

CURRICULUM VITAE FOR ACADEMIC PROMOTION

The Johns Hopkins University School of Medicine

(Signature) _____
Samuel Chi-Hung Yiu, PhD, MD (Date of this version)

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

Chief, Anterior Segment Division, King Khaled Eye Specialist Hospital
Medical Staff Department 2011 – present

Associate Professor, Department of Ophthalmology,
Wilmer Eye Institute, Johns Hopkins University 2012-present

Personal Data

Name: Samuel Chi-Hung Yiu, Ph.D., M.D.

Business Address: Johns Hopkins University
School of Medicine
Wilmer Eye Institute
600 N. Wolfe Street
Baltimore, MD 21287

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E-mail Address: syiu2@jhmi.edu

Education and Training (in chronological order):

M.Sc. University of Southern California
Los Angeles, California
Applied Biometry
1983

Ph.D. University of Southern California
Los Angeles, California
Physiology & Biophysics
1988

Schepens Eye Institute
Harvard Medical School
Lacrimal Physiology
1988-1989 (Post-Doctoral Fellowship)

M.D. University of Alberta
Alberta, Canada
1994 (Medical School)

Dalhousie University
Halifax Nova Scotia, Canada
1994-1995 (Internship)

Dalhousie University
Halifax Nova Scotia, Canada
1995-1999 (Residency)

Cornea, External Disease and Refractive Surgery
University of Southern California,
Keck School of Medicine, Doheny Eye Institute
Los Angeles, California
1999-2001 (Fellowship)

Professional Experience (in chronological order, earliest first)

- | | |
|-----------|---|
| 1982-1983 | Research Assistant, Dept. of Biometry, University of Southern California School of Medicine |
| 1983-1988 | Research Assistant, Dept. of Physiology & Biophysics, University of Southern California School of Medicine. |
| 1988-1989 | Research Associate, Schepens Eye Institute, Harvard Medical School, Boston. |
| 1994-1999 | Ophthalmology Resident, Dept of Ophthalmology, Dalhousie University. |
| 1999-2001 | Cornea, External Disease and Refractive surgery fellow, Dept. of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California. |
| 1999-2001 | Clinical Instructor, Dept. of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California. |
| 2001-2009 | Assistant Professor, Dept of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California. |
| 2001-2009 | Director of Ocular Surface Center, Dept of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California. |
| 2002-2011 | Director of Medical Student Education in Ophthalmology, Dept of Ophthalmology, Keck School of Medicine, University of Southern California. |

- 2002-2011 Member of Education Policy Committee, Keck School of Medicine, University of Southern California.
- 2002-2011 Member of Clinical Curriculum Committee, Keck School of Medicine, University of Southern California.
- 2003-2011 Assistant Professor (tenure track) Department of Physiology & Biophysics, Keck School of Medicine, University of Southern California.
- 2003-2011 Director of External, Cornea & Refractive Surgery Fellowship, Doheny Eye Institute, Department of Ophthalmology, Keck School of Medicine.
- 2004-2008 LCME Education Review Committee.
- 2006-2011 Medical Student Research Steering Committee, Keck School of Medicine, University of Southern California.
- 2006-2009 Pacific Coast of Ophthalmology & Otolaryngology – Planning Committee.
- 2007-2009 Association of University Professors of Ophthalmology (AUPO) Consortium of Medical Education – member.
- 2008-present Eye Bank Association of America’s Accreditation Board Member.
- 2008-present Editorial Board Member, Chinese Ophthalmology Research.
- 2009-2011 Associate Professor (clinical track), Dept of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California.
- 2009-2011 Associate Professor, Dept of Physiology & Biophysics, Keck School of Medicine, University of Southern California.
- 2009-2011 Medical Director, Rosenthal Clinic, Doheny Eye Institute, Keck School of Medicine, University of Southern California.
- 2009-2011 Association of University Professor of Ophthalmology (AUPO) Associate Member.
- 2010-present Tissue Bank International – International Medical & Scientific Advisory Committee Member.
- 2010-2011 Los Angeles Eye Society – Program Chair.
- 2010-2011 Co-Director, Cornea Service, Department of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California.

- 2011-2012 Visiting Associate Professor, Department of Ophthalmology, Wilmer Eye Institute, Johns Hopkins University.
- 2011 - present Chief, Anterior Segment, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011-2012 Senior Consultant, Anterior Segment, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia
- 2011 - 2011 Chair, M&M Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011- present Chair, OR Performance Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011- present Anterior Segment Fellowship Director, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011 - present Residency Training Committee, King Saud University/King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011 - present Recruitment Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011- present Editorial Board Member, Saudi Journal of Ophthalmology.
- 2011 - present Member, Medical Education Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2012 - present Associate Professor, Department of Ophthalmology, Wilmer Eye Institute, Johns Hopkins University
- 2012 - present Senior Academic Consultant, Anterior Segment, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia

RESEARCH ACTIVITIES

Publications: Peer-reviewed Original Science Research

Peer Reviewed

1. Wright KW, Edelman PM, Walonker F, **Yiu SC**. Reliability of fixation preference testing in diagnosing amblyopia. Arch Ophthalmol. 1986; 104:549-553
2. Mircheff AK, Ingham CE, Lambert RW, Hales KL, Hensley CB, **Yiu SC**. Na⁺/H⁺ antiporter in lacrimal acinar cell basal-lateral membranes. Invest Ophthalmol Vis Sci. 1987; 28:1726-1729.
3. **Yiu SC**, Lambert RW, Bradley ME, Ingham CE, Hales KL, Wood RL, Mircheff AK. Stimulation-associated redistribution of Na, K-ATPase in exocrine acinar cells. J Membr Biol 1988; 102:185-194.

4. Bradley ME, Peters CL, Lambert RW, **Yiu SC**, Mircheff AK. Subcellular distribution of muscarinic acetylcholine receptors in rat exorbital lacrimal gland. *Invest Ophthalmol Vis Sci.* 1990; 31:977-986.
5. **Yiu SC**, Wood RL, Mircheff AK. Analytic subcellular fractionation of acini from rat lacrimal gland. *Invest Ophthalmol Vis Sci.* 1990; 31:2437-2447.
6. **Yiu SC**, Lambert RW, Tortoriello PJ, Mircheff AK. Secretagogue-induced redistribution of Na, K-ATPase in rat lacrimal gland. *Invest Ophthalmol Vis Sci.* 1991; 32:2976-2984.
7. Mircheff AK, Bowen JW, **Yiu SC**, McDonough AA. Synthesis and translocation of Na, K-ATPase alpha and beta subunits to plasma membrane in MDCK cells. *Am. J. Physiol.* 1992; 262: C470-C483.
8. Wu Z, Ying H, **Yiu SC**, and Smith RE. Fungal Keratitis Caused by *Scedosporium Apiospermum*: Report of Two Cases and Review and Review of Treatment. *Cornea.* 21(5):519-523, July 2002.
9. Zamir E, MD, Smith R.E., MD, Wang RC, MD, **Yiu SC, MD**, Burnstine M, MD, Marback E, MD, Narsing Rao NA, MD. Squamous Cell Carcinoma of the Limbus Extending into the Anterior Segment. *Archives of Ophthalmology.* 120(8): 1106-1107, August 2002.
10. **Yiu SC**. Evaluation of the efficacy of intranasal zinc gluconate (letter). *Clin. Infect Dis* 2002-34: 1657.
11. Scott, G, **Yiu SC**, (Corresponding author) Wasilewski D, Song JA, Smith RE, Combined Esterified Estrogen and Methyltestosterone Treatment for Dry Eye Syndrome in Postmenopausal Women (*AJO* 2005;139:1109-1110).
12. Behrens A, Doyle JJ, Stern L, Chuck RS, McDonnell PJ, and the Dysfunctional Tear Syndrome Group: Azar DT, Dua HS, Horn MM, Karpecki PM, Laibson PR, Lemp MA, Meisler, DM, Murube del Castillo J, O'Brien TP, Pflugfelder SC, Rolando M, Schein OD, Seitz B, Tseng SC, van Setten GB, Wilson SE, **Yiu SC**. "Dysfunctional Tear Syndrome: A Delphi Approach to Treatment Recommendations". (*Cornea*, 2006, Sep; 25 (8): 9007).
13. Zhu Z, Rife L, **Yiu SC**, Trousdale M, Wasilewski D, Siqueira AL Smith RE. A technique for preparation of the corneal endothelial's descemet's membrane complex for transplantation (*Cornea*, 2006, Jul; 25 (6) 705-8).
14. Selvam S, Thomas PJ, Peng, C-A, Trousdale M, Zhu Z, Stevenson D, Schechter JE, Mircheff AK, Jacob JT, Smith RE, **Yiu SC** (Corresponding author). Towards a Tissue-Engineered Tear Secretory System: Functional Lacrimal Gland Acinar Cells Cultured on Matrix Protein-Coated Substrates. (*Journal of Biomedical Materials Research, Part B: Applied Biomaterials* 80B: 192-200, 2007).
15. Khurana RN, LaBree LD, Scott G, Smith RE, **Yiu SC** (Corresponding author). Esterified Estrogens Combined with Methyltestosterone Raise Intraocular Pressure in

