

CURRICULUM VITAE
H. DWIGHT CAVANAGH, M.D., Ph.D.

PERSONAL INFORMATION:

Current Professional Address: Univ. of Texas Southwestern Medical Center at Dallas
5323 Harry Hines Boulevard
Dallas, Texas 75390-9057
Tel. (214) 648-8074
Fax: (214) 648-9061
e-mail: dwight.cavanagh@utsouthwestern.edu

EDUCATION:

1954 - 1958	St. Leo Abbey Preparatory School Pasco County, Florida
1958 - 1960	Massachusetts Institute of Technology Cambridge, Massachusetts
1960 - 1962	Johns Hopkins University School of Medicine Baltimore, Maryland Received B.A. (1962)
1963 - 1964	Johns Hopkins Medical School Department of Physiological Chemistry USPH Post-Sophomore Fellow in Research Preceptor: Albert Lehninger, Ph.D.
1962 - 1965	Johns Hopkins University School of Medicine Baltimore, Maryland Received M.D. (1965)
1965 - 1966	Johns Hopkins Hospital Harriet Lane Service Internship in Pediatrics
1966 - 1969	Harvard University Department of Biology (Thesis Preceptor: George Wald, Ph.D., Nobel Laureate, Medicine & Physiology (1967), Cambridge, Massachusetts Received Ph.D. in Biology (1972)

H. Dwight Cavanagh, M.D., Ph.D.

- 1969 - 1973
The Wilmer Eye Institute,
The Johns Hopkins Hospital
Residency and Fellowship in Ophthalmology
Preceptor: A.E. Maumenee, MD
- 1973 - 1975
Massachusetts Eye and Ear Infirmary
Harvard Medical School
Clinical Fellow on the Cornea Service
Eye Research Institute of Retina Foundation
Harvard Medical School
Research Fellow, Laboratory for Corneal Research
Preceptor: Claes H. Dohlman, M.D.

ACADEMIC AND ADMINISTRATIVE APPOINTMENTS:

- 1966 - 1969
Harvard University Department of Biology
USPH Post-Doctoral Research Fellow
Teaching Fellow, Harvard University Graduate School
of Arts & Sciences (Natural Science 5, Biology)
- 1969 - 1973
The Wilmer Eye Institute, Johns Hopkins University,
Instructor in Ophthalmology
- 1975 - 1976
Assistant Professor of Ophthalmology, Harvard Medical
School; Director, Residency Training in Ophthalmology
and Assistant Surgeon in Ophthalmology,
Massachusetts Eye & Ear Infirmary
- 1975 - 1976
Assistant Director of Laboratory for Corneal Research,
Eye Research Institute of Retina Foundation
- 1976 - 1978
Associate Professor of Ophthalmology with tenure,
Emory University School of Medicine
- 1978 - 1986
Professor and Chairman, Department of Ophthalmology,
Emory University School of Medicine
- 1978 - 1987
F. Phinizy Calhoun, Sr. Distinguished Professor of
Ophthalmology, Emory University School of Medicine
- 1978 - 1986
Chief, Section of Ophthalmology, The Emory Clinic
- 1984 - 1986
Founding Director, The Emory Eye Center, Emory
University
- 1986 - 1987
Visiting Research Professor (Ophthalmology), Center for
Sight, Georgetown University (sabbatical leave)

H. Dwight Cavanagh, M.D., Ph.D.

1987 - 1991	Professor of Ophthalmology, Georgetown University
1991 - 1995	Distinguished University Professor of Ophthalmology and Vice-Chairman, with tenure, University of Texas Southwestern Medical Center at Dallas
Sept 1, 1995 - 2011	The Dr. W. Maxwell Thomas Distinguished Chair Professor of Ophthalmology and Vice Chairman, with tenure, University of Texas Southwestern Medical Center at Dallas
Sept 1, 2011 – Present	Clinical Professor of Ophthalmology and Vice-Chairman Emeritus
Jan 1, 1997 - 2005	Medical Director and Associate Dean for Clinical Affairs /Zale Lipshy University Hospital and The University of Texas Southwestern Medical Center at Dallas
Jan 1, 1999 - Present	Director, and Associate Dean for Transplant Services Center, The University of Texas Southwestern Medical Center at Dallas

MAJOR PROFESSIONAL SERVICE APPOINTMENTS:

1975, 1980, 1985, 1990	Consultant to National Eye Institute; Special Study Sections; Corneal Research Task Force Unit; National Plan for Vision Research
1975 - Present	Consultant Reviewer for: <i>American Journal of Ophthalmology</i> <i>Annals of Ophthalmology</i> <i>Archives of Ophthalmology</i> <i>Biochemical Pharmacology</i> <i>British Journal of Ophthalmology</i> <i>Contact Lens Journal of Ophthalmologists</i> (Editor 2002 -) <i>Current Eye Research</i> <i>Current Opinion in Ophthalmology</i> <i>European J. Ophthalmology</i> <i>Experimental Eye Research</i> <i>Investigative Ophthalmology and Visual Science</i> <i>The Journal Cornea (Editor: 1989-95)</i> <i>Journal of Microscopy</i> <i>The Journal of Scanning Microscopy</i> <i>Molecular Vision</i> <i>Nature - Medicine</i> <i>The New England Journal of Medicine</i> <i>Ophthalmic Research</i>

H. Dwight Cavanagh, M.D., Ph.D.

Optometry and Visual Science
Proceedings of the National Academy of Science
(USA)

Major Professional Service Appointments (cont):

Prostaglandins
Science
Survey of Ophthalmology
Eye and Contact Lens: Science and Clinical
Practice (Editor-in-Chief: 2002 – 2007)
The Journal Cornea (Editor-in-Chief: 1986-1995)

1976 - 1989	Member, Board of Directors, Contact Lens Association of Ophthalmologists (US)
1977 - 1978	Consultant: Drugs Committee U.S. Food & Drug Administration
1977 - 1981	Member, Committee for Medical Student Admissions, Emory University School of Medicine
1977 - 1981	Member, Section I Faculty (Fundamentals & Principles of Ophthalmology) American Academy of Ophthalmology Basic and Clinical Science Course
1979 - 1981	Chairman, Section I
1978 - 1979	Co-Chairman, Medical Care & Utilization Review Committee, Emory University Hospital
1979	Consultant to Scientific Advisory Board: Research to Prevent Blindness, Inc
1978 - 1982	Member, Board of Directors, Castroviejo Society of Corneal Surgeons
1982-1984	Program Chair, Castroviejo Society of Corneal Surgeons
1979 - 1986	Founder Member Designate, Peach Bowl, Atlanta, Georgia
1980 - 1984	Member, Visual Sciences-A Study Section The National Eye Institute, Washington, DC
1982 - 1984	Chairman, Visual Sciences-A Study Section
1982 - 1987	Member, Scientific Advisory Panel,

H. Dwight Cavanagh, M.D., Ph.D.

The National Society to Prevent Blindness, NY

- 1984 - Present Consultant, Ad Hoc Reserve Panel Grants Reviewer, The National Eye Institute/Div. Res. Grants (SBIR, VISA 1, Special SS, etc.)
- 1980 – 1984** **Associate Secretary, Committee for Research and Regulatory Agencies, The American Academy of Ophthalmology, Washington, DC**
- 1980 - 1986 Member, Committee for Research and Regulatory Agencies, The American Academy of Ophthalmology
- 1981 - 1982 Chairman, Committee for Postgraduate Education, Associate of University Professor of Ophthalmology
- 1981 - 1983 Senior Consulting Editor, *Ophthalmology Times* (New York)
- 1982 - 1987** **Executive Secretary/Treasurer, (position now designated Executive Vice President) Association for Research in Vision and Ophthalmology**

During tenure as 5-year CEO of ARVO: (1) membership increased from approximately 1500 to 3000; (2) designed and established the current ARVO central office on the NIH campus with FASEB; (3) hired the first permanent administrator (Mrs. Kathleen McCasland); (4) established the current ARVO Constitution and By-Laws, since modified to permit trustee governance and with required statutes to establish compliance for C3501 tax exempt organization chartered in New York; (5) increased net worth of ARVO from less than \$50,000 (1982) to nearly a half million dollars with institution of a permanent Finance Committee; (5) established and recommended the 2nd Mildred Wisenfeld Award with honor recognition to Carl Kupfer, MD, for important services rendered to the visual science community as Director of NEI; (7) established the first liaison with Fight-for-Sight with ARVO as guardian and peer-reviewer for research fund distribution (since ongoing); (8) with RPB and the AAO, established the first joint coalition to lobby Congress for research funds for the NEI. I gave the Congressional Testimony for the NEI to both Houses in 1984); and (9) served as the first ARVO representative to the AAO House of delegates (formed 1982) through 1987.

- 1983 - 1986** **The Civilian National Consultant to the Surgeon General, United States Air Force**
- 1982 - 1984 Program Chairman, The Castroviejo Society of Corneal Surgeons
- 1982 - 1987** **Member, Board of Counselors, The American Academy of Ophthalmology**

H. Dwight Cavanagh, M.D., Ph.D.

- 1983 - Present Research External Grants Commission Consultant,
Medical Research Council of Australia
- 1985 - 1987 Member, Scientific Advisory Board, The Knights
Templar Foundation
- 1985 - 1988 Member, Advisory Development Board, The
Department of Ophthalmology, University of South
Florida, Tampa, Florida
- 1985 - 1988 Member, Editorial Board, *J. Ophthalmic Surgery*
- 1986 - 1987 President Elect, Contact Lens Association of
Ophthalmologists of the United States**
- 1986 Organizer, The Hilton Head Workshop for Contact Lens
Infections: sponsored by Contact Lens Manufacturers
Association of America
- 1987 - 1988 President, Contact Lens Association of
Ophthalmologists of the United States**
- 1988 - 1989 Immediate Past-President and Director**
- 1987 Chairman, Ad Hoc Outside Review Panel, The
Department of Ophthalmology, The University of
Pittsburgh, Pittsburgh, PA
- 1984 - 1986 Member, Board of Trustees
Atlanta Area Services for the Blind
- 1985 - 1987 Vice President and President Elect,
Castroviejo Society of Corneal Surgeons**
- 1987 - 1989 President, Castroviejo Society of Corneal Surgeons**
- 1989 - 1991 Immediate Past-President and Director, Castroviejo
Society of Corneal Surgeons**
- 1986 - 1987 Member, Board of Directors, Georgia Physicians Health
Network Medical Association of Georgia
- 1986 - 1987 Member, Organizing Committee and Education
Coordinator, Third 10th Annual International
Corneal Conference, Washington, DC (1987)**
- Editor: Proceedings, World Congress on the Cornea
(III), Raven Press (1988)**

H. Dwight Cavanagh, M.D., Ph.D.

- 1985 - 1986 Chairman, Research Committee, Association of University Professors of Ophthalmology
- 1987 - 1989 Member Editorial Board, *The Journal Cornea*
- 1987 – 2002 Member, Editorial Board, *Contact Lens Assoc. of Ophthalmologists (CLAO) Journal*
- 1989 1991 Civilian Consultant (Cornea, National Naval Medical Center, Bethesda, MD
- 1988 - Current Member, International Society for Contact Lens Research
- 1989 - 1995 Editor-in-Chief, *The Journal Cornea*, Raven Press, NY**
- 1989 - 1993 Member, Neurosciences I Study Section, National Institutes of Health**
- 1993 – Current Permanent Senior Review panel, National Institutes Of Health
- 1990 Member, Orphan Drug Review Panel, FDA
- 1990 - 1995 Member, Editorial Board, *Journal of Scanning Microscopy*
- 1991 Chairman, International Organizing Committee, 3rd International Conference on Confocal Microscopy, Atlantic City, NJ (Apr 10-12, 1991). Sponsored by the Royal Microscopy Society and Scanning Microscopy, USA**
- 1991 - 1997 Member, Deans V.A. Medical Center Advisory Committee, U.T. Southwestern Medical Center
- 1991 - 1992 Member, Utilization Review Committee, Zale Lipshy University Hospital U.T. Southwestern Medical Center
- 1992 Member, International Organizing Committee, 4th International Conference on Confocal Microscopy, Amsterdam, The Netherlands
- 1992 - 2002 **Founding Associate Editor, *The Journal BioImaging***
- 1992 - Current Medical Director, University of Texas Southwestern Eye

H. Dwight Cavanagh, M.D., Ph.D.

Bank and Transplant Services

- 1992 - 1996
Member, Research Committee
Eye Bank Association of Americas
- 1992 - 1996
Member, Scientific Program Committee

Eye Bank Association of America; 1994 - current
Member, Medical Advisory Board
Eye Bank Association of America
- 1994 - 1996
Chair, Medical Advisory Committee for Policy and
Position Research
Eye Bank Association of America
- 1993 - 1994
Member, Curriculum Evaluation and Integration Panel,
U.T. Southwestern Medical Center
- 1993 - 1994
**Member, Medical School Admissions Committee
U.T. Southwestern Medical Center**
- 1994 - 1997
Member, Continuing Medical Education Advisory
Committee, U.T. Southwestern Medical Center
- 1994 - 2001
Member (alternate), Institutional Review Board,
U.T. Southwestern Medical Center
- 1994 - Current
Member, Transplant Services Center Medical Advisory
Board, U.T. Southwestern Medical Center
- 1994 - Current
Member, Texas Medical Foundation
- 1995 and 1996
Member, Medical Executive Committee,
Zale Lipshy University Hospital
- 1995 - Current
Reviewer - The Wellcome Trust - National Research
Clinical Grants (London)
- 1995 - Current
Reviewer - The National Science Foundation,
Washington, DC
- 1995 - Current
Member, British Contact Lens Association
- 1995 - 1997
Vice-President/President-Elect, South Central Region,
Eye Bank Association of America; Member, Board of
Directors, Eye Bank Association of America

H. Dwight Cavanagh, M.D., Ph.D.

1997 - 1998	President, South Central Region, Eye Bank Association of America; Member, Board of Directors, Eye Bank Association of America
1996 - 1998	Chairman, The Paton Society Committee, Eye Bank Association of America
1998 - 2000	Chairman, Research Committee, Eye Bank Association of America
1997– current	Scientific Reviewer, Swiss National Science Foundation and Australian Medical Research Council
1997 - 1998	Member, Peer Review Panel on Photorefractive Keratectomy (PRK) Research, convened by the American Institute of Biological Science for the U.S. Government (Pentagon), Department of Defense
1999 - 2005	Clinical Planning Committee, The University of Texas Southwestern Medical Center at Dallas
2002 - 2008	Editor-in-Chief, <i>Eye and Contact Lens Journal</i>
2005 – 2007	Vice President and member of the Executive The International Society for Contact Lens Research
2006 – Current	Member, Board of Directors, American Foundation for the Blind, Dallas, Texas
2007 - 2009	President-elect, International Society for Contact Lens Research
2009 - 2011	President, International Society for Contact Lens Research
2013 -	Member, Advisory Board of Turkiye Klinikleri Journal of Medicine Sciences, Turkey

MILITARY SERVICE:

Appointed 1 Lt., U.S Army Medical Corps Reserves, 1965; promoted to Captain, 1967; promoted to Major 1974; Reserve Good Conduct Medal, 1974; Inactive Reserve Pool and Honorable Discharge, 1975

PROFESSIONAL SOCIETY MEMBERSHIPS FROM:

1965 - Emeritus 2012	Member, Johns Hopkins Medical & Surgical Society
1967 – 2013 (Retired)	Member, Association for Research in Vision and Ophthalmology

H. Dwight Cavanagh, M.D., Ph.D.

1974 – Emeritus, 2012 Retired, 2012	Member, Society of Heed Fellows Member, American Medical Association Member, American Association of Ophthalmologists (1974-80, merged with AAO)
1974 - 1976 Retired, 2012	Member, New England Ophthalmological Society Member, Massachusetts Medical Society
1975 - Life Fellow 2010	Fellow, American Academy of Ophthalmology
1975- Active, Current	Fellow, Castroviejo Society of Corneal Surgeons Member, Eye Bank Association of America Member, Contact Lens Association of Ophthalmologists
1975 – Emeritus, 2012	Member, Massachusetts Ophthalmological Society (to 1976)
1976 – Retired, 2012	Fellow, International Eye Foundation, Society of Eye Surgeons
1976 - 1984	Member, Society for Contemporary Ophthalmology
1976 – Retired, 2013	Member, Society for Ocular Microbiology and Immunology Member, Southeastern District, Eye Bank Association of America, Medical Association of Georgia (to 1987) Atlanta Medical Society (to 1987)
1976 – 1987	Georgia Ophthalmological Society
1978	Member, Pan American Association of Ophthalmologists Fellow, American College of Surgeons Life Member Emeritus Status Award, 2005
1979	Member, Board of Directors, Keratorefractive Society (1979-81) Member, Association University Professors of Ophthalmology (1978-86) Member, Atlanta Ophthalmologic Society (to 1987)
1979	Member, Scientific Advisory Panel for the Society to Prevent Blindness (to 1988)
1980	Member, Scientific Advisory Panel for

H. Dwight Cavanagh, M.D., Ph.D.

	Friends of Eye Research (to 1986)
	Member, Scientific Advisory Panel for the Maryland Eye Bank (to 1985)
1982 - 2012	Fellow, International College of Surgeons Emeritus Status Awarded, 2012
1983 - 1993	Fellow, New York Academy of Science
1986 – Retired (Emeritus), 2013	Elected Fellow, Royal Microscopy Society (London)
1988 – Active, 2013	Fellow, International Society for Contact Lens Research Member, Washington, DC Ophthalmological Society
1990 – Active, 2013	Fellow, F. Townley Paton, MD Society, Eye Bank Association of America
1992 – Retired, 2012 1992 – Retired, 2012	Full Member, The Society for Neuroscience Full Member, The American Physiological Society (FASEB)
Retired, 2012	Dallas Academy of Ophthalmology
Retired, 2012	Dallas Medical Society
Retired, 2012	Texas Ophthalmological Society
Retired, 2012	Texas Medical Association
1992 – Retired, 2012	Fellow, Electron Microscopical Society of America
1993 – Retired Fellow 2013	Elected Fellow, Royal Society of Medicine (London)
1995	Elected Fellow, Texas Society of Ophthalmology and Otolaryngology (to 2000, Society ceased)
1997 – Retired, 2012	Elected Fellow, Society for Experimental Biology and Medicine (USA)
2001- Lifetime	Elected the 8th Honorary (Lifetime) Fellow, American Academy of Optometry
2002	Member, International Society of Refractive Surgery
2002 – Active, 2013	Member, American Society of Cataract and Refractive Surgery
2005 – Retired, 2012	The American Society for Cell Biology

HOSPITAL APPOINTMENTS:

H. Dwight Cavanagh, M.D., Ph.D.

1975 - 1976	Massachusetts Eye & Ear Infirmary Boston, Boston, Massachusetts (Assistant Surgeon)
1978 - 1986	Emory University Hospital, Atlanta, GA Henrietta Egleston Hospital for Children, Atlanta, GA Grady Memorial Hospital, Atlanta, GA Crawford W. Long Memorial Hospital, Atlanta, GA Veterans Administration Medical Center, Atlanta, GA
<i>Note: As Chairman of Ophthalmology (1978-87), I served as overall head of these affiliated hospital programs for training and services.</i>	
1978 - 1987 1978 - 1985	Metropolitan Eye & Ear Hospital, Atlanta, GA Chief of Service, Emory University Hospital Atlanta, GA
1978 - 1980	Chief of Service, Henrietta Egleston Hospital for Children, Atlanta, GA
1978 - 1982	Chief of Service, Grady Memorial Hospital, Atlanta, GA
1988 - 1991	Georgetown University Hospital, Washington, DC
1991 - Present	Zale Lipshy University Hospital; Veterans Administration Medical Center, Dallas, TX; St. Paul Medical Center; Children's Hospital; Parkland Memorial Hospital; John Peter Smith Hospital (Fort Worth)

BOARD CERTIFICATION:

1974	Certified: American Board of Ophthalmology (life-time certification)
------	----------------------------------------------------------------------

LICENSURE:

1963	Florida - Basic Science Certificate
July 27, 1965 – 2008	Maryland - #D02614 (Inactive, 2008)
May 18, 1967– 1976	Massachusetts - #19931 (Inactive, 1976)
June 14, 1976 – 2007	Georgia - #17678 (Inactive, 2008)
Jan. 27, 1987– 2008	District of Columbia - #4337 (Inactive, 2008)

Sept. 30, 1991 Texas - Distinguished Professor's Permit
Nov. 14, 1992 Texas - J2857 (active).

Note: No medical license in any state has ever been limited or terminated.

HONORS AND AWARDS:

1962	Phi Beta Kappa, Johns Hopkins Medical School
1962, 1964	Joseph E. Collins Scholar in Medicine, Johns Hopkins Medical School
1963 - 1964	USPH Post-Sophomore Fellowship, Johns Hopkins Medical School
1965	Henry Strong Denison Research Prize (\$1,000), Johns Hopkins Medical School
1966 - 1969	USPH Post-Doctoral Research Fellowship, Harvard Medical School
1973 - 1976	Thomas D. and Hugh Byers Heed Foundation Fellow in Ophthalmology, Massachusetts Eye & Ear Infirmary
1973	American Medical Association Physician Recognition Award
1974 - 1975	USPH Special Research Fellowship in Cornea, Massachusetts Eye & Ear Infirmary
1979 - 1986	Listing, <i>Best Doctors in the U.S.</i>, John Pekkamen, Wideview Press (1979)
1980 - Present	<i>Who's Who in America, Marquis Publications, New York</i>
1981	The Heed Award
1982	Honor Award, American Academy of Ophthalmology
1983	<i>Who's Who</i> (Germany)
1983	The 18th Jean Lacerte Lecture, Universite' Laval and Canadian College of Surgeons (Quebec)
1983	Fourth Maxwell K. Boschner Lecture Toronto University (Toronto)

- 1983** **Honor Award, Chilean Academy of Ophthalmology**
- 1983 *Dictionary of International Biography*
(Volume 18) (Listing)
- 1984 Second Joseph E. Koplowitz Memorial Lecture in
Ophthalmology, Georgetown University
- 1982 - 1986 Associate Examiner, The American Board of
Ophthalmology
- 1984 - Current**
Permanent Reviewer
(NIH): CSR-PEER REVIEW
NOTES@LIST.NIH.Gov
- Invited, Congressional Testimony in Support of the
Citizens' Budget for the National Eye Institute for
FY 1985, presented separately to the United States
Senate and The House of Representatives'
Appropriations Subcommittees for Health/Labor
and Human Services. Sponsored by Research to
Prevent Blindness, Inc., (New York), The American
Academy of Ophthalmology, and the Association for
Research in Vision and Ophthalmology**
- 1987 Award of Appreciation, The Knights Templar Eye
Foundation, and USA for Service as a member of the
Scientific Advisory Board 1985-87.
- 1987 14th Waldert Lecture, University of Rochester,
Rochester, NY
- 1987** **Honor Recognition Award, Association for Research
and Vision in Ophthalmology (ARVO)**
- 1988 Honor Recognition Award, Contact Lens Association of
Ophthalmologists (USA)
- 1989** **21st Conrad Berens Lecturer, Contact Lens,
Association of Ophthalmologists (USA)**
- 1989 - Present American Men and Women of Science
- 1989 Honor and Recognition Award, Castroviejo Corneal
Society
- 1991** **The 5th Morton B. Sarver Lectures, The College of
Optometry, University of California at Berkeley**
- 1995** **W. Maxwell Thomas Distinguished Chair
Professor, University of Texas Southwestern Medical
Center at Dallas**

H. Dwight Cavanagh, M.D., Ph.D.

- 1995 **Senior Investigator Award (\$55,000), Research to Prevent Blindness, Inc., New York**
- 1996 9th Francisco J. Bajandas Lecture, University of Texas Health Science Center, San Antonio, TX (March 1 - 2, 1996).
- 1996 CLAO Honor Award, Contact Lens Association of Ophthalmologists
- 1996 **Special Honor Recognition Award as Editor of *Cornea*, Castroviejo Corneal Society, 4th World Congress of the Cornea, Orlando, Florida, April 19, 1996**
- 1997 **The 7th Whitney Sampson Lecture**, American Academy of Ophthalmology and Contact Lens Association of Ophthalmologists, Combined Annual Meeting, Oct 27, 1997, San Francisco, CA
- 1997 **The XVth George Nissel Award and Lecture**, The British Contact Lens Association, The Royal Medical Society, London, England and Glasgow, Scotland, November 18 & 20, 1997
- 1998 The 21st McDonald Lecture, June 13th 1998, Loyola University School of Medicine, Maywood, Illinois
- 1998 – Current** **Listing, *Best Doctors in the U.S.*, Woodward White; Now *Best Doctors in America*.**
- 1998** **Distinguished Honor Award for Outstanding Research in Contact Lenses, Vision, University of Texas College of Optometry at Houston**
- 1999** **Senior Honor Award, American Academy of Ophthalmology**
- 2000** **The 18th F. Townley Paton Honor Award and Lecture 2000, Eye Bank Association of America, awarded to one ophthalmologist in the United States each year for outstanding contributions to Corneal Transplantation and Eye Banking; presented at the American Academy of Ophthalmology Meeting October 28, 2000, Dallas, Texas**
- 2001** **Invited Member, The Order of the Knights of the Hospital of St. John of Jerusalem (US, UK); Serving brother 2001-05; Officer, 2005-2009**

- Commander, 2009- current**
- 2001** Elected as 8th Honorary Fellow
American Academy of Optometry (founded 1923).
- 2002 –current** America’s Top Ophthalmologists, Consumer
Research Council of America, Washington, D.C.
- 2004 - Current** Who’s Who in Medicine and Healthcare, Marquis
Publications, New York
- 2005 - Current** Who’s Who in the World, Marquis Publications
New York
- 2005** The Montagu Ruben Gold Medal; 11th recipient,
International Society for Contact Lens Research, 25th
Anniversary Meeting, August, 2005, Coolum,
Australia
- 2005 - 2007** Listed in *D Magazine’s Best Doctors*,
October 2005, 2006, 2007
- 2005** Bausch & Lomb Visionaries National Recognition
Award \$20,000 to support charitable work; one of 2
(MDs) and 2 (ODs) (USA)
- 2005** THE 33rd MAX SCHAPERO AWARD and Lecture,
The American Academy of Optometry Section on
Contact Lenses Annual Meeting.
December 10, 2005, San Diego, CA
- 2006** 15th Carl Zeiss Lecture, annual scientific meeting,
the International Society of Optical Engineers
(SPIE), San Jose, California. January 21, 2006.
- 2007** The XVth British Contact Lens Association Gold
Medal and Lecture
June 2007, Manchester, England
- 2007 - Current** Who’s Who in Science and Engineering, Marquis
Publications, New York.
- 2008** The 5th Donald Korb Award for Excellence and
Lecture, The American Optometric Association
Annual National Meeting, Seattle, WA
- 2008** The 2nd Hikaru Hamano Gold Medal, and Lecture,
31st World Congress of Ophthalmology,
Hong Kong, PRC

