

**UNIVERSITY OF CALIFORNIA, LOS ANGELES  
DEPARTMENT OF OPHTHALMOLOGY**

**AMERICAN JOURNAL OF OPHTHALMOLOGY**

Daneshvar R, Yarmohammadi A, Alizadeh R, Henry S, Law SK, Caprioli J, Nouri-Mahdavi K. **Prediction of glaucoma progression with structural parameters: Comparison of optical coherence tomography and clinical disc parameters.** Am J Ophthalmol. 2019 Jun 24; 208:19–29. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Kim JH, Rabiolo A, Morales E, Fatehi N, Lee WS, Yu F, Afifi AA, Nouri-Mahdavi K, Caprioli J. **Cataract surgery and rate of visual field progression in primary open-angle glaucoma.** Am J Ophthalmol. 2019 May; 201:19-30. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Kim JH, Rabiolo A, Morales E, Yu F, Afifi AA, Nouri-Mahdavi K, Caprioli J. **Risk factors for fast visual field progression in glaucoma.** Am J Ophthalmol. 2019 Jun 22; 207:268–278. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Li, Y., Wei, Q., Le, A, Gawargious, B. A., and Demer, J. L. **Rectus extraocular muscle paths and staphylomata in high myopia.** Am. J. Ophthalmol. 2019 May;201:37-45. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Neuro-ophthalmology; Strabismus/Amblyopia/Eye Movement Disorders

Lin SR, Prapaipanich P, Yu F, Law SK, Caprioli J, Aldave AJ, Deng SX. **Comparison of endothelial keratoplasty techniques in patients with prior glaucoma surgery - a case-matched study.** Am J Ophthalmol. 2019 Mar 29;206:94-101. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea; Glaucoma

Nouri-Mahdavi K, Fatehi N, Caprioli J. **Longitudinal macular structure-function relationships in glaucoma and their sources of variability.** Am J Ophthalmol 2019 May 9; 207:18–36. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

**INVESTIGATIVE OPHTHALMOLOGY AND VISUAL SCIENCE**

Au A, Hou K, Davila JP, Gunnemann F, Fragiotta S, Arva M, Sacconi R, Pauleikhoff D, Querques G, Waheed N, Freund KB, Sadda S, Sarraf D. **Volumetric analysis of vascularized serous pigment epithelial detachment progression in neovascular age-related macular degeneration using optical coherence tomography angiography.** Invest Ophthalmol Vis Sci. 2019 Aug 1;60(10):3310-3319. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Age-Related Macular Degeneration

Chanwimol K, Balasubramanian S, Nassisi M, Gaw SL, Janzen C, Sarraf D, Sadda SR, Tsui I. **Retinal vascular changes during pregnancy detected with optical coherence tomography angiography.** Invest Ophthalmol Vis Sci. 2019 Jun 3;60(7):2726-2732 (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Other (pregnancy)

Dos Santos A, Balayan A, Funderburgh ML, Ngo J, Funderburgh JL, Deng SX. **Differentiation Capacity of Human Mesenchymal Stem Cells into Keratocyte Lineage.** Invest Ophthalmol Vis Sci. 2019;60(8):3013-23. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea

Gonzalez S, Oh D, Baclagon ER, Zheng JJ, Deng SX. **Wnt Signaling Is Required for the Maintenance of Human Limbal Stem/Progenitor Cells In Vitro.** Invest Ophthalmol Vis Sci. 2019;60(1):107-12. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea

Sun MM, Chan AM, Law SM, Duarte S, Diaz-Aguilar D, Wadehra M, Gordon LK. **Epithelial membrane protein-2 (EMP2) antibody blockade reduces corneal neovascularization in an in vivo model.** Invest Ophthalmol Vis Sci. 2019 Jan 2;60(1):245-254 (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Cornea

### JAMA OPHTHALMOLOGY

Tsui I, Pineles SL. **What coats disease and age-related macular degeneration have in common.** JAMA Ophthalmol. 2019 Feb 1;137(2):184. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): AMD; Retina/Retinal Disease. RPB support has been inadvertently omitted by grantee institution.

