

## Key Publications

### Human Corneal Epithelial Cells (hTCEpi)

Alekseev O, Limonnik V, Donovan K, Azizkhan-Clifford J. Activation of checkpoint kinase 2 is critical for herpes simplex virus type 1 replication in corneal epithelium. *Ophthalmic Res.* 2015;53(2):55-64. [PMID: 25531207]



Alekseev O, Donovan K, Azizkhan-Clifford J. Inhibition of ataxia telangiectasia mutated (ATM) kinase suppresses herpes simplex virus type 1 (HSV-1) keratitis. *Invest Ophthalmol Vis Sci.* 2014 Feb 3;55(2):706-15. [PMID: 24370835]



Atilano SR, Chwa M, Kim DW, Jordan N, Udar N, Coskun P, Jester JV, Wallace DC, Kenney MC. Hydrogen peroxide causes mitochondrial DNA damage in corneal epithelial cells. *Cornea.* 2009 May;28(4):426-33. [PMID: 19411962]



Dreier B, Raghunathan VK, Russell P, Murphy CJ. Focal adhesion kinase knockdown modulates the response of human corneal epithelial cells to topographic cues. *Acta Biomater.* 2012 Dec;8(12):4285-94. [PMID: 22813850]



Koppaka V, Chen Y, Mehta G, Orlicky DJ, Thompson DC, Jester JV, Vasiliou V. ALDH3A1 Plays a Functional Role in Maintenance of Corneal Epithelial Homeostasis. *PLoS One.* 2016 Jan 11;11(1):e0146433. [PMID: 26751691]



McClintock JL, Ceresa BP. Transforming growth factor- $\alpha$  enhances corneal epithelial cell migration by promoting EGFR recycling. *Invest Ophthalmol Vis Sci.* 2010 Jul;51(7):3455-61. [PMID: 20181835]



McMahon FW, Gallagher C, O'Reilly N, Clynes M, O'Sullivan F, Kavanagh K. Exposure of a corneal epithelial cell line (hTCEpi) to Demodex-associated Bacillus proteins results in an inflammatory response. *Invest Ophthalmol Vis Sci.* 2014 Oct 2;55(10):7019-28. [PMID: 25277231]



Neves LF, Duan J, Voelker A, Khanal A, McNally L, Steinbach-Rankins J, Ceresa BP. Preparation and optimisation of anionic liposomes for delivery of small peptides and cDNA to human corneal epithelial cells. *J Microencapsul.* 2016 Jun;33(4):391-9. [PMID: 27530524]



O'Reilly N, Gallagher C, Reddy Katikireddy K, Clynes M, O'Sullivan F, Kavanagh K. Demodex-associated Bacillus proteins induce an aberrant wound healing response in a corneal epithelial cell line: possible implications for corneal ulcer formation in ocular rosacea. *Invest Ophthalmol Vis Sci.* 2012 May 31;53(6):3250-9. [PMID: 22531699]



Parks EE, Ceresa BP. Cell surface epidermal growth factor receptors increase Src and c-Cbl activity and receptor ubiquitylation. *J Biol Chem.* 2014 Sep 12;289(37):25537-45. [PMID: 25074934]



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Reins RY, Mesmar F, Williams C, McDermott AM. Vitamin D Induces Global Gene Transcription in Human Corneal Epithelial Cells: Implications for Corneal Inflammation. *Invest Ophthalmol Vis Sci.* 2016 May 1;57(6):2689-98. [PMID: 27196318]



Robertson DM, Zhu M, Wu YC, Cavanagh HD. Hypoxia-induced downregulation of  $\Delta$ Np63 $\alpha$  in the corneal epithelium. *Eye Contact Lens.* 2012 Jul;38(4):214-21. [PMID: 22367219]



Robertson DM, Ho SI, Cavanagh HD. C-terminal cleavage of DeltaNp63alpha is associated with TSA-induced apoptosis in immortalized corneal epithelial cells. *Invest Ophthalmol Vis Sci.* 2010 Aug;51(8):3977-85. [PMID: 20375332]