- Postmenopausal Women. *American Journal of Ophthalmology*, 2006, Sept: 142(3)-494-5.
16. Selvam S, Thomas PJ, and **Yiu SC** (Corresponding author). Tissue Engineering, current and future approaches to the Ocular Surface Reconstruction. (*Ocular Surface* 2006, July: 4(3)-120-36, Review).
 17. Thomas PB, YH Liu, FF Zhuang, SW Song, S Selvam, Smith RE, Trousdale MD, **SC Yiu**. (Corresponding author) Identification of Undifferentiated Cells in the Limbal Basal Region Using Notch-1. (*Molecular vision*) (2007; 13: 337-344).
 18. Li G, O'Hearn T, **Yiu SC**, Francis BA. Amniotic Membrane Transplantation for Intraoperative Conjunctival Repair During Trabeculectomy with Mitomycin C. *The Journal of Glaucoma J Glaucoma* Sept. 16 (b):521-526, 2007.
 19. **Yiu SC**, (Corresponding author) Thomas P, Nguyen P. Ocular Surface Reconstruction – Recent Advances and Future Outlooks. (*Current Opinion in Ophthalmology*, vol 18, no. 6 p. 509-514, 2007).
 20. Nguyen P and **Yiu SC**. (Corresponding author) Multi-Agent Pharmaceutical Therapy for Modulation of Corneal Allograft Immunologic Rejection. (*Current Insights AAO*, 2007).
 21. Selvam S, Thomas PB, Gukasyan HJ, Yu AS, Stevenson D, Trousdale MD, Mircheff AK, Schechter JE, Smith RE, **Yiu SC**. (Corresponding author) Towards a Tissue-Engineered Tear Secretory System: Transepithelial Bioelectrical Properties of Rabbit Acinar Cell Monolayers on Polyester Membrane Scaffolds. (*Am J Physiology Cell Physiol* 293:C1412 – C1419, 2007).
 22. Reddy HS, Li Y, **Yiu SC**, Irvine J, Huang D (corresponding). Optical Coherence tomography in the Repair of Corneal and Scleral Melts. (*Ophthalmic Surgery, Lasers & Imaging* Vol. 38, No. 6, Nov/Dec, 2007).
 23. Nguyen P, **Yiu SC** (Corresponding author). Review: Ocular Surface Reconstruction – Recent Innovations, Surgical Candidate Selection, and Postoperative Management. (*Expert review of Ophthalmology*, 3(5), 567-584.2008).
 24. Zhou S, Li Y, Lu ATH, Liu P, Tang M, **Yiu SC**, Huang D. Reproducibility of Tear Meniscus Measurement by Fourier-Domain Optical Coherence Tomography. (*Ophthalmic Surgery, Lasers & Imaging*, in press 2009).
 25. Selvam S, Nakamura T, Chang WV, Trousdale MD, Mircheff AK, **Yiu SC** (Corresponding author). Diffusion Studies on Microporous Poly(L-lactic acid) Membranes Fabricated using Solvent-Cast/Particulate Leaching Technique (*Tissue Eng Part C Methods* 2009 Sept.15 (13) 463-74).
 26. McDonald ML, Wang Y, Selvam S, Nakamura T, Chow RH, Schechter JE, **Yiu SC**, and Mircheff, AK. Cytopathology and Exocrine Dysfunction Induced in Ex Vivo Rabbit Lacrimal Gland Acinar Cell Models by Chronic Exposure to Histamine or Serotonin. *IOVS*: 50:3164-3175, 2009.

27. Thomas PB, Samant DM, Zhu Z, Selvam S, Stevenson D, Wang Y, Song SW, Mircheff AK, Schechter JE, **Yiu SC**, Trousdale MD. Long Term Topical Cyclosporine Treatment Improves Tear Production and Reduces Keratoconjunctivitis in Rabbits with Induced Autoimmune Dacryoadentis. (Journal of Ocular Pharmacology and Therapeutic, Jun; 25(3): 285-92, 2009).
28. Nguyen P, Meyyappan M, **Yiu SC** (corresponding author). Applications of Nanobiotechnology in Ophthalmology – Part 1. Ophthalmic Research, 2009 Ophthalmic Res. 2010; 44: 1-6.
29. Liu Y, Kawai K, Khashabi S, Deng C, and **Yiu SC** (corresponding author). Inactivation of Smad4 leads to impaired ocular development and cataract formation. Biochem Biophys Res. Comm. 2010 OCT; 400(4):476-82, Epub 2010 Aug 22.
30. Nguyen P, Barte F, Shinada S, and **Yiu SC** (corresponding author). Management of Corneal Graft Rejection – A case series report and review of the literature (Journal of Clinical & Experimental Ophthalmology, 2010 Sept 29; 1(103)).
31. Strube, YNJ, Conte FJ, Faria C, **Yiu SC**, and Wright KW. Amniotic Membrane Transplantation for Restrictive Strabismus. (Ophthalmology, 2011, Jun; 118(6): 1175-9).
32. Heur M, Tang M, **Yiu SC**, Zhang X, and Huang D. Investigation of Femtosecond Laser Enabled Keratoplasty Wound Geometry Using Optical Coherence Tomography (Cornea, 2011, Aug: 30(8): 889-94).
33. Bujak M, **Yiu SC** (Corresponding Author), Zhang X, Li Y, Huang D. Serial Measurement of Tear Meniscus by Fourier-Domain Optical Coherence Tomography after Instillation of Artificial Tears in Patients with Dry Eyes. (Ophthalmic Surgery, Lasers & Imaging, 2011 Jul-Aug; 42(4): 308-13).
34. Strube, YNJ, Conte FJ, Faria C, **Yiu SC**, and Wright KW. Restrictive Strabismus: Author Reply. (Ophthalmology, 2012, Jan; 119(1): 208-209)
35. Tittler E, Nguyen P, Rue KS, Vasconcelos-Santos DV, Song JC, Irvine JA, Smith RE, Rao NA and **Yiu SC** (Corresponding Author). Early Surgical Debridement in the Management of Infectious Scleritis after Pterygium Excision. (Journal of Ophthalmic Inflammation and Infection, in press 2012).
36. Nguyen P, Huang D, Li Y, Sadda SR, Ramos S, Pappuru RR, **Yiu SC** (Corresponding Author). Correlation between Optical Coherence Tomography-derived Assessments of Lower Tear Meniscus Parameters and Clinical Features of Dry Eye. (Cornea 2012, in press)
37. Nguyen P, Huang A and **Yiu SC** (Corresponding Author). Nanobiotechnology in the Management of Glaucoma. (US Ophthalmic Review 2012, in press).
38. Tittler E, Nguyen P, Bujak M, Zhang X, **Yiu SC**, Huang D. Between-grader Repeatability of Tear Meniscus Measurements Using Fourier Domain Ocular

Coherence Tomography (OCT). (Ophthalmic Surgery, Lasers & Imaging, 2011 Sep-Oct; 42(5): 423-7).

