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Profile and Research Interests:

Dr Geeta Vemuganti joined to lead and develop the fledgling School of Medical Sciences at the University of Hyderabad in December 2010 after a long stint as Head of Ophthalmic Pathology Laboratory and Head of Sudhakar and Sreekant Ravi Stem Cell Biology Laboratory at the renowned L V Prasad Eye Institute, Hyderabad. Her experience and expertise is in the area of ocular tumors and stem cell biology, where she has contributed cutting edge research that has led to bench-to-bedside applications. Her current research focuses on cancer stem cells in Retinoblastoma, new animal models, role of mesenchymal stem cells in Leprosy and human lacrimal gland cultures. She holds several honorary positions, including an adjunct professorship of ophthalmology in the School of Medicine and Dentistry, University of Rochester, USA. She also served as Chair of the Program Committee, of the AP section and Global Member Committee of the Association for Research in Vision and Ophthalmology (ARVO), and President, Indian Society of Ophthalmic Pathology Indian Society of Ophthalmic Pathology, among other professional and academic affiliations. Dr Vemuganti earned her basic medical degree at the JLN Medical College, Ajmer before completing her MD in Pathology at the Nizam's Institute of Medical Sciences. She has had advanced training in ocular pathology at the Doheny Eye Institute, Los Angeles, USA and has been a visiting pathologist at the Eye and Ear Infirmary and Department of Pathology, University of Illinois, Chicago. She has published widely, authoring more than papers in journals of international repute. She is also a recipient of several national and international awards including the recent Senior Achievement award by American Academy of Ophthalmology and Fellow, ARVO. Dr Vemuganti has received many prestigious academic as well as research grants from national and international agencies and has guided many doctoral students in both basic and applied research projects

Publications: Citations: 5100, H Index: 40 (google scholar citation

Selected Publications:

1. Chévez-Barrios P, Eagle RC, Krailo M, Piao J, Albert D, Xia C, Gao Y, **Vemuganti** G, Javed A, Khetan V, Honavar SG, O'Brien J, Leahey A, Matthay K, Meadows A, Chintagumpala M.A

- Study of Unilateral Retinoblastoma With and Without Histopathologic High-Risk Features and the Role of Adjuvant Chemotherapy-A Children's Oncology Group (COG) study. J of Clin Oncology (accepted for publication)
2. Tiwari S, Nair RM, Vamadevan P, Ali MJ, Naik MN, Honavar SG, **Vemuganti GK**. Establishing and characterizing lacrispheres from human lacrimal gland for potential clinical application. Graefes Arch Clin Exp Ophthalmol. 2018 Apr;256(4):717-727
 3. A Nair RM, Balla MMS, Khan I, Kalathur, RKR, Kondaiah P, **Vemuganti GK**. In vitro characterization of CD133lo Cancer stem cells in Retinoblastoma Y79 cell line. BMC Cancer. 2017 Nov 21;17(1):779.
 4. Kirkegaard MM, Rasmussen PK, Coupland SE, Esmali B, Finger PT, Graue GF, Grossniklaus HE, Honavar SG, Khong JJ, McKelvie PA, Mulay K, Prause JU, Ralfkiaer E, Sjö LD, Toft PB, Vemuganti GK, Thuro BA, Curtin J, Heegaard S. Conjunctival Lymphoma-An International Multicenter Retrospective Study. JAMA Ophthalmol. 2016 Feb 18.
 5. Tiwari S, Bhatt A, Nagamodi J, Ali MJ, Ali H, Naik MN, Reddy VAP, **Vemuganti GK**. Aqueous Deficient Dry Eye Syndrome Post Orbital Radiotherapy: A 10-Year Retrospective Study. Transl Vis Sci Technol. 2017 Jun 15;6(3):19.
(Study conceived, planned and written by me, executed by PhD scholar, lead author of the manuscript with 80% contribution)
 6. Tiwari S, Ali MJ, Balla MM, Naik MN, Honavar SG, Reddy VA, **Vemuganti GK**. Establishing human lacrimal gland cultures with secretory function. PLoS One. 2012;7(1):e29458.
(Study conceived, planned and written by me, executed by PhD scholar, lead author of the manuscript with 70% contribution)
 7. Sangwan VS, Basu S, **Vemuganti GK**, Kunjal S, Subramaniam S, Sannapaneni K, Gaddipati S, Tiwari S, Dorairajan B. Clinical Outcome of Xeno-Free Autologous Cultivated Limbal Epithelial Transplantation: A Ten Year study. Br J Ophthalmol. 2011 Nov;95(11):1525-9
Study conceived, planned and executed by me, contributed to manuscript writing, analysis with inputs from others-50% contribution)
 8. 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. Epub 2010 Jul 29.
(Study conceived, planned and executed by me, led the manuscript writing by the first author, -50% contribution)
 9. Manderwad GP, Gopinathan G, Khosla S, **Vemuganti GK**, Kannabiran C, Honavar SH. Hypomethylation of the *DNMT3L* Promoter in Ocular Surface Squamous Neoplasia (OSSN) Arch Pathol Lab Med. Arch Pathol Lab Med. 2010 Aug;134(8):1193-6.
(Study conceived, planned and executed by by PhD Scholar, manuscript writing by scholar with myinputs--40% contribution)
 10. Balla MM, **Vemuganti GK**, Kannabiran C, Honavar SG, Murthy R. Phenotypic Characterization of Retinoblastoma for the Presence of Putative Cancer Stem-like Cell markers by Flow Cytometry. Invest Ophthalmol Vis Sci. 2008 Nov 21.

