

CURRICULUM VITAE

Demographic Information:

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Place of Birth: Boston, Massachusetts

Education and Training:

Education:

1973 Valedictorian, Peabody School, Cambridge, MA.
1977 Graduate Honors in Physics, Phillips Academy, Andover, MA.
1981 B.A. Cum Laude, Biochemistry Honors Major, University of Pennsylvania, Philadelphia, PA.
1988 Ph.D. Boston University School of Medicine, Boston, MA (biochemistry).
1988 M.D. Boston University School of Medicine, Boston, MA.

Postdoctoral Training:

1988-1989 Transitional Internship, Framingham Union Hospital, Framingham, MA.
1989-1992 Ophthalmology Residency, Wilmer Ophthalmological Institute, Johns Hopkins Hospital and University, Baltimore, MD.
1992-1994 Research Fellow in Ophthalmology, Joslin Research Laboratories, Joslin Diabetes Center, Boston, MA.
1993-1994 Vitreoretinal Fellow in Ophthalmology, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.

Licensure and Certification:

1989 Diplomat, National Board of Medical Examiners.
1992- Licensed, Massachusetts Board of Registration in Medicine.
1992- Drug Enforcement Administration Registration, Schedule II-V
1993-2003 Certified, American Board of Ophthalmology, 10 year term.
2003- Re-Certified, American Board of Ophthalmology, 10 year term.

Professional Appointments:

Academic Appointments:

1989-1992 Fellow in Ophthalmology, Johns Hopkins University School of Medicine, Baltimore, MD.
1992-1994 Clinical Fellow in Ophthalmology, Harvard University Faculty of Medicine, Boston, MA.
1992-1994 Research Fellow, Department of Research, Joslin Diabetes Center, Boston, MA.
1993-1994 Clinical Fellow, Ophthalmology, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
1994-1997 Instructor, Department of Ophthalmology, Harvard University Faculty of Medicine, Boston, MA.
1994-1997 Research Associate, Joslin Diabetes Center, Harvard Medical School, Boston, MA.
1997-2001 Assistant Professor of Ophthalmology, Harvard University Faculty of Medicine, Boston, MA.
1997- Investigator, Joslin Diabetes Center, Harvard Medical School, Boston, MA.
2001- Associate Professor of Ophthalmology, Harvard University Faculty of Medicine, Boston, MA.

Hospital Appointments:

1992-1994 Clinical Fellow, New England Deaconess Hospital, Boston, MA.
1992-1994 Clinical Research Assistant in Ophthalmology, Mass. Eye & Ear Infirmary, Boston, MA.
1992-1997 Associate in Ophthalmology, Beth Israel Hospital, Boston, MA.
1992-1997 Active Full-time Staff, Brigham and Women's Hospital, Boston, MA.
1993- Associate Clinic Staff, Joslin Diabetes Center, Harvard Medical School, Boston, MA.
1994-1977 Active Staff, New England Deaconess Hospital, Boston, MA.
1997- Associate Surgeon, Active Affiliate Staff, Dept. of Surgery, Brigham & Women's Hospital, Boston, MA
1997- Active Staff, Beth Israel Deaconess Medical Center, Boston, MA.

Awards and Honors:

- 1980 Phi Lambda Upsilon, National Honorary Chemical Society, Alpha Upsilon Chapter.
- 1988 Sidney Cooperband Memorial Fund Award, Boston University School of Medicine.
- 1988 Alpha Omega Alpha, National Honor Medical Society, Boston University Chapter.
- 1992- 1993 Heed Fellowship, The Heed Ophthalmic Foundation, Cleveland, OH.
- 1992- 1993 The Fellow of the Society of Heed Fellows, The Heed Ophthalmic Foundation, Cleveland, OH.
- 1993- 1994 Heed/Knapp Fellowship, The Heed Ophthalmic Foundation, Cleveland, OH.
- 1994- 1996 Capps Scholar in Diabetes, Harvard Medical School, Boston, MA.
- 1994- 1997 Pfizer Postdoctoral Fellowship (diabetes/endocrinology).
- 1994 Mario C. Balodimos, M.D. Award, American Diabetes Association, MA Affiliate.
- 1996 Alcon Research Institute Award.
- 1997 3rd Annual Irvine H. Leopold Lecture, Mount Sinai Medical Center, New York, NY.
- 1999 American Academy of Ophthalmology Achievement Award.
- 2000 Mary Jane Kugel Award, Juvenile Diabetes Association International, New York, NY.
- 2000 Dolly Green Scholar, Research to Prevent Blindness, New York, NY.
- 2002 Richard and Hinda Rosenthal Foundation Award, Macula Society, Cleveland, OH.
- 2003 Ministry of Health Higher Medical Development Expert Visitorship, Diabetic Eye Disease, Singapore.
- 2003 Sir William Osler Young Investigator Award, The Interurban Clinical Club.
- 2003 Novartis Award in Diabetes – Young Investigator, Novartis, Basel, Switzerland.
- 2003 Outstanding Foreign Investigator Award, The Japan Society of Diabetic Complications, Kyoto, Japan.
- 2005 2nd Annual Anwar Shah Retina Lecturer, Saint Louis University Eye Institute, St. Louis. MO.
- 2005 Charles Schepens Award in Research and Lecturer, Schepens International Society, Vancouver, BC.

Service Assignments:

- 1994- Attending Physician, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA
- 1994- Director of Photography, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 1995- 1999 Consulting Physician, New England Eye Institute, Boston, MA
- 1996- Consulting Physician, Veterans Administration Hospital, West Roxbury and Brockton, MA.

Major Committee Assignments:**National:**

- 1994- Medical Science Review Committee, Juvenile Diabetes Foundation International.
- 1995-2000 Lions Club International SightFirst Diabetic Retinopathy Research Grant Review Panel.
- 1995-1999 Fight for Sight Research Grant Review Panel.
- 1996 National Institutes of Health, Visual Science C Study Section, outside opinion.
- 1996-2000 Chair, Lions Club International SightFirst Diabetic Retinopathy Research Grant Review Panel.
- 1997 National Institutes of Health, Visual Science C Study Section, temporary reviewer.
- 1997-1998 Chair, American Diabetes Association Annual Meeting, Complications: Ocular Oral Presentation Section
- 1998 National Institutes of Health, K08 Grants, reviewer.
- 1998, 2003 National Institutes of Health, National Eye Institute, Special Emphasis Panel, reviewer.
- 1999 Editor and external contributor, Information Statement: Eye Care of People with Diabetes Mellitus.
American Academy of Ophthalmology.
- 1999-2002 Chair, Complications Section, Juvenile Diabetes Foundation, Medical Science Review Committee.
- 1999- Clinical Affairs Advisory Committee, Juvenile Diabetes Foundation, International.
- 2002- North American Advisory Board, Eli Lilly Company, Indianapolis, IN.
- 2002- Chair, Clinical Investigation Section, Juvenile Diabetes Foundation, Medical Science Review Committee.
- 2002- Network Chair, Diabetic Retinopathy Clinical Research Network (DRCR.net), National Eye Institute.
- 2002-2003 Study Chair, DRCR.net Protocol 1, Pilot Study of Laser Photocoagulation for Diabetic Macular Edema
- 2003- Executive Committee, Eli Lilly Phase III PKC-DMES II Multinational Clinical Trial.
- 2003- American Telemedicine Association (ATA) and Information Technology Laboratory at the U.S. National
Institutes of Standards and Technology (NIST) Ophthalmic Telemedicine Standards Committee.
- 2003- Nominating Committee, The Macula Society.
- 2004 Invited Reviewer, Wellcome Trust University Award, London, UK.
- 2004 Invited Lecturer & Participant, Best Practice Guideline Round Table: Managing risks of intravitreal
injections. RETINA, Lippincot, Williams and Wilkins, New York.
- 2004 Invited Lecturer & Participant. National Institutes of Health Trans-Institute Angiogenesis Research
Program (TARP) Workshop, Towson, MD.
- 2004 National Institutes of Health, National Eye Institute, ZEY1 VSN(05), reviewer.

National (continued):

- 2005-2006 American Academy of Ophthalmology, 2005 Annual Meeting Program Committee, Retina/Vitreous Subcommittee.
- 2005 Chair, Sandostatin-LAR for Diabetic Retinopathy Global Advisory Board. Novartis Pharmaceuticals
- 2005 National Institutes of Health, National Eye Institute, Center for Scientific Review Special Emphasis Panel, reviewer.

Regional:

- 1995 Retina Disease Advisory Panel, Allergan, Inc., Irvine, CA.
- 1997 Leading Edge Advisory Panel, Alcon Laboratories, Fort Worth, TX.
- 1997 Research Advisory Panel, CIBAVision Ophthalmics, Fort Lauderdale, FL.
- 1977 Scientific Board, Center for Pharmacological Clinical Trials and Macular Degeneration, New York, NY.
- 1998-2003 Public Health and Education Committee, New England Ophthalmological Society.
- 2000-2003 Executive Board, Massachusetts Society of Eye Physicians and Surgeons
- 2001- External Advisory Council, Penn State Juvenile Diabetes Foundation Diabetic Retinopathy Center
- 2001- Data Safety Monitoring Board, Ark Therapeutics, Phase IIB Clinical Trial on VEGF-D gene therapy
- 2001 Michigan Diabetes Research and Training Center, Pilot and Feasibility Grants, reviewer.

Medical School:

- 1985-1988 M.D.-Ph.D. Class Representative, Boston University School of Medicine, Boston, MA.
- 2003- Harvard Medical School Executive Committee of the Department of Ophthalmology
- 2004- Residency Managing Committee, Harvard Medical School Residency Program in Ophthalmology

Hospital:

- 1990-1991 House Staff Society Council Membership, Johns Hopkins Hospital, Baltimore, MD.
- 1998-1999 Research Representative to the Joint Conference Committee, Joslin Diabetes Center, Boston, MA.
- 2003-2004 Organizing Committee & Poster Contest Judge, Departmental Alumni Meeting, Massachusetts Eye & Ear Infirmary, Boston, MA.
- 2004-2008 Board of Trustees "staff-at-large", Joslin Diabetes Center, Boston, MA.
- 2004-2008 Clinic Advisory Committee, Board of Trustees, Joslin Diabetes Center, Boston, MA.