Yang U, Gentleman S, Gai X, Gorin MB, Borchert MS, Lee TC, Villanueva A, Koenekoop R, Maguire AM, Bennett J, Redmond TM, Nagiel A. **Utility of in vitro mutagenesis of RPE65 protein for verification of mutational pathogenicity before gene therapy.** JAMA Ophthalmol. 2019 Oct 3;1-9. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Gene Therapy; Other (leber congenital amaurosis; RPE65). RPB support has been inadvertently omitted by grantee institution.

### OPHTHALMOLOGY

Chew EY, Clemons TE, Jaffe GJ, Johnson CA, Farsiu S, Lad EM, Guymer R, Rosenfeld P, Hubschman JP, Constable I, Wiley H, Singerman LJ, Gillies M, Comer G, Blodi B, Elliott D, Yan J, Bird A, Friedlander M, Macular Telangiectasia Type 2-Phase 2 CNTF Research Group. **Effect of ciliary neurotrophic factor on retinal neurodegeneration in patients with macular telangiectasia type 2: a randomized clinical trial.** Ophthalmology. 2019 Apr;126(4):540-549. (UCLA – Unres. Grant) Keyword(s): Retina/Retinal Diseases; Other (device) RPB support has been inadvertently omitted by grantee institution.

Nouri-Mahdavi K. **Usefulness of macular temporal vertical asymmetry for differentiating optic neuropathies from glaucoma.** Ophthalmology. 2019 Aug;126(8):1140. (UCLA – Unres. Grant) Keyword(s): Retina/Retinal Diseases). RPB support has been inadvertently omitted by grantee institution.

Yu JJ, Agrón E, Clemons TE, Domalpally A, van Asten F, Keenan TD, Cukras C, Chew EY, Age-Related Eye Disease Study 2 Research Group. **Natural history of drusenoid pigment epithelial detachment associated with age-related macular degeneration: Age-related eye disease study 2 report no. 17.** Ophthalmology. 2019 Feb;126(2):261-273 (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Age-related macular degeneration. RPB support has been inadvertently omitted by grantee institution.

### OTHER PROFESSIONAL PUBLICATIONS-UNITED STATES

Aravena C, Bozkurt K, Chuephanich P, Supiyaphun C, Yu F, Deng SX. **Classification of limbal stem cell deficiency using clinical and confocal grading.** Cornea. 2019;38(1):1-7. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea; Other (imaging)

Bai X., Yang X.-J., Cheng Y., Chen L. **Establishment of an induced pluripotent stem cell line (FDEENTi001-A) from a patient with pathological myopia.** Stem Cell Res 2019 Jan;34,101369. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Stem Cell Research/Therapy. RPB support has been inadvertently omitted by grantee institution.

Bai X., Yang X.-J., Chen L. **Establishment of an induced pluripotent stem cell line (FDEENTi002-A) from a patient with Best's disease carrying c.888C>A mutation in BEST1 gene.** Stem Cell Res. 2019 Jul;38,101459. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Stem Cell Research/Therapy

Bai X., Yang X.-J., Chen L. (2019) **Generation of an integration-free induced pluripotent stem cell line (FDEENTi003-A) from a patient with pathological myopia.** Stem Cell Res. 2019 Aug; 39,101495. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Stem Cell Research/Therapy

Bhat SP. **The developing ocular lens: The developing ocular lens: A practical paradigm for probing chromatin landscape and gene expression.** Dev Biol. 2019 Sep1;453(1):105-106. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cataract; Gene Research/Therapy

Bhat SP, Gangalum RK, Kim D, Kashyap RK, Zhou X, Elashoff D. **Transcriptional profiling of single fiber cells in a transgenic paradigm of an inherited childhood cataract reveals absence of molecular heterogeneity.** J Biol Chem 2019 Sep 13;294(37):13530-13544. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cataract; Gene Research/Therapy

Chen MF, Meer E, Velez FG, Jones M, Mathern GW, Pineles SL. **Etiology and age modifies subjective visual function after cerebral hemispherectomy.** J Child Neurol. 2019 Jul;34(8):446-451. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Neuro-Ophthalmology; Pediatric

Chung DD, Zhang W, Jatavallabhula K, Barrington A, Jung J, Aldave AJ. **Alterations in GRHL2-OVOL2-ZEB1 axis and aberrant activation of Wnt signaling lead to altered gene transcription in posterior polymorphous corneal dystrophy.** Exp Eye Res. 2019 Jun 21;188:107696. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Cornea