39. Cleary CA, Song J, Tang M, Liu YL, **Yiu SC**, Huang D. Dual Laser-assisted Lamellar Anterior Keratoplasty: a Laboratory Study in Eye Bank Eyes (Cornea, 2012 Feb 28 Epub ahead of print).
40. Nguyen, P, **Yiu SC** (Corresponding Author). Imaging Studies in a case of Infectious Scleritis after Pterygium Excision. (Middle East African Journal of Ophthalmology, 2012; 19:337-9).
41. Mah, F, Milner, M., **Yiu SC**, Donnenfeld E, Conway T, Hollander DA. PERSIST: Physician's Evaluation of Restasis Satisfaction in Second Trial of Topical Cyclosporine Ophthalmic Emulsion 0.05% for Dry Eye: A Retrospective Review (accepted for publication in *Clinical Ophthalmology* 2012).
42. Cason J, **Yiu SC** (Corresponding Author). Acute Hydrops in the Donor Cornea Graft in Non-Keratoconus Patients. MEAJO (Accepted 2012).
43. Nguyen P, Khashabi S, Chopra V, Heur M, Song J, **Yiu SC** (Corresponding Author). Descemet Stripping with Automated Endothelial Keratoplasty: A Comparative Study of Outcome in Patients with Preexisting Glaucoma. (accepted for publication in *Saudi Journal of Ophthalmology*, 2013)
44. **Yiu SC**. Ocular Therapeutics of the Future. (Middle East African Journal of Ophthalmology, 2013 Jan-Mar; 20(1): 1-2.)
45. Nguyen P, **Yiu SC**. Strategies for Local Gene Therapy of Corneal Allograft Rejection. (Middle East African Journal of Ophthalmology, 2013 Jan-Mar, 20 (1): 11-16)

Inventions, Patents, Copyrights (pending, awarded)

1. Bioartificial Lacrimal Gland
Principal Inventor (U.S. publication 2006-0104957, approved)

Extramural Funding (current, pending, previous)

| | |
|-----------|--|
| 1983 | Sigma Xi Grant-In-Aid (\$500.00) |
| 1988 | Fight for Sight, Postdoctoral Fellowship (\$12,000.00) |
| 2003-2007 | Co-Principal Investigator - NEI R03 Title: Identification of Limbal Stem Cells Using Cell Surface Markers. (\$502,635.00, April 2003 – February 2006) (extended to February, 2007). Completed. 30% |
| 2004-2007 | Principal Investigator – Symbigene Inc. – Grant Support – Title: Ocular Inflammation (\$677,000.00). Completed. 30% |
| 2002-2004 | Baxter Junior Award (\$150, 000.00) - Completed |

- 2004-2007 Principal Investigator – NEI R21 Title: “Bioartificial Lacrimal Gland (\$427,075.00, May 2004-April 2006) (extended to April 2007) Completed. 30%
- 2003-2011 Ocular Surface Center Fund – (\$150,000) Principal Investigator 10%
- 2008-2010 LX201-01 (\$84,350) Principal Investigator (completed) 5%
- 2008-2011 NEI Treatment of Anterior Eye Disease with Optical Coherence Tomography. Subcontract from David Huang (\$199,012)-Principal Investigator (completed) 5%
- 2009-2010 Retrospective Chart Review of Patients’ Second Trial of RESTASIS®(cyclosporine ophthalmic emulsion) 0.05% S Preservative-Free (Restasis) Principal Investigator (\$15,000 completed) (Allergan)
- 2010-2011 Keck School of Medicine – Bridge Fund (\$28,000)
- 2011-2013 Artificial Lacrimal Gland - Wilmer Eye Institute Departmental Funding (\$900,000) – Principal Investigator.
- 2012 Ex Vivo Expansion of Cornea Limbal Stem Cells for the Treatment of Ocular Surface Diseases in Saudi Arabia – (SAR 1,999,000) – Principal Investigator. (Approved for funding).
- 2012 Pathogenic Determinants of Pterygia – (\$250,000) – Co-Investigator. (In progress).
- 2012 Comprehensive Molecular Profiling of Ocular Surface Squamous Neoplasia - Co-Investigator (Approved for funding).
- 2012-2014 The Molecular Profiling of Conjunctive Squamous Cell Carcinoma – Co-Investigator (KKESH Wilmer Grant -\$250,000) (In progress).

Research Program Building / Leadership

Dates, name of research / basic science program, role

- 2001-2011 Director, Ocular Surface Center, Doheny Vision Research Center, Doheny Eye Institute, Kekch School of Medicine, University of Southern California
- 2011 – present Program Director, Cornea Stem Cell Laboratory, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia
- 2011 – present Eye Bank
- 2012 – present Cornea Society Stem Cell Committee

EDUCATIONAL ACTIVITIES

Educational Publications (see notes re: format under Research Publications, above) Peer-reviewed, original, educational publications should be listed first, followed by the remaining categories of publications.

Books and Chapters:

Mircheff AK, **Yiu SC**, Lambert RW, Bradley ME, McDonough AA, Wood RL. Subcellular approaches for the study of exocrine ion transport. In: Martinez JR, Ed. Epithelial Ion Transport in Cystic Fibrosis. Columbia: University of Missouri Printing Service, 1986:9-27.

Mircheff AK, Bradley ME, Hensley CB, van Corven EJJM, **Yiu SC**, Lambert RW. Use of phase partitioning in multidimensional subcellular fractionation. In: Fisher D, Sutherland IA, eds. Advances in Separations Using Aqueous Phase Systems in Cell Biology and Biotechnology. London:Plenum Press, pp. 67-80.

Mircheff AK, Bradley ME, **Yiu SC**, Lambert RW. Rapid Stimulation-associated changes in exocrine Na, K-ATPase subcellular distribution. Current Topics in Membranes and Transport 34:121, 1989

Yiu SC. Identification of Corneal Limbal Stem Cell Markers. Summary of Proceedings Epithelial Cell Biology: Implications for the Ocular Surface P.7-8 Samuel C. Yiu, MD, PhD, editor., 2003

Memarzadeh, F, **Yiu SC** (Corresponding author), Smith RE. The Cornea in Systemic Disease. (Duane Clinical Opthal, Vol. 4, Chap. 15, 2007).

Nguyen P, Khashabi S, and **Yiu SC**. Ocular Surface Reconstitution (Progress in Molecular and Environmental Bioengineering – from Analysis and Modeling to Technology Applications. Chapter 13 pp291-322, 2011).