Major Administrative Responsibilities:

- 1994-2004 Director, Resident Education, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 1997- Co-Director, Section on Research Computing, Joslin Diabetes Center, Boston, MA.
- 1998-2004 Study Chairman, Protein Kinase C Diabetic Retinopathy Study, multinational, multicenter clinical trial
- 1998-2004 Study Chairman, Protein Kinase C Diabetic Macular Edema Study, multinational multicenter clinical trial
- 1999-2002 Chair, Joslin Diabetes Center Information Technology Steering Committee
- 2000- Study Chairman, Protein Kinase C Diabetic Retinopathy Study 2, multinational multicenter clinical trial
- 2001-2003 Assistant Director, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 2001- Head, Section of Eye Research, Joslin Diabetes Center, Boston, MA.
- 2003-2005 Associate Director, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 2004- Local Director, Harvard Medical School Residency Program in Ophthalmology, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 2005- Director, Beetham Eye Institute, Joslin Diabetes Center, Boston, MA.
- 2005- Executive Committee, Strategic Initiative Division, Joslin Vision Network, Joslin Diabetes Center, Boston, MA.

Professional Society Involvement:

- 1986- American Medical Association.
- 1986-1988 Undersea and Hyperbaric Medical Society
- 1987-1988 American College of Emergency Physicians.
- 1987- Massachusetts Medical Society.
- 1989- The Association for Research in Vision and Ophthalmology (ARVO).
- 1990- American Academy of Ophthalmology, fellow.
- 1994- American Diabetes Association, professional member.
- 1994 Session Moderator (Retinal Ischemia), ARVO Annual Meeting, Sarasota, FL.
- 1995-1996 Session Moderator (Neovascularization), ARVO Annual Meeting, Fort Lauderdale, FL.
- 1995-1997 Reviewer, American Diabetes Association Scientific Sessions Meeting Committee.
- 1997- New England Ophthalmological Society, member.
- 1998 Session Moderator (Growth Factors II), ARVO Annual Meeting, Fort Lauderdale, FL.
- 1998 Session Moderator (VEGF Expression & Activity), ARVO Annual Meeting, Fort Lauderdale, FL.

Professional Society Involvement (continued):

- 1998 Session Co-chair (Complications, Ocular) American Diabetes Association Scientific Sessions Annual Meeting, Chicago, IL.
- 2000 Reviewer, American Diabetes Association Scientific Sessions Meeting Committee.
- 2000 Session Moderator, Diabetes 2000 International Congress, Italy.
- 2000 Session Co-moderator (Retinal and Choroidal Angiogenesis and Inhibition), International Congress of Eye Research, Santa Fe, NM.
- 2000- The International Society for Eye Research, full member.
- 2001- Pine Ridge Eye Study Society, member
- 2001- Macula Society, member
- 2001- Retina Society, member
- 2005 Reviewer, American Academy of Ophthalmology Scientific Program.
- 2005 Session Co-moderator (Diabetic retinopathy III), ARVO Annual Meeting, Fort Lauderdale, FL.

Editorial Boards:

- 1997- American Journal of Ophthalmology.
- 1997- RETINA.
- 1999, 2000 Investigative Ophthalmology and Visual Science (guest editor)
- 2004 Investigative Ophthalmology and Visual Science (guest editor)

Report of Research:**Major Research Interests:**

Molecular biology of ischemic retinal disease, growth factor mediation of proliferative retinopathies and macular edema, hypertension interactions with retinal disease, clinical trial design & implementation, diabetic retinopathy, macular edema and retinal vascular disorders.

Narrative Description:

Research is focused on understanding basic molecular biological mechanisms underlying retinal vascular disease with emphasis on the activity of growth factors in diabetic retinopathy & macular edema. The mechanistic details are utilized as the foundation from which to design and pursue animal and human clinical trials. Ongoing clinical studies include effects of oral protein kinase C inhibitors, growth factor inhibitors, antioxidants, anti-proliferative agents and genetics of diabetic eye disease.

Report of Teaching:**Local Contributions:****Medical School Courses:**

- 1990-1991 Medical student instruction in ophthalmology, Johns Hopkins Hospital, Baltimore, MD, yearly.
- 1993 Invited Lecturer: Summer Student Program, Joslin Diabetes Center, Boston, MA.

Graduate Medical Courses and Invited Teaching Presentations:

- 1989-1991 Lecturer: Wilmer Resident's Clinical Conferences, Johns Hopkins University & Hospital, yearly.
- 1990-1995 Lecturer: Wilmer Ophthalmological Institute 49th-53rd Clinical Meetings, Johns Hopkins University and Hospital, Baltimore, MD, yearly.
- 1992- Preceptor: Longwood Medical Area Ophthalmology Conferences, Joslin rotation, preceptor for Joslin clinical fellow's monthly in-depth presentation discussing unique and interesting cases.
- 1992- Lecturer: Beetham Eye Institute Resident Conferences, Joslin Diabetes Center, weekly detailed didactic and slide review presentations concerning all academic and clinical aspects of diabetic retinopathy, organizing director for this series.
- 1994- Invited Lecturer: Joslin Tuesday Noon Seminar Series, Joslin Diabetes Center, yearly presentation to all internal research staff at Joslin Diabetes Center.
- 1994 Invited Lecturer: Endocrinology Grand Rounds, Beth Israel Hospital, Boston, MA.
- 1995 Invited Lecturer: Joslin Diabetes Thursday Afternoon Lecture Series, Joslin Diabetes Center.
- 1996- Invited Lecturer: Beth Israel/Deaconess Hospital Endocrinology Fellow lecture series, yearly invited presentation regarding state-of-the-art care of diabetic retinopathy.
- 1996- Preceptor & Grand Rounds Lecturer, approx. semi-monthly, Veterans Administration Hospital, West Roxbury and Brockton, MA.
- 1996 Invited Lecturer: Grand Rounds, Massachusetts Eye & Ear Infirmary, Boston, MA.
- 1996 Invited Lecturer: Massachusetts General Hospital Research Fellow Conference, Boston, MA.

Graduate Medical Courses and Invited Teaching Presentations (continued):

- 1996 Invited Lecturer: Boston University & Tufts Ophthalmology Resident Teaching Seminar, Boston, MA.
- 1996 Invited Lecturer: MD-PhD Student Dinner, Boston University School of Medicine, Boston, MA.
- 1997, 2000 Invited Lecturer: Children's Hospital, Endocrinology Fellow lecture on diabetic retinopathy clinical care and research.
- 1998 Invited Lecturer: New England College of Optometry Advanced Care Grand Rounds Lecture Series.
- 1998 Invited Lecturer: Gunderson Eye Center Resident Conference, Boston, MA.
- 1998 Invited Lecturer: Endocrine Grand Rounds, Beth Israel Deaconess Hospital, Boston, MA.
- 2000 Invited Lecturer: Children's Hospital Endocrine Division Guest Lecture Series. "*Diabetic Retinopathy: Past Present and Future*". Children's Hospital, Boston, MA.
- 2000 Grand Rounds Lecturer: Massachusetts Eye & Ear Infirmary, "*Frontiers in the Management of Diabetic Retinopathy*", Boston, MA.
- 2002 Invited Lecturer: Joslin Noon Seminar Series, "*Pathways Mediating Stretch- & Hypertension-induced Retinal Expression of VEGF & its Receptors: Potential Mechanisms for Exacerbation of Diabetic Retinopathy by Hypertension*", Joslin Diabetes Center, Boston, MA.
- 2002 Invited Co-Lecturer: Schepens Eye Research Institute, Harvard Medical School, Molecular Vision Training Program: Biology of Ophthalmic Diseases, "*Diabetic Retinopathy*", Boston, MA.
- 2003 Invited Co-Lecturer: NEI Postdoctoral Training Program, "*The Biology of Ophthalmic Diseases*", Schepens Eye Research Institute Boston, MA.
- 2004 Invited Lecturer: "*PKC Inhibitors*", Grand Rounds, Massachusetts Eye and Ear Infirmary, Boston, MA
- 2004 Invited Lecturer: "*Oral PKC Inhibitors for Diabetic retinopathy and Macular Edema: New Molecular Findings and Initial Clinical Trial results*", 2004 Update on Ophthalmology, Harvard Medical School, Department of Ophthalmology, Boston, MA.

Regional, National and International Contributions:**Invited Presentations:**

- 1984 Invited Lecturer: Minisymposium on Membrane Receptor and Cellular Regulation, Harvard Medical School Department of Medicine and Joslin Diabetes Center.
- 1985 Invited Lecturer: Massachusetts General Hospital Insulin Action Minisymposium, Boston, MA.
- 1986-1987 Invited Lecturer, New England Aquarium, Research Division, Boston, MA.
- 1990 Invited Lecturer: Emergency Medical Technician CME Seminar, Johns Hopkins Hospital.
- 1991 Invited Lecturer: Eighth Annual Wilmer Nursing Conference, Johns Hopkins Hospital.
- 1992, 1995 Invited Lecturer: Lions Diabetes Awareness Chairmen Education Day, Joslin Diabetes Center.
- 1992 Invited Lecturer: Massachusetts Lions Eye Research Foundation Annual Visitation, Boston, MA.
- 1992 Invited Lecturer: New England Ophthalmological Society, Board Meeting Dinner, Boston, MA.
- 1993 Invited Lecturer: Symposium on Vascular Complications of Diabetes Mellitus, Joslin Diabetes Center, Boston.
- 1993 Invited Co-lecturer: Boston Emergency Medical Services Grand Rounds (October), Boston, MA.
- 1995-1996 Invited Lecturer: New England Council of Optometrists, 73rd & 74th Annual Eye Care Congress, Boston.
- 1995 Invited Lecturer: Research to Prevent Blindness 13th National Science Writers Seminar.
- 1995 Invited Lecturer: "*Cutting Edge Retina*", Subspecialty Day, American Academy of Ophthalmology.
- 1996 Invited Lecturer: "*Vitreoretinal Frontiers: 21st Century*", Subspecialty Day, American Academy of Ophthalmology
- 1996 Invited Lecturer: Retinal Vascular Disease, Matthew D. Davis Tribute, Madison, WI.
- 1996 Invited Lecturer: "*New approaches in the diagnosis and therapy of macular and retinal diseases*", Universitat Leipzig, Germany.
- 1997 Invited Lecturer: "*Novel Anti-angiogenic Therapy for Diabetic Retinopathy, Macular Degeneration and Other Ocular Diseases of Neovascularization*", Pre-conference Mini-symposium, Boston, MA.
- 1997 Invited Lecturer: New England Ophthalmological Society Subspecialty Symposium, Boston, MA.
- 1997 NEI sponsored Oregon Health Sciences University Training Program, Portland, OR.
- 1997 Keynote Lecturer: European Association for the Study of Diabetic Eye Complications, Amsterdam.
- 1997 Irvine H. Leopold Lectureship: Cedars-Sinai Medical Center, Los Angeles, CA.
- 1997 Invited Lecturer: Japanese Medical Society, Kyoto, Japan.
- 1997 Invited Lecturer: "*Guidelines for Panretinal Photocoagulation in Diabetic Retinopathy*", American Academy of Ophthalmology (substituted for Lloyd M. Aiello, MD).
- 1997 Invited Lecturer: "*Vitreoretinal Update*", Subspecialty Day, American Academy of Ophthalmology.
- 1998 Invited Lecturer: Diabetic Retinopathy Update, Cleveland Clinic, OH.
- 1998 Invited Lecturer: Grand Rounds, Pennsylvania State University, Hershey, PA.

