Publications (cont.):

Microscopy. *Cornea J* 1992; 11:282-7.

183. Jester, J.V., Petroll, W.M., Garana, R., Barry, P., Cavanagh, H.D.: "Cytoskeletal and Extracellular Matrix Organization During Myofibroblast Medicated Avascular Corneal Wound Contraction in the Feline Eye." *FASEB J* 1992; 6:3997.

184. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "A Technique for In Vivo 3-Dimensional Visualization of Corneal Cells Using tandem Scanning Confocal Microscopy." *FASEB J* 1992; 6:5248.

185. New, K., Lind, G.J., Barry, P.A., Cavanagh, H.D., Jester, J.V.: Na^+/K^+ ATPase Subunit Expression in Cat and Human Cornea." *Invest Ophthalmol Vis Sci* 1992(Suppl); 33:923.

186. Barry, P.A., Ichijima, H., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Organization of the Corneal Endothelial Cytoskeleton Using In Situ Immunolabeling." *Invest Ophthalmol Vis Sci* 1992(Suppl); 33:1236.

187. Lind, G.J., Jester, J.V., Barry, P.A., Cavanagh, H.D.: "Muscarinic Acetylcholine Receptors (mAChRs) in Corneal Cells." *Invest Ophthalmol Vis Sci* 1992(Suppl); 33:1239.

188. Jester, J.V., Andrews, P., Petroll, W.M., Barry, P.A., Ichijima, H., Cavanagh, H.D.: "Imaging of Carboxy Fluorescein (CF) Transport Across Corneal Endothelium (CE) Using Laser Confocal Microscopy (LCM)." *Invest Ophthalmol Vis Sci* 1992(Suppl); 33:1237.

189. Petroll, W.M., Barry, P.A., Cavanagh, H.D., Jester, J.V.: "Changes in Stress Fiber Orientation in Myofibroblasts During Healing of Radial Keratotomy (RK) Wounds. *Invest Ophthalmol Vis Sci* 1992(Suppl); 33:1235.

190. Cavanagh, H.D., Ichijima, H., Petroll, W.M., Ohashi, J., Jester, J.V.: "*In Vivo* Confocal Microscopic Studies of Corneal Epithelial Changes in Rabbit eyes with Rigid Gas Permeable Contact Lens Wear and Benzalkonium Chloride Application." *3D Imaging Sci in Microscopy*, Amsterdam, The Netherlands. pp.49.

191. Imayasu, M., Moriyama, T., Ohashi, J., Ichijima, H., Cavanagh, H.D.: "A Quantitative Method for LDH, MDH and Albumin Levels in Tears and Ocular Surface Toxicity scored by Draize Criteria in Rabbit Eyes." *CLAO J* 1992; 18:260-6.

192. Cavanagh, H.D., McCulley, J.P., Petroll, W.M., Anderson, W., Conger, D. Bowman, R.W., Wilson, S.E., Jester, J.V.: "The Clinical and Diagnostic Use of In Vivo Confocal Microscopy in Patients with Corneal Disease." *Ophthalmology* 1992; 99:123.

193. Watson, T.F., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "*In Vivo* Confocal Microscopy in Clinical Dental Research: An Initial Appraisal." *J of Dentistry* 1992; 20:352-8.

Publications (cont.):

194. Nelson, M.D., Gordon, J.F., Cavanagh, H.D. as part of the Chiron KCS Study Group: "Topical Fibronectin in the Treatment of Keratoconjunctivitis Sicca." *Am J Ophthalmol* 1992; 114:441-447.

195. Lind, G., Cavanagh, H.D.: "Acetylcholine Receptors in Corneal Epithelium of the Rabbit." *Mol Biol of the Cell* 1992; 3(Suppl): 297a.

196. Ichijima, H., Petroll, W.M., Barry, P.A., Andrews, P.M., Dai, M., Cavanagh H.D., Jester, J.V.: "Actin Filament Organization During Endothelial Wound Healing in the Rabbit Cornea: Comparison Between Transcorneal Freeze and Mechanical Scrape Injuries." *Invest Ophthalmol Vis Sci* 1993; 34:2803-12.

197. Ichijima, H., Petroll, W.M., Andrews, P.M., Barry, P.A., Dai, M., Jester, J.V., Cavanagh, H.D.: "In Vivo Confocal Microscopic Studies of Endothelial Wound Healing in Rabbit Corneas." *Cornea J* 1993; 12:369-378.

198. Lind, G.J., Cavanagh, H.D.: "Nuclear Muscarinic Acetylcholine Receptors in Corneal Cells from Rabbit." *Invest Ophthalmol Vis Sci* 1993; 34:2943-52.

199. Petroll, W.M., Cavanagh, H.D., Barry, P.A., Jester, J.V.: "Quantitative Analysis of Stress Fiber Orientation During Corneal Wound Contraction." *J Cell Science* 1993; 104:353-363.

200. Ichijima, H., Ohashi, J., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Morphological and Biochemical Evaluation for Rigid Gas Permeable Contact Lens Extended Wear on Rabbit Corneal Epithelium." *CLAO J* 1993; 19:121-128.

201. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Three-Dimensional Imaging of Corneal Cells Using *In Vivo* Confocal Microscopy." *J Microscopy* 1993; 70:213-219.

202. Imayasu, M., Cavanagh, H.D.: "Adherence of *Pseudomonas aeruginosa* to Rabbit Cornea After Overnight Wear of Rigid Gas Permeable and Hydrogel Contact Lenses." *Invest Ophthalmol Vis Sci* 1993; 34(Suppl):979.

203. Ichijima, H., Ohashi, J., Cavanagh, H.D.: "Effects of Contact Lens Extended Wear on Lactate Dehydrogenase Activity and Isozyme Pattern in Rabbit Tears." *Invest Ophthalmol Vis Sci* 1993; 34(Suppl):1008.

204. Cavanagh, H.D., Petroll, W.M., Alizadeh, H., He, Y-G., McCulley, J.P., Jester, J.V.: "Clinical and Diagnostic Use of *In Vivo* Confocal Microscopy in Patients with Corneal Disease" *Ophthalmology* 1993; 100:1444-54.

205. Imayasu, M., Moriyama, T., Ohashi, J., Cavanagh, H.D.: "Effects of Rigid Gas Permeable

Publications (cont.):

Contact Lenses on Rabbit Cornea Assessed by LDH Activities, MDH Activities and Albumin Levels in Tear Fluid." *CLAO J* 1993; 19:153-157.

206. Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "The Application of Confocal Microscopy to the Study of Living Systems." *Neuroscience and Biobehavioral Reviews* 1993; 17:483-497.

207. Kooner, K.S., Cavanagh, H.D., Zimmerman, C.F., Itani, K.M.: "Eye Movement Restrictions after Molteno Implant Surgery." *Ophthal Surg* 1993; 24:498-499.

208. Andrews, P.M., Jester, J.V., Petroll, W.M., Barry, P.A., Ichijima, H., Cavanagh, H.D.: "In Vivo Osmotic Perturbation of Intercellular Fluid Channels in the Rabbit Corneal Endothelium", *Cornea J* 1994; 13:253-259.

209. Cavanagh, H.D., Bouchard C.: "The High Risk Keratoplasty Patient-Quo Vadis?" Editorial: *Cornea J* 1994; 13:1-3.

210. Cavanagh, H.D.: "Clinical and Diagnostic Use of In Vivo Confocal Microscopy in Patients with Corneal Disease." *Ophthalmology Digest* 1994; 5:4-5.

211. Jester, J.V., Barry, P.A., Lind, G.J., Petroll, W.M., Garana, R., Cavanagh, H.D.: "Corneal Keratocytes: In Situ and In Vitro Organization of Cytoskeletal Contractile Proteins." *Invest Ophthalmol Vis Sci* 1994; 35:730-743.

212. Imayasu, M.S., Petroll, W.M., Jester, J.V., Patel, S.K., Cavanagh, H.D.: "The Relation between Contact Lens Oxygen Transmissibility and Binding of *Pseudomonas aeruginosa* to the Cornea after Overnight Wear." *Ophthalmology* 1994; 101:371-388. (Editorial Comment in *Arch Ophthalmol* 1994.)

213. Ichijima, H., Cavanagh, H.D.: "Effects of Rigid Lens Extended Wear on Lactate Dehydrogenase Activity and Isozymes in Rabbit Tears." *Cornea J* 1994; 13:429-434.