Mircheff A, **Yiu SC**. Chapter 33 Hormonal Therapies (In Press)

Submitted

Nguyen P, Barte F, Kang SY, Shinanda S, Song JC, **Yiu SC**. A Novel Pharmaceutical Protocol for Management of Immunogenic Rejection Following Repeat Penetrating Keratoplasty in High-Risk Patients. (Submitted)

Tse B, Heur M, **Yiu SC**. Decemet's Stripping Automated Endothelial Keratoplasty Graft Failure Associated with Recrudescence of Cystoid Macular Edema. (Submitted)

Heur M, **Yiu SC**. Repair of Spontaneous Corneal Perforation in Pellucid Marginal Degeneration using Amniotic Membrane. (Submitted)

Nguyen P, Khashabi S, Chopra V, Francis B, Memarzadeh F, Heur M, Song JC, **Yiu SC**. Descemet Stripping with Automated Endothelial Keratoplasty in Glaucoma. (Submitted)

Cason J, Ahmad H, Heur M, **Yiu SC**, Song J. Use of the Novel Y-Suture Technique to Reduce Detachments in Descemet's Stripping Automated Endothelial Keratoplasty. *British Journal of Ophthalmology*. (Submitted)

Selvam S, Mircheff A, **Yiu SC**. Diverse Mediators Modulate the Chloride Ion Fluxes that Drive Lacrimal Fluid Production. *Investigative Ophthalmology & Visual Science* (Submitted)

Abstracts

1. Wright KW, Edelman P, Walonker F, **Yiu SC**. Fixation preference testing in the diagnosis of amblyopia. *Invest Ophthalmol Vis Sci*. 1984; 25(ARVO Suppl):75.
2. **Yiu SC**, Ingham CE, Hales KL, Mircheff AK. Carbachol-induced changes in lacrimal gland Na, K-ATPase distribution. *Invest Ophthalmol Vis Sci*. 1985; 26(ARVO Suppl):15.
3. **Yiu SC**, Ingham CE, Mircheff AK. Stimulation of lacrimal glands increases the yield of Na-K-ATPase in isolated plasma membranes. *Fed Proc* 1986; 45:4288.
4. Mircheff AK, Ingham CE, Lambert RW, **Yiu SC**. Na/H antiporter in exocrine gland basal-lateral and intracellular membranes. *Fed Proc* 1986; 45:510.
5. Peters CL, Bradley ME, **Yiu SC**, Mircheff AK. Muscarinic receptors in cell surface and intracellular membranes of rat exorbital lacrimal gland. *Invest Ophthalmol Vis Sci*. 1986; 27(ARVO Suppl):26.
6. Bradley ME, Lambert RW, **Yiu SC**, Mircheff AK. Early stimulation-induced redistribution of muscarinic acetylcholine receptors in rat lacrimal acinar cells. *Invest Ophthalmol Vis Sci*. 1987; 28(ARVO Suppl):157.
7. Brandt JD, **Yiu SC**, Mircheff AK. Secretagogue-induced basolateral membrane internalization in isolated lacrimal acini. *Invest Ophthalmol Vis Sci*. 1988; 29(ARVO Suppl):90.
8. Lambert RW, **Yiu SC**, Mircheff AK. Sodium/proton and chloride/bicarbonate 1988; 29(ARVO Suppl):56.
9. Mircheff AK, Bowen JW, **Yiu SC**, McDonough AA. Subcellular fraction study of Na, K-ATPase assembly in MDCK-T cells. (*FASEB Journal* 1989; vol. 3:A874).
10. **Yiu SC**, Brandt JD, Mircheff AK. Secretagogue induced Na, K-ATPase recruitment and basolateral membrane recycling in isolated lacrimal gland acini. (*J. Gen Physiol* 1988 vol. 92:22a).
11. **Yiu SC**, Dartt DA. Calcium/phospholipid-dependent protein phosphorylation in rat lacrimal gland cytosol. *Invest Ophthalmol Vis Sci*. 1989; 30(ARVO Suppl):73.

12. Hodges RR, Dicker DM, **Yiu SC**, Dartt DA. Comparison of roles of protein kinase C, inositol triphosphate, and Ca in cholinergic and alpha-1 adrenergic agonist stimulation of lacrimal gland protein secretion. *J.Gen Physiol* 1989 vol. 94: 29a.
13. **Yiu SC**, Jollimore CA, Tatton N, and Kelly M.E.M. (-)-Deprenyl increases cell survival and decreases apoptosis in rat retinal cultures following trophic withdrawal. *Invest Ophthalmol Vis Sci.* 1997; 38(ARVO Suppl): S159.
14. **Yiu SC**, Barron E, Rodriguez A, Trousdale M, Song J, Irvine J, and Smith RE. Identification of Putative Human Limbal Stem Cells Based on Cell Surface Phenotype. *Invest Ophthalmol Vis Sci*; 2001, 5477, vol. 42(4).
15. **Yiu SC**, Barron E, Rodriguez AR, Woodley D, Trousdale MD, Irvine JA, Smith RE. High Expression Level of E-Cadherin within the Basal Layer of Human Corneolimbic Epithelium. *Invest Ophthalmol Vis Sci*; 2002: 43.
16. Pang NKY, Wilson J, Sheety M, Affeldt J, **Yiu SC**. Osmolarity-Induced. Size Changes in Soft Contact Lenses. (CLAO, 2002).
17. Pang NKY, Wilson J, Sheety M, Affeldt J, **Yiu SC**. Pre-Shrunk Therapeutic Lenses and Dry Eye Syndrome. (CLAO, 2002).
18. Albini TA, **Yiu SC**, Song JC. The Results of Primary Posterior Capsulotomy and Anterior Vitrectomy as Compared to Traditional Extra capsular Cataract Extraction with Intraocular Lens Implantation in Pediatric Patients. (*Invest Ophthalmol Vis Sci*; 2002: 43).
19. **Yiu SC**, Wasilweski D, Barron E, Rodriguez AR, Woodley D, Trousdale MD, Song JC, Irvine JA, Stephens D, and Smith RE. High Expression Level of β -1 integrins Primary Culture of Human Corneolimbic Explants. (*Invest Ophthalmol Vis. Sci.*, 2003).
20. Wasilweski D, Cui J, Smith RE, Rife L, Mahmoud M, **Yiu SC**. α -Melanocyte-stimulating hormone (MSH) as an inhibitor of traumatic ocular inflammation in rats (*Invest. Ophthalmol. Vis. Sci.*, 2003).
21. Scott G, Wasilewski D, Siqueira AL, Song JA, Irvine JA, Smith RE, and **Yiu SC**. Estratost Therapy for Dry Eye Syndrome (presented at the Annual AAO Meeting, November, 2003).
22. **Yiu SC**, Ying N, Trousdale MD, and Smith RE. Co-localization and High Expression Level of β -1 integrins and K3 Keratin in Expansion of Human Corneolimbic explants, (*Invest. Ophthalmol. Vis. Sci.*, 2004).
23. Zhu J, Wasilewski D, Chen W, Nouranini S, Fu XL, Pritzlaff C, Ying N, Cui J, Smith RE, Rife L, Mahmoud M, Scott G, **Yiu SC**. Genetically engineered bacteria expressing α -Melanocyte-stimulating hormone (α -MSH) as an inhibitor of traumatic ocular inflammatory reaction in rats, (*Invest. Ophthalmol. Vis. Sci.*, 2004).
24. Ying N, Siqueira AL, Wasilewski D, Chen W, Nouranini S, Fu XL, Pritzlaff C, Cui J, Smith RE, Rife L, Mahmoud M, Scott G, **Yiu SC**. Inhibition of endotoxin-Induced