Invited Presentations (continued):

- 1998 Invited Lecturer: Diabetic Complications Conference, Joslin Diabetes Center 100th Anniversary Celebration, Boston, MA.
- 1998 Invited Lecturer: American Diabetes Association Symposium *"New Therapeutic Approaches to Diabetic Retinopathy"*, Chicago, IL.
- 1998 Invited Lecturer: American Association for Clinical Chemistry *"Two Years Before the Millennium: What's new in the pathogenesis, complications and prevention of diabetes mellitus"*, Chicago, IL.
- 1998 Invited Lecturer for 2 presentations: Diabetic Retinopathy Update *"What's New in Diabetic Retinopathy"* & *"Venous Occlusive Disease"*, Wilmer Ophthalmological Institute, Baltimore, MD.
- 1998 Invited Lecturer: National Eye Institute Research Seminar, NIH, Bethesda, MD.
- 1998 Invited Lecturer: Vitreoretinal Update 1998, Subspecialty Day, New Orleans, LA.
- 1998 Invited Lecturer: American Academy of Ophthalmology, *"Advances in Retinal Diagnosis and Therapy at the Millennium"*, New Orleans, LA.
- 1998 Invited Lecturer for 2 presentations: New Developments in Diabetes Care and Diabetic Retinopathy *"VEGF and Other Cytokines in the Development of Diabetic Retinopathy"* and *"Protein Kinase C Beta Inhibitor Trial"*, Stanford University School of Medicine, Stanford, CA.
- 1999 Invited Lecturer: New England Ophthalmological Society, Interactive New England Retina Specialists Meeting, Boston, MA.
- 1999 Invited Lecturer: 5th Japanese Society of Diabetic Ophthalmology, Nagoya, Japan.
- 1999 Invited Lecturer: Retinal Symposium Update for the Anterior Segment Surgeon, American Society of Cataract and Refractive Surgery Annual Meeting, Seattle, WA.
- 1999 Invited Lecturer: American Academy of Ophthalmology Symposium: Diabetes and the Eye: *"Research and Future Directions in Diabetic Retinopathy"*, Orlando, FL.
- 1999 Invited Lecturer: New England Council of Optometrists Annual Congress. *"Diabetes Update Symposium"*, Providence, RI
- 1999 Invited Lecturer: Boston Angiogenesis Meeting. *"Growth Factor Interactions Mediating Retinal Endothelial Cell Proliferation"*, Boston, MA.
- 1999 Invited Lecturer: American Academy of Ophthalmology. *"Telemedicine & Diabetes"*, Orlando, FL
- 1999 Invited Lecturer: American Academy of Ophthalmology. *"Future Directions in Diabetic Retinopathy"*, Orlando, FL
- 1999 Invited Lecturer for 3 presentations: Espallat-Cabral Eye Institute and Alcon Diabetic retinopathy Seminar, Santa Domingo, Dominican Republic.
- 2000 Invited Lecturer: The Fourth Hyonam Kidney laboratory International Symposium. *"The Role Of VEGF In Diabetic Vascular Complications"*. Seoul, Korea.
- 2000 Keynote Lecturer: Netherlands Ophthalmological Society. *"The Role of Growth factors in Diabetic Retinopathy"* Rotterdam, Holland.
- 2000 Invited Lecturer: The 59th Clinical Meeting of the Wilmer Resident's Association. *"Diabetic Retinopathy: Where are we going?"*. Wilmer Ophthalmological Institute, Baltimore, MD.
- 2000 Invited Lecturer: Massachusetts Society of Eye Physicians and Surgeons Annual Business Meeting. *"Diabetic Retinopathy: New Advances in Treatment"*, Boston, MA.
- 2000 Invited Grand Rounds Lecturer: *Grand Rounds Guest Series*, New Jersey Medical Center, Department of Ophthalmology, NJ. Two presentations.
- 2000 Plenary Lecturer: Australian Diabetes Society Annual Scientific Meeting. *"Treatment of Retinopathy: lessons from interventional studies."* Cairns, Australia.
- 2000 Alcon Visiting Professor, The University Department of Ophthalmology and The Clinical School at the Royal Victorian Eye & Ear Hospital, 2 lectures and clinical rounds.
- 2000 Invited Lecturer: Australian Diabetes Society Symposium Speaker, Australian Diabetes Society Annual Scientific Meeting. *"VEGF and Retinopathy."* Cairns, Australia.
- 2000 Invited Lecturer: Bernard Becker Symposium, Washington University School of Medicine, *"Oral Therapies for Diabetic Retinopathy: problems and promise along the road from bench to bedside"*, St. Louis, MO.
- 2000 Invited Lecturer: International Society for Eye Research. Santa Fe, NM.
- 2000 Invited Lecturer: American Academy of Ophthalmology, Diabetes 2000 Symposium, Annual Meeting, *"Future Therapies for Diabetic Retinopathy"*. Dallas, Texas.
- 2000 Invited Lecturer: Retina 2000, Subspecialty Day, *"Pharmacological Therapy for Macular Edema"*, Dallas, Texas.
- 2000 Invited Lecturer: Gerald J. Friedman Symposium, Motifiore Medical Center, Albert Einstein College of Medicine, *"Pharmacologic Therapies for Diabetic retinopathy: the journey from test tube to clinical trial"*, New York, NY.

Invited Presentations (continued):

- 2001 Invited Lecturer: American Diabetes Association, “*Pigment Epithelial Derived factor as a Modulator of Retinal Angiogenesis and Permeability*”, Philadelphia, PA.
- 2001 Invited Lecturer: American Diabetes Association, “*The Molecular Frontier, The Key to Progress in the Management of Vascular Complications in Diabetes*”, Philadelphia, PA.
- 2001 Invited Lecturer: Pine Ridge Eye Study Society, “*Novel Pharmacological Approaches to the Treatment of Diabetic Retinopathy*”, Driggs, ID.
- 2001 Invited Lecturer: Oxford Ophthalmological Conference, Master’s Symposium “*Novel Therapies for the Medical Management of Diabetic Retinopathy*”, Oxford, UK.
- 2001 Invited Lecturer: Randomized Trials in Ophthalmology: Past, Present, Future, “*Trials in Diabetic Retinopathy: Future*”, Wilmer Ophthalmological Institute, Baltimore, MD.
- 2001 Invited Lecturer: Expanding Your Knowledge; Advancing Your Career, “*Breakthroughs in the Pathogenesis of Diabetic Retinopathy*”, Seminar for Ophthalmic Medical Personnel, Boston, MA.
- 2001 Invited Keynote Lecturer for 4 presentations: Malaysian Ophthalmologic Meeting, Update on Vitreoretinal Diseases, Kuala Lumpur, Malaysia.
- 2001 Invited Lecturer: American Academy of Ophthalmology, Opening Symposium: New Vessels, New Medicines, New Ideas in Retina, “*Future Therapies for Diabetic Retinopathy*”, 2001 Annual Meeting, New Orleans, LA.
- 2002 Invited Lecturer: Vision Problems in the United States, “*Diabetic Retinopathy in the United States*”, Prevent Blindness America, Washington, DC.
- 2002 Invited Lecturer: Diabetes & the Eye 2002, “*The Role of PKC Inhibition in Diabetic Retinopathy*”, Rancho Mirage, CA.
- 2002 Invited Lecturer: XXIXth International Congress of Ophthalmology, “*Molecular Mechanisms of Diabetic Retinopathy and Macular Edema*”, Sydney, Australia.
- 2002 Invited Lecturer: XXIXth International Congress of Ophthalmology, two presentations “*The Role of PKC- β Inhibitors in Diabetic Retinopathy*”, Sydney, Australia.
- 2002 Invited Lecturer, co-moderator: ARVO Annual Scientific Meeting, Special Interest Group: “*Pharmacological Inhibition of Retinal and Choroidal Neovascularization: New Strategies and Future Frontiers*”, Fort Lauderdale, Florida.
- 2002 Invited Lecturer: ARVO Annual Scientific Meeting, Special Symposium, Phase V Communications: “*The Function of Protein Kinase C in Microvascular Damage during Diabetic Retinopathy and Macular Edema*”, Fort Lauderdale, Florida.
- 2002 Invited Lecturer: American Academy of Ophthalmology Retina Subspecialty Day: “*New Models for Collaborative Research Trials on Diabetic Macular Edema*”, Orlando, FL.
- 2002 Invited Lecturer: Eli Lilly & Co. Continuing Medical Education Symposium: “*An Emerging Era in the Treatment of Diabetic Microvascular Complications*”, American Academy of Ophthalmology Annual Meeting, Orlando, FL.
- 2002 Invited Lecturer: Genentech Continuing Medical Education Symposium: “*Leading Edge Therapies in Neovascular Retinal Disease – Retinal Neovascularization, A clinical perspective.*”, American Academy of Ophthalmology Annual Meeting, Orlando, FL.
- 2002 Invited Lecturer: American Academy of Ophthalmology Annual Meeting Symposium, “*The Role of Growth Factors in Diabetic Retinopathy*”, Orlando, FL.
- 2002 Invited Lecturer: American Academy of Optometry Annual Meeting, “*The Joslin Vision Network - A Digital Camera/Internet-Based System to Detect Diabetic Retinopathy in Rural or Non-Metropolitan Settings*” and “*Specific pharmacological agents for the treatment of diabetic retinopathy: PKC- beta inhibitor therapy*”, San Diego, CA.
- 2003 Invited Lecturer for 6 presentations: Ministry of Health Higher Medical Development Plan Visiting Expert, Singapore National Eye Center, Singapore.
- 2003 Invited Lecturer: First Singapore Eye Research Institute (SERI) and Association for Research in Vision and Ophthalmology (ARVO) Meeting, “*Treatment of Diabetic Retinopathy: past, present and future*”, Singapore.
- 2003 Invited Lecturer: American Indian Diabetic Teleophthalmology CME Symposium: “*Pharmacotherapy of Diabetic Retinopathy*” and “*The Joslin Vision Network*” Palm Springs, CA.
- 2003 Invited Lecturer: National Institute of Diabetes and Digestive and Kidney Diseases Symposium “*Metabolic Imprinting and the Long-Term Complications of Diabetes Mellitus: Bench to Bedside and Back*”, presentation “*Treatment of vascular complications: clinical trials with PKC inhibitors*”, NIH Library of Medicine, Bethesda, MD.
- 2003 Invited Lecturer: UTMB Ophthalmology Resident/Alumni Day, “*New Developments in Retina*”, Galveston, TX.