Demer, J. L. and Clark, R. A. **Functional anatomy of extraocular muscles during human vergence compensation of horizontal heterophoria.** J. Neurophysiol. 2019 Jul 1;122: 105-117. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Neuro-ophthalmology; Strabismus/Amblyopia/Eye Movement Disorders

Fatehi N, McCannel TA, Giaconi J, Caprioli J, Law SK, Nouri-Mahdavi K. **Outcomes of glaucoma drainage device surgery in eyes with treated uveal melanoma.** Ocul Oncol Pathol. 2019 Jan;5(1):20-27. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma; Ocular Oncology

Francone A, Huang JM, Ma J, Tsao TC, Rosen J, Hubschman JP. **The effect of haptic feedback on efficiency and safety during preretinal membrane peeling simulation.** Transl Vis Sci Technol. 2019 Jul 3;8(4):2. (UCLA – Unres. Grant) Keyword(s): Retina/Retinal Diseases; Other (Virtual reality)

Frausto RF, Chung DD, Boere PM, Swamy VS, Duong HNV, Kao L, Azimov R, Zhang W, Carrigan L, Wong D, Morselli M, Zakharevich M, Hanser EM, Kassels AC, Kurtz I, Pellegrini M, Aldave AJ. **ZEB1 insufficiency causes corneal endothelial cell state transition and altered cellular processing.** PLoS One. 2019 Jun 13;14(6):e0218279. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Cornea

Gonzalez S, Uhm H, Deng SX. **Notch inhibition prevents differentiation of human limbal stem/progenitor cells in vitro.** Sci Rep. 2019;9(1):10373. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea

Govetto A, Virgili G, Rodriguez FJ, Figueroa MS, Sarraf D, Hubschman JP. **Functional and anatomical significance of the ectopic inner foveal layers in eyes with idiopathic epiretinal membranes: Surgical results at 12 months.** Retina. 2019 Feb;39(2):347-357. (UCLA – Unres. Grant) Keyword(s): Retina/Retinal Diseases). RPB support has been inadvertently omitted by Journal.

Handa JT, Bowes Rickman C, Dick AD, Gorin MB, Miller JW, Toth CA, Ueffing M, Zarbin M, Farrer LA. **A systems biology approach towards understanding and treating non-neovascular age-related macular degeneration.** Nat Commun. 2019 Jul 26;10(1):3347. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Age-related macular degeneration; Other (Pathobiology)

Hanna RM, Lopez EA, Hasnain H, Selamet U, Wilson J, Youssef PN, Akladeous N, Bunnapradist S, Gorin

MB. **Three patients with injection of intravitreal vascular endothelial growth factor inhibitors and subsequent exacerbation of chronic proteinuria and hypertension.** Clin Kidney J. 2019 Feb;12(1):92-100. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Other (VEGF inhibitors; renal disease) RPB support has been inadvertently omitted by grantee institution.

Hou KK, Au A, Kashani AH, Freund KB, Sadda SR, Sarraf D. **Pseudoflow with OCT angiography in eyes with hard exudates and macular drusen.** Transl Vis Sci Technol. 2019 Jun 27;8(3):50. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): AMD

Hu M, Huaizhou W, Huang AS, Li L, Yan S, Yongli X, Wang N. **Microcatheter-assisted trabeculotomy for primary congenital glaucoma after failed glaucoma surgeries.** J Glaucoma 2019 Jan; 28(1): 1-6. (Univ. of California, Los Angeles -- Career Development Award and Unres. Grant. Keyword(s): Glaucoma

Huang AS, Penteadó R, Papoyan V, Voskanyan L, Weinreb R. **Aqueous angiographic outflow improvement after trabecular microbypass in glaucoma patients.** Ophthalmol Glaucoma 2019 Jan-Feb;2(1):11-21. (Univ. of California, Los Angeles -- Career Development Award and Unres. Grant) Keyword(s): Glaucoma

Huang AS, Stenger MB, Macias BR. **Gravitational influence on intraocular pressure: Implications for spaceflight and disease.** J Glaucoma 2019 Aug; 28(8):156-764. (Univ. of California, Los Angeles -- Career Development Award and Unres. Grant. Keyword(s): Glaucoma

Le Q, Deng SX. **The application of human amniotic membrane in the surgical management of limbal stem cell deficiency.** Ocul Surf. 2019;17(2):221-9. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Cornea

Lin M, Alizadeh R, Law SK. **Outcomes of combined ahmed glaucoma valve and trabeculectomy revision with adjunctive antimetabolite.** J Glaucoma. 2019 May;28(5):404-410. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma.