- Uveitis in rats using genetically engineered bacteria expressing α -Melanocyte-stimulating hormone (α - MSH), (Invest. Ophthal.Vis. Sci., 2004).
25. Khurana RN, Scott G, Smith RE, **Yiu SC**. Esterified Estrogens combined with Methyltestosterone Rais Intraocular Pressure in Postmenopausal Women. (Invest. Ophthal. Vis Sci., 2004).
 26. S Shivaram, **SC Yiu**, RE Smith, MD Trousdale, CA Peng, Z Zhu, D Stevenson, AK Mircheff, T Nakamura, JT Jacob. Analysis of rabbit lacrimal gland acinar cells cultured on ECMP coated silicone sheets (Invest. Ophthal.Vis. Sci., 2005).
 27. Z Zhu, L Rife, **SC Yiu**, MD Trousdale, and RE Smith. Evaluation of Human Endothelium-Descemet's Membrane preparation. (Invest. Ophthal.Vis. Sci., 2005).
 28. C Ding, Z Zhu, Y Zheng, J Wong, **SC Yiu**, AK Mircheff, and JE Schechter. Pregnancy and the Lacrimal Gland: Where have all the Hormones Gone?. (Invest. Ophthal.Vis. Sci., 2005).
 29. PB Thomas, YH Liu, FF Zhuang, SW Song, S Selvam, RE Smith, MD Trousdale, **SC Yiu**. Identification of Undifferentiated Cells in the Limbal Basal Region Using Notch-1 (Invest. Ophthal.Vis. Sci., 2006).
 30. S Selvam, PB Thomas, CA Peng, MD Trousdale, D Stevenson, JE Schechter, AK Mircheff, JT Jacob, RE Smith, **SC Yiu**. Bioengineering an Artificial Lacrimal Gland: Study of Functional Rabbit Lacrimal Gland Acinar Cells Cultured on Matrix Protein-Coated Substrates (Invest. Ophthal. Vis. Sci., 2006).
 31. HS Reddy, Y Li, **SC Yiu**, JA Irvine, D Huang. Imaging of Corneal and Scleral Melts with Optical Coherence Tomography (Invest., Ophthal. Vis., Sci., 2006).
 32. S Selvam, PB Thomas, HJ Gukasyan, AS Yu, D Stevenson, MD Trousdale, AK Mircheff, JE Schechter, **SC Yiu**. Bioengineering an Artificial Lacrimal Gland: Electrophysiological Properties of Functional Rabbit Lacrimal Gland Acinar Cells Cultured on Polyester Membrane Scaffolds. (Invest. Ophthal. Vis. Sci., 2007).
 33. **SC Yiu**, PB Thomas, YH Liu, S Selvam, MD Trousdale, RE Smith. Notch-1 Immunoexpression in Human and mouse cornea. (Invest. Ophthal. Vis. Sci., 2007).
 34. F Barte, B Francis, S Shinada, **SC Yiu**. Systemic Immunosuppression in the Management of Corneal Graft Rejection. (Invest. Ophthal. Vis. Sci., 2007).
 35. H Liu, FF Zhuang, **SC Yiu**, RE Smith. M11, a mammalian homolog of the *Drosophila trithorax* gene, functions as a transcriptional repressor on the *Msx2* Proximal promoter. (Invest. Ophthal. Vis. Sci., 2007).
 36. Selvam S, Nakamura T, Samant DM, Thomas P, Stevenson D, Mircheff AK, Trousdale MD, Smith RE, **Yiu SC**. Altered Bioelectrical Properties of Rabbitt Acinar Cell Monolayers Induced by Acute and Chronic Stimulation with Histamine and Sertonin. (Invest. Ophthal. Vis. Sci., 2008).

37. Nguyen P, **Yiu SC**, Song JC. A Novel Pharmaceutical Protocol for Management of Immunogenic Rejection following Repeat Penetrating Keratoplasty. (Invest. Ophthalm. Vis. Sci., 2008).
38. Zhou S, Li Y, Liu P, **Yiu SC**, Huang D. Reproducibility of Tear Meniscus Measurement by Fourier Domain Optical Coherence Tomography. (Invest. Ophthalm. Vis. Sci., 2008).
39. Mircheff AK, McDonald ML, Wang Y, Nakamura T, Selvam S, **Yiu SC**, Trousdale MD, Schechter JE. Derangement of Lacrimal Acinar Function during Chronic Stimulation with Inflammatory Mediators. (Invest. Ophthalm. Vis. Sci., 2008).
40. Kim EE, Song JC, **Yiu SC**, Memarzadeh F, Rao NA. Histologic Analysis of Descemet's Membrane and Its Clinical Relevance in DSAEK. Doheny Eye Institute, Los Angeles, CA. (Invest. Ophthalm. Vis. Sci., 2009).
41. Tittler EH, Nguyen P, Song JC, **Yiu SC**. Surgical Debridement of Infectious Scleritis after Pterygium Excision. Ophthalmology, Doheny Eye Institute, Los Angeles, CA. (Invest. Ophthalm. Vis. Sci., 2009).
42. **Yiu SC**, Selvam S, Nakamura T, Wang Y, Samant DM, Thomas PB, Trousdale MD, Mircheff AK. Inflammatory Mediators Induce Aberrant Basal-Lateral β -Hexosaminidase Secretion and Up-Regulate Inflammatory Cytokine. Ophthalmology, Physiology and Biophysics. (Invest. Ophthalm. Vis. Sci., 2009).
43. Selvam S, Nakamura T, Samant DM, Thomas PB, Mircheff AK, Trousdale MD, **Yiu SC**. Chronic IL-1 β and IL-6 Decrease CI Secretion in a Novel Rabbit Lacrimal Epithelial Monolayer Model. (Invest. Ophthalm. Vis.Sci., 2009).
44. Liu T, Khashabi S, **Yiu SC**. Keratoplasty II/Keratoprosthesis/Corneal Surgery. Ophthalmology, Doheny Eye Institute, Los Angeles, CA. (Invest.Ophthalm. Vis.Sci. 2010).
45. Yu Z, Zhao J, Zhang J, Liu YH, **Yiu SC**, Lallemand Y, Bensoussan V, Zhu L. Development and Growth of the Lens.Ophthalmology, Doheny Eye Institute, Los Angeles, CA. (Invest.Ophthalm.Vis.Sci. 2010).
46. Kim LA, Heur M, Song J, **Yiu SC**, Memarzadeh F, Fawzi AA. Vitreoretinal Surgery II. Doheny Eye Institute Los Angeles, CA (Invest.Ophthalm.Vis.Sci. 2010).
47. Bujak MC, Huang D, Sadda SR, Li P, Nguyen P, Pappuru RK, **Yiu SC**. Dry Eye II Diagnosis, Mechanism and Nerves. Ophthalmology, Doheny Eye Institute, Los Angeles, CA. (Invest.Ophthalm.Vis.Sci. 2010).
48. Nguyen P, Huang D, Sadda SR, Pappuru RR, Ramos S, Li Y, **Yiu SC**. Dry Eye II. Diagnosis, Mechanism and Nerves. Ophthalmology, Doheny Eye Institute, Los Angeles, CA (Invest.Ophthalm.Vis.Sci. 2010).
49. Khashabi S, Liu Y, Nguyen P, **Yiu SC**. Corneal Stem Cells. Ophthalmology, Doheny Eye Institute, Los Angeles, CA (Invest.Ophthalm.Vis.Sci. 2010).