Invited Presentations (continued):

- 2003 Invited Lecturer: “*Initial results of the protein kinase C β inhibitor Diabetic Macular Edema Study (PKC-DMES)*”, 18th International Diabetes Federation Congress, Paris, France.
- 2003 Invited Lecturer: “*PKC and Diabetic Retinopathy: New Basic and Clinical Findings Supporting a Novel Therapy*”, Outstanding Foreign Investigator Award Lecture, Kyoto, Japan.
- 2003 Invited Lecturer: “*The PKC Inhibitor Study: What Happened?*”, The Retina Debates 2003: New Technology and Controversies from the Posterior Segment, Anaheim, CA.
- 2003 Invited Instructor: “*New and Emerging Techniques in the Management of Diabetic Macular Edema*”, American Academy of Ophthalmology Annual Meeting Instruction Course, Anaheim, CA.
- 2003 Invited Lecturer: “*Diabetic Retinopathy: What’s New?*”, What’s New in Retina, American Academy of Ophthalmology Annual Meeting Symposium, Anaheim, CA.
- 2003 Invited Discussant: “*Intravitreal Triamcinolone for the Treatment of Refractory Diabetic Macular Edema: An Optical Coherence Tomography Study*”, American Academy of Ophthalmology Annual Meeting, Anaheim, CA.
- 2004 Invited Lecturer: “*Initial Results of the Protein Kinase C Inhibitor Diabetic Retinopathy Study (PKC-DRS) and Diabetic Macular Edema Study (PKC-DMES)*”, Angiogenesis 2004, Bascom Palmer Eye Institute, Miami, FL.
- 2004 Invited Lecturer: “*PKCbeta Inhibition for DME*”, 5th International Symposium on Ocular Pharmacology and Therapeutics, Monte Carlo, Monaco.
- 2004 Invited Lecturer: “*PKCbeta Inhibition of NPDR Progression and Visual Loss*”, 5th International Symposium on Ocular Pharmacology and Therapeutics, Monte Carlo, Monaco.
- 2004 Invited Lecturer: “*Macugen DME Phase II Results*”, Retina Society Annual Meeting, Baltimore, MD.
- 2004 Invited Lecturer: “*Molecular Biology & Natural History of Diabetic Retinopathy*”, Update on Diabetic Retinopathy: Advances in Understanding & Treatment, Advanced Studies in Ophthalmology, American Academy of Ophthalmology Annual Meeting, New Orleans, LA.
- 2004 Invited Lecturer: “*Macugen DME Phase II Results*”, Scientific Program, Eyetech/Pfizer Investigator’s Meeting, New Orleans, LA.
- 2004 Invited Lecturer: “*The Use of Intravitreal Corticosteroids in the DRCR.net*”, Retina Subspecialty Day, American Academy of Ophthalmology Annual Meeting, New Orleans, LA.
- 2004 Invited Lecturer: “*Molecular Mechanisms of Diabetic Retinopathy*”, Singapore National Eye Center, Singapore.
- 2004 Invited Lecturer: “*Emerging Pharmacological Therapies for Diabetic Retinopathy – status of current clinical trials*”, Singapore National Eye Center, Singapore.
- 2004 Invited Lecturer: “*Retinopathy and Systemic Disease in Patients with 50 or More Years of Diabetes*”, Singapore National Eye Center, Singapore.
- 2004 Invited Lecturer: “*Retinopathy Clinical Trial Evaluation of Nove Intravitreal Steroid Preparations for Treatment of Diabetic Macular Edema*”, Singapore National Eye Center, Singapore.
- 2005 Invited Lecturer: “*Epidemiology and Pathophysiology of Diabetic Retinopathy*”, Update on the Management of Diabetic Retinopathy and its Complications. Los Angeles, CA.
- 2005 Invited Lecturer: “*Metabolic and Systemic Issues of Diabetic Retinopathy*”, Update on the Management of Diabetic Retinopathy and its Complications. Los Angeles, CA.
- 2005 Invited Lecturer: “*PKC Inhibition in the Management of Diabetes Complications*”, Managing Diabetes 2005: Clinical Issues. Boston, MA.
- 2005 Invited Award Lecture: The Inaugural Charles L. Schepens Research Award Lecture. “*Pharmacotherapy of Diabetic Retinopathy*”, Schepens International Society Meeting, Vancouver, BC.
- 2005 Invited Named Lecture: Anwar Shah Retina Lecture. “*Diabetic Retinopathy in the 21st Century: Novel Therapeutics and New Horizons*”. Saint Louis University Eye Institute Alumnae Day. Saint Louis, MO.
- 2005 Invited Lecturer: “*Joslin Vision Network and Telemedicine for Diabetic Retinopathy*”. Wisconsin Diabetic Retinopathy Conference, Madison, WI.
- 2005 Invited Lecturer: “*Anti-VEGF Inhibitors for Diabetic Macular Edema*”. Wisconsin Diabetic Retinopathy Conference, Madison, WI.
- 2005 Invited Lecturer: “*Protein Kinase C Inhibitor Trials for Diabetic Retinopathy and Diabetic Macular Edema*”. Wisconsin Diabetic Retinopathy Conference, Madison, WI.
- 2005 Invited Lecturer: “*Diabetic Retinopathy Clinical Research Network*”. Wisconsin Diabetic Retinopathy Conference, Madison, WI.
- 2005 Invited Lecturer: “*Systemic Considerations in Diabetic Retinopathy*”. International Symposium on Diabetic Retinopathy, Aravind Hospital, Madurai, India.

Invited Presentations (continued):

- 2005 Invited Lecturer: “*Pharmacotherapy for in Diabetic Retinopathy: Current Status and New Horizons for Novel Therapies*”. International Symposium on Diabetic Retinopathy, Aravind Hospital, Madurai, India.
- 2005 Invited Lecturer: “*The Effect of the PKC- β Inhibitor Ruboxistaurin on Moderate Visual Loss*”. International Joint Meeting, European Society of Ophthalmology & German Society of Ophthalmology, Berlin, Germany.
- 2005 Invited Lecturer: “*DRCR.net Laser Study*”, Changing Concepts & Controversies, Subspecialty Day, American Academy of Ophthalmology Annual Meeting, Chicago, IL.
- 2005 Invited Lecturer: “*PKC β Inhibitor Phase 3 Clinical trial; Results*”, Late Breaking News, Subspecialty Day, American Academy of Ophthalmology Annual Meeting, Chicago, IL.
- 2005 Invited Lecturer: “*Molecular Biology of Diabetic Retinopathy: Opportunities for Therapeutic Intervention*”, Diabetic Retinopathy: Focus on Macular Edema, Advanced Studies in Ophthalmology, American Academy of Ophthalmology Annual Meeting, Chicago, IL.
- 2005 Invited Lecturer: “*PKC Inhibitors for Diabetic Retinopathy*”, Pharmacotherapy for Macular Edema Disease Symposium, American Academy of Ophthalmology & Macula Society joint symposium, Chicago, IL.
- 2005 Invited Lecturer: “*New Horizons in the Treatment of Diabetic Retinal Disease: The Current Status of Novel Therapies*”, Ophthalmic Photographers Society Annual Meeting, Chicago, IL.
- 2005 Invited Instructor: “*Managing the Risk of Infection after Intravitreal Injection*”, Instructional Course Faculty. American Academy of Ophthalmology Annual Meeting, Chicago, IL.
- 2005 Invited Lecturer: “*PKC Inhibitors from Bench to Bedside: a new treatment for diabetic vascular complications*”, Joslin Diabetes Center Tuesday Internal Seminar Series, Boston, MA.

Professional Leadership Roles Related to Teaching:

- 1991, 1993- Invited Instructor: Diabetes 2000 Workshop on Diabetic Retinopathy, American Academy of Ophthalmology, skills transfer course.
- 1991 Invited Lecturer & Participant: Conference on Policy Evolution in Ophthalmology, Washington, DC.
- 1995-1999 Invited Instructor: Optometry Resident Retina Consultation & Education Clinic, New England Eye Institute, Boston, MA, biweekly clinical teaching and consultation.
- 1997 Invited Participant: National Institutes of Health Conference “*Diabetes Mellitus: Challenges and Opportunities*”.
- 1999 Invited Participant: National Aeronautics and Space Administration (NASA), Juvenile Diabetes Foundation and National Institutes of Health Technology Workshop on “Diabetic Retinopathy”. See Lieth E and Gardner TW. *Diabetes Technology & Therapeutics*. 1999;1:499-518.
- 1999 Invited Participant: National Eye Institute *Genetics of Diabetic Retinopathy* Workshop. Bethesda, MD
- 2002- Panel Member: Ask the Experts, “*Diabetic Retinopathy*”, expert responses to important issues, MedScape for WebMD.
- 2003 Invited Participant: National Eye Institute, *Metabolic Imprinting and the Long-Term Complications of Diabetes Mellitus: Bench to Bedside and Back Conference*. Bethesda, MD.
- 2003 Invited Lecturer and Participant: “*Diabetic Retinopathy*”, EDIC Planning Committee, NIDDK/NIH, Bethesda MD.
- 2003 Invited Moderator: “*Medical and Pharmacologic Treatment of Diabetic Macular Edema*”, American Academy of Ophthalmology Annual Meeting Breakfast with the Experts, Anaheim, CA.
- 2004 Invited Participant: “*The Role of VEGF in AMD*”, Live Roundtable CME Development, Coral Gables, FL.
- 2004 Invited Lecturer and Participant: “*Angiogenesis & Diabetes*”, NCI-JDRF Angiogenesis Meeting, NCI/NIDDK/NEI, Towson, MD.
- 2004 Visiting Professor: Singapore National Eye Center, Singapore.
- 2004 Invited Continuing Medical Education Roundtable Participant, “*Managing The Risk of Infection After Intravitreal Injections*”, *Retinal Physician*, 2004: Jan.;S1-11.
- 2005 Invited Lecturer & Faculty: “*Advances in Diabetic Retinopathy*”, Mentoring in Ophthalmology Program. Annenberg Center for Health Sciences at Eisenhower, Rancho Mirage, CA.
- 2005 Invited Lecturer & Participant in Technology Information, Forecasting & Assessment Council, Centre of Relevance and Excellence in Diabetic Retinopathy (TIFAC-CORE), Madurai, India.
- 2005 Invited Reviewer, Pfizer Australia Senior Research Fellowship, Melbourne, Australia.
- 2005 Invited Moderator, Breakfast and Lunch with the Experts, American Academy of Ophthalmology.
- 2005 Reviewer, Annual Meeting Program Committee, American Academy of Ophthalmology.