2007 – 2009	President-Elect, International Society for Contact Lens Research
2008 - Current	Texas Super Doctors
2008 – Current	Castle Connolly Medical Ltd. Top Doctors USA
2009	Inducted into the inaugural class of ARVO Fellows
March 18-20, 2009 San Antonio, TX	The 14th Hogan-Ferguson Ethics Lecture University of Texas Health Sciences Center at San Antonio, and the San Antonio Ophthalmological Society
May 8, 2009 Canada	Natural Sciences and Engineering Council of Canada (NSERC) served as a reviewer “Replacing the needle: efficacious delivery to the back of the eye”
May 10-12, 2009 Paris, France	Keynote Lecturer, The French Ophthalmological Society Combined Meeting with the European Contact Lens Society of Ophthalmologists
August 20, 2009 Heraklion, Crete	President, International Society for Contact Lens Research
September 24-25, 2009 Montreal, Canada	The 9th Oliver H. Dabiezies, Jr. Lecture; Contact Association of Ophthalmologists, USA Annual Meeting
October 24-27, 2009 San Francisco, CA	The 35th Ramon Castroviejo Gold Medal and Lecture of the Cornea Society, American Academy of Ophthalmology, San Francisco, CA
2010 – 2016	Scientific Advisory Board, The Singapore National Eye Centre (SNEC) \$25 Million National Level, 5 Year Translational Clinical Research Flagship Programme
August 21 – 21, 2011 Napa, CA	President and Presiding Officer, International Society Contact Lens Research 16th Biennial Meeting
June 26, 2012 San Diego, CA	Legend Award presented by the Contact Lens and Cornea Society of the American Optometric Association Annual Scientific Meeting

RESEARCH GRANTS:

- 1969 - 1970 Fight-for-Sight, Inc.: (\$6,000)
Biochemistry of Photoreceptor Membranes
H.D. Cavanagh, M.D.
- 1970 - 1973 USPH Research Grant, #EY-00552:
(\$34,123) - National Institute Study on Biochemistry of
Rod and Cone Visual Pigment Proteins
H.D. Cavanagh, M.D., Ph.D.
- 1975 - 1980 USPH Training Grant, #EY-07018:
(\$196,712) - National Institute on Physiology and
Biochemistry of Corneal Disease - H.D. Cavanagh,
M.D., Ph.D. and C.H. Dohlman, M.D., C.O.P.I.
- 1976 - 1986;
1988 - 1991 USPH Research Grant, #EY-01920:
(\$197,242) - National Eye Institute Study on
Biochemical Control of Growth and Proliferation in
Corneal Epithelium - H.D. Cavanagh, M.D., Ph.D. and
Ann Colley, Ph.D.
- 1977 - 1978 Parke Davis Company: (\$12,000) - Evaluation of 5%
Ophthalmic Suspension and 3% Ointment of Adenine:
Arabinoside in the Treatment of Herpes Simplex
Keratitis - H.D. Cavanagh, M.D., Ph.D. and Andre J.
Nahmias, M.D.
- 1978 Fisons Corporation - (\$6,500) - Double-Blind
Evaluation of Cromolyn Sodium 4% Ophthalmic
Suspension in Ragweed Allergic Conjunctivitis: Pre-
Season Use - H.D. Cavanagh, M.D., Ph.D.
- 1976 - 1983 Corneal Sciences, Inc.: (funded through individual
charges to patients fitted with the lenses) - Therapeutic
and Extended Wear CSI Soft Contact Lens - H.D.
Cavanagh, M.D., Ph.D., Principal Investigator
- 1984 - 1985 Matching Construction/Renovation Grant (\$400,000)
NEI (PI) to build the Yerkes Primate Eye Laboratory and
Vivarium
- 1984 - 1986 Principal Investigator, NIH Training Grant, T32-#EY-
07092: (\$811,804) - Multidisciplinary Training in
Vision and Research (Emory University)
- 1986 Co-Principal Investigator, NIH Core Grant, Department
of Ophthalmology, P30-#EY-06360: (\$726,878)
(Emory University)

H. Dwight Cavanagh, M.D., Ph.D.

1987 - 1991	EYO-4361-04 - The Ocular Surface and Contact Lens. M.A. Lemp (PI), \$30,000 as Co-Investigator, Georgetown University Medical Center
Aug 31, 1987 - Jul 31, 1992	EYO-7348, Co-Principal Investigator - Modulation of Corneal Curvature During Wound Healing (with James V. Jester, Ph.D.) (\$946,979), Georgetown University Medical Center
1987 - 1988	Co-Investigator, NIH, Eye Research Instrumentation Grant (\$91,776), Center for Sight, Georgetown University Medical Center
1988 - 1992	National Medical Monitor (Principal Investigator) U.S. National Clinical Trial for Extended Wear SF-P Polymer RGP Contact Lens. Menicon Corp., Nagoya, Japan (\$70,000 direct cost)
Jan 1, 1990 - Dec 31, 1990	Principal Investigator, Clinical Trial, Treatment of Giant Papillary Conjunctivitis with Docromil (Fisons Corp.) (\$15,000 direct cost), Georgetown Univ. Medical Center
Sep 1, 1989 - Aug 31, 1992	Principal Investigator, Regulation of Corneal Epithelial RNA Polymerase Activity (\$357,201 direct cost) (EYO-4604)
Nov 1, 1989 - Oct 31, 1992	Principal Investigator, <u>In Vivo</u> Regulation of Corneal Endothelial Cell Function (\$614,526 direct cost) (EYO-8277)
Jan 1, 1990 - Dec 31, 1992 One of the five members of the National Advisory Board to Sandoz who planned and executed this study (1990-92)	Principal Investigator, High Risk Corneal Transplantation Study with Topical Cyclosporine A. (Sandoz Pharmaceuticals, Inc.) (\$150,000 direct cost), Georgetown University Medical Center
Aug 31, 1993 - Jul 31, 1996	Co-Investigator, Modulation of Corneal Curvature During Wound Healing, with James V. Jester, Ph.D., (P.I.) (\$452,188 direct cost)
Aug 31, 1994 - Jul 31, 1995	Principal Investigator, Role of O ₂ Project to Improve Contact Lens Safety (Pearle Vision) (\$24,432 direct cost)
Oct 1, 1994 - Sept 30, 1997 • Renewed 1997 - 99 • Renewed 2000 - 03 • Renewed 2003 - 05	Principal Investigator, Role of O ₂ in Contact Lens-Induced Bacterial Binding (\$334,978. direct cost) (EY10738-1)

H. Dwight Cavanagh, M.D., Ph.D.

Jan 1, 1995 - Dec 31, 1996 • Renewed April 1, 1997 - April 1, 1998 - current	Principal Investigator, Role of Oxygen in Contact-Lens Induced Binding of <i>Pseudomonas aeruginosa</i> to Corneal Epithelium (Bausch & Lomb, Inc.) (\$320,000 direct cost); renewal (\$197,659) direct cost
August 1, 1997 - current	Testing of Proprietary Company Polymers for Bacterial Binding and Effects of Lens Wear. Ciba Vision Corp (\$410,466)
• Renewed 2003-05	\$150,000/ Jan 1, 1995 - June 30, 1997 Co-investigator, Pathobiology of Ocular Irritancy: a new
• Renewed May 6, 1997 - May 5, 2000	<i>In vivo</i> approach, with Dr. James V. Jester, Ph.D. (P.I.), Proctor and Gamble Corp., (\$408,000 total costs); renewal (\$337,437).
Jan 1, 1997 - 1999	Principal Investigator, Efficacy and Safety of Bromhexine in Patients with Keratoconjunctivitis Sicca, Pharmaceutical Discovery Corporation, (\$22,400 cost).
August 31, 1994 – July 31, 1995; August 31, 1995 - July 31, 1996 • Renewed July 1997-98 • Renewed July 1999-2000 • Renewed 2002 • Renewed 2004 • Renewed 2005 • Renewed 2007 • Renewed 2009	Principal Investigator, Project to Improve Contact Lens Safety, Pearle Vision Foundation, (\$25,958 total cost); renewal (\$26,283). (alternate year renewal)
December 1, 1996 - Nov. 30, 2001 • Renewed 2001/06	Co-Investigator, Regulation of Corneal Myofibroblast Transformation (NEI - EY07238) (Dr. James Jester, Principal Investigator) (\$750,000)
Sept 1, 1996 - July 31, 1999	Co-Investigator, Growth Regulation During Healing of Corneal Endothelium (NEI EY11235, \$463,528 direct costs) (Dr. Matt Petroll, Principal Investigator)
May 7, 1997 - current	Principal Investigator, A Multicenter Double-Masked Study of Safety/Efficacy of Cyclosporine A 0.05% in Patients with Keratoconjunctivitis Sicca. Allergan Inc., (\$15,000).
March 1, 1998 - Feb 28, 2000 • (Renewed 2000 - 2002)	Co-Investigator, International Program for Animal Alternatives, Johns Hopkins University, \$60,000 “Identification of Biochemical Markers of Surface Induced Ocular Irritation in an ex vivo Eye Model”

H. Dwight Cavanagh, M.D., Ph.D.

Jan. 2000 - Dec. 2002	The Chilton Foundation, Dallas, TX (\$75,000), Award for Research Excellence
Sept 1, 2000 - Aug 31, 2004	Co-Investigator, "Keratocyte Crystallins and Corneal Transparency." (NEI 13215-01, Dr. James Jester, PI) (\$600,000 direct costs)
2004, 2008	\$25,000, Scientific Grant Award, American Optometric Foundation with Drs Patrick Ladage (2004) and Danielle Robertson (2008)
Jan 1, 2000 - Dec. 31, 2003 • (Renewed: 1 April 04 – March 07 (3 years))	Principal Investigator, Regulatory Role of Contact Lens Oxygen in Epithelial Homeostasis. (NEI - \$545,396 direct costs) Renewal: \$225,000/year direct costs)
Sept 1, 2008 – Aug 31, 2012	Co-investigator, "P63/IGFBP3/BCL2 Control of Corneal Epithelial Home Staining Dr. Danielle Robertson, PI (EY O1621901) \$274,750.00 last year

POST-DOCTORAL TRAINEES (1978 - Current)

Academic Research and Clinical Corneal Fellows

Gabriel van Rij, M.D.	Professor and Chair Dept. Ophthalmology	Rotterdam University The Netherlands
Michael Insler, M.D.	Professor of Ophthalmology (Academic Full-Time)	Louisiana State University New Orleans, LA
R. Doyle Stulting, M.D., Ph.D.	Professor of Ophthalmology (Academic Full-Time)	Emory University Med. Ctr. Atlanta, GA
Bruce Bodner, M.D.	Clinical Professor of Ophthalmology	Med. Col. Hampden Roads Norfolk, Virginia
Mahipal Sachdev, M.D.	Associate Professor Director, Cornea Service (Academic Full-Time)	Prasad Eye Institute Delhi, India
Miriam Krishnan, M.D.	Director (retired) Delhi, India	Lady Hardynge Eye Hospital
Gary N. Holland, M.D.	David May II Professor of Ophthalmology (Academic Full-Time)	Jules Stein Eye Institute Los Angeles, CA
Jayne Weiss, M.D.	Professor and Chairperson, Dept. of Ophthalmology (Academic Full-Time)	Louisiana State University Eye Institute New Orleans, Louisiana

H. Dwight Cavanagh, M.D., Ph.D.

Michael Brown, M.D. Med	Associate Professor (Academic Full-Time)	Univ. of Arkansas School of Little Rock, AR
David Andrews, M.D.	Clinical Associate Professor	Dalhousie University Halifax, Canada
Randy J. Epstein, M.D.	Clinical Professor	Rush Medical College Chicago, IL
Geoffrey J. Crawford, M.D.	Professor (Academic Full-Time)	Lions Eye Institute, Perth Med. Sch., Perth, Australia
Charles Bouchard, M.D.	Professor and Chair (Ophthalmology) (Academic Full-Time)	Loyola University Chicago, IL
Woodford Van Meter, M.D.	Associate Professor of Ophthalmology	University of Kentucky Lexington, KY
John A. Seedor, M.D.	Clinical Associate Professor of Ophthalmology	New York Eye and Ear New York, NY
Alan M. Kozarsky, M.D.	Clinical Assistant Professor of Ophthalmology	Emory University Atlanta, GA
Karen D. Summers, M.D.	Clinical Assistant Professor of Ophthalmology	Emory University Atlanta, GA
Edward R. Rashid, M.D.	Clinical Assistant Professor of Ophthalmology	Univ. Texas Health Sci. Ctr. San Antonio, TX
Eric T. Vinokur, M.D.	Clinical Assistant Professor of Ophthalmology	Albert Einstein Col. of Med. New York, NY
Linda L. Burk, M.D.	Clinical Assistant Professor of Ophthalmology	UT Southwestern Med. Ctr. Dallas, TX
Neil G. Dreizen, M.D.	Clinical Instructor of Ophthalmology	Wills Eye Hospital Philadelphia, PA
Clifford A. Hendricks, M.D.	Clinical Associate Professor in Ophthalmology	Tulane University New Orleans, LA
Orkum Muftuoglu, M.D. (2 years)	Associate Professor Academic Ophthalmology	Ankara, Turkey
Sylvia Hargrave, M.D.	Clinical Assistant Professor of Ophthalmology	UT Southwestern Med. Ctr. Dallas, TX
William Trattler, M.D.	Clinical Associate Professor of Ophthalmology	Univ. of Miami School of Med. Miami, FL
Thomas Redens, M.D.	Assistant Professor of Ophthalmology	Louisiana State Univ. Sch. Med. Shreveport, LA

H. Dwight Cavanagh, M.D., Ph.D.

	(Academic Full-Time)	
Christopher Ta, M.D.	Associate Professor of Ophthalmology Director of Residency Education (Academic Full-Time)	Stanford University Stanford, CA
Vinod Mootha, M.D.	Associate Professor of Ophthalmology (Academic Full-Time)	UT Southwestern Med Ctr. Dallas, TX
Deniz Oral, M.D. (2 years)	Associate Professor of Ophthalmology (Academic Full-Time)	Medical University, Istanbul, Turkey
Shady Awwad, M.D. (2 years)	Associate Professor American University	Beirut Lebanon
Mouhab Aljajeh, M.D.	Associate Professor of Ophthalmology Damascus University School of Medicine	Damascus, Syria
Kichiemon Asomo, M.D.	(2 years) Assistant Professor of Ophthalmology	Cornea Service SUNY (Brooklyn), New York
Didar Anwar, M.D.	(2 years) Assistant Professor Kirkuk University	Kirkuk, Iraq

Clinical Trainees (Cornea Fellows)

Ozlem Abbasoglu, M.D. (2 years)	Ankara, Turkey
Mark Arey, M.D.	Denton, TX
Neil Bealka, M.D.	Temple, TX
Marguerite Bilbro, M.D.	Rockville, MD
Susan Blair, M.D.	Little Rock, AR
Albert Leveille Brooks, M.D.	Sacramento, CA
Benjamin Chacko, M.D.	Brooke Army Medical Center, San Antonio, TX
John Carmody, M.D.	Shreveport, LA
Albert Caruana, M.D.	Towson, MD
Willie Chen, M.D.	Atlanta, GA
Suraj Cherry, M.D.	Antioch, CA
S. William Clark, III, M.D.	Waycross, GA
Harold W. Climenhaga, M.D.	Edmonton, Canada
Byron Cook, M.D.	Lexington, KY
Michael Cornell, M.D.	Aurora, CO
Eric Dai, M.D.	Dallas, TX
Ajay Dave, M.D.	New Delhi, India

Jeffrey Davis, M.D.	Bradenton, Florida
Kamron Riaz, M.D.	Chicago, IL
Surendar Dwarakanathan, M.D.	Chicago, IL
Marilyn Eakins, M.D.	Manitoba, Canada
Sameh El Agha, M.D. (2 years)	Cairo, Egypt
Adam Friend, M.D.	New York, New York
Fusun Gokmen, M.D. (2 years)	Turkey
Damien Goldberg, M.D.	Los Angeles, CA
Dinora Garza, M.D.	Guadalajara, Mexico
Paul J. Glass, M.D.	Atlanta, GA
Mohamad Guenena, M.D. (2 years)	Cairo, Egypt
Richard Hector, M.D.	Bradenton, FL
Lars Hertzog, M.D.	Long Beach, CA
Ziad Husseini, M.D. (2 years)	Tripoli, Lebanon
Adrian Jachen, M.D.	New York, NY
Binoy Jani, M.D.	Washington, DC
Eric Johnston, M.D.	Chicago, IL
Neil Kalin, M.D.	Wilmington, DE
Patrick Kelley, M.D.	USAF
Ashballa Khattak, M.D.	Jeddah, Saudi Arabia
Arbi Khemichian, M.D.	
Soo Kim, M.D.	Lima, Peru
Jon Konti, M.D.	
Matthew Kruger, M.D.	Winchester, MA
Michael Lamensdorf, M.D.	Sarasota, FL
Danny Lee, M.D.	Atlanta, GA
James Lehmann, M.D.	San Antonio, TX
David Liang, M.D.	Washington, D.C.
Julie Madani-Becker, M.D.	Los Angeles, CA
Rob Mason, M.D.	Springfield, IL
Ruth Mattern, M.D., Ph.D.	Tuba City, AZ
Frank McDonald, M.D.	Jacksonville, FL
John McInnes, M.D.	Chicago, IL
David Mendelblatt, M.D.	St. Petersburg, FL
Jaime Ruiz-Montenegro, M.D. (2 years)	Morelia, Mexico
Ravathi Naadimuthu, M.D.	Princeton, New Jersey
Russell W. Nelligan, M.D.	
Phillip Newman, M.D.	Atlanta, GA
James Park, M.D., Ph.D.	Bethesda, MD
Dipak Parmar, M.D. (2 years)	London, England
Mario Di Pascuale, M.D. (2 years)	Fort Worth, TX
Yuval Pessach, M.D. (2 years)	
C.T. Pillai, M.D.	London, England
Pawan Prasher, M.D. (2 years)	Bombay, India
Jeffrey Reisman, M.D.	Morristown, NJ
Maria Rojas, M.D.	Austin, TX
Michael Seward, M.D.	St. Joseph, MI
Michael Shaughnessy, M.D.	South Euclid, OH
Joanne Shen, M.D.	Chicago, IL

H. Dwight Cavanagh, M.D., Ph.D.

Erik Skoog, M.D. Cleveland, OH
Tom S. Tooma, M.D. Colton, CA
Jacob Thomas, M.D. Columbia, MO
Russell Van Norman, M.D. (2 years) Shreveport, LA
Jose Vargas, M.D. (2 years) Dallas, TX
Louis Verstinghe, M.D. Dallas, Texas
Mitchell Vogel, M.D. Virginia Beach, VA
Kentaro Yamada, M.D. Orange, CA
Christopher Walton, M.D. Mobile, AL

Predoctoral Trainees

Masaki Imayasu (1993-94) PhD, Kyoto University (Biochemistry) (2000)
Thesis preceptor Thesis work performed at UT Southwestern Medical Center at Dallas, Texas

Torben Möller-Pederson MD, PhD PhD Awarded at Aarhus University, Denmark
(1999-2001) Thesis research at UT Southwestern
Thesis advisor

Patrick Ladage, B. Opt, PhD, PhD Awarded by College of Optometry, University of
(2002-04) Houston, Texas. Thesis research done at U.T.
Primary Thesis preceptor Southwestern.

Danielle Robertson, OD, PhD PhD (August 2007) College of Optometry,
Primary Thesis preceptor University of Houston, Texas. Thesis Research done
at U.T. Southwestern
Ezell Scholar (2003, 2004) American Optometric Foundation

Jerry Kalangara, M.S. IV Pre-MD thesis for graduation with Distinction (2010):
“Reconstitution of a multi-layered, differentiated cornea
by HTERT-immortalized corneal epithelial cells”
UT Southwestern Medical Center in Dallas, Texas
Thesis Reviewer PhD Thesis, Nicole Ann Carnt
Univ. New South Wales: Contact Lens Wearer
Susceptibility to Corneal Infiltrative Events Due to
Risk taking Behavior and Genetics (16 Dec 2011).

Research Fellows

Masaki Imayasu, M.S (1993-94) Menicon Inc., Nagoya, Japan PhD Nagoya Univ. (2003)
Kazuoka Yamamoto (1998-2001) Nagoya, Japan, PhD candidate, Osaka Univ. (2003)
Takashi Yamamoto (2001-2003) Nagoya, Japan
Alex Yu, Ph.D. (1999-2000) Miami, Florida
Nobutaka Yamamoto (2003-05) (Deceased) Nagoya, Japan
Naoka Yamamoto (2003-05) (Deceased) Nagoya, Japan
Danielle Robertson, OD, PhD Houston, Texas; Ezell Scholar (2003, 2004) American
Optometric Foundation
Engy Mohamed, M.D. (2 years) Cairo, Egypt

Postdoctoral Clinical Research Fellows

Jin Ho Chang, M.D. (2001)

Seoul, Korea

Young Lee, M.D. (2002)

Seoul, Korea

CURRENT TRAINEES

Current Post-doctoral (Clinical Fellows) (2013-2014)

Michael Karon, M.D. Ph.D (2013-2014)

Serdar Dogan, M.D. (2 years) (2012-2014)

Eli Moses, M.D. (2013-2014)

Shetal Shah, M.D. (2013-2014)

Ahmed Soliman, M.D. (2 years) (2013-2015)

Clinical Cornea Fellows (2014-2015)

Geoffrey Hill, M.D. (2014-2015)

David Kennedy, M.D. (2014-2015)

Austin Lash, M.D. (2014-2015)

Ahmed Omar, M.D. (2014-2016)

Ahmed Soliman, M.D. (2013-2015)

International 2-year Fellows

RESIDENCY TRAINING IN OPHTHALMOLOGY (1975 - CURRENT)

- As director of residency training in ophthalmology at Harvard, 24 residents per year were supervised (1975-76)
- From 1976 - 86, 15 residents per year were supervised at Emory University. During this period, the program maintained 5 year accreditation without deficiency notation. Kevin C. Greenidge, M.D. (resident 1978-81) is Professor and Chair in Ophthalmology at New York University.
- From 1988-91, 15 residents were trained at Georgetown University; 1991 - current, 27 residents per year are trained at UT Southwestern Medical Center.

PROFESSIONAL ACTIVITIES:

1977- 1986

- As Chairman of the Committee to Institute The Emory Eye Center (CITE), planned, constructed, occupied and raised the funds to pay for the Emory Eye Center (10 million dollar construction, 2 1/2 million dollar equipment) (dedicated 1985 Prof. Arnall Patz, M.D. (Hopkins) Hon. ScD recipient) with an additional project (\$750,000) for the Yerkes Primate Ocular Research Laboratory and Vivarium dedicated by Torsten Wiesel MD (Nobel Laureate) in 1985. During this period The Department of Ophthalmology expanded from three faculty to thirty-seven, from less than twenty employees to more than two hundred and fifty, and with an annual

operating budget expansion from less than \$300,000 to 11 million dollars. The annual direct cost NIH research budget expanded from less than \$100,000 to 3.8 million, with thirty-one NIH grants and an additional thirty-four program project grants (3rd ranked of all Eye Institutes in the U.S. by research funding [1984, 1985, 1986] and first ranked Department of the Emory University School of Medicine [1983-1986]. During 1978-86, the Department endowment increased from 4 million to 10 million dollars, with a further 11 million dollars of outstanding pledges and estate commitments, most of which has since been received.

CONTINUING MEDICAL EDUCATION PRESENTATIONS:

January 10-13, 1980 Las Vegas, NV	Speaker, Mid-Winter National Meeting, Contact Lens Association of Ophthalmologists
March 9-15, 1980 Miami, FL	Speaker, International Glaucoma Conference, IV American Society for Contemporary Ophthalmology
March 17-21, 1980 Atlanta, GA	Lecturer, International Meeting on Human Herpes Viruses, Emory University School of Medicine
March 28-30, 1980 Atlanta, GA	Faculty, Orbital Dissection Course, Emory University School of Medicine
April 24-26, 1980 Philadelphia, PA	Visiting Professor, 32nd Annual Wills Eye Conference, Wills Ex-Resident Society
April 28-29, 1980 Minneapolis, Minnesota	Visiting Professor, "Current Ophthalmological Techniques," University of Minnesota
May 1-4, 1980 Sea Island, Georgia	Annual Meeting, Georgia Society of Ophthalmology
May 5-9, 1980 Orlando, FL	Scientific Speaker, Annual Meeting, Association for Research in Vision and Ophthalmology
June 7-8, 1980 Palo Alto, CA	Speaker, "Continuous Wear Soft Contact Lens," Stanford University School of Medicine
August 14-17, 1980 Rochester, New York	Speaker, "Correction of Surgical Aphakia, Rochester Eye Institute, Rochester Academy of Medicine

H. Dwight Cavanagh, M.D., Ph.D.

September 12-13, 1980 Atlanta, GA	Visiting Professor, "Current Topics in Ophthalmology, Medical College of Georgia
September 27-28, 1980 Atlanta, GA	Speaker, "Anterior Segment Disease and Surgery," Jacksonville Ophthalmology Society
October 20-24, 1980 Atlanta, GA	Speaker and Presiding Officer, Ophthalmic Symposium, American College of Surgeons Annual Clinical Congress
November 21-24, 1980 Atlanta, GA	Speaker and Presiding Officer, Ophthalmology Symposium, Medical Association of Georgia Scientific Assembly
December 1-2, 1980 Atlanta, GA	Speaker, "Pediatric Ophthalmology and Strabismus: Update," Emory University School of Medicine
December 3, 1980 Atlanta, GA	Speaker, Annual Residents/Alumni Scientific Meeting, Emory University School of Medicine
February 2-3, 1981 New Orleans, LA	Speaker and Chairman, Continuing Education Committee, American University Professors of Ophthalmology Annual Meeting
February 19-22, 1981 New Orleans, LA	Speaker, "The Anterior Segment," Eye Foundation of America, Annual Meeting
February 28-March 1, 1981 Chattanooga, TN	Speaker, Saturday Seminar, Chattanooga Ophthalmological Society
March 13, 1981 Providence, RI	Visiting Professor, Topics in External Disease, Rhode Island Hospital, Department of Ophthalmology
March 18-21, 1981 Orlando, FL	Speaker, National Meeting, American Society of Contemporary Ophthalmology
April 22-24, 1981 Los Angeles, CA	Speaker, Jules Stein Post-Graduate Seminar, Jules Stein Eye Institute
April 26, 1981 Atlanta, GA	Speaker, National Meeting, International Eye Congress
April 27-28, 1981 Sarasota, FL	Speaker, National Meeting, Association for Research in Vision and Ophthalmology

H. Dwight Cavanagh, M.D., Ph.D.

April 30-May 3, 1981 Sea Island, GA	Speaker and Presiding Officer, The Cloister Meeting, Georgia Society of Ophthalmology
May 15-31, 1981 China, Beijing, Shanghai, Nanking, Soochow	Visiting Professor, China Exchange Feasibility Committee (Invited by Chinese Government)
September 18-19, 1981 Boston, MA	Speaker, 12th Corneal Research Conference
October 26, 1981 Atlanta, GA	Speaker, Atlanta Ophthalmological Society
October 31-November 6, 1981 Atlanta, GA November 4, 1981 Miami, FL	Speaker, International Meeting, American Academy of Ophthalmology Speaker, III Curso Interamericano Meeting, Bascom Palmer Eye Institute
November 21, 1981 Atlanta, GA	Speaker, Georgia Society of Ophthalmology, Omni Hotel
January 28-31, 1982 Las Vegas, NV	Speaker, Mid-Winter National Meeting, Contact Lens Association of Ophthalmologists
October 25, 29, 1982 Boston, MA	Chairman, National Meeting of The Castroviejo Society
October 30-November 5, 1982 San Francisco, CA	Speaker, International Meeting of The American Academy of Ophthalmology and the 24th World Congress of Ophthalmology
February 16, 1983 New Orleans, LA	Speaker and Honored Guest, Meeting of The New Orleans Academy of Ophthalmology
March 25-27, 1983 Chattanooga, TN	Speaker, Corneal Symposium, University of Tennessee
April 14-16, 1983 Philadelphia, PA	Speaker, Alumni Meeting of Scheie Eye Institute, the University of Pennsylvania
May 2-8, 1983 Sarasota, FL	Speaker, Annual Meeting of The Association for Research in Vision and Ophthalmology
May 6-7, 1983 Toronto, Canada	Speaker, 4th Biennial Contact and Intraocular Lens Course, Toronto University