- (Study conceived, planned, written by me, executed by my PhD scholar, analysis, manuscript writing- contribution-70% contribution)
11. Polisetty N, Fatima N, Madhira S, Sangwan VS, **Vemuganti GK**. Mesenchymal cells from limbal stroma of the eye. *Mol Vis*. 2008 Mar 4;14:431-42
(Study conceived, planned by me, executed by my PhD scholar and other students, manuscript writing with inputs from others-70% contribution)
 12. **Vemuganti GK**, Naik M, Honavar SG, GC Shekar. Rapid Intraoperative Diagnosis of Tumors of the Eye and Orbit by Squash and Imprint Cytology. *Ophthalmology* 2004 May;111(5):1009-1015.
(Study conceived, planned and executed by me, manuscript writing with inputs from others-60% contribution)
 13. **Vemuganti GK**, Kashyap S, Sangwan VS, Singh S. *Ex-vivo* potential of cadaveric and fresh limbal tissues to regenerate cultured epithelium. *Indian J Ophthalmol* 2004;52:113-20.
(Study conceived, planned and executed by by Phd student under by guidance, manuscript writing with inputs from others-70% contribution)
 14. **Vemuganti GK**, Garg Prashant, Gopinathan U, Naduvilath TJ, John RK, Rajeev B, Rao GN. Evaluation of agent and host factors in progression of Mycotic keratitis: a histological and microbiological study of 167 buttons. *Ophthalmology* 2002 Aug;109(8):1538-1546.
(Study conceived, planned, executed and analysed by me, manuscript writing with inputs from others-70% contribution)

Selected Awards and Honors

1. Honored as Fellow of Association of Research in Vision and Ophthalmology, ARVO 2019
2. **Member of Technical Expert Committee on Stem cells and Regenerative medicine, Department of Biotechnology, India**
3. Member of TAS - Sectional Committee in "**Medical, Health and Pharmaceuticals Sciences**" **August 2018**
4. Member of ICMR- Expert Group on Stem Cell Research & Therapy August 2018
5. The Women in Eye and Vision Research (WEAVR) initiative of ARVO selected Geeta K Vemuganti to feature several women who have made significant contributions to the field of eye and vision research as part of the International Women's Day celebration in March.- for **her role as a pioneer in culturing human limbal epithelial stem cells for clinical transplantation in India.**
6. Elected fellow of Telangana State Academy of Sciences, January 2018
7. Invited expert of the WHO consensus and Editorial Board meeting for Classification of Eye Tumors, Lyon, France, 11-13th of January 2018
8. Vishishta Puruskar 2017 by Dr Ramineni Foundation, USA
9. Member of Task Force on "Stem Cell Research and Regenerative Medicine" Department of Biotechnology, N Delhi
10. American Academy of Ophthalmology Senior Achievement Award 2017
11. Mentor in the Pilot Women Leadership Development Program of ARVO 2017