Journal Manuscript Reviews:

1990- Archives of Ophthalmology.
 1992- Diabetes.
 1993- Retina.
 1993- Investigative Ophthalmology and Visual Science.
 1995- American Journal of Ophthalmology.
 1995- Journal of Clinical Investigation.
 1995- Experimental Eye Research.
 1995- Diabetologia.
 1995- Current Eye Research.
 1995- Microvascular Research.
 1995- BioTechniques.
 1995- Life Sciences.
 1995- Acta Diabetologica.
 1996- American Journal of Pathology.
 1996- Endocrinology.
 1996- Ophthalmology.
 1997- Cancer Research.
 1997- Anesthesiology.
 1997- New England Journal of Medicine.
 1997- Journal of Clinical Endocrinology and Metabolism.
 1998- Atherosclerosis.
 1998- British Journal of Ophthalmology.
 1998- Controlled Clinical Trials.
 1999- Ophthalmic Epidemiology .
 1999- Clinical Science.
 1999- Journal of Pediatrics.
 1999- Diabetic Medicine.
 1999- Lancet.
 2000- Journal of Biological Chemistry.
 2000- Human Gene Therapy.
 2001- Canadian Journal of Diabetes Care.
 2001- European Journal of Ophthalmology.
 2001- Trends in Molecular Medicine.
 2002- The American Journal of the Medical Sciences.
 2002- The EMBO Journal.
 2002- European Journal of Biochemistry.
 2003- American Journal of Physiology.
 2003- Physiological Genomics.
 2004- Journal of Anatomy.
 2004- Expert Reviews in Molecular Medicine.
 2005- Human Molecular Genetics

Patents:

6284751 Therapeutic treatment for VEGF related diseases
 6114320 Therapeutic treatment for VEGF related ocular diseases
 20020091082 Methods of modulating symptoms of hypertension (pending)

Clinical Activities:**Clinical Practice:**

The major clinical practice focus is retinal vascular disease with special emphasis on all aspects of diabetic retinopathy. This is principally a complex referral practice.

Time Commitments:

Research: 80% *Clinical:* 15% (includes clinical research)
Teaching: 5% (plus ongoing teaching during clinical and research time)

Clinical Program Development:

Responsibilities include continued participation in the development and implementation of residency and fellowship teaching programs, the fundus photography reading center, the Joslin Vision Network telemedicine initiative and a collaborative diabetes eye care program within the Longwood Medical Area.

BIBLIOGRAPHY**Original Reports:**

1. **Aiello LP**, Wessling-Resnick M, Pilch PF. Dipeptide Metalloendoprotease Substrates are Glucose Transport Inhibitors and Membrane Structure Perturbants. *Biochemistry* 1986; **25**:3944-50.
2. **Aiello LP**, Shia MA, Robinson GS, Pilch PF, Farmer SR. Characterization and Hepatic Expression of Rat Alpha-1-Inhibitor III mRNA. *J. Biol. Chem.* 1988; **263**:4013-22.
3. Javitt JC, **Aiello LP**, Bassi LJ, Canner JK. Detecting and Treating Diabetic Retinopathy: Financial and Visual Savings Associated with Improved Implementation of Current Guidelines. *Ophthalmology* 1990; **98**:1565-74.
4. **Aiello LP**, Iwamoto M, Guyer DR. Penetrating Ocular Fishhook Injuries: Surgical Management and Long-term Visual Outcome. *Ophthalmology* 1992; **99**(6):862-866.
5. **Aiello LP**, Iwamoto, M, Taylor HR. Perforating Ocular Fishhook Injury. *Arch. Ophthalmol*1992; **110**:1316-7.
6. **Aiello LP**, Iwamoto M, Guyer DR. Fish-hook Injuries. *Ophthalmology* [letter] 1993; **100**(1):3-4.
7. **Aiello LP**, Traboulsi EI. Pigmented Fundus Lesions in a Pre-term Infant with Familial Adenomatous Polyposis. *Arch. Ophthalmology* 1993; **111**(3):302-3.
8. **Aiello LP**, Iwamoto M, Taylor HR. Removing Penetrating Fishhooks. *Arch. Ophthalmol* [letter] 1993; **111**(4):429-30.
9. **Aiello LP**, Javitt, JC, Canner JK. National Outcomes of Penetrating Keratoplasty: Risks of Endophthalmitis and Retinal Detachment. *Arch. Ophthalmol* 1993; **111**(4):509-13.
10. Nishio Y, **Aiello LP**, King GL. Glucose Induced Genes in Bovine Aortic Smooth Muscle Cells Identified by mRNA Differential Display. *FASEB J.* 1994; **8**:103-106.
11. **Aiello LP**, Robinson GS, You-Wei L, Nishio Y, King GL. Identification of Multiple Glucose-regulated Genes in Bovine Retinal Pericytes by mRNA Differential Display. *Proc. Natl. Acad. Sci.* 1994; **91**:6231-6235.
12. **Aiello LP**, Arrigg PG, Murtha TJ, Shah S, Aiello LM. Solar Retinopathy Resulting From Hypoglycemic Insulin Reaction. *Arch. Ophthalmol.* 1994; **112**:982-983.
13. Javitt JC, **Aiello LP**, Chiang Y, Ferris FL, Canner JK, Greenfield S. Preventative Eye Care in People with Diabetes is Cost-saving to the Federal Government. *Diabetes Care* 1994; **18**(8):909-917.
14. **Aiello LP**, Avery RL, Arrigg PG, Keyt B, Aiello LM, Jampel HD, Shah ST, Pasquale LR, Thieme H, Iwamoto MA, Park JE, Nguyen HV, Ferrara N, King GL. Vascular Endothelial Growth Factor in Ocular Fluids of Patients with Diabetic Retinopathy and Other Retinal Disorders. *New Engl. J. Med.* 1994; **331**:1480-1487.
15. Thieme H, **Aiello LP**, Takagi H, Ferrara N, King GL. Comparative Analysis of Vascular Endothelial Growth Factor (VEGF) Receptors on Retinal and Aortic Microvascular Endothelial Cells. *Diabetes.* 1995; **44**:98-103.
16. **Aiello LP**, Arrigg PG, Aiello LM. Reversible Leukocoria Associated with Clinically Significant Diabetic Macular Edema. *Graefe's Arch. Clin. Exp. Ophthalmol.* 1995; **233**:54-55.
17. Pierce EA, Avery RL, Foley E, **Aiello LP**, Smith LEH. Vascular Endothelial Growth Factor/Vascular Permeability Factor Expression in a Mouse Model of Retinal Neovascularization. *Proc. Natl. Acad. Sci.* 1995; **92**:905-909.
18. Hamdan AD., **Aiello LP**, Quist WC, Ozaki CK, Contreras MA, Phaneuf MD, Ruiz C, King GL, LoGerfo FW. Isolation of Genes Differentially Expressed at the Downstream Anastomosis of Prosthetic Arterial Grafts using mRNA Differential Display. *J. Vasc. Surg.* 1995; **21**:228-234.
19. Feener EP, Northrup JM, **Aiello LP**, King GL. Angiotensin II Induces Plasminogen Activator-1 and -2 Expression in Vascular Endothelial and Smooth Muscle Cells. *J. Clin. Invest.* 1995; **95**:1353-1362.
20. Lagrèze WDA, Bömer TG, **Aiello LP**. Lightning-Induced Ocular Injury. *Arch. Ophthalmol.* 1995;**113**:1076-1077.
21. Nishio Y, Warren CE, Buczek-Thomas JA, Rulfs J, Koya D, **Aiello LP**, Feener EP, Miller TB, Dennis JW, King GL. Identification and Characterization of a Gene Regulating Enzymatic Glycosylation which is Induced by Diabetes and Hyperglycemia Specifically in Rat Cardiac Tissue. *J. Clin Invest.* 1995; **96**:1759-1767.
22. **Aiello LP**, Northrup JM, Keyt BA, Takagi H, Iwamoto MA. Hypoxic Regulation of Vascular Endothelial Growth Factor in Retinal Cells. *Arch. Ophthalmol.* 1995;**113**(12):1538-1544.
23. **Aiello LP**, Pierce EA, Foley ED, Takagi H, Chen H, Riddle L, Ferrara N, King GL, Smith LEH. Suppression of Retinal Neovascularization *in Vivo* by Inhibition of Vascular Endothelial Growth Factor (VEGF) using Soluble VEGF-receptor Chimeric Proteins. *Proc. Natl. Acad. Sci.* 1995;**92**(23):10457-10461.
24. Javitt JC, **Aiello LP**. Cost Effectiveness of Detecting and Treating Diabetic Retinopathy. *Ann. Intern. Med.* 1995;**124**(1 pt 2):164-169.
25. **Aiello LP**. Lightning-induced Ocular Injury. *Arch. Ophthalmol.* [letter] 1996;**114**:501-502.
26. Takagi H, King GL, Ferrara N, **Aiello LP**. Hypoxia Regulates Vascular Endothelial Growth Factor Receptor KDR/Flk Gene Expression through Adenosine A₂ Receptors in Retinal Capillary Endothelial Cells. *Invest. Ophthalmol. Vis. Sci.* 1996; **37**:1311-1321.