H. Dwight Cavanagh, M.D., Ph.D.

May 9-12, 1984 Florence, Italy	Speaker, 3rd International Congress on Cataract Surgery and Visual Rehabilitation
December 13-15, 1984 Boston, MA	Invited Guest Lecturer, New England Ophthalmological Society
February 14-16, 1985 Phoenix, AZ	Speaker, 11th Annual Frontiers in Ophthalmology
March 16-18, 1985 Ann Arbor, MI	Speaker, W.K. Kellogg Eye Center Dedication Symposium, University of Michigan
March 28-29, 1985 San Juan, Puerto Rico	Speaker, Annual Meeting of the Castroviejo Society
May 2-5, 1985 Sea Island, GA	Speaker, Annual Meeting of the Georgia Society of Ophthalmology
May 6-10, 1985 Sarasota, FL	Speaker, Association for Research in Vision and Ophthalmology
June 5-7, 1985 Los Angeles, CA	Speaker, Estelle Doheny Eye Foundation, Hospital Dedication Meeting, University of Southern California
June 13-14, 1985 Washington, D.C.	Speaker, National Eye Trauma Symposium National Eye Trauma Network
June 29-July 3, 1985 San Diego, CA	Speaker, Pacific Coast Oto-Ophthalmological Society
February 25, 1986 Phoenix, AZ	Speaker, Association of University Professors of Ophthalmology
March 8-11, 1986 New Orleans, LA	Speaker and Honored Guest, New Orleans Academy of Ophthalmology Annual Symposium
April 28-May 2, 1986 Sarasota, FL	Speaker, Annual Meeting of The Association for Research in Vision and Ophthalmology
August 18-21, 1986 Tunis-Carthage, Tunisia	Invited Visiting Professor and Lecturer, Tunis-Carthage Eye Institute, Tunisia (Invited by Tunisian Government)
December 12, 1986 New York, NY	Visiting Professor and Lecturer, The New York Eye and Ear Infirmary

H. Dwight Cavanagh, M.D., Ph.D.

January 15-18, 1987 Las Vegas, NV	Program Speaker, Annual Meeting, Contact Lens Association of Ophthalmologists
January 31, 1987 Nassau, The Bahamas	Program Speaker, Fison's Symposium on Advances in Ocular Immunology
April 15, 1987 Washington, D.C.	Lecturer, Department of Ophthalmology, Howard University
April 27-March 1, 1987 Washington, D.C.	Program Speaker and Educational Coordinator, World Congress on the Cornea III
May 4-8, 1987 Sarasota, Florida	Program Speaker, Annual Meeting, Association for Research in Vision and Ophthalmology
May 18, 1987 Pittsburgh, PA	Program Speaker, Dedication, Scientific Symposium for the University of Pittsburgh Eye Center
June 12, 1987 Rochester, NY	14th Waldert Lecturer, University of Rochester
June 13, 1987 Washington, D.C.	Lecturer, Alumni Post-Graduate Course in Ophthalmology, Georgetown University School of Medicine
September 10-12, 1987 Boston, MA	Program Speaker, 14th Biennial Corneal Research Conference, Massachusetts Eye & Ear Infirmary
October 1-3, 1987 Grenoble, France	Invited International Guest Lecturer, Annual Meeting, The European Contact Lens Society of Ophthalmologists
November 12-25, 1987 Japan and Korea	Bausch & Lomb International Visiting Professor and Lecturer, Universities of Tokyo, Osaka, Kyoto, Sapporo (Japan) and National University and Catholic Universities in Seoul, Korea
January 7, 1988 Washington, D.C.	Lecturer, Georgetown University School of Medicine in Course, Faces of Ophthalmology
January 13-16, 1988 Las Vegas, NV	Program Speaker, Annual Meeting, Contact Lens Association of Ophthalmologists
February 1-5, 1988 Kauai, Hawaii	Program Speaker, Mid-Winter Meeting, Castroviejo Society of Corneal Surgeons
February 25, 1988 Washington, D.C.	Lecturer, Department of Ophthalmology Howard University

H. Dwight Cavanagh, M.D., Ph.D.

May 2-6, 1988 Sarasota, FL	Program Speaker, Annual Meeting, Association of Research and Vision in Ophthalmology
May 20, 1988 Washington, D.C.	Invited Speaker, Symposium on Advances in Ocular Immunology, Georgetown University Medical Center
June 9-10, 1988 Washington, D.C.	Co-Director, Advanced Course in Anterior Segment Microsurgery, Center for Sight, Georgetown University Medical Center
June 11, 1988 Washington, D.C.	Speaker, Annual Alumni Post-Graduate Course, Center for Sight, Georgetown University Medical Center
June 25, 1988 Dallas, TX	Participant, Workshop for National Acanthamoeba Clinical Treatment Trial (Bausch & Lomb)
August 17, 1988 Copenhagen, Denmark	Invited Speaker, European Council on Cataract, Implant and Corneal Surgery, Annual Meeting
September 3, 1988 Kauai, Hawaii	Invited Speaker, Society for International Contact Lens Research
September 7, 1988 San Francisco, CA	Invited Speaker, The International Society for Eye Research
September 22, 1988 West Germany	Invited Paper Presentation, The Hamburg, International Society of Optical Engineers and Physicists (SPIE)
September 27, 1988 Washington, D.C.	Lecturer, Post-Graduate Course in Ocular Trauma, Department of Ophthalmology, Georgetown University Medical Center
October 10, 1988 Las Vegas, NV	Program Participant, Annual Meeting, American Academy of Ophthalmology; Castroviejo Society Symposium on Corneal Transplantation
October 21, 1988 The Greenbrier, WV	Speaker and Co-Director, Post-Graduate Education Course: "Outpatient Ophthalmology"
November 3-4, 1988 Washington, D.C.	Invited Moderator and Participant, Workshop on Accommodating Advances in Ophthalmology in a Cost Containment Environment, Institute for Health Policy Analysis, Georgetown University

H. Dwight Cavanagh, M.D., Ph.D.

January 13, 1989 New Orleans, LA	The 27th Conrad Berens Lecturer, Annual Meeting, Contact Lens Association of Ophthalmology (USA)
March 15-17, 1989 Amsterdam, The Netherlands	Invited Speaker, 1st International Conference on Confocal Microscopy (Academisch Medisch Centrum)
March 25, 1989 Washington, D.C.	Speaker and Organizer, Spring Clinical Symposium, Center for Sight, Georgetown University Medical Center
April 30-May 5, 1989 Sarasota, FL	Scientific Program Participant, Annual Meeting, Association for Research in Vision and Ophthalmology
May 18, 1989 Washington, D.C.	Invited Speaker, Washington Ophthalmological Society
June 10, 1989 Dallas, TX	Invited Speaker and Visiting Professor, Department of Ophthalmology, Dallas Ophthalmological Society, University of Texas at Dallas
August 5-6, 1989 Keystone, CO	Co-Director, A National Symposium on Contact Lenses: “Challenges, Controversies, and Opportunities.” (Sponsored by Health Learning Systems, Inc.)
September 21-22, 1989 Boston, MA	Invited Speaker and Program Participant, 15th Cornea Research Conference, Massachusetts Eye & Ear Infirmary, Harvard Medical School
September 23, 1989 St. Louis, MO	Invited Speaker, Post-Graduate Course in Contact Lens and Corneal Disease, St. Louis University School of Medicine, Department of Ophthalmology
October 13-14, 1989 Washington, D.C.	Speaker and Course Organizer: “Ophthalmology Update (1989),” Center for Sight, Georgetown University Medical Center
October 28-30, 1989	Speaker and Participant, American Academy of Ophthalmology Annual Meeting and Combined Castroviejo Corneal Society Symposium
November 4-20, 1989 Washington, D.C.	Program Speaker and Organizer, Fall Clinical Symposium, Center for Sight, Georgetown University Medical Center
November 18-20, 1989 Osaka and Tokyo, Japan	Invited Speaker, 2nd International CIBA Symposium, Tokyo and Osaka Universities
December 13, 1989	Invited Lecturer and Visiting Professor, Department of

H. Dwight Cavanagh, M.D., Ph.D.

New York, NY	Ophthalmology, St. Vincents Hospital, New York Medical College
January 10-13, 1990 Las Vegas, Nevada	Scientific Program Participant, Annual Scientific Meeting, Contact Lens Association of Ophthalmologists
February 10, 1990 Baltimore, MD	Lecturer and Visiting Professor, Sinai Hospital, Department of Ophthalmology
March 24, 1990 Washington, D.C.	Co-Organizer and Program Participant, Spring Clinical Symposium, "Sjögren's Syndrome," Center for Sight, Georgetown University Medical Center
April 17-20, 1990 Crystal City, VA	Scientific Program Participant and National Organizing Committee Member, Scanning Microscopy 1990 Annual Symposium
April 29-May 4, 1990 Sarasota, FL	Scientific Program Participant and Session Moderator (Cornea), Annual Meeting, Association of Research in Vision and Ophthalmologists
May 26, 1990 Orlando, FL	Invited Scientific Program Participant (Cornea), Pan American Association of Ophthalmologists
June 1-2, 1990 St. Louis, MO	Invited Program Speaker and Course Participant, 3rd Annual Cornea-Contact Lens Course, Department of Ophthalmology, Washington University School of Medicine
June 21-22, 1990 Norfolk, VA	Invited Guest Speaker, Virginia Society of Ophthalmology, Annual State Scientific Meeting
June 30, 1990 Seattle, WA	Invited Program participant, Eye Bank Association of America, Annual National Scientific Meeting
July 2-6, 1990 London, England	Scientific Program Participant, combined meetings of The Royal Microscopy Society and the 2nd International Conference on Confocal Microscopy
July 12-21, 1990 Tokyo, Nagoya, Osaka Japan	Distinguished Visiting Professor and Lecturer, Universities of Tokyo, Nagoya and Osaka, Japan (Sponsored by Bausch & Lomb, Inc.)
July 29-August 4, 1990 Helsinki, Finland	Invited Scientific Program Participant and Co-Organizer, Session on Confocal Microscopy, 10th International Conference, International Society for Eye Research

H. Dwight Cavanagh, M.D., Ph.D.

August 30-September 3, 1990
Monaco, France

Invited Plenary Speaker, International Society for
Contact Lens Research

October 11, 1990
Washington, DC

Visiting Lecturer, Howard University

October 28-November 1, 1990
Atlanta, GA

Instructional Program Participant, Annual Scientific
Meeting, American Academy of Ophthalmology and
Castroviejo Corneal Society

January 12, 1991
Berkeley, CA
April 10-12, 1991
Atlantic City, NJ

Invited Visiting Professor, the Morton B. Sarver
Lectures, University of California at Berkeley
Chairman of the Organizing Committee and Speaker,
the 3rd International Congress on Confocal Microscopy
and (4th) 3-Dimensional Reconstruction (Scanning
Microscopy, RMS)

April 28-May 3, 1991
Sarasota, FL

Scientific Program Participant, Annual National
Scientific Meeting, Association for Research in Vision
and Ophthalmology

May 11, 1991
Fairfax, VA

Scientific Program Speaker, The Virginia
Ophthalmological Society, Annual State Meeting

May 16, 1991
Louisville, KY

Visiting Professor and Lecturer, The Department of
Ophthalmology and the Louisville Ophthalmological
Society

November 23-24, 1991
Nagoya, Japan

40th Anniversary International Contact Lens
Symposium, Menicon, Inc., Invited keynote speaker and
scientific participant

November 9, 1991
Dallas, TX

Organizer and Scientific Program Participant, CLAO
Regional Contact Lens update at U.T. Southwestern
Medical Center

December 13, 1991
Lubbock, TX
January 15-18, 1992
Las Vegas, NV

Visiting Professor and Lecturer, Department of
Ophthalmology, U.T. at Lubbock
Scientific Program Participant, Annual Scientific
Meeting, Contact Lens Association of Ophthalmologists

February 21, 1992
San Antonio, TX

Visiting Professor and Lecturer, Brooke Army
Medical Center and Department of Ophthalmology, U.T.
San Antonio

March 9-11, 1992

Member Organizing Committee and Scientific

H. Dwight Cavanagh, M.D., Ph.D.

Amsterdam, Holland	Program Participant, 4th International Congress on Confocal Microscopy
April 20, 1992 Newark, NJ	Visiting Professor and Lecturer, Dept of Ophthalmology, New Jersey College of Medicine
May 2-9, 1992 Sarasota, FL	Scientific Program Participant, Annual National Meeting, Association for Research in Vision and Ophthalmology
June 20, 1992 Lake Tahoe, NV	Scientific Program Participant, Annual National Meeting, Eye Bank Association of America
June 26-27, 1992 San Antonio, TX	Invited Program Speaker, Symposium on Biomedical Imaging, U.T.
Nov 8-12, 1992 Dallas, TX	Scientific Program participant, the American Academy of Ophthalmology Annual Meeting
Dec 5, 1992 Chicago, IL	Invited Keynote speaker, Regional Contact Lens Course Contact Lens Association of Ophthalmologists, Rush Medical College
Jan 13-16, 1993 Las Vegas, NV	Scientific Program Participant, Annual Scientific Meeting, Contact Lens Association of Ophthalmologists.
March 5, 1993 Iowa City, IO	Visiting Professor, Department of Ophthalmology, University of Iowa School of Medicine
April 21, 1993 Dallas, TX	Invited Program Speaker, Transplant Services, University of Texas Southwestern Medical Center
May 1-7, 1993 Sarasota, FL	Scientific Program Participant, Annual National Meeting, Association for Research in Vision and Ophthalmology
May 15, 1993 Houston, TX	Scientific Program Participant, Annual Meeting, Texas Ophthalmological Association
June 14, 1993 Dallas, TX	Scientific Program Participant, Continuing Education for Primary Care Physicians, U.T. Southwestern Medical Center
June 16-19, 1993 San Diego, CA	Scientific Program Participant, Annual National Meeting, Eye Bank Association of America

H. Dwight Cavanagh, M.D., Ph.D.

October 5, 1993 Killeen, TX	Continuing Medical Education Program, Invited Program Speaker, UT Southwestern
October 28-31, 1993 New Orleans, LA	Invited Scientific Program Participant, Southern Medical Association's 87th Annual Scientific Assembly
Nov 10-13, 1993 Chicago, IL	Invited Scientific Program Participant, Eye Bank Association of America
Nov 13-18, 1993 Chicago, IL	Invited Scientific Program Participant, Annual National Meeting American Academy of Ophthalmology
Jan 12-15, 1994 Las Vegas, NV	Invited Scientific Program Participant, Annual National Meeting, Contact Lens Society of Ophthalmologists
Jan 29-30, 1994 Galveston, TX	Invited Program Speaker, International Keratorefractive Surgery, Excimer, and Holmium Symposium and Workshop, U. Texas Medical School
March 17-18, 1994 Shreveport, LA	Invited Keynote Speaker, 1994 Resident Alumni Day, Louisiana State University
May 1-7, 1994 Sarasota, FL	Scientific Program Participant, Annual National Meeting, Association for Research in Vision and Ophthalmology
May 13-14, 1994 Austin, TX	Invited Program Speaker, Texas Medical Association Meeting/Texas Ophthalmology Association Meeting
Sept 14-17, 1994 Alicante, Spain	Invited Program Speaker, European Contact Lens Society of Ophthalmologists
Oct 1-2, 1994 Dallas, TX	Invited Program Speaker, Sjögren's Syndrome Symposium
Oct 14-17, 1994 Lisbon, Portugal	Invited Program Speaker, Bausch & Lomb European Symposium on Contact Lenses
Oct 26-29, 1994 San Francisco, CA	Scientific Program Participant, The Eye Bank Association of America (National Meeting)
Oct 30-Nov 3, 1994 San Francisco, CA	Scientific Program Participant, Castroviejo Corneal Society (National Meeting)

H. Dwight Cavanagh, M.D., Ph.D.

December 2-3, 1994 Houston, TX	Invited Scientific Program Speaker, The University of Texas College of Optometry at Houston
December 10-14, 1994 San Francisco, CA	Scientific Program Participant, The Society for Cell Biology (National Meeting)
Jan 11-14, 1995 Las Vegas, NV	Scientific Program Participant, The Contact Lens Association of Ophthalmologists (National Meeting)
Feb 15, 1995 Winston-Salem, NC	Visiting Professor and Lecturer, Bowman-Gray School of Medicine of Wake Forest University (Ophthalmology)
May 14-19, 1995 Fort Lauderdale, FL	Scientific Program Participant, Association for Research in Vision and Ophthalmology Annual National Research Meeting
June 14-17, 1995 Hilton Head, SC	Scientific Program Participant, Annual National Meeting, Eye Bank Association of America
July 11, 1995 Waco, TX	Scientific Program Participant, Family Practice Lecture
September 10-15, 1995 Jackson Hole, WY	Scientific Program Participant, Biennial Meeting, International Society of Contact Lens Research
September 15-16, 1995 Lake Geneva, WI	Scientific Program Participant, Wisconsin Upper Michigan Society of Ophthalmology Meeting (invited lecturer)
September 23, 1995 Dallas, TX	Contact Lens Association of America, Course Director, Regional Basic Contact Lens Seminar
October 7-10, 1995 Orlando, FL	Invited Scientific Program Participant, Research to Prevent Blindness Science Writers Symposium
October 26-28, 1995 Atlanta, GA	Scientific Program Participant, Annual National Meeting, Eye Bank Association of America
December 8-9, 1995 Houston, TX	Invited Plenary Program Lecturer, The University of Texas College of Optometry at Houston
December 10-13, 1995 Washington, DC	Scientific Program Participant, The Society for Cell Biology (National Meeting)
February 16, 1996 Dallas, TX	The Texas Osteopathic Lecture, Texas State Osteopathic Meeting

H. Dwight Cavanagh, M.D., Ph.D.

March 1-2, 1996 San Antonio, TX	The 9th Bajandas Lecture, University of Texas Health Science Center at San Antonio
April 15-20, 1996 Orlando, FL	Invited Speaker, IV World Congress on the Cornea
May 10-11, 1996 San Antonio, TX	Invited Speaker, Texas Medical Association, Annual Session
May 14, 1996 Waco, TX	Scientific Program Participant, Family Practice Lecture
June 25-29, 1996 Santa Barbara, CA	Invited Speaker and Program Participant, Annual National Scientific Meeting, Eye Bank Association of America
October 17-19, 1996 Seville, Spain	Scientific Program Participant, Bausch & Lomb Symposium on Contact Lenses
October 24-27, 1996 Chicago, IL	Scientific Program Participant, (1) Eye Bank Association of America; (2) Castroviejo Cornea Society, (3) American Academy of Ophthalmology
December 6-12, 1996 San Francisco, CA	Scientific Program Participant, The Society for Cell Biology National Meeting
February 20-33, 1997 El Paso, TX	Invited Speaker, Eye Bank Association of Texas Annual Meeting and Corneal Symposium
March 22-31, 1997 Paris, France	Invited Speaker, 5th Symposium Menicon – Europe
May 16-17, 1997 Houston, TX	Invited Speaker, Texas Medical Association 1997 Annual Session
June 12-15, 1997 Fort Worth, TX	Invited Speaker, Texas Osteopathic Medical Association 98th Annual Convention & Scientific Seminar
June 17-22, 1997 Palm Beach, FL	Invited Speaker, Eye Bank Association of America Annual Meeting
September 9, 1997 Dayton, OH	Invited Speaker, Dayton Ophthalmology Society
September 21-24, 1997 Los Angeles, CA	Invited Speaker, Research to Prevent Blindness Science Writers Seminar

H. Dwight Cavanagh, M.D., Ph.D.

October 22-25, 1997
San Francisco, California

Eye Bank Association of America
Educational Conference
(Invited Speaker)

October 27, 1997
San Francisco, California

The Whitney Sampson Lecture, American
Academy of Ophthalmology, combined with Contact
Lens Association of Ophthalmologists

October 28, 1997
San Francisco, California

Scientific Presenter, Castroviejo Corneal Society Annual
Scientific Meeting

November 5-6, 1997
New Orleans, Louisiana

Invited Speaker, 9th Symposium on the Material Science
and Chemistry of Contact Lenses

November 15-20, 1997
London, England

George Nissel Memorial Lecture
British Contact Lens Society

November 15-20, 1997
Edinburgh, Scotland

George Nissel Memorial Lecture
Scottish Contact Lens Society

December 5-6, 1997
Toronto, Canada

Invited Speaker, Update on Cornea and Anterior
Segment Corneal, Refractive and Cataract Surgery
“Walter Wright Day”

December 14-15, 1997
San Antonio, Texas

Invited Plenary Speaker, American Academy of
Optometry Annual Meeting

January 28-19, 1998
Las Vegas, Nevada

Invited Guest Speaker, Contact Lens Association of
Ophthalmologists Annual Scientific Meeting

February 11, 1998
Washington, D.C.

Invited Guest Speaker, Food and Drug Administration,
Ophthalmic Devices Panel

February 26-28, 1998
Dallas, Texas

Invited Speaker, Eye Bank Association of Texas
Annual Meeting and Corneal Symposium

March 15, 1998
Washington, D.C.

Clinical Participant, Special Call Meeting, Eye Bank
Association

April 2-3, 1998
Baltimore, Maryland

Invited Speaker, The Johns Hopkins Center for
Alternatives to Animal Testing, Special Workshop on
Recovery Models

April 5-6, 1998

Invited Speaker, Bausch & Lomb Corporation Seminar

H. Dwight Cavanagh, M.D., Ph.D.

Rochester, New York

April 9-10, 1998
St. Louis, Missouri

Invited Plenary Speaker, A Celebration of Eye Research,
Washington University School of Medicine Symposium

April 16, 1998
Dallas, Texas

Invited Speaker, Turning Tragedy into Triumph, The
14th Annual Will a Miracle Conference, Baylor Hospital

May 8, 1998
Dallas, Texas

1998 Texas Optometric Association Annual
Meeting (Invited Plenary Lecturer)

May 10-15, 1998
Ft. Lauderdale, Florida
June 12-13, 1998
Maywood, Illinois

Scientific Program Participant, National Annual Meeting
Association for Research in Vision and Ophthalmology
The 21st Annual McDonald Lecture, Loyola University
School of Medicine, Maywood, Illinois

June 23-25, 1998
Amsterdam,
The Netherlands

Invited Plenary Speaker, The XXVIIIth International
Congress of Ophthalmology

September 27, 1998
Dallas, Texas

Scientific Program Participant, Continuing
Education for Optometrists

October 12, 1998
Houston, Texas

Invited Speaker, University of Texas College of
Optometry

October 15-16, 1998
Fullerton, California

Invited Speaker, Southern California College of
Optometry Alumni Reunion

October 17, 1998
Dallas, Texas

Scientific Program Participant, Continuing
Education for Primary Care Physicians

November 5-7, 1998
New Orleans, Louisiana

Invited Scientific Program Participant and Course
Instructor, Eye Bank Association of America,
Castroviejo Society and American Academy of
Ophthalmology Annual Meeting

November 11, 1998
Dallas, Texas

Invited Speaker, Southwest Medical Foundation,
Clinical Perspectives

November 25-30, 1998
Singapore

Invited Speaker, 3rd Singapore National Eye Centre
International Meeting and 11th International Meeting on
Cataract, Implant Microsurgery and Refractive Surgery

November 25-30, 1998

Invited Plenary Speaker, Cornea, Contact Lenses and

H. Dwight Cavanagh, M.D., Ph.D.

Singapore	Contemporary Vision Care; The 15th Annual Symposium
December 4-6, 1998 Houston, Texas	University of Houston College of Optometry Invited Speaker (Honor Award for Distinguished Research in Contact Lenses)
December 12, 1998 Dallas, Texas	Co-organizer and Speaker, Special Symposium on Sjogrens Syndrome co-sponsored by Baylor College of Dentistry and the National Sjogrens Foundation
December 15, 1998 Atlanta, Georgia	Poster Presentation, Biomedical Engineering Symposium
April 8-16, 1999 Heidelberg, Germany	International Leica Confocal User Meeting and International Congress on Confocal Microscopy
April 18-21, 1999 Barcelona, Spain	Future in Sight, Invited Guest Speaker CIBA Vision Symposium
May 8-14, 1998 Ft. Lauderdale, Florida	Scientific Program Participant, National Annual Meeting, Association for Research in Vision and Ophthalmology
June 23-26, 1999 Newport Beach, California	Eye Bank Association of America, Annual Meeting
September 23, 1999 Dallas, Texas	Invited Guest Speaker, Partners in Retina Foundation of the Southwest
September 26, 1999 Dallas, Texas	Presenter, Ophthalmology Pearls for Optometrists, The UT Southwestern Medical Center
September 28, 1999 Miami, Florida	Presenter, Research to Prevent Blindness Science Writers' Symposium
October 9, 1999 Dallas, Texas	Co-Presenter, VISX Certification Course, Zale Lipshy University Hospital
October 20-23, 1999 Orlando, Florida	Scientific Program Participant, Eye Bank Association of America Annual Meeting
October 20-23, 1999 Orlando, Florida	Scientific Program Participant, American Academy of Ophthalmology (Refractive Surgery) Annual Meeting
October 20-23, 1999	Scientific Program Participant, The Castroviejo Corneal

H. Dwight Cavanagh, M.D., Ph.D.

Orlando, Florida	Society Annual Meeting
November 7, 1999 Dallas, Texas	Co-Presenter, Chiron LASIK course, Zale Lipshy University Hospital
December 4, 1999 Dallas, Texas	Program Participant, Eye Pearls for Primary Care Physicians
December 11, 1999 Dallas, Texas	Program Director, CLAO Regional Contact Lens Course
January 24-26, 2000 Las Vegas, Nevada	Scientific Program Participant, CLAO National Meeting
April 30-May 3, 2000 Ft. Lauderdale, FL	Scientific Program Participant, National Annual Meeting, Association for Research in Vision and Ophthalmology
June 21-25, 2000 Washington, DC	Eye Bank Association of America, Annual Meeting
October 22-27, 2000 Santa Fe, New Mexico	Invited Special Symposium Program Speaker, International Society for Eye Research
October 28, 2000 Dallas, Texas	The R. Townley Paton Award Lecture in conjunction with the Annual National Joint Scientific Meeting of the Eye Bank Association of America and the Castroviejo Corneal Society
October 31, 2000 Dallas, Texas	Invited Scientific Program Participant, The American Academy of Ophthalmology Joint Meeting with the Castroviejo Corneal Society
Nov. 15-18, 2000 Maui, Hawaii	Invited Keynote Speaker and Founding Member, The Ocular Surface and Tear Film Society, International Scientific Meeting
December 9, 2000 Orlando, Florida	Invited Plenary Scientific Program Speaker, The American Academy of Optometry Annual Meeting, Joint Session with the Contact Lens Section (AAO)
April 29 - May 4, 2001 Ft. Lauderdale, Florida	Scientific Program Participant, The Associate for Research in Vision and Ophthalmology
June 1-3, 2001	Invited Keynote Speaker, The British Contact Lens