214. Masaki, I., Moriyama, T., Ichijima, H., Ohashi, J., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "The Effects of Daily Wear Rigid Gas Permeable Contact Lenses Treated with Contact Lens Care Solutions Containing Preservatives on the Rabbit Cornea", *CLAO J* 1994; 20:183-188.

215. McCollum, C.J., Foulks, G.N., Bodner, B., Shepard, J., Daniels, K., Cavanagh, H.D.: "Rapid Assay of Lactoferrin in Keratoconjunctivitis Sicca." *Cornea J* 1994; 13:505-508.

216. Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "In vivo Confocal Imaging: General Principles and Applications." *Scanning J* 1994; 16:131-149.

217. Ichijima, H., Jester, J.V., Petroll, W.M., Cavanagh, H.D.: "Laser and Tandem Scanning Confocal Microscopic Studies of Rabbit Corneal Wound Healing." *Scanning J* 1994; 16:263-

Publications (cont.):

268.

218. Boettcher, K., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Determination of 3-Dimensional Keratocyte Density in the Rabbit Cornea Using Laser Confocal Microscopy." *Invest Ophthalmol Vis Sci* 1994(Suppl); 35:1355.

219. Petroll, W.M., Chuong, C.J., Cavanagh, H.D., Jester, J.V.: "Estimation of Corneal Material Properties Using Incision Profile Measurements." *Invest Ophthalmol Vis Sci* 1994(Suppl); 35:1357.

220. Barry, P.A., Cavanagh, H.D., Jester, J.V.: "Effect of Serum, bFGF, TGF_{B1} and Heparin on In Vitro Myofibroblast Transformation in Rabbit Corneal Keratocytes." *Invest Ophthalmol Vis Sci* 1994(Suppl); 35:1356.

221. Lind, G.J., Cavanagh, H.D.: "A Nuclear 47 KDA Protein with Characteristics of Muscarinic Acetylcholine Receptors (MACHRS)." *Invest Ophthalmol Vis Sci* 1994(Suppl); 35:1940.

222. Jester, J.V., Barry, P.A., Cavanagh, H.D., and Petroll, W.M.: "In Vivo Corneal Endothelial Wound Healing." *Invest Ophthalmol Vis Sci* 1994(Suppl); 35:1384.

223. Mathers, W.D., Cavanagh, H.D.: "Tear Film, Pharmacology of Eyedrops, and Toxicity." *Current Opinion in Ophthalmology* 1994; 5(4):13-18.

224. Cavanagh, H.D.: "Extended Wear, Corneal Hypoxia, and Corneal Ulcers." *CLAO J* 1994; 20:218-219.

225. The PERK Study Group, including Cavanagh, H.D.: "Results of Prospective Evaluation of Radial Keratotomy (PERK) Study 10 Years After Surgery." *Arch Ophthalmol* 1994; 112:1298-1308.

226. Petroll, W.M., Boettcher, K., Barry, P., Cavanagh, H.D., Jester, J.V.: "Quantitative Assessment of Anteroposterior Keratocyte Density in the Normal Rabbit Cornea." *Cornea* 1995; 14:3-9.

227. Beecherl, E.E., Petroll, W.M., Cavanagh, H.D., Shires, G.T.: "Vital Microscopy of Proximal Renal Tubule Morphology in Response to One Minute of Ischemia." Eighteenth Annual Conference on Shock, Shock Society, Asheville, North Carolina, June, 1995.

228. Jester, J.V., Barry, P.A., Martucci, M.L., Petroll, W.M., Cavanagh, H.D.: "Verapamil Perturbs Barrier Function by Opening of Novel Intercellular "Y" Junctional Channels Between Corneal Endothelial Cells." *Mol Biol of the Cell* 1994; 5:421a (Suppl).

229. Barry, P.A., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "Cell Matrix Interactions Modulate Induction of a-Smooth Muscle Actin (a-SM) Expression by TGF_{b1} in Cultured Fibroblasts."

Publications (cont.):

Mol Biol of the Cell 1994; 5:464a (Suppl).

230. Cavanagh, H.D., Petroll, W.M., Jester, J.V.: Guest Editorial and Issue: "Three and Four Dimensional Microscopy." *Scanning J* 1994; 16:129.

231. Cavanagh, H.D., Jester, J.V., Petroll, W.M.: Guest Editorial and Issue: "The Future Development of Confocal Microscopy." *Scanning J* 1994; 16:261.

232. Petroll, W.M., Roy, P., Hall, B., Cavanagh, H.D., Jester, J.V.: "Quantitative 3-D Assessment of Wound Healing after Radial Keratotomy (RK) In Vivo and In Situ." *Invest Ophthalmol Vis Sci* 1995(Suppl); 36:S38.

233. Jester, J.V., Petroll, W.M., Barry, P.A., Olsen, D., Cavanagh, H.D.: "Inhibition of Corneal Fibrosis by Topical Application of Blocking Antibodies to TGFß in the Rabbit LK Model." *Invest Ophthalmol Vis Sci* 1995(Suppl.); 36:S867.

234. Maurer, J., Petroll, W.M., Wilkie, D.A., Parker, R., Hall, B., Cavanagh, H.D., Jester, J.: "In Vivo Confocal Microscopic Evaluation of Ocular Irritation." *Invest Ophthalmol Vis Sci* 1995(Suppl.); 36:S502.

235. Barry, P.A., Wilson, S.E., Hall, B.A., Cavanagh, H.D., Jester, J.V.: "Characterization of Myofibroblast Cell Line from SV 40 Transfected Rabbit Keratocytes." *Invest Ophthalmol Vis Sci* 1995(Suppl.), 36:S26.

236. Mohay, J., Jester, J.V., Petroll, W.M., Cavanagh, H.D., Chen, X., Wood, T.O., McLaughlin, B.H.: "Histological and Confocal Microscopic Evaluation of Long-Term Corneal Endothelial Cell Transplantation." *Invest Ophthalmol Vis Sci* 1995(Suppl); 36:S652.

237. Jester, J.V., Petroll, W.M., Barry, P.A., Cavanagh, H.D.: "Temporal 3-Dimensional, Cellular Anatomy of Corneal Wound Tissue." *J Anatomy*, London 1995, 186:301-311.

238. Jester, J.V., Petroll, W.M., Barry, P.A., Cavanagh, H.D.: Expression of Alpha Smooth Muscle (α-SM) During Corneal Stromal Wound Healing. *Invest Ophthalmol Vis Sci* 1995, 36:809-819.

239. Barry, P.A., Petroll, W.M., Andrews, P.M., Cavanagh, H.D., Jester, J.V.: "The Spatial Organization of Corneal Endothelial Cytoskeletal Proteins and Their Relationship to the Apical Junctional Complex." *Invest Ophthalmol Vis Sci* 1995; 36:1115-1124.

240. Lind, G., Cavanagh, H.D.: "Identification and Subcellular Distribution of Muscarinic Acetylcholine Receptor-Related Proteins in CHO and Rabbit Cells," *Invest Ophthalmol Vis Sci* 1995; 36:1492-1507.

Publications (cont.):

241. Cavanagh, H.D., Petroll W.M., Jester, J.V.: "Confocal Microscopy: Uses in Measurement of Cellular Structure and Function," in Osborne, N.N. and Chader, J. eds, *Progress in Retinal and Eye Research*, Pergamon Press, Oxford, England, 1995; 2:527-565.

242. Cavanagh, H.D., Heck, E.: "Who Can Give Corneas," (Letter to the Editor), *The New York Times*, Monday, August 21, 1995, p. A14.

243. Petroll, W.M., Jester, J.V., Barry, P.A., Cavanagh, H.D.: "Assessment of F-Actin Organization and Apical-Basal Polarity During In Vivo Cat Endothelial Wound Healing." *Invest Ophthalmol Vis Sci* 1995; 36:2492-2502.

244. Wilhelmus, K., Stulting, R.D., Sugar, J., Khan, M.D. and the Medical Advisory Board of the Eye Bank Association of America, including Cavanagh, H.D.: "Primary Corneal Graft Failure," *Arch Ophthalmol* 1995; 113:1497-1502.

245. Petroll, W.M., Jester, J.V., Barry-Lane, P.A., Cavanagh, H.D.: "Induction of Corneal Endothelial Transdifferentiation." *Mol Bio Cell* 1995; 6(Suppl): 88a.

246. Ren, G., Wilson, G., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Programmed Cell Death in Terminally Differentiated Corneal Epithelium." *Mol Bio Cell* 1995; 6(Suppl): 355a.

