

## CURRICULUM VITAE

SOPHIE XIAOHUI DENG

### PROFESSIONAL ADDRESS:

Cornea Division  
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### EDUCATION:

- 1989-1991 *Bachelor of Science (BS) Phi Beta Kappa*, The City College of New York, City University of New York
- 1994-2001 *Doctor of Medicine (MD)*, University of Rochester, School of Medicine and Dentistry
- 1994-2001 *Doctor of Philosophy (PhD) in Immunology and Microbiology*, University of Rochester, School of Medicine and Dentistry

### Postgraduate Training

- 2001-2002 Internship, Internal medicine  
Department of Medicine, University of Tennessee at Memphis
- 2002-2005 Residency in Ophthalmology  
Department of Ophthalmology, University of Illinois, Chicago

### Fellowship Training

- 2005-2006 Heed Fellow  
Cornea, External Ocular Diseases and Refractive Surgery Fellowship Program  
Stein Eye Institute, Department of Ophthalmology, David Geffen School of Medicine at UCLA

### PROFESSION EXPERIENCE

- 2013- Associate Professor  
Stein Eye Institute, Department of Ophthalmology, David Geffen School of Medicine at UCLA
- 2013- Co-Director, Center for Regenerative Medicine in Ophthalmology  
Stein Eye Institute, Department of Ophthalmology, David Geffen School of Medicine at UCLA

- 2007-2013 Assistant Professor  
Stein Eye Institute, Department of Ophthalmology, David Geffen School of  
Medicine at UCLA
- 2007-2013 Consultant, Cornea Service, VA Great Los Angeles Health Care System
- 2006-2007 Associate Physician Diplomate  
Stein Eye Institute, Department of Ophthalmology, UCLA School of Medicine
- 1991-1994 Research Assistant, The Rockefeller University

## **CERTIFICATION AND LICENSURE**

- Diplomate, National Board of Medical Examination, 2002  
Diplomate, American Board of Ophthalmology, 2007  
State of California Medical License, 2005-present

## **HONORS AND AWARDS:**

- 1989 Heymann Scholarship.  
1990 Arthur G. Levy Award.  
1991 Seymour Mann Award.  
1991 Francis Hochman Award.  
1991 Marks Neidle Memorial Prize in Physical Chemistry.  
1991 Dean's List.  
1991 Research Honors.  
1991 Bachelor of Science, *Magna Cum Laude*.  
1991 *Phi Beta Kappa*  
1994 Fannie & Henry Rice Scholarship.  
1994 Helen Kingsbury Medical Student Scholarship.  
1995 John A. Hartford/AFAR Medical Student Geriatric Scholar.  
2005 Beem-Fisher Award, First Place for Best Resident Scientific Paper.  
Chicago Ophthalmological Society.  
2005 Excellence in Resident Research.  
Department of Ophthalmology, University of Illinois, Chicago.  
2005 Heed Foundation Fellowship (July 2005 to June 2006).  
2009 Best of Show in Anterior Segment Reconstruction, "Analysis of the Corneal and  
Limbal Epithelial Changes in Limbal Stem Cell Deficiency"  
The America Society of Cataract and Refractive Surgery 2009 Annual Meeting.  
San Francisco, California  
2010 Prevent Blindness America Investigator Award.  
2016 2016 THz Science and Tech. Best Paper Award (co-Author)

## **PROFESSIONAL ACTIVITIES**

### **Honor Society Memberships**

- 1989 Sigma XI Research Fellow.  
1991 Phi Beta Kappa.  
2005- Heed Fellow

### **Professional Organization Memberships:**

Fellow, American Academy of Ophthalmology.  
 Member with Thesis, The Cornea Society.  
 Member, Association for Research in Vision and Ophthalmology.  
 Member, California Academy of Ophthalmology.  
 Member, Los Angeles Society of Ophthalmology.  
 Member, Max Fine California Cornea Society.  
 Member, Women in Ophthalmology