H. Dwight Cavanagh, M.D., Ph.D.

Brighton, England (UK)	Society
July 19-20, 2001 New Orleans, Louisiana	Invited speaker, 12th Symposium on the Material Science and Chemistry of Contact Lenses
August 11, 2001 Dallas, Texas	Program Participant, 4 th Annual Ophthalmology Review for the Primary Care Physician
September 9-14, 2001 Sun Valley, Idaho	Invited speaker, International Society for Contact Lens Research
October 14, 2001 Dallas, Texas	Program Participant, Anterior Segment Review for Optometrists
November 9-11, 2001 New Orleans, Louisiana	Scientific Program Participant, Eye Bank Association of American
November 14-20, 2001 Nagoya, Japan	Invited Speaker, Menicon 50 th Anniversary International Symposium/Tokyo Association of Ophthalmologist
December 1, 2001 Dallas, Texas	Co-Presenter, Excellence in LASIK course, Zale Lipshy University Hospital
December 2, 2001 Houston, Texas	Invited Speaker, Cornea, Contact Lens & Contemporary Vision Care: the 18 th Annual Symposium
December 8-10, 2001 Philadelphia, Pennsylvania	Invited Guest of Honor, American Academy of Optometry
January 6-8, 2002 Atlanta, Georgia	Invited Speaker, CibaVision Night & Day Clinical Symposium
January 29, 2002 Anaheim, California	Scientific Program Participant, Contact Lens Association of Ophthalmologist Annual Scientific meeting
March 2, 2002 Dallas, Texas	Co-Presenter, Excellence in LASIK course, Zale Lipshy University Hospital
April 19-20, 2002 Dallas, Texas	Invited Speaker, Texas Ophthalmological Association Annual Meeting
May 4-10, 2002 Ft. Lauderdale, Florida	Scientific Program Participant, Association for Research in Vision and Ophthalmology
May 30-June 1, 2002 Philadelphia, Pennsylvania	Invited Scientific Program Participant (speaker), Joint Meeting of the Contact Lens Association of

H. Dwight Cavanagh, M.D., Ph.D.

	Ophthalmologists/American Society of Cataract and Refractive Surgery
June 9-13, 2002 Salzburg, Austria	Invited Plenary Speaker, 3 rd International Conference on Ocular Infections
June 17-18, 2002 Quebec City, Canada	Invited Plenary Speaker, Night & Day Continuous Wear Summit - Ciba
August 8-9, 2002 Toronto, Canada	Invited Plenary Speaker, 1 st International Global Orthokeratology Symposium
August 15-18, 2002 San Diego, California	Scientific Program Participant, Continuous Wear Contact Lenses for the New Millennium; A World Summit Symposium
September 22-24, 2002 Washington, D.C.	Invited Participant, Research to Prevent Blindness Science Writers' Symposium
September 28, 2002 Dallas, Texas	Program Participant, 5 th Annual Ophthalmology Review for the Primary Care Physician
December 14-15, 2002 San Diego, California	Invited Speaker, American Academy of Optometry Annual Scientific Meeting
January 22-25, 2003 Orlando, Florida	Invited Plenary Speaker and Symposium Chair, Contact Lens & Eyecare Symposium, Contact Institute of the United States
February 8, 2003 Dallas, Texas	Program Participant, Ophthalmology, Dermatology and Otolaryngology Joint Symposium
March 1, 2003 Houston, Texas	Invited Plenary Speaker, 50 th Anniversary Symposium College of Optometry, University of Houston, Texas
March 11-13, 2003 Cincinnati, Ohio	Invited Speaker, 8 th Annual Ophthalmology Conference & Research Symposium, University of Cincinnati
March 27-29, 2003	Invited Speaker, 6 th Symposium Menicon Europe
May 4-9, 2003 Ft. Lauderdale, Florida	Scientific Program Participant, The Associate for Research in Vision and Ophthalmology
June 4-8, 2003 Brighton, United Kingdom	Invited Speaker, British Contact Lens Association Clinical Conference

H. Dwight Cavanagh, M.D., Ph.D.

June 19-21, 2003 Washington, DC	Invited Speaker, Eye Bank Association of American Annual Meeting
September 7-12, 2003 Majorca, Spain	Invited Speaker, International Society of Contact Lens Research Symposium
November 8, 2003 Dallas, Texas	Program participant, 5 th Annual Ophthalmology Review for the Primary Care Physician
November 13-15, 2003 Anaheim, California	Program Participant, Eye Bank Association of American Annual meeting
November 15-18, 2003 Anaheim, California	Scientific Program Participant, American Academy of Ophthalmology Annual meeting
November 21-23, 2003 Houston, Texas	Invited Speaker, Cornea, Contact Lenses & Contemporary Vision Care 20 th Annual Symposium
December 4-7, 2003 Dallas, Texas	Invited Speaker, American Academy of Optometry Annual meeting
March 13-20, 2004 Sydney, Australia	Invited Keynote Speaker by the Australian-New Zealand Ophthalmological Societies, 11 th World Congress on Corneal – Contact Lens Research
March 27-31, 2004 London, England	Tissue Engineering Workshop Scientific Participant, Representing UT Southwestern Medical Center by Invitation, Imperial College (London)
April 24-28, 2004 Fort Lauderdale, Florida	Scientific Program Participant, Association for Research in Vision Ophthalmology Annual Meeting
April 29-30, 2004 Fort Lauderdale, Florida	Co-executive Organizer, World Summit Meeting on Orthokeratology
November, 2004 New Orleans, Louisiana	Scientific Participant, American Academy of Ophthalmology, Annual Meeting
December, 2004 Tampa, Florida	Invited Speaker, American Academy of Optometry Annual Meeting
January, 2005 San Diego, California	Scientific Participant, Contact Lens and Eyecare Symposium, National Meeting
March 21-25, 2005 Jena, Germany	Scientific Program Participant, Focus on Microscopy 2005

H. Dwight Cavanagh, M.D., Ph.D.

April 13-16, 2005 Washington, D.C.	Invited Keynote Speaker, World Cornea Congress V
April 30-May 6, 2005 Ft. Lauderdale, Florida	Scientific Program Participant, Association for Research for Vision and Ophthalmology Annual Meeting
August 14-18, 2005 Coolum, Australia	Scientific Program Participant, International Society Society for Contact Lens Research, Biennial Meeting
October 17-21, 2005 Chicago, Illinois	Scientific Program Participant, Ocular Microbiology and Immunology Section and American Academy of Ophthalmology Annual Meeting
September 25-26, 2005 Laguna Beach, California	Scientific Program Participant, Western Eye Conference, Biennial Meeting
October 17-21, 2005 Chicago, Illinois	Scientific Program Participant, Ocular Microbiology and Immunology Section and American Academy of Ophthalmology Annual Meeting
December 8-11, 2005 San Diego, California	Key Note Speaker, The Max Schapero Lecturer Awardee, Annual Scientific Meeting, the American Academy of Optometry
December 11-14, 2005 San Jose, California	Scientific Program Participant, American Society of Cell Biology Annual Meeting
January 19-22, 2006 San Jose, California	Scientific Program Participant, The International Society for Optical Engineering (SPIE), Annual Meeting
April 5-11, 2006 Athens, Greece	Key Note Speaker, Global Symposium on Vision Correction (Bausch and Lomb)
April 29-May 4, 2006 Ft. Lauderdale, Florida	Scientific Program Participant, Association for Research for Vision and Ophthalmology Annual Meeting
May 15-23, 2006 Birmingham, England	Key Note Speaker, British Contact Lens Association, Annual Clinical Conference
September 15-16, 2006 Las Vegas, Nevada	Key Note Speaker, Contact Lens Association of Ophthalmologists (USA), Annual Educational Seminar
February 6, 2007-02-23 Stanford, California	Visiting Professor and Lecturer, Department of Ophthalmology, Stanford University School of Medicine

H. Dwight Cavanagh, M.D., Ph.D.

March 2-5, 2007 Singapore	Invited Keynote Speaker, Asia Satellite meeting of the Association for Research for Vision and Ophthalmology Meeting
May 3-4, 2007 Fort Lauderdale, FL	Organizer and Program Participant, World Summit Conference on Contact Lens Safety with the Contact Lens Association of Ophthalmologists (USA)
May 6-10, 2007 Fort Lauderdale, Florida	Scientific Program Participant, Association for Research for Vision and Ophthalmology Annual Meeting
May 31, 2007-June 3, 2007 Manchester, England	Gold Medal Lecturer, British Contact Lens Association International Clinical Conference
August 12-17, 2007 Whistler, Canada	Scientific Program Participant, International Society for Contact Lens Research
March 10-15, 2008 Singapore	Invited Keynote Speaker, Combined 1 st Asia-Pacific Corneal Society and Asia-Pacific Contact-Lens Association of Ophthalmologists Society Meeting
April 26-May 1, 2008 Ft. Lauderdale, FL	Scientific Program Participant, Annual National Meeting, Association for Research in Vision and Ophthalmology
June 6-8, 2008 Marbella, Spain	Keynote Speaker, Scientific Meeting, French Contact Lens Society
June 26-27, 2008 Seattle, WA	Recipient, the 5 th Donald Korb Award and Lecturer, The American Association of Optometry Annual National Meeting
June 28- July 3, 2008 Hong Kong, Peoples Republic of China	Recipient, the 2nd Harmano Gold Medal and Lecturer, XXXI World Congress of Ophthalmology
October 22-26, 2008 Anaheim, California	Scientific Program Participant, Annual Meeting, American Academy of Optometry
November 6-7, 2008 New Orleans, Louisiana	Guest Speaker, Biopolymer Meeting, Professor Jean Jacob, Louisiana State University
December 13, 2008 Houston, TX	The 5 th Whitney Sampson Lecture, Houston Academy of Ophthalmology, and visiting Professor, UT Houston and Baylor Medical College

H. Dwight Cavanagh, M.D., Ph.D.

January 22-23, 2009 Washington, DC	Organizer and Invited Participant, special workshop U.S. Food and Drug Administration
March 18-20, 2009 San Antonio, TX	14 th Hogan-Ferguson Ethics Lecture, and Lecturer, San Antonio Ophthalmological Society, The University of Texas Medical Center at San Antonio, TX
May 10-13, 2009 Paris, France	Keynote Speaker, Combined Meeting: French Ophthalmological Society and European Contact Lens Association of Ophthalmologists
August 16-21, 2009 Heraklion, Crete, Greece	Program Chair and Scientific Participant, 26 th Scientific Meeting, International Society for Contact Lens Research
September 24-25, 2009 Montreal, Canada	The 9 th Oliver Dabezies Lecture Contact Lens Association Ophthalmologists, USA Annual Meeting
October 24-27, 2009 San Francisco, CA	The 35 th Ramon Castroviejo Gold Medal and Lecture, The Annual Cornea Society and American Academy of Ophthalmology Joint Meeting
February 12, 2010 Dallas, TX	Live Lecture via Internet, Global Leaders in Ophthalmology Lecture Series, The L.V. Prasad Eye Institute, Hyderabad, India
March 26-27, 2010 Yamaguchi, Japan	International Corneal Conference, Yamaguchi School Medicine, Invited scientific program speaker
April 8-10, 2010 Boston, MA	Invited Scientific Program Participant, VI World Corneal Congress
May 1-6, 2010 Ft. Lauderdale, FL	Scientific Program Participant, Annual Meeting, Association for Research in Vision and Ophthalmology
June 5, 2010 Hilton Head Island, SC	Program Participant, Eye Bank Association of America Annual National Conference
August 28, 2010 Ft. Worth, Texas	Keynote address: American Foundation for the Blind: Center on Vision Loss Symposium
October 15, 2010 Chicago, Illinois	Scientific Program Participant, The Corneal Society and The Ocular Microbiology and Immunology Group Held in conjunction with the annual meeting of the

H. Dwight Cavanagh, M.D., Ph.D.

	American Academy of Ophthalmology meeting
November 11–13, 2010 San Francisco, CA	Scientific Program Participant, The Annual National Meeting of the American Academy of Optometry
December 1-3, 2010 Kyoto, Japan	Invited Keynote Speaker, 2 nd Biannual Scientific Meeting of the Asia-Pacific Cornea Society
December 4, 2010 Dallas, Texas	Moderator “Crossroads in Ophthalmology” Annual PG Course, Department of Ophthalmology, UTSWMC
April 30–May 2, 2011 Ft. Lauderdale, FL	Scientific Program Participant, Annual Meeting, Assoc. Res. Vsn. Ophthalmology
August 21 – 26, 2011 Napa, CA	16 th Biennial Meeting, The International Society Contact Lens Research (President and Presiding Officer)
October 5, 2012 Chicago, IL	CDS Study, Investigators Meeting
November 6-9, 2012 Chicago, IL	Annual Meeting American Academy of Ophthalmology and Cornea/EBAA, Scientific Program Participant
November 28–28, 2012 Manila, Philippines	3 rd Biennial Asia-Pacific Cornea Society, joint meeting with the Cornea Society and the AAOph; Keynote Speaker and Chair, International Contact Lens Symposium
June 7-8, 2013 Chicago, IL	Eye Bank Association of America Annual Meeting Program Participant
June 26-30, 2013 San Diego, CA	American Optometric Society, Annual Meeting Presentation of Living Legend Award, of the Contact Lens Section, Friday, June 28 th
August 24-30, 2013 Kyoto, Japan	2013 Biennial Scientific Meeting, International Society Contact Lens Research, Program Participant Moderator and Scientific Program Participant
March 4-5, 2014 Singapore	Consultant-Reviewer for the Singapore National Eye Center, Translational Clinical Research Flagship Program

ABSTRACTS

1. Cavanagh HD, Wald G. Isolation, Purification and Characterization of Bovine Visual Pigment Protein. *Fed Proc* 1969; 28:334.
2. Frank RE, Cavanagh HD, Kenyon KR. Binding of Terminal Phosphate Residues from ATP by Visual Pigment Protein. *Biophys J Soc Abst* 1972; 12:103a.
3. Cavanagh HD, Pihlaja DH, Dohlman DH. Anti-Inflammatory Therapy in Herpetic Ocular Disease. Association for Research in Vision and Ophthalmology (Symposia). *Invest Ophthalmol Vis Sci* 1975 ;(suppl).
4. Cavanagh HD, Colley AM. Cholinergic Adrenergic and Prostaglandin (PG) Effects on Cyclic Nucleotide Levels and Growth in Cultured Corneal Epithelium. *Invest Ophthalmol Vis Sci* 1979;18(suppl):74-5.
5. Cavanagh HD, Colley AM. Adrenergic and PG Effects on Basal Lamina Synthesis by Cultured Epithelium. *Invest Ophthalmol Vis Sci* 1980;19(suppl):98.
6. Cavanagh HD, Colley AM. B-Adrenergic and Muscarinic Binding in Corneal Epithelium. *Invest Ophthalmol Vis Sci* 1981;20(suppl):37.
7. Cavanagh HD, Colley AM. Desensitization of Corneal Cyclic Nucleotide Responses. *Invest Ophthalmol Vis Sci* 1982;21(suppl):72.
8. Lamensdorf M, Wilson LA, Waring GO III, Cavanagh HD. Microbial Keratitis After Penetrating Keratoplasty. *Ophthalmology* 1982;89(Sept. suppl):124.
9. Cavanagh HD, Colley AM. Corneal Epithelia Beta-Adrenergic and Muscarinic Desensitization. *Invest Ophthalmol Vis Sci* 1983;24(suppl):12.
10. The PERK Study Group, including Cavanagh HD. Prospective Evaluation of Radial Keratotomy-PERK Study: One Year Post-operative Results. *Ophthalmology* 1984;91(suppl):89.
11. Colley AM, Cavanagh HD. Localization of Corneal B-Adrenergic and Muscarinic Binding. *Invest Ophthalmol Vis Sci* 1984;25(suppl):78.
12. The PERK Study Group, including Cavanagh HD. Results of the Prospective Evaluation of Radial Keratotomy (PERK) Study Two Years After Surgery. *Ophthalmology* 1985;92 (suppl):72.
13. The PERK Study Group, including Cavanagh HD. PERK Patients at One Year: Side Effects and the Diameter of the Clear Zone. *Invest Ophthalmol Vis Sci* 1985;26:148.
14. The PERK Study Group, including Cavanagh HD. Changes in Refraction, Keratometry and

- Visual Acuity During the First Year After Radial Keratotomy in the PERK Study. *Invest Ophthalmol Vis Sci* 1985;26:202.
15. The PERK Study Group, including Cavanagh HD. Summary of Initial Results of the Prospective Evaluation of Radial Keratotomy (PERK) Study. *Ophthal Forum* 1985;3:No.3.
 16. The PERK Study Group, including Cavanagh HD. Correlation of Uncorrected Visual Acuity and Cycloplegic Refraction after Radial Keratotomy in the (PERK) Study. *Invest Ophthalmol Vis Sci* 1985;26:149.
 17. The PERK Study Group, including Cavanagh HD. Relationship of Glare to Refraction and Uncorrected Visual Acuity in the Radial Keratotomy (PERK) Study. *Am Pub Health Assoc* 1985;17(suppl):21.
 18. The PERK Study Group, including Cavanagh HD. PERK Patients at One Year: Psychological Characteristics. *Am Pub Health Assoc* 1985;17(suppl):21.
 19. The PERK Study Group, including Cavanagh HD. PERK Patients at One Year: Lens-Wearing Status and Satisfaction. *Am Pub Health Assoc* 1985;17(suppl):21.
 20. The PERK Study Group, including Cavanagh HD. Factors Affecting the Outcome of Radial Keratotomy in the PERK Study. *Invest Ophthalmol Vis Sci* 1985;26 (suppl):203.
 21. Colley, A.M., Cavanagh, H.D., Law, M.L.: Muscarinic Regulation of Corneal Nuclear Protein Kinases. *Invest Ophthalmol Vis Sci* 1985; 26 (Suppl):203.
 22. Friedlaender, L.D., Cavanagh, H.D.: Correlations of Ocular Blood Flow in Cerebrovascular Disease. *Invest Ophthalmol Vis Sci* 1985; 26(Suppl):220.
 23. Cavanagh, H.D., Colley, A.M., Drake, L.A., Law, M.L.: Muscarinic Regulation of Corneal DNA and RNA Polymerases. *Invest Ophthalmol Vis Sci* 1985; 26(Suppl):321.
 24. The PERK Study Group, including Cavanagh HD. Corneal Topography: Refractive Correlations. *Invest Ophthalmol Vis Sci* 1986; 27:15.
 25. The PERK Study Group, including Cavanagh HD. PERK Patients at Two Years: Lens-Wearing Status, Visual Characteristics and Satisfaction. *Invest Ophthalmol Vis Sci* 1986:63.
 26. The PERK Study Group, including Cavanagh HD. Summary of Short-term Results of the PERK Study. *Pakistan J Ophthalmol* 1986; 2:No. 2.
 27. Colley, A.M., Cavanagh, H.D., Law, M.L.: Carbamylcholine Enhances Resurfacing of Acid-burned Corneas. *Invest Ophthalmol Vis Sci* 1986; 27 (suppl):208.
 28. Colley, A.M., Cavanagh, H.D., Drake, L.A., Law, M.L.: DNA and RNA Polymerases in Resurfacing Acid-burned Corneas. *Invest Ophthalmol Vis Sci* 1986; 27(Suppl):31.

29. Lemp, M.A., Dilly, P.N., Cavanagh, H.D., Jester, J.V.: *In Vivo* Scanning Reflected Light Microscopy I: Morphology of the Normal Rabbit Cornea. *Invest Ophthalmol Vis Sci* 1987; 8 (Suppl):221.
30. Dilly, P.N., Cavanagh, H.D., Jester, J.V., Lemp, M.A.: *In Vivo* Reflected Light Microscopy II: Morphological Demonstration of Ouabain Inhibition of Rabbit Corneal Endothelial Pump. *Invest Ophthalmol Vis Sci* 1987; 28 (suppl):326.
31. Pascucci, S.E., Lemp, M.A., Cavanagh, H.D., Shields, W., Jester, J.V.: An Analysis of Age-Related Morphologic Changes of Human Meibomian Glands. *Invest Ophthalmol Vis Sci* 1988; (Suppl):213.
32. Melki, T., Cavanagh, H.D., Jester, J.V., Dilly, P.N., Lemp, M.A., Foegh, M.: Correlation of *In Vivo* Confocal Tandem Scanning Microscopy (TSM) Observations of Effects of Thromboxane Antagonist AH 23848 B (Galaxo, Gr Brit) and Ouabain on Transmission Electron Microscopy and Lanthanum Penetration Studies. *Invest Ophthalmol Vis Sci* 1988(Suppl):257.
33. Lemp, M.A., Mathers, W.D., Jester, J.V., Cavanagh, H.D.: Color Specular Microscopy of the Corneal Epithelium in Humans. *Proc Int'l Soc Eye Res* 1988; 5:132.
34. Cavanagh, H.D., Jester, J.V., Mathers, W.D., Lemp, M.A.: *In Vivo* Confocal Microscopy of the Eye. *Proc Int'l Soc Eye Res* 1988; 5:133.
35. Jester, J.V., Cavanagh, H.D., Mathers, W.D., Lemp, M.A.: *In Vivo* Cell Responses to Injury Using Confocal Microscopy. *Proc Int'l Soc Eye Res* 1988; 5:133.
36. Jester, J.V., Cavanagh, H.D., Lemp, and M.A.: *In Vivo* Confocal Imaging of the Eye Using Tandem Scanning Confocal Microscopy. In *Pro Int'l Cong on Optical Sci and Engineering (SPIE)*, Sept. 19-23, 1988; Hamburg, West Germany. Technical Abstracts: pp 137.
37. MacKeen, D., Cavanagh, H.D., Hamano, H., Ichijima, and H.: Overnight Swelling and Deswelling of Rabbit Corneas in Response to RGP and Soft Contact Lens Wear. *Invest Ophthalmol Vis Sci* 1989; 40(Suppl):30:3.
38. MacKeen, D., Kazai, A., Jester, J.V., Cavanagh, and H.D.: Corneal Swelling Responses Differ with Extended Wear in Naive and Adapted Subjects with High DK RGP Contact Lenses. *Invest Ophthalmol Vis Sci* 1989; 481(Suppl):30:3.
39. Andrews, P.M., Jester, J.V., Cavanagh, H.D.: *In Vivo* Microscopy of the Living Kidney. *Kidney Int'l*, Jan 1990; 37:1.
40. Petroll, W.M., Sachdev, M., Feng, W., New, K., Essepien, J., Cavanagh, H.D., Jester, and J.V.: *In Vivo* 4 Dimensional Analysis of Wound Healing Using Confocal Microscopy. *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:2.

41. Garana, R.M., Petroll, W.M., Feng, W., Cavanagh, H.D., Jester, and J.V.: Cell Biology of Corneal Wound Fibroblasts: Mechanism of Wound Contraction in Radial Keratotomy (RK). *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:3.
42. Sachdev, M., Cavanagh, H.D., Petroll, W.M., New, K., Jester, J.V.: Unifying Role for Arachidonate-Related Metabolites in Regulation of Corneal Endothelial Structure and Function. *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:3.
43. Jester, J.V., Petroll, W.M., Feng, W., Sachdev, M., New, K., Essepian, J., Cavanagh, H.D.: *In Vivo* Modulation of Corneal Curvature During Wound Healing in Radial Keratotomy (RK). *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:300.
44. Cavanagh, H.D., Hamano, H., MacKeen, D., Lemp, M.A.: Tear Lactate Dehydrogenase Levels: A New Method to Assess Effects of Contact Lens Wear in a Rabbit Model and Man. *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:406.
45. MacKeen, D., Cavanagh, H.D., Ohashi, J., Lemp, M.A.: Clinical Results of Extended Wear with a New High DK Rigid Gas Permeable Contact Lens in Humans. *Invest Ophthalmol Vis Sci* 1990(Suppl); 31:407.
46. Cavanagh, H.D., Petroll, W.M., Jester, J.V.: Confocal Microscopy of Living Tissue: A New Paradigm for Cell Biology and Medicine. *Proc Royal Micros Society* 1990; 25:563.
47. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: *In Vivo* 4 Dimensional Analysis of Wound Healing Using Confocal Microscopy. *Proc Royal Micros Society*, (London), 1990; 25:566.
48. Sachdev, M., Cavanagh, H.D., Petroll, W.M., New, K., Jester, J.V.: Regulation of Corneal Endothelial Pump Function by Arachidonate Related Metabolites. *Proc Intl Soc Eye Res* 1990; 6:201.
49. Cavanagh, H.D.: *In Vivo* Confocal Microscopy: New Developments and Applications. *Proc Intl Soc Eye Res* 1990; 6:79.
50. Garana, R.M.R., Petroll, W.M., Sachdev, M., Feng, W., Cavanagh, H.D., Jester, J.V.: Modulation of Corneal Curvature by Wound Contraction Following Radial Keratotomy. *Proc Intl Soc Eye Res* 1990; 6:193.
51. Garana, R.M.R., Jester, J.V., Petroll, W.M., Lemp, M.A., Cavanagh, H.D.: Comparison of *In Vivo* and *Ex Vivo* Cellular Structure in Rabbit Eyes Detected by Tandem Scanning Microscopy. *Proc Intl Soc Eye Res* 1990; 6:193.
52. Nelson, D.J., Gordon, J., Cavanagh, H.D.: Results of a Prospective, Multi-centered, Randomized Vehicle and Placebo-Controlled Clinical Trial of Fibronectin Ophthalmic Solution in Patients with Keratoconjunctivitis Sicca (KCS). *Invest Ophthalmol Vis Sci*. 1991(Suppl); 32:726.

53. Lind, G.J., Jester, J.V., Cavanagh, H.D.: Subtypes of Muscarinic Acetylcholine Receptor mRNAs in Rabbit Corneal Cells. *Invest Ophthalmol Vis Sci* 1991(Suppl); 32:966.
54. Andrews, P.M., Ichijima, H., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: The Effects of *In Vivo* Disassembly of Corneal Endothelial Cytoplasmic Cytoskeletal Elements. *Invest Ophthalmol Vis Sci* 1991(Suppl); 32:1065.
55. Ichijima, H., Petroll, W.M., Andrews, P.M., Garana, R.M.R., Barry, P.A., Balaoing, L.P., Jester, J.V., Cavanagh, H.D.: Confocal Microscopic Studies of Corneal Endothelial Wound Healing in Rabbit Eyes. *Invest Ophthalmol Vis Sci* 1991(Suppl); 32:1164.
56. Garana, R.M.R., Herman, I., Barry, P., Jester, J.V., Cavanagh, H.D.: Confocal Evaluation of the 3-Dimensional Cytoskeletal Protein Organization in Normal Cat Keratocytes. *Invest Ophthalmol Vis Sci* 1991(Suppl); 32:1002.
57. Petroll, W.M., Cavanagh, H.D., Garana, R.M.R., Barry, P.A., Jester, J.V.: 3-Dimensional Analysis of F-Actin Organization in Myofibroblasts Using Laser Confocal Microscopy. *Invest Ophthalmol Vis Sci* 1991(Suppl); 32:1163.
58. Jester, J.V., Petroll, W.M., Garana, R., Lemp, M.A., Cavanagh, H.D.: In Vitro Artifacts vs *In Vivo* Reality with Confocal Microscopy. *J Scanning Micros* 1991 (Suppl 1) 13:91-2.
59. 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.
60. 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.
61. 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.
62. 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.
63. 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.
64. 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.
65. 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.
66. Lind, G., Cavanagh, H.D.: Acetylcholine Receptors in Corneal Epithelium of the Rabbit. *Mol Biol of the Cell* 1992; 3(Suppl): 297a.
 67. 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.
 68. 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.
 69. 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.
 70. 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.
 71. 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.
 72. 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.
 73. 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.
 74. 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).
 75. Barry, P.A., Cavanagh, H.D., Petroll, W.M., Jester, and J.V.: Cell Matrix Interactions Modulate Induction of α -Smooth Muscle Actin (α -SM) Expression by TGF_{b1} in Cultured Fibroblasts. *Mol Biol of the Cell* 1994; 5:464a (Suppl).
 76. 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.