247. Ichijima, H., Cavanagh, H.D.: Evaluation of RGP Lens-Induced Corneal Hypoxia in Response to Extended Wear Using Rabbit Eyes." *Practical Optometry* 1995; 6 (6):234,

248. Cavanagh, H.D.: "Use of Therapeutic Hydrogel Contact Lenses in Corneal Melting Disorders." *Contactologia* 1995; 17E:177-181.

249. Petroll, W.M., Roy, P., Chuong, C., Hall, B., Cavanagh, H.D., and Jester, J.: "Measurement of Surgically-Induced Corneal Deformations Using 3-D Confocal Microscopy," 1996; *Cornea J* 15:154-164.

250. Kalin, N.S., et al, including Cavanagh, H.D.: "Chronic Localized Conjunctival Chemosis," *Cornea J* 15:295-300 1996.

251. Hogan, R.N., Cavanagh, H.D.: "Transplantation of Corneal Tissue from Donors with Diseases of the Central Nervous System," *Cornea J* 14:547-553 1995. (Editorial Comment)

252. Mattern, R., Heck, E.L., Cavanagh, H.D.: "The Impact of Tissue Utilization of Screening Donor Corneas by Specular Microscopy at the University of Texas Southwestern Medical Center," *Cornea J* 14:562-567 1995. (Editorial Comment)

253. Cavanagh, H.D.: "Eye Banking 1995: Danger and Opportunity (Editorial)." *Cornea J* 14:545-546 1995.

Publications (cont.):

254. Cavanagh, H.D., McCulley, J.P.: "In Vivo Confocal Microscopy and *Acanthamoeba* Keratitis. A Dynamic New View of an Old Clinical Problem" (Editorial). *American Journal of Ophthalmology* 121:207 1996.

255. Jester, J.V., Petroll, W.M., Huang, J., Roy, P., Barry-Lane, P.A., Cavanagh, H.D.: "$TGF_{\beta 1}$ Modulated Myofibroblast Transformation via Matrix Interaction: Role in Wound Contraction." *Invest Ophthalmol Vis Sci* (Suppl) S219 1996.

256. Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "In Vivo Confocal Imaging." *Internat. Rev. Exp. Pathol* Academic Press 1996; 36:93-129.

257. Hsu, J.K.W., Green, W.R., Kalin, N.S., Cavanagh, H.D.: "An Unusual Case of Elastofibroma Oculi." *Invest Ophthalmol Vis Sci* 1996(Suppl); S1017.

258. Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Quantitative 3-Dimensional Confocal Imaging of the Cornea *In Situ* and *In Vivo*: System Design and Calibration," *Scanning* 1996; 18:45-49.

259. Mattern, R., Cavanagh, H.D.: "The Role of Eye Banking in Vision Research," in Krachmer, J., Mannis, M., Holland, E., eds, *The Cornea*, Mosby 1996, p. 553-558.

260. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Confocal Microscopy," in Krachmer, J., Mannis, M., Holland, E., eds, *The Cornea*, Mosby 1996, p 335-350.

261. Cavanagh, H.D.: "A Time Remembered (Editorial)." *Cornea J* 1996; 15:1.

262. Jester, J.V., Barry, P.A., Cavanagh, H.D., Petroll, W.M.: "Induction of α-smooth Muscle Actin Expression and Myofibroblast Transformation in Cultured Corneal Keratocytes." *Cornea J* 1996; 15:505-516.

263. Petroll W.M., Jester, J.V., Barry-Lane, P.A., Cavanagh, H.D.: "Effects of basic FGF and $TGF_{\beta 1}$ on F-actin and ZO-1 Organization During Cat Endothelial Wound Healing." *Cornea J.* 1996; 15:525-532.

264. Jester, J.V., Maurer, J.K., Wilkie, D.A., Petroll, W.M., Parker, R.D., Cavanagh, H.D.: "Application of *in vivo* Confocal Microscopy to the Understanding of Surfactant-induced Ocular Irritation." *Toxicologic Pathology* 1996; 24:412-428. (Editorial Comment)

265. Moller-Pedersen, T., Vogel, M., Li, H., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Quantification of Stromal Thinning Epithelial Thickness, and Corneal Haze Following PRK Using Through Focusing Confocal Microscopy (TFCM)." *Ophthalmology* 1996; (Suppl) 103:184.

Publications (cont.):

266. Vogel, M., Cavanagh, H.D., Petry H.D.: "Keratitis Caused by Alcaligenes Denitrificans Subspecies Xylosoxidans." *Cornea* 1996; 15:437-439.

267. Hsu, J.K.W., Cavanagh, H.D., Green W.R.: "An Unusual Case of Elastofibroma Oculi." *Cornea* 1997; 16:112-119.

268. Barry-Lane, P.A., Wilson, S.E., Cavanagh, H.D., Jester, J.V.: "Characterization of SV-40 Transfected Cell Strains from Rabbit Keratocytes." *Cornea* 1997; 16:72-78.

269. Petroll, W.M., Barry-Lane, P., Cavanagh, H.D., Jester, J.V.: "ZO-1 Reorganization and Myofibroblast Transformation of Corneal Endothelial Cells after Freeze Injury in the Cat." *Experimental Eye Research* 1997; 64:257-267.

270. Heck, E., Cavanagh, H.D.: "Eye Banking," In *UNOS Organ Procurement; Preservation and Distribution in Transplantation*, Ed. Phillips, M.G., Diethelm, A.G., William Byrd Press, Richmond, VA 1995.

271. Mathers, W.D., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Basic Science and Applications of In Vivo Microscopy," *Current Opinion in Ophthalmology* 1995.

272. Jester, J.V., Barry-Lane, P.A., Petroll, W.M., Olsen, D.R., Cavanagh, H.D.: "Inhibition of Corneal Fibrosis by Topical Application of Blocking Antibodies to TGFß in the Rabbit." *Cornea* 1997; 16:177-187.

273. Li, H.F., Petroll, W.M., Maurer, J.K., Cavanagh, H.D., Jester, J.V.: "Epithelial and Corneal Thickness Measurements by In Vivo Confocal Microscopy Through Focusing (CMTF)." *Current Eye Research* 1997; 16:214-221.

274. Møller-Pedersen, T., Vogel, M., Li, H., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Quantification of Ablation Depth, Epithelial Thickness, and Corneal Haze following Photorefractive Keratectomy Using In Vivo Confocal Microscopy." *Ophthalmology* 1997; 104:360-368.

275. Mattern, R.M., Cavanagh, H.D.: "Should Antibody to Hepatitis B Core Antigen Be Tested in Routine Screening of Donor Corneas for Transplant?" *Cornea* 1997; 16:138-145. (Editorial Comment)

276. Roy, P., Petroll, W.M., Cavanagh, H.D., Chuong, C.J., Jester, J.V.: "An In Vitro Force Measurement Assay to Study the Mechanism of Fibroblast-Mediated Collagen Matrix Reorganization in the Early Phase: A Single Cell Approach." *Exp Cell Res* 1997; 232:106-117.

277. Li, H.F., Maurer, J.K, Parker, R.D., Petroll, H.D., Cavanagh, H.D., Jester, J.V.: "Area and Depth of Surfactant-Induced Corneal Injury Correlates with Cell Depth." *Invest Ophthalmol Vis*

Publications (cont.):

Sci 1997; 38:S399.

278. Petroll, W.M., Jester, J.V., Bean, J., Cavanagh, H.D.: "Effects of Serum, $TGF_{\beta 1}$ and bFGF on Cat Corneal Endothelial Proliferation and Myofibroblast Transformation during Wound Healing. *Invest Ophthalmol Vis Sci* 1997; 38:S731

279. Maurer, J.K., Li, H.F., Petroll, W.M., Parker, R.D., Cavanagh, H.D., Jester, J.V.: "Confocal Microscopic Characterization of Initial Changes of Surfactant-Induced Eye Irritation Occurring in the Rabbit." *Toxicol Appl Pharmacol* 1997; 143:291-300.

280. Eiferman, R.A., Sher, H., Cavanagh, D., Weiss J.: "Correction of Myopic Astigmatism with the Meditec MEL-60 Scanning Excimer Laser." *Invest Ophthalmol Vis Sci* 1997; 38:S410.

281. Ren, H., Ho-Fan, J., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Does Hypoxia Alone Increase the Bacterial Adherence to Exfoliated Corneal Epithelial Cells in Man?" *Invest Ophthalmol Vis Sci* 1997; 38:S139.