### **University Services:**

2008 Ophthalmology Resident Selection Committee, UCLA Department of Ophthalmology  
 2007- Clinical Quality Assurance Committee, UCLA Department of Ophthalmology  
 2007- Jules Stein Eye Institute Noon Research Seminar Organizing Committee, UCLA  
 Department of Ophthalmology  
 2007- Consultant, Cornea Service, VA Great Los Angeles Health Care System  
 2009- Grant reviewer, Council on Research Faculty Grant Program, UCLA

### **Community and Professional Services**

2007-2009 Editorial Board Member, Ocular TRUST Program, Vistakon Pharmaceuticals, LLC.  
 2010-2016 Ophthalmic Technology Assessment Committee, Cornea and Anterior Segment  
 Disorders Panel, American Academy of Ophthalmology.  
 2011- Committee Member, International Consortium on the Definition, Diagnosis and  
 Treatment of Limbal Stem Cell Deficiency  
 2015- Subcommittee member, Management & Therapy, TFOS Dry Eye Workshop II  
 (DEWS II)  
 2015-2018 Member, Annual Meeting Program Committee (Cornea Section), Association for  
 Research in Vision and Ophthalmology

### **Editorial Services to Scholarly Publications**

2008- Reviewer, Molecular Vision  
 2009- Reviewer, Cornea  
 2010- Reviewer, Investigational Ophthalmologic Vision Sciences  
 2010- Reviewer, Survey of Ophthalmology  
 2010- Reviewer, Eye  
 2010- Reviewer, Cell Transplantation  
 2011- Reviewer, American Journal of Ophthalmology  
 2011- Reviewer, Journal of Cataract and Refractive Surgery  
 2011- Reviewer, British Journal of Ophthalmology  
 2011- Reviewer, Experimental Eye Research  
 2011- Reviewer, JAMA Ophthalmology (Archive of Ophthalmology)  
 2012- Reviewer, European Journal of Ophthalmology  
 2012- Reviewer, Ophthalmology  
 2012- Reviewer, PLOS ONE  
 2013- Reviewer, Stem Cells  
 2014- Reviewer, Nature Scientific Report  
 2015- Reviewer, Stem Cell Research

## Clinical Trials

- 2010 Principle Investigator (UCLA site), “Safety and Efficacy Study of Azithromycin Ophthalmic Solution, 1% versus Placebo in Subjects with Blepharitis”, Inspire Pharmaceutical, Inc.
- 2012- Investigator, “A Randomized, Multicenter, Double-Masked Cornea Preservation Time Study”, National Eye Institute.
- 2014-6 Principle Investigator (UCLA site), “Evaluation of Efficacy of 20 µg/ml rhNGF new formulation (with anti-oxidant) in patients with stage 2 and 3 Neurotrophic Keratitis”, Dompé Corp.

## PATENTS

PCT Application No. PCT/US2013/044375: Novel Methods to Regenerate Limbal Stem Cells

## RESEARCH GRANTS AND FELLOWSHIPS RECIEVED:

### Ongoing Research Support

CLIN1-08686 08/01/2016-12/31/2018  
 California Institute for Regenerative Medicine (CIRM)  
 Regeneration of a Normal Corneal Surface by Limbal Stem Cell Therapy  
 Role: PI

R01 EY021797 09/01/12-08/31/17  
 NIH/NEI  
 Ex Vivo Expansion of Limbal Stem Cells for Transplantation  
 Role: PI

R01 EY022364 Lu (PI) 09/01/13-08/31/17  
 NIH/NEI  
 Differential Effects of Corneal Hypoxia on Limbal Stem and Epithelial Cell Fates  
 Role: Consultant

### Past Research Support:

R01 1R01EY021590-01 Grundfest (PI) 07/01/11-06/31/16  
 NIH  
 Non-Contact, THz Sensing of Corneal Hydration  
 Role: co-Investigator

Unrestricted Research Grant  
 Research to Prevent Blindness  
 Role: PI

BF-01768 bridging funding 08/01/14-05/31/15  
 California Institute for Regenerative Medicine (CIRM)  
 Regeneration of Functional Human Corneal Epithelial Progenitor Cells  
 Role: PI