12. Distinguished Lecture at the 1st Middle East Ophthalmic Oncology Conference, Dec 15-16th 2016, Cairo, Egypt
13. Member of National Apex Committee- Stem Cell Research and Therapy
14. Keynote address at the Women in Eye and Vision Research (WEAVR) at Association of Research in Vision and Ophthalmology, 1-5th May, 2016 Seattle, USA
15. Distinguished Lecture at Central University Orissa on Eye diseases: bench to bedside journey' 25th April 2016
16. 9th Indian College of Pathology Oration 2015 on 5th December at IAPM meeting, Kochi, Kerala.
17. Distinguished Lecture Schepen's Eye Research Institute, Harvard Medical School, Boston, May 2014 on "Human lacrimal gland cultures: progress and promise"
18. Member of Expert Group for Stem Cell Task Force, ICMR
19. Awarded the 2013 ARVO/Merck Collaborative Research Fellowship Award by ARVO Foundation for Eye Research and the Association for Research in Vision and Ophthalmology (ARVO) through a grant from Merck for the proposal entitled "Effect of Androgens on Human Lacrimal Gland Cells In-vitro."
20. Invited to deliver the Lt Gen M A Baig Shaheed Memorial lecture on Stem cell therapy at the 11th Biennial meeting of SAARC Academy of Ophthalmology and 16th Islamabad Congress of Ophthalmology at Bhurban, Pakistan 3-6th October 2013
21. National Academy of Medical Sciences Amritsar Award 2007 given at the NAMS meeting, Patiala, 31st October 2010
22. Shri Shyam Lal Saksena Memorial Award for year 2010 from National Academy of Medical Sciences
23. Nominated and Elected as Fellow of Indian College of Pathologists, 2009
24. Four Decade Trust Oration on "Stem Cell Research: How do we make the Bench to Bedside Journey?" at SMS Medical College, Jaipur, on 24th December, 2009
25. Association of Biotechnology & Pharmacy Senior Scientist Award at the International Symposium on "Emerging Trends in Biomedical and Nanobiotechnology: Relevance to Human Health" held at Acharya Nagarjuna University, Guntur, A.P, India, from December, 19-21, 2009.
26. Elected Fellow of National Academy of Medical Sciences, 2007
27. Awarded the Biotech Products and Process Development and Commercialisation for the year 2007 in initiating the first adult stem therapy in India which turned out to be the largest clinical trial of its kind that has restored sight to more than 200 patients. This is a joint award shared by Dr Virender S Sangwan and Geeta K Vemuganti and is from Govt of India, Ministry of Science & technology, Department of Biotechnology.

28. Awarded 5 best photographs by the Ophthalmic Photographic Society, at the American Society of Cataract and Refractory Surgery, San Diego, April 2- 3rd May 2007, for the following Categories
 - a. First Prize -Gross specimen photography (Inside the eye)
 - b. Second Prize- Gross specimen photography (optic nerve glioma)
 - c. Third Prize- Gross specimen photography(Schwannoma)
 - d. Second Prize- Microphotography (metastatic Retinoblastoma, CSF fluid)
 - e. Honorable Mention- Microphotography (Asteroid Hyalosis)
29. Awarded the Best Oral Presentation for a paper presented at the Stem Cell Research Forum of India and International Stem Cell Meeting, 29 - 1st Feb 2007, Bangalore
30. Awarded the American Academy of Ophthalmology's Achievement Award, 2006
31. Life Patron of Al Shifa Trust Eye Hospital, Rawalpindi, Pakistan, Year
32. Awarded the "Dr Shurveer Singh Trust Oration Award" at RNT Medical College, Udaipur, Rajasthan, 23rd February 2006
33. Awarded the "National Bioscience Award for Career Development for the year 2003-4, in recognition of the outstanding research contributions. This award is from the Secretary, Govt of India, Ministry of Science & technology, Department of Biotechnology.
34. Awarded the CHEMTECH PHARMABIO "**Outstanding Contribution**" Award (Biotech), for the year 2005. This is in recognition of the pioneering contribution in the area of medical biotechnology and biosciences, especially in the area of using stem cell techniques to restore the precious vision in patients.
35. Interviewed for an UGC program on Women Scientist and chosen as one of the leading – Ladies in labs for a 15 minute documentary film
36. Awarded the Rangachari Gold medal for the best paper entitled "Proliferative potential of stem cells from fresh vs cadaveric limbal tissues" All India Ophthalmological Society, January 2002
37. Awarded the best thematic film at the Film festival of All India Ophthalmological Society, Chennai, 2000 entitled " Mimics of Retinoblastoma

Invited Talks

1. Invited to deliver a talk at the NASA Ames Research Centre, California, 8th May 2019
2. Invited talk at WOC, Bangkok, Feb 2019
3. Member of Consensus and Editorial Board Meeting of International Agency for Cancer Research, WHO on Classification of Eye Tumors, at Lyon, France, January 2018
4. Invited talk at University of Liverpool, June 2017
5. Invited Speaker at the ISOP session on " Infections of the Eye and Adenexa" at at World Ophthalmology Conference, Guadalajara, Mexico, 5-9th Feb 2016