282. Moller-Pedersen, T., Li., H.F., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Anti-TGFß Treatment Reduces Corneal Haze But Not Regression of Ablative Effect following Excimer Laser PRK in the Rabbit." *Invest Ophthalmol Vis Sci* 1997; 38:S209.

283. Li, H.F., Maurer, J.K., Parker, R.D., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Area and Depth of Surfactant-Induced Corneal Injury Correlates with Cell Death." *Invest Ophthalmol Vis Sci* 1997; 38:S399.

284. He, U.G., Alizadeh, H., McCulley, J.P., Cavanagh, H.D., Huang, J., Niederkorn, J.Y.: "Transplantation of Cultured Human Amniotic Epithelial Cells on the Ocular Surface." *Invest Ophthalmol Vis Sci* 1997; 38:S421.

285. Jester, J.V., Huang, J., Kao, W.W., Petroll, W.M., Cavanagh, H.D.: "TBF_{β} Mediated Corneal Myofibroblast Transformation Is Dependent on Tyrosine Phosphorylation." *Invest Ophthalmol Vis Sci* 1997; 38:S502.

286. Petroll, W.M., Jester, J.V., Bean, J., Cavanagh, H.D.: "Effects of serum TGF-ß1 and bFGF on Cat Corneal Endothelial Proliferation and Myofibroblast Transformation During Wound Healing." *Invest Ophthalmol Vis Sci* 1997; 38:S730.

287. Mar, P.K., Huang, J., Roy, P., Yin, H., Cavanagh, H.D. and Jester, J.V.: "Effects of Gelsolin Over-Expression in SV-40 Transformed Rabbit Corneal Keratocytes." (*6th International Congress on Cell Biology, The American Society for Cell Biology Meeting*). San Francisco, CA 1997.

288. Roy, P., Petroll, W.M., Cavanagh, H.D., and Jester, J.V.: "Force Generation of Isolated Corneal

Publications (cont.):

Fibroblasts During Collagen Matrix Reorganization." (*6th International Congress on Cell Biology, The American Society for Cell Biology Meeting*). San Francisco, CA 1997.

289. Ren, H., Petroll, W.M., Jester, J.V., Cavanagh, H.D, Mathers WD, Bonanno JA, Kennedy RH., "Adherence of *Pseudomonas Aeruginosa* to Shed Rabbit Corneal Epithelial Cells after Overnight Wear of Contact Lenses, *CLAO J* 1997; 23:63-68.

290. Abbasoglu, O.E., McCulley, J.P., Bowman, R.W., Cavanagh, H.D.: "Accuracy of Intraocular Pressure Measurements after Myopic Excimer PRK". *Ophthalmology* 1997; 105(Suppl): 162.

291. Mar, P.K., Roy, P., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "Disruption of Actin Filaments by Gelsolin Overexpression Impairs Matrix Reorganization." *Invest Ophthalmol Vis Sci* 1998; 39:S35.

292. Chang, J.H., Ren, H., Petroll, W.M., Rodeheaver, D., Cavanagh, H.D., Jester, J.V.: "The Application of In Vivo Confocal Microscopy and Tear LDH Measurement in Assessing Corneal Response to Contact Lens and Contact Lens Solutions." *Invest Ophthalmol Vis Sci* 1998; 39:S336.

293. Cavanagh, H.D., Ren, H., Ho-Fan, J., Petroll, W.M., Jester, J.V., The CL Study Group: "The Relationship between Contact Lens Oxygen Permeability and Binding of *Pseudomonas aeruginosa* in Human Corneal Endothelial Cells after Overnight and Extended Wear." *Invest Ophthalmol Vis Sci* 1998; 39:S337.

294. Moller-Peterson, T., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "Excimer Laser Transepithelial Photoablation Reduces Corneal Keratocyte Loss, but Provokes More Haze than Epithelial Scraping." *Invest Ophthalmol Vis Sci* 1998; 39:S448.

295. Jester, J.V., Moller-Peterson, T., Huang, J., Sax, C.M., Petroll, W.M., Cavanagh, H.D., Piatigorsky, J.: "Rabbit Keratocytes Express Enzyme Crystallins that May Modulate Cellular Corneal Transparency following Excimer PRK." *Invest Ophthalmol Vis Sci* 1998; 39:S449.

296. Petroll, W.M., Jester, J.V., Bean, J.J., Cavanagh, H.D.: "Direct Correlation of Cell Proliferation with Cytoskeletal and Tight Junction Organization During *In Vivo* Corneal Endothelial Wound Healing." *Invest Ophthalmol Vis Sci* 1998; 39:S453.

297. Hsu, J.K., Bean, J.D., Jester, J.V., Cavanagh, H.D., Petroll, W.M.: "The Spatial Organization of Apical Junctional complex (AJC)-Associated Proteins in Cat and Human Corneal Endothelium." *Invest Ophthalmol Vis Sci* 1998; 39:S530.

298. Roy, P., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Generation of Mechanical Forces Involved in Matrix Reorganization - Cell Locomotion or Cell Contraction?" *Invest Ophthalmol Vis Sci* 1998; 39:S757.

Publications (cont.):

299. Ren, H., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Preliminary Studies into the Effect of Extended Contact Lens Wear on Proliferation of Rabbit Corneal Epithelial Cells Using Bromodeoxyuridine Labeling." *Invest Ophthalmol Vis Sci* 1998; 39:S1028.

300. Moller-Pedersen, T., Li, H.F., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Confocal Microscopic Characterization of Wound Repair after Photorefractive Keratectomy." *Invest Ophthalmol Vis Sci* 1998; 39:487-501.

301. Jester, J.V., Li, H.F., Petroll, W.M., Parker, R.D., Cavanagh, H.D., Carr, G.J., Smith, B., Maurer, J.K.: "Area and Depth of Surfactant-Induced Corneal Injury Correlates with Cell Death." *Invest Ophthalmol Vis Sci* 1998; 39:922-936.

302. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Assessment of Stress Fiber Orientation during Healing of Radial Keratotomy Wounds Using Confocal Microscopy." *Scanning* 1998; 20:74-82.

303. Abbasoglu, O.E., Bowman, R.W., Cavanagh, H.D., McCulley, J.P.: "Reliability of Intraocular Pressure after Myopic Excimer Photorefractive Keratectomy." *Ophthalmology* 1998; 105:2193-2196.

304. Petroll, W.M., Jester, J.V., Bean, J.J., Cavanagh, H.D.: "Myofibroblast Transformation of Cat Corneal Endothelium by Transforming Growth Factor-beta1, -beta2, and beta3." *Invest Ophthalmol Vis Sci* 1998; 39:2018-2032.

305. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Clinical Confocal Microscopy." *Current Opinion in Ophthalmology* 1998; 9:59-65.

306. Cavanagh, H.D.: "Call Me Mildred," Editorial, *Cornea* 1998; 17 (3):253-256.

307. Cavanagh, H.D., Jester, J.V. and the Members of the Peer Review Panel. Report of the Peer Review Panel on Photorefractive Keratotomy (PRK), April, 1998, by the American Institute of Biological Sciences, for the Department of Defense (Pentagon). 123 pages. Sterling, VA.

308. Moller-Pedersen, T., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "Corneal Haze Development after PRK Is Regulated by Volume of Stromal Tissue Removed." *Cornea.* 1998; 17(6):627-639.

309. Moller-Pedersen, T., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "Neutralizing Antibody to TGFß Modulates Corneal Haze but Not Regression of Photoablative Effect following Excimer Laser PRK." *Current Eye Res* 1998; 17:736-747.

310. Hogan, R.N., Heck, E., Cavanagh, H.D.: "Risk of Prion Disease Transmission from Ocular

Publications (cont.):

Donor Tissue Transplantation." *Cornea* 1999; 18(1):2-11. (with editorial comment).

311. Nartney, I.N., Cavanagh, H.D., Jester, J.V, Andrews, P., Petroll, W.M.: "Characterization of Specular "Dark Events" in Human Donor Corneal Endothelium by Scanning and Transmission Electron Microscopy." *Cornea* 1998; 17(5): 544-549.

312. Hsu, J.K.W., Cavanagh, H.D., Jester, J.V., Petroll, W.M.: "Changes in Corneal Endothelial Apical Junctional Protein Organization Following Corneal Cold Storage." *Cornea* 1999;18:712-720.