TR2-01768		03/01/11-02/28/14
California Institute for Regenerative Medicine (CIRM)		
Regeneration of Functional Human Corneal Epithelial Progenitor Cells		
Role: PI		
T32 EY007026-35	Travis (PI)	10/30/05-09/30/11
NIH/NEI		
Jules Stein Eye Institute Training Grant for Vision Research		
Role: Preceptor		
Investigator Award		07/01/10-06/30/11
Prevent Blindness of America		
Characterization and Staging of Limbal Stem Cell Deficiency using <i>in vivo</i> Confocal Laser Scanning Microscopy		
Role: PI		
Faculty Research Grant		07/01/09-6/30/10
UCLA		
Regeneration of limbal stem cells from epidermal epithelial stem cells		
Role: PI		
Oppenheimer Translational Research Seed Grant		07/01/08-6/30/09
UCLA		
Isolation of human epidermal epithelial progenitor cells		
Role: PI		
Research Grant		07/01/05-06/30/05
Abraham J. & Phyllis Katz Foundation		
Antimicrobial Effects of Methotrexate		
Role: PI		
Research Grant	Goldstein (PI)	07/07/04-06/30/05
Illinois Society for the Prevention of Blindness		
Use of Methotrexate in Ocular Inflammation		
Role: co-PI		

### INVITED LECTURES AND PRESENTATIONS

19 May 06	“Uveitis in Children: Infliximab Treatment of Chronic, Non-Infectious Anterior Uveitis” The 40 <sup>th</sup> JSEI Annual Clinical and Research Seminar
09 Sep 07	“Limbal Stem Cell Deficiency, Approach an Old Problem at a New Angle” JSEI Vision Conference Lake Arrowhead, California
30 Nov 07	“Intravitreal Methotrexate as a Local Therapy for Uveitis” First Chinese Conference on Uveitis Guangzhou, Guangdong, China

- 30 Nov 07 “Boston Type I Keratoprosthesis, Patient Selection and Post-Operative Management”  
Zhongshan Ophthalmic Center  
Guangdong, China
- 23 May 08 “Red Eye and Collagen Vascular Diseases”  
Rheumatology Division Grand Rounds, Department of Medicine,  
UCLA David Geffen School of Medicine
- 3 Feb 09 “Ex Vivo Expansion of Limbal Stem Cells”  
The Brasel Basic Science Conference  
Los Angeles Biomedical Research Institute at UCLA-Harbor Medical Center
- 3 May 09 “Analysis of the Corneal and Limbal Epithelial Changes in Limbal Stem Cell Deficiency Using *in vivo* Confocal Microscopy.”  
18<sup>th</sup> Vista Scientific Conference  
Fort Lauderdale, Florida
- 11 Jun 09 “Activation of Wnt/ $\beta$ -catenin Promotes Self-Renewal of Human Limbal Stem Cells.”  
Gordon Research Conferences on Tissue Repair and Regeneration  
New London, New Hampshire.
- 8 Apr 10 “Analysis of Cellular Abnormalities in Limbal Stem Cell Deficiency by *in vivo* Confocal Microscopy”  
World Cornea Congress VI  
Boston, Massachusetts
- 4 May 10 “Evaluation of Structural Changes in Limbal Stem Cell Deficiency Using *in vivo* Confocal Microscopy.”  
The Association for Research in Vision and Ophthalmology (ARVO) 2010 annual meeting  
Fort Lauderdale, Florida
- 17 Sep 10 “Descemet Stripping Automated Endothelial Keratoplasty in Endothelial Dysfunction.”  
The 25<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress  
Beijing, China.
- 22 Oct 10 “Corneal Epithelial Stem Cells, In Sickness and In Health”  
Embryology Club  
UCLA Department of Biological Sciences
- 3 Dec 10 “DSEK in Glaucoma Patients”  
The 2<sup>nd</sup> Asian Cornea Society Biennial Scientific Meeting  
Kyoto, Japan.
- 18 Mar 11 “Scleritis, Diagnosis and Management.”  
Rheumatology Grand Rounds  
Department of Medicine, UCLA