Original Reports (continued):

27. Takagi H, King GL, **Aiello LP**. Identification and Characterization of Vascular Endothelial Growth Factor Receptor (Flt) in Bovine Retinal Pericytes. *Diabetes* 1996; **45**:1016-1023.
28. Takagi H, King GL, Robinson GS, Ferrara N, **Aiello LP**. Adenosine Mediates Hypoxic Induction of Vascular Endothelial Growth Factor in Retinal Pericytes and Endothelial Cells. *Invest. Ophthalmol. Vis. Sci* 1996;**37**:2165-2176.
29. Pu X, **Aiello LP**, Ishii H, Jiang ZY, Park DJ, Robinson GS, Takagi H, Newsome WP, Jirousek J, King GL. Characterization of Vascular Endothelial Growth Factor's Effect on the Activation of Protein Kinase C, its Isoforms and Endothelial Cell Growth. *J. Clin. Invest.* 1996; **98**(9):2018-2026.
30. Hamdan AD, **Aiello LP**, Misare BD, Contreras MA, King GL, LoGerfo FW, Quist WC. Vascular Endothelial Growth Factor Expression in Canine Peripheral Vein Bypass Grafts. *J. Vasc. Surg.* 1997; **26**:79-86.
31. **Aiello LP**, Bursell SE, Clermont A, Duh E, Ishii H, Takagi C, Mori F, Ciulla TA, Ways K, Jirousek M, Smith LEH, King GL. Vascular Endothelial Growth Factor-Induced Retinal Permeability is Mediated by Protein Kinase C in Vivo and Suppressed by an Orally Effective β Isoform-Selective Inhibitor. *Diabetes*. 1997; **46**:1473-1480.
32. Clermont A, **Aiello LP**, Mori F, Aiello LM, Bursell SE. Vascular Endothelial Growth Factor (VEGF) and Severity of Nonproliferative Diabetic Retinopathy (NPDR) Mediate Retinal Hemodynamics *In Vivo*: A Potential Role for VEGF in the Progression of Nonproliferative Diabetic Retinopathy. *Am. J. Ophthalmol.* 1997; **124**:433-446.
33. Schuppert GT, Pons S, Hugl S, **Aiello LP**, King GL, White M, Rhodes CJ. A specific increased expression of insulin receptor substrate 2 in pancreatic β -cell lines is involved in mediating serum-stimulated β -cell growth. *Diabetes* 1998; **47**:1074-1085.
34. Hata Y, Duh E, Zhang K, Robinson GS, **Aiello LP**. Transcription Factors SP1 & Sp3 Affect Vascular Endothelial Growth Factor Receptor KDR Expression through a Novel Recognition Sequence. *J. Biol. Chem.* 1998; **273**:19294-19303.
35. Takagi H, King GL, **Aiello LP**. Hypoxia Upregulates Glucose Transport Activity through an Adenosine Mediated Increase of GLUT1 Expression in Retinal Capillary Endothelial Cells. *Diabetes*. 1998; **47**:1480-1488.
36. Aiello LM, Bursell SE, Cavallerano J, Gardner WK, Strong J and **The Joslin Vision Network Research Team**. Joslin Vision network Validation Study: Pilot Image Stabilization Phase. *J. Am. Optometric Assoc.* 1998;**98**:699-710.
37. Vasir B, **Aiello LP**, Yoon KH, Quickel RR, Weir SB, Weir GC. Hypoxia Induces Vascular Endothelial Growth factor Gene and Protein Expression in Cultured Rat Islet Cells. *Diabetes*. 1998; **47**:1894-1903.
38. Kubaska SM, Phaneuf MD, Rook SL, **Aiello LP**, LoGerfo FW, Quist WC. Characterization of Covalently Bound Vascular Endothelial Growth Factor: Creation of a Novel Dacron Prosthetic Graft Surface. *Surgical Forum*. 1998 322-324.
39. Espaillet A, **Aiello LP**, Arrigg PG, Villalobos R, Silver PM, Cavicchi RW. Canthaxanthine Retinopathy. *Arch. Ophthalmol.* 1999; **117**:412-413.
40. Hata Y, Rook SL, **Aiello LP**. Basic Fibroblast Growth Factor Induces Expression of VEGF Receptor KDR through a PKC and p44/p42 MAPK-Dependent Pathway. *Diabetes*. 1999; **48**:1145-1155.
41. Bursell SE, Clermont A, **Aiello LP**, Aiello LM, Schlossman DK, Feener EP, Laffel L, King GL. High-dose Vitamin E Supplementation Normalizes Retinal Blood Flow and Creatinine Clearance in Patients with Type I Diabetes. *Diabetes Care*. 1999; **22**:1245-1251.
42. Espaillet A, **Aiello LP**, Calderon RM, Cavallerano JD, Cavicchi RW, Cordahi G. Preservation of Vision Through Weiss' Ring Following Dense Vitreous Hemorrhage. *Amer. J. Ophthalmol.* 1999; **128**:376-378.
43. Miyamoto K, Khosrof S, Bursell SE, Rohan R, Murata T, Clermont AC, **Aiello LP**, Ogura Y, Adamis AP. Prevention of Leukostasis and Vascular Leakage in Streptozocin-induced Diabetic Retinopathy via Intracellular Adhesion Molecule-1 Inhibition. *Proc. Natl. Acad. Sci.* 1999; **96**:10836-10841.
44. Barouch FC, Miyamoto K, Allport JR, Fujita K, Bursell SE, **Aiello LP**, Luscinskas FW, Adamis AP. Integrin-mediated Neutrophil Adhesion and retinal Leukostasis in Diabetes. *Invest. Ophthalmol. Vis. Sci.* 2000; **41**:1153-1158.
45. Miyamoto K, Khosrof S, Bursell SE, Moromizato Y, **Aiello LP**, Ogura Y, Adamis AP. Vascular endothelial growth factor (VEGF)-induced retinal vascular permeability is mediated by intercellular adhesion molecule-1 (ICAM-1). *Am. J. Pathol.* 2000;**156**:1733-1739.
46. Cai W, Rook SL, Jiang ZY, Takahara N, **Aiello LP**. Mechanisms of Hepatocyte Growth Factor-Induced Retinal Endothelial Cell Migration and Growth. *Invest. Ophthalmol. Vis. Sci.* 2000; **41**(7):1885-93.
47. Hata Y, Clermont A, Yamauchi T, Pierce EA, Kagokawa H, Yoshikawa H, Robinson GS, Ishibashi T, Hashimoto T, Umeda F, Bursell SE, **Aiello LP**. Retinal Expression and Functional Bioactivity of Prostacyclin Stimulating Factor. *J. Clin. Invest.* 2000;**106**:541-550.

Original Reports (continued):

48. Suzuma K, Naruse K, Suzuma I, Takahara N, Ueki K, **Aiello LP**, King GL. Vascular Endothelial Growth Factor Induces Connective Tissue Growth factor via KDR, Flt-1 and PI3-kinase-Akt Dependent Pathways in retinal Vascular Cells. *J. Biol. Chem.* 2000; **275**:40725-40731.
49. Feng D, Bursell SE, Clermont AC, Lipinska I, **Aiello LP**, Laffel L, King GL, Tofler GH. von Willebrand factor and retinal circulation in early-stage retinopathy of type 1 diabetes. *Diabetes Care.* 2000;**23**(11):1694-8.
50. Barouch FC, Miyamoto K, Allport JR, Fujita K, Bursell SE, **Aiello LP**, Luscinskas FW, Adamis AP. Integrin-mediated neutrophil adhesion & retinal leukostasis in diabetes. *Invest Ophthalmol Vis Sci.* 2000 Apr;**41**(5):1153-8.
51. Suzuma I, Hata Y, Clermont A, Pokras F, Rook S, Suzuma K, Feener E, **Aiello LP**. Cyclic Stretch And Hypertension Induce Retinal Expression of Vascular Endothelial Growth Factor and Vascular Endothelial Growth Factor Receptor-2: Potential Mechanisms for Exacerbation of Diabetic Retinopathy by Hypertension. *Diabetes.* 2001;**50**:444-454.
52. Bursell SE, Cavallerano JD, Cavallerano AA, Clermont AC, Birkmire-Peters D, **Aiello LP**, Aiello LM and the Joslin Vision Network Research Team. Stereo nonmydriatic digital-video color retinal imaging compared with Early Treatment Diabetic Retinopathy Study seven standard field 35-mm stereo color photos for determining level of diabetic retinopathy. *Ophthalmol.* 2001;**108**:572-585.
53. Chaturvedi N, Fuller JH, Pokras F, Rottiers R, Papazoglou N, **Aiello LP**. Circulating plasma vascular endothelial growth factor and microvascular complications of Type 1 diabetes mellitus: the influence of ACE inhibition. *Diabet Med.* 2001;**18**(4):288-94.
54. **Aiello LP**, George DJ, Cahill MT, Wong JS, Cavallerano JD, Hannah AL, Kaelin WG. Rapid and Durable Recovery of Visual Function in a Patient with von Hippel-Lindau Syndrome Following Systemic Therapy with VEGF Receptor Inhibitor SU5416. *Ophthalmol.* 2002;**109**:1745-1751.
55. Suzuma I, Suzuma K, Ueki K, Hata Y, Feener EP, King GL, **Aiello LP**. Stretch-Induced Retinal VEGF Expression is Mediated by PI3 Kinase and PKC- ζ but Not by Stretch-Induced ERK1/2, Akt, Ras or Classical/Novel PKC Pathways. *J. Biol. Chem.* 2002;**277**(2):1047-57.
56. Chou E, Suzuma I, Way KJ, Opland D, Clermont AC, Naruse K, Suzuma K, Bowling NL, Vlahos CJ, **Aiello LP**, King GL. Decreased cardiac expression of vascular endothelial growth factor and its receptors in insulin-resistant and diabetic States: a possible explanation for impaired collateral formation in cardiac tissue. *Circulation.* 2002;**105**(3):373-9.
57. Raunijar R, Suzuma K, King AL, **Aiello LP**, King GL. Differential effects of bactericidal/permeability increasing protein (BPI) analogs on retinal neovascularization and retinal pericyte growth. *Invest Ophthalmol Vis Sci.* 2002;**43**(2):503-509.
58. Suzuma K, Takahara N, Suzuma I, Isshiki K, Ueki K, Leitges M, **Aiello LP**, King GL. Characterization of protein kinase C beta isoform's action on retinoblastoma protein phosphorylation, vascular endothelial growth factor-induced endothelial cell proliferation, and retinal neovascularization. *Proc Natl Acad Sci. U S A.* 2002;**99**(2):721-6.
59. Duh EJ, Yang HS, Suzuma I, Miyagi M, Youngman E, Mori K, Katai M, Yan L, Suzuma K, West K, Davarya S, Tong P, Gehlbach P, Pearlman J, Crabb JW, **Aiello LP**, Campochiaro PA, Zack DJ. Pigment Epithelium-Derived Factor (PEDF) Suppresses Ischemia-induced Retinal Neovascularization and VEGF-induced Migration and Growth. *Invest Ophthalmol Vis Sci.* 2002; **43**(3):821-9.
60. Cavallerano AA, Cavallerano JD, Katalinic P, Tolson, AM, **Aiello LP**, Aiello LM and the Joslin Vision Network Clinical Team. Use of Joslin Validated Joslin Vision Network Digital-Video Nonmydriatic Retinal Imaging to Assess Diabetic Retinopathy in a Diabetes Outpatient Intensive Treatment Program. *RETINA.* 2003;**23**(2):215-223.
61. Sassa Y, Hata Y, **Aiello LP**, Taniguchi Y, Kohno K, Ishibashi T. Bifunctional properties of PPAR γ 1 in KDR gene regulation is mediated via interaction of PPAR γ 1 with both Sp1 and Sp3. *Diabetes.* 2004;**53**(5):1222-9.
62. Jager RD, **Aiello LP**, Patel SC, Cunningham ET. Risks of Intravitreal Injection: A Comprehensive Review. *RETINA.* 2004;**24**(5):676-698.
63. Cavallerano J, Lawrence MG, Zimmer-Galler I, Bauman W, Bursell S, Gardner WK, Horton M, Hildebrand L, Federman J, Carnahan L, Kuzmak P, Peters JM, Darkins A, Ahmed J, Aiello LM, **Aiello LP**, Buck G, Cheng YL, Cunningham D, Goodall E, Hope N, Huang E, Hubbard L, Janczewski M, Lewis JW, Matsuzaki H, McVeigh FL, Motzno J, Parker-Taillon D, Read R, Soliz P, Szirth B, Vigersky RA, Ward T; American Telemedicine Association, Ocular Telehealth Special Interest Group; National Institute of Standards and Technology Working Group. Telehealth practice recommendations for diabetic retinopathy. *Telemed J E Health.* 2004;**10**(4):469-82.
64. Cavallerano AA, Cavallerano JD, Katalinic P, Blake B, Rynne M, Conlin PR, Hock K, Tolson AM, **Aiello LP**, Aiello LM. Joslin Vision Network Research Team. A Telemedicine Program for Diabetic Retinopathy in a Veterans Affairs Medical Center – the Joslin Vision Network Eye Health Care Model. *Am. J. Ophthalmol.* 2005;Apr;**139**(4):597-604.
65. Jager RD, Timothy NH, Coney JM, Katalinic P, Cavicchi RW, Strong J, Cavallerano, JD, **Aiello LP**. Congenital Retinal MacrovesSEL. *RETINA.* 2005;**25**(4):538-540.