Liu X, Thung EG, Caprioli J, Law SK. **Combined Ab externo cyclopexy and cryopexy in cyclodialysis cleft repair.** J Glaucoma. 2019 Jun;28(6):568-574. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Liu X, Law SK. **Autologous partial-thickness scleral flap and donor corneal graft in management of tube erosion of glaucoma drainage device.** J Glaucoma. 2019 Apr;28(4):347-351. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Mao X., An Q., Xi H., Yang X.-J., Zhang X., Yuan S., Wang J., Hu Y, Liu Q, Fan G. **Single-cell RNA sequencing of hESC-derived 3D retinal organoids reveals novel genes regulating RPC commitment in early human retinogenesis.** Stem Cell Reports 2019 Oct 8;13,747-760. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Stem Cell Research/Therapy

McClements ME, Barnard AR, Singh MS, Charbel Issa P, Jiang Z, Radu RA, and MacLaren RE. **An AAV dual vector strategy ameliorates the stargardt phenotype in adult ABCA4<sup>-/-</sup> mice.** Human Gene Therapy. 2019 May;30(5):590-600. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retina diseases

Mohammadzadeh V, Galian K, Martinyan J, Nouri-Mahdavi K. **Vision loss after glaucoma surgery: Progressive macular thinning as a sign of snuff-out phenomenon.** J Glaucoma. 2019 Jun;28(6):e99-e102. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Morshedian A, Kaylor JJ, Ng SY, Tsan A, Frederiksen R, Xu T, Yuan L, Sampath AP, Radu RA, Fain GL, and Travis GH. **Light-driven regeneration of cone visual pigments through a mechanism involving**

**RGR opsin in müller glial cells.** *Neuron*. 2019 Jun 19;102(6):1172-1183. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina

Pineles SL, Chang MY, Holmes JM, Kekunnaya R, Özkan SB, Velez FG. **Innovative techniques for the treatment of adult strabismus.** *J AAPOS*. 2019 Jun;23(3):132-139. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Neuro-Ophthalmology; Strabismus/Amblyopia/Eye Movement Disorders.

Rabiolo A, Morales E, Mohamed L, Capistrano V, Kim JH, Afifi A, Yu F, Coleman AL, Nouri-Mahdavi K, Caprioli J. **Comparison of methods to detect and measure glaucomatous visual field progression.** *Transl Vis Sci Technol*. 2019 Sep 11;8(5):2. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Rangchian, A., Francone, A., Farajzadeh, M., Hosseini, H., Connelly, K., Hubschman, J., Kavehpour, H. **Effects of collagenase type ii on vitreous humor—an in situ rheological study.** *J Biomech Eng*. 2019 Apr; 141(8): 081007-1 - 081007-6. (UCLA – Unres. Grant) Keyword(s): Other (Vitreous). RPB support has been inadvertently omitted by Journal..

Sun MM, Levinson RD, Filipowicz AD, Anesi S, Kaplan HJ, Wang W, Goldstein DA, Gangaputra S, Swan RT, Sen HN, Gordon LK. **Uveitis in patients treated with CTLA-4 and PD-1 checkpoint blockade inhibition.** *Ocul Immunol Inflamm*. 2019 Mar 1:1-11 (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Other (uveitis)

Snyder KC, Oikawa K, Williams J, Kiland JA, Gehrke S, Teixeira LBC, Huang AS, and McLellan GJ. **Imaging distal aqueous outflow pathways in a spontaneous model of congenital glaucoma.** 2019. *Transl Vis Sci Technol*. 8 (5):22. (Univ. of California, Los Angeles -- Career Development Award and Unres. Grant. Keyword(s): Glaucoma.

Trzeciecka A, Stark DT, Kwong JMK, Piqueras M, Bhattacharya SK, Caprioli J. **Comparative lipid profiling dataset of the inflammation-induced optic nerve regeneration.** *Data Brief*. 2019 Apr 25; 24:103950. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Glaucoma

Velez FG, Pineles SL. **Management of surgical overcorrections following surgery for duane syndrome with esotropia in primary position.** *J AAPOS*. 2019 Feb;23(1):2-4. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Neuro-Ophthalmology; Strabismus/Amblyopia/Eye Movement Disorders. RPB support has been inadvertently omitted by grantee institution.