- 3 May 11 “Comparative Analysis of Biological Processes and Molecular Functions in the Human Ocular Epithelium: Preferential Gene Expression in the Human Limbus” (senior author).  
ARVO 2011 Annual Meeting  
Fort Lauderdale, Florida
- 4 May 11 “Wnt/ $\beta$ -catenin Signaling Regulates Proliferation of Human Cornea Epithelial Stem/Progenitor Cells.”  
ARVO 2011 Annual Meeting  
Fort Lauderdale, Florida
- 15 Dec 11 “Anterior Segment Reconstruction”  
Grand Round, Department of Ophthalmology, Yale University  
New Haven, Connecticut
- 29 Jan 12 “Ocular Surface Reconstruction”  
Jules Stein Eye Institute-Southern California College of Optometry 2012 Symposium  
Los Angeles, California
- 26 Mar 12 “Wnt Signaling in Limbal Stem/Progenitor Cells”  
Gordon Research Conferences on Biology and Pathobiology of the Cornea  
Ventura, California
- 13 Apr 12 “Elevated Intraocular Pressure is a Common Complication in Active Infectious Keratitis”  
The 27<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress  
Busan, South Korea
- 14 Apr 12 “New Approaches to Detect Limbal Stem Cell Deficiency”  
The 27<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress  
Busan, South Korea
- 7 May 2012 “The Role of Wnt6 in Regulating Human Corneal Epithelial Stem/Progenitor Cell Differentiation” (Senior Author)  
ARVO 2012 Annual Meeting  
Fort Lauderdale, Florida
- 9 May 2012 “Wnt Signaling Pathway Regulates the Differentiation of Human Corneal Epithelial Stem/Progenitor Cells via the Frizzled 7 Receptor” (Senior Author)  
ARVO 2012 Annual Meeting.  
Fort Lauderdale, Florida
- 9 May 2012 “Wnt Signaling in the Regulation of Corneal Epithelial Stem/Progenitor Cells”  
Special Interest Group Section (SIG)  
ARVO 2012 Annual Meeting.  
Fort Lauderdale, Florida
- 19 Apr 2012 “Bioengineering of Limbal Stem Cell for Transplantation”

Shanghai Stem Cell Initiative, Tonji University  
Shanghai, China

- 5 Oct 2012 “Anterior Segment Reconstruction”  
Grand Rounds, Department of Ophthalmology  
Northwestern University, Chicago, Illinois
- 27 Nov 2012 “Use and Misuse of AMT in Keratoplasty”  
3<sup>rd</sup> Biennial Asian Corneal Society Meeting  
Manila, Philippine
- 12 Dec 2012 “Anterior Segment Reconstruction”  
Grand Rounds, Department of Ophthalmology  
University of California, Irvin
- 4 Apr 2013 “Wnt Signaling in the Regulation of Human Corneal Epithelial Stem Cells”  
117<sup>th</sup> Annual Meeting of the Japanese Ophthalmological Society  
Tokyo, Japan
- 11 May 2013 “Management of Failed PK: repeat PK vs. DSEK vs. keratoprosthesis”  
Advances in Cornea Surgery: Decisions and Dilemmas in a Changing Field  
Tissue Bank international Cornea Symposium  
Santa Monica, California
- 12 Sep 2013 “TRUST”  
The XIX International Congress of Cornea and Refractive Surgery  
Puerto Vallarta, Mexico
- 12 Sep 2013 “Limbal Stem Cell Deficiency”  
The XIX International Congress of Cornea and Refractive Surgery  
Puerto Vallarta, Mexico
- 18 Sep 2013 “Use and Misuse of AMT in Ophthalmology”  
Keynote Lecture  
The 7th International Conference on the Tear Film & Ocular Surface (TFOS)  
Taormina, Sicily
- 11 Oct 2013 “Limbal Stem Cell Deficiency: the Past, the Present and the Future”  
UCI Stem Cell Center Fall Lecture Series  
University of California, Irvine, CA
- 13 Nov 2013 “Engineering replacement cornea from autologous stem cells”  
Tissue Engineering International & Regenerative Medicine Society (TERMIS) 2013  
America Meeting  
Atlanta, GA
- 5 Dec 2013 “New Advances in the Treatment and Diagnosis of Limbal Stem Cell Deficiency”  
Cedars-Sinai Regenerative Medicine Institute Seminar Series