77. 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 TGF β in the Rabbit LK Model. *Invest Ophthalmol Vis Sci* 1995(Suppl.); 36:S867.
78. 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.
79. 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.
80. 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.
81. 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.
82. 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.
83. Jester, J.V., Petroll, W.M., Huang, J., Roy, P., Barry-Lane, P.A., Cavanagh, H.D.: TGF β_1 Modulated Myofibroblast Transformation via Matrix Interaction: Role in Wound Contraction. *Invest Ophthalmol Vis Sci* (Suppl) 1996;S219.
84. 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.
85. 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.
86. 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 Sci* 1997; 38:S399.
87. Petroll, W.M., Jester, J.V., Bean, J., Cavanagh, H.D.: Effects of Serum, TGF β_1 and bFGF on Cat Corneal Endothelial Proliferation and Myofibroblast Transformation during Wound Healing. *Invest Ophthalmol Vis Sci* 1997; 38:S731
88. 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.
89. 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.
90. Moller-Pedersen, T., Li, H.F., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: Anti-TGF β Treatment Reduces Corneal Haze But Not Regression of Ablative Effect following Excimer Laser PRK in the Rabbit. *Invest Ophthalmol Vis Sci* 1997; 38:S209.
 91. 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.
 92. 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.
 93. Jester, J.V., Huang, J., Kao, W.W., Petroll, W.M., Cavanagh, H.D.: TGF β Mediated Corneal Myofibroblast Transformation Is Dependent on Tyrosine Phosphorylation. *Invest Ophthalmol Vis Sci* 1997; 38:S502.
 94. Petroll, W.M., Jester, J.V., Bean, J., Cavanagh, H.D.: Effects of serum TGF- β 1 and bFGF on Cat Corneal Endothelial Proliferation and Myofibroblast Transformation during Wound Healing. *Invest Ophthalmol Vis Sci* 1997; 38:S730.
 95. 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.
 96. 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.
 97. 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.
 98. 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.
 99. 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.
 100. 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.
101. 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.
 102. 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.
 103. 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.
 104. 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.
 105. 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.
 106. 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.
 107. 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.
 108. 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.
 109. 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).
 110. 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.
 111. 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.
 112. 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.

113. 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.
114. 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.
115. 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.
116. 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.
117. 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.
118. 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.
119. 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.
120. 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.
121. 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.
122. 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.
123. 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 Technique. *Invest Ophthalmol Vis Sci* 2000;41(Suppl):S922.
124. 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.
125. 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.
126. 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.
127. 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.
128. 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-O₂ Transmissible RGP and Soft Contact Lenses on Bacterial Binding and Corneal Epithelium. *Invest Ophthalmol Vis Sci* 2001;42:S595.
129. 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.
130. 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.
131. Cavanagh HD, Ladage PM, Yamamoto K, Ren DH, Li L, Petroll WM, Jester JV. Effects of daily and extended wear of novel hyper O₂ transmissible soft contact lens on bacterial binding and corneal epithelium: a 1 year clinical trial. *Invest Ophthalmol Vis Sci* 2002;42:S125.
132. 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.
133. Ladage PM, Petroll WM, Bergmanson JPG, Jester JV, Cavanagh HD. 3-D Location of BrdU-labeled epithelial cells following overnight RGP lens wear in rabbit cornea. *Invest Ophthalmol Vis Sci* 2002;78:S128.
134. 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.
135. 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.
136. 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.
137. 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.
138. 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-O₂ Transmissible Soft Contact Lens on Bacterial Binding and Corneal Epithelium: A 1 Year Clinical Trial. *ARVO Abstract*; 2002, Abs. #3089.
139. 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.
140. Wang X, McCulley JP, Bowman RW, Cavanagh HD: Contact Lens-induced Corneal Warpage in Patients Scheduled for Photorefractive Surgery. *ARVO Abstract*; 2002, Abs. 3103.
141. Vargas JM, Seward M, McCulley JP, Bowman RW, Cavanagh HD. LADARV_sion vs VISX S3 in Treating Myopia and Hyperopia. *ARVO Abstract*; 2002, Abs. #4142.
142. Oral D, Vargas JM, Seward M, Bowman RW, McCulley JP, Cavanagh HD: Results of LASIK after Radial Keratotomy. *ARVO Abstract*; 2002, Abs. 4155.
143. 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.
144. 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.
145. 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. *Invest Ophthalmol Vis Sci*. 2003;44:ARVO E-Abstract 892.
146. Yamamoto T, Fisher SR, Jester JV, Cavanagh HD: Differentiation of Telomerase Immortalized Human Corneal Epithelial Cells. *Invest Ophthalmol Vis Sci*. 2003;44:ARVO E-Abstract 1337.
147. Kim AS, McCulley JP, Cavanagh HD, Jester JV, Bugde SC, Kovoov T, Petroll WM: Evaluation of the Effects of Topical Ophthalmic Fluoroquinolones (FQ) on the Cornea Using In Vivo Confocal Microscopy. *Invest Ophthalmol Vis Sci*. 2003;44:ARVO E-Abstract 1367.

148. 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. *Invest Ophthalmol Vis Sci.* 2003;44:ARVO E-Abstract 1371.
149. 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. *Invest Ophthalmol Vis Sci.* 2003;44:ARVO E-Abstract 1372.
150. Oral D, McCulley JP, Bowman RW, Cavanagh HD, El-Agha MSH, Seward MS: Hyperopic LASIK Results with Ladar Vision, Visx S2, and Visx S3. *Invest Ophthalmol Vis Sci.* 2003;43:ARVO E-Abstract 2619.
151. Jester JV, Houston J, Adams B, Huang J, Matinyare D, Petroll WM, Cavanagh HD: Species Specific and Developmental Expression of Corneal Keratocyte Crystallin Proteins. *Invest Ophthalmol Vis Sci.* 2003;44:ARVO E-Abstract 4219.
152. Yamamoto N, Yamamoto N, Cavanagh HD, Jester JV. Involvement of membrane lipid rafts in the internalization of *Pseudomonas aeruginosa* by immortalized corneal epithelial cells (hTCDpi). *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 1466.
153. Yamamoto N, Ladage PM, Cavanagh HD. *Pseudomonas aeruginosa* binding to the rabbit corneal surface following orthokeratology lens wear. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 1582.
154. Ladage PM, Yamamoto N, Cavanagh HD. Confocal microscopy of the rabbit corneal surface following orthokeratology lens wear. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 1535.
155. Van Norman RH, Awwad ST, El-Kateb M, Bowman W, Cavanagh D, McCulley JP. Comparing the wave captures of the VISX WaveScan and the LADARWave aberrometers using adjusted and actual capture zones. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 2843.
156. El-Kateb, M, Awwad ST, Bowman W, Cavanagh HD, McCulley JP. VISX WaveScan and LADARWave aberrometers: a comparative higher order aberration capture study. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 2842.
157. Awwad ST, El-Kateb M, Bowman W, Cavanagh HD, McCulley JP. LADARVision CustomCornea LASIK for myopic/astigmatic eyes: quantitative and qualitative results. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 2820.
158. Robertson DM, Cavanagh HD, Shay JW, Jester JV. BCL-2 alpha in human telomerized corneal epithelial cells. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO E-Abstract 1463.
159. Jester JV, Sacco B, Ward B, Takashima A, Garcia JV, Cavanagh HD, Petroll WM. Bone marrow derived cells in corneal repair. *Invest Ophthalmol Vis Sci.* 2004;45:ARVO-E-Abstract 1168.

160. Awwad ST, El-Kateb M, Bowman W, Cavanagh HD, McCulley JP. The validity of the peripheral wavefront capture zone within 0.25 mm of the pupillary border. *American Society of Cataract and Refractive Surgery Abs.*, 2004.
161. Awwad ST, El-Kateb M, Bowman W, Cavanagh HD, McCulley JP. The visual results of LADARVision CustomCornea LASIK. *American Society of Cataract and Refractive Surgery Abs.*, 2004.
162. El-Kateb M, Awwad ST, Bowman W, Cavanagh HD, McCulley JP. Comparative higher aberration capture of the VISX WaveScan and LADARWave aberrometers. *American Society of Cataract and Refractive Surgery Abs.*, 2004.
163. Awwad ST, Haddad W, Wang M, Cavanagh HD. Intrastromal corneal crystal deposits by gatifloxacin after penetrating keratoplasty. *American Society of Cataract and Refractive Surgery Abs.*, 2004.
164. Parmar D, Awwad ST, Heilman M, Whitson JT, Cavanagh HD. Blindness from Acanthamoeba. *American Society of Cataract and Refractive Surgery Abs.*, 2004.
165. Yamamoto N, Yamamoto N, Jester JV, Cavanagh HD. Pathophysiological corneal epithelium changes after prolonged low-Dk RGP lens wear in eyelid closure-induced hypoxia. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 900.
166. Parmar D, Ladage PM, Awwad S, McCulley JP, Bowman RW, Cavanagh HD. Corneal epithelial homeostasis following laser in situ keratomileusis (LASIK). *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 901.
167. Goldberg DF, Cavanagh HD, Bowman W, Kelley P, Parmar D, Petroll M, Verity SM, McCulley JP. Keratocyte response following INTACS®, intracorneal lens inserts, and flap creation by femtosecond laser ablation (Intralase®) for LASIK. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 217.
168. Robertson DM, Petroll SM, Jester JV, Cavanagh HD. Caspase activation in human corneal epithelial cells using FRET. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 210.
169. Yamamoto N, Yamamoto N, Jester JV, Cavanagh HD. Internalization of *Pseudomonas aeruginosa* in corneal epithelium is mediated by lipid rafts. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 2122.
170. Fisher SR, Robertson DM, Cavanagh HD. P63 expression in hTERT-Immortalized corneal epithelial cells. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 2123.
171. Komaromy K, Awwad ST, Oral D, Bowman RW, Cavanagh HD, McCulley JP. Comparison of induced astigmatism in conventional and wavefront-guided laser in situ keratomileusis. *Invest Ophthalmol Vis Sci.* 2005;46:ARVO E-Abstract 4390.

172. Cavanagh HD, Yamamoto N, Robertson DM, Petroll WM. Lipid membrane rafts mediate pseudomonas aeruginosa internalization in corneal epithelium following ctl wear in vivo and in vitro. (Abstract) *Mol Biol Cell* 2006;16:147.
173. Di Pascuale MA, Butovich I, Aranowicz J, Uchiyama E, Awwad S, Cavanagh HD Digital sequential lipid tear film interferometry characterization and corneal topography regularity surface indices assessment in normal subjects. *Invest Ophthalmol Vis Sci.* 2006;47:ARVO E-Abstract 1939.
174. Ho SI, Robertson DM, Hansen BS, Allam AM, Parmar P, Petroll WM, Cavanagh HD The role of p63 as a regulator of proliferation in human corneal epithelial cells. 2006;47:ARVO E-Abstract 3035.
175. Awwad ST, Bowman RW, Cavanagh HD, Verity SM, McCulley JP Optimizing corneal power calculations after myopic keratorefractive surgery. 2006; 47:ARVO E-Abstract 3616.
176. Cavanagh HD, Robertson DM, Ho SI, Mei J, Dimiceli KC, Petroll WM Characterization of igfbp3 in telomerase-immortalized human corneal epithelial cells. 2006; 47:ARVO E-Abstract 4922.
177. Robertson DM, Ho SI, Parmar P, Hansen BS, Petroll WM, Cavanagh HD Assessment of apoptotic protein dynamics in human corneal epithelial cells using frap and flip. 2006;47: ARVO E-Abstract 4927.
178. Prasher P, Di Pascuale MA, Dwarakanathan S, Winslow H, Cavanagh HD, McCulley JP, Bowman RW, Mootha VV. Role of visante anterior segment oct as an adjunctive tool in the management of a case with successfully reconstructed ocular surface for unilateral limbal stem cell deficiency and dense corneal scar. *Invest. Ophthalmol. Vis. Sci.* 2007; 48: ARVO E-Abstract. 1872.
179. Robertson DM, Hansen BS, Ho SI, Petroll WM, Cavanagh HD. Np63 modulates igfbp3 activity in human corneal epithelial cells. *Invest. Ophthalmol. Vis. Sci.* 2007; 48: ARVO E-Abstract. 2743.
180. Cavanagh HD, Robertson DM, Ho SI, Hansen BS, Petroll, WM. Transcriptional activity of np63 isoforms in corneal epithelial cells. *Invest. Ophthalmol. Vis. Sci.* 2007; 48: ARVO E-Abstract. 2744.
181. Di Pascuale MA, Arey M, Prasher P, Bowman RW, Cavanagh HD, McCulley JP, Mootha VV. Early corneal changes after descemet's stripping automated endothelial keratoplasty (dsaek) evaluated by visante anterior segment oct. *Invest. Ophthalmol. Vis. Sci.* 2007; 48: ARVO E-Abstract. 1130.
182. Kalangara JP, Robertson DM, Baucom RB, Ho SI, Cavanagh HD. Reconstitution of a Multi-Layered, Differentiated Cornea by HTERT-Immortalized Corneal Epithelial Cells Transduced

- with Thymidine *Invest. Ophthalmol. Vis. Sci.* 2007; 49: ARVO E-Abstract. 5751.
183. Robertson DM, Ho SI, Cavanagh HD. Interactive regulation of cell survival in corneal epithelial cells by NP63 α/β Np63 γ . *Invest. Ophthalmol. Vis. Sci.* 2008; 49: ARVO E-Abstract. 4300.
184. Cavanagh HD, Robertson DM. The Effect of Contact Lens Care Solutions on Pseudomonas Binding Following Hyper-DK Silicone Hydrogel Contact Lens Wear *Invest. Ophthalmol. Vis. Sci.* 2008 49: E-Abstract 4867.
185. Muftuoglu O, Prasher P, Di Pascuale MA, Mootha VV, Verity S, Bowman RW, McCulley JP, Cavanagh HD. Visual and Clinical Outcomes of Wavefront Guided Myopic Lasik With Iris Registration. *Invest. Ophthalmol. Vis. Sci.* 2008; 49: ARVO E-Abstract. 5641.
186. Mohamed EM, Wojtowicz JC, Bowman WB, Cavanagh D, Mootha V, Verity S, McCulley JP. Corneal Thickness Association with Ocular and Corneal Wavefront Aberrations. *Invest. Ophthalmol. Vis. Sci.* 2009;50: ARVO E-Abstract 1566.
187. Robertson DM, Ho SI, Cavanagh HD. BCL2 Regulation by Δ Np63/p53 Interactions in Corneal Epithelial Cells. *Invest. Ophthalmol. Vis. Sci.* 2009; 50: ARVO E-Abstract 4601.
188. Bui TH, Cavanagh HD, Robertson DM. Compliance, Perception and Awareness of Risk in an Established Contact Lens Wearing Population. *Invest. Ophthalmol. Vis. Sci.* 2010; 51: ARVO E-Abstract 1514.
189. Robertson DM, Ho SI, Cavanagh HD. Oxygen-Mediated Down-Regulation of Δ Np63 in the Corneal Epithelium. *Invest. Ophthalmol. Vis. Sci.* 2010; 51: ARVO E-abstract 1518.
190. Imayasu M, Hori Y, Cavanagh HD. Effects of Multi-Purpose Contact Lens Care Solutions and their ingredients on Membrane-Associated Mucins at the Corneal Epithelial Cells. *Invest. Ophthalmol. Vis. Sci.* 2010; 51: ARVO-E Abstract 1525.
191. Mouhab A, Mohamed E, Bowman W, Cavanagh D, Verity S, McCulley J., Myopic LASIK Visual Outcomes of VISX S4 using Iris Registration 2010 ASCRS Abstract.
192. Arciniega JC, Mohamed EM, Bowman W, Cavanagh D, Verity S, McCulley JP. Corneal High Order Aberrations in Keratoconus 2010 ASCRS Abstract.
193. Robertson DM, Cavanagh HD. Contact Lens Awareness Does Not Correspond with Compliant Behavior. 2010; Abstract, American Academy of Optometry.
194. Robertson DM, Zhu M, Cavanagh HD. Regulation of Corneal Epithelial Homeostasis by Peptide Growth Factors and Associated Binding Proteins: The IGF System. 2010; Abstract: American Academy of Optometry.
195. Robertson, DM, Ho S-I, Cavanagh HD. Oxygen-mediated Expression of Delta No. 63 in the Corneal Epithelium, *Mol Biol Cell*: 2010.

196. Petroll, WM, Weaver, M, Vaidya, S, McCulley, JP, Cavanagh, HD. Quantitative Corneal Imaging *In Vivo* Using a Modified HRT-RCM Confocal Microscope, 2011 ARVO Abstract #4205/D949.
197. Robertson, DM, Zhu, M, Cavanagh, HD. Nuclear Localization of IGFBP3 and IGF-1R Proliferating Corneal Epithelial Cells. 2011 ARVO Abstract #308/D772.
198. Pascuale, MA, Cavanagh, HD. Analysis of Dsaek Dislocation Rate By: Graft Thickness, Graft Size, Preoperative Storage Time, and Endothelial Cell Count, 2011 ARVO Abstract #747/D797.
199. Imayasu, M, Nomachi, My, Tchedre, K, Cavanagh, HD. A Rapid Determination for Encystment Rate of *Acanthamoeba* using Flow Cytometry. 2011 ARVO Abstract #6484/D948.
200. Burnham, G, Cavanagh, HD, Robertson, DM. Neutrophil-enhanced *Pseudomonas aeruginosa* Biofilms on Silicone Hydrogel Contact Lens. 2011 ARVO Abstract #6506/D974.
201. Tchedre, KT, Imayasu, M, Hori, Y, Cavanagh, HD. Effect of Multipurpose Contact Lens Care Solutions On Membrane-associated Mucins Expressions In the Rat Cornea. 2011 ARVO Abstract #6512/D976.
202. Mootha, VV, Gong, X, Guenena, M, Whitson, J, Cavanagh HD. Anterior Segment Dysgenesis in a Family with Monozygotic Twins. 2012 ARVO Abstract #1539/D760.
203. Imayasu, M, Tchedre, KT, Cavanagh, HD. Effects of Multi-purpose Solutions on the Viability and Encystment of Clinical Isolates of *Acanthamoeba* determined by Flow Cytometry. 2012 ARVO Abstract#6077/D898.
204. Tchedre, KT, Imayasu, M, Hori, Y, Cavanagh, HD. Evaluation of Commercially Available Novel Multipurpose Contact Lens Care Solutions Effect on Membrane-associated Mucin Expression in the Rat Cornea. 2012 ARVO Abstract #6078/D899.
205. Petroll WM, Hagenasr DB, Cavanagh HD, Robertson, D. 3 Dimensional Assesment of In Vivo Corneal Wound Healing using a Modified HRT-RCM Confocal Microscope. 2013 ARVO Abstract #3222.
206. Kruti D, Cavanagh HD, Hogan IV, Backer L, Zinn A, Mootha V. Ocular Manifestations of X-linked Reticulate Pigmentary Disorder. 2013 ARVO Abstract #4722.
207. Bennet A, Rashads, Drury D, Cavanagh HD, McCulley JP, Petroll WM, Mootha V. Impact of Donor Age on Endothelium-Descemet Membrane Layer Harvesting. 2013 ARVO Abstract #1748.
208. Tchedre KT, Imayasu M, Hori Y, Cavanagh HD. Boric Acid-Based Multi Purpose Contact Lens Care Solutions (MPSs) cytotoxicity Effect on Human Corneal Epitthelial Cells. 2013 ARVO Abstract #1748.

209. Heck E, Cavanagh HD. Nucleic Acid Testing and Tissue Safety. Eye Bank Association Am. National Science Program with the Cornea Society Abstracts.

PUBLICATIONS:

- 1971 -

1. Cavanagh, H.D.: The Protein of Rhodopsin. Ph.D. Thesis. Harvard University, Cambridge, Massachusetts, 1971.

- 1973 -

2. Frank, R.E., Cavanagh, H.D., Kenyon, K.R.: Light-Stimulated Phosphorylation of Bovine Visual Pigments by Adenosine Triphosphate. *J Biol Chem* 1973; 248:596-609.

- 1974 -

3. Cavanagh, H.D., Green, W.R., Goldberg, H.K.: Multicentric Sebaceous Adenocarcinoma of the Meibomian Gland. *Am J Ophthalmol* 1974; 326-332.

- 1975 -

4. Cavanagh, H.D.: Herpetic Ocular Disease: Therapy of Persistent Epithelial Defect. *Int Ophthalmol Clin* 1975; 15:67-88.

- 1976 -

5. Cavanagh, H.D., Pihlaja, D.H., Thoft, R.A., Dohlman, D.H.: The Pathogenesis and Treatment of Persistent Epithelial Defects. *Trans Am Acad Ophthalmol Otolaryngol* 1976; 81:754-69. (now *J. Ophthalmology*)
6. Berman, M., Cavanagh, H.D., Gage, J.: Regulation of Collagenase Activity in the Ulcerating Cornea by Cyclic-AMP. *Exp Eye Res* 1976; 22:209-1
7. Patten, J.T., Cavanagh, H.D., Allansmith, M.R.: Induced Ocular Pseudophthisis. *Am J Ophthalmol* 1976; 82:272-6.
8. Cavanagh, H.D.: An Historical Sketch of Christ Church Cambridge, (1761-1976). Revised and edited from 1st edition. Gardner Day, D.D., Boston, Massachusetts: *Alden Press, 1976.*
9. Cavanagh, H.D., Pihlaja, D.H., Thoft, R.A., Dohlman, C.H.: The Pathogenesis and Treatment of Persistent Epithelial Defects. *Trans Am Acad Ophthalmol Otolaryngol* 1976; 81:754-69. Reprinted in Hughes, W.F. (ed): *The Yearbook of Ophthalmology*. Chicago: Medical Yearbook Publishing, Inc., 1977. pp. 79-80.
10. Patten, J.T., Cavanagh, H.D., Pavan-Langston, D.: Penetrating Keratoplasty in Acute Herpetic Corneal Perforation. *Ann Ophthalmol* 1976; 8:287-94.

- 1977 -

11. Berman, M.B., Cavanagh, H.D., Gage, J.: 5 Adenosine Monophosphate Prevents Collagen Degradation in Culture But Does Not Prevent Corneal Ulceration. *Exp Eye Res* 1977; 24:391-
12. Cavanagh, H.D. and Pihlaja, D.H.: The Management of Corneal Perforation in Herpes Simplex Keratitis. *Persp Ophthalmol* 1977; 1:269-83.
13. Friedlander, M.H., Cavanagh, H.D., Sullivan, W.R., Gallagher, M.J., Dickerson, G.R.: Bilateral Central Lipid Infiltrates of the Cornea. *American Journal of Ophthalmology* 1977; 84:781-7.

- 1978 -

14. Donshik, P.C., Collin, H.B., Foster, C.S., Cavanagh, H.D., Boruchoff, S.A.: Conjunctival Resection Treatment and Ultrastructural Histopathology of Superior Limbic Keratoconjunctivitis. *Am J Ophthalmol* 1978; 85:101-10.
15. Collin, H.B., Donshik, P.C., Foster, C.S., Boruchoff, S.A., Cavanagh, H.D.: Keratinization of the Bulbar Conjunctival Epithelium in Superior Limbic Keratoconjunctivitis in Humans: An Electron Microscopic Study. *Acta Ophthalmol* 1978; 56:531-43.
16. Cavanagh, H.D., Lemp, M.A.: Wound Repair in the Cornea. Contact & IOL. *Med J (now CLAO Journal)* 1978; 4:138-44.
17. Collin, H.B., Donshik, P.C., Boruchoff, S.A., Foster, C.S., Cavanagh, H.D.: The Fine Structure of Nuclear Changes in Superior Limbic Keratoconjunctivitis. *Invest Ophthalmol Vis Sci* 1978; 17:79-84.
18. Cavanagh, H.D.: Therapeutic Hydrogel Lenses. in Duane, T.D. (ed): *Clinical Ophthalmology*, 2nd Ed., New York: Harper & Row, 1978; 4:Ch 11.

- 1979 -

19. Donshik, P.C., Cavanagh, H.D., Boruchoff, S.A., Dohlman, C.H.: Effect of Bilateral and Unilateral Grafts on the Incidence of Rejections in Keratoconus. *Am J Ophthalmol* 1979; 87:823-6.
20. Hendley, R.L., Rieser, J.C., Cavanagh, H.D., Bodner, B.I., Waring, G.O., III: Primary Radiation Therapy for Meibomian Gland Carcinoma. *Am J Ophthalmol* 1979; 87:206-9.
21. Stefanis, G.S., Cavanagh, H.D., Tindall, G.T.: Ophthalmological Aspects of Pituitary

Tumors. in Tindall, G.T. and Collins, W.F. (eds): Clinical Management of Pituitary Disorders. New York: Raven Press, 1979.

22. Bodner, B.I., Bell, F.C., Cavanagh, H.D.: Embryology and Developmental Abnormalities of the Eye. J Cont Ed Ophthalmol 1979; 41:21-31.
23. Mascarella, K. and Cavanagh, H.D.: Penetrating Keratoplasty Using McCarey-Kaufman Preserved Corneal Tissue. South Med J 1979; 72:1268-71.
24. Cavanagh, H.D., Colley, A.M., Pihlaja, D.J.: Persistent Corneal Epithelial Defects. Int Ophthalmol Clin 1979; 19:197-206.
25. Nahmias, A., Vistine, A., Haney, M., Stanwick, R., Lee, F., Cavanagh, H.D.: Isolation, Quantitation, and Electron Microscopic Detection of Virus from Tears in Human Herpetic Keratitis - Relation to Antiviral Therapy. Adv Ophthalmol 1979; 38:30-7.

- 1980 -

26. McCord, C.D., Jr. and Cavanagh, H.D.: Microscopic Features and Biologic Behavior of Eyelid Tumors. Ophthal Surg 1980; 11:671-81.
27. Cavanagh, H.D., Bodner, B.I., Wilson, L.A.: Extended Wear Hydrogel Lenses: Long-Term Effectiveness and Costs. Ophthalmology 1980; 87:871-6.
28. Cavanagh, H.D.: Extended Wear Contact Lenses in Aphakia. *Mini Highlights of Ophthalmology* 1980; 8:5.