313. Jester, J.V., Petroll, W.M., Cavanagh, H.D.: "Measurement of tissue thickness using confocal microscopy." *Methods in Enzymology* 1999;307:230-245.

314. Beck, R.W., Gal, R.L., Mannis M.J., Holland, E.J., Cavanagh, H.D., Foulks, F.N., Lindquist, T., Macsai, M.S., Smith, R.E., Stark, W.J., Stulting, R.D., Sugar, J.: "Is Donor Age an Important Determinant of Graft Survival?" *Cornea* 1999;18:503-510.

315. Petroll, W.M., Hsu, J.K.W., Bean, J.J., Cavanagh, H.D.: "Labeling of Cycling Corneal Endothelial Cells During Healing Using a Monoclonal Antibody to the Ki67 Antigen (MIB-1)." *Cornea* 1999;18:98-108.

316. Petroll, W.M., Hsu, J.K.W., Bean, J.J., Cavanagh, H.D., Jester, J.V.: "The Spatial Organization of Apical Junctional Complex-Associated Proteins in Feline and Human Corneal Endothelium." *Curr Eye Res* 1999;18:10-19.

317. Roy, P., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Exertion of Tractional Force Requires the Coordinated Up-Regulation of Cell Contractility and Adhesion." *Cell Motil Cytoskeleton* 1999;43:23-34.

318. Roy, P., Petroll, W.M., Chuong, C.J., Cavanagh, H.D., Jester, J.V.: "Effect of Cell Migration on the Maintenance of Tension on Collagen Matrix-Implication in Wound Healing." *Ann Biomed Eng* 1999;27:721-730.

319. Jester, J.V., Maurer, J.K., Parker, R.D., Bean, J., Petroll, W.M., Cavanagh, H.D." Area and Depth of Surfactant-Induced Corneal Irritancy Predicts Ocular Response." *Invest Ophthalmol Vis Sci* 1999;39:922-936.

320. Jester, J.V., Petroll, W.M., Cavanagh, H.D.: "Corneal Stromal Wound Healing in Refractive Surgery: The Role of Myofibroblasts." *Progress in Retinal Eye Research* 1999;18:311-356.

321. Jester, J.V., Moller-Pedersen, T., Huang, J., Sax, C.M., Petroll, W.M., Cavanagh, H.D., Piatigorsky, J.: The Cellular Basis of Corneal Transparency: Evidence for Corneal "Crystallins"." *J. Cell Sci* 1999;112:613-622.

Publications (cont.):

322. Jester, J.V., Huang, J., Barry-Lane, P.A., Kao, W.W., Petroll, W.M., Cavanagh, H.D.: "Transforming Growth Factor ß-Mediated Myofibroblast Differentiation Requires Actin and Fibronectin Assembly." *Invest. Ophthalmol Vis Sci* 1999;40:1959-1967.

323. Jester, J.V., Petroll, W.M., Cavanagh, H.D.: "Measurement of Tissue Thickness Using Confocal Microscopy." *Methods in Enzymology* 1999;307:230-245.

324. Petroll, W.M., Jester, J.V., Ma, L., Cavanagh, H.D.: "Effects of TGF On Cytoskeletal and Apical Junctional Protein Organization in Human Corneal Endothelium *in situ*." *ARVO - IOVS* 1999;40:S627.

325. Yu, A.A., Jester, J.V., Cavanagh, H.D., Petroll, W.M.: "Digital Signal Processing of Confocal Microscopy Through Focusing (CMTF) Intensity Curves." *ARVO - IOVS* 1999;40:S902.

326. Chang, J.H., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "LPA-Induced Matrix Re-Organization by Corneal Keratocytes Involves Protein Phosphorylation and Isoprenylation." *ARVO - IOVS* 1999;40:S622.

327. Jester, J.V., Huang, J., Petroll, W.M., Cavanagh, H.D., Kays, W.T., Piatigorsky, J.: "Expression of Rabbit Corneal Crystallins by Keratocytes Correlates with Neonatal Development of Corneal Transparency." *ARVO - IOVS* 1999;40:S180.

328. Ladage, P.M., Yamamoto, K., Petroll, M., Jester, J., Bergmanson, J.P.G., Cavanagh, H.D.: "Effect of RGP Contact Lens Extended Wear on Epithelial Mitosis in the Rabbit." *Invest Ophthalmol Vis Sci* 1999;40:S908 (Abstract 4787).

329. Cavanagh, H.D., Hogan, R.N.: Letter to the Editor, response to Johnson RT, Gibbs CJ: Creutzfeldt-Jacob Disease and Related Transmissible Spongiform Encephalopathies". *N Engl J Med* 1999;21:1688-1689.

330. Cavanagh, H.D., Ren, H., Ladage, P.M., Li, L., Petroll, M., Jester, J.: "Effects of Low and High Dk Daily Contact Lens Wear on Binding of Pseudomonas Aeruginosa to Human Corneal Epithelium." *ARVO - IOVS* 1999;40:S906.

331. Ichijima, H., Tanaka, H., Cavanagh, H.D.: "Chronic Adaptation of Glucose-lactate Metabolism in the Rabbit Cornea During RGP Lens Continuous Wear." *ARVO - IOVS* 1999;40:S.

332. Petroll, W.M., Jester, J.V., Bean, J.J., Ma, L., Cavanagh, H.D.: "Proliferating Corneal Endothelial Cells Retain Junctions During in vivo Wound Healing." *ARVO - IOVS* 1999.

333. Ren, D.H., Petroll, W.M., Jester, J.V., Ho-Fan, J., Cavanagh, H.D.: "Short-term Hypoxia Downregulates Epithelial Cell Desquamation In Vivo, But Does Not Increase *Pseudomonas*

Publications (cont.):

aeruginosa Adherence to Exfoliated Human Corneal Epithelial Cells." *CLAO J* 1999;25:73-79, with Editorial Comment.

334. Ren, D.H., Petroll, W.M., Jester, J.V., Ho-Fan, J., Cavanagh, H.D.: "The Relationship between Contact Lens Oxygen Permeability and Binding of *Pseudomonas aeruginosa* to Human Corneal Epithelial Cells after Overnight and Extended Wear." *CLAO J* 1999;25:80-100, with Editorial Comment.

335. Moller-Pedersen, T., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: "A 1-year Confocal Microscopic Study of the Mechanisms Underlying Corneal Haze Development and Refractive Regression following Excimer Laser PRK." *Cornea* 1999;18:374.

336. Chang, J.H., Ren, H., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: The Application of *In Vivo* Confocal Microscopy and Tear LDH Measurement in Assessing Corneal Response to Contact Lens and Contact Lens Solutions." *Current Eye Res* 1999;19:171-181.

337. Ren, D.H., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "The Effect of Rigid Gas Permeable Contact Lens Wear on Proliferation of Rabbit Corneal and Conjunctival Epithelial Cells." *CLAO J* 1999;25:136-141, with Editorial Comment.

338. Wang, X., McCulley, J.P., Bowman, R.W., Cavanagh, H.D.: "Results of Myopic Astigmatic LASIK with VISX Star Excimer." *Invest. Ophthalmol. Vis. Sci.* 40(Suppl): S894, 1999.

339. Maurer, J.K., Parker, R.D., Petroll, W.M., Carr, G.J. Cavanagh, H.D., Jester, J.V.: "Quantitative Measurement of Acute Corneal Injury in Rabbits with Surfactant of Different Type and Irritancy." *Toxicol and Applied Pharmacology* 1999;158:61-70.

340. Cavanagh, H.D., Hogan, R.N.: "Preventing Prion Transmission in Corneal Transplants" (Letter to Editor) *JAMA* 1999;282:2211.

341. Cavanagh, H.D.: "Incidence of Contact Lens Associated Microbial Keratitis and its Related Morbidity." (Letter to Editor) *Lancet* 1999;154:179.

342. Ichijima, H., Kawai, T., Yamamoto, K., Cavanagh, H.D.: "Determination of Protein Deposits on RGP Lenses by X-ray Photoelectron Spectroscopy." *CLAO J* 2000;26:18-25.

343. Ichijima, H., Imayasu, J., Tanaka, H., Ren, D.H., Cavanagh, H.D.: "Effects of RGP Lens Extended Wear on Glucose-lactate Metabolism and Stromal Swelling in the Rabbit Cornea." *CLAO J* 2000;26:30-36.

344. Moller-Pedersen, T., Cavanagh, H.D., Petroll, W.M.., Jester, J.V." "Stromal Wound Healing Explains Refractive Instability and Haze Development after Photorefractive Keratectomy." *Ophthalmology* 2000;107:1235-1245.