Los Angeles, CA

- 19 Feb 2014 “Bioengineering of Human Limbal Stem/Progenitor Cells”  
Gordon Research Conference in Biology and Pathology of the Cornea  
Ventura, CA
- 4 Apr 2014 “DMEK - Cutting Edge & Future Possibilities”  
Lunch symposium, 2014 World Ophthalmology Congress  
Tokyo, Japan
- 7 Apr 2014 “Recent Advances in Limbal Stem Cell Deficiency”  
Grand Rounds Department of Ophthalmology, Osaka University,  
Osaka, Japan
- 25 Apr 2014 “Penetrating Keratoplasty”  
Session III: Video Pearls in Keratoplasty Surgery: You NEED to SEE This  
Cornea Day, ASCRS 2014  
Boston, MA
- 7 May 2014 “The Effect of Wnt Signaling Small Molecule Modulators on the Cultured Human  
LSCs”  
Application of Molecular Biology to Corneal Regenerative Medicine  
2014 ARVO annual meeting  
Orlando, FL
- 20 Jul 2014 “Novel Approaches to Expand Limbal Stem Cells”  
XXI Biennial Meeting, International Society for Eye Research  
San Francisco, CA
- Sep 19 2014 “DMEK – Now and Beyond”  
The 17<sup>th</sup> AFRO-Asian Congress of Ophthalmology/17<sup>th</sup> CCOS  
Xi’an, P.R. China
- Sep 19 2014 “New Advances in the Diagnosis of Limbal Stem Cell Deficiency”  
The 17<sup>th</sup> AFRO-Asian Congress of Ophthalmology/17<sup>th</sup> CCOS  
Xi’an, P.R. China
- April 3, 2015 “New Parameters to Classify Limbal Stem Cell Deficiency”  
The 17<sup>th</sup> Chinese Ophthalmology Congress  
GuangZhou, China
- Jun 19, 2015 “What We Don’t Know about Limbal Stem cell Deficiency”  
Bench to Bed Research Symposium  
Gavin Herbert Eye Institute, University of California, Irvine  
Irvine, CA
- Aug 13, 2015 “New Approaches to Bioengineer Limbal Stem Cell for Transplantation”  
The Aniridia Foundation International “Make a Miracle” conference

Vancouver, BC, Canada

- Aug 14, 2015 “Treatment Options for Aniridia Keratopathy”  
The Aniridia Foundation International “Make a Miracle” conference  
Vancouver, BC, Canada
- Oct 16 2015 “Regulation of Human Limbal Stem Cells via Wnt Signaling Pathway”  
The 29<sup>th</sup> Boston Biennial Cornea Conference  
Boston, MA
- Mar 6 2016 “Outcome of DMEK in Patients with Prior Glaucoma Surgery”  
6<sup>th</sup> Fuchs Symposium  
Baltimore, MD
- May 2 2016 “Limbal Stem Cell Therapy: Myth or Truth”  
Minisymposium, ARVO 2016 annual meeting  
Seattle, WA
- May 6 2016 “Complications of Cosmetic Eye-whitening Procedures”  
Cornea Day, ASCRS 2016  
New Orleans, LA
- Jun 18 2016 “Standardized Surgical Techniques to Perform Successful DMEK”  
Tianjin International Ophthalmology Forum 2016  
Tianjin, P.R. China
- Sep 9 2016 “Limbal Stem Cell Deficiency, Where We Are Now”  
Keynote Lecture  
The 8th International Conference on the Tear Film & Ocular Surface (TFOS)  
Montpellier, France
- Sep 9 2016 “Standardization of limbal stem cell culture for transplantation”  
2016 EuroCornea  
Copenhagen, Denmark
- Sep 26 2016 “New Insight into the Diagnosis of Limbal Stem Cell Deficiency”  
XXI Biennial Meeting, International Society for Eye Research  
Tokyo, Japan
- Oct 15, 2016 “How Do I Know If This is Stem Cell Deficiency?”  
Cornea Day, 2016 AAO annual meeting  
Chicago, IL

