye bank.

Every year since, the amount of eyes going through the "first-class" eye bank has increased. Last year in Ontario there were 790 cornea operations in Ontario, said Mrs. Wolf. Presently there is a waiting list of 62 people.



Toronto eye bank manager Anne Wolf displays two corneas being readied for transport to a Toronto hospital. The corneas, which have a lifespan of approximately 24 hours, were to be used in a Feb. 16 transplant.



Assistant researcher Syed Hasany (left) and Dr. P.K. Basu stand beside the video display screen that plays tapes photographed through a special microscope. Pictured are individual cornea cells that are checked for flaws.