50. Liu Y, Khashabi S, **Yiu SC**, Liu Y. Ocular Structures in Human & Animal Models. Ophthalmology, Doheny Eye Institute, Los Angeles, CA (Invest.Ophthal.Vis.Sci. 2010).
51. Ahmad H, Heur M, **Yiu SC**, Song J, Smith RE. Use of the Novel Y-Suture Technique to Reduce Detachments in Descemet's Stripping Automated Endothelial Keratoplasty. World Congress, April 2010.
52. Strube YNJ, Conte FJ, Faria C, Wright KW, **Yiu, SC**. Amniotic Membrane transplantation for restrictive strabismus. AAO, Chicago 2010.
53. Mah F, Milner M, **Yiu SC**, Donnenfeld E, Conway T, Hollander DA. A retrospective chart review of physician satisfaction with a second trial of restatis (Cyclosporine Ophthalmic Emulsion). AAO, 2010 Chicago.
54. Cason JB, **Yiu, SC**. Hydrops in the donor Cornea Graft of Non-keratoconus Patients. Invest. Ophthal. Vis Sci. 2011.
55. Hwang AM, Rue KS, Francis BA, **Yiu SC**. Analysis of refractive outcome and complications of descemet's stripping and automated endothelial keratoplasty (DSAEK) with sclera-fixated sutured posterior chamber intraocular lens (Invest. Ophthal Vis Sci 2011).
56. Khashabi S, Nguyen P, Memarzadeh F, Chopra V, Francis B, Heur M, Song J, **Yiu SC**. Visual outcome and intraocular pressure after descemet's stripping with automated endothelial keratoplasty (Invest. Ophthal Vis Sci 2011).
57. Nguyen P, Khashabi, S, Memarzadeh F, Chopra V, Francis BA, Heur M, Song J, **Yiu SC**. Recipient risk factors for complications after descemet stripping with endothelial keratoplasty (Invest. Ophthal Vis Sci 2011).
58. Cleary CA, Song J, Tang M, Liu YL, **Yiu SC**, Huang D. Dual laser-assisted lamellar anterior keratoplasty: A laboratory study in eye bank eyes (Invest. Ophthal. Vis Sci 2011).
59. Chapman KO, Khashabi S, Chiu G, **Yiu SC**. Prosthetic replacement of the ocular surface ecosystem (PROSE) (Invest. Ophthal Vis Sci 2011).
60. Sun G, Elisseeff JH, McDonnell PJ, **Yiu SC**. Decellularized Rabbit Lacrimal Gland as a Scaffold for Engineering an Artificial Lacrimal Gland. (Invest. Ophthal Vis Sci 2012).
61. **Yiu SC**, Sun G, Huang H, Luttly GA, Song J, Edward D. Keratocyte Gene Expression in the normal central cornea. (Invest. Ophthal Vis Sci 2012)

Teaching

1984 Taught and supervised Klane Hales, a Summer Research Fellow summer and first-year medical student at USC Medical School: Subcellular fractionation of lacrimal gland and determination of membrane marker enzymes

- 1985 Taught and supervised Chris Peters, a first-year medical student at summer USC Medical School: Subcellular fractionation of lacrimal gland and determination of membrane marker enzymes
- 1999 Lecturing 4th year medical students on “red eye” and “surgical Indications for cataract
- 1999-2001 Surgical instructor for senior ophthalmology residents
- 2001-2011 Medical Student Adviser
- 2002-2011 Course Director-Introduction to Clinical Medicine (Ophthalmology)
- 2001-2011 Director of Medical Student Education in Ophthalmology
- 2002-2011 Course Director-Basic Ophthalmology Rotation (Year III & IV Medical Students)
- 2002-2011 Course Director-Advanced Ophthalmology Rotation (Year III & IV Medical Students)
- 2011- present Member, Medical Education Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia

Scientific Presentation/Invited Lectureship

1. Normogram for lasik surgery. Invited speaker, CME Conference. Doheny Eye Institute, Dept of Ophthalmology, Keck School of Medicine, University of Southern California, November 1999
2. Hormonal therapy for dry eye diseases. Invited speaker, Doheny Days, Doheny Eye Institute, Dept of Ophthalmology, Keck School of Medicine, University of Southern California, June 2000.
3. New treatment alternative for ocular surface disorders and dry eye. New Approach to dry eye treatment, Speaker, CME Conference, Doheny Eye Institute, Dept of Ophthalmology, Keck School of Medicine, University of Southern California, 2001
4. New approaches for ocular surface reconstruction. Isaac Bekhor, Vision Research Seminar. Invited speaker, Doheny Eye Institute, Department of Ophthalmology, Keck School of Medicine, University of Southern California, March 2001
5. Transplantation of Corneal Limbal Stem Cells, Grand Round Speaker, Department of Ophthalmology, Loma Linda California, May 2002
6. Identification of Corneal Stem Cells Using Cell Surface Markers. The Second Global Chinese Ophthalmic Conference. Invited Speaker, Taipei, Taiwan June 2002
7. Epithelial Cell Biology: Implications for the Ocular Surface. Seminar Director and Speaker, Doheny Eye Institute Annual Symposium, October 2002.

8. The Future directions in Limbal Stem Cells Transplantation, Invited Speaker, Loma Linda University, CME Conference, March 2003.
9. New Approaches to Ocular Surface Disorders. Grand Round Speaker, University of British Columbia, Vancouver BC, Canada, March 2003
10. New Modalities for dry eye disease. Speaker/Moderator, Doheny Eye Day. DohenyEye Institute, Dept of Ophthalmology, Keck School of Medicine, University of Southern California, June 2003
11. A New Approach to Treatment of Dry Eye Disease. Invited Speaker, PCOOS, San Diego, June 2003
12. Delphi International Panel Meeting on Dry Eye Syndrome, Invited Panelist, John Hopkins University, Baltimore MD, October 2003
13. Expression of β -1 integrins remains high in expansion of Human Cornea Limbal explants. Presentor, First International Conference on Epithelial Technologies and Tissue Engineering, Singapore, December 4-6, 2003
14. Ocular Surface Disorders: New Modalities in Management & Treatment. Invited Speaker, PCOOS, Hawaii, June 2004
15. Management of Dry Eyes Prior to Lasik Surgery. Invited Speaker, CME Conference. Doheny Eye Institute, Dept of Ophthalmology, Keck School of Medicine University of Southern California, October 2004
16. CME Course, Director: Dry Eye, Doheny Eye Institute, Los Angeles, CA, April, 2005.
17. Panelist at the Cornea World Congress V, Washington, DC, April, 2005.
18. Management of Dysfunctional Tear Syndrome, Invited Speakers, PCOOS, Vancouver, June 2005.
19. Invited Speakers, "Bioartificial Lacrimal Gland". Regenerative Ocular Biology, Laguna Beach, California, September, 2005.
20. Invited Faculty: State of the Art Conference on the Management of Chronic Dry Eye, National Eye Institute, November 19, 2005.
21. Visiting Professor, Beijing Eye Institute, Beijing China, December 24-29, 2005.
22. Invited Speaker "Management of Dysfunctional Tear Syndrome". L.A. Eye Research Study Group, January 16, 2006.
23. CME, Course Director: Management of Dry Eye, Los Angeles, CA, April 9, 2005.
24. Bioengineered a Bioartificial Lacrimal Gland, Speaker, Doheny Days, Doheny Eye

- Institute, Los Angeles, CA, June 16-17, 2006.
25. Southern California College of Optometry Alumni Reunion Weekend CE Program: The Delphi approach to the management of Dry Eye Syndrome, October 8, 2006.
 26. Allergan Dry Eye Advisory Board, New York, New York, October 12-14, 2006.
 27. Visiting Professor Henan Eye Institute, China, November 5-7, 2006
 28. Visiting Professor Dalhousie University, Halifax Nova Scotia, Canada, November 20-23, 2006.
 29. Triple Therapies for the Management of Corneal Graft Rejection. Doheny Eye Institute, CME, Conference, December 9, 2006.
 30. CME Course Director, Ocular Surface Diseases, Doheny Eye Institute, March 10, 2007.
 31. Invited Speaker, PCOOS, Hawaii, June 21-27, 2007.
 32. Invited Speaker, Rochester University, Rochester, New York, May 18-19, 2007.
 33. Invited speaker, Chinese National Congress of Ophthalmology, Henan Province, China, August 22-27, 2007.
 34. CME Speaker: Cornea Day, Doheny Eye Institute, September 2007.
 35. L.A. Eye Society, Panelist. September, 2007.
 36. CME Course Director: Corneal/External Disease: Emerging Strategies for Diagnosis & Disease Management, Doheny Eye Institute, May 10, 2008.
 37. CME Speaker, Doheny Eye Institute, October 11, 2008
 38. Invited Speaker, PCOOS, Newport Beach, CA 2008.
 39. Invited Speaker and section chair, World Ophthalmology Congress, Hong Kong, China, June 28 – July 2, 2008.
 40. Visiting Professor, Zhongshan Eye Center, July 5, 2008
 41. Visiting Professor, Henan Eye Institute, July 5-6, 2008
 42. Allergan, Ophthalmology Advisory Board meeting, AAO, Atlanta, GA, November 9, 2008
 43. INSPIRE, Meibomian Gland Disease Advisory Board meeting, Atlanta, GA, November 6, 2008
 44. Visiting Professor, UCSF, San Francisco, CA, February 12, 2009