## **COURSE INSTRUCTION AND SYMPOSIA**

- 2005 “Intravitreal Methotrexate, Effective and Safe?”  
Department of Ophthalmology Alumni Research Day  
Chicago, Illinois

- 2010 “Selective Keratoplasty, the Future of Corneal Transplantation?”  
Speaker, Cornea and Retina Symposium.  
Southern California College of Optometry.  
Los Angeles, California.
- 2010 “DALK and DSEK, Patient Selection and Surgical Techniques.”  
Instructor, Breakfast with the Experts.  
America Academy of Ophthalmology 2010 Annual Meeting.  
Chicago, Illinois
- 2011 “Stem Cell and Regenerative Medicine”  
Moderator, Cornea Paper Section  
ARVO 2011 Annual Meeting  
Fort Lauderdale, Florida
- 2011 “DALK and DSEK, Patient Selection and Surgical Techniques.”  
Moderator, Breakfast with the Experts.  
America Academy of Ophthalmology 2011 Annual Meeting  
Orlando, Florida
- 2012 “DSEK Indications and Patients Selections”  
Course Instructor  
The 27<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress.  
Busan, South Korea
- 2012 “Boston Type I Keratoprosthesis: Patient Selection”  
Course Instructor  
The 27<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress  
Busan, South Korea
- 2012 Challenging Cornea Cases  
Chair, Case Presentation  
The 27<sup>th</sup> Asian Pacific Academy of Ophthalmology Congress  
Busan, South Korea
- 2012 “Cornea Stem Cell I”  
Chair, Cornea Paper Section  
ARVO 2012 Annual Meeting  
Fort Lauderdale, Florida
- 2012 “New Insights on Limbal Stem Cell Regulation and Ex Vivo Expansion for  
Transplantation”  
Organizer and Moderator, Special Interest Group (SIG)  
ARVO 2012 Annual Meeting  
Fort Lauderdale, Florida
- 2012 “Dos and Don'ts in Descemet-Stripping Endothelial Keratoplasty and Deep Anterior  
Lamellar Keratoplasty”  
Moderator, Breakfast with the Experts

- AA 2012 Annual Meeting  
Chicago, Illinois
- 2012 “Basic Techniques of DSEK and DALK”  
Course Instructor and training surgeon  
Ho Chi Minh City Eye Hospital  
Ho Chi Minh City, Vietnam
- 2013 “Stroma Keratocytes, Development and Dystrophies”  
Moderator, Paper Section  
ARVO 2013 Annual Meeting  
Seattle, Washington
- 2014 “Somatic and Pluripotent Stem Cells for Cornea Regeneration”  
Session Organizer  
XXI Biennial Meeting, International Society for Eye Research  
San Francisco, CA
- 2014 “Cornea and External Diseases Original Papers”  
Session Panelist  
2014 AAO meeting  
Chicago, IL
- 1015 “Eye Banking and Corneal Dystrophies Original Papers”  
Session Panelist  
World Cornea Congress VII  
San Diego, CA
- 2016 Establishment of Tissue Boundaries: Implications for Cornea and Conjunctiva  
Session Moderator  
Gordon Conference, Biology and Pathobiology of Cornea  
Ventura, CA