Original Reports (continued):

66. Whited JD, Datta SK, Aiello LM, **Aiello LP**, Cavallerano JD, Conlin PR, Horton MB, Vigersky RA, Poropatich RK, Challa P, Darkins AW, Bursell SE. A Modeled Economic Analysis of a Digital Teleophthalmology System as used by Three Federal Healthcare Agencies for Detecting Proliferative Diabetic Retinopathy. *Telemedicine J.*, 2005; in press.
67. Cavallerano JD, **Aiello LP**, Cavallerano AA, Katalinic P, Hock K, Kirby R, Aiello LM and The Joslin Vision Network Team. Nonmydriatic Digital Imaging Alternative for Annual Retinal Exam in Persons with Previously Documented No or Mild Diabetic Retinopathy. *Am. J. Ophthalmol.* 2005; in press.
68. The PKC-DRS Study Group. Manuscript Writing & Study Executive Committee: **Aiello LP (Chair)**; Davis MD, Milton RC, Sheetz MJ, Arora V, Vignati L. The Effect of Ruboxistaurin on Visual Loss in Patients with Moderately Severe to Very Severe Nonproliferative Diabetic Retinopathy: Initial Results of the PKC-DRS Multicenter Randomized Clinical Trial, *Diabetes.* 2005;54:2188-2197.
69. Strøm C, Sander B, Klemp K, **Aiello LP**, Lund- Andersen H, Larsen M. Effect of ruboxistaurin on blood-retinal barrier permeability in relation to severity of leakage in diabetic macular edema. *Invest Ophthalmol Vis Sci.* 2005, **46**(10):3855-8.
70. Cunningham ET, Adamis AP, Altaweel M, **Aiello LP**, Bressler NM, D'Amico DJ, Goldbaum M, Guyer DR, Katz B, Patel M, Schwartz SD and the Macugen Diabetic Retinopathy Study Group. A Phase II Randomized Double-Masked Trial of Pegaptanib, an Anti-vascular Endothelial Growth Factor Aptamer, for Diabetic Macular Edema. *Ophthalmol.* 2005; **46**:3855-3858.
71. Clermont AC, Cahill M, Salti H, Rook SL, Rask-Madsen C, Goddard L, Wong JS, Bursell D, Bursell SE, **Aiello LP**. Hepatocyte Growth Factor Induces Retinal Vascular Permeability via MAP-Kinase and PI-3 Kinase Without Altering Retinal Hemodynamics. *Invest Ophthalmol Vis Sci.* 2005, in press.
72. **Aiello LP**, Clermont A, Arora V, Davis MD, Sheetz MJ, Bursell SE. Inhibition of PKC- β by Oral Administration of Ruboxistaurin (LY333531) Mesylate is Well-Tolerated and Ameliorates Diabetes-induced Retinal Hemodynamic Abnormalities in Patients. *Invest Ophthalmol Vis Sci.* 2005, in press.
73. Chow SP, Aiello LM, Cavallerano JD, Katalinic P, Hock K, Tolson A, Kirby R, Bursell SE, **Aiello LP**. Comparison of Nonmydriatic Digital Retinal Imaging vs. Dilated Ophthalmic Examination for Nondiabetic Eye Disease in Persons with Diabetes. *Am. J. Ophthalmol.* 2005, in press.

Proceedings of Meetings:

1. **Aiello LP**. Vascular Endothelial Growth Factor and the Eye: Biochemical Mechanisms of Action and Implications for Novel Therapies. *Ophthalmic Res.* 1997; **29**:354-362.
2. **Aiello LP**. Angiogenesis in Diabetic Retinopathy: A History of Accomplishment, Discovery and Promise. In: Friedman EA and L'Esperance FA, eds. *Diabetic Renal-Retinal Syndrome: 21st Century Management Now.* Boston: Kluwer Academic Publishers, 1998:181-196.
3. **Aiello LP**, Wong JS. Role of Vascular Endothelial Growth Factor in Diabetic Vascular Complications. *Kidney International.* 2000; vol. **58**, Suppl. 77:S113-S119.
4. **Aiello LP**, Cahill MT. Novel Therapies for the Medical Management of Diabetic Retinopathy. *Eye.* 2004; in press.

Reviews and Educationally Relevant Publications:

1. Gottsch JD, **Aiello LP**. Hyphema: Diagnosis and Management. *Ophthalmology Digest* 1990; **5**:8-9.
2. **Aiello LP**, Schachat AP. Choroidal Metastasis. In: Falco L, Esente S, eds. *Tumori Intraoculari: International Symposium on Intraocular Tumors.* Florence: Medical Books di G. Cafaro, 1990: 79-84.
3. **Aiello LP**, Iwamoto M, Guyer DR. Penetrating Ocular Fishhook Injuries: Surgical Management and Long-term Visual Outcome. *Ophthalmology Digest* 1993; **5**:30-31.
4. Aiello LM, Cavallerano J, **Aiello LP**, Bursell SE. Exercise in Patients with Diabetic Complications: Retinopathy. In: Ruderman, N, Devlin JT, eds. *The Health Professional's Guide to Diabetes and Exercise.* American Medical Association, Clinical Education Series. 1995:143-151.
5. **Aiello LP**, Cavallerano J, Bursell SE. Diabetic Eye Disease. In Brownlee M and King GL ed. *Endocrinology and Metabolism Clinics of North America.* Philadelphia: W.B. Saunders Company, 1996.
6. **Aiello LP**. Implications for Novel Growth Factor Therapies in Diabetic Retinopathy. *Current Opinion in Endocrinology and Diabetes* 1996;**3**:307-314.
7. **Aiello LP**. VEGF and the Eye: Past, Present and Future. [ed.] *Arch. Ophthalmol.* 1996; **114**(10):1252-1254.
8. Miller JW, Adamis AP, **Aiello LP**. Vascular Endothelial Growth Factor in Ocular Neovascularization and Proliferative Diabetic Retinopathy. *Diabetes and Metabolism Reviews.* 1997;**13**:37-50.
9. Takagi H, King GL, **Aiello LP**. Identification and Characterization of Vascular Endothelial Growth Factor Receptor (Flt) in Bovine Retinal Pericytes. *Focus on Diabetic Retinopathy* 1997; **4**:41-42.

Reviews and Educationally Relevant Publications (continued):