45. Invited Speaker, McGee Eye Institute, Oklahoma City, OK, February 26-27, 2009
46. Speaker and Moderator, USC/Doheny Eye Institute, Los Angeles, CA, June 14-15, 2009
47. Invited Speaker, Eye Institute, University of Hong Kong, Hong Kong, July 28, 2009
48. Invited Speaker, Atlantic Eye Symposium, Halifax, Nova Scotia, September 18-20, 2009
49. Visiting Professor, University of Western Ontario, London, Ontario, September, 2009
50. INSPIRE, Meibomian Gland Disease Advisory Board meeting, San Francisco, CA, October, 2009.
51. Visiting Professor, Yale University, New Hampshire Connecticut, April, 2010.
52. Visiting Professor, New York State University Stony Brook, May, 2010
53. Invited Speaker, WOC, Berlin, Germany, June 2010.
54. Speaker and Moderator, USC/Doheny Eye Institute, Los Angeles, CA , June 11-12, 2010
55. Visiting Professor, Harin No. 2 Hospital, Harbin, China, June, 2010.
56. Keynote Speaker, Harbin Provincial Ophthalmology Meeting, Harbin, China, July 2010.
57. Invited Speaker, Allergan Training Course, Irvine, CA. November 17-18, 2010
58. Invited Speaker, Allergan Training Course, Dana Point, CA. December 14, 2010
59. CME Course Director Ocular Surface Diseases & Dry Eye disorders, USC/Doheny Eye Institute, Los Angeles, CA. December 11, 2010
60. Visiting Professor, UBC, Vancouver: Ocular Surface Reconstruction: The Past, Present, Future. September 27, 2011
61. Invited Speaker, IOSS, Goa, India: Ocular Surface Reconstruction - Recent Approaches and Innovations, Nov 15, 2011
62. Tissue Engineering: Is this the future of Keratoplasty. Invited Speaker, Keratoplasty Conference, King Saud University, Riyadh, Saudi Arabia. December 5-6, 2011
63. Prospective Clinical Trial, KKESH Research Course, January 15, 2012
64. Ocular Surface Reconstruction: The Past, Present, Future – King Khaled Eye Specialist

Hospital, Grand Round. January 15, 2012.

65. Stem Cell Therapy: An update. Italian Cornea Congress, Rome, Italy, February 22-24, 2012.
66. Stem Cell Research: Past, Present & Future, Ophthalmology Highlights Symposium, Dr. Soliman Fakeeh Hospital, Jeddah, Saudi Arabia, May 23-24, 2012
67. Ocular surface disease and dermatological disease - are they related? Visiting Professor. Department of Dermatology, Johns Hopkins, June 13, 2012
68. Bacterial and Viral Keratitis. Invited Speaker. International Ocular Inflammation Society Siem Reap, Cambodia December 7-9, 2012

Mentoring (pre- and post-doctoral)

Post-Doctoral Fellows:

- | | |
|-----------|---|
| 2002-2003 | Daniel Wasilewski, MD, Post-doctoral Fellow |
| 2003 | Alexandre Lass Siqueira, MD, Post-doctoral Fellow |
| 2005-2006 | Song Sang-Wroul, MD Post-doctoral fellow |
| 2008-2010 | Ying Liu, MD Post-doctoral fellow |
| 2010-2012 | Guoying Sun, MD Post-doctoral fellow |
| 2012 – | Hong He, MD, Post-doctoral fellow |
| 2012 – | Hui Lin, MD, Post-doctoral fellow |

Pre-Doctoral Fellows:

- | | |
|-----------|---|
| 2004-2008 | Shivaram Selvam, PhD student, Dept. of Chemical Engineering, University of Southern California. (Principal mentor of his Ph.D. thesis) |
| 2004-2006 | Rasheda Hawk, PhD. student, Dept. of Physiology & Biophysics, University of Southern California. (PhD thesis: Committee member) |
| 2005-2006 | Michelle McDonald, Msc. Student, Dept. of Physiology & Biophysics, University of Southern California. (Master thesis: Committee member) |

Clinical Fellows:

- | | |
|-----------|--------------------------------------|
| 2001-2002 | Samir Shah, M.D., Todd Johnson, M.D. |
|-----------|--------------------------------------|

2002-2003 Soma Agarwal, M.D., Suhas Tuli, M.D.

2003-2004 John Grant Tew, M.D., Michael Wu, M.D.

2004-2005 Anne Ko, M.D., Tonica Johnson, M.D.

2005-2006 Timothy Atmajian, M.D., FarnazMemarzadeh, M.D.

2006-2007 Derrick Montgomery, M.D., Bibiana Reiser, M.D.

2007-2008 Sandhya Iyer, M.D., and Victoria Chen-Espinoza, M.D.

2008-2009 Martin Heur, M.D., and Lisa Hwang, M.D.

2009-2010 Mathew Bujak, MD, and Habeeb Ahmad, MD

2010 -2011 John Cason, MD, and Anita Hwang, MD

2011 Samira Awaji, MD, Mosa Harby, MD, Mohanna Jindan, MD, Sami Khan, MD, Ammar Mahmood, MD, Sultan Zaaidi, MD

2011-2012 Abdullah Abubakar, MD, Naif Al-Ali, MD, Turki Al-Ghamdi, MD, Saad Al-Harbi, MD, Abdulmajid Jaethen, MD, Nasser Al-Sabaani MD

2012-2013 Walid Barakat, MD, Safa'a Beheiri, MD, Mohammad Al-Gefary, MD, Adel Al-Harhi, MD, Salem Al-Malki, MD, Mutlaq Al-Otaibi MD, AlBaraa Al-Qassimi, MD

2013-2014 Waseem Aalam, MD, Waleed Dhabaan, MD, Abdulrahman Khairallah, MD, Sultan Rashidi, MD, Naif Sulaimani, MD, Salem Zaid, MD.

Resident:

2009- 2011 Pho Nguyen, MD

Medical Students:

2001-2008 2003-Garrett Scott

2004-Ramzi Azzam

2006-Felise Barte

2007-2008- Pho Nguyen

2008-Brian Tse

2008-Neal Palejawala

2008-2010- Ethan Tittler
2009- Timothy Hsia
2009- Tin Tin-Liu
2009-present - Shabnam Khashabi
2010- Kelly Rue

Undergraduate:

2012 – Justin Lee

Educational Program Building / Leadership

2001-2011 Director of Medical Student Education in Ophthalmology
2002-2011 Member of Education Policy Committee, Keck School of
Medicine, University of Southern California
2002-2011 Member of Clinical Curriculum Committee, Keck School of
Medicine, University of Southern California
2009-2011 Association of University Professor of Ophthalmology (AUPO)
Associate member

Educational Extramural Funding (current, pending, previous)
Grants or contracts obtained to support an educational initiative.