6. Invited Faculty at 1st Middle East Ophthalmic Oncology Conference, Dec 15-16th 2016, Cairo,
7. Invited talk at Regenerative Medicine Meeting, Berlin, 28 July to 1 August 2015
8. Invited talk on “ Ivory Towers and Glass Ceilings” Contrasting fortunes of Higher Education and Commercial Sectors in bridging the gender gap in Leadership- at Global Education Dialogues: South Asia Series: Dangerous Demographics in Colombo, March 2014
9. Invited Speaker at World Ophthalmology Congress April 2014
10. Invited Speaker at Association of Research in Vision and Ophthalmology 2014, Orlando, USA
11. Invited Speaker at University of Rochester, USA-8-9th May 2014
12. Distinguished Lecture on “Human Lacrimal Gland Cultures: Progress and Promise” at Schepens’s Eye Research Institute, Massachusetts Eye and Ear Institute, Harvard Medical School, Boston
13. Invited Speaker at European Congress of Pathology, London, 30th Aug -3rd Sept 2014
14. Invited talks on Stem Cell Therapy in Ophthalmology, Progress and promise on 5th September 2014, at University of Liverpool
15. Invited Talk on What’s new in Corneal Infection in the Session Ocular Infections and Degenerations at World Ophthalmology Congress, 2014 Tokyo
16. Invited talk at University of Edinburgh, 21st of January 2013
17. Invited talk at University of Cardiff, UK
18. Visit to London School of Hygiene and tropical medicine, London, 24th January 2013
19. Invited talk at University College, London, 24th January 2013
20. Invited talk at Queens Mary college, London, 25th January 2013
21. Invited talk at the European Society of Ophthalmology, Copenhagen, Denmark, 8-11th June 2013
22. Invited talk at the German Ophthalmologic Society meeting Nurember, Germany, 13-15th June 2013
23. Invited visit to University of Wursburg , 14th June 2013
24. Invited speaker (3 talks) at Ocular Oncology Symposium, National University of Singapore, 28-31st August 2013
25. Invited speaker at the 11th Biennial meeting of SAARC Academy of Ophthalmology and 16th Islamabad Congress of Ophthalmology at Bhurban, Pakistan 3-6th October 2013,
26. invited to deliver the esteemed Lt Gen Mushtaq Baig Memorial lecture on Stem cell therapy in Ophthalmology, 11th Biennial meeting of SAARC Academy of Ophthalmology and 16th Islamabad Congress of Ophthalmology at Bhurban, Pakistan 3-6th October 2013,
27. Invited visit at Life Patron, AL Shifa Trust Eye Hospital, Rawalpindi, 7th October 2013
28. Invited talk at the National Centre for Excellence in Molecular Biology, Lahore, 8th October 2013
29. Invited talk at Asia-ARVO: Lacrimal gland cell therapy: where do we stand, 28th October 2013

30. Invited speaker at International Society of Ophthalmology Guanzhou, China 9th – 11th November 2013
31. Visit to University of Arkansas Medical Sciences to discuss the collaborative NIH project, 17-18th January 2012
32. Invited for the Research Advisory Council meeting at IAEA , Vienna, 10-12th September 2012
33. Invited talk at the Neurosciences Club, Univeristy of Salzburg, 13-14th September 2012
34. Invited Academic Visit and meeting the Leaders at University of Arkansas Medical School Feb 1-3rd 2011.
35. Invited talk on Scope of School of Medical Sciences at University of Hyderabad, University of Arkanas Medical School, Little Rock, Feb 2nd 2011.
36. Invited Talk on Interesting Clinico-pathologic correlation at University of Rochester, Rochester
37. Invited talk on Scope of biomedical research at Cincinnati Children's hospital, Cincinnati
38. Invited talk on Stem Cell Therapy for Ocular Surface, DST Wellcome trust meeting at UK, 23-28th July 2011
39. Invited panellist of Wellcome Trust supported meeting at Sheffield supported by DST dated 24-28th July 2011
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Ongoing Projects

1. **SERB grant on** "Exploring the potential of lacrimal gland stem cells in restoring the damaged function through cell therapy". Approved
2. **Erasmus Plus grant on Optometry Curriculum Update for Lifelong Learning through ErasmUS (OCULUS) by European Union**
3. **Chick Embryo in vivo xenograft model for Ocular Cancer studies- UGC-UKIERI award**
4. **Restoration of myelination in leprosy by bone marrow mesenchymal stem cells (MSCs): In-vitro and Ex-vivo Evaluation- ICMR project**

Other Links:

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<https://vidwan.inflibnet.ac.in/myprofile>; ID 58653

https://www.researchgate.net/profile/Geeta_Vemuganti2