

A discovery that will rewrite the ophthalmology textbooks has been named Research Project of the Year.

Scientists from the University of Nottingham have identified a previously undetected layer of the cornea, the clear protective lens that sits in front of the eye.

The group, led by Harminder Dua, professor of ophthalmology at Nottingham, found a distinct layer deep in the corneal tissue that plays a vital tole in the flow of fluid from the eye.

The discovery has been named "Dua's Layer" in honour of the Nottingham scientist.

The structure has sparked a flurry of research questions about its role in diseases of the eye including glaucoma, the world's second most common cause of blindness, which is a result of defective fluid drainage.

Dua's layer may also shed fresh light on current poorly understood aspects of eye surgery.

The research, published in the journal Ophthalmology in June 2013, was the discipline's most downloaded paper on the Science Direct website over the next three months.

Collaborative work with researchers in Italy Egypt, Lithuania and Wales is building on the breakthrough.

The judges described the discovery as truly groundbreaking.

Shearer West, head of the Humanities Division at the University of Oxford, said: "The discovery of a new layer of the cornea by Professor Dua has been one of the most exciting recent developments in ophthalmology, with the possibility of revolutionizing the treatment of corneal diseases."