GRANT SUPPORT

1983 Sigma Xi Grant-In-Aid (\$500.00)
1988 Fight for Sight, Postdoctoral Fellowship (\$12,000.00)
2003-2007 Co-Principal Investigator - NEI R03 Title: Identification of Limbal Stem
Cells Using Cell Surface Markers. (\$502,635.00, April 2003 – February
2006) (extended to February, 2007). Completed. 30%
2004-2007 Principal Investigator – Symbigene Inc. – Grant Support – Title: Ocular
Inflammation (\$677,000.00). Completed. 30%
2002-2004 Baxter Junior Award (\$150, 000.00) - Completed
2004-2007 Principal Investigator – NEI R21 Title: “Bioartificial Lacrimal Gland
(\$427,075.00, May 2004-April 2006) (extended to April 2007)
Completed. 30%

- 2003-2011 Present Ocular Surface Center Fund – (\$150,000) Principal Investigator 10%
- 2008-2010 LX201-01 (\$84,350) Principal Investigator (completed) 5%
- 2008-2011 NEI Treatment of Anterior Eye Disease with Optical Coherence Tomography. Subcontract from David Huang (\$199,012)-Principal Investigator (in progress) 5%
- 2009-2010 Retrospective Chart Review of Patients’ Second Trial of RESTASIS®(cyclosporine ophthalmic emulsion) 0.05% S Preservative-Free (Restasis) Principal Investigator (\$15,000 completed) (Allergan)
- 2010 - Keck School of Medicine – Bridge Fund (\$28,000)
- 2011-2013 Artificial Lacrimal Gland - Wilmer Eye Institute Departmental Funding (\$900,000) – Principal Investigator.
- 2012 Ex Vivo Expansion of Cornea Limbal Stem Cells for the Treatment of Ocular Surface Diseases in Saudi Arabia – (SAR 1,999,000) – Principal Investigator. (Approved for funding).
- 2012 Pathogenic Determinants of Pterygia – (\$250,000) – Co-Investigator. (In progress).
- 2012 Comprehensive Molecular Profiling of Ocular Surface Squamous Neoplasia - Co-Investigator (Approved for funding).
- 2012-2014 The Molecular Profiling of Conjunctive Squamous Cell Carcinoma – Co-Investigator (KKESH Wilmer Grant -\$250,000) (In progress).

CLINICAL ACTIVITIES

Certification

California A68541
 Medical Council of Canada 85833
 Maryland Board of Physicians D73528
 American Board of Ophthalmology,
 (Board Certified May, 2004)

Clinical (Service) Responsibilities (dates, specialty, role, time commitment)

2001-2011 Cornea, External & Refractive Surgery – Attending physician, 65% time commitment

Clinical Program Building / Leadership

Dates, name of clinical program, role

- 2009-2011 Medical Director, Rosenthal Clinic, Doheny Eye Institute, Keck School of Medicine, University of Southern California
- 2010-2011 Co-Director, Cornea Service, Department of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California
- 2011 – Chief, Anterior Segment Division, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2011 - Member, Medical Education Committee, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.
- 2012 - Co-Director – Surgical Training Wet Lab, King Khaled Eye Specialist Hospital, Riyadh, Saudi Arabia.

Clinical Extramural Funding (current, pending, previous)

Grants or contracts obtained to support a clinical initiative.

For each grant or contract please provide the following information in this format:

- Dates, title
- Identification number
- Sponsor
- Total direct cost
- Principal Investigator
- Your role, your percent effort
- Notes

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments (date, committees)

Director of Medical Student Education in Ophthalmology, Dept of Ophthalmology, Keck School of Medicine, University of Southern California, 2002 – present

Member of Education Policy Committee, Keck School of Medicine, University of Southern California, 2002 – 2011

Member of Clinical Curriculum Committee, Keck School of Medicine, University of Southern California, 2002 – 2011

Assistant Professor (tenure track) Department of Physiology & Biophysics, Keck School of Medicine, University of Southern California, 2003 - 2009

Director of External, Cornea & Refractive Surgery Fellowship, Doheny Eye Institute,

Department of Ophthalmology, Keck School of Medicine 2003 – 2011

LCME Education Review Committee 2004 – 2011

Medical Student Research Steering Committee, Keck School of Medicine, University of Southern California, 2006 – 2011

Pacific Coast of Ophthalmology & Otolaryngology – Planning Committee, 2006 – 2011.

Association of University Professors of Ophthalmology (AUPO) Consortium of Medical Education – member 2007 – 2011

Eye Bank Association of America's Accreditation Board Member – 2008 – 2011

Associate Professor (clinical track), Dept of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California, 2009 – 2011

Associate Professor, Dept of Physiology & Biophysics, Keck School of Medicine, University of Southern California 2009 – 2011

Medical Director, Rosenthal Clinic, Doheny Eye Institute, Keck School of Medicine, University of Southern California, 2009 – 2011

Association of University Professor of Ophthalmology (AUPO) Associate Member
2009 – 2011

Tissue Bank International – International Medical & Scientific Advisory Committee Member.
2010 – present

Los Angeles Eye Society – Program Chair, 2010 – 2011

Co-Director, Cornea Service, Department of Ophthalmology, Doheny Eye Institute, Keck School of Medicine, University of Southern California, 2010 – 2011

Chief, Anterior Segment Division, King Khaled Eye Specialist Hospital, Riyadh, Kingdom of Saudi Arabia, 2011 - present

Associate Professor, Department of Ophthalmology, Wilmer Eye Institute, Johns Hopkins University, 2012 – present.

Saudi Ophthalmological Society, Scientific Program Committee Member, 2012

Cornea Society Stem Cell Committee, 2012 - present

RECOGNITION

HONORS AND AWARDS

1981 American Heart Association Student Summer Research Grant

| | |
|-----------|--|
| 1983 | Sigma Xi Grant-In-Aid |
| 1983-1988 | Pre-doctoral Fellowship, USC |
| 1985 | ARVO Travel Award |
| 1988 | Fight for Sight, Post-doctoral Fellowship |
| 1988 | Sigma Xi Honor Society |
| 1988 | Summer Research Grant, Marine Biological Laboratory |
| 1997 | Research Day Award, Dept. of Ophthalmology, Dalhousie University |
| 2002 | Baxter Foundation Junior Faculty Award |
| 2007 | America' Top Ophthalmologists |
| 2008 | Who's Who in America |
| 2011-2013 | Best Doctors |

MEMBERSHIPS

| | |
|------------|--|
| 1985 | American Society of Cell Biology |
| 1985-1988 | New York Academy of Science |
| 1985-1989 | Association for Research in Vision & Ophthalmology |
| 1985-1989 | American Association for the Advancement of Science |
| 1995-1997 | Residency training committee member, Dept. of Ophthalmology, Dalhousie University |
| 1994-1999 | Canadian Ophthalmology Society, Junior member |
| 1997-2001 | American Academy of Ophthalmology, international member in training |
| 1997- 1999 | Oversea Missionary Fellowship, Canada, Atlantic Provinces, regional council member |
| 1997- | Christian Medical and Dental Society, Canada |
| 2001- | American Academy of Ophthalmology, full member |

- 2004 - American Academy of Ophthalmology, Fellow
- 2002 - L.A. Eye Society
- 2002 - Max Fine Eye Society
- 2002 - Tears Film and Ocular Surface Study Group
- 2002 - International Ocular Surface Society
- 2003 - International Society for Stem Cell
- 2003 - Tissue Engineering International Society
- 2004- International Society of Dacryology & Dry Eye
- 2005- Cornea Society – Member
- 2005- Endothelial Keratoplasty Group
- 2006- California Academy of Ophthalmology

OTHER PROFESSIONAL ACCOMPLISHMENTS