- 1981 -

29. Donshik, P.C., Cavanagh, H.D., Boruchoff, S.A., Dohlman, C.H.: Posterior Subcapsular Cataracts Induced by Topical Corticosteroids Following Keratoplasty for Keratoconus. Ann ophthalmol 1981; 13:29-32.
30. Haney, M.L., Jeffrey, C., Cavanagh, H.D.: Corneal Involvement in Methylmalonic Aciduria. Ann Ophthalmol 1981; 13:81-3.
31. Boerner, C.F., Lee, F.K., Wickliffe, C.L., Nahmias, A.J., Cavanagh, H.D., Straus, S.E.: Electron Microscopy for the Diagnosis of Ocular Viral Infections. Ophthalmology 1981; 88:1377-81.
32. Worthen, D.M., Luxemberg, M.N., Gutman, F.H., Colenbrander, A., Schultz, R.O., Cavanagh, H.D., Kaufman, H.E.: Ophthalmology (Eye Physician and Surgeon) Manpower Studies for the United States. Part III: A Survey of the Ophthalmologists' Viewpoints and Practice Characteristics. Ophthalmology 1981; 88:45A-51A.
33. Cavanagh, H.D. and Boyd, B.F.: Extended Wear in Aphakia with Third Generation Soft Contact Lenses. Volume II, Ch. 42, pp. 832, Highlights of Ophthalmology, Boyd, B.F. (ed),

Kingsport Press, Tenn (1981).

- 1982 -

34. The PERK Study Group, including Cavanagh, H.D.: Prospective Evaluation of Radial Keratotomy (PERK): Clinical Aspects. *Ophthal Forum* 1982; 1:30-35.
35. Bodner, B.I. and Cavanagh, H.D.: *Ophthalmic Surgery in Medical Management of the Surgical Patient* (1st Ed.), Smith, R.B. (ed), Butterworth, Boston (1982).
36. Cavanagh, H.D., Leveille, A.S.: Extended Wear Contact Lenses in Patients with Corneal Grafts and Aphakia. *Ophthalmology* 1982; 89:643-50.
37. Leveille, A.S., Benson, J., Cavanagh, H.D., Bodner, B.I., Byers, R.H., Jr.: Cost Effectiveness in Eyebanking. *Ophthalmology* 1982; 90:51A-53A.
38. Cavanagh, H.D., Colley, A.M.: Cholinergic Adrenergic, and PGE Effects in Cyclic Nucleotides and Growth in Cultured Corneal Epithelium. *Metab Pediatr Syst Ophthalmol* 1982; 6:63-74.
39. Colley, A.M., Cavanagh, H.D.: Binding of (3H) Dihydroalprenolol and (2H) Quinuclidinyl Benzilate to Intact Cells of Cultured Corneal Epithelium. *Metab Pediatr Syst Ophthalmol* 1982; 6:72-86.

- 1983 -

40. Waring, G.O., III, Welch, S.N., Cavanagh, H.D., Wilson, L.A.: Results of Penetrating Keratoplasty in 123 Eyes with Pseudophakic or Aphakic Corneal Edema. *Ophthalmology* 1983; 90:25-33.
41. The PERK Study Group, including Cavanagh, H.D.: Rationale for and Design of the National Eye Institute Prospective Evaluation of Radial Keratotomy. *Ophthalmology* 1983; 90:40-58.
42. The PERK Study Group, including Cavanagh, H.D.: Design Features of the Prospective Evaluation of Radial Keratotomy - PERK Study, in Binder, P.S. (ed): *Refractive Corneal Surgery: The Correction of Aphakia, Hyperopia, and Myopia*. *Int Ophthalmol Clin* 1983; 23:145-165.
43. Leveille, A.S. and Cavanagh, H.D.: Penetrating Keratoplasty in Eyes with Fuchs Dystrophy and Small Anterior Segments. *ACTA:XXIV (International Congress of Ophthalmology)* Henkind, P.A. (ed) Vol I, 298, Lippincott, 1983.
44. Leveille, A.S., McMullan, F.D., Cavanagh, H.D.: Endophthalmitis Following Penetrating Keratoplasty. *Ophthalmology* 1983; 90:38-9.
45. Stulting, R.D., Hooper, R.J., Cavanagh, H.D.: Ocular Injury Caused by Tarantula Hairs

(Letter). *Am J Ophthalmol* 1983; 96:118-9.

46. Stulting, R.D., Nahmias, A.J., Cavanagh, H.D.: Wetting Contact Lenses in the Mouth May Transmit Genital Herpes to the Eyes. *JAMA* 1983; 249:2245.

- 1984 -

47. The PERK Study Group, including Cavanagh, H.D.: Psychosocial Characteristics of Candidates for the Prospective Evaluation of Radial Keratotomy - PERK Study. *Arch Ophthalmol* 1984; 102:1187-92.
48. Cavanagh, H.D.: Extended Wear Contact Lenses in Aphakia: Physiology, Lens Design, Fitting, and Results. *Trans New Orleans Acad Ophthalmol* 1984; 13, 23. CV Mosby, St. Louis, MO.
49. Cavanagh, HD. Discussion Repeat radial keratotomy in monkeys. Cowden JW, Weber B. *Ophthalmology* 1983;90:251-256.
50. Cavanagh, H.D.: Extended Wear Contact Lenses in Aphakia: Patient Selection and Complications. *Trans New Orleans Acad Ophthalmol* 1984;67-74. CV Mosby, St. Louis, MO
51. Cavanagh, H.D., Waring, G.O., III: Penetrating Keratoplasty in Pseudophakic and Aphakic Corneal Edema. *Trans New Orleans Acad Ophthalmol* 1984; 1973-84. CV Mosby, St. Louis, MO.
52. Cavanagh, H.D.: Special Problem Areas in Aphakic Extended Wear Contact Lenses: Chronic Ocular Surface Disease, Corneal Grafts and Aphakia, and Pediatric Aphakia and Corneal Disease. Roundtable Discussion. *Trans New Orleans Acad Ophthalmol* 1983; 299-314.
53. Newman, P.E., Goodman, R.A., Waring, G.O., III, Finton, R.J., Wilson, L.A., Wright, J., Cavanagh, H.D.: A Cluster of Cases of Myobacterium Chelonei Keratitis Associated with Outpatient Office Procedures. *Am J Ophthalmol* 1984; 97:344-8.
54. Kozarsky, A.M., Stopak, S., Waring, G.O., III, Stulting, R.D., Wilson, L.A., Cavanagh, H.D., Cornell, F.M.: Results of Penetrating Keratoplasty for Pseudophakic Corneal Edema with Retention of Intraocular Lens. *Ophthalmology* 1984; 91:1141-1146.
55. Stulting, R.D., Summers, K.D., Cavanagh, H.D., Waring, G.O., III, Gammon, J.A.: Penetrating Keratoplasty in Children. *Ophthalmology* 1984; 91:1222-30.
56. Kozarsky, A.M., Stulting, R.D., Waring, G.O., III, Cornell, F.M., Wilson, L.A., Cavanagh, H.D.: Penetrating Keratoplasty for Exogenous Paecilomyces Keratitis Followed by Post-operative Endophthalmitis. *Am J Ophthalmol* 1984; 98:552-7.

- 1985 -

57. The PERK Study Group, including Cavanagh, H.D.: Results of the Prospective Evaluation of Radial Keratotomy (PERK) Study One Year After Surgery. *Ophthalmology* 1985; 92:177-98, 307.
58. Colley, A.M., Cavanagh, H.D., Drake, L.A., Law, M.L.: Cyclic Nucleotides in Muscarinic Regulation of DNA and RNA Polymerase Activity in Cultured Corneal Epithelial Cells of the Rabbit. *Current Eye Res* 1985; 4:941-50.
59. Cavanagh, H.D.: The Correction of Aphakia with Extended Wear Contact Lenses, in Maumenee, A.E., Stark, W.H., Esente, I. (eds): *Cat Surg and Visual Rehab*. Amsterdam: Kugler Publications, 1985; pp. 295-310.
60. Cavanagh, H.D., Waring, G.O., III, Kozarsky, A.M., Stulting, R.D., Wilson, L.A.: Penetrating Keratoplasty in Aphakic and Pseudophakic Corneal Edema and Combined Procedures. In Maumenee, A.E., Stark, W.H., Esente, I. (eds): *Cat Surg and Visual Rehab*. Amsterdam: Kugler Publications, 1985; pp. 183.
61. Insler, M.S., Cavanagh, H.D., Wilson, L.A.: Gentamicin-Resistant *Pseudomonas* Endophthalmitis After Penetrating Keratoplasty. *Br J Ophthalmol* 1985; 69:189-191.

- 1986 -

62. The PERK Study Group, including Cavanagh, H.D.: Reported Satisfaction, Fluctuation of Vision and Glare Among Patients One Year After Surgery in the Prospective Evaluation of Radial Keratotomy (PERK) Study. *Arch Ophthalmol* 1986; 104:356-63.
63. Kozarsky, A.M. and Cavanagh, H.D.: Therapeutic Hydrogel Lenses. *Clinical Ophthalmology*, Duane, T.D. (ed), Vol IV, Chap. 11 (1-5); Harper & Row, 1986.
64. Waring, G.O., III, Gammon, J.A., Cavanagh, H.D.: Current Concepts of Penetrating Keratoplasty in Children in Modern Concepts of Eye Care for Children: A Symposium Commemorating the 150th Anniversary of Wills Eye Hospital. Ed. Spaeth, G.L., Slack Pub, Thorofare, N.J., 1986; Ch 10: 81-91.

- 1987 -

65. Dreizen, N.A., Stulting, R.D., Cavanagh, H.D.: Penetrating Keratoplasty and Cataract Surgery in Children. In, Ed. Reinecke, R.D., *Annual Review of Ophthalmology*, Appleton-Century-Crofts, Norwalk, Conn, 1987, 3:1-24.
66. Kozarsky, A.M. and Cavanagh, H.D.: The Triple Procedure: Cataract Extraction, Intraocular Lens Insertion and Corneal Transplantation. *Anterior Segment Surgery*. ed. W. Stark. 1987; Chap 14D, 260-7.
67. Colley, A.M., Cavanagh, H.D., Law, M.L.: Subcellular Localization of Muscarinic Effects on Enzymes of Cyclic Nucleotide Metabolism in Cultured Corneal Epithelial Cells of the

- Rabbit. *Metab Pediatr Sys Ophthal* 1987; 10:36-38.
68. Colley, A.M., Cavanagh, H.D., Law, M.L.: Effects of Topical Carbamylcholine on Corneal Epithelial Resurfacing. *Metab Pediatr Sys Ophthal* 1987; 10:71-72
 69. Cavanagh, H.D.: Keratoplasty for Keratoconus: Indications, Complications, and Results. *Cornea, Refractive Surgery and Contact Lens: Transactions of the New Orleans Academy of Ophthalmology*. Raven Press, New York. pp 307, 1987.
 70. Colley, A.M., Law, M.L., Drake, L.A., Cavanagh, H.D.: Activity of DNA and RNA polymerases in Resurfacing Rabbit Corneal Epithelium. *Current Eye Res* 1987; 6:477-87.
 71. Epstein, R.J., Seedor, J.A., Dreizen, N.A., Stulting, R.D., Wilson, L.A., Waring, G.O., III, Cavanagh, H.D.: Penetrating Keratoplasty for Herpes Simplex Keratitis and Keratoconus: Allograft Rejection and Survival. *Ophthalmology* 1987; 94:935-944.
 72. Cavanagh, H.D. and Jones, D.B.: Complications of Penetrating Keratoplasty: Therapeutic Keratoplasty. *Cornea, Refractive Surgery and Contact Lens: Transactions of the New Orleans Academy of Ophthalmology*. Raven Press, New York. pp 251-258, 1987.
 73. Cavanagh, H.D.: Extended Wear-What Happened? *Editorial CLAO J* 1987; 13:194.
 74. Cavanagh, H.D.: Medical Complications of Contact Lenses. *Clinical Update Monograph Series, American Academy of Family Physicians Home Study Self-Assessment Program*, 1987.
 75. The PERK Study Group, including Cavanagh, H.D.: Factors Affecting Outcome and Predictability of Radial Keratotomy in the PERK Study. *Arch Ophthalmol* 1987; 105:42.
 76. Seedor, J.A., Stulting, R.D., Epstein, R.J., Nay, R.E., Dreizen, N.G., Waring, G.O., III, Wilson, L.A., Cavanagh, H.D.: Survival of Corneal Grafts from Donors Supported by Mechanical Ventilation. *Ophthalmology* 1987; 94:101-108.

-1988 -

77. Kozarsky, A.M. and Cavanagh, H.D.: *The Ophthalmology Patient in Medical Management of the Surgical Patient (2nd Edition)*. Smith, R.B. (ed). Butterworth, Boston. 1988.
78. Cavanagh, H.D.: CLAO, Contact Lens Reclassification and the FDA: Who is the Patient's Advocate? *CLAO J* 1988 Editorial; 14:120.
79. Colley, A.M. and Cavanagh, H.D.: Regulation of RNA Polymerase Activity in Corneal Epithelium. *The Cornea: Transactions of the World Congress on the Cornea III, 1988 Editorial*; 27-33.
80. Stulting, R.D., Waring, G.O., III, Bridges, W.Z., Cavanagh, H.D.: Effect of Donor

Epithelium on Corneal Transplant Survival. *Ophthalmology* 1988; 95:803-12.

81. Jester, J.V., Cavanagh, H.D., Lemp, M.A.: In Vivo Confocal Imaging of the Eye Using Tandem Scanning Confocal Microscopy (TSCM). Proceedings of the 46th Annual Meeting of the Electron Microscopy Society of America, Bailey, G.W. (ed), pp 56-57, San Francisco press, San Francisco, California. 1988.
82. Jester, J.V., Cavanagh, H.D., Lemp, M.A.: In Vivo Confocal Imaging of the Eye Using Tandem Scanning Confocal Microscopy (TSCM). Proceedings of the Int Soc Optical Engineering (SPIE), Vol. 1028, 1988; 122-126.
83. Cavanagh, H.D. (ed), The Cornea. Transactions of the World Congress on the Cornea III, 672 pages. Raven Press, New York. 1988.

- 1989 -

84. Crawford, G.J., Stulting, R.D., Cavanagh, H.D., Waring, G.O., III: Penetrating Keratoplasty in the Management of the Iridocorneal Endothelial Syndrome. *Cornea J* 1989; 8:34-40.
85. Cavanagh, H.D. and Colley, A.M.: The Molecular Basis of Neurotrophic Keratitis. *Acta Ophthalmol.* 1989; 67:115-134.
86. Jester, J.V., Cavanagh, H.D., Essepian, J., Shields, W.J., Lemp, M.A.: Real-time Confocal Imaging of the Living Eye. in Proc of the Int'l Soc Optical Engineering (SPIE) 1989; 1161:366-376.
87. Cavanagh, H.D. and Jester, J.V.: Real-time Confocal Microscopy of the Living Eye. 1st International Conference on Confocal Microscopy, Amsterdam, The Netherlands, March 1989.
88. Ichikawa, H., Kozai, A., MacKeen, D., Jester, J.V., Cavanagh, H.D.: Corneal Swelling Responses with Extended Wear in Naive and Adapted Subjects with Menicon RGP Contact Lenses. *CLAO J* 1989; 15:192-4.
89. Hideji I, MacKeen, D., Hamano, H., Jester, J.V., Cavanagh, H.D.: Swelling and Deswelling of Rabbit Corneas in Response to RGP, Hydrogel and Elastomer Contact Lens Wear. *CLAO J* 1989; 15:290-7.
90. Cavanagh, H.D.: Passing the Torch. *Cornea J* Editorial, 1989; 8:1.
91. Cavanagh, H.D., Jester, J.V., Lemp, M.A.: Confocal Microscopy of the Living Eye. in Proceedings of the 2nd International CIBA Symposium, Nov 18, 1989. Tokyo, Japan.

-1990 -

92. Jester, J.V., Cavanagh, H.D., Lemp, M.A.: Confocal Microscopic Imaging of the Eye and the

- Tandem Scanning Confocal Microscope (TSCM). Non-Invasive Diagnostic Techniques in Ophthalmology, Masters, B.R. (ed), Springer-Verlag. New York. 1990; 11:172-88.
93. Bouchard, C.S., Shields, W.J., Cavanagh, H.D.: Contact Lens Update: Problems and Progress. *Current Opinions in Ophthalmology* 1990; 1:72-81.
 94. Cavanagh, H.D., Jester, J.V., Essepian, J., Shields, W.J., Lemp, M.A.: Confocal Microscopy of the Living Eye. (The 21st Conrad Berens Lecture). *CLAO J* 1990; 16:65-73.
 95. Cavanagh, H.D., Enoch, J.M. (eds): Contact Lenses: Challenges, Controversies, and Opportunities. *Cornea J* 1990; (Suppl 1), 71 pages.
 96. Andrews, P.M., Jester, J.V., Cavanagh, H.D.: In Vivo Microscopy of the Living Kidney. *Kidney Int'l* 1990; 33:549.
 97. Petroll, W.M., Cavanagh H.D., Jester J.V.: In Vivo Digital Image Acquisition in Confocal Microscopy. *Trans Royal Microscopical Soc* 1990; 1:349-352.
 98. Mertz, P.H.V., Bouchard, C.S., Mathers, W.D., Goldman, J., Shields, W.J., Cavanagh, H.D.: Corneal Infiltrates Associated with Disposable Extended Wear Soft Contact Lenses: A Report of Nine Cases. *CLAO J* 1990; 16:269.
- 1991 -**
99. Jester, J.V., Petroll, W.M., Andrews, P.M., Cavanagh, H.D., Lemp, M.A.: In Vivo Real-time Confocal Imaging. *J Elect Micros Tech* 1991; 18:50-60.
 100. Cavanagh, H.D.: Max Fine: There at the Beginning. Editorial: *Cornea J* 1990; 9:2.
 101. Andrews, P.M., Petroll, W.M., Cavanagh, H.D., Jester, J.V.: Tandem Scanning Confocal Microscopy of Normal and Ischemic Living Kidneys. *Amer J Anat* 1991; 191:95-102.
 102. Lustine, T., Bouchard, C.S., Cavanagh, H.D.: Determinants of Prognosis for Continued Contact Lens Wear in Patients with Giant Papillary Conjunctivitis. *CLAO J* 1991; 17:104-107.
 103. Mertz, PHV, Bouchard, CS, Mathers, WD, Goldman J, Shields WJ, Cavanagh, HD.: Corneal Infiltrates associate with disposable extended wear soft contact lenses: a report of 9 cases. *CLAO J* 1990;16:269-272.
 104. Bouchard, C.S., Chako, B., Cupples, H.P., Mathers, W.D., Cavanagh, H.D.: Surgical Treatment for a Case of Postoperative Pseudallescheria boydii Endophthalmitis. *Ophthal Surg* 1991; 22:98-101.
 105. New, K.C., Petroll, W.M., Boyde, A., Martin, L., Corcuff, P., Leveque, J.L., Cavanagh, H.D., Jester, J.V., Lemp, M.A.: In Vivo Imaging of Human Teeth and Skin Using Real-time

Confocal Microscopy. *J Scanning Micros* 1991; 13:369-72.

106. Cavanagh, H.D.: *Novus Ordo Seclorum: A New Age Now Begins*. *Cornea J* 1991; 10:1.
107. Petroll, W.M., Hill, J., Cavanagh, H.D., Jester, J.V.: *In Vivo 3-Dimensional Reconstruction of Corneal Fibroblasts Using Confocal Microscopy*. *J Scanning Micros* 1991; 13:92-93.
108. Barry, P.A., Petroll, W.M., Garana, R.M., Cavanagh, H.D., Jester, J.V.: *Fluorescent Staining of Intact, Unsectioned Corneal Tissue for Analysis by Confocal Microscopy*. *J Scanning Micros* 1991(Suppl 1); 13:112-113.

- 1992 -

109. Petroll, W.M., Cavanagh, H.D., Lemp, M.A., Andrews, P.M., Jester, J.V.: *Digital Image Acquisition in In Vivo Confocal Microscopy*. *J Micros, (London)*, 1992; 165:61-69.
110. Jester, J.V., Petroll, W.M., Garana, R.M.R., Lemp, M.A., Cavanagh, H.D.: *Comparison of In Vivo and Ex Vivo Cellular Structure in Rabbit Eyes Detected by Tandem Scanning Microscopy*. *J Micros, (London)*, 1992; 165:169-181
111. Ichijima, H., Imayasu, M., Ohashi, J., Cavanagh, H.D.: *Effect of Contact Lens-Induced Hypoxia on Lactate Dehydrogenase Activity and Isozyme in Rabbit Cornea*. *Cornea J* 1992; 11:108-113.
112. Ichijima, H., Imayasu, M., Ohashi, J., Cavanagh, H.D.: *Tear Lactate Dehydrogenase Levels: A New Method to Assess Effects of Contact Lens Wear in Man*. *Cornea J* 1992; 11:114-120.
113. Jester, J.V., Villaseñor, R.A., Schanzlin, D.J., Cavanagh, H.D.: *Variations in Wound Healing Following Radial Keratotomy. Possible Insights Into Mechanisms of Clinical Complications and Refractive Effects*. *Cornea J* 1992; 11:191-199.
114. Cavanagh, H.D.: *Contact Lenses in the Industrial Workplace: Are they Safe? Editorial*. *CLAO J* 1992; 18:11.
115. MacKeen, D.L., Sachdev, M., Ballou, V., Cavanagh, H.D.: *A Prospective Multicenter Clinical Trial to Assess Safety and Efficacy of Menicon SF-P RGP Lenses for Extended Wear*. *CLAO J* 1992; 18:183-186.
116. Blair, S.D., Seabrooks, D., Shields, W.J., Pillai, S., Cavanagh, H.D.: *Bilateral Progressive Essential Iris Atrophy and Keratoconus with Coincident Features of Posterior Polymorphous Dystrophy: A Case Report and Proposed Pathogenesis*. *Cornea J* 1992; 11:255-261.
117. Ichijima, H., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: *Confocal Microscopic Studies of Living Rabbit Cornea Treated with Benzalkonium Chloride*. *Cornea J* 1992; 11:221-225.
118. Goodglick, T.A., Mertz, P., Wolfley, D., Zimmerman, L., Cavanagh, H.D.: *Ciliated Respiratory-like Epithelium Forming Cystic Conjunctival Lesions in a Patient with Severe*

- Stevens-Johnson Syndrome. *Ophthalm Surg* 1992; 23:557-559.
119. Jester, J.V., Petroll, W.M., Feng, W., Essepian, J., Cavanagh, H.D.: Radial Keratotomy: I. The Wound Healing Process and Measurement of Incisional Gape in Two Animal Models Using In Vivo, Confocal Microscopy. *Invest Ophthalmol Vis Sci* 1992; 33:3255-3270
120. Garana, R.M.R., Petroll, W.M., Herman, I., Barry, P., Andrews, P., Cavanagh, H.D., Jester, J.V.: Radial Keratotomy. II. Role of the Myofibroblasts in Corneal Wound Contraction. *Invest Ophthalmol Vis Sci* 1992; 33:3271-3282.
121. Petroll, W.M., New, K.C., Sachdev, M., Cavanagh, H.D., Jester, J.V.: Radial Keratotomy. III. Relationship Between Wound Gape and Corneal Curvature in Primate Eyes. *Invest Ophthalmol Vis Sci* 1992; 33:3283-3291.
122. Ichijima, H., Ohashi, J., Petroll, W.M., Jester, J.V., Cavanagh, H.D.: Effects of Increasing DK with Rigid Contact Lens Extended Wear on Rabbit Corneal Epithelium Using Confocal Microscopy. *Cornea J* 1992; 11:282-287.
123. 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 1992, pp.49.
124. 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; 18:260-266.

- 1993 -

125. 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* 1993; 100:1444-1454.
126. 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; 20:352-358.
127. 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.
128. 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; 34:2803-2812.
129. 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.
130. Lind, G.J., Cavanagh, H.D.: Nuclear Muscarinic Acetylcholine Receptors in Corneal Cells from Rabbit. *Invest Ophthalmol Vis Sci* 1993; 34:2943-2952.
131. 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.
132. 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 Apr;19(2): 121-128.
133. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: Three-Dimensional Imaging of Corneal Cells Using In Vivo Confocal Microscopy. *J Microscopy* 1993; 170:213-219.
134. Imayasu, M., Moriyama, T., Ohashi, J., Cavanagh, H.D.: Effects of Rigid Gas Permeable Contact Lens Extended Wear on Rabbit Cornea Assessed by LDH Activity, and Albumin Levels in Tear Fluid. *CLAO J* 1993; 19:153-157.
135. 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.
136. Kooner, K.S., Cavanagh, H.D., Zimmerman, C.F., Itani, K.M.: Eye Movement Restrictions after Molteno Implant Surgery. *Ophthalm Surg* 1993; 24:498-499.

- 1994 -

137. 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.
138. Cavanagh, H.D., Bouchard C.: The High Risk Keratoplasty Patient-Quo Vadis? Editorial: *Cornea J* 1994; 13:1-3.
139. Cavanagh, H.D.: Clinical and Diagnostic Use of In Vivo Confocal Microscopy in Patients with Corneal Disease. *Ophthalmology Digest* 1994; 5:4-5.
140. 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.
141. 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.)

142. 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.*
143. Imayasu, M, 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.*
144. 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.*
145. Petroll, W.M., Jester, J.V., Cavanagh, H.D.: In vivo Confocal Imaging: General Principles and Applications. *Scanning J 1994; 16:131-149.*
146. 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; 16:263-268.*
147. Mathers, W.D., Cavanagh, H.D.: Tear Film, Pharmacology of Eyedrops, and Toxicity. *Current Opinion in Ophthalmology 1994; 5(4):13-18.*
148. Cavanagh, H.D.: Extended Wear, Corneal Hypoxia, and Corneal Ulcers. *CLAO J 1994; 20:218-219.*
149. 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.*

- 1995 -

150. 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.*
151. 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.*
152. Cavanagh, H.D., Petroll, W.M., Jester, J.V.: Guest Editorial and Issue: Three and Four Dimensional Microscopy. *Scanning J 1994; 16:129.*
153. Cavanagh, H.D., Jester, J.V., Petroll, W.M.: Guest Editorial and Issue: The Future Development of Confocal Microscopy. *Scanning J 1994; 16:261.*
154. 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.*
155. 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.*
 156. 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.*
 157. Lind, G., Cavanagh, H.D.: Identification and Subcellular Distribution of Muscarinic Acetylcholine Receptor-Related Proteins in Rabbit Corneal and Chinese Hamster Ovary Cells. *Invest Ophthalmol Vis Sci 1995; 36:1492-1507.*
 158. 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.*
 159. Cavanagh, H.D., Heck, E.: Who Can Give Corneas, (Letter to the Editor), *The New York Times, Monday, August 21, 1995, p. A14.*
 160. 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.*
 161. 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.*
 162. 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):234-235.*
 163. Cavanagh, H.D.: Use of Therapeutic Hydrogel Contact Lenses in Corneal Melting Disorders. *Contactologia 1995; 17E:177-181.*
 164. Petroll, W.M., Roy, P., Chuong, C., Hall, B., Cavanagh, H.D., and Jester, J.: Measurement of Surgically Induced Corneal Deformations Using Three-Dimensional Confocal Microscopy, 1996; *Cornea J 15:154-164.*
 165. Kalin, N.S., et al, including Cavanagh, H.D.: Chronic Localized Conjunctival Chemosis, *Cornea J 1996;15:295-300.*
 166. Hogan, R.N., Cavanagh, H.D.: Transplantation of Corneal Tissue from Donors with Diseases of the Central Nervous System, *Cornea J 1995;14:547-553.* (Editorial Comment)

167. 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* 1995;14:562-567. (Editorial Comment)

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

- 1996 -

169. 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* 1996; 121:207-208.