Publications (cont.):

345. Li, J., Jester, J.V., Cavanagh, H.D., Petroll, W.M.: "On-Line 3-Dimensional Confocal Imaging in Vivo." *Invest Ophthalmol Vis Sci* 2000;41:2945-2953.

346. Ladage, P.M., Yamamoto, K., Ren, D.H., Petroll, M.W., Jester, J.F., Bergmanson, J.P.G., Cavanagh, H.D.: "Basal Epithelial Cell Turnover Following RGP Extended Contact Lens Wear in the Rabbit Cornea." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S75.

347. Yamamoto K., Ladage, P.M., Ren, H.D., Petroll W.M., Jester, J.V., Cavanagh, H.D.: "Bcl-2 Expression and Apoptosis in the Rabbit Corneal Epithelium During Low and Hyper Dk Rigid Gas Permeable Overnight Contact Lens Wear." *Invest Ophthalmol Vis Sci* 2000:41(Suppl);S75.

348. Ren, D.H., Ladage, P.M., Yamamoto, K., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Effects of Soft and Rigid Gas Permeable (RGP) Daily Contact Lens Wear (DW) on Binding of *Pseudomonas aeruginosa* (PA) to Human Corneal Epithelium." *Invest Ophthalmol Vis Sci* 2000:41(Suppl):S76.

349. Mariappan, M.R., Petroll , W.M., Cavanagh, H.D., Jester, J.V.: "Oleamide inhibits cell-cell communication and *in vitro* wound concentration in corneal fibroblasts." *Invest Ophthalmol Vis Sci* 2000:41(Suppl):118.

350. Yu, A.A., Li, J., Jester, J.V., Cavanagh, H.D., Petroll, W.M.: "The Use of Photomultiplier Tube for Signal Detection During Confocal Microscopy Through Focusing." *Invest Ophthalmol Vis Sci* 2000:41(Suppl):S258.

351. Parver, D.L., Hargrave, S.L., Jung, J.C., Fini, M.E., Fisher, S., Jester, J.V., McCulley, J.P., Cavanagh, H.D.: "Matrix Metalloproteinase Expression after Photorefractive Keratectomy Complicated by Corneal Perforation." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S682.

352. Yi, D.H., Bowman, R.W., McCulley, J.P., Cavanagh, H.D.: "Comparing Surgically Induced Astigmatism Following Hyperopic or Myopic Photorefractive Keratectomy." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S690.

353. Johnson , E.W., El Agha, M.S., Bowman, R.W., Cavanagh, H.D., McCulley, J.P.: "PRK versus LASIK for the treatment of spherical hyperopia using the VISX Star Excimer Laser." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S691.

354. Maurer, J.K., Parker R.D., Molai, A., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Corneal Injury in the Rabbit Low Volume eye Test Using Non-Surfactants." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S900.

355. Lee Y.G., Chen W.Y.W., Petroll W.M., Cavanagh, H.D., Jester, J.V.: "Excimer Laser Photorefractive Keratectomy (PRK) in Humans, Mechanical Debridement versus Laser Scrape

Publications (cont.):

Technique." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S922.

356. Mason, R., Gokmen, F., Cheung D., Hargrave, S.L., Bowman, R.W., Cavanagh, H.D., McCulley, J.P.: "PTK at the University of Texas Southwestern Medical Center: A three Year Retrospective Study." *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S923.

357. Jester, J.V., Molai, A., Petroll, W.M., Cavanagh, H.D., Parker, R.D., Carr, G.J., Maurer, J.K.: "Quantitative Characterization of Acid and Alkali Induced Corneal Injury in the Low Volume Eye Test." *Tox Pathol* 2000;28:679-687.

358. Petroll, W.M., Ma, L., Jester, J.V., Cavanagh, H.D., Bean, J. "Organization of Junctional Proteins in Proliferating Cat Corneal Endothelium During Wound Healing." *Cornea* 2001;20:73-80.

359. Shen, J.P., Whitson, J.T., El Agha, M.S., Kooner, K.S., Hargrave, S.L., Bowman, R.W., Cavanagh, H.D., McCulley, J.P.: "Glaucoma Tube Shunt Placement in the Setting of Penetrating Keratoplasty: A Retrospective Review." *Invest Ophthalmol Vis Sci* 2001;42:S419.

360. Ladage, P.M., Yamamoto, K., Ren, D.H., Li, L., Petroll, W.M., Jester, J.V., Bergmanson, J.P.G., Cavanagh, H.D.: "Effects of Overnight Hyper Dk Soft Contact Lens Wear and Eyelid Closure on Epithelial Proliferation Rate of Rabbit Cornea." *Invest Ophthalmol Vis Sci* 2001;42:S591.

361. Li, L., Ren, D.H., Ladage, P.M., Yamamoto, K., Molai, M., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "The Effect of Overnight Contact Lens Wear and Eyelid Closure on Expression of Annexin V at the Rabbit Corneal Epithelial Surface." *Invest Ophthalmol Vis Sci* 2001;42:S592.

362. Ren, D.H., Yamamoto, K., Ladage, P.M., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Adaptive Effects of 30-day Extended Wear of New Hyper-O_2 Transmissible RGP and Soft Contact Lenses on Bacterial Binding and Corneal Epithelium." *Invest Ophthalmol Vis Sci* 2001;42:S595.

363. Alizadeh, H., Apte, S., El-Agha, M.S., Li, L., Hurt, M., Howard, K., Cavanagh, H.D., McCulley, J.P., Niederkorn, J.Y.: "Tear IgA and Serum IgG Antibodies against *Acanthamoeba* in Patients with *Acanthamoeba* Keratitis." *Invest Ophthalmol Vis Sci* 2001;42:S740.

364. Yamamoto, K., Ladage, P.M., Li, L., Ren, D.H., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Bcl-2 Expression and Apoptosis in the Human Corneal Epithelium." *Invest Ophthalmol Vis Sci* 2001;42:S936.

365. Yamamoto, K., Ladage, P.M., Ren, D.H., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D. "Bcl-2 expression in the human cornea." *Exp. Eye Res* 2001;73:247-255.

Publications (cont.):

366. Lee, Y.G., Chen, W.Y.W., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Corneal Haze after Photorefractive Keratectomy Using Different Epithelial Removal Techniques." *Ophthalmology* 2001;108:112-120.

367. Mar, P.K., Roy, P., Yin, H.L., Cavanagh, H.D., Jester, J.V.: "Stress Fiber Formation is Required for Matrix Reorganization in a Corneal Myofibroblast Cell Line." *Exp Eye Res* 2001;72:455-466.

368. Jester, J.V., Lee, Y.G., Li, J., Chakravarti, S., Paul, J., Petroll, W.M., Cavanagh, H.D.: "Measurement of corneal sublayer thickness and transparency in transgenic mice with altered corneal clarity using in vivo confocal microscopy." *Vision Research* 2001;41:1283-1290.

369. Maurer, J.K., Molai, A., Parker, R.D., Li, L., Carr, G.J., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: "Pathology of Ocular Irritation with Bleaching Agents in the Rabbit Low-volume Eye Test. *Tox Pathol* 2001;29:308-319.

370. Maurer, J.K., Molai, A., Parker, R.D., Li, L., Carr, G.J., Petroll, W.M., Cavanagh, H .D., Jester, J.V.: "Pathology of Ocular Irritation with Acetone, Cyclohexanol, Parafluoroaniline, and Formaldehyde in the Rabbit Low-Volume Eye Test. *Tox Pathol* 2001;29:187-199..

371. Ladage, P.M., Yamamoto, K., Ren, D.H., Li, L., Jester, J.V., Petroll, W.M., Cavanagh, H.D.: "Effects of Rigid and Soft Contact Lens Daily Wear on Corneal Epithelium, Tear Lactate Dehydrogenase and Bacterial Binding to Exfoliated Epithelial Cells." *Ophthalmology* 2001;108:1279-1288.

372. Yi, D.H., Petroll, M., Bowman, R.W., McCulley, J.P., Cavanagh, H.D.: "Surgically Induced Astigmatism after Hyperopic or Myopic Photorefractive Keratectomy." *J Cataract Ref Surg* 2001;27:396-403.