Robertson DM, Ho SI, Cavanagh HD. Characterization of DeltaNp63 isoforms in normal cornea and telomerase-immortalized human corneal epithelial cells. *Exp Eye Res.* 2008 Apr;86(4):576-85. [PMID: 18314104]



Robertson DM, Ho SI, Hansen BS, Petroll WM, Cavanagh HD. Insulin-like Growth Factor Binding Protein-3 expression in the human corneal epithelium. *Exp Eye Res.* 2007 Oct;85(4):492-501. [PMID: 17709104]



Robertson DM, Li L, Fisher S, Pearce VP, Shay JW, Wright WE, Cavanagh HD, Jester JV. Characterization of growth and differentiation in a telomerase-immortalized human corneal epithelial cell line. *Invest Ophthalmol Vis Sci.* 2005 Feb;46(2):470-8. [PMID: 15671271]



Rush JS, Bingaman DP, Chaney PG, Wax MB, Ceresa BP. Administration of Menadione, Vitamin K3, Ameliorates Off-Target Effects on Corneal Epithelial Wound Healing Due to Receptor Tyrosine Kinase Inhibition. *Invest Ophthalmol Vis Sci.* 2016 Nov 1;57(14):5864-5871. [PMID: 27802516]



Rush JS, Boeving MA, Berry WL, Ceresa BP. Antagonizing c-Cbl enhances EGFR-dependent corneal epithelial homeostasis. *Invest Ophthalmol Vis Sci.* 2014 Jul 1;55(8):4691-9. [PMID: 24985478]



Talarico EF Jr. Plasma membrane calcium-ATPase isoform four distribution changes during corneal epithelial wound healing. *Mol Vis.* 2010 Nov 2;16:2259-72. [PMID: 21139678]



Tocce EJ, Broderick AH, Murphy KC, Liliensiek SJ, Murphy CJ, Lynn DM, Nealey PF. Functionalization of reactive polymer multilayers with RGD and an antifouling motif: RGD density provides control over human corneal epithelial cell-substrate interactions. *J Biomed Mater Res A.* 2012 Jan;100(1):84-93. [PMID: 21972074]



Wilson MJ, Liliensiek SJ, Murphy CJ, Murphy WL, Nealey PF. Hydrogels with well-defined peptide-hydrogel spacing and concentration: impact on epithelial cell behavior. *Soft Matter.* 2012;8(2):390-398. [PMID: 23264803]



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Wu YC, Buckner BR, Zhu M, Cavanagh HD, Robertson DM. Elevated IGFBP3 levels in diabetic tears: a negative regulator of IGF-1 signaling in the corneal epithelium. *Ocul Surf.* 2012 Apr;10(2):100-7. [PMID: 22482470]



Wu YC, Zhu M, Robertson DM. Novel nuclear localization and potential function of insulin-like growth factor-1 receptor/insulin receptor hybrid in corneal epithelial cells. *PLoS One.* 2012;7(8):e42483. [PMID: 22879999]



Yáñez-Soto B, Leonard BC, Raghunathan VK, Abbott NL, Murphy CJ. Effect of Stratification on Surface Properties of Corneal Epithelial Cells. *Invest Ophthalmol Vis Sci.* 2015 Dec;56(13):8340-8. [PMID: 26747762]



Yamamoto N, Yamamoto N, Petroll MW, Jester JV, Cavanagh HD. Regulation of *Pseudomonas aeruginosa* internalization after contact lens wear in vivo and in serum-free culture by ocular surface cells. *Invest Ophthalmol Vis Sci.* 2006 Aug;47(8):3430-40. [PMID: 16877413]



Yamamoto N, Yamamoto N, Petroll MW, Cavanagh HD, Jester JV. Internalization of *Pseudomonas aeruginosa* is mediated by lipid rafts in contact lens-wearing rabbit and cultured human corneal epithelial cells. *Invest Ophthalmol Vis Sci.* 2005 Apr;46(4):1348-55. [PMID: 15790901]