## **PUBLICATIONS/BIBLIOGRAPHY:**

### ***Original Research Papers – Peer Reviewed***

1. Muller, W.A., Weigl, S.A., **Deng X.**, Phillips, D.M. PECAM-1 is Required for Transendothelial Migration of Leukocytes. *J of Exp Med.* 1993 Aug 1;178(2):449-60
2. Bogen, S., Pak J., Garifallou, M., **Deng X.**, Muller, W.A. Monoclonal Antibody To Murine PECAM-1 (CD31) Blocks Acute Inflammation in vivo. *J of Exp Med.* 1994 Mar 1;179(3):1059-64
3. **Deng, S.**, Panahian, N., James, H., Gelbard, H.A., Federoff, H.J., Dewhurst, S., Epstein, L.G. Luciferase: a Sensitive And Quantitative Probe For Blood-Brain Barrier Disruption. *J of Neurosci Methods.* 1998; 83(2):159-64
4. **Deng, S.**, Hanson, E., Sanz, I. *In vivo* Cell Penetration and Intracellular Transport of Anti-Smith and Anti-La Monoclonal Autoantibodies. *Int Immunol*, 2000; 12 (4): 415

5. **Deng, S.**, Pendland, S., Gupta, S., Fiscella, R., Edward, D., Tessler, H., Goldstein, D., Methotrexate Reduces The Complications Of Endophthalmitis Resulting From Intravitreal Injection Compared With Dexamethasone In A Rabbit Model, *IOVS*, 2006 Apr;47(4):1516-21
6. Ding, Z., Dong, J., Liu, J., **Deng, S.**, Preferential Gene Expression in the Limbus of the Vervet Monkey, *Mol Vis*. 2008; 14:2031-41
7. Asbell, P., Colby, K., **Deng, S.**, McDonnell, P., Meisler, D.M., Raizman, M.B., Sheppard, J.D. Jr, Sahm, D.F, Ocular TRUST: Nationwide Antimicrobial Susceptibility Patterns in Ocular Isolates, *Am J Ophthalmol*. 2008 Jun;145(6):951-8
8. **Deng, S.**, Kamal, K.M., Hollander, D., The use of Voriconazole in the Management of Post-penetrating Keratoplasty Paecilomyces keratitis. *J Ocul Pharmacol Ther*. 2009 Apr;25(2):175-7
9. Tsui, I., Uslan, D., Hubschman, J., **Deng, S.**, *Nocardia farcinica* Infection of a Baerveldt Implant in a Patient with a Boston Type I Keratoprosthesis, *J Glaucoma*, 2010 Jun-Jul 19(5): 339-40
10. Hong, J., Zheng, T., Xu, J., **Deng, S.**, Chen, L., Sun, X, Le, Q., Pan, Z., Assessment of Limbus and Central Cornea in Patients with Keratolimbal Allograft Transplantation Using *In Vivo* Laser Scanning Confocal Microscopy: an Observational Study, *Graefes Arch Clin Exp Ophthalmol*. 2011 May: 249(5):701-8
11. Nakatsu, M., Ding, Z., Ng, M., Truong, T., **Deng, S.**, Wnt/ $\beta$ -catenin Signaling Regulates Human Corneal Epithelial Progenitor Cell Proliferation, *IOVS*, 2011 Jul 1;52(7):4734-41
12. Zarei-Ghanavati, S., Baghdasaryan, E., Ramirez-Miranda, A., Nguyen, M., Yu, F., **Deng, S.**, Elevated Intraocular Pressure is a Common Complication during Active Microbial Keratitis, *Am J. Ophthalmol*. 2011 Oct;152(4):575-581
13. Truong, T., Huynh, K., Nakatsu, M, **Deng, S.**, SSEA-4 is a Potential Negative Marker for the Enrichment of Human Cornea Epithelial Stem/Progenitor Cells, *IOVS*, 2011 Aug 11;52(9):6315-20
14. Ramirez-Miranda, A., Zarei-Ghanavati, S., Nakatsu, M., Nguyen, C., **Deng, S.**, Keratin 13 is a More Specific Marker of Human Conjunctival Epithelium Than Keratin 19, *Mol Vis*. 2011;17:1652-61.
15. Zarei-Ghanavati, S., Ramirez-Miranda, A., **Deng, S.**, Limbal Lacunae, A New Limbal Structure Detected by *in vivo* Confocal Microscopy. *Ophthalmic Surg Lasers Imaging*, 2011 Dec 8;42:e129-31
16. Wiaux, C., Baghdasaryan, E., Lee, O., Bourges, J., **Deng, S.**, Yu, F., Aldave, A., Outcomes After Descemet Stripping Endothelial Keratoplasty in Glaucoma Patients with Previous Trabeculectomy and Tube Shunt Implantation, *Cornea*, 2011 Dec;30(12):1304-11
17. Wang, L., **Deng, S.**, Lu, L., Role of CTCF in EGF-induced Migration of Immortalized Human Corneal Epithelial Cells, *IOVS*, 2012 Feb 23;53(2):946-51
18. **Deng, S.**, Sejpal, K., Tang, Q., Lee, O., Aldave, A., Yu, F., Characterization of Limbal Stem Cell Deficiency by *in vivo* Laser Scanning Confocal Microscopy: a Microstructural Approach, *Arch Ophthalmol*. 2012 Apr;130(4):440-5.