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

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

172. 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.

173. 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.

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

175. 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.

176. Petroll W.M., Jester, J.V., Barry-Lane, P.A., Cavanagh, H.D.: Effects of basic FGF and TGF β 1 on F-actin and ZO-1 Organization During Cat Endothelial Wound Healing. *Cornea J.* 1996; 15: 525-532.

177. 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)

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

179. Hsu, J.K.W., Cavanagh, H.D., Green W.R.: An Unusual Case of Elastofibroma Oculi.

180. 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.
181. 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.
182. 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.
183. 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.
184. Ren H, Petroll WM, Jester JV, Cavanagh HD. The alpha, beta gamma cell hypothesis for renewal of the Corneal Epithelial Surface. In Advances in Corneal Research, Selected Transactions of the World Congress on the Cornea. Ed Lass JH, *Plenum Press, NY* 1996; 463-464.
185. Jester JV, Ren H, Petroll WM, Cavanagh HD. Adherence of Pseudomonas aeruginosa to shed Rabbit Corneal Epithelial cells after overnight wear of contact lenses. In: Advances in Corneal Research, Selected Transactions of the World Congress on the Cornea, Ed. Lass JH, *Plenum Press, NY* 1996; 465-466.

- 1997 -

186. 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 TGF β in the Rabbit. *Cornea* 1997; 16: 177-187.
187. 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.
188. Møller-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 Photorefractive Keratectomy Using In Vivo Confocal Microscopy. *Ophthalmology* 1997; 104: 360-368.
189. Mattern, R.M., Cavanagh, HD.: Should Antibody to Hepatitis B Core Antigen be Tested in Routine Screening of Donor Corneas for Transplant? *Cornea* 1997; 16: 138-145. (Editorial Comment)
190. Roy, P., Petroll, W.M., Cavanagh, H.D., Chuong, C.J., Jester, J.V.: An In Vitro Force Measurement Assay to Study the Early Mechanical Interaction between Corneal Fibroblasts and Collagen Matrix. *Exp Cell Res* 1997; 232: 106-117.

191. 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.
192. 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*.
193. Roy, P., Petroll, W.M., Cavanagh, H.D., and Jester, J.V.: Force Generation of Isolated Corneal Fibroblasts During Collagen Matrix Reorganization. (6th International Congress on Cell Biology, The American Society for Cell Biology Meeting). *San Francisco, CA 1997*.
194. 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.

-1998 -

195. 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.
196. 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.
197. 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.
198. 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.
199. 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.
200. Petroll, W.M., Cavanagh, H.D., Jester, J.V.: Clinical Confocal Microscopy. *Current Opinion in Ophthalmology* 1998; 9: 59-65.

201. Cavanagh, H.D.: Call Me Mildred, Editorial, *Cornea* 1998; 17 (3): 253-256.
202. 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.
203. 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.
204. Moller-Pedersen, T., Cavanagh, H.D., Petroll, W.M., Jester, J.V.: Neutralizing Antibody to TGF β Modulates Stromal Fibrosis but not Regression of Photoablative Effect following PRK. *Current Eye Res* 1998; 17: 736-747.
205. Hogan, R.N., Heck, E., Cavanagh, H.D.: Risk of Prion Disease Transmission from Ocular Donor Tissue Transplantation. *Cornea* 1999; 18(1):2-11. (with editorial comment).
206. 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.

- 1999 -

207. 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.
208. Jester, J.V., Petroll, W.M., Cavanagh, H.D.: Measurement of Tissue Thickness using Confocal Microscopy. *Methods in Enzymology* 1999;307: 230-245.
209. 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.
210. 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.
211. 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. *Current Eye Research* 1999;18: 10-19.
212. 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.

213. 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.
214. 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.
215. 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.
216. 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'. *Journal of Cell Science* 1999;112: 613-622.
217. Jester, J.V., Huang, J., Barry-Lane, P.A., Kao, W.W., Petroll, W.M., Cavanagh, H.D.: Transforming Growth Factor β -Mediated Myofibroblast Differentiation Requires Actin and Fibronectin Assembly. *Invest. Ophthalmol Vis Sci* 1999;40: 1959-1967.
218. Jester, J.V., Petroll, W.M., Cavanagh, H.D.: Measurement of Tissue Thickness Using Confocal Microscopy. *Methods in Enzymology* 1999;307: 230-245.
219. Cavanagh, H.D., Hogan, R.N.: Letter to the Editor, Response to Johnson RT, Gibbs CJ: Creutzfeldt-Jacob Disease and Related Transmissible Spongiform Encephalopathies. *New England Journal of Medicine* 1999;21: 1688-1689.
220. 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 aeruginosa* Adherence to Exfoliated Human Corneal Epithelial Cells. *CLAO J* 1999;25: 73-79, with Editorial Comment.
221. 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.
222. 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.
223. 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.
224. 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.

225. 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.*
226. Cavanagh, H.D., Hogan, R.N.: Preventing Prion Transmission in Corneal Transplants (Letter to Editor) *JAMA 1999;282: 2211.*
227. Cavanagh, H.D.: Incidence of Contact Lens Associated Microbial Keratitis and its Related Morbidity. (Letter to Editor) *Lancet 1999;154: 179.*

- 2000-

228. 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.*
229. 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.*
230. 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.*
231. 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.*
232. 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.*
233. Cavanagh HD, El-Agha MS, Petroll WM, Jester JV. Specular Microscopy, Confocal Microscopy, and Ultrasound Biomicroscopy: Diagnostic tools of the past quarter century. *Cornea 2000;19: 712-722.*
234. El-Agha MS, Johnston, EW, Bowman RW, Cavanagh HD, McCulley JP. Excimer laser treatment of spherical hyperopia: prk or lasik? *Tr. Am. Ophth. Soc. 2000;98: 59-69.*

- 2001-

235. 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.*
236. 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.
237. 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.
238. 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. *Experimental Eye Research* 2001;72: 455-466.
239. 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.
240. 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.
241. 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.
242. 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.
243. Yi, D.H., Petroll, M., Bowman, R.W., McCulley, J.P., Cavanagh, H.D.: Surgically Induced Astigmatism after Hyperopic or Myopic Photorefractive Keratectomy. *Journal Cataract Refractive Surgery* 2001;27: 396-403.
244. 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.
245. 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.
246. 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.
247. 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* 2000, 98: 59.

248. 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.
249. 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.
250. Cavanagh, H.D.: New worlds open before us: Four-dimensional in vivo microscopy (letter; comment). *Clinical & Experimental Ophthalmology* 2001; 29:275.

- 2002 -

251. 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 O2 Transmissible Contact Lenses on Bacterial Binding and Corneal Epithelium. *Ophthalmology* 2002;109: 27-40.
252. 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.
253. 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 in corneal melting. *Ophthalmology* 2002;109,343-350.
254. Gokmen F, Jester JV, Petroll WM, Cavanagh HD: In vivo confocal microscopy through-focusing to measure corneal flap thickness after laser in situ keratomileusis. *Journal of Cataract and Refractive Surgery* 2002; 28: 962-970.
255. 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.
256. 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.
257. 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. *Journal of Cataract Refractive Surgery* 2002;28: 1467-1470.
258. 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.

259. 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.
260. 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.
261. 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.
262. Wang, X., McCulley, J.P., Bowman, R.W., Cavanagh, H.D.: Results of Combined Myopic Astigmatic LASIK Treatment and Retreatments. *The CLAO J* 2002;28: 55-60.
263. 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.
264. 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.
265. 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.

- 2003 -

266. 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.
267. 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.
268. 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.
269. 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.
270. 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.

271. Ladage PM, Yamamoto K, Li L, et al: Effects of O₂ 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, Kluwer Academic/Plenum Publishers, *Advanced Experimental Medical Biol* 2003;506: 885-893.
272. Cavanagh HD. Over the counter cosmetic contact lenses. *Eye & Contact Lens. Science and Clinical Practice (Editorial)* 2003: 29:195
273. Hogan RN, Cavanagh HD, Brown P: Letter to the Editor, Qualifications to the report of a new case of Creutzfeldt-Jakob disease in the recipient of a corneal transplant. *Arch Neurol* 2003;60: 293-294.
274. 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, Kluwer Academic/Plenum Publishers, *Adv Exp Med Biol* 2003;406: 845-850.
275. Cavanagh HD: Continuous Wear Hyper Dk Contact Lenses: More Industry Rodomontade or a Truly New Age? Editorial, *Eye and Contact Lens* 2003;29: S1.
276. Petroll WM, Koo 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.
277. Gatlin J, Melkus MW, Padgett A, Petroll WM, Cavanagh HD, Garcia JV, Jester JV: In Vivo Fluorescent Labeling of Corneal Wound Healing Fibroblasts. *Experimental Eye Research* 2003;76: 361-371.
278. Ladage PM, Jester JV, Petroll WM, Bergmanson JPG, Cavanagh HD: Vertical Movement of Epithelial Basal Cells Toward the Corneal Surface During Use of Extended Wear Contact Lenses. *Invest Ophthalmology Vision Science* 2003;44: 1056-1063.
279. 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.
280. Cavanagh HD. Continuous wear hyper Dk contact lenses: more industry rodomontade or true new age? *Eye & Contact Lens. Science and Clinical Practice (Editorial)* 2003;29: S1.
281. Ladage PM, Ren DH, Jester JV, Petroll SM, Bergmanson JPG, Cavanagh HD: The Effects of Eyelid Closure and Disposable and Silicone Hydrogel Extended Contact Lens Wear on Rabbit Corneal Epithelium. *Invest Ophthalmology Vision Science* 2003;44: 1843-1849.

282. Mendelblatt D, McCulley JP, Bowman RW, Verity S, Cavanagh, HD. Effects of an educational seminar on rejection demographics in patients presenting for laser in situ keratomileusis. *Eye and Contact Lens* 2003;29: 69-71.
283. Cavanagh HD. The effects of low- and hyper-Dk contact lenses on corneal epithelial homeostasis. *Ophthalmology Clinics of North America* 2003;16: 1-14.
284. 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: 62-64.
285. El-Agha MSH, Bowman RW, Cavanagh HD, McCulley JP. Comparison of photorefractive keratectomy and laser in situ keratomileusis of the treatment of compound hyperopic astigmatism. *Journal of Cataract and Refractive Surgery* 2003;29: 900-907.
286. Whitson JT, McCulley JP, Cavanagh HD, Song J, Bowman RW, Hertzog L. Effect of laser in situ keratomileusis on optic nerve head topography and retinal nerve fiber layer thickness. *Journal of Cataract and Refractive Surgery* 2003;29: 2302-2305.
287. 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* 2003;29: 2351-2357.

- 2004 -

288. Petroll WM, Cavanagh HD, Jester JV. Dynamic 3-D visualization of collagen matrix remodeling and cytoskeletal organization in living corneal fibroblasts. *Scanning* 2004;26: 1-10.
289. Cavanagh HD. Red eyes, melting corneas, and gene therapy: some editorial thoughts. (Editorial) *Eye & Contact Lens, Science and Clinical Practice*, 2004; 30:1.
290. Cavanagh HD. Orthokeratology, Old Devil or New Saint? (Editorial) *Eye & Contact Lens, Science and Clinical Practice*, 2004; 30:119.
291. Heck EL, Tenery RM, Kay DB, Cavanagh HD. The Greater Need: The State of Corneal Transplantation in North Texas. *Dallas Medical Journal* 2004;90: 170-172.
292. Jester JV, Ward B, Takashima A, Gatlin T, Gorig JV, Cavanagh HD. 4-Dimensional multiphoton confocal microscopy: the new frontier in cellular imaging. *The Ocular Surface Journal* 2004;2: 10-20.
293. Awwad ST, Haddad W, Wang MX, Parmar D, Conger D, Cavanagh HD. Corneal intrastructural gatifloxacin crystal deposits after penetrating keratoplasty. *Eye and Contact Lens* 2004;30: 169-172.

294. Cavanagh HD. Orthokeratology: Old devil vs new saint. The dialogue continues . . . (Editorial) *Eye & Contact Lens: Science & Clinical Practice (Editorial) 2004;30: 179.*
295. Ladage PM, Yamamoto N, Robertson DM, Jester JV, Petroll WM, Cavanagh HD. Pseudomonas aeruginosa corneal binding after 24 hours orthokeratology lens wear. *Eye and Contact Lens: Science & Clinical Practice 2004;30:173-178.*
296. Oral D, Bowman RW, Cavanagh HD, El-Agha MH, Seward MS, McCulley JP. Hyperopic laser-assisted in situ keratomileusis results with LADAR Vision, Visx Star S2, and Visx Star S3. *Eye & Contact Lens: Science & Clinical Practice 2004;30: 49-53.*
297. Awwad ST, El Kateb M, Bowman RW, Cavanagh HD, McCulley JP. Wavefront-guided laser in situ keratomileusis with the Alcon CustomCornea and the VISX CustomVue: three month results. *Journal of Refractive Surgery, 2004;20: S606-S613.*
298. Kovoor TA, Kim AS, McCulley JP, Cavanagh HD, Jester JV, Bugde AC, Petroll WM. Evaluation of the corneal effects of topical ophthalmic fluoroquinolones using in vivo confocal microscopy. *Eye & Contact Lens: Science & Clinical Practice 2004;30: 90-94.*
299. 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 2004.:
300. Cavanagh HD, Ladage P, Petroll WM, Jester JV. Clinical Confocal Microscopy. In: Smolin & Thoft's: The Cornea: Scientific Foundations and Clinical Practice, ed, Foster CS, Azar D, Dohlman C, 4th edition, Lippincott, Williams & Wilkins, Boston, MA, 2004.
301. Awwad ST, El-Kateb M, Bowman RW, Cavanagh HD, McCulley JP. Wavefront-guided laser in situ keratomileusis with the LADAR CustomCornea and the VISX CustomVue: A comparative study. *Journal of Refractive Surgery 2004;20: S606-S613.*
302. Cavanagh HD. Summary and future directions – basic science. *Eye & Contact Lens. Scienceand Clinical Practice 2004;30: 265.*

- 2005 -

303. Oral D, Awwad ST, Seward MS, Bowman RW, McCulley JP, Cavanagh HD. Hyperopic laser-assisted in situ keratomileusis in eyes with previous radial keratotomy. *Journal of Cataract and Refractive Surgery 2005; 31: 1561-1568.*
304. 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. *Investigative Ophthalmology & Visual Science 2005;46: 470-478.*
305. 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. *Investigative Ophthalmology & Visual Science* 2005;46: 1348-1355.
306. Cavanagh HD, and the Cornea Donor Study Group. Baseline donor characteristics in the Cornea Donor Study. *Cornea* 2005;24(4): 389-396.
307. Cavanagh HD, and the Cornea Donor Study Group. An evaluation of image quality and accuracy of eye bank measurements of donor cornea endothelial cell density in the specular microscopy ancillary study. *Ophthalmology* 2005;112: 431-440.
308. Cavanagh HD. Novus ordo seclorum. (Editorial) *Eye & Contact Lens, Science and Clinical Practice*, 2005; 31:1.
309. Fonn D, Sweeney D, Holden BA, Cavanagh D. Corneal oxygen deficiency. *Eye & Contact Lens, Science and Clinical Practice*, 2005; 31: 23-27.
310. Cavanagh HD. In the forest of academia, are printed scientific journals an endangered species? (Editorial) *Eye & Contact Lens, Science and Clinical Practice*, 2005; 31:49.
311. Petroll WM, Jafari M, Lane SS, Jester JV, Cavanagh HD: Quantitative assessment of ophthalmic viscosurgical device retention using in vivo confocal microscopy. *Journal of Cataract and Refractive Surgery*, 2005;31:2363-2368.
312. Whitson JT, Liang C, Whitson JT, Godfrey DG, Petroll WM, Cavanagh HD, Patel D, Fellman RL, Starita RJ. Central corneal thickness in patients with congenital aniridia. *Eye & Contact Lens*, 2005; 31: 221-224.
313. Awwad ST, Haithcock KK, Oral D, Bowman RW, Cavanagh HD, McCulley JP. A comparison of induced astigmatism in conventional and wavefront-guided myopic LASIK using LADARVision4000 and VISX S4 platforms. *Journal of Refractive Surgery*, 2005; 21: S792-S798.
314. Walline JJ, Holden BA, Bullimore, MA, Rah MJ, Asbell PA, Barr JT, Caroline PJ, Cavanagh HD et al. The current state of corneal reshaping. *Eye & Contact Lens, Science and Clinical Practice*, 2005; 31: 209-214.
315. Awwad ST, Parmar DN, Heilman M, Bowman RW, McCulley JP, Cavanagh HD. Results of penetrating keratoplasty for visual rehabilitation after acanthamoeba keratitis. *American Journal Ophthalmol*, 2005; 140;1080-1084.
316. Robertson DM, Cavanagh HD. *Pseudomonas aeruginosa* keratitis in an atopic silicone hydrogel lens wearer with rosacea. *Eye & Contact Lens, Science and Clinical Practice*, 2005;31: 254-256
317. Cavanagh HD. Corneal reshaping: where are we? *Eye & Contact Lens*, 2005;31:185

- 2006-

318. Robertson DM, Ladage PM, Yamamoto N., Jester JV, Petroll WM, Cavanagh HD. Bcl-2 and bax regulation of corneal homeostasis in genetically altered mice. *Eye & Contact Lens: Science and Clinical Practice*. 2006; 32: 3-7.
319. Cavanagh D, Petroll WM Real-time high spatial resolution, in vivo corneal imaging; current success and future needs. XV Carl Zeiss Lecture. *Proc of SPIE*, 2006; 1638; 61380C-1.
320. Sha BB, Cavanagh HD, Petroll WM, Kothare, AD et al. In-vivo microvasculature visualization using hyperspectral imaging. *Proc of SPIE*, 2006; 1638; 61380U.
321. Cavanagh HD, and the Cornea Donor Study Group. Clinical profile and early surgical complications in the Cornea Donor Study (CDS). *Cornea* 2006; 25(2): 164-170.
322. Cavanagh HD, and the Cornea Donor Study Group. Specular microscopy ancillary study methods for donor endothelial cell density determination of cornea donor study images. *Current Eye Research*, 2006; 31: 319-327.
323. Parmar DN, Awwad ST, Petroll WM, Bowman RW, McCulley JP, Cavanagh HD. Tandem scanning confocal corneal microscopy in the diagnosis of suspected Acanthamoeba keratitis. *Ophthalmology*, 2006; 113: 538-547.
324. Yamamoto N, Yamamoto N, Jester JV, Petroll WM, Cavanagh HD. Prolonged hypoxia induces lipid raft formation and increases pseudomonas internalization in vivo after contact lens wear and lid closure. *Eye & Contact Lens: Science and Clinical Practice*, 2006;32: 114-120.
325. Sanchez P, Heck E, Rivera C, Sanchez A, Cavanagh HD. Risk factors for infectious disease in corneal transplant screening. *Eye & Contact Lens; Science and Clinical Practice*, 2006;32: 124-127.
326. Awwad ST, Wang MX, Cavanagh HD. A case of gatifloxacin crystal deposits in the corneal graft of an 85-year-old man. *Eye & Contact Lens: Science and Clinical Practice*, 2006; 32:157.
327. Ly LT, Cavanagh HD, Petroll WM. Confocal assessment of the effects of fourth-generation fluoroquinolones on the cornea. *Eye & Contact Lens: Science & Clinical Practice*, 2006;32: 161-165.
328. Petroll WM, Goldberg D, Lindsey SS, Kelley PS, Cavanagh HD, Bowman RW, Parmar DN, Veriety SM, McCulley JP. Confocal assessment of the corneal response to intracorneal lens insertion and laser in situ keratomileusis with flap creation using intralase. *Journal of Cataract Refractive Surgery*, 2006;;32: 1119-1128.

329. Yamamoto N, Yamamoto N, Petroll WM, 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 Vision Science*, 2006;47: 3430-3440.
330. Ly LT, McCulley JP, Verity SM, Cavanagh HD, Petroll WM. Evaluation of intrastromal lipid deposits following intacs implantation using in vivo confocal microscopy. *Eye & Contact Lens: Science and Clinical Practice*, 2006;32: 211-215.
331. Parmar DN, Alizadeh H, Awwad ST, Li H, Neelam S, Bowman R, Cavanagh HD, McCulley JP. Ocular surface restoration using non-surgical transplantation of tissue-cultured human amniotic epithelial cells. *American Journal of Ophthalmology*, 2006;141; 299-307.
332. Kelley PS, Dossey AP, Patel D, Whitson JT, Hogan RN, Cavanagh HD. Secondary glaucoma associated with advanced acanthamoeba keratitis. *Eye & Contact Lens: Science & Clinical Practice*, 2006;32: 178-182.
333. Whitson, JT, Cavanagh HD, Petroll WM. Assessment of corneal epithelial integrity following acute exposure to ocular hypotensive agents preserved with and without benzalkonium chloride. *Advances in Therapy*, 2006;23: 1007-1015
334. Cavanagh, HD. The Tao Poems. 2006 Alibris Press, Philadelphia, PA
335. Cavanagh HD, Beneta BA, Gal RL, Ruedy KJ, Rice C, Beck RW, Lass JL for the Cornea Donor Study Group. Specular microscopy reading center methods in the Specular Microscopy Ancillary Study (SMAS) *Current Eye Research*, 2006;31: 319-327.

- 2007 -

336. Awwad ST, Helman M, Hogan RN, Parmar DN, Petroll WM, McCulley JP, Cavanagh HD. Severe reactive ischemic posterior segment inflammation in acanthamoeba keratitis: a new potentially blinding syndrome *Ophthalmology*, 2007;114: 313-320.
337. Awwad ST, Petroll WM, McCulley JP, Cavanagh HD. Updates in acanthamoeba keratitis. *Eye & Contact Lens: Science and Clinical Practice*, 2007;33: 1-8.
338. Pachigolla G, Blomquist P, Cavanagh HD. Microbial keratitis pathogens and antibiotic susceptibilities: a 5-year review of cases at an urban county hospital in north texas. *Eye & Contact Lens: Science and Clinical Practice*, 2007;33: 45-49.
339. Awwad ST, Bowman RW, Cavanagh HD, McCulley JP. Wavefront-guided lasik for myopia using the ladar customcornea and the visx customvue. *Journal of Refractive Surgery*, 2007;23: 26-38.
340. Robertson, DM, McCulley JP, Cavanagh HD. Severe acanthamoeba keratitis following overnight orthokeratology. *Eye & Contact Lens: Science and Clinical Practice*, 2007;33: 121- 123.

341. Robertson DM, Petroll, WM, Jester JV, Cavanagh HD. Current concepts: contact lens related pseudomonas keratitis *Contact Lens & Anterior Eye*, 2007;30: 94-107.
342. Lindsey SS, McCulley JP, Cavanagh, HD, Verity SM, Bowman RW, Petroll WM. Prospective evaluation of permavision intracorneal implants using in vivo confocal microscopy *Journal of Cataract & Refractive Surgery*, 2007;23: 410-413.
343. Hu MY, McCulley JP, Cavanagh HD, Bowman WB, Verity SM, Mootha V, Petroll M. Comparison of corneal response to laser in situ keratomileusis with flap creation using the fs15 and fs30 femtosecond lasers: clinical and confocal findings. *Journal of Cataract & Refractive Surgery*, 2007;33: 673-681.
344. Ward BR, Jester JV, Nishibu A, Vishwanath M, Shalhevet D, Kumamoto T, Petroll WM, Cavanagh HD, Takashima A. Local Thermal Injury Elicits Immediate Dynamic Behavioural Responses by Corneal Langerhans Cells *Immunology*, 2007;120: 556-572.
345. Ichijima H, Cavanagh HD. How Rigid Gas-Permeable Lenses Supply More Oxygen to the Cornea than Silicone Hydrogels: A New Model. *Eye & Contact Lens*, 2007;33: 216-223.
346. Robertson DM, Ho SI, Hansen BS, Petroll WM, and HD Cavanagh. Insulin-Like Growth Factor Binding Protein-3 Expression and Apoptosis in the Corneal Epithelium. *Experimental Eye Research*, 2007;85: 492-501.
347. Cavanagh HD, Acanthamoeba keratitis: 2007: A Train Wreck in Slow Motion (Editorial) *Eye and Contact Lens*, 2007;33: 209.
348. Awwad ST, Lehmann J, Cavanagh HD, McCulley, JP, Bowman RW. A Comparison of Higher Order Aberrations in Eyes Implanted with ACRYSOF IQ SN60WF and ACRYSOF SN60AT Intraocular Lens. *Euro Journal of Ophthalmology*, 2007;17: 320-326.
349. Cavanagh HD, Di Pascuale MA, Petroll WM. Real-time spatial resolution, in vivo corneal imaging: current success and future needs (“Plan Rapport Sfo Lentilles de Contact” French Ophthalmol. Paris, France, 2007)
350. Jester JV, Lee YG, Huang J, Houston J, Adams B, Cavanagh HD, Petroll WM. Development of Postnatal Corneal Transparency is Associated with Keratocyte Quiescence and Marked Expression of the Corneal Crystalline ALDH1A1. *Inv Ophthal Vis Sci*, 2007;48: 4061-4069.
351. Robertson DM, Petroll WM, Jester JV, Cavanagh HD. The Role of Contact Lens Type, Oxygen Transmission and Care-Related Solutions in Mediating Epithelial Homeostasis and Pseudomonas Binding to Corneal Cells: An Overview. *Eye and Contact Lens*, 2007;33: 394-398.
352. Cavanagh, HD, Holden, B. Safety, Safety, Safety *Eye and Contact Lens*, 2007;33:341.