373. Alizadeh, H., Apte, S., El-Agha, M., Li, L., Hurt, M.D., Howard, K., Cavanagh, H.D., McCulley, J.P., Niederkorn, J.Y.: "Tear IgA and Serum IgG Antibodies against Acanthamoeba in Patients with Acanthamoeba Keratitis." *Cornea* 2001;20:622-627.

374. Ladage, P.M., Yamamoto, K., Ren, D.H., Li, L., Jester, J.V., Petroll, W.M., Bergmanson, J.P.G., Cavanagh, H.D.: "Proliferation Rate of Rabbit Corneal Epithelium during Overnight Rigid Contact Lens Wear." *Invest Ophthalmol Vis Sci* 2001;42:2804-2812.

375. Miller, A.E., McCulley, J.P., Bowman, R.W., Cavanagh, H.D., Wang, X.H.: "Patient Satisfaction after LASIK for Myopia. *CLAO J.* 2001;27:84-88.

376. El-Agha, M.S.H., Johnston, E.W., Bowman, R.W., Cavanagh, H.D., McCulley, J.P.: "PRK Versus LASIK for the Treatment of Spherical Hyperopia." *Tr Am Soc Ophthalmol* 2001, 98:59-66.

Publications (cont.):

377. Yamamoto, K., Ladage, P.M., Ren, D.H., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Epitope Variability of Bcl-2 Immunolocalization in the Human Corneal Epithelium." *CLAO J* 2001;27:221-224.

378. Yamamoto, K., Ladage, P.M., Ren, H.D., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Effects of Low and Hyper Dk Rigid Gas Permeable Contact Lenses on Bcl-2 Expression and Apoptosis in the Rabbit Corneal Epithelium." *CLAO J* 2001, 27:137-143.

379. Cavanagh, H.D.: "New worlds open before us: Four-dimensional in vivo microscopy (letter; comment). *Clinical & Experimental Ophthalmology* 2001;29:275.

380. Cavanagh HD, Ladage PM, Yamamoto K, Ren DH, Li L, Petroll WM, Jester JV. "Effects of daily and extended wear of novel hyper O_2 transmissible soft contact lens on bacterial binding and corneal epithelium: a 1 year clinical trial. *Invest Ophthalmol Vis Sci* 2002;42:S125.

381. Ren, D.H., Yamamoto, K., Ladage, P.M., Molai, M., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D. "Adaptive Effects of 30-Night Wear of Hyper O_2 Transmissible Contact Lenses on Bacterial Binding and Corneal Epithelium." *Ophthalmology* 2002;109:27-40.

382. Yamamoto T, Ladage PM, Petroll MW, Jester JV, Cavanagh HD."Muc1/Muc5 expression in ocular surface epithelium in the rabbit following 24-hours low Dk/t RGP corneal contact lens wear." *Invest Ophthalmol Vis Sci* 2002;42:S125.

383. Ladage PM, Petroll WM, Bergmanson JPG, Jester JV, Cavanagh HD. "3-C Location of BrdU-labeled epithelial cells following overnight RGP lens wear in rabbit cornea." *Invest Ophthalmol Vis Sci* 2002;78:S128.

384. Yamamoto, K., Ladage, P.M., Ren, D.H., Li, L., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: "Effect of Eyelid Closure and Overnight Contact Lens Wear on Viability of Surface Epithelial Cells in Rabbit Cornea." *Cornea* 2002;21:85-90.

385. Song J, Lee YG, Houston J, Petroll WM, Chakravarti S, Cavanagh HD, Jester JV: "Neonatal Corneal Stromal Development in the Normal and Lumican Knockout Mouse." *ARVO Abstract*, 2002, Abs. #1694.

386. Gatlin JE, Melkus MW, Padgett A, Cavanagh HD, Petroll WM, Garcia JV, Jester JV: "Multiphoton Confocal Imaging of Corneal Wound Healing Fibroblasts Using Gene Transfer of Green Fluorescent Protein (GFP)." *ARVO Abstract*, 2002, Abs. #1712.

387. Awan MH, Whitson JT, McCulley JP, Bowman RW, Cavanagh HD, Song J, Hertzog L: "Effect of Betaxolol on Optic Nerve Head Topography and Retinal Nerve Fiber Layer Thickness During LASIK." *ARVO Abstract*, 2002, Abs. #2100.

Publications (cont.):

388. Ladage PM, Petroll WM, Bergmanson JPG, Jester JV, Cavanagh HD: "Location of BrdU-labeled Epithelial Cells Following Overnight RGP Lens Wear in Rabbit Cornea." *ARVO Abstract*; 2002, Abs. #3079.

389. Cavanagh H, Ladage PM, Yamamoto K, Ren DH, Li L, Petroll WM, Jester JV: "Effects of Daily and Extended Wear (EW) of a Novel Hyper-O_2 Transmissible Soft Contact Lens on Bacterial Binding and Corneal Epithelium: A 1 Year Clinical Trial." *ARVO Abstract;* 2002, Abs. #3089.

390. Yamamoto T, Ladage PM, Petroll WM, Jester JV, Cavanagh HD. "Muc1/Muc5 Expression in Ocular Surface Epithelium in the Rabbit Following 24-hours Low Dk/t RGP Corneal Contact Lens Wear." *ARVO Abstract*; 2002, Abs. #3102.

391. Wang X, McCulley JP, Bowman RW, Cavanagh HD: "Contact Lens-induced Corneal Warpage in Patients Scheduled for Photorefractive Surgery." *ARVO Abstract;* 2002, Abs. 3103.

392. Vargas JM, Seward M, McCulley JP, Bowman RW, Cavanagh HD. "LADARVsion vs VISX S3 in Treating Myopia and Hyperopia." *ARVO Abstract*; 2002, Abs. #4142.

393. Oral D, Vargas JM, Seward M, Bowman RW, McCulley JP, Cavanagh HD: "Results of LASIK after Radial Keratotomy." *ARVO Abstract;* 2002, Abs. 4155.

394. Robertson DM, Ladage PM, Yamamoto T, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh HD: "Characterization of Bax knockout murine corneas." *Optom Vis Sci* 2002;79:2002.

395. Hargrave SL, Jung JC, Fini ME, Gelender H, Cather C, Guidera A, Udell I, Fischer S, Jester JV, Bowman, RW, McCulley JP, Cavanagh HD: "The possible role of the vitamin E solubilizer in topical diclofenac on matrix metalloproteinase expression: An analysis of Post-operative Keratolysis." *Ophthalmology* 2002;109,343-350.

396. Gokmen F, Jester JV, Petroll WM, Cavanagh HD: "The use of in vivo confocal microscopy through-focusing in measuring corneal flap thickness after LASIK. *J Cat Refract Surg* 2002; 28:962-970.

397. Wang, S., Shen, J., McCulley, J.P., Bowman, R.W., Petroll, W.M., Cavanagh, H.D.: "Intraocular Pressure Measurement after Hyperopic LASIK." *CLAO J* 2002;28:136-139.

398. Petroll WM, Yu A, Li J, Jester JV, Cavanagh HD, Black T.: "A Prototype Two-Detector Confocal Microscope for In Vivo Corneal Imaging." *Scanning* 2002;24:163-170.

Publications (cont.):

399. Chung MS, Pepose JS, El-Agha MS, Cavanagh HD: "Confocal microscopic findings in a case of delayed-onset diffuse lamellar keratitis after laser in situ keratomileusis. *J Cat Refract Surg* 2002;28:1467-1470.

400. Cavanagh HD, Ladage PM, Li SL, Yamamoto K, Molai M, Ren DH, Petroll WM, Jester JV. "Effects of daily and overnight wear of novel hyper oxygen-transmissible soft contact lens on bacterial binding and corneal epithelium: a 13-month clinical trial." *Ophthalmology* 2002;109:1957-1969.

401. Cavanagh HD, Li S, Yamamoto K, Ladage PM, Petroll WM, Jester, JV. "Oxygen effects on normal and contact lens-perturbed corneal epithelium." *Estratto da Minerva Oftalmologica*, 2002;44:1-13.

402. Jester JV, Huang JY, Petroll WM, Cavanagh HD. "TGF beta induced myofibroblast differentiation of rabbit keratocytes requires synergistic TGF beta, PDGF and integrin signaling. *Experimental Eye Research* 2002, 75:645-657.

403. Wang X, McCulley JP, Bowman RW, Cavanagh DH. "Time to resolution of contact lens-induced corneal warpage prior to refractive surgery." *The CLAO Journal* 2002;28:169-171.