19. Kurbanyan, K., Sejpal, K., Aldave, A., **Deng S.**, *In Vivo* Confocal Microscopic Findings in Lisch Corneal Dystrophy, *Cornea*. 2012 Apr;31(4):437-41
20. Hong, J., Chen, J., Sun, X., **Deng, S.**, Chen, L., Gong, L., Cao, W., Yu, X., Xu, J., Paediatric Bacterial Keratitis Cases In Shanghai: Microbiological Profile, Antibiotic Susceptibility And Visual Outcomes, *Eye*, 2012 Dec;26(12):1571-8
21. Hua, M., González, S., **Deng, S.**, Extracellular matrix is an important component of limbal stem cell niche, *J. Funct. Mater.* 2012 Dec; 10;3(4):879-94
22. Sejpal, K., Bakhtiari, B., **Deng, S.**, Presentation, Diagnosis and Management of Limbal Stem Cell Deficiency, *Middle East Afr J Ophthalmol.* 2013 Jan-Mar; 20 (1):5-10
23. Hong, J., Xu, J., Wei, A., **Deng, S.**, Cui, X., Yu, X., Sun, x., A new Tonometer-the Corvis ST Tonometer Clinical Comparison with Non-contact, and Goldmann Applanation Tonometers, *IOVS*, 2013 Jan 23;54(1):659-65
24. Chen, Y., Huang, K., Nakatsu, M., Xue\*, X., **Deng\***, **S.**, Fan\*, G., Identification of novel molecular markers through transcriptomic analysis in human fetal and adult corneal endothelial cells, *Hum Mol Genet.* 2013 Apr 1;22(7):1271-9 (\*co-corresponding authors)
25. Nakatsu, M., Vartanyan, L., Vu, D., Ng, M., **Deng, S.**, Preferential Biological Processes in the Human Limbus by Differential Gene Profiling, *PLoS One*, 2013 Apr 22; 8(4):e61833
26. Le, Q, **Deng, S.**, Xu, J., In vivo Confocal Microscopy of Congenital Aniridia-Associated Keratopathy, *Eye*, 2013 Jun;27(6):763-6
27. González, S., **Deng, S.**, Presence of Native Limbal Stromal Cells Increases the Expansion Efficiency of Limbal Stem/Progenitor Cells in Culture, *Exp Eye Res.* 2013 Nov;116:169-76, Epub 2013 Sep 7
28. Mei, H., González, S., Nakatsu, M., Baclagon, B., Lopes, V., Williams, D., **Deng, S.**, A 3-Dimensional Culture Method to Expand Limbal Stem/Progenitor Cells, *Tissue Eng Part C Methods.* 2014 May;20(5):393-400, Epub 2013 Nov 7
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