Virender Singh Sangwan

Director of Innovations & Translational Research, Dr Shroff Charity Eye Hospital
Dr Virender Sangwan is a world-renowned ophthalmologist and a pioneer in regenerative medicine with a career spanning over 30 years. Currently serving as the Director of Innovations at Dr Shroff's Charity Eye Hospital (SCEH), Delhi, Dr Sangwan is widely recognised for his groundbreaking work in ocular immunology and corneal health.

A former student of Harvard Medical School and a long-time leader at the LV Prasad Eye Institute, Dr Sangwan's most significant contribution is the development of Simple Limbal Epithelial Transplantation (SLET). This innovative technique democratised limbal stem cell therapy by simplifying the procedure and drastically reducing costs, making sight-restoring surgery accessible to thousands of patients worldwide. His commitment to translational research continues through his leadership in developing "Liquid Cornea"—a bioengineered technology poised to eliminate the global shortage of donor corneal tissue.

Key Achievements:

- Innovator: Developed SLET, now a global gold standard for treating chemical corneal injuries.
- Global Recognition: Recipient of the prestigious Shanti Swarup Bhatnagar Prize and named among the top 2% of scientists globally.
- Institutional Leader: Founder and current President of the Asia Cornea Society and former President of the Uveitis Society of India.
- Educator: Has led clinical training programs across five continents, including significant work with ORBIS International.

Dr. Sangwan remains at the forefront of medical innovation, bridging the gap between laboratory breakthroughs and clinical patient care. Based on his Google Scholar profile, here are his key bibliometric indicators as of March 2026:
Total Citations: 16,196
h-index: 66
i10-index: 214

Recent Impact (Since 2021): 6,961 citations and an h-index of 37, indicating continued relevance in the field.

1. Thokala P, Singh A, Singh VK, Rathi VM, Basu S, Singh V, MacNeil S, Sangwan VS. Economic, clinical and social impact of simple limbal epithelial transplantation for limbal stem cell deficiency. Br J Ophthalmol. 2022 Jul;106(7):923-928.

2. Singh V, Tiwari A, Kethiri AR, Sangwan VS. Current perspectives of limbal-derived stem cells and its application in ocular surface regeneration and limbal stem cell transplantation.Stem Cells Transl Med. 2021 Aug;10(8):1121-1128.

3. Ramachandran C, Deshpande P, Ortega I, Sefat F, McKean R, Srivastava M, MacNeil S, Basu S, Sangwan VS. Proof-of-concept study of electrospun PLGA membrane in the treatment of limbal stem cell deficiency. BMJ Open Ophthalmol. 2021 Jul 26;6(1):e000762.

4. Vazirani J, Mariappan I, Ramamurthy S, Fatima S, Basu S, Sangwan VS. Surgical Management of Bilateral Limbal Stem Cell Deficiency. The Ocular Surface. 2016 Jul;14(3):350–64.

5. Basu S, Sureka SP, Shanbhag SS, Kethiri AR, Singh V, Sangwan VS. Simple Limbal Epithelial Transplantation: Long-Term Clinical Outcomes in 125 Cases of Unilateral Chronic Ocular Surface Burns. Ophthalmology. 2016 May;123(5):1000–10.

6. Sejpal K, Ali MH, Maddileti S, Basu S, Ramappa M, Kekunnaya R, Vemuganti GK, Sangwan VS. Cultivated limbal epithelial transplantation in children with ocular surface burns. JAMA Ophthalmol. 2013 Jun;131(6):731–6.

7. Sangwan VS, Basu S, MacNeil S, Balasubramanian D. Simple limbal epithelial transplantation (SLET): a novel surgical technique for the treatment of unilateral limbal stem cell deficiency. Br J Ophthalmol. 2012 Jul;96(7):931–4.

8. Sangwan VS, Basu S, Vemuganti GK, Sejpal K, Subramaniam SV, Bandyopadhyay S, Krishnaiah S, Gaddipati S, Tiwari S, Balasubramanian D. Clinical outcomes of xeno-free autologous cultivated limbal epithelial transplantation: a 10-year study. Br J Ophthalmol. 2011 Nov;95(11):1525–9.

9. Mariappan I, Maddileti S, Savy S, Tiwari S, Gaddipati S, Fatima A, Sangwan VS, Balasubramanian D, Vemuganti GK. In vitro culture and expansion of human limbal epithelial cells. Nat Protoc. 2010 Aug;5(8):1470–9.

10. Polisetti N, Agarwal P, Khan I, Kondaiah P, Sangwan VS, Vemuganti GK. Gene expression profile of epithelial cells and mesenchymal cells derived from limbal explant culture. Mol Vis. 2010 Jul 6;16:1227–40.