- 2008 -

353. Awwad ST, Dwarakanathan S, Bowman RW, Cavanagh HD, Verity SM, Mootha VV, McCulley. Intraocular lens power calculation after myopic laser in situ keratomileusis: Estimating the corneal refractive power *Journal of Cataract & Refractive Surgery*, 2008;34: 1070-1076.
354. Cavanagh HD. Doors Open, Doors Close (Editorial) *Eye & Contact Lens*, 2008;34: 1.
355. Imayasu M, Shiraishi A, Ohashi Y, Shimada S, Cavanagh HD. Effects of Multi-Purpose Solutions on Corneal Epithelial Tight Junctions *Eye & Contact Lens*, 2008;34: 50-55.
356. Awwad ST, Sanchez P, Sanchez, A, McCulley, JP, Cavanagh HD. A Preliminary in Vivo Assessment of Higher Order Aberrations Induced by A Silicone Hydrogel Monofocal Contact Lens. *Eye & Contact Lens*, 2008;34: 2-5.
357. Robertson DM, Petroll WM, HD Cavanagh. The Effect of Non-Preserved Care Solutions on 12 Months of Daily and Extended Silicone Hydrogel Contact Lens Wear. *Inv Ophthal and Vis Sci*, 2008;9: 7-15.
358. Awwad ST, Di Pascuale MA, Hogan, RN, McCulley JP, Cavanagh HD. Avellino Corneal Dystrophy Worsening after Lasik: a Histopathologic Examination *American Journal of Ophthalmology*, 2008;145(4): 656-661.
359. Awwad ST, Warmerdanm D, Bowman RW, Dwarakanathan S, Verity SS, Cavanagh HD, McCulley JP. Contrast Sensitivity and Higher Order Aberrations in Eyes Implanted With: ACRTSOF IQ SN60WF AND ACRYSOF SN60AT Intraocular Lenses *Journal of Refractive Surgery*, 2008;246: 619-625.
360. Robertson DM, Ho SI, HD Cavanagh. Characterization of DeltaNp63 Isoforms in Normal and Telomerase-Immortalized Human Corneal Epithelial Cells *Experimental Eye Research*, 2008;86 (4): 576-585.
361. Cavanagh HD and the Cornea Donor Study Investigator Group. The Effect of Donor Age on Corneal Transplantation Outcome: Results of the Cornea Donor Study *Ophthalmology*, 2008;115: 620 - 626.
362. Cavanagh HD and the Cornea Donor Study Investigator Group. Donor Age and Corneal Endothelial Cell Loss Five Years after Successful Cornea Transplantation: Specular Microscopy Ancillary Study Results *Ophthalmology*, 2008;115: 627-632.
363. Iwata W, Ohno S, Kawai T, Ichijima H, Cavanagh HD. InVitro Evaluation of Lipids Absorbed on Silicone Hydrogel Contact Lenses Using a New Gas Chromatography/Mass Spectrometry Analytical Method *Eye & Contact Lens*, 2008;34(5): 272-280.
364. Petroll WM, Bowman RW, Cavanagh HD, Verity SM, Mootha VV, McCulley JP.

- Assessment of Keratocyte Activation Following LASIK with Flap Creation Using the Intralase FS60 Laser *Journal of Refractive Surgery*, 2008;24: 847-849.
365. Cavanagh, H.D., and the Members of the Study Advisory Group Risk factors for microbial keratitis with Contemporary contact lenses; a case-control study – *Ophthalmology*, 2008;115: 1647-1654.e3.
366. Prasher P, Di Pascuale M, Cavanagh HD. Bilateral Chronic Peripheral Ulcerative Keratitis Secondary to Cat Scratch Disease *Eye & Contact Lens*, 2008;34(3): 191-193.
367. Maxwell WA, Reiser HJ, Stewart RH, Cavanagh HD, Walters H, Sager DP, Meuse PA, and the Nepafenac Study Group. Placebo-Controlled Study of Nepafenac Dosing Frequency for Ocular Pain and Inflammation Associated with Cataract Surgery (*Journal Ocular Pharmacology and Therapeutics*, 2008; 24(6): 593-599.
- 2009-**
368. Gumus K, Cavanagh, HD. The Role of inflammation and antiinflammation therapies in keratoconjunctivitis sicca *Clinical Ophthalmology*, 2009;3: 57-67.
369. Alizadeh, Hassan, Ph.D., Neelam, Sudha, M.S., Cavanagh, HD. Amoebicidal Activities of Alexidine Against Three Pathogenic Strains of Acanthamoeba *Eye and ContactLens*, 2009;35:1: 1-5.
370. Robertson, DM, Cavanagh HD The clinical and cellular basis of contact lens-related corneal infections *Clinical Ophthalmology*, 2009;2(4): 907-917.
371. Cavanagh HD, Shovlin Joseph P, Sindt Christine W. All About Acanthamoeba Review of Cornea Contact Lenses, 2009;Jan/Feb: 15-17.
372. Cavanagh HD, and the Cornea Donor study Investigator Group: Powe A, Gal RL, Beck RW, Mannis MJ, Holland EJ on behalf of the Cornea Donor Study Investigator Group. The Cornea Donor Study, *Vision Pan-America*, 2009;8: 134-137.
373. Cavanagh HD and The Cornea Donor Study Group: Dunn SP, Stark WJ, Stulting RD, Lass JH, Sugar A, Pavilack MA, Smith PW, Tanner JP, Dontchev M, Gal RL, Beck RW, Kollman C, Mannis MJ, Holland EJ on behalf of the Cornea Donor Study Investigator Group. The effect of ABO blood incompatibility on corneal transplant failure in conditions with low risk of graft rejection, *American Journal of Ophthalmology*, 2009;147: 432-438.
374. Cavanagh HD, and the Cornea Donor Study Investigator Group: Sugar A, Tanner JP, Dontchev M, Tennant B, Schultze RL, Dunn SD, Lindquist TD, Gal RL, Beck RW, Kollman C, Mannis Mark J, Holland EJ on behalf of the Cornea Donor Study Investigator Group. Recipient Risk Factors for Graft Failure in the Cornea Donor Study, *Ophthalmology*, 2009;116: 1023-1028.
375. Imayasu M, Shimizu H, Shimada S, Suzuki T, Cavanagh HD Effects of Multi-Purpose

- Contact-Lens Care Solutions on Adhesion of *Pseudomonas aeruginosa* to Corneal Epithelial Cells, *Eye and Contact Lens*, 2009;35(2): 98-104.
376. Verity SM, McCulley JP, Bowman RW, Cavanagh HD, Petroll WM. Outcomes of PermaVision Intracorneal Implants for the Correction of Hyperopia *American Journal of Ophthalmology* 2009;147: 973-977.
377. Awwad ST, Alvarez-Chedzoy N, Bowman Wayne, Cavanagh H. Dwight, McCulley James P. Quality Of Life Changes After Myopic Wavefront-Guided Laser In Situ Keratomileusis *Eye and Contact Lens* 2009;35(3): 128-132.
378. Awwad ST, Kelley PS, Bowman RW, Cavanagh HD, McCulley, JP. Corneal refractive power estimation and intraocular lens calculation after hyperopic LASIK. *Ophthalmology* 2009;116(3): 393-400.
379. Muftuoglu O, Prasher P, Chu C, Mootha V, Verity SR., Bowman W, Cavanagh HD, McCulley, JP. Laser in situ keratomileusis for residual refractive errors after apodized diffractive multifocal intraocular lens implantation. *Journal of Cataract and Refractive Surgery*, 2009;June 35(6): 1063-1071.
380. Di Pascuale MA, Prasher P, Schlecte C, Arey M, Bowman RW, McCulley JP, Mootha VV, Cavanagh HD. Corneal Deturgence after Descemet's Stripping Automated Endothelial Keratoplasty Evaluated by Visante™ Anterior Segment OCT *American Journal of Ophthalmology* 2009;148: 32-37.
381. Cavanagh HD, and The Cornea Donor Study Group: Sugar A, Tanner JP, Dontchev M, Tennant B, Schultze RL, Dunn SP, Lindquist TD, Gal RL, Beck RW, Kollman C, Mannis M, Holland E, for the Cornea Donor Study Investigator Group. Risk factors for graft failure in the Cornea Donor Study. *Ophthalmology* 2009;116: 1023-1028.
382. Prasher P, Muftuoglu O, Bowman RW, McCulley JP, Petroll WM, Mootha VV, Cavanagh HD. Tandem Scanning Confocal Microscopy of Cornea after Descemet Stripping Automated Endothelial Keratoplasty *Eye & Contact Lens* 2009;35(4): 196 -202.
383. Kovoov TA, Mohamed E, Cavanagh HD, Bowman RW., Outcomes of LASIK and PKR in Previous Penetrating Corneal Transplant Recipients *Eye and Contact Lens* 2009;35(5): 242-245.
384. Imayasu M, Toshihiko U, Yuichi O, Cavanagh HD., Effects of Multipurpose Contact Lens Care Solutions on the Adhesiveness of Acanthamoeba to Corneal Epithelial Cells *Eye and Contact Lens* 2009;35(5): 246-250.
385. Gumus K, Ertugrul M, Cavanagh, HD. Topical Cyclosporine A as a Steroid-Sparing Agent in Steroid-Dependent Idiopathic Ocular Myositis With Scleritis: A Case Report and Review of the Literature. *Eye and Contact Lens* 2009;35(5): 275-278.

386. Cavanagh HD, and the Cornea Donor Study Group: Sugar J, Montoya M, Dontchev M, Tanner JP, Beck R, Gal R, Gallagher S, Gaster R, Heck E, Holland EJ, Kollman C, Malling J, Mannis MJ, Woody J for the Group Cornea Donor Study Investigator Group Donor Risk Factors for Graft Failure in the Cornea Donor Study *Cornea* 2009;28(9): 981-985. PMID: 19724216
387. Awwad ST, Bowman RW, Cavanagh HD, Parmer D. Changes in Ocular Higher Order Aberrations with Accommodation in Wavefront-Guided Lasik Myopic Candidates. *Journal of Cataract & Refractive Surgery*, 2009;25(2): 171-172.
388. Mohamed EM, Wojtowicz JR, Bowman RW, Cavanagh HD, Mootha V, Verity S, McCulley J P. Corneal Thickness Association with Ocular and Corneal High-Order Abberations. *Eye & Contact Lens* 2009;35(6): 297-301.
389. Petroll WM, Cavanagh HD. Remote-Controlled Scanning and Automated Confocal Microscopy Through Focusing Using a Modified HRT Rostock Corneal Module *Eye and Contact Lens* 2009;35(6): 302-308.
390. Lindquist TD, Miller TD, Elsen JL, Lignoski PJ. Policy and Position Research Subcommittee of the Medical Advisory Board of the Eye Bank Association of America Collaborators: Cavanagh HD, Doughman DJ, Drury D, Hannush SB, Lindquist TD, Miller G, Pfister RR, Sugar A, Sugar J, Sutphin JE, VanMeter WS. Minimizing the risk of disease transmission during corneal tissue processing. *Cornea*, 2009;June;2228(5): 482-484.
391. Kovoor TA, Mohamed E, Cavanagh HD, Bowman RW. Outcomes of LASIK and PRK in previous penetrating corneal transplant recipients. *Eye and Contact Lens*, 2009 Sep;35(5): 242-245.

2010

392. Cavanagh HD and The Cornea Donor Study Group: Lass JH, Sugar A, Benetz BA, Beck RW, Dontchev M, Gal RL, Kollman C, Gross R, Heck E, Holland EJ, Mannis MJ, Raber, I, Stark WJ, Stutling RD for the Cornea Donor Study Investigator Group. Endothelial Cell Density to Predict Endothelial Graft Failure After Penetrating Keratoplasty *Archives of Ophthalmology* 2010; January; 63-69.
393. Mohamed Engy M, Muftuoglu Orkun, Bowman Wayne R, Cavanagh HD, Mootha Vinod V, Radwan Gamal A, McCulley James P. Wavefront-guided Ablation Retreatment Using Iris Registration *Eye and Contact Lens* 2010; 36(1): 54-59.
394. Parmar DN, Awwad S, Hassan A, Bowman RW, Cavanagh HD, McCulley JP., Contact Lens-Based Expansion & Transplantation Of Autologous Epithelial Progenitors For Ocular Surface Reconstruction: Crossover Control. *Journal of Transplantation* 2010; February; 89(4): 483.
395. Muftuoglu O, Dao, L, Cavanagh HD, McCulley, JP, Bowman, RW. Limbal Relaxing

- Incisions at the Time of Apodized Diffractive Multifocal Intraocular Lens Implantation to Reduce Astigmatism With or Without Subsequent Laser in Situ Keratomileusis. *Journal of Cataract Refractive Surgery* 2010 March; 36: 456-464.
396. Petroll WM, Cavanagh HD, Jester JV. Confocal Microscopy (3rd Edition, (Chapter 15) *The Cornea*; Editor: Krachmer, Mannis M and Holland E. Elsevier-Mosby Philadelphia, PA 2010; pp 205-219.
397. Robertson DM, Cavanagh HD, Contact Lens Applications in Corneal Disease (3rd Edition, (Chapter 101) *The Cornea*; Editor: Krachmer, Mannis M and Holland E. Elsevier-Mosby Philadelphia, PA 2010; 1217-1229.
398. Allen MB, Lieu P, Muftuoglu MD, Mootha VV, Bowman RW, Petroll WM, Kooner KS, Cavanagh HD, Whitson JT, Aggarwal NK. Risk Factors for Intra Ocular Pressure Evaluation Following Descemet Stripping Endothelial Keratoplasty *Eye and Contact Lens* 2010;36(4): 223 – 224.
399. Albright RA, Venuti BD, Ichijima H, N.Yunt AK, Cavanagh HD. Post-Market Surveillance of Menicon Z rigid gas permeable Contact Lenses for up to 30 days Continuous Wear in the United States *Eye & Contact Lens*, 2010;36(5): 1-5.
400. Prasher P, Mootha VV, Muftuoglu O, Bowman RW, Cavanagh HD, McCulley JP. Corneal Power Measurement with the Pentacam Scheimpflug Imaging System after Descemet Stripping Automated Endothelial Keratoplasty *J Cataract Refract Surg* 2010; 36: 1358 – 1364.
401. Cavanagh HD, Robertson DM, Petroll WM, Jester JV. The 35th Castroviejo Lecture: Forty Years in Search of the Perfect Contact Lens *Cornea* 2010; 29: 1075–1085.
402. Robertson DM, Ho SI, Cavanagh HD. C-terminal Cleavage of Δ Np63 α is Associated with TSA-induced Apoptosis in Immortalized Corneal Epithelial Cells *Invest Ophthalmology & Visual Science* 2010; 51: 3977 – 3985.
403. Bui TH, Cavanagh HD, Robertson DM. Patient Compliance during Contact Lens Wear: perceptions, awareness and behavior (*Eye & Contact Lens*, 2010; 36: 334-339).
404. Imayasu M, Hori Y, Cavanagh H. D. Effects of Multipurpose Contact Lens-care Solutions and their ingredients on membrane-associated mucins of human corneal epithelial cells. (*Eye & Contact Lens*, 2010; 36: 361-366).
405. Muftuoglu O, Dao L, Mootha VV, Verity S, Bowman RW, Cavanagh HD, McCulley JP. Apodized Diffractive Intraocular Lens Implantation after Lasik With or Without Subsequent Excimer Laser Enhancement (*J Cataract Refractive Surgery* 2010; 36: 1815-1821).

2011

406. Mootha VV, Heck E, Verity S, Petroll M, Lakshman N, Muftuoglu O, Bowman RW, McCulley JP, Cavanagh HD. Comparative Study of DSAEK Donor Preparation by Moria ALTK Microkeratome, Horizon Microkeratome, and Intralase FS 60 (*Cornea* 2011; 30: 320-324).
407. Robertson D, Parks Q, Yang RL, Kret S, Poch KP, Malcon K, Cavanagh HD, Nick J, Disruption of Contact Lens – Associated Pseudomonas Aeruginosa Biofilms formed in the presence of Neutrophils. (*Invest Ophthalmol Vis Sci* 2011; 52: 2844- 2850).
408. Keay LJ, Gower EW, Lovieno A, Oechsler RA, Alfonso EC, Matoba A, Colby K, Tuli SS, Hammersmith K, Cavanagh D, Lee SM, Irvine J, Stulting RD, Mauger TF, Schein, Oliver D. Clinical and Microbiological Characteristics of Fungal Keratitis in the US, 2001-2007: A Multi-Center Study (*Ophthalmology* 2011; Feb 7:16).
409. Robertson D, Kalangara JP, Baucom RB, Petroll WM, Cavanagh HD. A Reconstituted Telomerase – Immortalized Human Corneal Epithelium in Vivo: A Pilot Study. (*Current Eye Research* 2011; 36: 706 - 71).
410. Cavanagh, HD, Lass, JH, Beck R, Benetz, BA, et al. and the Cornea Donor Study Investigator Group. Baseline Factors Relating to Endothelial Cell Loss following Penetrating Keratoplasty *Arch. Ophthalmology E-Pub* 9 May 2011.
411. Thomas J, Guel A, Cavanagh, H.D. The Role of Atopy in Corneal Graft Survival (*Cornea J*, 2011; 30: 1088 - 1097).
412. Tchedre K, Imayasu M, Cavanagh, HD. Assessment of Multi-purpose Contact Lens Care Solutions Ingredients Effects on Membrane-associated Mucins in Human Corneal Epithelial Cells (HCE-T). *Eye & Contact Lens* (2011; Vol 3: 328 - 329).
413. Robertson DM, Cavanagh HD. Non-compliance with Contact Lens Wear and Care Practices: a Comparative Analysis. *Optometry Vis Sci* 2011; 88: 1402 – 1408.
414. Ali ZK, Whitson JT, Mootha VV, Witherspoon RS, Joseph JA, Joseph AM, Dynan L, Cavanagh HD. Glaucoma in Patients with Corneal Endothelial Dystrophy. *Eye and Contact Lens* 2011; 37: 332 – 336.

2012

415. Cavanagh HD and the FECD Genetics Multi-center Study Investigators: Louttit MD, Kopplin LJ, Igo, Jr RP, Fondran JR, Tagliaferri A, Bardenstein D, Aldave AJ, Croasdale CR, Price M, Rosenwasser GO, Lass JH, Iyengar SK: A multi-center study to map genes for Fuchs' Endothelial Corneal Dystrophy: Baseline Characteristics and Heritability. (*CorneaEpub* 10/29/11, and *Cornea* 2012; 31: 26-35).
416. Burnham GW, Cavanagh HD, Robertson DM. The impact of cellular debris on Pseudomonas Aeruginosa adherence to silicone hydrogel contact lenses and contact lens storage cases. (*Eye*

- and *Contact Lens* 2012; 38: 7 - 15).
417. Cavanagh HD, Letter to the Editor: Repeat Corneal Transplantation. (*Ophthalmology* 2012; *in press*).
 418. Goktas A, Gumus K, Mirza GE, Crockett C, Karakucuk S, Cavanagh HD. Corneal Endothelial Characteristics and Central Corneal Thickness in a Population of Turkish Cataract Patients (*Eye and Contact Lens* 2012; EPub doi: 10.1097/ICL.0bo13ez18243e7d2 ahead of press; 38: 142 - 145).
 419. Wu Y, 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. (*Ocular Surface J* 2012; 10: 100 – 10).
 420. Salzman RM, Reinecke S, Lin X, Cavanagh HD, Whitson, JT. Long-term outcomes of a pseudo-360 degree trabeculotomy *ab externo* technique for congenital glaucoma at Children’s Medical Center. (*Clinical Ophthalmology* 2012; 6: 689 – 698).
 421. Cavanagh HD and the FECD Genetics Multi-center Study Investigators: Kopplin LJ, Przepysznyk, Schmotzer B, Rudo K, Babineau DC, Patel SV, Verdier DD, Jurkuras V, Iyengar SK, Lass JH. Relationship of Fuch’s Endothelial Corneal Dystrophy Severity to Central Corneal Thickness. (*Arch. Ophthalmology* 2012; 130(4): 433 – 439).
 422. Robertson D, Meifang Shu, Yu-Chieh Wu and Cavanagh HD. Hypoxia-Induced Downregulation of Delta Np63 alpha in the Corneal Epithelium. (*Eye & Contact Lens* 2012; 38(4) 214-221).
 423. Cavanagh HD and the FECD Genetics Multi-Study Investigators Group: Nagarsheth M, Singh A, Schmotzer B, Babineau DC, Sugar J, Lee WB, Iyengarsk, Lass JH. Relationship Between Fuch’s Endothelial Corneal Dystrophy Severity and Glaucoma and or Ocular Hypertention. (*Arch.Ophthalmology. E Pub ahead in Press: doi: 10.1001/Arch. Ophthalmology* 2012;130:1384-1388).
 424. Cavanagh HD and the Corneal Donor Study Investigator Groups: Stulting RD, Sugar A, Beck R, Bellin M, Dontchev M, Feder RS, Gall RL, Holland EJ, Kollman C, Mannus MJ, Price F, Stark WJ, Kerdier DD. (*Cornea J.* 2012; 31: 1141-1147).
 425. Cavanagh HD and the FECD Genetics Multi-Center Study Investigators: Igo RP, Kopplin LJ, Joseph Perome, Truitt B, Fondran J, Bardenstein D, Aldave AJ, Croasdale R, Price MO, Rosenwasser M, Lase JM, Iyerrgarsk. Differing roles for TCF4 and COL8 A2 in Central Corneal thickness and Fuchs Endothelial Corneal Dystrophy. *PLOSS ONE*, October 2012, Volume 7, issue10, e46742, 1-10.
 426. Cavanagh, HD and the Cornea Donor Study Group. Suger A, Montonya MM, Beck R, Cowden JW, Dontchev Mariya et al. Impact of the Cornea Donor Study on Acceptance of Corneas from Older Donors. (*Cornea J.* 2012; 31: 1441-1445).

427. Kim SY, Muftuoglu O, Hogan RN, Bowman RW, Cavanagh HD, McCulley JP. Histopathology and Spectral Domain OCT finds of Pneumatic-assisted Dissection in DALK. (*Cornea J.*, 2012; 31: 1288-1293).

2013

428. Petrol WM, Weaver M, Vaidya S, McCulley JP, Cavanagh HD. Quantitative 3-D imaging *in vivo* using a modified HRJ-RCM confocal microscope. (*Corneal J.* 2012; *E Pub ahead of Print Oct 9, 2012*); 2013; 31: e36. (*E, SDC*): www.corneajournal.com; 32 (4): e32-e 43.
429. Muftuoglu O, Toro P, Hogan RN, Bowman WP, Cavanagh HD, McCulley JP, Mootha V. Sarnicola,V. Sarnicola Air-Visco Bubble technique in Deep Anterior Lamellar Keratoplasty. (*Corneal J., E Pub April 2013, Vol 32, issue #46, pages 527-532*).
430. Heck E, Cavanagh HD. Nucleic Acid Testing and Tissue Safety: An Eye Bank's Five Year Review of H.I.V. and Hepatitis Testing for Donor Corneas. (*Cornea J.,E Pub April 2013. Vol. 32, issue #4; pages 503-505*).
431. Heck E, Cavanagh HD. Viral HCV RNA Reactivity of Corneal Cells in Plasma HCV Nucleic Acid-Positive Eye Donors. (*Cornea J. 2013 E Pub April 2013, Vol. 32, issue #4; pages 506-507*).
432. Teeple Ryan C, Hynan Linda, Cavanagh HD. Comparing Treatment Outcomes for Ocular Mucous Membrane Pemphigoid. *Jof (J Clinic Experimental Ophthalmol. E Pub 2013, S2, http://dx.dpo/prg/10,4172/2155-9570.S2-005)*.
433. Cavanagh HD. Obituary: Hicaru Hamano MD (*Eye and Contact Lens 39;2(2013)*)
434. Cavanagh HD. Obituary: Hicaru Hamano MD (*Contact Lens and Anterior Eye 2013, Vol. 36, Issue 1, February 2013, http://dx.doi.org/10.1016/j.clae.2012.11.004*)
435. Cavanagh HD and the Cornea Donor Study Group, Benetz BA, Lass JH, Gal R, etal. Endothelial morphometric parameters to predict endothelial graft failure after penetrating Keratoplasty. The Corneal Donor Study Investigative Group. *E Pub 14 March 2013, JAMA Ophthalmol, doi: 1001/jama phthalmol. 2013; 131 (5): 601-608.*
436. Cavanagh HD and the Cornea Donor Study Groups. Verdier DD, Sugar A, Baratz K, Beck R, etal. Corneal thickness as a predictor of Corneal Transplant outcome. *Cornea J.* 2013; 362 (6): 729-736.
437. Awward ST, McCulley JP, Cavanagh HD, Bowman WB, Verity S. The Accuracy of the Double-k adjustment for Third Generation IOL Calculation Formulas in Previous Keratorefractive Surgery. *Eye and Contact Lens. 39: 220-227 2013.*
438. Imayasu Masaki, Tchedre K, Cavanagh HD. Effects of Multipurpose Solutions on the

Viable and Encystment of Acanthamoeba determined by Flow Cytometry. (*Eye and Contact lens*, 39: 228-233 (2013).)

439. Nomachi M, Sakanishi K, Ichijima H, Cavanagh HD. Evaluation of Diminished Microbial Contamination in Handling of a Novel Daily Disposable Flat-Pack Contact Lens. *Eye and Contact lens*, 39: 234-238 (2013).
440. Tchedre K, Imayasu M, Hori Y, Cavanagh HD. Potential Mechanism of Multi-purpose Contact Lens Care Solutions-Induced Membrane-Associated Mucin down regulation and Release in Human Corneal Epithelial Cells and at the Rat Cornea Surface. *Eye and Contact lens*, 39: 394-399 (2013).
441. Fung DS, Roensch MA, Kooner KS, Cavanagh HD, Whitson JR. Epidemiology and Characteristics of Childhood Glaucoma: Results from the Dallas Registry. *Clinical Ophthalmology*. 7: 1739-1746 (2013).
442. Cavanagh HD, and the Fuch's Genetics Multi-Center Study Group: Zhang X, Fondran IR, Mootha V, Hammersmith OM, Sugar A, Lass JH, Iyengar Sk. Association of smoking and other risk factors with Fuch's Endothelial Dystrophy Severity and Corneal Thickness. *Invest. Ophthalmol. Cis. Sci* 2013 Aug. 27; 54 (8): 5829-5835. *Doi*: 10.1167/iavs. 13-11918.
443. Cavanagh HD. How does contact lens wear lower Corneal defenses against Pseudomonas infection? Can this be prevented? In: Proceedings of the 3rd Biennial Meeting Asis Corneal Society (noc. 28-29, 2012 in Manila), *pub. Medimond Proceedings* ([medimond proceedings@editografica.com](mailto:medimond_proceedings@editografica.com)).
444. Cavanagh HD and the Corneal Donor Study Group. Effect of Donor age on Penetrating Keratoplasty for Endothelial disease: graft survival after 10 yease in the Cornea Donor Study. Mannis. MJ, Holland EJ, Gal RL etal. *Ophthalmology* 2013; 120: 2419-2427.
445. Cavanagh HD and the Cornea Donor Study Group. Donor Age and Factors related to Endothelial Cell Loss 10 years after Penetrating Keratoplasty: Specular Microscopy Ancillary Study. Lass JH, Bebetz BA, Gal RL etal. *Ophthalmolgy* 2013; 120: 2428-2435.
446. Heck E and Cavanagh HD. Comparison of Hepatitis B, Core, HBc, and Hepatitis B antibody, Anti-HBs, in a presumed low risk donor population. *Cell and Tissue Bank* 2013; published online 30 De 2013; DOI 10.1007/s 10561-013-9409-6.

2014

447. Ichijima H, Shi mamotos, Ariwaka Y, Muraki K, and Cavanagh HD. Compliance study of contact lens wearers in Japan: Part 1: Internet survey of actual circumstances of lens use.

Eye and Cataract Lens 2014, in press.

448. Shi mamotos, Ariwaka Y, Ichijima H, Sakota H, and Cavanagh HD. Compliance study of contact lens wearers in Japan: Part 2: Evaluation of subscriber membership system. *Eye and Contact Lens* 2014, in press.
449. Bennett A, Rashad S, Drury D, Cavanagh HD, McCulley JP, Petroll MW, Mootha, V. Impact of Donor Age on Endothelium Descemet Membrane Layer Harvesting and Scroll formation. *Submitted Cornea/ASCRS*. 2014
450. Cavanagh H.D. Chesapeake Colonial Families: British Antecedants and Descendants. XLIBRIS Co., 2 volumes, 2014, in press.