Wang T, Pahlberg J, Cafaro J, Frederiksen R, Cooper AJ, Sampath AP, Field GD, Chen J. **Activation of rod input in a model of retinal degeneration reverses retinal remodeling and induces formation of functional synapses and recovery of visual signaling in the adult retina.** *J Neurosci*. 2019 Aug 21;39(34):6798-6810. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases

Zhang W, Margines JB, Jacobs DS, Rabinowitz YS, Hanser EM, Chauhan T, Chung D, Bykhovskaya Y, Gaster RN, Aldave AJ. **Corneal perforation after corneal cross-linking in keratoconus associated with potentially pathogenic ZNF469 mutations.** *Cornea*. 2019 Aug;38(8):1033-1039. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Cornea

#### **OTHER PROFESSIONAL PUBLICATIONS-FOREIGN**

Au A, Sarraf D. **Vascular anatomy and its relationship to pathology in retinoschisis.** *Eye (Lond)* 2019 May;33(5):693-694. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases. RPB support has been inadvertently omitted by grantee institution.

Garrity ST, Jung JY, Zambrowski O, Pichi F, Su D, Arya M, Waheed NK, Duker JS, Chetrit Y, Miserocchi E, Giuffre C, Kaden TR, Querques G, Souied EH, Freund KB, Sarraf D. **Early hydroxychloroquine**

**retinopathy: Optical coherence tomography abnormalities preceding humphrey visual field defects.** Br J Ophthalmol 2019 Nov; 103(11):1600-1604. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases

Hariri AH, Ip MS, Girach A, Lam BL, Fischer MD, Sankila EM, Pennesi ME, Holz FG, Maclaren RE, Birch DG, Hoyng CB, MacDonald IM, Black GC, Tsang SH, Bressler NM, Stepien KE, Larsen M, Gorin MB, Meunier I, Webster AR, Sadda S. **For natural history of the progression of choroideremia (NIGHT) study group. Macular spatial distribution of preserved autofluorescence in patients with choroideremia.** Br J Ophthalmol. 2019 Jul;103(7):933-937. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Other (choroideremia; retinal imaging). RPB support has been inadvertently omitted by grantee institution.

Haritoglou C, Tadayoni R, Hubschman JP. **Lamellar macular hole surgery - current concepts, future prospects.** Clin Ophthalmol. 2019 Jan;(13):143-146. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases. RPB support has been inadvertently omitted by grantee institution.

Pichi F, Fragiotta S, Freund KB, Au A, Lembo A, Nucci P, Sebastiani S, Gutierrez Hernandez JC, Interlandi E, Pellegrini F, Dolz-Marco R, Gallego-Pinazo R, Orellana-Rios J, Adatia FA, Munro M, Abboud EB, Ghazi N, Cunha Souza E, Amer R, Neri P, Sarraf D. **Cilioretinal artery hypoperfusion and its association with paracentral acute middle maculopathy.** Br J Ophthalmol 2019 Aug;103(8):1137-1145. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases. RPB support has been inadvertently omitted by grantee institution.

Pineles SL, Lewis RA, Khanlou N, Velez FG. **Vertical asymmetric mitochondrial ophthalmoplegia.** Can J Ophthalmol. 2019 Oct;54(5):e230-e232. (Univ. of California, Los Angeles - Unres. Grant) Keyword(s): Neuro-Ophthalmology; Strabismus/Amblyopia/Eye Movement Disorders

Su, F, Spee C, Araujo E, Barron E, Wang M, Ghione C, Hinton DR, Nusinowitz S, Kannan R, Reddy ST, Farias-Eisner R. **A novel HDL-mimetic peptide HM-10/10 protects RPE and photoreceptors in murine models of retinal degeneration.** Int J Mol Sci. 2019 Sep 27;20(19). (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Retina/Retinal Diseases.

Yang YM, Chow PE, McCannel TA, Lamb JM. **A comparison of the shielding effectiveness of silicone oil vitreous substitutes when used with Palladium-103 and Iodine-125 eye plaques.** Med Phys. 2019 Feb;46(2):1006-1011. (Univ. of California, Los Angeles – Unres. Grant) Keyword(s): Ocular Oncology/Pterygium