10. **Aiello LP.** Ophthalmic Drug Formulary. In: Varma R, ed. *Essentials of Eye Care: The Johns Hopkins Wilmer Handbook*. Philadelphia: Lippincott-Raven, 1997; 643-678.
11. **Aiello LP.** Clinical Implications of Vascular Growth Factors in Proliferative Retinopathies. *Current Opinion in Ophthalmology* 1997;**8**:19-31.
12. **Aiello LP.** Vascular Endothelial Growth Factor: 20th Century Mechanisms, 21st Century Therapies. *Invest. Ophthalmol. Vis. Sci.* 1997; **38**(9):1647-1652.
13. **Aiello LP, Gardner TW, King GL, Blankenship G, Cavallerano JD, Ferris FL, Klein R.** Diabetic Retinopathy: Technical Review. American Diabetes Association. *Diabetes Care.* 1998; **21**:143-156.
14. **Aiello LP, Gardner TW, King GL, Blankenship G, Cavallerano JD, Ferris FL, Klein R.** Diabetic Retinopathy: Position Statement. American Diabetes Association. *Diabetes Care.* 1998; **21**:157-159.
15. Robinson GS, **Aiello, LP.** Angiogenic factors in Diabetic Ocular Disease: Mechanisms of Today, Therapies of Tomorrow. *Int. Ophthalmol Clinics.* 1998;**38**:89-102.
16. Grand MG, **Aiello LP, Cavallerano JD, Iwamoto MA.** Eye Disease. In: Levine, Pfeiffer, eds. *The Uncomplicated Guide to Diabetes Complications.* The American Diabetes Association, 1998:67-99.
17. Aiello LM, Cavallerano J, **Aiello LP, Bursell SE.** Diabetic Retinopathy. In: Guyer D, Yannuzzi L, Chang S, Shields B, Green WR, eds. *Retina-Vitreous-Macula.* Philadelphia: W.B. Saunders Company, 1998: 316-344.
18. **Aiello LP, Hata Y.** Molecular Mechanisms of Growth Factor Action in Diabetic Retinopathy. *Current Opinion Endocrinology and Diabetes.* 1999; **6**:146-156.
19. Espallat E, Cavallerano JD, **Aiello LP.** How to do a better dilated fundus exam in diabetic patients. *Rev. Ophthalmol.* 1999;**VI**(8),52-59.
20. Duh E, **Aiello LP.** Vascular Endothelial Growth Factor and Diabetes: The Agonist versus Antagonist Paradox. *Diabetes.* 1999; **48**:1899-1906.
21. Adamis AP, **Aiello LP, D'Amato R.** Angiogenesis and Ophthalmic Disease. *Angiogenesis.* 1999; **3**:9-14.
22. **Aiello LP.** Eye Complications of Diabetes. In: Koreman, Kahn CR, eds. *Atlas of Clinical Endocrinology Volume II: Diabetes.* Blackwell Science, Philadelphia. 1999.
23. Wong J, **Aiello LP.** Diabetic Retinopathy. *Ann. Acad. Med. Singapore.* 2000;Nov;**29**(6):745-52.
24. Gardner TW, **Aiello LP.** "Pathogenesis of Diabetic Retinopathy". *American Academy of Ophthalmology Monographs: Diabetes and Ocular Disease: Past, Present, and Future Therapies.* 2000; **14**:1-18.
25. **Aiello LP, Gardner TW.** "Future Therapies for Diabetic Retinopathy". *American Academy of Ophthalmology Monograph: Diabetes and Ocular Disease: Past, Present, and Future Therapies.* 2000; **14**:239-274.
26. **Aiello LP.** Keeping in Touch with Angiogenesis. News & Views. *Nature Medicine.* 2000; **6**:379-381.
27. **Aiello LP and Wong JS.** Role of Vascular Endothelial Growth Factor in Diabetic Vascular Complications. *Kidney International.* 2000;**58**(Suppl. 77): S-113-S-119.
28. **Aiello LP, Cavallerano J.** Diabetic Retinopathy. In: Johnstone MT and Veves A, eds. *Contemporary Cardiology: Diabetes and Cardiovascular Disease.* Humana Press, NJ. 2001; chapter 21:385-398.
29. **Aiello LP, Wong J, Cavallerano J, Bursell SE, Aiello LM,.** Retinopathy. In: Ruderman, N, Devlin JT, Kriska A., eds. *Handbook of Exercise in Diabetes, second edition.* American Diabetes Association, 2001.
30. **Aiello LP, Cahill MT, Wong JS.** Systemic Considerations in the Management of Diabetic Retinopathy. *Am. J. Ophthalmol.* 2001;**132**(5):760-76.
31. Suzuma I, Hata Y, Clermont A, Pokras F, Rook S, Suzuma K, Feener E, **Aiello LP.** Cyclic Stretch And Hypertension Induce Retinal Expression of Vascular Endothelial Growth Factor and Vascular Endothelial Growth Factor Receptor-2: Potential Mechanisms for Exacerbation of Diabetic Retinopathy by Hypertension. *Focus on Diabetic Retinopathy* 2002;**9**(1):15-18.
32. Duh E, **Aiello LP.** Basic Pathobiology of the Eye and Its Complications In: Porte D, ed. *Ellenberg & Rifkin's Diabetes*, sixth edition. McGraw-Hill, 2002; 653-661.
33. **Aiello LP.** The Potential Role of PKC β in Diabetic Retinopathy and Macular Edema. *Surveys Ophthalmol.* 2002;**47**(2):S263-269.
34. **Aiello LP.** Eye Complications of Diabetes. In: Skyler, ed. *Atlas of Diabetes: Second Edition.* Lippincott Williams & Wilkins, Philadelphia. 2003.
35. Fong DS, **Aiello LP, Gardner TW, King GL, Blankenship G, Cavallerano JD, Ferris FL, Klein R.** Diabetic Retinopathy: American Diabetes Association Position Statement. *Diabetes Care.* 2003;**26**(1)226-229.
36. **Aiello LP, Cahill MT, Cavallerano JD.** Growth Factors and Protein Kinase C Inhibitors as Novel Therapies for the Medical Management of Diabetic Retinopathy. *EYE.* 2004; **18**:117-125.
37. **Aiello LP, Aiello LM, Cavallerano JD.** Visual Loss. In: *Therapy for Diabetes Mellitus and Related Disorders.* American Diabetes Association, 2004; 37:340-343.
38. **Aiello LP, Aiello LM, Cavallerano JD.** Ocular Complications. In: *Therapy for Diabetes Mellitus and Related Disorders.* American Diabetes Association, 2004; 38:344-357.

Reviews and Educationally Relevant Publications (continued):

39. Rosenfeld PJ, **Aiello LP**, Blumenkranz MS, Campochiaro PA, D'Amato RJ, Ferrara N. "The Role of VEGF in Neovascular AMD". *Ophthalmology Times*, CME Roundtable. 2004;29(Suppl. 5).
40. Grand MG, **Aiello LP**, Cavallerano JD, Iwamoto MA. Eye Disease. In: Levine, Pfeiffer, eds. *The Uncomplicated Guide to Diabetes Complications*. (updated second edition) The American Diabetes Association, 2004; in press.
41. **Aiello LP**. Complications of Diabetes Mellitus: *Diabetic Retinopathy, Macular Edema and other Ocular Complications*. In: Larson R, Kronenberg H, Melmed S, Polonsky K, eds. *Williams Textbook of Endocrinology, tenth edition*. W.B. Saunders Company, 2004; in press.
42. Salti H, Cavallerano JD, Cahill MT, Wong JS, **Aiello LP**. Influence of Blood Pressure and Blood Glucose Control on Diabetic Retinopathy: A Review. In: *Hypertension and Diabetes, Volume 2*. Lippincott Williams & Wilkins, 2004; in press.
43. **Aiello LP**, Cavallerano J. Diabetic Retinopathy (revised). In: Johnstone MT and Veves A, eds. *Contemporary Cardiology: Diabetes and Cardiovascular Disease, 2nd Edition*. Humana Press, NJ. 2004; in press.
44. Fong DS, **Aiello LP**, Ferris FL, Klein R. Diabetic Retinopathy: Technical Review. *Diabetes Care*. 2004;27(10):2540-53.
45. **Aiello LP**, Brucker AJ, Chang S, Cunningham ET, D'Amico DJ, Flynn HW, Grillone LR, Hutcherson S, Liebmann JM, O'Brien TP, Scott IU, Spaide RF, Ta C, Trese MT. Evolving Guidelines for Intravitreal Injections. *RETINA*. 2004;24(5);S3-S19.
46. **Aiello LP**. Eye Complications of Diabetes. (edited) In: Skyler, ed. *Atlas of Diabetes: Third Edition*. Lippincott Williams & Wilkins, Philadelphia. 2003.
47. Gardner TW, **Aiello LP**. Pathogenesis of Diabetic Retinopathy. In: Scott, ed. *Diabetic Retinopathy: A Practical Guide for the Clinical Ophthalmologist*. Springer, Heidelberg, in press.
48. **Aiello LP**. Eyes on the Prize: Preventing Vision Problems Associated with Diabetes. *TIME*. 2005, March 28th.; 80-83.
49. **Aiello LP**. Molecular Biology and Natural History of Diabetic Retinopathy. *Advanced Studies in Medicine*. 2005;2(1)8-13.
50. **Aiello LP**, Cavallerano J, Klein R. *Diabetic Eye Disease*. In: Leslie J. DeGroot, J. Larry Jameson, eds. *Endocrinology, fifth edition*. W.B. Saunders Company, 2005; 1305-1317.
51. **Aiello LP**. Angiogenic Pathways in Diabetic retinopathy. *N. Engl. J. Med*. 2005; **353**:839-841.

Non-print Materials:

1. Actor. Management of Diabetic Retinopathy for the Primary Care Physician. (1990 COVE Diabetic Retinopathy Videotape) American Academy of Ophthalmology.
2. Actor. Evaluation and Treatment of Diabetic Retinopathy. (1990 COVE Diabetic Retinopathy Videotape) American Academy of Ophthalmology.
3. Actor. The JAMA Report. (national news release re: The Baltimore Eye Survey) Orbis Productions, 16 July, 1991.
4. Live televised guest interviews regarding cataract surgery. Maryland Public Television Fund Raising Drive, aired 10:00 - 11:00 pm, 20 August, 1991.
5. CD ROM contributor. The Cutting Edge Retina, Subspecialty Day 1995. American Academy of Ophthalmology.
6. CD ROM contributor. Vitreoretinal Frontiers: 21st Century 1996. American Academy of Ophthalmology.
7. Audio tape contributor. New Therapeutic Approaches to Diabetic Retinopathy – Council on Complications. The American Diabetes Association, 1998.
8. CD ROM contributor. American Diabetes Association Annual Meeting, 1998.
9. Actor. "Managed Care in America". PBS-TV program aired in 2000. David Murdoch & Tom Jennings producers. Hedrick Smith Productions, 1999.
10. CD ROM contributor. American Diabetes Association Annual Meeting, 2000.
11. CD ROM contributor. Retina 2000: Management of Posterior Segment Disease, Subspecialty Day 2000. American Academy of Ophthalmology.
12. Ivanhoe Broadcast News. Newswire Release/Interview/Film, Waiting for a Diabetes Cure Part 2: Treating the Complications. November 1, 2002.
13. CD ROM contributor. Retina 2002: Giant Steps: A look at the past – an eye to the future, Subspecialty Day 2002. American Academy of Ophthalmology.
14. CD ROM contributor. The Retina Debates 2003: New Technology and Controversies from the Posterior Segment, Subspecialty Day 2003. American Academy of Ophthalmology.
15. Web-based Virtual Patient Reference Library: VP17 - A Woman with Diabetes. "Retinopathy". (<http://research.bidmc.harvard.edu/vptutorials/diabetes/default.htm>). Case Authors: Martin J. Abrahamson, MD and Ann Miller, NP. 2004.
16. CD ROM contributor. Retina. American Academy of Ophthalmology. 2004.