404. Jester JV, Gatlin J, Melkus M, Padgett A, Cavanagh HD, Petroll WM, Garcia JV: "In Vivo Fluorescent Imaging of Corneal Wound Healing Fibroblasts." *Wound Repair and Regeneration* 2002;10:A26.

405. Wang, X., McCulley, J.P., Bowman, R.W., Cavanagh, H.D.: "Results of Combined Myopic Astigmatic LASIK Treatment and Retreatments." *CLAO J* 2002;28:55-60.

406. Li L, Ren DH, Ladage PM, Yamamoto K, Petroll WM, Jester JV, Cavanagh HD: "Annexin V Binding to Rabbit Corneal Epithelial Cells following Overnight Contact Lens Wear or Eyelid Closure." *CLAO J* 2002;28:48-54.

407. Ladage PM, Yamamoto K, Li L, Ren DH, Petroll WM, Jester JV, Cavanagh HD: "Corneal epithelial homeostasis following daily and overnight contact lens wear." *Contact Lens and Anterior Eye* 2002;25:11-21.

408. Ladage PM, Petroll WM, Jester JV, Fisher S, Bergmanson JPG, Cavanagh HD: "Spherical Indentations of the Human and Rabbit Corneal Epithelium Following Extended Contact Lens Wear. *CLAO J* 2002;28:177-180.

409. Song J, Lee Y-G, Houston J, Petroll WM, Chakravarti S, Cavanagh HD, Jester JV: "Neonatal corneal Stromal Development in the Normal and Lumican-Deficient Mouse." *Invest Ophthalmol Vis Sci* 2003;44:548-557.

Publications (cont.):

410. Li SL, Ladage PM, Yamamoto T, Petroll WM, Jester JV, Cavanagh HD. "Effects of contact lens care solutions on surface exfoliation and bacterial binding to corneal epithelial cells." *Eye and Contact Lens* 2003;29:27-30.

411. Gleason W, Tanaka H, Albright R, Cavanagh HD. "A 1-Year Prospective Clinical Trial of Menicon Z (Tisilfocon A) Right Gas-Permeable Contact Lenses Worn on a 30-day Continuous Wear Schedule." *Eye & Contact Lens* 2003;29:2-9.

412. Cavanagh HD, Ladage P, Yamamoto K, Li SL, Petroll WM, Jester JV. " Effects of Daily and Overnight Wear of Hyper-Oxygen Transmissible Rigid and Silicone Hydrogel Lenses on Bacterial Binding to the Corneal Epithelium: 13-Month Clinical Trials." *Eye & Contact Lens* 2003;29:S14-S16.

413. Ladage PM, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh, HD. "Role of Oxygen in Corneal Epithelial Homeostasis During Extended Contact Lens Wear." *Eye & Contact Lens* 2003; 29:S2-S6.

414. Ladage PM, Yamamoto K, Li L, et al: "Effects of O_2 Transmissibility on Corneal Epithelium after Daily and Extended Contact Lens Wear in Rabbit and Man." In *Third International Conference on the Lacrimal Gland, Tear Film, and Dry Eye Syndromes: Basic Science and Clinical Relevance 3*, 2001, Maui, Hawaii, Klewer Academic/Plenum Publishers, *Adv Exp Med Biol* 2003;885-893.

415. Hogan RN, Cavanagh HD, Brown P: Letter to the Editor, "Qualifications to the report of a new case or Creutzfeldt-Jakob disease in the recipient of a corneal transplant." *Arch Neurol* 2003;60:293-294.

416. Niederkorn JY, Alizadeh H, Leher H, Apte S, El Agha S, Ling L, Hurt M, Howard K, Cavanagh HD, McCulley JP: "Role of Tear Anti-*Acanthamoeba* IgA in *Acanthamoeba* Keratitis." *Third Annual Conference on the Lacrimal Gland, Tear Film and Dry Eye Syndrome,* Maui, Hawaii, Klewer Academic/Plenum Publishers, *Adv Exp Med Biol* 2003;845-850.

417. Houston JM, Adams B, Petroll WM, Cavanagh HD, Jester JV. "Corneal Haze after Excimer PTK in the Mouse Cornea Related to Stromal Cell Density and Myofibroblast Differentiation but not Stromal Growth." *ARVO Abstract* 2003, Abs. #892.

418. Yamamoto T, Fisher SR, Jester JV, Cavanagh HD: "Differentiation of telomerase Immortalized Human Corneal Epithelial Cells." *ARVO Abstract* 2003; Abs. #1337.

419. Kim AS, McCulley JP, Cavanagh HD, Jester JV, Bugde SC, Kovoor T, Petroll WM: "Evaluation of the Effects of Topical Ophthalmic Fluoroquinolones (FQ) on the Cornea Using In Vivo Confocal Microscopy." *ARVO Abstract* 2003; Abs. #1367.

Publications (cont.):

420. Robertson DM, Ladage PM, Yamamoto T, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh HD: "The Role of Bax as a Regulator of Corneal Epithelial Homeostasis." *ARVO Abstract* 2003; Abs. #1371.

421. Ladage PM, Robertson DM, Yamamoto T, Petroll WM, Jester JV, Cavanagh HD: "The Effect of Bcl-2 Overexpression on Corneal Epithelial Homeostasis in Transgenic Mice." *ARVO Abstract* 2003; Abs. #1372.

422. Oral D, McCulley JP, Bowman RW, Cavanagh HD, El-Agha MSH, Seward MS: "Hyperopic LASIK Results with Ladar Vision, Visx S2, and Visx S3." *ARVO Abstract* 2003; Abs. #2619.

423. Jester JV, Houston J, Adams B, Huang J, Matinyare D, Petroll WM, Cavanagh HD: " Species Specific and Developmental Expression of Corneal Keratocyte Crystallin Proteins." *ARVO Abstract*, 2003; Abs. #4219.

424. Cavanagh HD: "Continuous Wear Hyper Dk Contact Lenses: More Industry Rodomontade or a Truly New Age?" Editorial, *Eye and Contact Lens* 2003;29:S1.

425. Petroll WM, Kovoor T, Ladage PM, Cavanagh HD, Jester JV, Robertson DM: "Can Postlens Tear Thickness Be Measured Using Three-Dimensional In Vivo Confocal Microscopy?" *Eye and Contact Lens* 2003;29:S110-114.

426. Gatlin J, Melkus MW, Padgett A, Petroll WM, Cavanagh HD, Garcia JV, Jester JV: In Vivo Fluorescent Labeling of Corneal Wound Healing Fibroblasts." *Exp Eye Res* 2003;76:361-371.

427. Ladage PM, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh HD: "Vertical Movement of Epithelial Basal Cells Towards the Corneal Surface During Use of Extended Wear Contact Lenses." *Invest Ophthalmol Vis Sci* 2003;44:1056-1063.

428. El-Agha SM, Johnston EW, Bowman RW, Cavanagh HD, McCulley JP: "Photorefractive Keratectomy Versus Laser In Situ Keratomileusis for the Treatment of Spherical Hyperopia." *Eye and Contact Lens* 2003;29:31-37.

429. Ladage PM, Ren DH, Jester JV, Petroll SM, Bergmanson JPG, Cavanagh HD: "Eyelid Closure, Soft and Silicone Hydrogel Contact Lens Wear: Effects on the Proliferation Rate of The Rabbit corneal Epithelium." *Invest Ophthalmol Vis Sci* 2003;44:44:1843-1849.

430. Ladage PM, Yamamoto K, Ren DH, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh HD: "Recovery time of Corneal Epithelial Proliferation in the Rabbit Following Rigid Permeable Extended Contact Lens Wear. *Eye and Contact Lens* 2003;29:00-00 (in press).

Publications (cont.):

431. Wilson G, Ladage PM, Cavanagh HD: "The Epithelium in Extended Wear." In: *Silicone Hydrogels: The Rebirth of Continuous Wear Contact Lenses,* ed. Sweeney DF, 2nd edition, Butterworth-Heinemann pubs, Oxford, UK 2003 (in press).

432. Seward MS, Oral D, McCulley JP, Bowman RW, Cavanagh HD: "Comparison of LADARVision and Visx Star S3 LASIK outcomes in myopia and hyperopia." *Journal of Cataract and Refractive Surgery* (in press, 2003).

433. Whitson JT, McCulley JP, Cavanagh HD, Song J, Bowman RW, Hertzog L. "Effect of LASIK on optic nerve head topography and retinal nerve fiber layer thickness." *Journal of Cataract and Refractive Surgery* (in press, 2003).